RESPONSES TO PUBLIC COMMENTS
TO THE

AC BY MARRIOT – WEST SAN JOSE
REVISED INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

File No.: H17-023

November 2018

CITY OF
SAN JOSE
CAPITAL OF SILICON VALLEY

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ATTACHMENTS

SECTION 1 RESPONSE TO COMMENTS ON THE RECIRCULATED INITIAL STUDY / MITIGATION NEGATIVE DECLARATION

Pursuant to the California Environmental Quality Act (CEQA), the City prepared an Initial Study/Mitigated Negative Declaration (IS/MND) for the AC by Marriot Hotel – West San Jose Project, located at 5696 Stevens Creek Boulevard (proposed project). The Draft Initial Study/Mitigated Negative Declaration was first circulated for public comments for 20 days, from August 17, 2018 to September 6, 2018. The City received six comments during the public circulation period, including three from local community members; one from Lozeau Drury, LLP, representing Laborers International Union of North America 270 (LiUNA); and one from the City of Cupertino.

In response to public comments on the aesthetics analysis in the IS/MND, the City provided new visual simulations and additional analysis on aesthetics and conformance of the project with policies in the Stevens Creek Boulevard Urban Village Plan. To provide the public with sufficient opportunity to review this new information, the City re-circulated the IS/MND for an additional 20 days from October 5, 2018 to October 25, 2018. The City of San Jose received a total of seven (7) comment letters on the Recirculated IS/MND six (6) during the public review period and one (1) comments after the end of the review period.

On October 30, 2018, five days after the end of the public comment period, Lozeau Drury LLP, who commented on the during the Recirculated IS/MND circulation period, submitted another comment letter on the re-circulated IS/MND via email. Although these comments were not received during the public circulation period, the City is responding to these comments as a courtesy to clarify the analysis in the IS/MND, address community concerns, and for purposes of providing information and the administrative record.

In summary, the comments received on the Recirculated IS/MND did not raise any new issues about the project's environmental impacts, or provide information indicating the project would result in new environmental impacts or impacts substantially greater in severity than disclosed in the IS/MND. CEQA does not require formal responses to comments on an IS/MND, only that the lead agency consider the comments received [CEQA Guidelines §15074(b)]. Nevertheless, responses to the comments are included in this document to provide a complete environmental record.

The re-circulated IS/MND, supporting technical studies, and response to comments on the original circulated IS/MND are available on the Planning Department's Negative Declarations/Initial Studies web site at: www.sanjoseca.gov/negativedeclarations.

The following pages contain a list of the agencies and persons that submitted comments on the Recirculated IS/MND and the City's responses to comments received on the Recirculated IS/MND. The specific comments have been excerpted from the letter and are presented as "Comment" with each response directly following ("Response"). Copies of the actual letters and email submitted to the City of San Jose are attached to this document.

SECTION 2 LIST OF AGENCIES AND PERSONS COMMENTING ON THE IS/MND

SECTION 3 RESPONSES TO COMMENTS RECEIVED ON THE RE-CIRCULATED IS/MND

1. RESPONSES TO COMMENTS FROM ED KETCHUM ON OCTOBER 7, 2018

Comment 1.1:
This project is within the lands once held by the Tamien speakers. By agreement these are represented by Muwekma Tribal Band. I suggest you speak to their representative Alan Leventhal.

Response 1.1: As part of the public circulation process, Mr. Alan Leventhal was notified of this project via email. In addition, as discussed on Page 144 of the Recirculated IS/MND, "at the time of the preparation of this Initial Study, no tribes have sent written requests for notification of projects to the City of San José, except for projects located in Coyote Valley." Follow up letters were also submitted to the Native American Heritage Commission and no responses were received by the City.

Comment 1.2:
As the project has four levels of subterranean parking It will require monitors as there is a significant possibility as a cultural resources thousand of years old could be buried by many feet of alluvium.

Response 1.2: The Recirculated IS/MND states that as part of the development permit approval the project would be required to perform the following standard permit conditions to avoid impacts associated with disturbance to buried archaeological resources during construction:

- In the event that prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity with a 50-foot radius of the find shall be stopped, the Director of Planning, Building, and Code Enforcement shall be notified, and the archaeologist will examine the find and make appropriate recommendations prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery during monitoring would be submitted to the Director of Planning, Building, and Code Enforcement.

- Pursuant to Section 7050.5 of the Health and Safety Code, and Section 5097.94 of the Public Resources Code of the State of California, in the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped. The Santa Clara County Coroner shall be notified and make a determination as to whether the remains are of Native American origin and whether an investigation into the cause of death is required. If the remains are determined to be Native American, the

Coroner will notify the Native American Heritage Commission (NAHC) immediately. Once the NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

2. RESPONSES TO COMMENTS FROM KIRK VARTAN, DATED OCTOBER 23, 2018.

Comment 2.1:
I am writing a letter of support for the project called: AC by Marriott – West San José, file #: H17-023, Assessor's Parcel Number: 375-12-017.

This is a good project and one that is controversial only because it is on a City border. The fact is, no one in any neighborhood wants to see *any* change in their neighborhood. This is a good project for the area that just happens to be in San Jose. If it were in Cupertino, I am sure the Cupertino City Council would enthusiastically support it. Why? Because it just makes sense. It is directly across from the 9-story Apple "sardine can" that will have a twin 9-story building in a few years. Apple and other corporate identities will continue to dominate this area. This will support need hotel demand with a quality option. San Jose benefits because of the tax revenue, but Cupertino and Santa Clara also benefit because less traffic will be seen when corporate travelers will either walk to the Apple building if that is where they are going, or they will simply jump on 280 North or South to get to where they need to go. It is a win-win for all Cities involved. This will help the region with emissions and pollution.

Stevens Creek is already VTA's second highest grossing transit line, second only to El Camino. It is only growing and expanding.

On top of all that, Stevens Creek is being looked at as a future intense transportation corridor, with technologies such as Hyper-Loop or tunneling being discussed. And as part of Councilmember Jones' Innovation Corridor, I think there is incredible need for high intensity uses along Stevens Creek to really make it shine. Hotels like this one will be a great addition to the Innovation Corridor.

I was a co-chair of the Stevens Creek Advisory Group and we looked at this project when looking at the land uses for the corridor. This use fit cleanly and clearly into the design.

I hope you will support this project quickly and let it get built.

Response 2.1: Comment noted. The author of this comment is expressing support for the Proposed Project, and does not identify any CEQA issues in the Recirculated IS/MND, and therefore, no specific response is required.

3. RESPONSES TO COMMENT FROM SEAN MCFEELY, DATED OCTOBER 23, 2018

Comment 3.1:
I am writing a letter of support for the project called: AC by Marriott – West San José, file #: H17-023, Assessor's Parcel Number: 375-12-017.

This project is consistent with the city's goals for urban transit oriented developments along major transportation corridors, and is consistent with the approved Stevens Creek Urban Village. This is an important corridor that will continue to receive transit improvements from VTA, San Jose and neighboring cities. Cupertino has recently discussed a high frequency transit solution such as hyperloop. The project is adjacent to existing 4 story residential and 4-6 story commercial/hotel building.

The valley has a significant hotel shortage with room prices reaching up to $1,000/night in places. The project would help the city capture significant economic impact from the nearby existing and proposed commercial developments. With that said, the architectural design is horribly dull and lacking (compared to AC Hotel in Sunnyvale, link). The project can still be a success with proper attention to the streetscape and base of the building, particularly the pedestrian hostile west elevation. It would be critical that the hotel bar is open to the public to help promote street vibrancy. Ideally, the project would have a more iconic design to due to the site being the western gateway into the Stevens Creek Corridor. San Jose can capture more economic development if it pushes for equal or better design to proposals in the neighboring towns.

Many hotels in other cities provide rentable bike for patrons. I would be best if the hotel partners with motivate or another provider to locate rentable bikes on site. Bike stalls are no good... if there are no bikes.

The general plan and specific plan call for urban transit and pedestrian focused developments along the Stevens Creek Corridor. I hope you will follow thru on that goal and support this project.

Response 3.1: Comment noted. The author of this comment is expressing support for the Proposed Project, and does not address the analysis contained in the Recirculated IS/MND. Therefore, no specific response is required.

4. RESPONSES TO COMMENTS FROM LOZEAU DRURY, LP, DATED OCTOBER 24, 2018.

Comment 4.1:

I am writing on behalf of the Laborers International Union of North America, Local Union 270 and its members living in and around the City of San Jose ("LIUNA") regarding the Initial Study and Mitigated Negative Declaration ("IS/MND") prepared for the AC by Marriott - West San Jose Project ("Project") (Project File No. HI7-023). After reviewing the IS/MND, and with the assistance of expert review by environmental consulting firm SWAPE, the evidence indicates that there is a "fair argument" that the Project may have unmitigated adverse environmental impacts or, alternatively, the IS/MND is not supported by substantial evidence. SWAPE's comments (attached hereto as Exhibit A) as well as the comments below identify substantial evidence of a fair argument that the Project may have significant environmental impacts. Accordingly, an environmental impact report ("EIR") is required to analyze these impacts and to propose all feasible mitigation measures to reduce those impacts. We urge the Planning Director to decline to approve the IS/MND, and to instruct staff to prepare an EIR for the Project prior to any Project approvals.

Response 4.1: Responses to specific comments related to the adequacy of the IS/MND are provided below. Pursuant to the responses below and the analysis in the Re-circulated IS/MND, the City made the findings that an IS/MND is the adequate CEQA document for this project. The Director of Planning, Building and Code Enforcement determined that the project would not have a significant effect on the environment if certain mitigation measures are incorporated into the project. The Recirculated IS/MND concluded that the project would result in potential impacts to biological resources and hazards and hazardous material. Consistent with the conclusion in the Recirculated IS/MND, the project would incorporate project-specific mitigation measures, City standard conditions and conditions of approval that will reduce those impacts to a less than significant level. The project applicant has made or agrees to make project revisions that will clearly mitigate the potentially significant effects to a less than significant level. Therefore, the project would reduce the impacts to less than significant levels, resulting in no further mitigation measures or an environmental impact report to be required.

Comment 4.2:

The proposed Project includes the demolition of an existing gas station and the construction of an approximately 78,850 square feet hotel including 168 guest rooms, a restaurant and four floors of underground parking for 100 vehicles. Little information is provided regarding the restaurant but it would presumably be open to the public as well as guests and could generate significant use by non-guests. The Project's hotel use would generate about 1,400 vehicle trips per day. The MND hints at the possible use of parking at another nearby location should the proposed parking prove insufficient to handle the demand generated by the Project.

Response 4.2: The comment incorrectly assumes the restaurant would be a larger, stand-alone type operation that would be marketed to both guests and non-guests. Similar to other hotels in the region, the restaurant is intended for use of hotel guests as a breakfast buffet and bar with snacks and light meals. Although these facilities are open to the public, it is not intended to be a full-scale restaurant operation that would attract significant use by non-guests. The restaurant/bar area is small and is located within the open lobby, and is not intended to be marketed as a separate restaurant to non-guests.

Comment 4.3:

As the California Supreme Court held, "[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR." *Communities for a Better Env't v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 319-320 ["CBE v. SCAQMD"], citing, *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75, 88; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 504–505. "Significant environmental effect" is defined very broadly as "a substantial or potentially substantial adverse change in the environment." Pub. Res. Code ["PRC"] § 21068; see also 14 CCR § 15382. An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial." *No Oil, Inc., supra*, 13 Cal.3d at 83. "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." *Communities for a Better Env't v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 109 ["*CBE v. CRA*"].

The EIR is the very heart of CEQA. *Bakersfield Citizens for Local Control v. City of Bakersfield (*2004) 124 Cal.App.4th 1184, 1214; *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927. The EIR is an "environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return." *Bakersfield Citizens*, 124 Cal.App.4th at 1220. The EIR also functions as a "document of accountability," intended to "demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action." *Laurel Heights Improvements Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 392. The EIR process "protects not only the environment but also informed self-government." *Pocket Protectors*, 124 Cal.App.4th at 927.

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment." PRC § 21080(d); see also *Pocket Protectors*, 124 Cal.App.4th at 927. In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact thus requiring no EIR (14 Cal. Code Regs.§ 15371), only if there is not even a "fair argument" that the project will have a significant environmental effect. PRC, §§ 21100, 21064. Since "[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process," by allowing the agency "to dispense with the duty [to prepare an EIR]," negative declarations are allowed

only in cases where "the proposed project will not affect the environment at all." *Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440. A mitigated negative declaration is proper only if the project revisions would avoid or mitigate the potentially significant effects identified in the initial study "to a point where clearly no significant effect on the environment would occur, and…there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment." PRC §§ 21064.5 and 21080(c)(2); *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 331. In that context, "may" means a reasonable possibility of a significant effect on the environment. PRC §§ 21082.2(a), 21100, 21151(a); *Pocket Protectors, supra*, 124 Cal.App.4th at 927; *League for Protection of Oakland's etc. Historic Resources v. City of Oakland* (1997) 52 Cal.App.4th 896, 904–905.

Under the "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to support the agency's decision. 14 CCR § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-15; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602. The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. *Pocket Protectors*, 124 Cal.App.4th at 928.

The "fair argument" standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

This 'fair argument' standard is very different from the standard normally followed by public agencies in making administrative determinations. Ordinarily, public agencies weigh the evidence in the record before them and reach a decision based on a preponderance of the evidence. [Citations]. The fair argument standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact. The lead agency's decision is thus largely legal rather than factual; it does not resolve conflicts in the evidence but determines only whether substantial evidence exists in the record to support the prescribed fair argument.

Kostka & Zishcke, *Practice Under CEQA*, §6.29, pp. 273-274. The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with a preference for resolving doubts in favor of environmental review." *Pocket Protectors*, 124 Cal.App.4th at 928.

In addition, a negative declaration must accurately describe the proposed project and its environmental setting. *Christward Ministry v. Superior Court* (1986) 184 Cal.App.3d 180; CEQA Guidelines §15071(a). The initial study must "provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment." CEQA Guidelines § 15063(c)(5).

Response 4.3: This comment provides information regarding the definition of the substantial evidence and fair argument standards, and does not address the analysis contained

in the Recirculated IS/MND. As discussed in Response 4.1 above, explained that the City has determined that an IS/MND is the appropriate environmental review for the project.

Comment 4.4:

Based on the floor plans included in the materials, it appears that the proposed restaurant is slated for about one-fourth to one-third of the first floor of the building. Based on the 9,850 square feet of floor space identified for the first floor, the restaurant would correlate to about a 3,000 square feet restaurant. Like other restaurants located in hotels, the proposed restaurant would presumably be open to the public. Those additional visitors to the Project are not factored into either the traffic counts or the air modeling for the Project. As SWAPE's review identifies, "only the proposed hotel land use was inputted into the model, while the restaurant land use was omitted entirely from the model." SWAPE Comments, pp. 2, 4. As a result, the air emissions from the Project are underestimated and not based on substantial evidence. *Id*.

Response 4.4: As discussed in Response 4.2, above, the restaurant/bar is intended for use of hotel guests as a breakfast buffet and bar with snacks and light meals. Although these facilities are open to the public, it is not intended to be a full-scale restaurant operation that would attract significant use by non-guests. As the hotel is the main proposed use, the analysis is adequate.

Comment 4.5:

The air emissions are further underestimated by the use of a smaller building square footage in the CalEEMod inputs than is proposed. Rather than the 78,850 square feet building described in the IS/MND, the CalEEMod files use a 77,900 square feet building. This error also underestimates the air pollution emissions of the Project. SWAPE Comments, p. 2.

Response 4.5: The IS/MND air quality analysis and supporting CalEEMod air quality modeling are based on a 168 room hotel with 100 parking spaces. The size of the hotel is significantly below the screening level sizes for hotels in the Bay Area Air Quality Management District's (BAAQMD) 2017 CEQA Guidelines, which call for operational air quality analysis for Criteria Air Pollutants for projects with more than 489 hotel rooms and more than 554 rooms for an analysis of construction-related air quality. Despite the size of the hotel, the City performed an air quality analysis using CalEEMod, which resulted in maximum daily operational and construction emissions significantly below the established BAAQMD thresholds for Reactive Organic Gases (ROG), Nitrogen Oxide (NO_X), and Particulate Matter (PM_{10} and $PM_{2.5}$), with operational emissions being approximately 2% to 15% of the operational emissions thresholds and construction emissions approximately 2% to 36% of construction emission thresholds. The approximately 1,000-square foot difference in building size noted by the commenter is not sufficient to trigger an increase in either operational or construction air pollutants, as demonstrated by the revised

CalEEMod output dated October 25, 2018. Therefore, the analyses as disclosed in the Recirculated IS/MND are adequate.

Comment 4.6:

Highly significant emissions from the many truck trips necessary to haul away materials from the demolition of the existing gas station also are not calculated by the project's CalEEMod modeling. Although the IS/MND states that "estimated emissions associated with the demolition of the existing gas station and service station are included in the demolition phase of the project[,]" a review of the CalEEMod inputs shows that zero haul trips were input for that demolition activity. IS/MND, p. 43; *Id*., App. B, p. 7. The inputs indicate that haul trips are estimated to be 20 miles in distance, but the number of trips would be zero. *Id*., App. B, p. 7. Significant air pollution emissions are overlooked by this omission.

Response 4.6: As discussed in the in the Air Quality Summary in Appendix B to the IS/MND, "construction of the proposed project would generate temporary criteria pollutant emissions primarily due to the operation of construction equipment and truck trips. Estimated emissions associated with the demolition of the existing gas station and service station are included in the demolition phase of the project. Site preparation and grading typically generate the greatest amount of emissions due to the use of grading equipment and soil hauling. Additionally, the grading phase of the project includes the excavation of an estimated 17,000 cubic yards of soil to account for the construction of the subterranean parking structure." Most demolition and haul trips are accounted for in the analysis of the grading stage, as this is the stage when the most haul trips will be generated (estimated at approximately 850 truck trips). Haul trips associated only with demolition of the existing gas station and canopies will be less in comparison, at approximately 15 to 20 truck trips (about 2% of the truck trips generated by grading/excavation). As discussed in Response 4.5, above, construction emissions are significantly below BAAQMD thresholds for Criteria Air Pollutants, and the haul trips associated with demolition are not sufficient to trigger a significant construction air quality impact. Therefore, the analyses as disclosed in the Recirculated IS/MND are adequate

Comment 4.7:

Lastly, the Transportation Demand Management Plan ("TDM Plan") and IS/MND both identify a parking contingency requiring the use of nearby off-street parking should the 100 spaces included in the subterranean garage prove to be inadequate. No specific off-street parking location is identified. Under the City's code, without a TDM plan and nearby bus routes, the Project would require 186 parking spaces. It thus seems reasonable to evaluate a worst case scenario contingency of providing up to 86 off-site spaces. Neither the air pollution nor traffic impacts of vehicles using the possible off-site parking locations is evaluated in the CalEEMod air modeling or the traffic impact analysis. As a result, the air emissions as well as the Project's traffic impacts are once again underestimated.

Response 4.7: The air quality analysis is based on 1,373 average daily weekday trips, which

includes trips that do not park on site such as guests arriving or departing through rideshare services. Furthermore, the TDM program and the proposed reduction in parking requirements are supported by the traffic analysis conducted by TJW Engineering Inc., dated August 3, 2018, and included as Appendix F in the Recirculated IS/MND, which concluded that the proposed project would reduce vehicle parking demand to 46% below the City's parking requirement. If parking surveys find that parking is insufficient on the site, additional measures, such as tandem parking or valet parking, could be provided. Such measures would not result in any change in the assumptions in the air quality analysis.

Comment 4.8:
Because of these omissions and inaccuracies, the air pollution modeling result is not supported by substantial evidence. The applicant should rerun the modeling in order to ascertain the actual anticipated emissions from the Project's construction and operation.

Response 4.8: See Response 4.5, above.

Comment 4.9:
People sensitive to toxic air contaminants virtually surround the proposed site. "The sensitive receptors nearest to the project include existing residences to the east and south/south west and the Sunflower Learning Center (pre-school and afterschool) to the west." IS/MND, p. 38. "The closest sensitive receptors to the project site are existing residences approximately 60 feet east of the project site." *Id*., p. 104. Despite the numerous nearby receptors, the IS/MND cavalierly attempts to interpolate that the Project's emissions will not have any health impacts on nearby sensitive receptors from its claim that the Project will not exceed any BAAQMD significance thresholds. IS/MND, p. 38. The IS/MND's conclusion is not supported by a quantitative health risk assessment ("HRA"). *Id*.; SWAPE Comments, p. 4. Nor is there any quantitative assessment of toxic air contaminant emissions, including diesel particulate matter from the project. *Id*. As SWAPE points out:

the Project Applicant cannot claim that the Project would result in a less than significant health risk impact without properly assessing the diesel particulate matter (DPM) emissions that will be emitted during Project activities. As a result, until the Project's construction and operational health risk impacts are adequately quantified and compared to applicable thresholds, the IS/MND cannot make any conclusions with regard to the Project's health risk impacts.

Response 4.9: A Health Risk Assessment was prepared for the proposed project by Illingworth & Rodkin, dated November 5, 2018 (Appendix C). This health risk assessment evaluated potential health effects of sensitive receptors at these nearby residences from construction emissions of diesel particulate matter (DPM) and particulate matter ($PM_{2.5}$). Dispersion modeling was conducted to predict the off-site concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated. DPM and $PM_{2.5}$ concentrations were

calculated at nearby sensitive receptors. The closest sensitive receptors to the project site are multi-family residences adjacent to the eastern site boundary, a daycare to the west, and single-family residences further away to the south and west.

The health risk assessment concluded that the maximum-modeled annual $PM_{2.5}$ concentration, which is based on combined exhaust and fugitive dust emissions, would be 0.07μg/m^3. Therefore, this maximum annual $PM_{2.5}$ concentration would be below the BAAQMD significance threshold of greater than 0.3μg/m^3. The maximum modeled annual residential DPM concentration (i.e., from construction exhaust) would be 0.06μg/m^3. The maximum computed Hazard Index (HI) based on this DPM concentration would be 0.01, which does not exceed the BAAQMD significance criterion of a HI greater than 1.0. Therefore, the project would not result in a significant impact for air quality and would not require new mitigation measures.

Comment 4.10:
SWAPE Comments, p. 5. In order to fully disclose the potential health risks associated with the Project, an accurate health risk assessment for the entire Project consistent with guidelines published by the Office of Environmental Health Hazard Assessment must be prepared. Currently, the IS/MND's conclusion that the Project will not result in any significant health risks is not supported by substantial evidence and a fair argument exists that the Project may have significant health risk impacts.

Response 4.10: The Health Risk Assessment prepared for the proposed project utilized BAAQMD's recommendation of cancer risk methodology that follows the State of California Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (CARB) recommended methods for conducting health risk assessments. Exposure parameters from the OEHHA guidelines and the recent BAAQMD HRA Guidelines were used in this evaluation. The analysis conclude maximum-modeled annual PM2.5 concentration would be 0.07μg/m3, maximum modeled annual residential DPM concentration (i.e., from construction exhaust) would be 0.06μg/m3, and maximum computed Hazard Index (HI) based on this DPM concentration would be 0.01. All of which would be below the BAAQMD significant thresholds. Refer to Response 4.9 and Appendix C of this Responses to Comment for further details.

Comment 4.11:
Based on the limited information provided by the IS/MND, a fair argument exists that the Project may have a significant health risk impact to nearby sensitive receptors. SWAPE has prepared a Level 2 health risk screening assessment ("HRSA") for the project. BAAQMD recommends a significance threshold of an increased cancer risk of 10 in one million and an increased cumulative cancer risk of 100 in a million from all local sources. Applying the U.S. Environmental Protection Agency's AERSCREEN model, as

recommended by OEHHA and the California Air Pollution Control Officers Association, SWAPE calculates that construction and operation of the Project will result in cancer risks to infants, children, adults, during the third trimester of pregnancy, and nearby residents over the course of a 30-year residential lifetime of, respectively, 310 in one million, 170 in one million, 26 in one million, 16 in one million, and 510 in one million, well in excess of BAAQMD's threshold. SWAPE Comment, pp. 4-8. Based on this substantial screening evidence, a fair argument is present that the Project may have significant health risk impacts on nearby residents.

Response 4.11: The project is not a significant generator of toxic air contaminants (TAC) from operation as it is a hotel with no manufacturing, generators, or significant numbers of truck trips (such as a warehouse distribution facility). In fact, as stated in the Health Risk Assessment prepared for the proposed project, the project would replace the Stevens Creek Shell gasoline station which is an existing source of TAC emissions.

As stated in Response 4.9, above, the health risk assessment concluded that the maximum increased residential cancer risk was computed as 9.7 in one million for an infant exposure and 0.2 in one million for an adult exposure. At the daycare facility, the maximum child risk was computed at 0.2 per million. The maximum excess cancer risk, assuming infant exposure, would be below the significance threshold of 10.0 in one million.

Comment 4.12:
Likewise, contrary to CEQA, by adding TAC emissions to the immediate area, the Project cannot avoid evaluating the cumulative impacts of the Project including the adjacent Stevens Creek Boulevard's existing TAC emissions on the Project's nearby sensitive receptors. Given the health risks identified above and the fact that the Project itself may increase cancer risks by more than 100 in a million, the addition of TACs from the Project's construction and operation is considerable and may significantly contribute to the Project's cumulative adverse health risk impact including the existing impacts from traffic on Steven's Creek Boulevard and perhaps other adjacent TAC sources. Hence, the IS/MND's conclusion that the Project will not have cumulative health risk impact is not supported by substantial evidence and a fair argument exists that the Project will result in cumulative health risks.

Response 4.12: Pursuant to the Health Risk Assessment prepared by Illingworth & Rodkin, dated November 5, 2018, "(p)roject operations will not include activities that would be a significant source of localized TAC or particulate matter ($PM_{2.5}$) emissions that could lead to significant operational health or community risks to off-site sensitive receptors. Furthermore, the project would not generate substantial diesel truck trips or include stationary equipment that emits TACs or $PM_{2.5}$. The project would replace the Stevens Creek Shell gasoline station, an existing source of TAC emissions. As provided in the background information regarding existing TAC sources in Health Risk Assessment, the Stevens Creek Shell gasoline station is

reported by BAAQMD as Plant 112344 to have a source risk of 5.05 chances per million. Additionally, the facility includes Plant 21376 that has a cancer risk of 0.50 chances per million. These facilities are about 115 feet from the nearest receptors where the maximum construction cancer risk was modeled. Using the BAAQMD Gas Station Distance Multiplier, the adjusted cancer risk from the Stevens Creek Shell gasoline station is 2.5 chances per million."

Cumulative community risk impacts were addressed through an evaluation of TAC sources located within 1,000 feet of the construction maximally exposed individual (MEI). These sources include highways (i.e., Interstate 280), busy surface streets (i.e., Stevens Creek Boulevard), and stationary sources identified by BAAQMD. Community risk impacts from these sources upon the construction MEI are below the required thresholds and are reported in the table below.

Source	Maximum Cancer Risk (per million)	PM2.5 concentration (µg/m3)	Hazard Index
Project Construction	9.7 (infant)	**0.07**	0.01
Removal of Shell Gas Station	2.5 (lifetime)	**0.00**	0.01
Project Increased Cancer Risk →	7.1 (infant)	**0.07**	0.00
BAAQMD Single-Source Threshold	***>10.0***	***>0.3***	***>1.0***
Significant?	*No*	*No*	*No*
Interstate 280 (Link 289, 6ft) at 600 feet south	11.8	0.09	0.01
Stevens Creek Boulevard at 190 ft south ADT 28355	4.6	0.17	<0.03
Plant #2181 (Generator) at 640 feet	0.2	<0.01	<0.01
Plant #108709 (Gas Station) at 680 feet	0.7	-	<0.01
Plant #22425 (Generator) at 670 feet	0.9	<0.01	<0.01
Plant #22426 (Generator) at 850 feet	1.5	<0.01	<0.01
Combined Sources Total	26.8 (infant)	0.33	<0.09
BAAQMD Cumulative Source Threshold	***>100***	***>0.8***	***>10.0***
Significant?	*No*	*No*	*No*

The table above reports both the project and cumulative community risk impacts. Without mitigation, the project would have a less-than-significant impact with respect to community risk caused by project construction activities, since the maximum cancer risk, PM2.5 concentration, and HI do not exceed the single-source thresholds of 10.0 per million for cancer risk, 0.3 µg/m3 for PM2.5, and HI of 1.0, respectively. Therefore, the combined annual cancer risk and Hazard risk values, which includes unmitigated and mitigated, would not exceed the cumulative threshold.

Comment 4.13:

By failing to assess the health risks to adjacent sensitive receptors, the Project also is inconsistent with the City's General plan. The General Plan addresses toxic air contaminants by establishing Goal MS-11

requiring the City to "[m]inimize exposure of people to air pollution and toxic air contaminants such as ozone, carbon monoxide, and particulate matter." To achieve this goal, the General Plan's Policy MS-11.1 states that the City must "[r]equire completion of air quality modeling for sensitive land uses such as new residential developments that are located near sources of pollution such as freeways and industrial uses" and require effective mitigation measures. The lack of any TAC modeling for the Project fails to protect the sensitive receptors adjacent to the project and is inconsistent with this goal and policy.

Response 4.13: The City's General Plan Policy MS-11.1 does not apply to the project because it is not considered a sensitive land use, such as new residences or a school, which would have significant concentrations of sensitive receptors over a long period of time (i.e., more than a few nights typically associated with hotel guests). . Moreover, as part of the Response to Comment, TAC analysis was completed to disclose the potential impact of the project operations and constructions to the nearby residents and had concluded to meet the BAAQMD threshold (Refer to Response 4.9 to Response 4.11).

Comment 4.14:

The IS/MND, despite acknowledging that the Project is projected to emit approximately 1,528 metric tons per year – well above the BAAQMD threshold of 1,100 metric tons of CO2e per year – claims that because the Project is consistent with the mandatory requirements of the City's GHG Reduction Strategy ("GHGRS"), it will not have any significant impacts from its GHG emissions. IS/MND, pp. 64-69. However, "[i]f there is substantial evidence that the effects of a particular project may be cumulatively considerable notwithstanding the project's compliance with the specified requirements in the plan for the reduction of greenhouse gas emissions, an EIR must be prepared for the project." 14 Cal. Admin Code § 15183.5(b)(2). The evidence that the Project is projected to exceed BAAQMD's numeric GHG threshold is substantial evidence that the Project may be cumulatively considerable despite its alleged compliance with the City's GHGRS. The Guidelines thus require the preparation of an EIR.

Response 4.14: As stated in the Greenhouse Gas Emission Section of the Recirculated IS/MND, the project is expected to generate 1,528 MT CO_2e per year. Although this is over the 1,100 MT CO_2e BAAQMD "bright line" threshold for new projects, it does not account for annual CO_2e emissions generated by the existing gas station. The existing gas station generates approximately 1,195 CO_2e emissions per year, as demonstrated by the CalEEMod output dated November 5, 2018 (Appendix B); using the existing gas station emissions as a baseline, the project would result in a net increase of only approximately 333 CO_2e emissions per year. The net increase in CO_2e will be significantly less than the 1,100 MT CO_2e "bright line" threshold.

GHG emissions are a cumulative impact which was evaluated in the 2011 Envision San Jose 2040 General Plan Final Environmental Impact Report (General Plan 2040 FEIR) and the 2015 Envision San Jose 2040 General Plan Supplemental Environmental Impact Report (General Plan 2040 SEIR). These EIRs evaluated

the cumulative GHG emissions of buildout of the General Plan pursuant to the overarching major strategies outlined in the General Plan, including focusing future growth into Urban Villages along transit lines or locations near downtown or major employment centers. The proposed hotel project is within the anticipated growth capacity evaluated in these EIRs for development of the Stevens Creek Boulevard Urban Village, and is therefore consistent with the City's Greenhouse Gas Reduction Strategy. The project would not result in a new significant impact that was not disclosed in the Recirculated IS/MND, and therefore, an EIR is not required.

Comment 4.15:
Moreover, "[a] plan for the reduction of greenhouse gas emissions should: … (B) Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable…. 14 Cal. Admin Code § 15183.5(b)(1)(B). San Jose's GHGRS does not establish any such level.

Response 4.15 This statement is false. The City's GHG Reduction Strategy is supported by analysis and substantial evidence in the General Plan 2040 SEIR, which was certified by City Council in December 2015.

Comment 4.16:
In addition, "[a]n environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project." 14 Cal. Admin Code § 15183.5(b)(2). Going through the relevant GHG reduction strategies included in the City's plan and referenced in the IS/MND, there is no evidence that any of the referenced strategies are either requirements that apply to the Project or would result in any significant reduction in GHG emissions from the Project.

For example, the GHGRS calls for the City to "[p]lan for housing sufficient to house 100% of the Bay Area's future workers and residents from all income levels, without displacing current low-income residents." This strategy is not a requirement that applies to or is even relevant to this hotel project and does nothing to mitigate the Project's GHG emissions.

Response 4.16: The project does not propose to remove existing housing units nor does it propose to construct housing units. Development of the proposed project is anticipated to begin the first quarter of 2019, in one single phase and anticipated to take approximately eighteen months. As stated in the Greenhouse Gas Emission Section of the Recirculated IS/MND, the proposed use is consistent with the General Plan Land Use Designation/Transportation Diagram which anticipate these type of uses in the land use capacity and is consistent with all applicable mandatory measures. Furthermore, as stated in Response 4.14 the project's emission calculation result

conclude that the project would continue to be below the "bright line" threshold.

Comment 4.17:
The IS/MND points to the GHGRS's requirement that the City "[r]educe vehicle miles traveled (VMT) per capita by 10%." The proposed hotel Project will increase the existing VMTs resulting from the gas station at the site. No reduction of VMTs from the existing conditions will result from the Project. The IS/MND relies on the notion that the hotel project is infill development. IS/MND, p. 66. The IS/MND then points to the presence of four Santa Clara Valley Authority ("SCVA") bus stops within a quarter mile of the site. No evidence that hotel guests actually use public transit buses is provided in support of the IS/MND analysis. The notion that hotel guests for a Marriott hotel laden with luggage are likely to use buses rather than ride-share services or rental cars is not supported by any evidence and is counterintuitive. Certainly, SCVA must have data on its ridership, including what, if any, percent of riders are hotel guests. AC Marriott also has other existing hotels in the Bay area from which it also could have extracted information about the likelihood that guests would utilize bus transit at the proposed location. The assertion that bus options will in fact encourage any significant number of the hotel's guests to drive less is not substantiated with any evidence. Even if the hotel were to provide shuttles to nearby attractions, there is no evidence that the additional VMT required to get people to and from the hotel will be reduced at all.

Response 4.17: The primary component of the City's GHG Reduction Strategy is to focus growth into infill locations in Urban Villages, designated employment areas, or downtown. Most of these locations, like the Stevens Creek Boulevard Urban Village where the project is located, are on high-frequency transit lines. TDM plans are typically implemented for several reasons including to reduce the amount of traffic generated by a land use, to promote more efficient utilization of existing transportation facilities and ensure that developments are designed to maximize the potential for alternative transportation usage, or to reduce the parking demand generated by new development and allow for a reduction in parking supply. The project will implement a TDM Plan, which could include transit passes for employees, a shuttle service to major points of interest, and unbundled parking (guests must pay for parking), all of which will contribute to a reduction in vehicle miles traveled as it provides alternative modes of transportation. Therefore, hotel employees can utilize the transit passes and take advantage of the nearby transit stations for their daily commute. Additionally, for hotel guests the TDM plans provides hotel shuttles for transport to and from the airport as well as to major destinations, and promotes the use of rideshare services. Refer to project's consistency with other City's policy to reduce greenhouse gas emission (i.e. Greenhouse Gas Reduction Strategy) in Responses 4.14 to Responses 4.16 above.

Comment 4.18:
A similar paucity of evidence undermines the IS/MND's reference to the TDM's strategy of "[i]ncreas[ing] location efficiency." IS/MND, p. 69. Again, the IS/MND relies on the unsubstantiated assumption that hotel guests will opt to use transit buses within a quarter of a mile of the Project in some significant

numbers. *Id*. There is no evidence that any substantial number of guests would utilize that service. The IS/MND also notes the presence of a bike lane on Stevens Creek Boulevard. Again, few if any people arriving and departing the hotel or heading to business meetings are likely to ride a bike from the hotel, so there is no evidence that the presence of the bike lane would encourage in any meaningful way any transportation efficiencies associated with the project's location.

Response 4.18: The analysis in the IS/MND does not assume a substantial number of guests would use public transit, as evidenced by trip generation rates in the CalEEMod outputs and the Transportation Impact Analysis supporting the IS/MND. The IS/MND does assume the project will have locational efficiencies due to the location of the proposed hotel within a mile of major destinations such as Main Street Cupertino, future development on the Vallco site, and major employment centers (such as Apple Park). Guests will be able to walk to eating and entertainment destinations in Main Street Cupertino and will be a short drive or bike ride to major employment centers. This implements a major component of the City's GHG Reduction Strategy by placing new development in locations near major destinations to give future users options to using a single-occupancy vehicle and reducing driving distance when a single-occupancy vehicle is used.

Comment 4.19:
The GHGRS calls for the "Installation of solar panels or other clean energy power generation sources on development sites, especially over parking areas." *See* IS/MND, p. 68. Rather than installing solar panels, the Project merely proposes to "install solar ready zone areas on the roof which is an allocated space suitable for solar panels to be installed at a future date." *Id*. How is this half-step consistent with the installation of solar panels? In order to be consistent with the GHGRS and Section 15183.5(b)(2), there must be a binding commitment for the hotel to install solar panels. In order to mitigate the Project's GHG impacts, the panels should be operative by the conclusion of the Project's construction.

Response 4.19: Installation of solar panels is not a mandatory measure of the City's GHG Reduction Strategy. It is an optional criteria that the applicant could choose to implement in order to reduce energy use and/or to comply with the City's Green Building Ordinance. The project is subject to compliance with the City's Green Building Policy as a condition of approval and is implemented prior to the issuance of a building permit. Refer to project's consistency with other City's policy to reduce greenhouse gas emission (i.e. Greenhouse Gas Reduction Strategy) in Responses 4.14 to Responses 4.18 above.

Comment 4.20:
The GHGRS calls for the use of recycled water wherever feasible and cost- effective. *See* IS/MND, p. 68. Rather than explain whether or not recycled water is feasible and cost-effective, the Project and IS/MND simply state that recycled water is not proposed. *Id*. More is needed to erase this mandatory requirement of the City's GHGRS.

Response 4.20: The use of recycled water is not a mandatory requirement of the City's GHG Reduction Strategy. Furthermore, the project site is not served by the South Bay Water Recycling Distribution System, and therefore use is not feasible.

Comment 4.21:

The GHGRS highlights the importance of car share programs. IS/MND, Appendix F (AC Hotel Transportation Demand Management Plan ["TDM"]), p. 12; IS/MND, p. 68. However, the Project's IS/MND leaves its possible car share program entirely undeveloped. The IS/MND indicates that the hotel "will implement a carpool/vanpool or car-share program, carpool ride-matching for employees, assistance with vanpool formation, provision of vanpool or car-share vehicles, and assign carpool, vanpool and car-share parking at the most desirable on-site locations at the ratio set forth in the proposed project's conditions of approval." It is impossible to tell what kind of program is envisioned or whether it would prove effective in a hotel context. The TDM actually identifies only five measures. These include providing bus passes to employees. TDM, p. 14. Certainly useful but not a large source of VMTs from the Project given that 18 employees are anticipated on site at any given time. *See* IS/MND, Appendix G, p. 35. The TDM also identifies a hotel shuttle for guests to points of interest and a bicycle program. TDM, p. 14. As noted above, how effective these measures may be is not supported by any evidence or analysis. Even the suggested hotel shuttle to and from major points of interest may or may not meaningfully reduce VMTs if use by guests is limited. The TDM also relies on having guests pay for parking. *Id*., pp. 14-15. Lastly, the TDM includes a TDM coordinator at the hotel and identifies various third party trip planning services. *Id*., p. 15. Although each of these measures is beneficial and could reduce the Project's expected VMTs by some unknown amount, there is no evidence to suggest it is likely that these measures will reduce the Project's increased VMTs in any meaningful way.

Response 4.21: A TDM Plan is not required for compliance with the City's GHG Reduction Strategy. The project's TDM Plan is required to reduce parking demand, not as mitigation to reduce project GHG emissions. Although implementation of the TDM Plan will have the additional benefit of contributing to a reduction in project GHG emissions, the project is not required to calculate the precise reduction in VMT and GHG emissions because no significant GHG impact was identified. Furthermore, as stated in the IS/MND, the project complies with the City's GHG Reduction Strategy by virtue of being a high-density development in an area with increased location efficiency.

Comment 4.22:

The GHGRS calls for plans to "[l]imit parking above code requirements." IS/MND, p. 68. The Project does limit parking to well below the spaces otherwise required by the Code – 100 versus 186 spaces. However, the TDM and IS/MND indicate that the hotel may arrange for parking at nearby lots. IS/MND, pp. 128-129. That contingency would effectively eliminate any benefit of requiring reduced parking on-site. Moreover, the TDM relies mostly on the presence of bus lines nearby. It is unrealistic for a hotel project to depend on guests visiting for a few days to meaningfully rely upon bus routes to travel to and

from the hotel, especially when first arriving and departing with luggage.

Response 4.22: As stated in Responses 4.17, 4.18, and 4.21, above, the TDM Plan is required to reduce parking demand to support the reduction in on-site parking spaces. The TDM Plan is not required to reduce GHG emissions. The analysis in the ISMND also does not assume that guests will use bus service for their transportation needs, but other TDM options include guest-friendly measures such as hotel shuttle service and rideshare availability. Refer to project's consistency with other City's policy to reduce greenhouse gas emission (i.e. Greenhouse Gas Reduction Strategy) in Responses 4.14 to Responses 4.16 above.

Comment 4.23:

The IS/MND relies on the requirement for the Project to comply with the City's Green Building ordinance. IS/MND, p. 66. The IS/MND lists several green building features to be applied by the project. *Id.*, p. 67. These include designated parking for clean air vehicles, underground parking reducing heat island effects, low water use fixtures, rainwater (grey water) use in landscaped areas, rainwater bio swales developed on-site, cooling roofing material shall be utilized reducing heat island effects, adhesives, sealants and caulks shall be low or no VOC and the dedicated solar ready zone will be provided on the roof. Although these measures may have incremental benefits (although actual solar panels are not guaranteed), there is no indication whether or how these measures will comply with the green building ordinance.

Response 4.23: Compliance with the City's Green Building Ordinance will be evaluated at time of building permit application review. As a commercial project, the project will be required to submit certification that the project meets criteria to be either U.S. Green Building Council LEED certified or GreenPoint Rated certified pursuant to Chapter 17.84 of the Municipal Code. This is a condition of approval in the permit and the project is required to illustrate compliance to this requirement prior to the issuance of a building permit. Therefore, the project is consistent with City's applicable policies.

Comment 4.24:

The City's Green Building Ordinance boils down to a requirement that certain categories of projects within San Jose achieve certain levels of LEED certification. San Jose Municipal Code, Chapter 17.84. LEED certification is not transparent to a reader of the IS/MND. The various LEED certification levels are based on a point system. The IS/MND does not explain the LEED point system. Nothing in the IS/MND explains what features the Project would claim to justify whatever points may be available to the Project in the LEED system. In other words, it is completely opaque for the IS/MND to invoke the City's Private Sector Green Building Policy and Green Building Ordinance, which in turn invoke a LEED point system that is inaccessible to the reviewing public, as a logical explanation of how the Project's specific design elements and facilities will reduce GHG emissions.

Response 4.24: Compliance with the City's Green Building Ordinance is not intended as mitigation under CEQA, but is a requirement for all projects unless exempted due to unique

circumstances. Therefore, the IS/MND is not required to justify compliance with checklist requirements for CEQA clearance. Therefore, this comment not raise any new significant impact or result in the need for any new mitigation measures.

Comment 4.25:

The Private Sector Green Building Policy actually requires this Project to be certified LEED Silver. http://www.sanjoseca.gov/index.aspx?NID=3284 ("Commercial/Industrial Tier 2 - ≥ 25,000 square feet = LEED Silver"). Residential projects may rely on a mere LEED certification. San Jose Municipal Code § 17.84.104 ("'Commercial / industrial building' means all non-residential construction including construction of retail space, office space, and other commercial uses, regardless of the zoning scheme at the project's location"). *See also* § 17.84.112 ("'Large commercial building' means a non-residential building having a gross floor area of twenty-five thousand (25,000) square feet or more and is not a high-rise building"). Large commercial buildings are deemed Tier two projects under the Code. § 17.84.121 ("Tier two project" means a large commercial industrial building…"). "All tier two commercial industrial projects for which this chapter is applicable must receive the minimum green building certification of LEED Silver." § 17.84.220.

Response 4.25: This comment re-iterates the City's Green Building Policy, and does not speak to the analysis in the IS/MND. Therefore, no further response is required.

Comment 4.26:

Even with that heightened LEED certification level, the City's ordinance does not guarantee that even a large commercial project such as the proposed Project will necessarily achieve LEED Silver because it provides for Project specific exemptions at the discretion of the Director of Planning. § 17.84.210. As a result, no one can be sure what compliance with the City's Green Building Ordinance may look like for this Project.

Accordingly, the IS/MND is entirely without evidentiary support and a fair argument exists that the Project may have significant GHG emission impacts.

Response 4.26: As stated in Response 4.24, compliance with the City's Green Building Ordinance is not required as CEQA mitigation for an identified impact. As stated in the IS/MND, the project will not have a GHG impact because it complies with the City's GHG Reduction Strategy.

In addition, the Recirculated IS/MND analysis finds that GHG emissions will be below the project-specific BAAQMD thresholds. As stated in the IS/MND, the project is expected to generate 1,528 MT CO_2e per year. The existing gas station generates approximately 1,195 CO_2e emissions per year, resulting in a net increase of only 333 CO_2e emissions per year. See Response 4.14.

Comment 4.27:
For the foregoing reasons, the IS/MND for the Project should be withdrawn, an EIR should be prepared, and the draft EIR should be circulated for public review and comment in accordance with CEQA. Thank you for considering these comments.

Response 4.27: Based on the analysis disclosed in the Recirculated IS/MND and response to comments, the proposed project will not have a significant effect on the environment in that the IS/MND identifies one or more potentially significant effects on the environment for which the project applicant, before public release of the Mitigated Negative Declaration, has made or agreed to make project revisions that clearly mitigate the effects to a less than significant level, as defined in CEQA Guidelines §15369.5.

Furthermore, the comments raised did not provide information indicating the project would result in new environmental impacts or impacts substantially greater in severity than disclosed in the IS/MND [CEQA Guidelines §15074(b)] and therefore, and have not presented a fair argument that the project will result in significant, adverse, unmitigatable impacts. Therefore, the project does not require the preparation of an Environmental Impact Report.

5. RESPONSES TO COMMENTS FROM SANTA CLARA VALLEY WATER DISTRICT ON OCTOBER 25, 2018

Comment 5.1:
The District has reviewed the Revised MND for City File H17-023, AC by Marriott- West San Jose Project, dated October 2018 and received by the District on October 5, 2018. The District does not have any facilities or right of way on or adjacent to the project. However, District records there is one active well at the site. If the well will continue to be used following redevelopment of the site, it must be protected so that it does not become lost or damaged during redevelopment of the site. If the well will not be used following redevelopment of the site, it must be properly destroyed under permit from the District. For more information regarding how to obtain a well destruction permit, please call the District's Well Ordinance Program Hotline at 408-630-2660.

Santa Clara Valley Water District (District) records indicate that 11 properly destroyed wells are located on the subject property. Because the wells are considered properly destroyed, no action is necessary to protect them or to bring them into compliance with the District Well Ordinance. While the District has records for most wells located in the County, it is always possible that a well exists that is not in the District's records. If previously unknown wells are found on the subject property during development, they must be properly destroyed under permit from the District or registered with the District and protected from damage.

Response 5.1: Comment noted, the project would be required to comply with the requirements of other regulatory agencies. The author of this comment does not address the analysis contained in the Recirculated IS/MND. Therefore, no further response is required.

6. RESPONSES TO COMMENTS FROM CATHERINE THALER DISTRICT ON OCTOBER 25, 2018

Comment 6.1:
Thank you for the opportunity to respond.

First: I don't feel the response to my letter about the effect on Stern was complete. I don't believe that the simple fact that all trips will impact the first 130 feet of Stern was studied or a concern. It really is immaterial how many gas station trips there are because most of them are on Stevens Creek. ALL of the proposed 1400 trips will be on Stern, with an immediate left turn required for half of them. This is going to be a problem.

Response 6.1: The intersection of Stevens Creek/Stern was projected to operate at LOS C in the AM and LOS D in the PM with the additional project traffic. When measuring intersection Level of service, Traffix, the approved software, is used to calculate intersection operations.

The LOS calculations measure what the increase in delay would be during the highest peak hour. In this case, the existing AM delay at the intersection is 34.6 seconds and with the addition of project traffic will increase to 34.7 seconds. The existing PM delay is 36.4 and with the additional project traffic will increase to 36.5 seconds. Thus for both the am and pm peak hour, the overall intersection delay increases slightly.

Focusing on the north leg only at the intersection of Stevens Creek and Stern along the project frontage, the intersection analysis indicates that the existing vehicle delay in the AM is approximately 27.1 seconds with the average queue of one vehicle per lane and in the PM the existing vehicle delay is 32 seconds with the average PM queue of seven vehicles per lane.

Again focusing on the north leg only, with the addition of the project traffic, the projected AM vehicle delay is approximately 27.3 seconds with the average queue of one vehicle per lane and the projected PM vehicle delay is 32.1 seconds with the projected PM queue of 7 vehicles per lane. Thus, for both the AM and PM peak hour, the traffic remains consistent for both the existing condition and the existing condition with the addition of the project traffic. Therefore the Level of service at this intersection currently operates at LOS D and will continue to operate at LOS D with the project traffic.

Based on the intersection LOS which does not measurably change, and typical vehicle operations of a hotel, and the relatively low number of peak hour trips generated by the proposed hotel, the report did not identify any significant vehicle queuing along Stern Ave. However, once the project is operational, if there are

issues created by the project, the City always reserves the right to coordinate with Hotel at any time, to address any transportation issues that may arise.

Comment 6.2:

Second; I have several major concerns about the construction impact.

1. We already have a parking issue on Stern Avenue because of the overflow from the adjacent Apartment Complex on San Jose land. All construction workers parking needs to be offsite- maybe on the empty land across the street.
2. Stern is a major egress from this neighborhood and should not be closed or partially closed during construction.
3. There is a bus stop on Stevens Creek at this location, it needs to remain available also.
4. Children and teenagers walk and ride bikes along this section of Stevens Creek to get to Hyde Junior High and Cupertino High School. It needs to be safe for them at all times.

Response 6.2: 1.Construction Worker Parking

The City will consider a condition in the planning permit requiring the developer to coordinate parking for the workers that would minimize the effects to the existing neighborhood parking prior to issuance of Public Works Clearances.

2.Partial or full closure of Stern

Construction staging typically occurs on low volume streets such as Stern Ave. Typically, the City will issue a permit that will allow use of the sidewalk as a staging area and may include a parking lane. The appropriate signage directing pedestrians to the other side of the street will be required. It is not anticipated that two-way traffic will be prohibited along Stern Ave. There are many other conditions such as hours of operations, designating truck routes, etc. that will be included in the permit or required during construction that are intended to minimize neighborhood impacts.

3.Existing Bus Stop

If construction affects the existing bus stop, the bus stop may be temporarily relocated to avoid conflicts. The City anticipates that the bus stop will remain in operation and accessible during construction.

4.School Walking Route

City staff concurs with providing safe walking, bicycling routes to school, especially along major streets like Stevens Creek Boulevard and will work with the contractor to ensure good pedestrian access.

Comment 6.3

Third: This project does not conform to the adjacent style and size of buildings. It is so evident in the pictures. This is a tree lined street, where the mature trees hide 3 and 4 story buildings. You are plunking

down a 7 story "lego like" tower at the entrance to a neighborhood of 5000 residents.

Response 6.3: As discussed in the Aesthetics section of the Recirculated IS/MND on page 25, Stevens Creek Boulevard and Stern Avenue are not designated as scenic corridors in the City's General Plan, and the project site is not located as a designated City Gateway in the City's General Plan. As a result, the project would not degrade visual character of the area, and would not obscure any scenic vistas, damage scenic resources, or degrade the visual quality of the area. The project is located within the Stevens Creek Boulevard Urban Village Plan and as such, the include Urban Design Guidelines and Standards. The building's location and elevations respect the character of the approved urban village and respect the interface of the adjacent buildings. The building is designed to include large setbacks and façade articulation to reduce the massing of the building, consistent with the Urban Village Plan. Therefore, the project is not a significant impact with regards to aesthetics and meets the requirements of the Stevens Creek Boulevard Urban Village Plan and the Urban Village Design Guidelines**.**

7. RESPONSES TO COMMENTS FROM LOZEAU DRURY, LP, DATED OCTOBER 30, 2018.

This comment letter was submitted after the end of the public comment period, see Attachment D. Although these comments were not received during the public circulation period, the City is responding as a courtesy to clarify the analysis in the IS/MND, address community concerns, and for purposes of providing information and the administrative record.

Comment 7.1:

Please accept the following supplemental comments submitted on behalf of Laborers International Union of North America, Local Union 270 and its members ("LIUNA") regarding the Initial Study and Mitigated Negative Declaration ("IS/MND") prepared for the AC by Marriott - West San Jose Project ("Project") (Project File No. HI7-023). Certified Industrial Hygienist, Francis "Bud" Offermann, PE, CIH, has conducted a review of the Project, the IS/MND and relevant appendices regarding the Project's indoor air emissions. Indoor Environmental Engineering Comments (Oct. 29, 2018) (attached). Mr. Offerman concludes that it is likely that the Project will expose future workers employed at the hotel to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde. Mr. Offermann is one of the world's leading experts on indoor air quality and has published extensively on the topic.

Response 7.1: Responses to specific comments related to the adequacy of the IS/MND are provided below. Pursuant to the responses below and the analysis in the Re-circulated IS/MND, the City made the findings that an IS/MND is the adequate CEQA document for this project and would not expose future workers to adverse, significant air quality impacts. The Director of Planning, Building and Code Enforcement determined that the project would not have a significant effect on the environment if certain mitigation measures are incorporated into the project. The Recirculated IS/MND concluded that the project would result in potential impacts to biological resources and hazards and hazardous material. Consistent with the conclusion in the Recirculated IS/MND, the project would incorporate project-specific mitigation measures, City standard conditions and conditions of approval that will reduce those impacts to a less than significant level. The project applicant has made or agrees to make project revisions that will clearly mitigate the potentially significant effects to a less than significant level. Therefore, the project would reduce the impacts to less than significant levels, resulting in no further mitigation measures or an environmental impact report to be required.

Comment 7.2:

Mr. Offermann explains that many composite wood products typically used in hotel construction contain formaldehyde-based glues which off-gas formaldehyde over a very long time period. He states, "The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particle board. These materials are commonly used in residential and hotel building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims."

Formaldehyde is a known human carcinogen. Mr. Offermann states that there is a fair argument that full-time workers at the AC by Marriott project will be exposed to a cancer risk from formaldehyde of approximately 18.4 per million. This is almost double the Bay Area Air Quality Management District (BAAQMD) CEQA significance threshold for airborne cancer risk of 10 per million. Mr. Offermann states:

> With respect to this project, AC by Marriott - West San Jose, since this is a hotel, guests are expected to have short term exposures (e.g. less than a week), but employees are expected to experience longer term exposures (e.g. 40 hours per week, 50 weeks per year). The longer term exposures for employees is anticipated to result in significant cancer risks resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in residences and hotels.

Offermann Comments, p. 4. Mr. Offermann concludes that this significant environmental impact should be analyzed in an EIR and mitigation measures should be imposed to reduce the risk of formaldehyde exposure. *Id.*, pp. 6-7. Mr. Offermann suggests several feasible mitigation measures, such as requiring the use of no-added-formaldehyde composite wood products, which are readily available. Offermann Comments, pp. 6-7. Mr. Offermann also suggests requiring air ventilation systems which would reduce formaldehyde levels. *Id.* Since the MND does not analyze this impact at all, none of these or other mitigation measures are considered.

When a Project exceeds a duly adopted CEQA significance threshold, as here, this alone establishes a fair argument that the project will have a significant adverse environmental impact and an EIR is required. Indeed, in many instances, such air quality thresholds are the only criteria reviewed and treated as dispositive in evaluating the significance of a project's air quality impacts. See, e.g. *Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 960 (County applies BAAQMD's "published CEQA quantitative criteria" and "threshold level of cumulative significance"). See also *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 110-111 ("A 'threshold of significance' for a given environmental effect is simply that level at which the lead agency finds the effects of the project to be significant"). The California Supreme Court made clear the substantial importance that an air district significance threshold plays in providing substantial evidence of a significant adverse impact. *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 327 ("As the [South Coast Air Quality Management] District's established significance threshold for NOx is 55 pounds per day, these estimates [of NOx emissions of 201 to 456 pounds per day] constitute substantial evidence supporting a fair argument for a significant adverse impact"). Since expert evidence demonstrates that the Project will exceed the BAAQMD's CEQA significance threshold, there is a fair argument that the Project will have significant adverse impacts and an EIR is required.

Response 7.2: The comment letter and supporting memorandum from Mr.Offerman on indoor air quality claims that the project will expose future workers employed at the hotel to

significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde. This assertion of a fair argument is incorrect as the project will need to comply with the 2016 CalGreen Code, which specifies that composite wood products (such as hardwood plywood and particleboard) meet the requirements for formaldehyde as specified in the California Air Resources Board's Air Toxic Control Measures. The 2016 CalGreen building code does not allow added formaldehyde-based resins or ultra-low emitting formaldehyde resins, and requires documentation of compliance with the California Air Resources Board's Air Toxic Control Measures. Furthermore, the commenter is speculating in the assertion that composite wood materials would be used in the interior of the building. Indoor building materials will not be known until the building permit stage, and as stated above, these materials will be required to comply with the California Air Resources Board, 2016 CalGreen building code, and LEED certification requirements.

Comment 7.3:
Mr. Offermann also notes that the high cancer risk that may be posed by the Project's indoor air emissions likely will be exacerbated by the additional cancer risk that exists from vehicle emissions from the adjacent Stevens Creek Boulevard and other nearby roadways. As the previous comments submitted by SWAPE point out, however, the applicant and City have not estimated the cumulative health risk impacts of the Project either on nearby sensitive receptors or future workers at the Project. *See* SWAPE Comment (Oct. 24, 2018). Consistent with SWAPE's observations, Mr. Offermann notes:

> The [IS/MND] does not assess the impact of existing or future traffic related emissions of PM2.5 upon the outdoor or indoor air concentrations. The air quality analyses in this MND focuses only on the emissions (pounds/day) of air contaminants from construction and operation and compares these emissions to the requirements established by the Bay Area Air Quality Management District (BAAQMD). The MND contains no air dispersion calculations of the cumulative impact these project related emissions and existing emissions have upon the concentrations of air contaminants in the outdoor and indoor air that people inhale each day.

Response 7.3: See Responses 4.9 through 4.12.

Comment 7.4:
Offermann Comments, p. 6. Mr. Offermann identifies a rule adopted in San Francisco that identifies a level of PM2.5 that triggers the installation of air filter systems in new development. "The San Francisco Department of Public Health, 2014. Article 38, Enhanced Ventilation Required for Urban Infill Sensitive Use Developments, requires that air filtration, with a minimum efficiency of MERV 13 be installed to remove PM2.5 from mechanically supplied outdoor air in all PM2.5 impacted areas." Offermann Comments, p. 6. A PM2.5 impacted area includes "[a]ll areas within 500 feet of any freeway or high-traffic road way (defined as urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day), unless air dispersion modeling shows total (traffic and ambient) outdoor concentrations of

less than an annual average of 10 μg/m3 PM2.5, are defined as PM2.5 impacted areas." *Id*. Mr. Offermann concludes that:

> It is my experience that based on the high future traffic noise level of 79 dBA Ldn. (City of San Jose, 2018, Revised Public Review Draft Initial Study – Mitigated Negative Declaration, Table 14 - Predicted Future Traffic Noise Exposure) that the annual average concentration of PM2.5 will be substantially higher than 10 μg/m3, and warrant installation of MERV 13 air filters in all mechanically supplied outdoor air ventilation systems.

Id.

Response 7.4: The Health Risk Assessment prepared for the proposed project (Appendix C) concluded that the maximum-modeled annual $PM_{2.5}$ concentration, which is based on combined exhaust and fugitive dust emissions, would be $0.07 \mu g/m^3$. Therefore, this maximum annual $PM_{2.5}$ concentration would be below the BAAQMD significance threshold of greater than $0.3 \mu g/m^3$. Refer to Response 4.9 to 4.13 and Appendix C of this Response to Comment for detailed information on the results of the Health Risk Assessment and conformance to BAAQMD thresholds.

Comment 7.5:

LIUNA has previously brought Mr. Offermann's indoor air pollution concerns to the attention of the City. During a Planning Commission hearing held on September 26, 2018 regarding a project proposed at 715 West Julian Street, Planning Department staff responded to the indoor air pollution concerns raised by LIUNA. During that hearing, staff claimed that a California Supreme Court decision – *California Building Industry Ass'n v. Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 386 ("*CBIA"*) – ruled that this type of air quality impact need not be addressed under CEQA because future residents of a mixed use project are part of the project and CEQA does not require evaluation of health or other impacts of a project on itself. To the extent staff again takes the position that future workers are not worthy of considering health protections under CEQA because they are part of the AC by Marriott project, staff's responses would be incorrect as a matter of law. Indeed, rather than support staff's response, the California Supreme Court in *CBIA* expressly holds that potential adverse impacts to future users and residents from pollution generated by a proposed project ***must be addressed*** under CEQA.

At issue in *CBIA* was whether the Air District could enact CEQA guidelines that advised lead agencies that they must analyze the impacts of adjacent environmental conditions on a project. The Supreme Court held that CEQA does not generally require lead agencies to consider the environment's effects on a project. (*CBIA*, 62 Cal.4th at 800-801.) However, to the extent a project may exacerbate existing adverse environmental conditions at or near a project site, those would still have to be considered pursuant to CEQA. (*Id*. at 801) ("CEQA calls upon an agency to evaluate existing conditions in order to assess whether a project could exacerbate hazards that are already present"). In so holding, the Court expressly held that CEQA's statutory language required lead agencies to disclose and analyze "impacts on ***a project's users or residents*** that arise ***from the project's effects*** on the environment." (*Id*. at 800 (emphasis added).)

The carcinogenic formaldehyde emissions identified by Mr. Offermann are not an existing environmental condition. Those emissions to the air will be from the Project. Employees will be users of the hotel. Currently, there is presumably little if any formaldehyde emissions at the site. Once the Project, emissions will begin at levels that pose significant health risks. Rather than excusing the City from addressing the impacts of carcinogens emitted into the indoor air from the Project, the Supreme Court in *CBIA* expressly finds that this type of effect by the project on the environment and a "project's users and residents" must be addressed in the CEQA process.

The Supreme Court's reasoning is well-grounded in CEQA's statutory language. CEQA expressly includes a project's effects on human beings as an effect on the environment that must be addressed in an environmental review. "Section 21083(b)(3)'s express language, for example, requires a finding of a 'significant effect on the environment' (§ 21083(b)) whenever the 'environmental effects of a project will cause substantial adverse effects *on human beings,* either directly or indirectly.'" (*CBIA*, 62 Cal.4th at 800 (emphasis in original.) Likewise, "the Legislature has made clear—in declarations accompanying CEQA's enactment—that public health and safety are of great importance in the statutory scheme." (*Id*., citing e.g., §§ 21000, subds. (b), (c), (d), (g), 21001, subds. (b), (d).) It goes without saying that the hundreds of future employees at the Project are human beings and the health and safety of those workers is as important to CEQA's safeguards as nearby residents currently living adjacent to the Project site.

Response 7.5: See Response 7.2. Additionally, the indoor air quality comments submitted by the commenter for the 715 West Julian Street project were responded to in a Supplemental Memorandum dated October 17, 2018. Consistent with this project and the responses provided above, the Supplemental Memorandum explained that the project will comply with the 2016 CalGreen Code, requirements for formaldehyde as specified in the California Air Resources Board's Air Toxic Control Measures, and comply with the City's Green Building Ordinance.

Comment 7.6:
For the above additional reasons, the IS/MND for the Project should be withdrawn, an EIR should be prepared, and the draft EIR should be circulated for public review and comment in accordance with CEQA. Thank you for considering these comments.

Response 7.6: Based on the analysis disclosed in the Recirculated IS/MND and the responses to similar comments herein, the proposed project will not have a significant effect on the environment in that the IS/MND identifies one or more potentially significant effects on the environment for which the project applicant, before public release of this Recirculated Mitigated Negative Declaration, has made or agreed to make project revisions that clearly mitigate the effects to a less than significant level, as defined in CEQA Guidelines §15369.5.

Furthermore, the comments raised did not provide information indicating the project would result in new environmental impacts or impacts substantially greater

in severity than disclosed in the IS/MND [CEQA Guidelines §15074(b)] and therefore, and have not presented a fair argument that the project will result in significant, adverse, un-mitigatable impacts which would require the preparation of an Environmental Impact Report.

Attachment A
Combined Public Comments

Mathur, Krinjal

From: Aerieways [redacted]
Sent: Sunday, October 07, 2018 9:06 PM
To: Mathur, Krinjal
Subject: Re: San Jose Planning Public Review Revised Draft MND: AC by Marriott – West San José

This project is within the lands once held by the Tamien speakers. By agreement these are represented by Muwekma Tribal Band. I suggest you speak to their representative Alan Leventhal.

As the project has four levels of subterranean parking It will require monitors as there is a significant possibility as a cultural resources thousand of years old could be buried by many feet of alluvium.

Ed

-----Original Message-----
From: Mathur, Krinjal <krinjal.mathur@sanjoseca.gov>
To: Mathur, Krinjal <krinjal.mathur@sanjoseca.gov>
Sent: Fri, Oct 5, 2018 3:44 pm
Subject: San Jose Planning Public Review Revised Draft MND: AC by Marriott – West San José

PUBLIC NOTICE
INTENT TO ADOPT
A REVISED MITIGATED NEGATIVE DECLARATION
CITY OF SAN JOSE, CALIFORNIA

Project Name: AC by Marriott – West San José

File No.: H17-023

Description: Site Development Permit to allow the demolition an existing gas station and convenience store, and the construction of a seven story hotel with 168 rooms, four levels of subterranean parking, a restaurant, and associated on-site improvements including paving and landscaping on a 0.415 gross acre site.

Location: Southeast corner of Stevens Creek Boulevard and Stern Avenue, at 5696 Stevens Creek Boulevard in San José;

Assessor's Parcel No.: 375-12-017

Council District: 1

Applicant Contact Information: Asset Gas SC, Inc., 7969 Engineer Road Unit 108, San Diego, CA 92111

The City has performed an environmental review of the project. The environmental review examines the nature and extent of any adverse effects on the environment that could occur if the project is approved and implemented. Based on the review, the City has prepared a revised Draft Mitigated Negative Declaration (MND) for this project. An MND is a statement by the City that the project will not have a significant effect on the environment if the project implements the protective measures (mitigation measures) identified during the environmental review. The project site is present on a list pursuant to Section 65962.5 of the California Government Code.

The revised Draft MND includes additional analysis and supporting information that was not included in the previously circulated Draft MND. The initial circulation of the Draft MND was from August 17, 2018 to September 6, 2018.

The public is welcome to review and comment on the revised Draft MND. The public comment period for this revised Draft MND **begins on October 5, 2018 to October 25, 2018**.

Tentative Public Hearing Schedule: The item is tentatively scheduled to be heard at the Planning Director's Hearing on Wednesday, October 31, 2018 at 9:00 a.m. The hearing will be held in the City Council Chambers at San José City Hall at 200 E. Santa Clara Street, San Jose, CA 95113. Please confirm hearing dates by viewing the agendas available through links at http://www.sanjoseca.gov/index.aspx?NID=1763.

The revised Draft MND, revised Initial Study, and reference documents are available online at: http://www.sanjoseca.gov/index.aspx?NID=6145. The documents are also available for review from 9:00 a.m. to 5:00 p.m. Monday through Friday at the City of San José Department of Planning, Building and Code Enforcement, located at City Hall, 200 East Santa Clara Street; and at the Dr. Martin Luther King, Jr. Main Library, located at 150 E. San Fernando Street.

For additional information, please contact Krinjal Mathur at (408) 535-7874, or by e-mail at krinjal.mathur@sanjoseca.gov.

Krinjal Mathur
Planner | City of San José
Planning, Building & Code Enforcement
krinjal.mathur@sanjoseca.gov
408.535.7874

Mathur, Krinjal

From: Kirk Vartan [redacted]
Sent: Tuesday, October 23, 2018 3:58 PM
To: Mathur, Krinjal; The Office of Mayor Sam Liccardo; District1; District2; District3; District4; District5; District 6; District7; District8; District9; District 10; Planning Commission 2; Planning Commission 3; Planning Commission 1; Planning Commission 4; Planning Commission 5; Planning Commission 7; Planning Commission 6; Brilliot, Michael; Rivera, Robert
Cc: Erik Schoennauer; Hunter Oliver; mark@jbandersonplanning.com; Catalyze SV; WinchesterNAC Info; Bob Levy
Subject: SUPPORT: AC by Marriott – West San José, file #: H17-023, Assessor's Parcel Number: 375-12-017

Dear Mayor, Council, and Planning Staff,

I am writing a letter of support for the project called: AC by Marriott – West San José, file #: H17-023, Assessor's Parcel Number: 375-12-017.

This is a good project and one that is controversial only because it is on a City border. The fact is, no one in any neighborhood wants to see *any* change in their neighborhood. This is a good project for the area that just happens to be in San Jose. If it were in Cupertino, I am sure the Cupertino City Council would enthusiastically support it. Why? Because it just makes sense. It is directly across from the 9-story Apple "sardine can" that will have a twin 9-story building in a few years. Apple and other corporate identities will continue to dominate this area. This will support need hotel demand with a quality option. San Jose benefits because of the tax revenue, but Cupertino and Santa Clara also benefit because less traffic will be seen when corporate travelers will either walk to the Apple building if that is where they are going, or they will simply jump on 280 North or South to get to where they need to go. It is a win-win for all Cities involved. This will help the region with emissions and pollution.

Stevens Creek is already VTA's second highest grossing transit line, second only to El Camino. It is only growing and expanding.

On top of all that, Stevens Creek is being looked at as a future intense transportation corridor, with technologies such as Hyper-Loop or tunneling being discussed. And as part of Councilmember Jones' Innovation Corridor, I think there is incredible need for high intensity uses along Stevens Creek to really make it shine. Hotels like this one will be a great addition to the Innovation Corridor.

I was a co-chair of the Stevens Creek Advisory Group and we looked at this project when looking at the land uses for the corridor. This use fit cleanly and clearly into the design.

I hope you will support this project quickly and let it get built.

Kind regards,

Kirk Vartan
Co-Chair, Stevens Creek Advisory Group
President, Winchester NAC
Board Member, Catalyze SV
VP, Cory Neighborhood Association
GM/Founder, A Slice of New York, a Bay Area Worker Cooperative

==========
A Slice of New York
A New York Experience in the Bay Area
The Bay Area's newest worker-cooperative
3443 Stevens Creek Blvd. (San Jose/Santa Clara)
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https://na01.safelinks.protection.outlook.com/?url=www.asony.com&data=02%7C01%7Ckrinjal.mathur%40sanjoseca.gov%7C1469e32ab9b84214b7ae08d6393b0205%7C0fe33be061424f969b8d7817d5c26139%7C0%7C0%7C636759322940857486&sdata=Nnp%2FQm9ksgR%2B5LUtv1hI1T%2BChr4wsSztVW1TYR3V%2BSQ%3D&reserved=0
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Mathur, Krinjal

From: Sean McFeely [redacted]
Sent: Tuesday, October 23, 2018 11:21 PM
To: Mathur, Krinjal; The Office of Mayor Sam Liccardo; District1; District2; District3; District4; District5; District 6; District7; District8; District9; District 10; Planning Commission 2; Planning Commission 3; Planning Commission 1; Planning Commission 4; Planning Commission 5; Planning Commission 7; Planning Commission 6; Brilliot, Michael; Rivera, Robert; cc: Erik Schoennauer; Hunter Oliver; [redacted]; Catalyze SV; Bob Levy
Subject: SUPPORT: AC by Marriott – West San José, file #: H17-023, Assessor's Parcel Number: 375-12-017

Dear Mayor, Council, and Planning Staff,

I am writing a letter of support for the project called: AC by Marriott – West San José, file #: H17-023, Assessor's Parcel Number: 375-12-017.

This project is consistent with the city's goals for urban transit oriented developments along major transportation corridors, and is consistent with the approved Stevens Creek Urban Village. This is an important corridor that will continue to receive transit improvements from VTA, San Jose and neighboring cities. Cupertino has recently discussed a high frequency transit solution such as hyperloop. The project is adjacent to existing 4 story residential and 4-6 story commercial/hotel building.

The valley has a significant hotel shortage with room prices reaching up to $1,000/night in places. The project would help the city capture significant economic impact from the nearby existing and proposed commercial developments. With that said, the architectural design is horribly dull and lacking (compared to AC Hotel in Sunnyvale, link). The project can still be a success with proper attention to the streetscape and base of the building, particularly the pedestrian hostile west elevation. It would be critical that the hotel bar is open to the public to help promote street vibrancy. Ideally, the project would have a more iconic design to due to the site being the western gateway into the Stevens Creek Corridor. San Jose can capture more economic development if it pushes for equal or better design to proposals in the neighboring towns.

Many hotels in other cities provide rentable bike for patrons. I would be best if the hotel partners with motivate or another provider to locate rentable bikes on site. Bike stalls are no good... if there are no bikes.

The general plan and specific plan call for urban transit and pedestrian focused developments along the Stevens Creek Corridor. I hope you will follow thru on that goal and support this project.

Sean McFeely
Co-Chair CatalyzeSV Project Advocacy Committee

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October 24, 2018 Via E-mail

Rosalynn Hughey, Director
Sylvia Do, Acting Deputy Director
Robert Rivera, Panning Project Manager
Krinjal Mathur, Environmental Project Manager
Planning, Building and Code Enforcement
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Re: AC by Marriott - West San Jose Project
(October 31, 2018 Director's Hearing, Agenda Item 4.a; Project File No. HI7-023)

Dear Director Hughey, Deputy Director Do, Mr. Rivera, and Ms. Mathur:

I am writing on behalf of the Laborers International Union of North America, Local Union 270 and its members living in and around the City of San Jose ("LIUNA") regarding the Initial Study and Mitigated Negative Declaration ("IS/MND") prepared for the AC by Marriott - West San Jose Project ("Project") (Project File No. HI7-023). After reviewing the IS/MND, and with the assistance of expert review by environmental consulting firm SWAPE, the evidence indicates that there is a "fair argument" that the Project may have unmitigated adverse environmental impacts or, alternatively, the IS/MND is not supported by substantial evidence. SWAPE's comments (attached hereto as Exhibit A) as well as the comments below identify substantial evidence of a fair argument that the Project may have significant environmental impacts. Accordingly, an environmental impact report ("EIR") is required to analyze these impacts and to propose all feasible mitigation measures to reduce those impacts. We urge the Planning Director to decline to approve the IS/MND, and to instruct staff to prepare an EIR for the Project prior to any Project approvals.

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I. PROJECT BACKGROUND

The proposed Project includes the demolition of an existing gas station and the construction of an approximately 78,850 square feet hotel including 168 guest rooms, a restaurant and four floors of underground parking for 100 vehicles. Little information is provided regarding the restaurant but it would presumably be open to the public as well as guests and could generate significant use by non-guests. The Project's hotel use would generate about 1,400 vehicle trips per day. The MND hints at the possible use of parking at another nearby location should the proposed parking prove insufficient to handle the demand generated by the Project.

II. LEGAL STANDARD

As the California Supreme Court held, "[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR." *Communities for a Better Env't v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 319-320 ["CBE v. SCAQMD"], citing, *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75, 88; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 504–505. "Significant environmental effect" is defined very broadly as "a substantial or potentially substantial adverse change in the environment." Pub. Res. Code ["PRC"] § 21068; see also 14 CCR § 15382. An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial*." No Oil, Inc., supra*, 13 Cal.3d at 83. "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." *Communities for a Better Env't v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 109 ["*CBE v. CRA*"].

The EIR is the very heart of CEQA. *Bakersfield Citizens for Local Control v. City of Bakersfield (*2004) 124 Cal.App.4th 1184, 1214; *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927. The EIR is an "environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return." *Bakersfield Citizens,* 124 Cal.App.4th at 1220. The EIR also functions as a "document of accountability," intended to "demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action." *Laurel Heights Improvements Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 392. The EIR process "protects not only the environment but also informed self-government." *Pocket Protectors*, 124 Cal.App.4th at 927.

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment." PRC § 21080(d); see also *Pocket Protectors*, 124 Cal.App.4th at 927. In

very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact thus requiring no EIR (14 Cal. Code Regs.§ 15371), only if there is not even a "fair argument" that the project will have a significant environmental effect. PRC, §§ 21100, 21064. Since "[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process," by allowing the agency "to dispense with the duty [to prepare an EIR]," negative declarations are allowed only in cases where "the proposed project will not affect the environment at all." *Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440. A mitigated negative declaration is proper only if the project revisions would avoid or mitigate the potentially significant effects identified in the initial study "to a point where clearly no significant effect on the environment would occur, and…there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment." PRC §§ 21064.5 and 21080(c)(2); *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 331. In that context, "may" means a reasonable possibility of a significant effect on the environment. PRC §§ 21082.2(a), 21100, 21151(a); *Pocket Protectors, supra*, 124 Cal.App.4th at 927; *League for Protection of Oakland's etc. Historic Resources v. City of Oakland* (1997) 52 Cal.App.4th 896, 904–905.

Under the "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to support the agency's decision. 14 CCR § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-15; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602. The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. *Pocket Protectors,* 124 Cal.App.4th at 928.

The "fair argument" standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

> This 'fair argument' standard is very different from the standard normally followed by public agencies in making administrative determinations. Ordinarily, public agencies weigh the evidence in the record before them and reach a decision based on a preponderance of the evidence. [Citations]. The fair argument standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact. The lead agency's decision is thus largely legal rather than factual; it does not resolve conflicts in the evidence but determines only whether substantial evidence exists in the record to support the prescribed fair argument.

Kostka & Zishcke*, Practice Under CEQA*, §6.29, pp. 273-274. The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with a preference for resolving doubts in favor of environmental review." *Pocket Protectors,* 124 Cal.App.4th at 928.

In addition, a negative declaration must accurately describe the proposed project and its environmental setting. *Christward Ministry v. Superior Court* (1986) 184 Cal.App.3d 180; CEQA Guidelines §15071(a). The initial study must "provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment." CEQA Guidelines § 15063(c)(5).

III. There is a Fair Argument that the Project May Have Unmitigated Adverse Environmental Impacts.

A. The MND's air quality analysis is not based on substantial evidence because it fails to address all uses that will attract traffic to the Project.

Based on the floor plans included in the materials, it appears that the proposed restaurant is slated for about one-fourth to one-third of the first floor of the building. Based on the 9,850 square feet of floor space identified for the first floor, the restaurant would correlate to about a 3,000 square feet restaurant. Like other restaurants located in hotels, the proposed restaurant would presumably be open to the public. Those additional visitors to the Project are not factored into either the traffic counts or the air modeling for the Project. As SWAPE's review identifies, "only the proposed hotel land use was inputted into the model, while the restaurant land use was omitted entirely from the model." SWAPE Comments, pp. 2, 4. As a result, the air emissions from the Project are underestimated and not based on substantial evidence. *Id*.

The air emissions are further underestimated by the use of a smaller building square footage in the CalEEMod inputs than is proposed. Rather than the 78,850 square feet building described in the IS/MND, the CalEEMod files use a 77,900 square feet building. This error also underestimates the air pollution emissions of the Project. SWAPE Comments, p. 2.

Highly significant emissions from the many truck trips necessary to haul away materials from the demolition of the existing gas station also are not calculated by the project's CalEEMod modeling. Although the IS/MND states that "estimated emissions associated with the demolition of the existing gas station and service station are included in the demolition phase of the project[,]" a review of the CalEEMod inputs shows that zero haul trips were input for that demolition activity. IS/MND, p. 43; *Id*., App. B, p. 7. The inputs indicate that haul trips are estimated to be 20 miles in distance, but the number of trips would be zero. *Id*., App. B, p. 7. Significant air pollution emissions are overlooked by this omission.

Lastly, the Transportation Demand Management Plan ("TDM Plan") and IS/MND both identify a parking contingency requiring the use of nearby off-street parking should the 100 spaces included in the subterranean garage prove to be inadequate. No specific off-street parking location is identified. Under the City's code, without a TDM plan and nearby bus routes, the Project would require 186 parking spaces. It thus seems reasonable to evaluate a worst case scenario contingency of providing up to 86 off-site spaces. Neither the air pollution nor traffic impacts of vehicles using the possible off-site parking locations is evaluated in the CalEEMod air modeling or the traffic impact analysis. As a result, the air emissions as well as the Project's traffic impacts are once again underestimated.

Because of these omissions and inaccuracies, the air pollution modeling result is not supported by substantial evidence. The applicant should rerun the modeling in order to ascertain the actual anticipated emissions from the Project's construction and operation.

B. There is substantial evidence of a fair argument that the Project may have significant health risk impacts from its emissions of toxic air contaminants.

People sensitive to toxic air contaminants virtually surround the proposed site. "The sensitive receptors nearest to the project include existing residences to the east and south/south west and the Sunflower Learning Center (pre-school and afterschool) to the west." IS/MND, p. 38. "The closest sensitive receptors to the project site are existing residences approximately 60 feet east of the project site." *Id*., p. 104. Despite the numerous nearby receptors, the IS/MND cavalierly attempts to interpolate that the Project's emissions will not have any health impacts on nearby sensitive receptors from its claim that the Project will not exceed any BAAQMD significance thresholds. IS/MND, p. 38. The IS/MND's conclusion is not supported by a quantitative health risk assessment ("HRA"). *Id*.; SWAPE Comments, p. 4. Nor is there any quantitative assessment of toxic air contaminant emissions, including diesel particulate matter from the project. *Id*. As SWAPE points out:

> the Project Applicant cannot claim that the Project would result in a less than significant health risk impact without properly assessing the diesel particulate matter (DPM) emissions that will be emitted during Project activities. As a result, until the Project's construction and operational health risk impacts are adequately quantified and compared to applicable thresholds, the IS/MND cannot make any conclusions with regard to the Project's health risk impacts.

SWAPE Comments, p. 5. In order to fully disclose the potential health risks associated with the Project, an accurate health risk assessment for the entire Project consistent with guidelines published by the Office of Environmental Health Hazard Assessment

must be prepared. Currently, the IS/MND's conclusion that the Project will not result in any significant health risks is not supported by substantial evidence and a fair argument exists that the Project may have significant health risk impacts.

Based on the limited information provided by the IS/MND, a fair argument exists that the Project may have a significant health risk impact to nearby sensitive receptors. SWAPE has prepared a Level 2 health risk screening assessment ("HRSA") for the project. BAAQMD recommends a significance threshold of an increased cancer risk of 10 in one million and an increased cumulative cancer risk of 100 in a million from all local sources. Applying the U.S. Environmental Protection Agency's AERSCREEN model, as recommended by OEHHA and the California Air Pollution Control Officers Association, SWAPE calculates that construction and operation of the Project will result in cancer risks to infants, children, adults, during the third trimester of pregnancy, and nearby residents over the course of a 30-year residential lifetime of, respectively, 310 in one million, 170 in one million, 26 in one million, 16 in one million, and 510 in one million, well in excess of BAAQMD's threshold. SWAPE Comment, pp. 4-8. Based on this substantial screening evidence, a fair argument is present that the Project may have significant health risk impacts on nearby residents.

Likewise, contrary to CEQA, by adding TAC emissions to the immediate area, the Project cannot avoid evaluating the cumulative impacts of the Project including the adjacent Stevens Creek Boulevard's existing TAC emissions on the Project's nearby sensitive receptors. Given the health risks identified above and the fact that the Project itself may increase cancer risks by more than 100 in a million, the addition of TACs from the Project's construction and operation is considerable and may significantly contribute to the Project's cumulative adverse health risk impact including the existing impacts from traffic on Steven's Creek Boulevard and perhaps other adjacent TAC sources. Hence, the IS/MND's conclusion that the Project will not have cumulative health risk impact is not supported by substantial evidence and a fair argument exists that the Project will result in cumulative health risks.

By failing to assess the health risks to adjacent sensitive receptors, the Project also is inconsistent with the City's General plan. The General Plan addresses toxic air contaminants by establishing Goal MS-11 requiring the City to "[m]inimize exposure of people to air pollution and toxic air contaminants such as ozone, carbon monoxide, and particulate matter." To achieve this goal, the General Plan's Policy MS-11.1 states that the City must "[r]equire completion of air quality modeling for sensitive land uses such as new residential developments that are located near sources of pollution such as freeways and industrial uses" and require effective mitigation measures. The lack of any TAC modeling for the Project fails to protect the sensitive receptors adjacent to the project and is inconsistent with this goal and policy.

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C. A fair argument exists that the project may have significant GHG emissions because the Project fails to explain how it complies with requirements of the City's GHG Reduction Strategy and does not include solar panels or other strategies supposedly encouraged by the Strategy.

The IS/MND, despite acknowledging that the Project is projected to emit approximately 1,528 metric tons per year – well above the BAAQMD threshold of 1,100 metric tons of CO2e per year – claims that because the Project is consistent with the mandatory requirements of the City's GHG Reduction Strategy ("GHGRS"), it will not have any significant impacts from its GHG emissions. IS/MND, pp. 64-69. However, "[i]f there is substantial evidence that the effects of a particular project may be cumulatively considerable notwithstanding the project's compliance with the specified requirements in the plan for the reduction of greenhouse gas emissions, an EIR must be prepared for the project." 14 Cal. Admin Code § 15183.5(b)(2). The evidence that the Project is projected to exceed BAAQMD's numeric GHG threshold is substantial evidence that the Project may be cumulatively considerable despite its alleged compliance with the City's GHGRS. The Guidelines thus require the preparation of an EIR.

Moreover, "[a] plan for the reduction of greenhouse gas emissions should: … (B) Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable…. 14 Cal. Admin Code § 15183.5(b)(1)(B). San Jose's GHGRS does not establish any such level.

In addition, "[a]n environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project." 14 Cal. Admin Code § 15183.5(b)(2). Going through the relevant GHG reduction strategies included in the City's plan and referenced in the IS/MND, there is no evidence that any of the referenced strategies are either requirements that apply to the Project or would result in any significant reduction in GHG emissions from the Project.

For example, the GHGRS calls for the City to "[p]lan for housing sufficient to house 100% of the Bay Area's future workers and residents from all income levels, without displacing current low-income residents." This strategy is not a requirement that applies to or is even relevant to this hotel project and does nothing to mitigate the Project's GHG emissions.

The IS/MND points to the GHGRS's requirement that the City "[r]educe vehicle miles traveled (VMT) per capita by 10%." The proposed hotel Project will increase the existing VMTs resulting from the gas station at the site. No reduction of VMTs from the

existing conditions will result from the Project. The IS/MND relies on the notion that the hotel project is infill development. IS/MND, p. 66. The IS/MND then points to the presence of four Santa Clara Valley Authority ("SCVA") bus stops within a quarter mile of the site. No evidence that hotel guests actually use public transit buses is provided in support of the IS/MND analysis. The notion that hotel guests for a Marriott hotel laden with luggage are likely to use buses rather than ride-share services or rental cars is not supported by any evidence and is counterintuitive. Certainly, SCVA must have data on its ridership, including what, if any, percent of riders are hotel guests. AC Marriott also has other existing hotels in the Bay area from which it also could have extracted information about the likelihood that guests would utilize bus transit at the proposed location. The assertion that bus options will in fact encourage any significant number of the hotel's guests to drive less is not substantiated with any evidence. Even if the hotel were to provide shuttles to nearby attractions, there is no evidence that the additional VMT required to get people to and from the hotel will be reduced at all.

A similar paucity of evidence undermines the IS/MND's reference to the TDM's strategy of "[i]ncreas[ing] location efficiency." IS/MND, p. 69. Again, the IS/MND relies on the unsubstantiated assumption that hotel guests will opt to use transit buses within a quarter of a mile of the Project in some significant numbers. *Id*. There is no evidence that any substantial number of guests would utilize that service. The IS/MND also notes the presence of a bike lane on Stevens Creek Boulevard. Again, few if any people arriving and departing the hotel or heading to business meetings are likely to ride a bike from the hotel, so there is no evidence that the presence of the bike lane would encourage in any meaningful way any transportation efficiencies associated with the project's location.

The GHGRS calls for the "Installation of solar panels or other clean energy power generation sources on development sites, especially over parking areas." *See* IS/MND, p. 68. Rather than installing solar panels, the Project merely proposes to "install solar ready zone areas on the roof which is an allocated space suitable for solar panels to be installed at a future date." *Id*. How is this half-step consistent with the installation of solar panels? In order to be consistent with the GHGRS and Section 15183.5(b)(2), there must be a binding commitment for the hotel to install solar panels. In order to mitigate the Project's GHG impacts, the panels should be operative by the conclusion of the Project's construction.

The GHGRS calls for the use of recycled water wherever feasible and cost-effective. *See* IS/MND, p. 68. Rather than explain whether or not recycled water is feasible and cost-effective, the Project and IS/MND simply state that recycled water is not proposed. *Id*. More is needed to erase this mandatory requirement of the City's GHGRS.

The GHGRS highlights the importance of car share programs. IS/MND, Appendix F (AC Hotel Transportation Demand Management Plan ["TDM"]), p. 12; IS/MND, p. 68. However, the Project's IS/MND leaves its possible car share program entirely

undeveloped. The IS/MND indicates that the hotel "will implement a carpool/vanpool or car-share program, carpool ride-matching for employees, assistance with vanpool formation, provision of vanpool or car-share vehicles, and assign carpool, vanpool and car-share parking at the most desirable on-site locations at the ratio set forth in the proposed project's conditions of approval." It is impossible to tell what kind of program is envisioned or whether it would prove effective in a hotel context. The TDM actually identifies only five measures. These include providing bus passes to employees. TDM, p. 14. Certainly useful but not a large source of VMTs from the Project given that 18 employees are anticipated on site at any given time. *See* IS/MND, Appendix G, p. 35. The TDM also identifies a hotel shuttle for guests to points of interest and a bicycle program. TDM, p. 14. As noted above, how effective these measures may be is not supported by any evidence or analysis. Even the suggested hotel shuttle to and from major points of interest may or may not meaningfully reduce VMTs if use by guests is limited. The TDM also relies on having guests pay for parking. *Id*., pp. 14-15. Lastly, the TDM includes a TDM coordinator at the hotel and identifies various third party trip planning services. *Id*., p. 15. Although each of these measures is beneficial and could reduce the Project's expected VMTs by some unknown amount, there is no evidence to suggest it is likely that these measures will reduce the Project's increased VMTs in any meaningful way.

The GHGRS calls for plans to "[l]imit parking above code requirements." IS/MND, p. 68. The Project does limit parking to well below the spaces otherwise required by the Code – 100 versus 186 spaces. However, the TDM and IS/MND indicate that the hotel may arrange for parking at nearby lots. IS/MND, pp. 128-129. That contingency would effectively eliminate any benefit of requiring reduced parking on-site. Moreover, the TDM relies mostly on the presence of bus lines nearby. It is unrealistic for a hotel project to depend on guests visiting for a few days to meaningfully rely upon bus routes to travel to and from the hotel, especially when first arriving and departing with luggage.

The IS/MND relies on the requirement for the Project to comply with the City's Green Building ordinance. IS/MND, p. 66. The IS/MND lists several green building features to be applied by the project. *Id*., p. 67. These include designated parking for clean air vehicles, underground parking reducing heat island effects, low water use fixtures, rainwater (grey water) use in landscaped areas, rainwater bio swales developed on- site, cooling roofing material shall be utilized reducing heat island effects, adhesives, sealants and caulks shall be low or no VOC and the dedicated solar ready zone will be provided on the roof. Although these measures may have incremental benefits (although actual solar panels are not guaranteed), there is no indication whether or how these measures will comply with the green building ordinance.

The City's Green Building Ordinance boils down to a requirement that certain categories of projects within San Jose achieve certain levels of LEED certification. San Jose Municipal Code, Chapter 17.84. LEED certification is not transparent to a reader of the IS/MND. The various LEED certification levels are based on a point system. The IS/MND does not explain the LEED point system. Nothing in the IS/MND explains what

features the Project would claim to justify whatever points may be available to the Project in the LEED system. In other words, it is completely opaque for the IS/MND to invoke the City's Private Sector Green Building Policy and Green Building Ordinance, which in turn invoke a LEED point system that is inaccessible to the reviewing public, as a logical explanation of how the Project's specific design elements and facilities will reduce GHG emissions.

The Private Sector Green Building Policy actually requires this Project to be certified LEED Silver. http://www.sanjoseca.gov/index.aspx?NID=3284 ("Commercial/Industrial Tier 2 - ≥ 25,000 square feet = LEED Silver"). Residential projects may rely on a mere LEED certification. San Jose Municipal Code § 17.84.104 ("'Commercial / industrial building' means all non-residential construction including construction of retail space, office space, and other commercial uses, regardless of the zoning scheme at the project's location"). *See also* § 17.84.112 ("'Large commercial building' means a non-residential building having a gross floor area of twenty-five thousand (25,000) square feet or more and is not a high-rise building"). Large commercial buildings are deemed Tier two projects under the Code. § 17.84.121 ("Tier two project" means a large commercial industrial building…"). "All tier two commercial industrial projects for which this chapter is applicable must receive the minimum green building certification of LEED Silver." § 17.84.220.

Even with that heightened LEED certification level, the City's ordinance does not guarantee that even a large commercial project such as the proposed Project will necessarily achieve LEED Silver because it provides for Project specific exemptions at the discretion of the Director of Planning. § 17.84.210. As a result, no one can be sure what compliance with the City's Green Building Ordinance may look like for this Project.

Accordingly, the IS/MND is entirely without evidentiary support and a fair argument exists that the Project may have significant GHG emission impacts.

D. CONCLUSION

For the foregoing reasons, the IS/MND for the Project should be withdrawn, an EIR should be prepared, and the draft EIR should be circulated for public review and comment in accordance with CEQA. Thank you for considering these comments.

Sincerely,

Michael R. Lozeau
Lozeau | Drury LLP

EXHIBIT A

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October 24, 2018

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Subject: Comments on the AC by Marriott – West San Jose Project

Dear Mr. Lozeau,

We have reviewed the August 2018 Initial Study and Mitigated Negative Declaration (IS/MND) for the AC by Marriott – West San Jose Project ("Project") located in the City of San Jose ("City"). The Project proposes to demolish an existing gas station and convenience store in order to construct a 168-room hotel with 4 levels of subterranean parking, a restaurant, and associated on-site improvements including paving and landscaping across the 0.451-acre lot.

Our review concludes that the IS/MND fails to adequately evaluate the Project's Air Quality and Greenhouse Gas (GHG) impacts. As a result, emissions and health impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. A Draft Environmental Impact Report (DEIR) should be prepared to adequately assess and mitigate the potential health risk and GHG impacts the Project may have on the surrounding environment.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The IS/MND relies on emissions calculated from the California Emissions Estimator Model Version CalEEMod.2016.3.1 ("CalEEMod").[1] CalEEMod provides recommended default values based on site specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act (CEQA) requires that such changes be justified by substantial evidence.[2] Once all of the values are

[1] CalEEMod Model 2013.2.2 Website Archive, *available at:* http://www.aqmd.gov/caleemod/download-model-2013
[2] CalEEMod Model 2013.2.2 User's Guide, pp. 2, 9, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/usersguideSept2016.pdf?sfvrsn=6

inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters were utilized in calculating the Project's air pollutant emissions, and make known which default values were changed as well as provide a justification for the values selected.[3]

When we reviewed the Project's CalEEMod output files, found in Appendix B, we found that several of the values inputted into the model were not consistent with information disclosed in the IS/MND. As a result, the Project's construction and operational emissions are greatly underestimated. A DEIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction and operation of the Project will have on local and regional air quality.

Failure to Include All Land Use and Use Correct Land Use Sizes

Review of the Project's CalEEMod output files demonstrates that not all of the land uses proposed by the IS/MND were included in the Project's CalEEMod model. As a result, the Project's construction and operational emissions are underestimated.

According to the IS/MND, the Project "would have a total building area of approximately 78,850 square feet and would include 168 guestrooms, a lobby, fitness room, restaurant, meeting room, market, employee breakroom, and linen/laundry area" (pp. 16). However, review of the Project's CalEEMod output files, found in Appendix B, demonstrates that only the proposed hotel land use was inputted into the model, while the restaurant land use was omitted entirely from the model (Appendix B, pp. 1). Furthermore, the output files also demonstrate that the hotel land use size was underestimated within the model (see excerpt below) (Appendix B, pp. 1).

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Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	100.00	Space	0.00	49,590.00	0
Hotel	168.00	Room	0.42	77,900.00	0

As you can see in the excerpt above, the Project Applicant failed to include the proposed restaurant land use and underestimated the total floor surface area of the proposed hotel land use. As previously mentioned, the land use type and size features are used throughout CalEEMod to determine default variable and emission factors that go into the model's calculations. [4] For example, the square footage of a land use is used for certain calculations such as determining the wall space to be painted (i.e., VOC

[3] CalEEMod Model 2013.2.2 User's Guide, pp. 7, 13, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/usersguideSept2016.pdf?sfvrsn=6 (A key feature of the CalEEMod program is the "remarks" feature, where the user explains why a default setting was replaced by a "user defined" value. These remarks are included in the report.)

[4] CalEEMod User's Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 17

emissions from architectural coatings) and volume that is heated or cooled (i.e., energy impacts). Furthermore, CalEEMod assigns each land use type with its own set of energy usage emission factors.[5] By completely omitting the restaurant land use and by underestimating the hotel land use size within the model, the emissions that would be produced during construction and operation of the proposed restaurant are unaccounted for and the emissions generated by the proposed hotel are underestimated. As a result, the Project's emissions are greatly underestimated.

Failure to Account for Total Number of Hauling Truck Trips during Demolition Phase

The IS/MND's CalEEMod model completely fails to model the hauling truck trips that will be generated during the demolition phase of construction. As a result, the Project's construction emissions are underestimated.

According to the IS/MND, the Project site is currently developed with a Shell gas station and an auto-repair business (p. 19). The IS/MND also states that "as part of the implementation of the proposed project, the existing gas station and service station will be demolished" (pp. 52). Furthermore, the IS/MND states that "estimated emissions associated with the demolition of the existing gas station and service station are included in the demolition phase of the project" (pp. 43). However, review of the Project's CalEEMod output files demonstrates that IS/MND modeled emissions assuming that there would be zero hauling trips during the demolition phase of construction (see excerpt below) (Appendix B, pp. 7).

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
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	54.00	21.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

As demonstrated above, the Project's model fails to account for any of the hauling truck trips needed to haul all the debris resulting from demolition of the existing Shell station and auto-repair business. By failing to account for the total number of hauling truck trips expected to occur throughout Project construction, the IS/MND substantially underestimates the Project's construction-related emissions. As a result, the criteria air pollutant emissions provided in the IS/MND are incorrect and unreliable and should not be used to determine Project significance.

Incorrect Daily Vehicle Trip Estimation

[5] CalEEMod User's Guide, Appendix D, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/05_appendix-d2016-3-1.pdf?sfvrsn=2

Review of the Project's Traffic Impact/Operations Analysis (TIA) demonstrates that the Project Applicant failed to evaluate the trips generated from the restaurant land use. As a result, the TIA is incorrect and should not be used to determine the Project's operational emissions.

As previously mentioned, the Project proposed to construct a "hotel with 168 rooms, four (4) levels of subterranean parking, a restaurant, and associated on-site improvement" (p. 9). Review of the TIA demonstrates that the total operational daily vehicle trip estimation provided within the analysis only accounts for trips resulting from the hotel land use and fails to account for any trips resulting from the restaurant land use (see excerpt below) (Table 6, Appendix G, pp. 28).

Table 6
Trip Generation for Existing and Proposed Land Uses

Existing Land Uses[1]	Daily Trip Ends (ADTs)	AM Peak Hour			PM Peak Hour		
	Volume	Volume			Volume		
		In	Out	Total	In	Out	Total
Existing Use Gross Trips (A)	761	24	26	50	34	37	71

Proposed Land Use[2]	Size	Daily Trip Ends (ADTs)		AM Peak Hour				PM Peak Hour				
		Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume	
						In	Out	Total			In	Out	Total
AC Hotel by Marriott (B)	168 Rooms	8.36/room	1404	0.47	59:41	47	32	79	0.60	51:49	51	50	101

	ADT	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Net New Trips (B) - (A)	**643**	**23**	**6**	**29**	**17**	**13**	**30**

1 = Data collected at existing driveways on February 20th and 21st, 2018 and averaged to determine existing use gross trips.

2: Rates from ITE Trip Generation (10th Edition, 2017)

As you can see in the excerpt above, vehicle trips generated by the proposed restaurant land use were not included in the total daily trips and, as a result, the Project's total daily operational vehicle trip estimation is incorrect. As a result, the operational mobile-source emissions associated with the Project are incorrect and should not be used to determine Project significance.

Failure to Evaluate All Potential Parking Land Use Requirements

Review of the IS/MND and the Project's Transportation Demand Management (TDM) Program, found in Appendix F, demonstrates that the Project Applicant failed to model all possible land uses in the Project's CalEEMod modeling. As a result, the Project's emissions are likely underestimated.

The Project Applicant proposes a TDM plan in order to reduce project parking demand to 46% below the City's minimum parking requirement (Appendix F, pp. 24). As a result, the Project Applicant proposes to construct 100 subterranean parking stalls (p. 128). The IS/MND states,

> "As noted above, the Applicant is requesting a reduction from the amount of onsite parking spaces required per Section 20.90.220 of San Jose Municipal Code. As part of this request, the Applicant has commissioned the preparation of a Transportation Demand Management (TDM) Plan (Appendix F), which evaluates the proposed reduction of onsite parking spaces. The project proposes to include one hundred (100) subterranean parking stalls, including stalls for standard

vehicles, clean air vehicles, ADA accessible, and motorcycle access. Page 16 of the TDM Plan notes that the proposed project will need to explore the possibility of entering into an agreement to utilize private off-street parking spaces on nights and weekends at a nearby land use (property), such as the existing and proposed office development on the north side of Stevens Creek Boulevard, in the event it is determined that that number parking spaces provided on-site (100 parking spaces does not meet demand" (p. 128-129).

The Project Applicant goes onto say, in the TDM, conducted by TJW Engineering, Inc.,

> "If all possible TDM measures are implemented and it is determined that the project still fails to meet the parking demand with the 100 on-site parking spaces provided, the project will need to explore the possibility of entering into an agreement to utilize private off-street parking on nights and weekends at a nearby land use, such as the existing and proposed office development on the north side of Stevens Creek Boulevard. The use of nearby private off-street spaces, if necessary, would not conflict with the goals of the TDM plan, since there currently is an abundance of available parking within these private lots, and would increase the utilization of an existing underutilized asset" (Appendix F, p. 16).

Therefore, the Project Applicant acknowledges that additional, off-site parking may be required. However, review of the Project's CalEEMod output files demonstrates that the Project Applicant only modeled emissions from the proposed 100 on-site parking uses (see excerpt below) (Appendix B, pp. 1).

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1.0 Project Characteristics

1.1 Land Usage

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Hotel	168.00	Room	0.42	77,900.00	0

As a result, the Project Applicant fails to model emissions from all possible parking land uses. According to the CalEEMod User's Guide, parking lots create emissions from electricity use, architectural coating activities, and parking lot degreasers.[6] Therefore, since the Project may require additional, off-site parking that was not included in the CalEEMod model, Project's operational emissions are underestimated. The Project Applicant should have conducted the most conservative analysis, as is required by CEQA, and modeled all possible land uses. Prior to Project Approval, an updated air quality analysis should be conducted in a project-specific DEIR.

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The IS/MND concludes that the proposed Project would have a less than significant impact on the health of sensitive receptors near the Project site without conducting a quantitative health risk assessment

[6] CalEEMod User's Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 2

(HRA) for construction or operation (p. 38). The Project Applicant does not discuss the preparation of an HRA, nor is there any quantitative assessment of the potential toxic air contaminant (TAC) emissions that would be emitted during construction or operation. The IS/MND attempts to justify this conclusion by stating,

> "As discussed above, grading and construction of the project site would not create emissions that would exceed BAAQMD thresholds for any criteria pollutant. Therefore, the proposed project will not expose sensitive receptors to substantial pollutant concentrations, and will result in **a less than significant impact**" (p. 38).

This justification and subsequent significance determination, however, are incorrect, as the Project Applicant cannot claim that the Project would result in a less than significant health risk impact without properly assessing the diesel particulate matter (DPM) emissions that will be emitted during Project activities. As a result, until the Project's construction and operational health risk impacts are adequately quantified and compared to applicable thresholds, the IS/MND cannot make any conclusions with regard to the Project's health risk impacts.

By failing to prepare a construction or an operational HRA, the IS/MND is inconsistent with recommendations set forth by the Office of Environmental Health Hazard Assessment (OEHHA), the organization responsible for providing recommendations for health risk assessments in California. In February of 2015, OEHHA released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, which was formally adopted in March of 2015.[7] This guidance document describes the types of projects that warrant the preparation of a health risk assessment. Construction of the Project will produce emissions of DPM, a human carcinogen, through the exhaust stacks of construction equipment over a construction period of 18 months (p. 10, p. 36). The OEHHA document recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors.[8] Therefore, per OEHHA guidelines, health risk impacts from Project construction should have been evaluated by the IS/MND. Furthermore, once construction of the Project is complete, the Project will generate 643 daily operational vehicle trips, which will generate additional exhaust emissions, thus continuing to expose nearby sensitive receptors to emissions (Appendix G, pp. 28). The OEHHA document recommends that exposure from projects lasting more than 6 months should be evaluated for the duration of the project, and recommends that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident (MEIR).[9] Even though we were not provided with the expected lifetime of the Project, we can reasonably assume that the Project will operate for at least 30 years, if not more. Therefore, health risks from Project operation should have also been evaluated by the IS/MND, as a 30-year exposure duration vastly exceeds the 2-

[7] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html

[8] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-18

[9] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-6, 8-15

month and 6-month requirements set forth by OEHHA. These recommendations reflect the most recent health risk policy, and as such, an updated assessment of health risks to nearby sensitive receptors from construction and operation should be included in a revised CEQA evaluation for the Project. In an effort to demonstrate the potential risk posed by the Project to nearby sensitive receptors, we prepared a simple screening-level HRA. The results of our assessment, as described below, demonstrate that construction and operational DPM emissions may result in a potentially significant health risk impact that was not previously identified or evaluated within the IS/MND.

Updated Analysis Indicates Potentially Significant Impact

In an effort to demonstrate the potential risk posed by Project construction and operation to nearby sensitive receptors, we prepared a simple screening-level HRA. The results of our assessment, as described below, provide substantial evidence that the Project's construction and operational DPM emissions may result in a potentially significant health risk impact that was not previously identified.

In order to conduct our screening level risk assessment we relied upon AERSCREEN, which is a screening level air quality dispersion model. [10] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA[11] and the California Air Pollution Control Officers Associated (CAPCOA)[12] guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary HRA of the Project's health-related impact to sensitive receptors using the mitigated annual PM10 exhaust estimates from SWAPE's annual CalEEMod output files, attached to this report for reference. According to the IS/MND, the closest sensitive receptor is approximately 60 feet, or approximately 18 meters east of the Project site (p. 107). Consistent with recommendations set forth by OEHHA, we used a residential exposure duration of 30 years, starting from the 3rd trimester stage of life. We also assumed that construction and operation of the Project would occur in quick succession, with no gaps between each Project phase. The SWAPE CalEEMod model's annual emissions indicate that construction activities will generate approximately 159 pounds of DPM over the approximately 1.5-year construction period, or approximately 533 days. The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project construction, we calculated an average DPM emission rate by the following equation.

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{158.6\ lbs}{533\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.001562\ g/s}$$

[10] "AERSCREEN Released as the EPA Recommended Screening Model," USEPA, April 11, 2011, *available at:* http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf

[11] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf

[12] "Health Risk Assessments for Proposed Land Use Projects," CAPCOA, July 2009, *available at:* http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf

Using this equation, we estimated a construction emission rate of 0.001562 grams per second (g/s). The SWAPE's annual CalEEMod output files indicate that operational activities will generate approximately 50.6 pounds of DPM per year over the 28.5-years of operation. Applying the same equation used to estimate the construction DPM emission rate, we estimate the following emission rate for Project operation.

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{50.6\ lbs}{365\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.0007278\ g/s}$$

Using this equation, we estimated an operational emission rate of 0.0007278 g/s. Construction and operational activity was simulated as a 0.416-acre rectangular area source in AERSCREEN, with dimensions of 41.5 meters by 40.6 meters. A release height of three meters was selected to represent the height of exhaust stacks on operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant be estimated by multiplying the single-hour concentration by 10%.[13] For example, for the MEIR the single-hour concentration estimated by AERSCREEN for Project construction is approximately 13.73 µg/m^3 DPM at approximately 25 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 1.373 µg/m^3 for Project construction at the MEIR. For Project operation, the single-hour concentration at the MEIR estimated by AERSCREEN is approximately 6.398 µg/m^3 DPM at approximately 25 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.6398 µg/m^3 for Project operation at the MEIR.

We calculated the excess cancer risk to the residential receptors located closest to the Project site using applicable HRA methodologies prescribed by OEHHA and the Bay Area Air Quality Management District (BAAQMD). Consistent with the construction schedule proposed by the IS/MND, the annualized average concentration for construction was used for the entire 3rd trimester of pregnancy (0.25 years) and the first 1.25 years of the infantile stage of life (0-2 years). The annualized average concentration for operation was used for the remainder of the 30-year exposure period, which makes up the remainder of the infantile stage of life, child stages of life (2 to 16 years) and adult stages of life (16 to 30 years). Consistent with OEHHA guidance, we used Age Sensitivity Factors (ASFs) to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution.[14] According to the updated guidance, quantified cancer risk should be multiplied by a factor of ten during the 3rd trimester of pregnancy and the first two years of life (infant), and should be multiplied by a factor of three during the child stage of life (2 to 16 years). Furthermore, in accordance with guidance set forth by OEHHA, we

[13] http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf

[14] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

used 95th percentile breathing rates for infants.[15] Finally, according to BAAQMD guidance, we used a Fraction of Time At Home (FAH) Value of 0.85 for the 3rd trimester and infant receptors, 0.72 for child receptors, and 0.73 for the adult receptors.[16] We used a cancer potency factor of 1.1 (mg/kg-day)$^{-1}$ and an averaging time of 25,550 days. The results of our calculations are shown below.

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)					
Activity	**Duration (years)**	**Concentration (µg/m^3)**	**Breathing Rate (L/kg-day)**	**ASF**	**Cancer Risk**
Construction	0.25	1.373	361	10	1.6E-05
3rd Trimester Duration	***0.25***			***3rd Trimester Exposure***	***1.6E-05***
Construction	1.25	1.373	1090	10	2.4E-04
Operation	0.75	0.6398	1090	10	6.7E-05
Infant Exposure Duration	***2.00***			***Infant Exposure***	***3.1E-04***
Operation	14.00	0.6398	572	3	1.7E-04
Child Exposure Duration	***14.00***			***Child Exposure***	***1.7E-04***
Operation	14.00	0.6398	261	1	2.6E-05
Adult Exposure Duration	***14.00***			***Adult Exposure***	***2.6E-05***
Lifetime Exposure Duration	**30.00**			**Lifetime Exposure**	**5.1E-04**

The excess cancer risk posed to adults, children, infants, and during the third trimester of pregnancy at the MEIR located approximately 25 meters away, over the course of Project construction and operation are approximately 26, 170, 310, and 16 in one million, respectively. Furthermore, the excess cancer risk over the course of a residential lifetime (30 years) at the MEIR is approximately 510 in one million. Consistent with OEHHA guidance, exposure was assumed to begin in the third trimester of pregnancy to provide the most conservative estimates of air quality hazards. All of the adult, child, infant, third trimester, and lifetime cancer risks exceed the BAAQMD threshold of 10 in one million.

It should be noted that our analysis represents a screening-level HRA, which is known to be more conservative, and tends to err on the side of health protection.[17] The purpose of a screening-level HRA, however, is to determine if a more refined HRA needs to be conducted. If the results of a screening-level health risk are above applicable thresholds, then the Project needs to conduct a more refined HRA that is more representative of site specific concentrations. Our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used. As a result, a refined

[15] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act," June 5, 2015, *available at:* http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588-risk-assessment-guidelines.pdf?sfvrsn=6, p. 19
"Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

[16] "Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines." BAAQMD, January 2016, *available at:* http://www.baaqmd.gov/~/media/files/planning-and-research/rules-and-regs/workshops/2016/reg-2-5/hra-guidelines_clean_jan_2016-pdf.pdf?la=en

[17] http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf p. 1-5

HRA must be prepared to examine air quality impacts generated by Project construction and operation using site-specific meteorology and specific equipment usage schedules. A DEIR must be prepared to adequately evaluate the Project's health risk impact, and should include additional mitigation measures to reduce these impacts to a less-than-significant level.

Greenhouse Gas

Failure to Adequately Evaluate the Project's Greenhouse Gas Impacts

The IS/MND evaluates the Project's GHG emissions and concludes that the Project would emit a total of 1,528 metric tons of carbon dioxide equivalents per year (MT CO_2e/yr), which exceeds the BAAQMD's bright line threshold of 1,100 MT CO_2e/yr (p. 64, p. 65). The IS/MND, however, goes on to state that the Project will not result in a significant GHG impact because "the proposed project is consistent with the goals, targets, and policies in the City of San Jose GHG Reduction Strategy" (p. 64).

The Project Applicant lists the goals, targets, and policies of the City of San Jose GHG Reduction Strategy and asserts that the Project will be consistent with these measures (Table 9, p. 66). The IS/MND claims that because the Project is compliant with these GHG Reduction Strategy measures, the Project's GHG impact would be less than significant (p. 64). This conclusion, however, is incorrect, as the Project Applicant fails to include the measures listed in Table 9 as mitigation or as mandatory conditions of Project approval, thereby rendering these measures unenforceable. According Section 15183.5 *Tiering and Streamlining the Analysis of Greenhouse Gas Emissions* of the CEQA guidelines,

> "An environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project."[18]

As stated above, CEQA requires the Project to identify which requirements apply to the Project and requires the IS/MND to make these requirements binding and enforceable to the Project. Review of the Greenhouse Gas Emissions section in the Initial Study Checklist demonstrates that the Project Applicant fails to implement any mitigation measures to reduce GHG emissions (p. 69). By failing to include the measures proposed in Table 9 as mitigation or mandatory conditions of approval, these measures are not enforceable. As a result, it is unclear what measures will actually be implemented once the Project is approved, and it is unclear whether implementation of these measures would satisfy requirement set forth by the GHG Reduction Strategy. Thus, the IS/MND cannot simply state that the Project is consistent with the City's GHG Reduction Strategy and conclude that the Project's GHG impact is less than significant as a result, as the IS/MND fails to actually demonstrate compliance with all of the applicable criteria disclosed in the City's GHG Reduction Strategy. The measures proposed in the Table 9 should have been included as mandatory conditions of approval or as mitigation in order to ensure that the proposed measures will be implemented once the Project is approved. By failing to do so, the GHG Reduction Strategy consistency analysis conducted by the IS/MND becomes an empty paper exercise, in

[18] https://govt.westlaw.com/calregs/Document/I872A68805F7511DFBF66AC2936A1B85A?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=%28sc.Default%29

which boxes are checked but the actual activities called for in those boxes do not occur. Until the Project includes these reduction measures as mitigation or mandatory conditions of approval, the Project is not consistent with the GHG Reduction Strategies and cannot claim that it is.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Hadley Nolan

MarriottSanJose_Construction

Start date and time 09/19/18 12:30:36

AERSCREEN 16216

San Jose Marriott, Construction

San Jose Marriott, Construction

---------- DATA ENTRY VALIDATION ----------

	METRIC	ENGLISH
** AREADATA **	---	---
Emission Rate:	0.156E-02 g/s	0.124E-01 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	41.50 meters	136.15 feet
Area Source Width:	40.60 meters	133.20 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	1046079	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity (u*): not adjusted

DEBUG OPTION ON

AERSCREEN output file:

MarriottSanJose_Construction.out

*** AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

****

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 09/19/18 12:36:59

****

```
  Running AERMOD

 Processing Winter


Processing surface roughness sector  1


**************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0


    ********   WARNING MESSAGES    ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5


    ********   WARNING MESSAGES    ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   3
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 20

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 25

    ********   WARNING MESSAGES   ********

               *** NONE ***

****

Processing wind flow sector   7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 30

    ********   WARNING MESSAGES   ********

               *** NONE ***

****

Processing wind flow sector   8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 35

    ********   WARNING MESSAGES   ********

               *** NONE ***

****

Processing wind flow sector   9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 40

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 45

******** WARNING MESSAGES ********

*** NONE ***

****

Running AERMOD

Processing Spring

Processing surface roughness sector 1

****

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  10


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  15
```

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 30

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 35

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 40

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 45

******** WARNING MESSAGES ********

*** NONE ***

****

Running AERMOD

Processing Summer

Processing surface roughness sector 1

****

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 5

******** WARNING MESSAGES ********

*** NONE ***

```
**************************************************

Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

**************************************************

Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

**************************************************

Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20

    ********   WARNING MESSAGES   ********
               ***  NONE  ***
```

```
**************************************************

Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***
```

****

Processing wind flow sector   9

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 40

    ********   WARNING MESSAGES   ********

               *** NONE ***

****

Processing wind flow sector 10

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 45

    ********   WARNING MESSAGES   ********

               *** NONE ***

 ****

  Running AERMOD

 Processing Autumn

Processing surface roughness sector 1

****

```
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************
```

```
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************
```

```
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   9

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  40

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************
```

```
Processing wind flow sector  10


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  45


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


FLOWSECTOR   ended 09/19/18 12:37:19


REFINE       started 09/19/18 12:37:19


 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


REFINE       ended 09/19/18 12:37:20


 ********************************************
 AERSCREEN Finished Successfully
 With no errors or warnings
 Check log file for details
 ********************************************
```

Ending date and time 09/19/18 12:37:22

MarriottSanJose_Construction_max_conc_distance

	Concentration		Distance	Elevation	Diag	Season/Month	Zo sector	Date
	H0	U*	W*	DT/DZ ZICNV ZIMCH	M-O LEN	Z0	BOWEN ALBEDO	REF WS HT REF TA HT
	0.89782E+01		1.00	0.00 40.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0
	0.13733E+02		25.00	0.00 45.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0
*	0.13802E+02		27.00	0.00 45.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0
	0.58548E+01		50.01	0.00 45.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0
	0.32476E+01		75.00	0.00 45.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0
	0.21714E+01		100.00	0.00 40.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0
	0.15945E+01		125.00	0.00 35.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0
	0.12393E+01		150.00	0.00 30.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0
	0.10022E+01		175.00	0.00 0.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0
	0.83398E+00		200.00	0.00 0.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0
	0.70920E+00		225.00	0.00 15.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0
	0.61329E+00		250.00	0.00 25.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0
	0.53789E+00		275.00	0.00 0.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0
	0.47717E+00		300.00	0.00 0.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0
	0.42753E+00		325.00	0.00 20.0	Winter	0-360	10011001	
	-1.30	0.043	-9.000	0.020 -999. 21.	6.0	1.000	1.50 0.35	0.50 10.0 310.0 2.0

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  0.38614E+00       350.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.35117E+00       375.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.32132E+00       400.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.29564E+00       425.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.27336E+00       450.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.25389E+00       475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.23667E+00       500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.22130E+00       525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.20755E+00       550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.19523E+00       575.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.18417E+00       599.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.17413E+00       625.00      0.00  30.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.16497E+00       650.00      0.00  30.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.15662E+00       675.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14962E+00       700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14257E+00       725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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  0.13607E+00       750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.13006E+00       775.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.12450E+00       800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.11935E+00       825.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.11455E+00       850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.11007E+00       875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.10589E+00       900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.10198E+00       924.99      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.98305E-01       950.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.94858E-01       975.00      0.00  30.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.91615E-01      1000.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.88560E-01      1024.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.85676E-01      1050.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.82951E-01      1075.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.80373E-01      1100.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.77931E-01      1125.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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  0.75615E-01      1149.99      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.73415E-01      1175.00      0.00  35.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.71323E-01      1200.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.69333E-01      1224.99      0.00  40.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.67437E-01      1249.99      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.65629E-01      1275.00      0.00  30.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.63904E-01      1300.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.62256E-01      1325.00      0.00  30.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.60680E-01      1349.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.59171E-01      1375.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.57727E-01      1400.00      0.00  40.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.56343E-01      1425.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.55016E-01      1449.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.53742E-01      1475.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.52518E-01      1500.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.51342E-01      1525.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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  0.50211E-01      1550.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.49123E-01      1574.99      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.48073E-01      1600.00      0.00  35.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.47062E-01      1625.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.46087E-01      1650.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.45147E-01      1675.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.44239E-01      1700.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.43363E-01      1725.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.42516E-01      1750.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.41697E-01      1774.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.40905E-01      1800.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.40139E-01      1825.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.39398E-01      1850.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.38680E-01      1875.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.37984E-01      1900.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.37310E-01      1924.99      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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  0.36656E-01      1950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.36021E-01      1975.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.35406E-01      2000.00      0.00  35.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.34808E-01      2025.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.34228E-01      2050.00      0.00  30.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.33664E-01      2075.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.33116E-01      2100.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.32584E-01      2124.99      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.32066E-01      2150.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.31562E-01      2175.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.31072E-01      2199.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.30594E-01      2224.99      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.30130E-01      2250.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.29677E-01      2275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.29236E-01      2300.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.28807E-01      2325.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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   0.28388E-01      2350.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.27979E-01      2375.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.27581E-01      2400.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.27192E-01      2424.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.26813E-01      2449.99      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.26442E-01      2475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.26081E-01      2500.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.25728E-01      2525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.25383E-01      2550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.25046E-01      2575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.24717E-01      2600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.24395E-01      2625.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.24081E-01      2650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.23773E-01      2675.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.23472E-01      2700.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.23178E-01      2725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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   0.22890E-01      2750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.22608E-01      2775.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.22332E-01      2800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.22062E-01      2825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.21798E-01      2850.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.21538E-01      2875.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.21285E-01      2900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.21036E-01      2925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.20792E-01      2950.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.20553E-01      2975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.20319E-01      3000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.20090E-01      3025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.19865E-01      3050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.19644E-01      3075.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.19428E-01      3100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.19215E-01      3125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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   0.19007E-01      3150.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.18802E-01      3175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.18601E-01      3200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.18404E-01      3225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.18211E-01      3250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.18021E-01      3275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.17834E-01      3300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.17651E-01      3325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.17471E-01      3350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.17294E-01      3375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.17120E-01      3400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.16949E-01      3425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.16781E-01      3450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.16616E-01      3475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.16454E-01      3500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.16295E-01      3525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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  0.16138E-01      3550.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.15984E-01      3575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.15832E-01      3600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.15683E-01      3625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.15536E-01      3650.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.15391E-01      3675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.15249E-01      3700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.15109E-01      3725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14972E-01      3750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14836E-01      3775.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14703E-01      3800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14572E-01      3825.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14442E-01      3850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14315E-01      3875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14189E-01      3900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14066E-01      3925.00      0.00  40.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
```

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   0.13944E-01      3950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.13824E-01      3975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.13706E-01      4000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.13590E-01      4025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.13475E-01      4050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.13362E-01      4075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.13251E-01      4100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.13141E-01      4125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.13033E-01      4150.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.12926E-01      4175.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.12821E-01      4200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.12717E-01      4225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.12615E-01      4250.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.12514E-01      4275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.12415E-01      4300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.12317E-01      4325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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   0.12220E-01      4350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.12125E-01      4375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.12030E-01      4400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11938E-01      4425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11846E-01      4450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11755E-01      4475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11666E-01      4500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11578E-01      4525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11491E-01      4550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11405E-01      4575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11321E-01      4599.99      0.00  40.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11237E-01      4625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11154E-01      4650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11073E-01      4675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.10992E-01      4700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.10913E-01      4725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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   0.10834E-01      4750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.10757E-01      4775.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.10680E-01      4800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.10605E-01      4825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.10530E-01      4850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.10456E-01      4875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.10383E-01      4900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.10311E-01      4925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.10240E-01      4950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.10170E-01      4975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.10100E-01      5000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
```

MarriottSanJose_Operation

Start date and time 09/19/18 12:39:48

AERSCREEN 16216

Marriott San Jose, Operation

Marriott San Jose, Operation

---------- DATA ENTRY VALIDATION ----------

	METRIC	ENGLISH
** AREADATA **	---	---
Emission Rate:	0.728E-03 g/s	0.578E-02 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	41.50 meters	136.15 feet
Area Source Width:	40.60 meters	133.20 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	1046079	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity (u*): not adjusted

DEBUG OPTION ON

AERSCREEN output file:

MarriottSanJose_Operation.out

*** AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

****

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 09/19/18 12:42:52

****

Running AERMOD

Processing Winter

Processing surface roughness sector 1

****

Processing wind flow sector   1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector   2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector   3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

    ********   WARNING MESSAGES   ********

               *** NONE ***

****

Processing wind flow sector   4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

    ********   WARNING MESSAGES   ********

               *** NONE ***

****

Processing wind flow sector   5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 20

    ********   WARNING MESSAGES   ********

               *** NONE ***

****

Processing wind flow sector   6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 25

    ********   WARNING MESSAGES   ********

               *** NONE ***

****

Processing wind flow sector   7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 30

    ********   WARNING MESSAGES   ********

               *** NONE ***

****

Processing wind flow sector   8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 35

    ********   WARNING MESSAGES   ********

               *** NONE ***

****

Processing wind flow sector   9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 40

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 45

******** WARNING MESSAGES ********

*** NONE ***

****

Running AERMOD

Processing Spring

Processing surface roughness sector 1

****

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 5

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 30

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   8


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  35


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   9


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  40


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector  10


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  45
```

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ******************************************


  Running AERMOD

 Processing Summer


Processing surface roughness sector  1


**************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5


    ********   WARNING MESSAGES   ********

               ***  NONE  ***
```

****

Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 10

    ********   WARNING MESSAGES   ********

               *** NONE ***

****

Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 15

    ********   WARNING MESSAGES   ********

               *** NONE ***

****

Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 20

    ********   WARNING MESSAGES   ********

               *** NONE ***

```
**************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  25


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   7


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  30


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   8


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  35


    ********   WARNING MESSAGES   ********

               ***  NONE  ***
```

****

Processing wind flow sector   9

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 40

    ********   WARNING MESSAGES   ********

               *** NONE ***

****

Processing wind flow sector 10

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 45

    ********   WARNING MESSAGES   ********

               *** NONE ***

 ****

  Running AERMOD

 Processing Autumn

Processing surface roughness sector 1

****

```
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************
```

```
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************
```

```
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************

Processing wind flow sector   9

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  40

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

**************************************************
```

```
                              MarriottSanJose_Operation
Processing wind flow sector  10


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  45


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


FLOWSECTOR   ended 09/19/18 12:43:10


REFINE       started 09/19/18 12:43:10


 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


REFINE       ended 09/19/18 12:43:11


 ********************************************
 AERSCREEN Finished Successfully
 With no errors or warnings
 Check log file for details
 ********************************************
```

Ending date and time 09/19/18 12:43:14

MarriottSanJose_Operation_max_conc_distance

Concentration	Distance	Elevation	Diag	Season/Month	Zo sector	Date
H0 U* W* DT/DZ ZICNV ZIMCH M-O LEN Z0 BOWEN ALBEDO REF WS HT REF TA HT						
0.41831E+01	1.00	0.00	40.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						
0.63985E+01	25.00	0.00	45.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						
* 0.64308E+01	27.00	0.00	45.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						
0.27279E+01	50.01	0.00	45.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						
0.15131E+01	75.00	0.00	45.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						
0.10117E+01	100.00	0.00	40.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						
0.74291E+00	125.00	0.00	35.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						
0.57740E+00	150.00	0.00	30.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						
0.46697E+00	175.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						
0.38857E+00	200.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						
0.33043E+00	225.00	0.00	15.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						
0.28574E+00	250.00	0.00	25.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						
0.25062E+00	275.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						
0.22232E+00	300.00	0.00	0.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						
0.19920E+00	325.00	0.00	20.0	Winter	0-360	10011001
-1.30 0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0 2.0						

```
  0.17991E+00       350.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.16362E+00       375.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14971E+00       400.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.13775E+00       425.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.12737E+00       450.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.11829E+00       475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.11027E+00       500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.10311E+00       525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.96703E-01       550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.90962E-01       575.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.85806E-01       599.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.81129E-01       625.00      0.00  30.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.76865E-01       650.00      0.00  30.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.72974E-01       675.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.69712E-01       700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.66424E-01       725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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  0.63396E-01       750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.60599E-01       775.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.58009E-01       800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.55605E-01       825.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.53369E-01       850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.51283E-01       875.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.49335E-01       900.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.47512E-01       924.99      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.45802E-01       950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.44196E-01       975.00      0.00  30.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.42685E-01      1000.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.41262E-01      1024.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.39918E-01      1050.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.38649E-01      1075.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.37448E-01      1100.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.36310E-01      1125.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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  0.35230E-01      1149.99      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.34205E-01      1175.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.33231E-01      1200.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.32304E-01      1225.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.31420E-01      1249.99      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.30578E-01      1275.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.29774E-01      1300.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.29006E-01      1325.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.28272E-01      1349.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.27569E-01      1375.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.26896E-01      1400.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.26251E-01      1425.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.25633E-01      1449.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.25039E-01      1475.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.24469E-01      1500.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.23921E-01      1525.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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  0.23394E-01      1550.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.22887E-01      1574.99      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.22398E-01      1600.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.21927E-01      1625.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.21473E-01      1650.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.21035E-01      1674.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.20612E-01      1700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.20203E-01      1725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.19809E-01      1750.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.19428E-01      1774.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.19059E-01      1800.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.18702E-01      1825.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.18356E-01      1850.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.18022E-01      1875.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.17697E-01      1900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.17383E-01      1925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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  0.17079E-01      1950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.16783E-01      1975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.16496E-01      2000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.16218E-01      2025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.15947E-01      2050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.15685E-01      2075.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.15429E-01      2100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.15181E-01      2125.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14940E-01      2150.00      0.00  30.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14705E-01      2175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14477E-01      2200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14255E-01      2225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.14038E-01      2250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.13827E-01      2275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.13622E-01      2300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.13422E-01      2325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
```

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   0.13226E-01      2350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.13036E-01      2375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.12850E-01      2400.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.12669E-01      2425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.12493E-01      2449.99      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.12320E-01      2475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.12152E-01      2500.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11987E-01      2525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11827E-01      2550.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11670E-01      2575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11516E-01      2600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11366E-01      2625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11220E-01      2650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.11076E-01      2675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.10936E-01      2700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.10799E-01      2725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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  0.10665E-01      2750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.10534E-01      2775.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.10405E-01      2800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.10279E-01      2824.99      0.00  35.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.10156E-01      2850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.10035E-01      2875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.99169E-02      2900.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.98011E-02      2925.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.96876E-02      2950.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.95763E-02      2975.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.94672E-02      2999.99      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.93603E-02      3025.00      0.00  40.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.92554E-02      3050.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.91525E-02      3075.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.90516E-02      3100.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.89527E-02      3125.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
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  0.88556E-02      3150.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.87603E-02      3174.99      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.86667E-02      3199.99      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.85749E-02      3225.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.84847E-02      3249.99      0.00  35.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.83962E-02      3274.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.83092E-02      3300.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.82239E-02      3325.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.81400E-02      3350.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.80576E-02      3375.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.79766E-02      3400.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.78970E-02      3425.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.78188E-02      3450.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.77419E-02      3475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.76663E-02      3500.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.75920E-02      3525.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
```

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  0.75189E-02      3550.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.74471E-02      3575.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.73764E-02      3600.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.73069E-02      3625.00      0.00  40.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.72385E-02      3650.00      0.00  40.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.71712E-02      3674.99      0.00  35.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.71049E-02      3700.00      0.00  20.0        Winter       0-360   10011001
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 310.0    2.0
  0.70398E-02      3724.99      0.00  20.0        Winter       0-360   10011001
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 310.0    2.0
  0.69756E-02      3750.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.69125E-02      3775.00      0.00  25.0        Winter       0-360   10011001
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 310.0    2.0
  0.68503E-02      3800.00      0.00  20.0        Winter       0-360   10011001
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 310.0    2.0
  0.67891E-02      3825.00      0.00   5.0        Winter       0-360   10011001
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 310.0    2.0
  0.67289E-02      3849.99      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.66695E-02      3875.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.66111E-02      3900.00      0.00  40.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.65535E-02      3925.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
```

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  0.64968E-02      3950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.64410E-02      3975.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.63860E-02      4000.00      0.00   0.0        Winter       0-360   10011001
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 310.0    2.0
  0.63318E-02      4025.00      0.00   5.0        Winter       0-360   10011001
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 310.0    2.0
  0.62784E-02      4050.00      0.00  45.0        Winter       0-360   10011001
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 310.0    2.0
  0.62257E-02      4074.99      0.00  35.0        Winter       0-360   10011001
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 310.0    2.0
  0.61738E-02      4100.00      0.00  25.0        Winter       0-360   10011001
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 310.0    2.0
  0.61227E-02      4125.00      0.00   5.0        Winter       0-360   10011001
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 310.0    2.0
  0.60723E-02      4150.00      0.00  10.0        Winter       0-360   10011001
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 310.0    2.0
  0.60226E-02      4175.00      0.00  25.0        Winter       0-360   10011001
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 310.0    2.0
  0.59736E-02      4200.00      0.00  10.0        Winter       0-360   10011001
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 310.0    2.0
  0.59253E-02      4225.00      0.00   5.0        Winter       0-360   10011001
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 310.0    2.0
  0.58776E-02      4249.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.58307E-02      4275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.57843E-02      4300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.57386E-02      4325.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
```

```
   0.56936E-02      4349.99      0.00  45.0        Winter       0-360   10011001
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 310.0    2.0
   0.56491E-02      4375.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.56052E-02      4400.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.55620E-02      4425.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.55192E-02      4449.99      0.00  10.0        Winter       0-360   10011001
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 310.0    2.0
   0.54771E-02      4475.00      0.00   5.0        Winter       0-360   10011001
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 310.0    2.0
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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.53945E-02      4525.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.53540E-02      4550.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.53140E-02      4575.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.52745E-02      4599.99      0.00  40.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.52355E-02      4625.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.51971E-02      4650.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.51591E-02      4675.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
   0.51216E-02      4700.00      0.00  15.0        Winter       0-360   10011001
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 310.0    2.0
   0.50846E-02      4725.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
```

MarriottSanJose_Operation_max_conc_distance

```
  0.50480E-02      4750.00      0.00   0.0        Winter       0-360   10011001
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 310.0    2.0
  0.50119E-02      4774.99      0.00  45.0        Winter       0-360   10011001
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 310.0    2.0
  0.49762E-02      4800.00      0.00   5.0        Winter       0-360   10011001
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 310.0    2.0
  0.49409E-02      4825.00      0.00  15.0        Winter       0-360   10011001
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 310.0    2.0
  0.49061E-02      4850.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.48717E-02      4875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.48378E-02      4899.99      0.00  35.0        Winter       0-360   10011001
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 310.0    2.0
  0.48042E-02      4925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.47711E-02      4950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
  0.47383E-02      4975.00      0.00   0.0        Winter       0-360   10011001
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 310.0    2.0
  0.47059E-02      4999.99      0.00  45.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
 310.0    2.0
```

Mathur, Krinjal

From: Colleen Haggerty [redacted]
Sent: Thursday, October 25, 2018 12:23 PM
To: Mathur, Krinjal
Subject: City File No. H17-032

Krinjal,

The District has reviewed the Revised MND for City File H17-023, AC by Marriott- West San Jose Project, dated October 2018 and received by the District on October 5, 2018. The District does not have any facilities or right of way on or adjacent to the project. However, District records there is one active well at the site. If the well will continue to be used following redevelopment of the site, it must be protected so that it does not become lost or damaged during redevelopment of the site. If the well will not be used following redevelopment of the site, it must be properly destroyed under permit from the District. For more information regarding how to obtain a well destruction permit, please call the District's Well Ordinance Program Hotline at 408-630-2660.

Santa Clara Valley Water District (District) records indicate that 11 properly destroyed wells are located on the subject property. Because the wells are considered properly destroyed, no action is necessary to protect them or to bring them into compliance with the District Well Ordinance. While the District has records for most wells located in the County, it is always possible that a well exists that is not in the District's records. If previously unknown wells are found on the subject property during development, they must be properly destroyed under permit from the District or registered with the District and protected from damage.

If you have any questions please let me know.
thanks

Colleen Haggerty, PE
Associate Civil Engineer
Community Projects Review Unit
Santa Clara Valley Water District
5750 Almaden Expressway, San Jose, CA 95118
(408) 630-2322 direct | (408)265-2600 main | [redacted] | www.valleywater.org
* Mailing address for FedEx, UPS, Golden State, *etc.*
Winfield Warehouse-5905 Winfield Blvd. San Jose, CA 95123-2428

Mathur, Krinjal

From: Catherine Thaler [redacted]
Sent: Thursday, October 25, 2018 12:39 PM
To: Mathur, Krinjal
Cc: Aarti Shrivastava; Benjamin Fu; rosalynn.hughey@sanjose.ca.gov
Subject: Re: San Jose Planning Public Review Revised Draft MND: AC by Marriott – West San José

Thank you for the opportunity to respond.

First: I don't feel the response to my letter about the effect on Stern was complete. I don't believe that the simple fact that all trips will impact the first 130 feet of Stern was studied or a concern. It really is immaterial how many gas station trips there are because most of them are on Stevens Creek. ALL of the proposed 1400 trips will be on Stern, with an immediate left turn required for half of them. This is going to be a problem.

Second; I have several major concerns about the construction impact.

1. We already have a parking issue on Stern Avenue because of the overflow from the adjacent Apartment Complex on San Jose land. All construction workers parking needs to be offsite- maybe on the empty land across the street.

2. Stern is a major egress from this neighborhood and should not be closed or partially closed during construction.

3. There is a bus stop on Stevens Creek at this location, it needs to remain available also.

4. Children and teenagers walk and ride bikes along this section of Stevens Creek to get to Hyde Junior High and Cupertino High School. It needs to be safe for them at all times.

Third: This project does not conform to the adjacent style and size of buildings. It is so evident in the pictures. This is a tree lined street, where the mature trees hide 3 and 4 story buildings. You are plunking down a 7 story "lego like" tower at the entrance to a neighborhood of 5000 residents.

I know it conforms to your Urban Village, but there should have been some consideration of existing buildings, even if they aren't in San Jose. This really is the wrong place for this hotel.

Regards,
Catherine Thaler

On Fri, Oct 5, 2018 at 3:43 PM Mathur, Krinjal <krinjal.mathur@sanjoseca.gov> wrote:

PUBLIC NOTICE

INTENT TO ADOPT

A REVISED MITIGATED NEGATIVE DECLARATION

CITY OF SAN JOSE, CALIFORNIA

Project Name: AC by Marriott – West San José

File No.: H17-023

Description: Site Development Permit to allow the demolition an existing gas station and convenience store, and the construction of a seven story hotel with 168 rooms, four levels of subterranean parking, a restaurant, and associated on-site improvements including paving and landscaping on a 0.415 gross acre site.

Location: Southeast corner of Stevens Creek Boulevard and Stern Avenue, at 5696 Stevens Creek Boulevard in San José;

Assessor's Parcel No.: 375-12-017

Council District: 1

Applicant Contact Information: Asset Gas SC, Inc., 7969 Engineer Road Unit 108, San Diego, CA 92111

The City has performed an environmental review of the project. The environmental review examines the nature and extent of any adverse effects on the environment that could occur if the project is approved and implemented. Based on the review, the City has prepared a revised Draft Mitigated Negative Declaration (MND) for this project. An MND is a statement by the City that the project will not have a significant effect on the environment if the project implements the protective measures (mitigation measures) identified during the environmental review. The project site is present on a list pursuant to Section 65962.5 of the California Government Code.

The revised Draft MND includes additional analysis and supporting information that was not included in the previously circulated Draft MND. The initial circulation of the Draft MND was from August 17, 2018 to September 6, 2018.

The public is welcome to review and comment on the revised Draft MND. The public comment period for this revised Draft MND **begins on October 5, 2018 to October 25, 2018**.

Tentative Public Hearing Schedule: The item is tentatively scheduled to be heard at the Planning Director's Hearing on Wednesday, October 31, 2018 at 9:00 a.m. The hearing will be held in the City Council Chambers at San José City Hall at 200 E. Santa Clara Street, San Jose, CA 95113. Please confirm hearing dates by viewing the agendas available through links at http://www.sanjoseca.gov/index.aspx?NID=1763.

The revised Draft MND, revised Initial Study, and reference documents are available online at: http://www.sanjoseca.gov/index.aspx?NID=6145. The documents are also available for review from 9:00 a.m. to 5:00 p.m. Monday through Friday at the City of San José Department of Planning, Building and Code Enforcement, located at City Hall, 200 East Santa Clara Street; and at the Dr. Martin Luther King, Jr. Main Library, located at 150 E. San Fernando Street.

For additional information, please contact Krinjal Mathur at (408) 535-7874, or by e-mail at krinjal.mathur@sanjoseca.gov.

Krinjal Mathur

Planner | City of San José

Planning, Building & Code Enforcement

krinjal.mathur@sanjoseca.gov

408.535.7874

Attachment B
Revised CalEEMod Output Files

5696 Stevens Creek Blvd. Hotel - AC by Marriott

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	100.00	Space	0.00	49,590.00	0
Hotel	168.00	Room	0.42	78,850.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2020
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 - Assumed start of construction - January 1, 2019
Building square footage set to 78,850 sq. ft. for proposed 7 stories
100 parking spaces

Construction Phase - Estimated construction time - 18 months

Grading - Grading includes excavation - 17,000 CY per Civil Plans

Trips and VMT -

5696 Stevens Creek Blvd. Hotel - AC by Marriott - Santa Clara County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	70.00
tblConstructionPhase	NumDays	100.00	220.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	60.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	1.00	2.00
tblGrading	AcresOfGrading	0.00	0.42
tblGrading	AcresOfGrading	1.00	0.42
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	BuildingSpaceSquareFeet	40,000.00	49,590.00
tblLandUse	BuildingSpaceSquareFeet	243,936.00	78,850.00
tblLandUse	LandUseSquareFeet	40,000.00	49,590.00
tblLandUse	LandUseSquareFeet	243,936.00	78,850.00
tblLandUse	LotAcreage	0.90	0.00
tblLandUse	LotAcreage	5.60	0.42
tblProjectCharacteristics	OperationalYear	2018	2020

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1624	1.8143	1.2623	3.2800e-003	0.0959	0.0793	0.1752	0.0322	0.0738	0.1060	0.0000	302.6122	302.6122	0.0446	0.0000	303.7261
2020	0.4585	0.3293	0.3038	6.3000e-004	0.0154	0.0169	0.0323	4.1600e-003	0.0159	0.0200	0.0000	56.1603	56.1603	9.4700e-003	0.0000	56.3972
Maximum	**0.4585**	**1.8143**	**1.2623**	**3.2800e-003**	**0.0959**	**0.0793**	**0.1752**	**0.0322**	**0.0738**	**0.1060**	**0.0000**	**302.6122**	**302.6122**	**0.0446**	**0.0000**	**303.7261**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1624	1.8143	1.2623	3.2800e-003	0.0959	0.0793	0.1752	0.0322	0.0738	0.1060	0.0000	302.6120	302.6120	0.0446	0.0000	303.7260
2020	0.4585	0.3293	0.3038	6.3000e-004	0.0154	0.0169	0.0323	4.1600e-003	0.0159	0.0200	0.0000	56.1603	56.1603	9.4700e-003	0.0000	56.3971
Maximum	**0.4585**	**1.8143**	**1.2623**	**3.2800e-003**	**0.0959**	**0.0793**	**0.1752**	**0.0322**	**0.0738**	**0.1060**	**0.0000**	**302.6120**	**302.6120**	**0.0446**	**0.0000**	**303.7260**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	0.5537	0.5537
2	4-1-2019	6-30-2019	0.5087	0.5087
3	7-1-2019	9-30-2019	0.4544	0.4544
4	10-1-2019	12-31-2019	0.4572	0.4572
5	1-1-2020	3-31-2020	0.3959	0.3959
6	4-1-2020	6-30-2020	0.3908	0.3908
		Highest	0.5537	0.5537

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3535	2.0000e-005	2.4800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7900e-003	4.7900e-003	1.0000e-005	0.0000	5.1100e-003
Energy	0.0189	0.1720	0.1445	1.0300e-003		0.0131	0.0131		0.0131	0.0131	0.0000	462.9801	462.9801	0.0161	6.0100e-003	465.1733
Mobile	0.3378	1.3396	3.6543	0.0109	0.9324	0.0110	0.9435	0.2496	0.0104	0.2600	0.0000	995.7336	995.7336	0.0378	0.0000	996.6776
Waste						0.0000	0.0000		0.0000	0.0000	18.6711	0.0000	18.6711	1.1034	0.0000	46.2569
Water						0.0000	0.0000		0.0000	0.0000	1.3520	7.1904	8.5425	0.1392	3.3500e-003	13.0194
Total	**0.7103**	**1.5116**	**3.8013**	**0.0119**	**0.9324**	**0.0241**	**0.9566**	**0.2496**	**0.0234**	**0.2731**	**20.0231**	**1,465.9089**	**1,485.9320**	**1.2965**	**9.3600e-003**	**1,521.1323**

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	0.3535	2.0000e-005	2.4800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7900e-003	4.7900e-003	1.0000e-005	0.0000	5.1100e-003
Energy	0.0189	0.1720	0.1445	1.0300e-003		0.0131	0.0131		0.0131	0.0131	0.0000	462.9801	462.9801	0.0161	6.0100e-003	465.1733
Mobile	0.3378	1.3396	3.6543	0.0109	0.9324	0.0110	0.9435	0.2496	0.0104	0.2600	0.0000	995.7336	995.7336	0.0378	0.0000	996.6776
Waste						0.0000	0.0000		0.0000	0.0000	18.6711	0.0000	18.6711	1.1034	0.0000	46.2569
Water						0.0000	0.0000		0.0000	0.0000	1.3520	7.1904	8.5425	0.1392	3.3500e-003	13.0194
Total	**0.7103**	**1.5116**	**3.8013**	**0.0119**	**0.9324**	**0.0241**	**0.9566**	**0.2496**	**0.0234**	**0.2731**	**20.0231**	**1,465.9089**	**1,485.9320**	**1.2965**	**9.3600e-003**	**1,521.1323**

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

3.0 Construction Detail

Construction Phase

5696 Stevens Creek Blvd. Hotel - AC by Marriott - Santa Clara County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	1/28/2019	5	20	
2	Site Preparation	Site Preparation	1/29/2019	1/30/2019	5	2	
3	Grading	Grading	1/31/2019	4/24/2019	5	60	
4	Building Construction	Building Construction	4/25/2019	2/26/2020	5	220	
5	Paving	Paving	2/27/2020	3/11/2020	5	10	
6	Architectural Coating	Architectural Coating	3/12/2020	6/17/2020	5	70	

Acres of Grading (Site Preparation Phase): 0.42

Acres of Grading (Grading Phase): 0.42

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 118,275; Non-Residential Outdoor: 39,425; Striped Parking Area: 2,975 (Architectural Coating – sqft)

OffRoad Equipment

5696 Stevens Creek Blvd. Hotel - AC by Marriott - Santa Clara County, Annual

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	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	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	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	54.00	21.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.5300e-003	0.0860	0.0769	1.2000e-004		5.3700e-003	5.3700e-003		5.1200e-003	5.1200e-003	0.0000	10.5202	10.5202	2.0100e-003	0.0000	10.5704
Total	**9.5300e-003**	**0.0860**	**0.0769**	**1.2000e-004**		**5.3700e-003**	**5.3700e-003**		**5.1200e-003**	**5.1200e-003**	**0.0000**	**10.5202**	**10.5202**	**2.0100e-003**	**0.0000**	**10.5704**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.7000e-004	2.7900e-003	1.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.7021	0.7021	2.0000e-005	0.0000	0.7026
Total	**3.6000e-004**	**2.7000e-004**	**2.7900e-003**	**1.0000e-005**	**7.9000e-004**	**1.0000e-005**	**8.0000e-004**	**2.1000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.7021**	**0.7021**	**2.0000e-005**	**0.0000**	**0.7026**

3.2 Demolition - 2019

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	9.5300e-003	0.0860	0.0769	1.2000e-004		5.3700e-003	5.3700e-003		5.1200e-003	5.1200e-003	0.0000	10.5202	10.5202	2.0100e-003	0.0000	10.5704
Total	**9.5300e-003**	**0.0860**	**0.0769**	**1.2000e-004**		**5.3700e-003**	**5.3700e-003**		**5.1200e-003**	**5.1200e-003**	**0.0000**	**10.5202**	**10.5202**	**2.0100e-003**	**0.0000**	**10.5704**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.7000e-004	2.7900e-003	1.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.7021	0.7021	2.0000e-005	0.0000	0.7026
Total	**3.6000e-004**	**2.7000e-004**	**2.7900e-003**	**1.0000e-005**	**7.9000e-004**	**1.0000e-005**	**8.0000e-004**	**2.1000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.7021**	**0.7021**	**2.0000e-005**	**0.0000**	**0.7026**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2000e-004	0.0000	2.2000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.2000e-004	8.9200e-003	4.1400e-003	1.0000e-005		3.7000e-004	3.7000e-004		3.4000e-004	3.4000e-004	0.0000	0.8756	0.8756	2.8000e-004	0.0000	0.8825
Total	**7.2000e-004**	**8.9200e-003**	**4.1400e-003**	**1.0000e-005**	**2.2000e-004**	**3.7000e-004**	**5.9000e-004**	**2.0000e-005**	**3.4000e-004**	**3.6000e-004**	**0.0000**	**0.8756**	**0.8756**	**2.8000e-004**	**0.0000**	**0.8825**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.4000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0351	0.0351	0.0000	0.0000	0.0351
Total	**2.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0351**	**0.0351**	**0.0000**	**0.0000**	**0.0351**

3.3 Site Preparation - 2019

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					2.2000e-004	0.0000	2.2000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.2000e-004	8.9200e-003	4.1400e-003	1.0000e-005		3.7000e-004	3.7000e-004		3.4000e-004	3.4000e-004	0.0000	0.8756	0.8756	2.8000e-004	0.0000	0.8825
Total	**7.2000e-004**	**8.9200e-003**	**4.1400e-003**	**1.0000e-005**	**2.2000e-004**	**3.7000e-004**	**5.9000e-004**	**2.0000e-005**	**3.4000e-004**	**3.6000e-004**	**0.0000**	**0.8756**	**0.8756**	**2.8000e-004**	**0.0000**	**0.8825**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.4000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0351	0.0351	0.0000	0.0000	0.0351
Total	**2.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0351**	**0.0351**	**0.0000**	**0.0000**	**0.0351**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0238	0.0000	0.0238	0.0126	0.0000	0.0126	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0286	0.2581	0.2308	3.6000e-004		0.0161	0.0161		0.0154	0.0154	0.0000	31.5607	31.5607	6.0200e-003	0.0000	31.7111
Total	**0.0286**	**0.2581**	**0.2308**	**3.6000e-004**	**0.0238**	**0.0161**	**0.0399**	**0.0126**	**0.0154**	**0.0280**	**0.0000**	**31.5607**	**31.5607**	**6.0200e-003**	**0.0000**	**31.7111**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.6600e-003	0.3308	0.0653	8.5000e-004	0.0180	1.2700e-003	0.0193	4.9500e-003	1.2100e-003	6.1700e-003	0.0000	81.8810	81.8810	3.8400e-003	0.0000	81.9769
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	1.0900e-003	8.1000e-004	8.3800e-003	2.0000e-005	2.3800e-003	2.0000e-005	2.4000e-003	6.3000e-004	1.0000e-005	6.5000e-004	0.0000	2.1063	2.1063	6.0000e-005	0.0000	2.1077
Total	**0.0108**	**0.3316**	**0.0737**	**8.7000e-004**	**0.0204**	**1.2900e-003**	**0.0217**	**5.5800e-003**	**1.2200e-003**	**6.8200e-003**	**0.0000**	**83.9873**	**83.9873**	**3.9000e-003**	**0.0000**	**84.0846**

3.4 Grading - 2019

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					0.0238	0.0000	0.0238	0.0126	0.0000	0.0126	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0286	0.2581	0.2308	3.6000e-004		0.0161	0.0161		0.0154	0.0154	0.0000	31.5607	31.5607	6.0200e-003	0.0000	31.7111
Total	**0.0286**	**0.2581**	**0.2308**	**3.6000e-004**	**0.0238**	**0.0161**	**0.0399**	**0.0126**	**0.0154**	**0.0280**	**0.0000**	**31.5607**	**31.5607**	**6.0200e-003**	**0.0000**	**31.7111**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.6600e-003	0.3308	0.0653	8.5000e-004	0.0180	1.2700e-003	0.0193	4.9500e-003	1.2100e-003	6.1700e-003	0.0000	81.8810	81.8810	3.8400e-003	0.0000	81.9769
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	1.0900e-003	8.1000e-004	8.3800e-003	2.0000e-005	2.3800e-003	2.0000e-005	2.4000e-003	6.3000e-004	1.0000e-005	6.5000e-004	0.0000	2.1063	2.1063	6.0000e-005	0.0000	2.1077
Total	**0.0108**	**0.3316**	**0.0737**	**8.7000e-004**	**0.0204**	**1.2900e-003**	**0.0217**	**5.5800e-003**	**1.2200e-003**	**6.8200e-003**	**0.0000**	**83.9873**	**83.9873**	**3.9000e-003**	**0.0000**	**84.0846**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0857	0.8790	0.6751	1.0200e-003		0.0542	0.0542		0.0499	0.0499	0.0000	91.5589	91.5589	0.0290	0.0000	92.2831
Total	**0.0857**	**0.8790**	**0.6751**	**1.0200e-003**		**0.0542**	**0.0542**		**0.0499**	**0.0499**	**0.0000**	**91.5589**	**91.5589**	**0.0290**	**0.0000**	**92.2831**

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	9.2200e-003	0.2373	0.0637	5.2000e-004	0.0124	1.7100e-003	0.0141	3.5700e-003	1.6300e-003	5.2100e-003	0.0000	49.4406	49.4406	2.4500e-003	0.0000	49.5019
Worker	0.0176	0.0131	0.1350	3.8000e-004	0.0383	2.5000e-004	0.0386	0.0102	2.3000e-004	0.0104	0.0000	33.9317	33.9317	9.2000e-004	0.0000	33.9548
Total	**0.0268**	**0.2504**	**0.1987**	**9.0000e-004**	**0.0507**	**1.9600e-003**	**0.0527**	**0.0138**	**1.8600e-003**	**0.0156**	**0.0000**	**83.3723**	**83.3723**	**3.3700e-003**	**0.0000**	**83.4567**

3.5 Building Construction - 2019

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	0.0857	0.8790	0.6751	1.0200e-003		0.0542	0.0542		0.0499	0.0499	0.0000	91.5588	91.5588	0.0290	0.0000	92.2830
Total	**0.0857**	**0.8790**	**0.6751**	**1.0200e-003**		**0.0542**	**0.0542**		**0.0499**	**0.0499**	**0.0000**	**91.5588**	**91.5588**	**0.0290**	**0.0000**	**92.2830**

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	9.2200e-003	0.2373	0.0637	5.2000e-004	0.0124	1.7100e-003	0.0141	3.5700e-003	1.6300e-003	5.2100e-003	0.0000	49.4406	49.4406	2.4500e-003	0.0000	49.5019
Worker	0.0176	0.0131	0.1350	3.8000e-004	0.0383	2.5000e-004	0.0386	0.0102	2.3000e-004	0.0104	0.0000	33.9317	33.9317	9.2000e-004	0.0000	33.9548
Total	**0.0268**	**0.2504**	**0.1987**	**9.0000e-004**	**0.0507**	**1.9600e-003**	**0.0527**	**0.0138**	**1.8600e-003**	**0.0156**	**0.0000**	**83.3723**	**83.3723**	**3.3700e-003**	**0.0000**	**83.4567**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0177	0.1815	0.1514	2.3000e-004		0.0107	0.0107		9.8500e-003	9.8500e-003	0.0000	20.5124	20.5124	6.6300e-003	0.0000	20.6783
Total	**0.0177**	**0.1815**	**0.1514**	**2.3000e-004**		**0.0107**	**0.0107**		**9.8500e-003**	**9.8500e-003**	**0.0000**	**20.5124**	**20.5124**	**6.6300e-003**	**0.0000**	**20.6783**

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	1.7100e-003	0.0490	0.0131	1.2000e-004	2.8300e-003	2.4000e-004	3.0700e-003	8.2000e-004	2.3000e-004	1.0500e-003	0.0000	11.2551	11.2551	5.2000e-004	0.0000	11.2680
Worker	3.6800e-003	2.6400e-003	0.0277	8.0000e-005	8.7800e-003	6.0000e-005	8.8400e-003	2.3400e-003	5.0000e-005	2.3900e-003	0.0000	7.5293	7.5293	1.8000e-004	0.0000	7.5339
Total	**5.3900e-003**	**0.0517**	**0.0408**	**2.0000e-004**	**0.0116**	**3.0000e-004**	**0.0119**	**3.1600e-003**	**2.8000e-004**	**3.4400e-003**	**0.0000**	**18.7844**	**18.7844**	**7.0000e-004**	**0.0000**	**18.8019**

3.5 Building Construction - 2020

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	0.0177	0.1815	0.1514	2.3000e-004		0.0107	0.0107		9.8500e-003	9.8500e-003	0.0000	20.5124	20.5124	6.6300e-003	0.0000	20.6782
Total	**0.0177**	**0.1815**	**0.1514**	**2.3000e-004**		**0.0107**	**0.0107**		**9.8500e-003**	**9.8500e-003**	**0.0000**	**20.5124**	**20.5124**	**6.6300e-003**	**0.0000**	**20.6782**

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	1.7100e-003	0.0490	0.0131	1.2000e-004	2.8300e-003	2.4000e-004	3.0700e-003	8.2000e-004	2.3000e-004	1.0500e-003	0.0000	11.2551	11.2551	5.2000e-004	0.0000	11.2680
Worker	3.6800e-003	2.6400e-003	0.0277	8.0000e-005	8.7800e-003	6.0000e-005	8.8400e-003	2.3400e-003	5.0000e-005	2.3900e-003	0.0000	7.5293	7.5293	1.8000e-004	0.0000	7.5339
Total	**5.3900e-003**	**0.0517**	**0.0408**	**2.0000e-004**	**0.0116**	**3.0000e-004**	**0.0119**	**3.1600e-003**	**2.8000e-004**	**3.4400e-003**	**0.0000**	**18.7844**	**18.7844**	**7.0000e-004**	**0.0000**	**18.8019**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8600e-003	0.0361	0.0356	6.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	4.6965	4.6965	1.3700e-003	0.0000	4.7307
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.8600e-003**	**0.0361**	**0.0356**	**6.0000e-005**		**1.9800e-003**	**1.9800e-003**		**1.8300e-003**	**1.8300e-003**	**0.0000**	**4.6965**	**4.6965**	**1.3700e-003**	**0.0000**	**4.7307**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.1000e-004	2.2500e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6121	0.6121	2.0000e-005	0.0000	0.6125
Total	**3.0000e-004**	**2.1000e-004**	**2.2500e-003**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.6121**	**0.6121**	**2.0000e-005**	**0.0000**	**0.6125**

3.6 Paving - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8600e-003	0.0361	0.0356	6.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	4.6965	4.6965	1.3700e-003	0.0000	4.7307
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.8600e-003**	**0.0361**	**0.0356**	**6.0000e-005**		**1.9800e-003**	**1.9800e-003**		**1.8300e-003**	**1.8300e-003**	**0.0000**	**4.6965**	**4.6965**	**1.3700e-003**	**0.0000**	**4.7307**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.1000e-004	2.2500e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6121	0.6121	2.0000e-005	0.0000	0.6125
Total	**3.0000e-004**	**2.1000e-004**	**2.2500e-003**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.6121**	**0.6121**	**2.0000e-005**	**0.0000**	**0.6125**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4215					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.4800e-003	0.0589	0.0641	1.0000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	8.9364	8.9364	6.9000e-004	0.0000	8.9537
Total	**0.4300**	**0.0589**	**0.0641**	**1.0000e-004**		**3.8800e-003**	**3.8800e-003**		**3.8800e-003**	**3.8800e-003**	**0.0000**	**8.9364**	**8.9364**	**6.9000e-004**	**0.0000**	**8.9537**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2800e-003	9.2000e-004	9.6400e-003	3.0000e-005	3.0500e-003	2.0000e-005	3.0700e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.6186	2.6186	6.0000e-005	0.0000	2.6202
Total	**1.2800e-003**	**9.2000e-004**	**9.6400e-003**	**3.0000e-005**	**3.0500e-003**	**2.0000e-005**	**3.0700e-003**	**8.1000e-004**	**2.0000e-005**	**8.3000e-004**	**0.0000**	**2.6186**	**2.6186**	**6.0000e-005**	**0.0000**	**2.6202**

3.7 Architectural Coating - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4215					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.4800e-003	0.0589	0.0641	1.0000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	8.9364	8.9364	6.9000e-004	0.0000	8.9537
Total	**0.4300**	**0.0589**	**0.0641**	**1.0000e-004**		**3.8800e-003**	**3.8800e-003**		**3.8800e-003**	**3.8800e-003**	**0.0000**	**8.9364**	**8.9364**	**6.9000e-004**	**0.0000**	**8.9537**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2800e-003	9.2000e-004	9.6400e-003	3.0000e-005	3.0500e-003	2.0000e-005	3.0700e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.6186	2.6186	6.0000e-005	0.0000	2.6202
Total	**1.2800e-003**	**9.2000e-004**	**9.6400e-003**	**3.0000e-005**	**3.0500e-003**	**2.0000e-005**	**3.0700e-003**	**8.1000e-004**	**2.0000e-005**	**8.3000e-004**	**0.0000**	**2.6186**	**2.6186**	**6.0000e-005**	**0.0000**	**2.6202**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3378	1.3396	3.6543	0.0109	0.9324	0.0110	0.9435	0.2496	0.0104	0.2600	0.0000	995.7336	995.7336	0.0378	0.0000	996.6776
Unmitigated	0.3378	1.3396	3.6543	0.0109	0.9324	0.0110	0.9435	0.2496	0.0104	0.2600	0.0000	995.7336	995.7336	0.0378	0.0000	996.6776

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hotel	1,372.56	1,375.92	999.60	2,507,453	2,507,453
Total	1,372.56	1,375.92	999.60	2,507,453	2,507,453

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Hotel	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	275.6938	275.6938	0.0125	2.5800e-003	276.7740
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	275.6938	275.6938	0.0125	2.5800e-003	276.7740
NaturalGas Mitigated	0.0189	0.1720	0.1445	1.0300e-003		0.0131	0.0131		0.0131	0.0131	0.0000	187.2863	187.2863	3.5900e-003	3.4300e-003	188.3993
NaturalGas Unmitigated	0.0189	0.1720	0.1445	1.0300e-003		0.0131	0.0131		0.0131	0.0131	0.0000	187.2863	187.2863	3.5900e-003	3.4300e-003	188.3993

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
Hotel	3.50961e+006	0.0189	0.1720	0.1445	1.0300e-003		0.0131	0.0131		0.0131	0.0131	0.0000	187.2863	187.2863	3.5900e-003	3.4300e-003	188.3993
Total		**0.0189**	**0.1720**	**0.1445**	**1.0300e-003**		**0.0131**	**0.0131**		**0.0131**	**0.0131**	**0.0000**	**187.2863**	**187.2863**	**3.5900e-003**	**3.4300e-003**	**188.3993**

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
Hotel	3.50961e+006	0.0189	0.1720	0.1445	1.0300e-003		0.0131	0.0131		0.0131	0.0131	0.0000	187.2863	187.2863	3.5900e-003	3.4300e-003	188.3993
Total		**0.0189**	**0.1720**	**0.1445**	**1.0300e-003**		**0.0131**	**0.0131**		**0.0131**	**0.0131**	**0.0000**	**187.2863**	**187.2863**	**3.5900e-003**	**3.4300e-003**	**188.3993**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	334237	97.2333	4.4000e-003	9.1000e-004	97.6143
Hotel	613453	178.4605	8.0700e-003	1.6700e-003	179.1598
Total		**275.6938**	**0.0125**	**2.5800e-003**	**276.7740**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	334237	97.2333	4.4000e-003	9.1000e-004	97.6143
Hotel	613453	178.4605	8.0700e-003	1.6700e-003	179.1598
Total		**275.6938**	**0.0125**	**2.5800e-003**	**276.7740**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3535	2.0000e-005	2.4800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7900e-003	4.7900e-003	1.0000e-005	0.0000	5.1100e-003
Unmitigated	0.3535	2.0000e-005	2.4800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7900e-003	4.7900e-003	1.0000e-005	0.0000	5.1100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3112					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.3000e-004	2.0000e-005	2.4800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7900e-003	4.7900e-003	1.0000e-005	0.0000	5.1100e-003
Total	**0.3535**	**2.0000e-005**	**2.4800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.7900e-003**	**4.7900e-003**	**1.0000e-005**	**0.0000**	**5.1100e-003**

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	0.0422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3112					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.3000e-004	2.0000e-005	2.4800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7900e-003	4.7900e-003	1.0000e-005	0.0000	5.1100e-003
Total	**0.3535**	**2.0000e-005**	**2.4800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.7900e-003**	**4.7900e-003**	**1.0000e-005**	**0.0000**	**5.1100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	8.5425	0.1392	3.3500e-003	13.0194
Unmitigated	8.5425	0.1392	3.3500e-003	13.0194

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	4.26162 / 0.473513	8.5425	0.1392	3.3500e-003	13.0194
Total		**8.5425**	**0.1392**	**3.3500e-003**	**13.0194**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	4.26162 / 0.473513	8.5425	0.1392	3.3500e-003	13.0194
Total		**8.5425**	**0.1392**	**3.3500e-003**	**13.0194**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.6711	1.1034	0.0000	46.2569
Unmitigated	18.6711	1.1034	0.0000	46.2569

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hotel	91.98	18.6711	1.1034	0.0000	46.2569
Total		**18.6711**	**1.1034**	**0.0000**	**46.2569**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hotel	91.98	18.6711	1.1034	0.0000	46.2569
Total		**18.6711**	**1.1034**	**0.0000**	**46.2569**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

5696 Stevens Creek Blvd. Hotel - AC by Marriott

Santa Clara County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	100.00	Space	0.00	49,590.00	0
Hotel	168.00	Room	0.42	78,850.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2020
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 - Assumed start of construction - January 1, 2019
Building square footage set to 78,850 sq. ft. for proposed 7 stories
100 parking spaces

Construction Phase - Estimated construction time - 18 months

Grading - Grading includes excavation - 17,000 CY per Civil Plans

Trips and VMT -

5696 Stevens Creek Blvd. Hotel - AC by Marriott - Santa Clara County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	70.00
tblConstructionPhase	NumDays	100.00	220.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	60.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	1.00	2.00
tblGrading	AcresOfGrading	0.00	0.42
tblGrading	AcresOfGrading	1.00	0.42
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	BuildingSpaceSquareFeet	40,000.00	49,590.00
tblLandUse	BuildingSpaceSquareFeet	243,936.00	78,850.00
tblLandUse	LandUseSquareFeet	40,000.00	49,590.00
tblLandUse	LandUseSquareFeet	243,936.00	78,850.00
tblLandUse	LotAcreage	0.90	0.00
tblLandUse	LotAcreage	5.60	0.42
tblProjectCharacteristics	OperationalYear	2018	2020

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.3092	19.4281	10.1039	0.0413	1.4933	0.6271	2.0729	0.6108	0.5777	1.1640	0.0000	4,272.5540	4,272.5540	0.3981	0.0000	4,281.5872
2020	12.3231	11.3291	9.4707	0.0216	0.5858	0.5369	1.1227	0.1586	0.4944	0.6530	0.0000	2,149.9492	2,149.9492	0.3942	0.0000	2,159.8045
Maximum	**12.3231**	**19.4281**	**10.1039**	**0.0413**	**1.4933**	**0.6271**	**2.0729**	**0.6108**	**0.5777**	**1.1640**	**0.0000**	**4,272.5540**	**4,272.5540**	**0.3981**	**0.0000**	**4,281.5872**

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	lb/day										lb/day					
2019	1.3092	19.4281	10.1039	0.0413	1.4933	0.6271	2.0729	0.6108	0.5777	1.1640	0.0000	4,272.5540	4,272.5540	0.3981	0.0000	4,281.5872
2020	12.3231	11.3291	9.4707	0.0216	0.5858	0.5369	1.1227	0.1586	0.4944	0.6530	0.0000	2,149.9492	2,149.9492	0.3942	0.0000	2,159.8045
Maximum	**12.3231**	**19.4281**	**10.1039**	**0.0413**	**1.4933**	**0.6271**	**2.0729**	**0.6108**	**0.5777**	**1.1640**	**0.0000**	**4,272.5540**	**4,272.5540**	**0.3981**	**0.0000**	**4,281.5872**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.9385	2.5000e-004	0.0275	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0587	0.0587	1.6000e-004		0.0626
Energy	0.1037	0.9427	0.7919	5.6600e-003		0.0716	0.0716		0.0716	0.0716		1,131.2211	1,131.2211	0.0217	0.0207	1,137.9434
Mobile	2.2281	7.4267	21.6321	0.0662	5.5298	0.0631	5.5929	1.4762	0.0592	1.5353		6,669.8866	6,669.8866	0.2403		6,675.8930
Total	**4.2703**	**8.3696**	**22.4515**	**0.0719**	**5.5298**	**0.1348**	**5.6647**	**1.4762**	**0.1309**	**1.6071**		**7,801.1664**	**7,801.1664**	**0.2621**	**0.0207**	**7,813.8989**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.9385	2.5000e-004	0.0275	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0587	0.0587	1.6000e-004		0.0626
Energy	0.1037	0.9427	0.7919	5.6600e-003		0.0716	0.0716		0.0716	0.0716		1,131.2211	1,131.2211	0.0217	0.0207	1,137.9434
Mobile	2.2281	7.4267	21.6321	0.0662	5.5298	0.0631	5.5929	1.4762	0.0592	1.5353		6,669.8866	6,669.8866	0.2403		6,675.8930
Total	**4.2703**	**8.3696**	**22.4515**	**0.0719**	**5.5298**	**0.1348**	**5.6647**	**1.4762**	**0.1309**	**1.6071**		**7,801.1664**	**7,801.1664**	**0.2621**	**0.0207**	**7,813.8989**

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

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	1/1/2019	1/28/2019	5	20	
2	Site Preparation	Site Preparation	1/29/2019	1/30/2019	5	2	
3	Grading	Grading	1/31/2019	4/24/2019	5	60	
4	Building Construction	Building Construction	4/25/2019	2/26/2020	5	220	
5	Paving	Paving	2/27/2020	3/11/2020	5	10	
6	Architectural Coating	Architectural Coating	3/12/2020	6/17/2020	5	70	

Acres of Grading (Site Preparation Phase): 0.42

Acres of Grading (Grading Phase): 0.42

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 118,275; Non-Residential Outdoor: 39,425; Striped Parking Area: 2,975 (Architectural Coating – sqft)

OffRoad Equipment

5696 Stevens Creek Blvd. Hotel - AC by Marriott - Santa Clara County, Summer

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	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	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	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	54.00	21.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9530	8.6039	7.6917	0.0120		0.5371	0.5371		0.5125	0.5125		1,159.6570	1,159.6570	0.2211		1,165.1847
Total	**0.9530**	**8.6039**	**7.6917**	**0.0120**		**0.5371**	**0.5371**		**0.5125**	**0.5125**		**1,159.6570**	**1,159.6570**	**0.2211**		**1,165.1847**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0380	0.0242	0.3060	8.4000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		83.1978	83.1978	2.2500e-003		83.2541
Total	**0.0380**	**0.0242**	**0.3060**	**8.4000e-004**	**0.0822**	**5.2000e-004**	**0.0827**	**0.0218**	**4.8000e-004**	**0.0223**		**83.1978**	**83.1978**	**2.2500e-003**		**83.2541**

3.2 Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9530	8.6039	7.6917	0.0120		0.5371	0.5371		0.5125	0.5125	0.0000	1,159.6570	1,159.6570	0.2211		1,165.1847
Total	**0.9530**	**8.6039**	**7.6917**	**0.0120**		**0.5371**	**0.5371**		**0.5125**	**0.5125**	**0.0000**	**1,159.6570**	**1,159.6570**	**0.2211**		**1,165.1847**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0380	0.0242	0.3060	8.4000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		83.1978	83.1978	2.2500e-003		83.2541
Total	**0.0380**	**0.0242**	**0.3060**	**8.4000e-004**	**0.0822**	**5.2000e-004**	**0.0827**	**0.0218**	**4.8000e-004**	**0.0223**		**83.1978**	**83.1978**	**2.2500e-003**		**83.2541**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2227	0.0000	0.2227	0.0241	0.0000	0.0241			0.0000			0.0000
Off-Road	0.7195	8.9170	4.1407	9.7500e-003		0.3672	0.3672		0.3378	0.3378		965.1690	965.1690	0.3054		972.8032
Total	**0.7195**	**8.9170**	**4.1407**	**9.7500e-003**	**0.2227**	**0.3672**	**0.5899**	**0.0241**	**0.3378**	**0.3619**		**965.1690**	**965.1690**	**0.3054**		**972.8032**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0190	0.0121	0.1530	4.2000e-004	0.0411	2.6000e-004	0.0413	0.0109	2.4000e-004	0.0111		41.5989	41.5989	1.1300e-003		41.6271
Total	**0.0190**	**0.0121**	**0.1530**	**4.2000e-004**	**0.0411**	**2.6000e-004**	**0.0413**	**0.0109**	**2.4000e-004**	**0.0111**		**41.5989**	**41.5989**	**1.1300e-003**		**41.6271**

3.3 Site Preparation - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2227	0.0000	0.2227	0.0241	0.0000	0.0241			0.0000			0.0000
Off-Road	0.7195	8.9170	4.1407	9.7500e-003		0.3672	0.3672		0.3378	0.3378	0.0000	965.1690	965.1690	0.3054		972.8032
Total	**0.7195**	**8.9170**	**4.1407**	**9.7500e-003**	**0.2227**	**0.3672**	**0.5899**	**0.0241**	**0.3378**	**0.3619**	**0.0000**	**965.1690**	**965.1690**	**0.3054**		**972.8032**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0190	0.0121	0.1530	4.2000e-004	0.0411	2.6000e-004	0.0413	0.0109	2.4000e-004	0.0111		41.5989	41.5989	1.1300e-003		41.6271
Total	**0.0190**	**0.0121**	**0.1530**	**4.2000e-004**	**0.0411**	**2.6000e-004**	**0.0413**	**0.0109**	**2.4000e-004**	**0.0111**		**41.5989**	**41.5989**	**1.1300e-003**		**41.6271**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7922	0.0000	0.7922	0.4194	0.0000	0.4194			0.0000			0.0000
Off-Road	0.9530	8.6039	7.6917	0.0120		0.5371	0.5371		0.5125	0.5125		1,159.6570	1,159.6570	0.2211		1,165.1847
Total	**0.9530**	**8.6039**	**7.6917**	**0.0120**	**0.7922**	**0.5371**	**1.3293**	**0.4194**	**0.5125**	**0.9319**		**1,159.6570**	**1,159.6570**	**0.2211**		**1,165.1847**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3181	10.8001	2.1062	0.0284	0.6189	0.0420	0.6609	0.1696	0.0402	0.2098		3,029.6991	3,029.6991	0.1380		3,033.1484
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0380	0.0242	0.3060	8.4000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		83.1978	83.1978	2.2500e-003		83.2541
Total	**0.3561**	**10.8242**	**2.4121**	**0.0293**	**0.7011**	**0.0425**	**0.7436**	**0.1914**	**0.0406**	**0.2321**		**3,112.8969**	**3,112.8969**	**0.1402**		**3,116.4025**

3.4 Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7922	0.0000	0.7922	0.4194	0.0000	0.4194			0.0000			0.0000
Off-Road	0.9530	8.6039	7.6917	0.0120		0.5371	0.5371		0.5125	0.5125	0.0000	1,159.6570	1,159.6570	0.2211		1,165.1847
Total	**0.9530**	**8.6039**	**7.6917**	**0.0120**	**0.7922**	**0.5371**	**1.3293**	**0.4194**	**0.5125**	**0.9319**	**0.0000**	**1,159.6570**	**1,159.6570**	**0.2211**		**1,165.1847**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3181	10.8001	2.1062	0.0284	0.6189	0.0420	0.6609	0.1696	0.0402	0.2098		3,029.6991	3,029.6991	0.1380		3,033.1484
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0380	0.0242	0.3060	8.4000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		83.1978	83.1978	2.2500e-003		83.2541
Total	**0.3561**	**10.8242**	**2.4121**	**0.0293**	**0.7011**	**0.0425**	**0.7436**	**0.1914**	**0.0406**	**0.2321**		**3,112.8969**	**3,112.8969**	**0.1402**		**3,116.4025**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892
Total	**0.9576**	**9.8207**	**7.5432**	**0.0114**		**0.6054**	**0.6054**		**0.5569**	**0.5569**		**1,127.6696**	**1,127.6696**	**0.3568**		**1,136.5892**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	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	0.1012	2.6147	0.6700	5.8300e-003	0.1422	0.0189	0.1611	0.0409	0.0181	0.0590		615.3781	615.3781	0.0292		616.1081
Worker	0.2054	0.1305	1.6523	4.5100e-003	0.4436	2.8300e-003	0.4464	0.1177	2.6100e-003	0.1203		449.2682	449.2682	0.0122		449.5723
Total	**0.3065**	**2.7453**	**2.3222**	**0.0103**	**0.5858**	**0.0218**	**0.6075**	**0.1586**	**0.0207**	**0.1793**		**1,064.6462**	**1,064.6462**	**0.0414**		**1,065.6804**

3.5 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.6696	1,127.6696	0.3568		1,136.5892
Total	**0.9576**	**9.8207**	**7.5432**	**0.0114**		**0.6054**	**0.6054**		**0.5569**	**0.5569**	**0.0000**	**1,127.6696**	**1,127.6696**	**0.3568**		**1,136.5892**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	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	0.1012	2.6147	0.6700	5.8300e-003	0.1422	0.0189	0.1611	0.0409	0.0181	0.0590		615.3781	615.3781	0.0292		616.1081
Worker	0.2054	0.1305	1.6523	4.5100e-003	0.4436	2.8300e-003	0.4464	0.1177	2.6100e-003	0.1203		449.2682	449.2682	0.0122		449.5723
Total	**0.3065**	**2.7453**	**2.3222**	**0.0103**	**0.5858**	**0.0218**	**0.6075**	**0.1586**	**0.0207**	**0.1793**		**1,064.6462**	**1,064.6462**	**0.0414**		**1,065.6804**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806		1,102.9781	1,102.9781	0.3567		1,111.8962
Total	**0.8617**	**8.8523**	**7.3875**	**0.0114**		**0.5224**	**0.5224**		**0.4806**	**0.4806**		**1,102.9781**	**1,102.9781**	**0.3567**		**1,111.8962**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	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	0.0816	2.3616	0.5981	5.7900e-003	0.1422	0.0118	0.1539	0.0409	0.0113	0.0522		611.7277	611.7277	0.0268		612.3986
Worker	0.1877	0.1153	1.4852	4.3700e-003	0.4436	2.7700e-003	0.4464	0.1177	2.5500e-003	0.1202		435.2435	435.2435	0.0107		435.5097
Total	**0.2693**	**2.4768**	**2.0833**	**0.0102**	**0.5858**	**0.0145**	**0.6003**	**0.1586**	**0.0138**	**0.1724**		**1,046.9711**	**1,046.9711**	**0.0375**		**1,047.9083**

3.5 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806	0.0000	1,102.9781	1,102.9781	0.3567		1,111.8962
Total	**0.8617**	**8.8523**	**7.3875**	**0.0114**		**0.5224**	**0.5224**		**0.4806**	**0.4806**	**0.0000**	**1,102.9781**	**1,102.9781**	**0.3567**		**1,111.8962**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	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	0.0816	2.3616	0.5981	5.7900e-003	0.1422	0.0118	0.1539	0.0409	0.0113	0.0522		611.7277	611.7277	0.0268		612.3986
Worker	0.1877	0.1153	1.4852	4.3700e-003	0.4436	2.7700e-003	0.4464	0.1177	2.5500e-003	0.1202		435.2435	435.2435	0.0107		435.5097
Total	**0.2693**	**2.4768**	**2.0833**	**0.0102**	**0.5858**	**0.0145**	**0.6003**	**0.1586**	**0.0138**	**0.1724**		**1,046.9711**	**1,046.9711**	**0.0375**		**1,047.9083**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7716	7.2266	7.1128	0.0113		0.3950	0.3950		0.3669	0.3669		1,035.3926	1,035.3926	0.3016		1,042.9323
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7716**	**7.2266**	**7.1128**	**0.0113**		**0.3950**	**0.3950**		**0.3669**	**0.3669**		**1,035.3926**	**1,035.3926**	**0.3016**		**1,042.9323**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0626	0.0384	0.4951	1.4600e-003	0.1479	9.2000e-004	0.1488	0.0392	8.5000e-004	0.0401		145.0812	145.0812	3.5500e-003		145.1699
Total	**0.0626**	**0.0384**	**0.4951**	**1.4600e-003**	**0.1479**	**9.2000e-004**	**0.1488**	**0.0392**	**8.5000e-004**	**0.0401**		**145.0812**	**145.0812**	**3.5500e-003**		**145.1699**

3.6 Paving - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7716	7.2266	7.1128	0.0113		0.3950	0.3950		0.3669	0.3669	0.0000	1,035.3926	1,035.3926	0.3016		1,042.9323
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7716**	**7.2266**	**7.1128**	**0.0113**		**0.3950**	**0.3950**		**0.3669**	**0.3669**	**0.0000**	**1,035.3926**	**1,035.3926**	**0.3016**		**1,042.9323**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0626	0.0384	0.4951	1.4600e-003	0.1479	9.2000e-004	0.1488	0.0392	8.5000e-004	0.0401		145.0812	145.0812	3.5500e-003		145.1699
Total	**0.0626**	**0.0384**	**0.4951**	**1.4600e-003**	**0.1479**	**9.2000e-004**	**0.1488**	**0.0392**	**8.5000e-004**	**0.0401**		**145.0812**	**145.0812**	**3.5500e-003**		**145.1699**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.0427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**12.2849**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0382	0.0235	0.3025	8.9000e-004	0.0904	5.6000e-004	0.0909	0.0240	5.2000e-004	0.0245		88.6607	88.6607	2.1700e-003		88.7150
Total	**0.0382**	**0.0235**	**0.3025**	**8.9000e-004**	**0.0904**	**5.6000e-004**	**0.0909**	**0.0240**	**5.2000e-004**	**0.0245**		**88.6607**	**88.6607**	**2.1700e-003**		**88.7150**

3.7 Architectural Coating - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.0427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**12.2849**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0382	0.0235	0.3025	8.9000e-004	0.0904	5.6000e-004	0.0909	0.0240	5.2000e-004	0.0245		88.6607	88.6607	2.1700e-003		88.7150
Total	**0.0382**	**0.0235**	**0.3025**	**8.9000e-004**	**0.0904**	**5.6000e-004**	**0.0909**	**0.0240**	**5.2000e-004**	**0.0245**		**88.6607**	**88.6607**	**2.1700e-003**		**88.7150**

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	lb/day										lb/day					
Mitigated	2.2281	7.4267	21.6321	0.0662	5.5298	0.0631	5.5929	1.4762	0.0592	1.5353		6,669.8866	6,669.8866	0.2403		6,675.8930
Unmitigated	2.2281	7.4267	21.6321	0.0662	5.5298	0.0631	5.5929	1.4762	0.0592	1.5353		6,669.8866	6,669.8866	0.2403		6,675.8930

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hotel	1,372.56	1,375.92	999.60	2,507,453	2,507,453
Total	1,372.56	1,375.92	999.60	2,507,453	2,507,453

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Hotel	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1037	0.9427	0.7919	5.6600e-003		0.0716	0.0716		0.0716	0.0716		1,131.2211	1,131.2211	0.0217	0.0207	1,137.9434
NaturalGas Unmitigated	0.1037	0.9427	0.7919	5.6600e-003		0.0716	0.0716		0.0716	0.0716		1,131.2211	1,131.2211	0.0217	0.0207	1,137.9434

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	lb/day										lb/day					
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
Hotel	9615.38	0.1037	0.9427	0.7919	5.6600e-003		0.0716	0.0716		0.0716	0.0716		1,131.2211	1,131.2211	0.0217	0.0207	1,137.9434
Total		**0.1037**	**0.9427**	**0.7919**	**5.6600e-003**		**0.0716**	**0.0716**		**0.0716**	**0.0716**		**1,131.2211**	**1,131.2211**	**0.0217**	**0.0207**	**1,137.9434**

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	lb/day										lb/day					
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
Hotel	9.61538	0.1037	0.9427	0.7919	5.6600e-003		0.0716	0.0716		0.0716	0.0716		1,131.2211	1,131.2211	0.0217	0.0207	1,137.9434
Total		**0.1037**	**0.9427**	**0.7919**	**5.6600e-003**		**0.0716**	**0.0716**		**0.0716**	**0.0716**		**1,131.2211**	**1,131.2211**	**0.0217**	**0.0207**	**1,137.9434**

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	lb/day										lb/day					
Mitigated	1.9385	2.5000e-004	0.0275	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0587	0.0587	1.6000e-004		0.0626
Unmitigated	1.9385	2.5000e-004	0.0275	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0587	0.0587	1.6000e-004		0.0626

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	lb/day										lb/day					
Architectural Coating	0.2310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7050					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5900e-003	2.5000e-004	0.0275	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0587	0.0587	1.6000e-004		0.0626
Total	**1.9385**	**2.5000e-004**	**0.0275**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0587**	**0.0587**	**1.6000e-004**		**0.0626**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7050					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5900e-003	2.5000e-004	0.0275	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0587	0.0587	1.6000e-004		0.0626
Total	**1.9385**	**2.5000e-004**	**0.0275**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0587**	**0.0587**	**1.6000e-004**		**0.0626**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

5696 Stevens Creek Blvd. Hotel - AC by Marriott

Santa Clara County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	100.00	Space	0.00	49,590.00	0
Hotel	168.00	Room	0.42	78,850.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2020
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 - Assumed start of construction - January 1, 2019
Building square footage set to 78,850 sq. ft. for proposed 7 stories
100 parking spaces

Construction Phase - Estimated construction time - 18 months

Grading - Grading includes excavation - 17,000 CY per Civil Plans

Trips and VMT -

5696 Stevens Creek Blvd. Hotel - AC by Marriott - Santa Clara County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	70.00
tblConstructionPhase	NumDays	100.00	220.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	60.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	1.00	2.00
tblGrading	AcresOfGrading	0.00	0.42
tblGrading	AcresOfGrading	1.00	0.42
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	BuildingSpaceSquareFeet	40,000.00	49,590.00
tblLandUse	BuildingSpaceSquareFeet	243,936.00	78,850.00
tblLandUse	LandUseSquareFeet	40,000.00	49,590.00
tblLandUse	LandUseSquareFeet	243,936.00	78,850.00
tblLandUse	LotAcreage	0.90	0.00
tblLandUse	LotAcreage	5.60	0.42
tblProjectCharacteristics	OperationalYear	2018	2020

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.3206	19.7058	10.2544	0.0407	1.4933	0.6274	2.0737	0.6108	0.5779	1.1647	0.0000	4,215.5837	4,215.5837	0.3997	0.0000	4,224.7863
2020	12.3256	11.3819	9.4451	0.0210	0.5858	0.5371	1.1229	0.1586	0.4946	0.6532	0.0000	2,099.0284	2,099.0284	0.3955	0.0000	2,108.9169
Maximum	**12.3256**	**19.7058**	**10.2544**	**0.0407**	**1.4933**	**0.6274**	**2.0737**	**0.6108**	**0.5779**	**1.1647**	**0.0000**	**4,215.5837**	**4,215.5837**	**0.3997**	**0.0000**	**4,224.7863**

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	lb/day										lb/day					
2019	1.3206	19.7058	10.2544	0.0407	1.4933	0.6274	2.0737	0.6108	0.5779	1.1647	0.0000	4,215.5837	4,215.5837	0.3997	0.0000	4,224.7863
2020	12.3256	11.3819	9.4451	0.0210	0.5858	0.5371	1.1229	0.1586	0.4946	0.6532	0.0000	2,099.0284	2,099.0284	0.3955	0.0000	2,108.9169
Maximum	**12.3256**	**19.7058**	**10.2544**	**0.0407**	**1.4933**	**0.6274**	**2.0737**	**0.6108**	**0.5779**	**1.1647**	**0.0000**	**4,215.5837**	**4,215.5837**	**0.3997**	**0.0000**	**4,224.7863**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.9385	2.5000e-004	0.0275	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0587	0.0587	1.6000e-004		0.0626
Energy	0.1037	0.9427	0.7919	5.6600e-003		0.0716	0.0716		0.0716	0.0716		1,131.2211	1,131.2211	0.0217	0.0207	1,137.9434
Mobile	1.9287	7.8312	21.9858	0.0617	5.5298	0.0636	5.5934	1.4762	0.0596	1.5358		6,212.2962	6,212.2962	0.2450		6,218.4210
Total	**3.9709**	**8.7741**	**22.8052**	**0.0673**	**5.5298**	**0.1353**	**5.6651**	**1.4762**	**0.1314**	**1.6075**		**7,343.5760**	**7,343.5760**	**0.2668**	**0.0207**	**7,356.4270**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.9385	2.5000e-004	0.0275	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0587	0.0587	1.6000e-004		0.0626
Energy	0.1037	0.9427	0.7919	5.6600e-003		0.0716	0.0716		0.0716	0.0716		1,131.2211	1,131.2211	0.0217	0.0207	1,137.9434
Mobile	1.9287	7.8312	21.9858	0.0617	5.5298	0.0636	5.5934	1.4762	0.0596	1.5358		6,212.2962	6,212.2962	0.2450		6,218.4210
Total	**3.9709**	**8.7741**	**22.8052**	**0.0673**	**5.5298**	**0.1353**	**5.6651**	**1.4762**	**0.1314**	**1.6075**		**7,343.5760**	**7,343.5760**	**0.2668**	**0.0207**	**7,356.4270**

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

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	1/1/2019	1/28/2019	5	20	
2	Site Preparation	Site Preparation	1/29/2019	1/30/2019	5	2	
3	Grading	Grading	1/31/2019	4/24/2019	5	60	
4	Building Construction	Building Construction	4/25/2019	2/26/2020	5	220	
5	Paving	Paving	2/27/2020	3/11/2020	5	10	
6	Architectural Coating	Architectural Coating	3/12/2020	6/17/2020	5	70	

Acres of Grading (Site Preparation Phase): 0.42

Acres of Grading (Grading Phase): 0.42

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 118,275; Non-Residential Outdoor: 39,425; Striped Parking Area: 2,975 (Architectural Coating – sqft)

OffRoad Equipment

5696 Stevens Creek Blvd. Hotel - AC by Marriott - Santa Clara County, Winter

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	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	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	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	54.00	21.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9530	8.6039	7.6917	0.0120		0.5371	0.5371		0.5125	0.5125		1,159.6570	1,159.6570	0.2211		1,165.1847
Total	**0.9530**	**8.6039**	**7.6917**	**0.0120**		**0.5371**	**0.5371**		**0.5125**	**0.5125**		**1,159.6570**	**1,159.6570**	**0.2211**		**1,165.1847**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0404	0.0295	0.2851	7.7000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		76.4349	76.4349	2.1100e-003		76.4876
Total	**0.0404**	**0.0295**	**0.2851**	**7.7000e-004**	**0.0822**	**5.2000e-004**	**0.0827**	**0.0218**	**4.8000e-004**	**0.0223**		**76.4349**	**76.4349**	**2.1100e-003**		**76.4876**

3.2 Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9530	8.6039	7.6917	0.0120		0.5371	0.5371		0.5125	0.5125	0.0000	1,159.6570	1,159.6570	0.2211		1,165.1847
Total	**0.9530**	**8.6039**	**7.6917**	**0.0120**		**0.5371**	**0.5371**		**0.5125**	**0.5125**	**0.0000**	**1,159.6570**	**1,159.6570**	**0.2211**		**1,165.1847**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0404	0.0295	0.2851	7.7000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		76.4349	76.4349	2.1100e-003		76.4876
Total	**0.0404**	**0.0295**	**0.2851**	**7.7000e-004**	**0.0822**	**5.2000e-004**	**0.0827**	**0.0218**	**4.8000e-004**	**0.0223**		**76.4349**	**76.4349**	**2.1100e-003**		**76.4876**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2227	0.0000	0.2227	0.0241	0.0000	0.0241			0.0000			0.0000
Off-Road	0.7195	8.9170	4.1407	9.7500e-003		0.3672	0.3672		0.3378	0.3378		965.1690	965.1690	0.3054		972.8032
Total	**0.7195**	**8.9170**	**4.1407**	**9.7500e-003**	**0.2227**	**0.3672**	**0.5899**	**0.0241**	**0.3378**	**0.3619**		**965.1690**	**965.1690**	**0.3054**		**972.8032**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0202	0.0148	0.1425	3.8000e-004	0.0411	2.6000e-004	0.0413	0.0109	2.4000e-004	0.0111		38.2174	38.2174	1.0600e-003		38.2438
Total	**0.0202**	**0.0148**	**0.1425**	**3.8000e-004**	**0.0411**	**2.6000e-004**	**0.0413**	**0.0109**	**2.4000e-004**	**0.0111**		**38.2174**	**38.2174**	**1.0600e-003**		**38.2438**

3.3 Site Preparation - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2227	0.0000	0.2227	0.0241	0.0000	0.0241			0.0000			0.0000
Off-Road	0.7195	8.9170	4.1407	9.7500e-003		0.3672	0.3672		0.3378	0.3378	0.0000	965.1690	965.1690	0.3054		972.8032
Total	**0.7195**	**8.9170**	**4.1407**	**9.7500e-003**	**0.2227**	**0.3672**	**0.5899**	**0.0241**	**0.3378**	**0.3619**	**0.0000**	**965.1690**	**965.1690**	**0.3054**		**972.8032**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0202	0.0148	0.1425	3.8000e-004	0.0411	2.6000e-004	0.0413	0.0109	2.4000e-004	0.0111		38.2174	38.2174	1.0600e-003		38.2438
Total	**0.0202**	**0.0148**	**0.1425**	**3.8000e-004**	**0.0411**	**2.6000e-004**	**0.0413**	**0.0109**	**2.4000e-004**	**0.0111**		**38.2174**	**38.2174**	**1.0600e-003**		**38.2438**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7922	0.0000	0.7922	0.4194	0.0000	0.4194			0.0000			0.0000
Off-Road	0.9530	8.6039	7.6917	0.0120		0.5371	0.5371		0.5125	0.5125		1,159.6570	1,159.6570	0.2211		1,165.1847
Total	**0.9530**	**8.6039**	**7.6917**	**0.0120**	**0.7922**	**0.5371**	**1.3293**	**0.4194**	**0.5125**	**0.9319**		**1,159.6570**	**1,159.6570**	**0.2211**		**1,165.1847**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3271	11.0723	2.2776	0.0280	0.6189	0.0428	0.6617	0.1696	0.0410	0.2106		2,979.4919	2,979.4919	0.1449		2,983.1140
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0404	0.0295	0.2851	7.7000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		76.4349	76.4349	2.1100e-003		76.4876
Total	**0.3675**	**11.1019**	**2.5627**	**0.0287**	**0.7011**	**0.0433**	**0.7444**	**0.1914**	**0.0414**	**0.2328**		**3,055.9267**	**3,055.9267**	**0.1470**		**3,059.6016**

3.4 Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7922	0.0000	0.7922	0.4194	0.0000	0.4194			0.0000			0.0000
Off-Road	0.9530	8.6039	7.6917	0.0120		0.5371	0.5371		0.5125	0.5125	0.0000	1,159.6570	1,159.6570	0.2211		1,165.1847
Total	**0.9530**	**8.6039**	**7.6917**	**0.0120**	**0.7922**	**0.5371**	**1.3293**	**0.4194**	**0.5125**	**0.9319**	**0.0000**	**1,159.6570**	**1,159.6570**	**0.2211**		**1,165.1847**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3271	11.0723	2.2776	0.0280	0.6189	0.0428	0.6617	0.1696	0.0410	0.2106		2,979.4919	2,979.4919	0.1449		2,983.1140
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0404	0.0295	0.2851	7.7000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		76.4349	76.4349	2.1100e-003		76.4876
Total	**0.3675**	**11.1019**	**2.5627**	**0.0287**	**0.7011**	**0.0433**	**0.7444**	**0.1914**	**0.0414**	**0.2328**		**3,055.9267**	**3,055.9267**	**0.1470**		**3,059.6016**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892
Total	**0.9576**	**9.8207**	**7.5432**	**0.0114**		**0.6054**	**0.6054**		**0.5569**	**0.5569**		**1,127.6696**	**1,127.6696**	**0.3568**		**1,136.5892**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	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	0.1059	2.6517	0.7610	5.6800e-003	0.1422	0.0192	0.1614	0.0409	0.0184	0.0593		600.0259	600.0259	0.0315		600.8125
Worker	0.2182	0.1595	1.5394	4.1400e-003	0.4436	2.8300e-003	0.4464	0.1177	2.6100e-003	0.1203		412.7482	412.7482	0.0114		413.0331
Total	**0.3241**	**2.8112**	**2.3003**	**9.8200e-003**	**0.5858**	**0.0221**	**0.6078**	**0.1586**	**0.0210**	**0.1796**		**1,012.7741**	**1,012.7741**	**0.0429**		**1,013.8456**

3.5 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.6696	1,127.6696	0.3568		1,136.5892
Total	**0.9576**	**9.8207**	**7.5432**	**0.0114**		**0.6054**	**0.6054**		**0.5569**	**0.5569**	**0.0000**	**1,127.6696**	**1,127.6696**	**0.3568**		**1,136.5892**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	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	0.1059	2.6517	0.7610	5.6800e-003	0.1422	0.0192	0.1614	0.0409	0.0184	0.0593		600.0259	600.0259	0.0315		600.8125
Worker	0.2182	0.1595	1.5394	4.1400e-003	0.4436	2.8300e-003	0.4464	0.1177	2.6100e-003	0.1203		412.7482	412.7482	0.0114		413.0331
Total	**0.3241**	**2.8112**	**2.3003**	**9.8200e-003**	**0.5858**	**0.0221**	**0.6078**	**0.1586**	**0.0210**	**0.1796**		**1,012.7741**	**1,012.7741**	**0.0429**		**1,013.8456**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806		1,102.9781	1,102.9781	0.3567		1,111.8962
Total	**0.8617**	**8.8523**	**7.3875**	**0.0114**		**0.5224**	**0.5224**		**0.4806**	**0.4806**		**1,102.9781**	**1,102.9781**	**0.3567**		**1,111.8962**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	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	0.0859	2.3888	0.6814	5.6400e-003	0.1422	0.0120	0.1541	0.0409	0.0114	0.0524		596.1986	596.1986	0.0289		596.9212
Worker	0.1997	0.1408	1.3762	4.0100e-003	0.4436	2.7700e-003	0.4464	0.1177	2.5500e-003	0.1202		399.8517	399.8517	9.9100e-003		400.0996
Total	**0.2855**	**2.5296**	**2.0576**	**9.6500e-003**	**0.5858**	**0.0147**	**0.6005**	**0.1586**	**0.0140**	**0.1726**		**996.0503**	**996.0503**	**0.0388**		**997.0207**

3.5 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806	0.0000	1,102.9781	1,102.9781	0.3567		1,111.8962
Total	**0.8617**	**8.8523**	**7.3875**	**0.0114**		**0.5224**	**0.5224**		**0.4806**	**0.4806**	**0.0000**	**1,102.9781**	**1,102.9781**	**0.3567**		**1,111.8962**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	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	0.0859	2.3888	0.6814	5.6400e-003	0.1422	0.0120	0.1541	0.0409	0.0114	0.0524		596.1986	596.1986	0.0289		596.9212
Worker	0.1997	0.1408	1.3762	4.0100e-003	0.4436	2.7700e-003	0.4464	0.1177	2.5500e-003	0.1202		399.8517	399.8517	9.9100e-003		400.0996
Total	**0.2855**	**2.5296**	**2.0576**	**9.6500e-003**	**0.5858**	**0.0147**	**0.6005**	**0.1586**	**0.0140**	**0.1726**		**996.0503**	**996.0503**	**0.0388**		**997.0207**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7716	7.2266	7.1128	0.0113		0.3950	0.3950		0.3669	0.3669		1,035.3926	1,035.3926	0.3016		1,042.9323
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7716**	**7.2266**	**7.1128**	**0.0113**		**0.3950**	**0.3950**		**0.3669**	**0.3669**		**1,035.3926**	**1,035.3926**	**0.3016**		**1,042.9323**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0666	0.0469	0.4587	1.3400e-003	0.1479	9.2000e-004	0.1488	0.0392	8.5000e-004	0.0401		133.2839	133.2839	3.3000e-003		133.3665
Total	**0.0666**	**0.0469**	**0.4587**	**1.3400e-003**	**0.1479**	**9.2000e-004**	**0.1488**	**0.0392**	**8.5000e-004**	**0.0401**		**133.2839**	**133.2839**	**3.3000e-003**		**133.3665**

3.6 Paving - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7716	7.2266	7.1128	0.0113		0.3950	0.3950		0.3669	0.3669	0.0000	1,035.3926	1,035.3926	0.3016		1,042.9323
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7716**	**7.2266**	**7.1128**	**0.0113**		**0.3950**	**0.3950**		**0.3669**	**0.3669**	**0.0000**	**1,035.3926**	**1,035.3926**	**0.3016**		**1,042.9323**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0666	0.0469	0.4587	1.3400e-003	0.1479	9.2000e-004	0.1488	0.0392	8.5000e-004	0.0401		133.2839	133.2839	3.3000e-003		133.3665
Total	**0.0666**	**0.0469**	**0.4587**	**1.3400e-003**	**0.1479**	**9.2000e-004**	**0.1488**	**0.0392**	**8.5000e-004**	**0.0401**		**133.2839**	**133.2839**	**3.3000e-003**		**133.3665**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.0427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**12.2849**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0407	0.0287	0.2803	8.2000e-004	0.0904	5.6000e-004	0.0909	0.0240	5.2000e-004	0.0245		81.4513	81.4513	2.0200e-003		81.5018
Total	**0.0407**	**0.0287**	**0.2803**	**8.2000e-004**	**0.0904**	**5.6000e-004**	**0.0909**	**0.0240**	**5.2000e-004**	**0.0245**		**81.4513**	**81.4513**	**2.0200e-003**		**81.5018**

3.7 Architectural Coating - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.0427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**12.2849**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0407	0.0287	0.2803	8.2000e-004	0.0904	5.6000e-004	0.0909	0.0240	5.2000e-004	0.0245		81.4513	81.4513	2.0200e-003		81.5018
Total	**0.0407**	**0.0287**	**0.2803**	**8.2000e-004**	**0.0904**	**5.6000e-004**	**0.0909**	**0.0240**	**5.2000e-004**	**0.0245**		**81.4513**	**81.4513**	**2.0200e-003**		**81.5018**

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	lb/day										lb/day					
Mitigated	1.9287	7.8312	21.9858	0.0617	5.5298	0.0636	5.5934	1.4762	0.0596	1.5358		6,212.2962	6,212.2962	0.2450		6,218.4210
Unmitigated	1.9287	7.8312	21.9858	0.0617	5.5298	0.0636	5.5934	1.4762	0.0596	1.5358		6,212.2962	6,212.2962	0.2450		6,218.4210

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hotel	1,372.56	1,375.92	999.60	2,507,453	2,507,453
Total	1,372.56	1,375.92	999.60	2,507,453	2,507,453

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Hotel	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1037	0.9427	0.7919	5.6600e-003		0.0716	0.0716		0.0716	0.0716		1,131.2211	1,131.2211	0.0217	0.0207	1,137.9434
NaturalGas Unmitigated	0.1037	0.9427	0.7919	5.6600e-003		0.0716	0.0716		0.0716	0.0716		1,131.2211	1,131.2211	0.0217	0.0207	1,137.9434

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	lb/day										lb/day					
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
Hotel	9615.38	0.1037	0.9427	0.7919	5.6600e-003		0.0716	0.0716		0.0716	0.0716		1,131.2211	1,131.2211	0.0217	0.0207	1,137.9434
Total		**0.1037**	**0.9427**	**0.7919**	**5.6600e-003**		**0.0716**	**0.0716**		**0.0716**	**0.0716**		**1,131.2211**	**1,131.2211**	**0.0217**	**0.0207**	**1,137.9434**

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	lb/day										lb/day					
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
Hotel	9.61538	0.1037	0.9427	0.7919	5.6600e-003		0.0716	0.0716		0.0716	0.0716		1,131.2211	1,131.2211	0.0217	0.0207	1,137.9434
Total		**0.1037**	**0.9427**	**0.7919**	**5.6600e-003**		**0.0716**	**0.0716**		**0.0716**	**0.0716**		**1,131.2211**	**1,131.2211**	**0.0217**	**0.0207**	**1,137.9434**

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	lb/day										lb/day					
Mitigated	1.9385	2.5000e-004	0.0275	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0587	0.0587	1.6000e-004		0.0626
Unmitigated	1.9385	2.5000e-004	0.0275	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0587	0.0587	1.6000e-004		0.0626

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	lb/day										lb/day					
Architectural Coating	0.2310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7050					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5900e-003	2.5000e-004	0.0275	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0587	0.0587	1.6000e-004		0.0626
Total	**1.9385**	**2.5000e-004**	**0.0275**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0587**	**0.0587**	**1.6000e-004**		**0.0626**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7050					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5900e-003	2.5000e-004	0.0275	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0587	0.0587	1.6000e-004		0.0626
Total	**1.9385**	**2.5000e-004**	**0.0275**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0587**	**0.0587**	**1.6000e-004**		**0.0626**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

5696 Stevens Creek Blvd. Hotel - AC by Marriott - Existing Use

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Gasoline/Service Station	8.00	Pump	0.36	15,577.40	0
Convenience Market With Gas Pumps	2.50	1000sqft	0.06	2,500.00	0

1.2 Other Project Characteristics

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

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Existing Shell Gas Station on a 0.415 Acre Site (18,077.4 sq. ft.).
8 pumps.
2,500 sq. ft. convienence store.

Construction Phase - Existing Use. Construction Days are set to default.

Trips and VMT -

Grading -

Vehicle Trips - Vehicle trips per the Traffic Study, dated August 3, 2018 - 761 trips per day.

5696 Stevens Creek Blvd. Hotel - AC by Marriott - Existing Use - Santa Clara County, Annual

Table Name	Column Name	Default Value	New Value
tblLandUse	BuildingSpaceSquareFeet	1,129.40	15,577.40
tblLandUse	LandUseSquareFeet	1,129.40	15,577.40
tblLandUse	LotAcreage	0.03	0.36
tblVehicleTrips	ST_TR	168.56	380.50
tblVehicleTrips	ST_TR	1,448.33	380.50
tblVehicleTrips	SU_TR	168.56	380.50
tblVehicleTrips	SU_TR	1,182.08	380.50
tblVehicleTrips	WD_TR	168.56	380.50
tblVehicleTrips	WD_TR	845.60	380.50

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1532	0.5914	0.4644	7.5000e-004	5.2600e-003	0.0353	0.0405	1.5900e-003	0.0326	0.0342	0.0000	67.7559	67.7559	0.0185	0.0000	68.2194
Maximum	**0.1532**	**0.5914**	**0.4644**	**7.5000e-004**	**5.2600e-003**	**0.0353**	**0.0405**	**1.5900e-003**	**0.0326**	**0.0342**	**0.0000**	**67.7559**	**67.7559**	**0.0185**	**0.0000**	**68.2194**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1532	0.5914	0.4644	7.5000e-004	5.2600e-003	0.0353	0.0405	1.5900e-003	0.0326	0.0342	0.0000	67.7558	67.7558	0.0185	0.0000	68.2193
Maximum	**0.1532**	**0.5914**	**0.4644**	**7.5000e-004**	**5.2600e-003**	**0.0353**	**0.0405**	**1.5900e-003**	**0.0326**	**0.0342**	**0.0000**	**67.7558**	**67.7558**	**0.0185**	**0.0000**	**68.2193**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	0.3508	0.3508
2	4-1-2019	6-30-2019	0.3896	0.3896
		Highest	0.3896	0.3896

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0800	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9000e-004	1.9000e-004	0.0000	0.0000	2.0000e-004
Energy	2.2600e-003	0.0205	0.0172	1.2000e-004		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	68.4497	68.4497	2.5100e-003	8.4000e-004	68.7631
Mobile	0.9790	2.8163	7.0433	0.0122	0.8422	0.0161	0.8583	0.2255	0.0152	0.2406	0.0000	1,116.8089	1,116.8089	0.0707	0.0000	1,118.5753
Waste						0.0000	0.0000		0.0000	0.0000	2.3994	0.0000	2.3994	0.1418	0.0000	5.9443
Water						0.0000	0.0000		0.0000	0.0000	0.0925	0.6406	0.7331	9.5300e-003	2.3000e-004	1.0398
Total	**1.0613**	**2.8369**	**7.0606**	**0.0124**	**0.8422**	**0.0177**	**0.8598**	**0.2255**	**0.0167**	**0.2422**	**2.4918**	**1,185.8993**	**1,188.3912**	**0.2245**	**1.0700e-003**	**1,194.3227**

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	0.0800	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9000e-004	1.9000e-004	0.0000	0.0000	2.0000e-004
Energy	2.2600e-003	0.0205	0.0172	1.2000e-004		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	68.4497	68.4497	2.5100e-003	8.4000e-004	68.7631
Mobile	0.9790	2.8163	7.0433	0.0122	0.8422	0.0161	0.8583	0.2255	0.0152	0.2406	0.0000	1,116.8089	1,116.8089	0.0707	0.0000	1,118.5753
Waste						0.0000	0.0000		0.0000	0.0000	2.3994	0.0000	2.3994	0.1418	0.0000	5.9443
Water						0.0000	0.0000		0.0000	0.0000	0.0925	0.6406	0.7331	9.5300e-003	2.3000e-004	1.0398
Total	**1.0613**	**2.8369**	**7.0606**	**0.0124**	**0.8422**	**0.0177**	**0.8598**	**0.2255**	**0.0167**	**0.2422**	**2.4918**	**1,185.8993**	**1,188.3912**	**0.2245**	**1.0700e-003**	**1,194.3227**

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

3.0 Construction Detail

Construction Phase

5696 Stevens Creek Blvd. Hotel - AC by Marriott - Existing Use - Santa Clara County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	1/14/2019	5	10	
2	Site Preparation	Site Preparation	1/15/2019	1/15/2019	5	1	
3	Grading	Grading	1/16/2019	1/17/2019	5	2	
4	Building Construction	Building Construction	1/18/2019	6/6/2019	5	100	
5	Paving	Paving	6/7/2019	6/13/2019	5	5	
6	Architectural Coating	Architectural Coating	6/14/2019	6/20/2019	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 27,116; Non-Residential Outdoor: 9,039; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

5696 Stevens Creek Blvd. Hotel - AC by Marriott - Existing Use - Santa Clara County, Annual

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	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	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	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	6.00	3.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7700e-003	0.0430	0.0385	6.0000e-005		2.6900e-003	2.6900e-003		2.5600e-003	2.5600e-003	0.0000	5.2601	5.2601	1.0000e-003	0.0000	5.2852
Total	**4.7700e-003**	**0.0430**	**0.0385**	**6.0000e-005**		**2.6900e-003**	**2.6900e-003**		**2.5600e-003**	**2.5600e-003**	**0.0000**	**5.2601**	**5.2601**	**1.0000e-003**	**0.0000**	**5.2852**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.4000e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3510	0.3510	1.0000e-005	0.0000	0.3513
Total	**1.8000e-004**	**1.4000e-004**	**1.4000e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3510**	**0.3510**	**1.0000e-005**	**0.0000**	**0.3513**

3.2 Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7700e-003	0.0430	0.0385	6.0000e-005		2.6900e-003	2.6900e-003		2.5600e-003	2.5600e-003	0.0000	5.2601	5.2601	1.0000e-003	0.0000	5.2852
Total	**4.7700e-003**	**0.0430**	**0.0385**	**6.0000e-005**		**2.6900e-003**	**2.6900e-003**		**2.5600e-003**	**2.5600e-003**	**0.0000**	**5.2601**	**5.2601**	**1.0000e-003**	**0.0000**	**5.2852**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.4000e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3510	0.3510	1.0000e-005	0.0000	0.3513
Total	**1.8000e-004**	**1.4000e-004**	**1.4000e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3510**	**0.3510**	**1.0000e-005**	**0.0000**	**0.3513**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-004	4.4600e-003	2.0700e-003	0.0000		1.8000e-004	1.8000e-004		1.7000e-004	1.7000e-004	0.0000	0.4378	0.4378	1.4000e-004	0.0000	0.4413
Total	**3.6000e-004**	**4.4600e-003**	**2.0700e-003**	**0.0000**	**2.7000e-004**	**1.8000e-004**	**4.5000e-004**	**3.0000e-005**	**1.7000e-004**	**2.0000e-004**	**0.0000**	**0.4378**	**0.4378**	**1.4000e-004**	**0.0000**	**0.4413**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0176	0.0176	0.0000	0.0000	0.0176
Total	**1.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0176**	**0.0176**	**0.0000**	**0.0000**	**0.0176**

3.3 Site Preparation - 2019

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					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-004	4.4600e-003	2.0700e-003	0.0000		1.8000e-004	1.8000e-004		1.7000e-004	1.7000e-004	0.0000	0.4378	0.4378	1.4000e-004	0.0000	0.4413
Total	**3.6000e-004**	**4.4600e-003**	**2.0700e-003**	**0.0000**	**2.7000e-004**	**1.8000e-004**	**4.5000e-004**	**3.0000e-005**	**1.7000e-004**	**2.0000e-004**	**0.0000**	**0.4378**	**0.4378**	**1.4000e-004**	**0.0000**	**0.4413**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0176	0.0176	0.0000	0.0000	0.0176
Total	**1.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0176**	**0.0176**	**0.0000**	**0.0000**	**0.0176**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5000e-004	8.6000e-003	7.6900e-003	1.0000e-005		5.4000e-004	5.4000e-004		5.1000e-004	5.1000e-004	0.0000	1.0520	1.0520	2.0000e-004	0.0000	1.0570
Total	**9.5000e-004**	**8.6000e-003**	**7.6900e-003**	**1.0000e-005**	**7.5000e-004**	**5.4000e-004**	**1.2900e-003**	**4.1000e-004**	**5.1000e-004**	**9.2000e-004**	**0.0000**	**1.0520**	**1.0520**	**2.0000e-004**	**0.0000**	**1.0570**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0702	0.0702	0.0000	0.0000	0.0703
Total	**4.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0702**	**0.0702**	**0.0000**	**0.0000**	**0.0703**

3.4 Grading - 2019

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					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5000e-004	8.6000e-003	7.6900e-003	1.0000e-005		5.4000e-004	5.4000e-004		5.1000e-004	5.1000e-004	0.0000	1.0520	1.0520	2.0000e-004	0.0000	1.0570
Total	**9.5000e-004**	**8.6000e-003**	**7.6900e-003**	**1.0000e-005**	**7.5000e-004**	**5.4000e-004**	**1.2900e-003**	**4.1000e-004**	**5.1000e-004**	**9.2000e-004**	**0.0000**	**1.0520**	**1.0520**	**2.0000e-004**	**0.0000**	**1.0570**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0702	0.0702	0.0000	0.0000	0.0703
Total	**4.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0702**	**0.0702**	**0.0000**	**0.0000**	**0.0703**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0479	0.4910	0.3772	5.7000e-004		0.0303	0.0303		0.0279	0.0279	0.0000	51.1502	51.1502	0.0162	0.0000	51.5548
Total	**0.0479**	**0.4910**	**0.3772**	**5.7000e-004**		**0.0303**	**0.0303**		**0.0279**	**0.0279**	**0.0000**	**51.1502**	**51.1502**	**0.0162**	**0.0000**	**51.5548**

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	7.4000e-004	0.0189	5.0800e-003	4.0000e-005	9.9000e-004	1.4000e-004	1.1200e-003	2.9000e-004	1.3000e-004	4.2000e-004	0.0000	3.9458	3.9458	2.0000e-004	0.0000	3.9507
Worker	1.0900e-003	8.1000e-004	8.3800e-003	2.0000e-005	2.3800e-003	2.0000e-005	2.4000e-003	6.3000e-004	1.0000e-005	6.5000e-004	0.0000	2.1063	2.1063	6.0000e-005	0.0000	2.1077
Total	**1.8300e-003**	**0.0198**	**0.0135**	**6.0000e-005**	**3.3700e-003**	**1.6000e-004**	**3.5200e-003**	**9.2000e-004**	**1.4000e-004**	**1.0700e-003**	**0.0000**	**6.0520**	**6.0520**	**2.6000e-004**	**0.0000**	**6.0584**

3.5 Building Construction - 2019

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	0.0479	0.4910	0.3772	5.7000e-004		0.0303	0.0303		0.0279	0.0279	0.0000	51.1502	51.1502	0.0162	0.0000	51.5548
Total	**0.0479**	**0.4910**	**0.3772**	**5.7000e-004**		**0.0303**	**0.0303**		**0.0279**	**0.0279**	**0.0000**	**51.1502**	**51.1502**	**0.0162**	**0.0000**	**51.5548**

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	7.4000e-004	0.0189	5.0800e-003	4.0000e-005	9.9000e-004	1.4000e-004	1.1200e-003	2.9000e-004	1.3000e-004	4.2000e-004	0.0000	3.9458	3.9458	2.0000e-004	0.0000	3.9507
Worker	1.0900e-003	8.1000e-004	8.3800e-003	2.0000e-005	2.3800e-003	2.0000e-005	2.4000e-003	6.3000e-004	1.0000e-005	6.5000e-004	0.0000	2.1063	2.1063	6.0000e-005	0.0000	2.1077
Total	**1.8300e-003**	**0.0198**	**0.0135**	**6.0000e-005**	**3.3700e-003**	**1.6000e-004**	**3.5200e-003**	**9.2000e-004**	**1.4000e-004**	**1.0700e-003**	**0.0000**	**6.0520**	**6.0520**	**2.6000e-004**	**0.0000**	**6.0584**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.0700e-003	0.0196	0.0179	3.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	2.3931	2.3931	6.8000e-004	0.0000	2.4102
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0700e-003**	**0.0196**	**0.0179**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.0300e-003**	**1.0300e-003**	**0.0000**	**2.3931**	**2.3931**	**6.8000e-004**	**0.0000**	**2.4102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	1.2600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3159	0.3159	1.0000e-005	0.0000	0.3162
Total	**1.6000e-004**	**1.2000e-004**	**1.2600e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3159**	**0.3159**	**1.0000e-005**	**0.0000**	**0.3162**

3.6 Paving - 2019

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	2.0700e-003	0.0196	0.0179	3.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	2.3931	2.3931	6.8000e-004	0.0000	2.4102
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0700e-003**	**0.0196**	**0.0179**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.0300e-003**	**1.0300e-003**	**0.0000**	**2.3931**	**2.3931**	**6.8000e-004**	**0.0000**	**2.4102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	1.2600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3159	0.3159	1.0000e-005	0.0000	0.3162
Total	**1.6000e-004**	**1.2000e-004**	**1.2600e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3159**	**0.3159**	**1.0000e-005**	**0.0000**	**0.3162**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0943					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7000e-004	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397
Total	**0.0949**	**4.5900e-003**	**4.6000e-003**	**1.0000e-005**		**3.2000e-004**	**3.2000e-004**		**3.2000e-004**	**3.2000e-004**	**0.0000**	**0.6383**	**0.6383**	**5.0000e-005**	**0.0000**	**0.6397**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0176	0.0176	0.0000	0.0000	0.0176
Total	**1.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0176**	**0.0176**	**0.0000**	**0.0000**	**0.0176**

3.7 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0943					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7000e-004	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397
Total	**0.0949**	**4.5900e-003**	**4.6000e-003**	**1.0000e-005**		**3.2000e-004**	**3.2000e-004**		**3.2000e-004**	**3.2000e-004**	**0.0000**	**0.6383**	**0.6383**	**5.0000e-005**	**0.0000**	**0.6397**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0176	0.0176	0.0000	0.0000	0.0176
Total	**1.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0176**	**0.0176**	**0.0000**	**0.0000**	**0.0176**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9790	2.8163	7.0433	0.0122	0.8422	0.0161	0.8583	0.2255	0.0152	0.2406	0.0000	1,116.8089	1,116.8089	0.0707	0.0000	1,118.5753
Unmitigated	0.9790	2.8163	7.0433	0.0122	0.8422	0.0161	0.8583	0.2255	0.0152	0.2406	0.0000	1,116.8089	1,116.8089	0.0707	0.0000	1,118.5753

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Gasoline/Service Station	3,044.00	3,044.00	3044.00	1,753,856	1,753,856
Convenience Market With Gas Pumps	951.25	951.25	951.25	510,255	510,255
Total	3,995.25	3,995.25	3,995.25	2,264,111	2,264,111

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Gasoline/Service Station	9.50	7.30	7.30	2.00	79.00	19.00	14	27	59
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Gasoline/Service Station	0.596719	0.040200	0.188056	0.111125	0.016796	0.004948	0.012194	0.019466	0.002007	0.001626	0.005410	0.000612	0.000841
Convenience Market With Gas Pumps	0.596719	0.040200	0.188056	0.111125	0.016796	0.004948	0.012194	0.019466	0.002007	0.001626	0.005410	0.000612	0.000841

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	46.1202	46.1202	2.0900e-003	4.3000e-004	46.3009
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	46.1202	46.1202	2.0900e-003	4.3000e-004	46.3009
NaturalGas Mitigated	2.2600e-003	0.0205	0.0172	1.2000e-004		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	22.3295	22.3295	4.3000e-004	4.1000e-004	22.4622
NaturalGas Unmitigated	2.2600e-003	0.0205	0.0172	1.2000e-004		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	22.3295	22.3295	4.3000e-004	4.1000e-004	22.4622

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					
Convenience Market With Gas Pumps	5950	3.0000e-005	2.9000e-004	2.5000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3175	0.3175	1.0000e-005	1.0000e-005	0.3194
Gasoline/Service Station	412490	2.2200e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003	0.0000	22.0120	22.0120	4.2000e-004	4.0000e-004	22.1428
Total		**2.2500e-003**	**0.0205**	**0.0172**	**1.2000e-004**		**1.5600e-003**	**1.5600e-003**		**1.5600e-003**	**1.5600e-003**	**0.0000**	**22.3295**	**22.3295**	**4.3000e-004**	**4.1000e-004**	**22.4622**

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					
Convenience Market With Gas Pumps	5950	3.0000e-005	2.9000e-004	2.5000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3175	0.3175	1.0000e-005	1.0000e-005	0.3194
Gasoline/Service Station	412490	2.2200e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003	0.0000	22.0120	22.0120	4.2000e-004	4.0000e-004	22.1428
Total		**2.2500e-003**	**0.0205**	**0.0172**	**1.2000e-004**		**1.5600e-003**	**1.5600e-003**		**1.5600e-003**	**1.5600e-003**	**0.0000**	**22.3295**	**22.3295**	**4.3000e-004**	**4.1000e-004**	**22.4622**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	27375	7.9637	3.6000e-004	7.0000e-005	7.9949
Gasoline/Service Station	131162	38.1564	1.7300e-003	3.6000e-004	38.3060
Total		**46.1201**	**2.0900e-003**	**4.3000e-004**	**46.3009**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	27375	7.9637	3.6000e-004	7.0000e-005	7.9949
Gasoline/Service Station	131162	38.1564	1.7300e-003	3.6000e-004	38.3060
Total		**46.1201**	**2.0900e-003**	**4.3000e-004**	**46.3009**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0800	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9000e-004	1.9000e-004	0.0000	0.0000	2.0000e-004
Unmitigated	0.0800	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9000e-004	1.9000e-004	0.0000	0.0000	2.0000e-004

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	9.4300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0706					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9000e-004	1.9000e-004	0.0000	0.0000	2.0000e-004
Total	**0.0800**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.9000e-004**	**1.9000e-004**	**0.0000**	**0.0000**	**2.0000e-004**

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	9.4300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0706					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9000e-004	1.9000e-004	0.0000	0.0000	2.0000e-004
Total	**0.0800**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.9000e-004**	**1.9000e-004**	**0.0000**	**0.0000**	**2.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.7331	9.5300e-003	2.3000e-004	1.0398
Unmitigated	0.7331	9.5300e-003	2.3000e-004	1.0398

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.185181 / 0.113498	0.4658	6.0500e-003	1.5000e-004	0.6607
Gasoline/Service Station	0.106255 / 0.0651241	0.2673	3.4700e-003	8.0000e-005	0.3791
Total		**0.7331**	**9.5200e-003**	**2.3000e-004**	**1.0398**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.185181 / 0.113498	0.4658	6.0500e-003	1.5000e-004	0.6607
Gasoline/Service Station	0.106255 / 0.0651241	0.2673	3.4700e-003	8.0000e-005	0.3791
Total		**0.7331**	**9.5200e-003**	**2.3000e-004**	**1.0398**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.3994	0.1418	0.0000	5.9443
Unmitigated	2.3994	0.1418	0.0000	5.9443

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	7.51	1.5245	0.0901	0.0000	3.7768
Gasoline/Service Station	4.31	0.8749	0.0517	0.0000	2.1675
Total		**2.3994**	**0.1418**	**0.0000**	**5.9443**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	7.51	1.5245	0.0901	0.0000	3.7768
Gasoline/Service Station	4.31	0.8749	0.0517	0.0000	2.1675
Total		**2.3994**	**0.1418**	**0.0000**	**5.9443**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment C
Health Risk Assessment

ILLINGWORTH & RODKIN, INC.
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November 5, 2018

Hunter Oliver
Oliver Holdings SC, LLC
7969 Engineer Road, Suite 108
San Diego, CA 92111

Via Email: hunter@oliverholdings.com

Subject: AC by Marriott – West in San Jose, CA
Health Risk Analysis of Construction Emissions

Dear Mr. Oliver:

Illingworth & Rodkin, Inc. has prepared a construction health risk assessment (HRA) for the proposed AC by Marriott – West project at 5696 Stevens Creek Boulevard in San Jose. This construction HRA was based on CalEEMod modeling of the project, use of the AERMOD dispersion model with meteorological data from San Jose International Airport and cancer risk calculations that are based on guidance provided by the Bay Area Air Quality Management District (BAAQMD). CalEEMod modeling was based on the CalEEMod files provided by your CEQA consultant, J.B. Anderson Land Use Planning along with project-specific construction assumptions.

Methodology and Significance Thresholds

The BAAQMD has published California Environmental Quality Act (CEQA) Air Quality Guidelines that are used in this assessment to evaluate health risk impacts of projects.[1] Significance thresholds that were used in this analysis, and contained in the BAAQMD CEQA Air Quality Guidelines, are summarized in Table 1. The community risk modeling methodology used in this assessment is contained in *Attachment 1*. This includes BAAQMD's recommendation of cancer risk methodology that follows the State of California Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (CARB) recommended methods for conducting health risk assessments. The most recent OEHHA risk assessment guidelines were published in February of 2015.[2] BAAQMD publishes their risk guidance as part of Regulation 2, Rule 5: *New Source Review of Toxic Air Contaminants*.[3]

[1] Bay Area Air Quality Management District. 2017. *BAAQMD CEQA Air Quality Guidelines*. May.
[2] OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.
[3] BAAQMD, 2016. *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines*. December 2016.

Table 1. Community Risk Significance

Health Risks and Hazards for Single Sources	
Excess Cancer Risk	>10.0 per one million
Hazard Index	>1.0
Incremental annual $PM_{2.5}$	>0.3 µg/m^3
Health Risks and Hazards for Combined Sources (Cumulative from all sources within 1,000-foot zone of influence)	
Excess Cancer Risk	>100 per one million
Hazard Index	>10.0
Annual Average $PM_{2.5}$	>0.8 µg/m^3

Project Construction Activity

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, a known toxic air contaminant (TAC). Construction exhaust emissions can pose health risks for sensitive receptors such as surrounding residents. The primary health risk impact issues associated with construction emissions are cancer risk and exposure to fine particulate matter ($PM_{2.5}$). Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the project construction activities was conducted that evaluated potential health effects of sensitive receptors at these nearby residences from construction emissions of DPM and $PM_{2.5}$.[4] Dispersion modeling was conducted to predict the off-site concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated.

Construction Emissions

Construction activity is anticipated to include demolition of the existing Shell Gas Station, grading/excavation, building construction, some paving, and architectural coating. Construction period emissions were modeled using the California Emissions Estimator Model, Version 2016.3.2 (CalEEMod).

J.B. Anderson provided the CalEEMod input file for the project along with a construction schedule that included equipment usage assumptions, including truck deliveries. The proposed project land uses input to CalEEMod included the following: 168 rooms and 78,850-sf entered as "Hotel" on a 0.42-acre site and 100 spaces entered as "Enclosed Parking with Elevator." In addition, the following estimations were entered into the model: 25 tons of building demolition and 17,000 cubic yards (cy) of excavation. In addition to CalEEMod default construction trip generation rates for vendors and workers, traffic for 180 cement truck trips and 20 asphalt delivery trips were included. Traffic generated by construction of the project that would occur on- and near-site was accounted by assuming a trip length of 1 mile in the modeling. According to the construction information provided, the crane and equipment used for building construction would be electric. Forklifts would be powered by propane or compressed natural gas. Electric power would be provided to the site prior to construction.

[4] DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.

The earliest possible construction start date of January 2019 was used. The provided schedule estimated 270 workdays over 13 months. *Attachment 2* includes the CalEEMod output for construction emissions, information for schedule, equipment usage, and truck hauling.

The CalEEMod model provided total annual PM_{10} exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles, with total emissions from all construction stages as 0.0146 tons (29 pounds). The on-road emissions are a result of haul truck travel during demolition and grading activities, worker travel, and vendor deliveries during construction. Fugitive $PM_{2.5}$ dust emissions were calculated by CalEEMod as 0.0016 tons (3 pounds) for the overall construction period.

Dispersion Modeling

The U.S. EPA AERMOD dispersion model was used to predict DPM and $PM_{2.5}$ concentrations at sensitive receptors (residences) in the vicinity of the project construction area. The AERMOD dispersion model is a BAAQMD-recommended model for use in modeling analysis of these types of emission activities for CEQA projects.[5] Refined modeling of the construction emissions was conducted where emission sources for the construction site were grouped into two categories: exhaust emissions of DPM and fugitive $PM_{2.5}$ dust emissions. Combustion equipment exhaust emissions were modeled as a series of point sources with a nine-foot release height (construction equipment exhaust stack height) placed at 5-meter (16-foot) intervals throughout the construction site. This resulted in 72 individual point sources being used to represent mobile equipment DPM exhaust emissions in the construction area, with DPM emissions occurring throughout the project construction site. Emissions from vehicle travel on- and off-site were distributed among the point sources throughout the site. Construction fugitive $PM_{2.5}$ dust emissions were modeled as an area source encompassing the entire construction site with a near ground level release height of two meters. Construction emissions were modeled as occurring daily between 7 a.m. to 4 p.m., when the majority of construction activity would occur.

The modeling used a five-year data set (2006-2010) of hourly meteorological data from the San José Airport meteorological site that was prepared for use with the AERMOD model by BAAQMD. Annual DPM and $PM_{2.5}$ concentrations from construction activities during the 2019 period were calculated using the model.

DPM and $PM_{2.5}$ concentrations were calculated at nearby sensitive receptors. The closest sensitive receptors to the project site are multi-family residences adjacent to the eastern site boundary, a daycare to the west, and single-family residences further away to the south and west. Receptor heights of 1.5 meters (5 feet) and 4.5 meters (15 feet) were used to represent the breathing heights of residents in nearby apartment buildings with residential units above the first floor. The construction area and sensitive receptors are shown in Figure 1.

[5] Bay Area Air Quality Management District (BAAQMD), 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0.* May.

Figure 1 Project Construction Site and Locations of Off-Site Sensitive Receptors and TAC Impacts

Predicted Cancer Risk and Hazards

Figure 1 shows the locations where the maximum-modeled DPM and $PM_{2.5}$ concentrations occurred. The maximum concentrations occurred at a single-family residence (1.5 meters) southeast of the project site. Using the maximum annual modeled DPM concentration, the maximum increased cancer risk at the location of the maximally exposed individual (MEI) was calculated using BAAQMD recommended methods. The cancer risk calculations are based on applying the BAAQMD recommended age sensitivity factors to the TAC concentrations. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. BAAQMD-recommended exposure parameters were used for the cancer risk calculations, as described in *Attachment 1*. Infant and adult exposures were assumed to occur at all residences through the entire construction period. *Attachment 3* includes the construction emission calculations and source information used in the modeling and the cancer risk calculations.

Results of this assessment are reported in Table 2. The maximum increased residential cancer risk was computed as 9.7 in one million for an infant exposure and 0.2 in one million for an adult exposure. At the daycare facility, the maximum child risk was computed at 0.2 per million. The maximum excess cancer risk, assuming infant exposure, would be below the significance threshold of 10.0 in one million.

The maximum-modeled annual $PM_{2.5}$ concentration, which is based on combined exhaust and fugitive dust emissions, would be 0.07μg/m^3. This maximum annual $PM_{2.5}$ concentration would be below the BAAQMD significance threshold of greater than 0.3μg/m^3. The location of the receptor with the maximum $PM_{2.5}$ concentration is also shown in Figure 1.

The maximum modeled annual residential DPM concentration (i.e., from construction exhaust) would be 0.06μg/m^3. The maximum computed Hazard Index (HI) based on this DPM concentration would be 0.01, which does not exceed the BAAQMD significance criterion of a HI greater than 1.0.

Existing TAC Sources

The project would replace the Stevens Creek Shell gasoline station, an existing source of TAC emissions. This station is reported by BAAQMD, as Plant 112344 to have a source risk of 5.05 chances per million. Additionally, the facility includes Plant 21376 that has a cancer risk of 0.50 chances per million. These facilities are about 115 feet from the nearest receptors where the maximum construction cancer risk was modeled. Using the BAAQMD Gas Station Distance Multiplier, the adjusted cancer risk from the Stevens Creek Shell gasoline station is 2.5 chances per million.

Cumulative Impact on Construction MEI

Cumulative community risk impacts were addressed through an evaluation of TAC sources located within 1,000 feet of the construction MEI (see Figure 2). These sources include highways (i.e., Interstate 280), busy surface streets (i.e., Stevens Creek Boulevard), and stationary sources identified by BAAQMD. Community risk impacts from these sources upon the construction MEI are reported in Table 2. Details of the modeling and community risk calculations are included in *Attachment 3.*

Summary of Construction Health Risk Impacts

Table 2 reports both the project and cumulative community risk impacts. Without mitigation, the project would have a *less-than-significant* impact with respect to community risk caused by project construction activities, since the maximum cancer risk, $PM_{2.5}$ concentration, and HI do not exceed the single-source thresholds of 10.0 per million for cancer risk, 0.3 μg/m^3 for $PM_{2.5}$, and HI of 1.0, respectively. As shown in Table 2, the combined annual cancer risk and Hazard risk values, which includes unmitigated and mitigated, would not exceed the cumulative threshold. *Attachment 3* includes the construction emission calculations and source information used in the modeling and the cancer risk calculations.

Figure 2 Project Construction Site and Nearby TAC/PM2.5 Sources

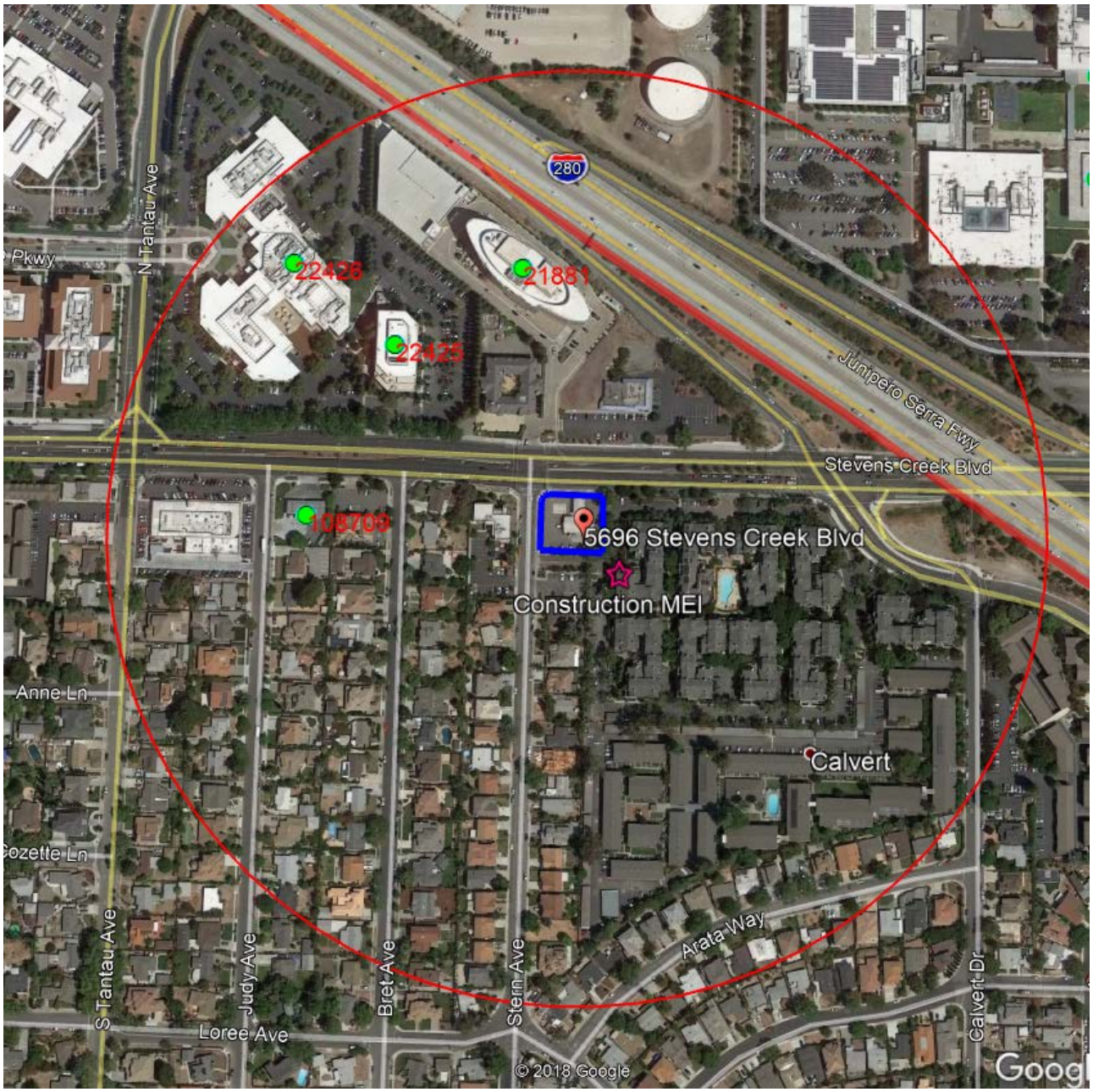

Table 2. Impacts from Combined Sources at Construction MEI

Source	Maximum Cancer Risk (per million)	$PM_{2.5}$ concentration ($\mu g/m^3$)	Hazard Index
Project Construction	9.7 (infant)	**0.07**	0.01
Removal of Shell Gas Station	2.5 (lifetime)	**0.00**	0.01
Project Increased Cancer Risk →	7.1 (infant)	**0.07**	0.00
BAAQMD Single-Source Threshold	***>10.0***	***>0.3***	***>1.0***
Significant?	*No*	*No*	*No*
Interstate 280 (Link 289, 6ft) at 600 feet south	11.8	0.09	0.01
Stevens Creek Boulevard at 190 ft south ADT 28355	4.6	0.17	<0.03
Plant #2181 (Generator) at 640 feet	0.2	<0.01	<0.01
Plant #108709 (Gas Station) at 680 feet	0.7	-	<0.01
Plant #22425 (Generator) at 670 feet	0.9	<0.01	<0.01
Plant #22426 (Generator) at 850 feet	1.5	<0.01	<0.01
Combined Sources Total	26.8 (infant)	0.33	<0.09
BAAQMD Cumulative Source Threshold	***>100***	***>0.8***	***>10.0***
Significant?	*No*	*No*	*No*

* * *

This concludes our analysis of the construction impacts from the proposed AC by Marriott – West project in San Jose. Please let us know if you have any questions or need additional information.

Sincerely,

James A. Reyff
Senior Consultant, Principal
Illingworth & Rodkin, Inc.
JOB #18-215

Attachments

Attachment 1 is the methodology used to compute community risk impacts, including the methods to compute lifetime cancer risk from exposure to project emissions.

Attachment 2 includes the CalEEMod output for project construction TAC emissions. Also included are any modeling assumptions.

Attachment 3 is the summary of AERMOD dispersion modeling. The input/output files are quite voluminous, are available upon request and would be provided in digital format.

Attachment 4 includes the screening community risk calculations from sources affecting the construction MEI.

Attachment 1: Health Risk Calculation Methodology

A health risk assessment (HRA) for exposure to Toxic Air Contaminates (TACs) requires the application of a risk characterization model to the results from the air dispersion model to estimate potential health risk at each sensitive receptor location. The State of California Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (CARB) develop recommended methods for conducting health risk assessments. The most recent OEHHA risk assessment guidelines were published in February of 2015.[1] These guidelines incorporate substantial changes designed to provide for enhanced protection of children, as required by State law, compared to previous published risk assessment guidelines. CARB has provided additional guidance on implementing OEHHA's recommended methods.[2] This HRA used the recent 2015 OEHHA risk assessment guidelines and CARB guidance. The BAAQMD has adopted recommended procedures for applying the newest OEHHA guidelines as part of Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants.[3] Exposure parameters from the OEHHA guidelines and the recent BAAQMD HRA Guidelines were used in this evaluation.

Cancer Risk

Potential increased cancer risk from inhalation of TACs are calculated based on the TAC concentration over the period of exposure, inhalation dose, the TAC cancer potency factor, and an age sensitivity factor to reflect the greater sensitivity of infants and children to cancer causing TACs. The inhalation dose depends on a person's breathing rate, exposure time and frequency of exposure, and the exposure duration. These parameters vary depending on the age, or age range, of the persons being exposed and whether the exposure is considered to occur at a residential location or other sensitive receptor location.

The current OEHHA guidance recommends that cancer risk be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, they recommend evaluating risks for the third trimester of pregnancy to age zero, ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposures, an ASF of 3 for a child exposure, and an ASF of 1 for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilogram of body weight per day (L/kg-day). As recommended by the BAAQMD, 95th percentile breathing rates are used for the third trimester and infant exposures, and 80th percentile breathing rates for child and adult exposures. Additionally, CARB and the BAAQMD recommend the use of a residential exposure duration of 30 years for sources with long-term emissions (e.g., roadways).

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[1] OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.

[2] CARB, 2015. *Risk Management Guidance for Stationary Sources of Air Toxics*. July 23.

[3] BAAQMD, 2016. *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines*. December 2016.

Under previous OEHHA and BAAQMD HRA guidance, residential receptors are assumed to be at their home 24 hours a day, or 100 percent of the time. In the 2015 Risk Assessment Guidance, OEHHA includes adjustments to exposure duration to account for the fraction of time at home (FAH), which can be less than 100 percent of the time, based on updated population and activity statistics. The FAH factors are age-specific and are: 0.85 for third trimester of pregnancy to less than 2 years old, 0.72 for ages 2 to less than 16 years, and 0.73 for ages 16 to 70 years. Use of the FAH factors is allowed by the BAAQMD if there are no schools in the project vicinity that would have a cancer risk of one in a million or greater assuming 100 percent exposure (FAH = 1.0).

Functionally, cancer risk is calculated using the following parameters and formulas:

Cancer Risk (per million) = $CPF \times Inhalation\ Dose \times ASF \times ED/AT \times FAH \times 10^6$

Where:

CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air} \times DBR \times A \times (EF/365) \times 10^{-6}$

Where:

C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

The health risk parameters used in this evaluation are summarized as follows:

	Exposure Type →	**Infant**		**Child**		**Adult**
Parameter	***Age Range →***	**3rd Trimester**	**0<2**	**2 < 9**	**2 < 16**	**16 - 30**
DPM Cancer Potency Factor $(mg/kg\text{-}day)^{-1}$		1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00
Daily Breathing Rate (L/kg-day)*		361	1,090	631	572	261
Inhalation Absorption Factor		1	1	1	1	1
Averaging Time (years)		70	70	70	70	70
Exposure Duration (years)		0.25	2	14	14	14
Exposure Frequency (days/year)		350	350	350	350	350
Age Sensitivity Factor		10	10	3	3	1
Fraction of Time at Home		0.85-1.0	0.85-1.0	0.72-1.0	0.72-1.0	0.73

* 95th percentile breathing rates for 3rd trimester and infants and 80th percentile for children and adults.

Non-Cancer Hazards

Potential non-cancer health hazards from TAC exposure are expressed in terms of a hazard index (HI), which is the ratio of the TAC concentration to a reference exposure level (REL). OEHHA has defined acceptable concentration levels for contaminants that pose non-cancer health hazards. TAC concentrations below the REL are not expected to cause adverse health impacts, even for sensitive individuals. The total HI is calculated as the sum of the HIs for each TAC evaluated and the total HI is compared to the BAAQMD significance thresholds to determine whether a significant non-cancer health impact from a project would occur.

Typically, for residential projects located near roadways with substantial TAC emissions, the primary TAC of concern with non-cancer health effects is diesel particulate matter (DPM). For DPM, the chronic inhalation REL is 5 micrograms per cubic meter ($\mu g/m^3$).

Annual $PM_{2.5}$ Concentrations

While not a TAC, fine particulate matter ($PM_{2.5}$) has been identified by the BAAQMD as a pollutant with potential non-cancer health effects that should be included when evaluating potential community health impacts under the California Environmental Quality Act (CEQA). The thresholds of significance for $PM_{2.5}$ (project level and cumulative) are in terms of an increase in the annual average concentration. When considering $PM_{2.5}$ impacts, the contribution from all sources of $PM_{2.5}$ emissions should be included. For projects with potential impacts from nearby local roadways, the $PM_{2.5}$ impacts should include those from vehicle exhaust emissions, $PM_{2.5}$ generated from vehicle tire and brake wear, and fugitive emissions from re-suspended dust on the roads.

Attachment 2: CalEEMod Modeling Output

5696 Stevens Creek Blvd. Hotel - AC by Marriott

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	100.00	Space	0.00	49,590.00	0
Hotel	168.00	Room	0.42	78,850.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2020
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 - Assumed start of construction - January 1, 2019

Building square footage set to 78,850 sq. ft. for proposed 7 stories

Construction Phase - Based on provided construction worksheet - Estimated construction time - 13 months

Off-road Equipment - Based on provided construction worksheet

Off-road Equipment - Based on provided construction worksheet

Off-road Equipment - Based on provided construction worksheet

Off-road Equipment - Based on provided construction worksheet

Off-road Equipment - Based on provided construction worksheet

Trips and VMT - On and near-site construciton travel

Demolition - Based on provided construction worksheet - 5 + 20 tons

Grading - Grading includes excavation - 17,000 CY per Civil Plans

Construction Off-road Equipment Mitigation - Based on provided construction worksheet

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	60.00
tblConstructionPhase	NumDays	100.00	110.00
tblConstructionPhase	NumDays	5.00	70.00
tblConstructionPhase	NumDays	5.00	10.00
tblEnergyUse	LightingElect	1.75	2.63
tblEnergyUse	LightingElect	2.35	2.41
tblEnergyUse	T24E	2.05	2.15
tblEnergyUse	T24NG	39.56	39.76

tblGrading	AcresOfGrading	0.00	0.42
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	40,000.00	49,590.00
tblLandUse	LandUseSquareFeet	243,936.00	78,850.00
tblLandUse	LotAcreage	0.90	0.00
tblLandUse	LotAcreage	5.60	0.42
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	1.00	3.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripNumber	2.00	11.00
tblTripsAndVMT	HaulingTripNumber	0.00	180.00
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.4637	0.7043	0.4390	9.0000e-004	6.1900e-003	0.0284	0.0346	1.5100e-003	0.0266	0.0281	0.0000	82.2013	82.2013	0.0176	0.0000	82.6419
2020	0.0203	0.0219	0.0214	3.0000e-005	4.0000e-005	1.3300e-003	1.3700e-003	1.0000e-005	1.2400e-003	1.2500e-003	0.0000	2.7487	2.7487	7.6000e-004	0.0000	2.7677
Maximum	**0.4637**	**0.7043**	**0.4390**	**9.0000e-004**	**6.1900e-003**	**0.0284**	**0.0346**	**1.5100e-003**	**0.0266**	**0.0281**	**0.0000**	**82.2013**	**82.2013**	**0.0176**	**0.0000**	**82.6419**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.4349	0.4475	0.6340	9.0000e-004	6.1900e-003	**0.0130**	0.0192	**1.5100e-003**	0.0121	0.0136	0.0000	61.1372	61.1372	0.0129	0.0000	61.4608
2020	0.0200	0.0194	0.0187	3.0000e-005	4.0000e-005	**1.1600e-003**	1.2000e-003	**1.0000e-005**	1.0700e-003	1.0800e-003	0.0000	2.3657	2.3657	7.3000e-004	0.0000	2.3839
Maximum	**0.4349**	**0.4475**	**0.6340**	**9.0000e-004**	**6.1900e-003**	**0.0130**	**0.0192**	**1.5100e-003**	**0.0121**	**0.0136**	**0.0000**	**61.1372**	**61.1372**	**0.0129**	**0.0000**	**61.4608**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**6.02**	**35.70**	**-41.77**	**0.00**	**0.00**	**52.36**	**43.28**	**0.00**	**52.64**	**49.88**	**0.00**	**25.25**	**25.25**	**25.67**	**0.00**	**25.25**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2019**	**3-31-2019**	0.2853	0.2853
2	**4-1-2019**	**6-30-2019**	0.2155	0.1205
3	**7-1-2019**	**9-30-2019**	0.1975	0.0766
4	**10-1-2019**	**12-31-2019**	0.4654	0.3964
5	**1-1-2020**	**3-31-2020**	0.0362	0.0341
		Highest	0.4654	0.3964

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	1/1/2019	1/28/2019	5	20	
2	Grading	Grading	1/29/2019	4/22/2019	5	60	
3	Building Construction	Building Construction	4/24/2019	9/24/2019	5	110	
4	Architectural Coating	Architectural Coating	9/30/2019	1/3/2020	5	70	
5	Paving	Paving	1/14/2020	1/27/2020	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.42

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 118,275; Non-Residential Outdoor: 39,425; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	4.00	81	0.73
Demolition	Rubber Tired Dozers	1	3.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Excavators	1	6.00	158	0.38
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56

Paving	Pavers	0	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	11.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Grading	2	5.00	0.00	2,125.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Building Construction	2	54.00	21.00	180.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	20.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0101	0.0983	0.0691	1.1000e-004		5.7000e-003	5.7000e-003		5.3300e-003	5.3300e-003	0.0000	9.7493	9.7493	2.4200e-003	0.0000	9.8099
Total	**0.0101**	**0.0983**	**0.0691**	**1.1000e-004**	**2.7000e-004**	**5.7000e-003**	**5.9700e-003**	**4.0000e-005**	**5.3300e-003**	**5.3700e-003**	**0.0000**	**9.7493**	**9.7493**	**2.4200e-003**	**0.0000**	**9.8099**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	5.9000e-004	1.0000e-004	0.0000	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0713	0.0713	1.0000e-005	0.0000	0.0715
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	1.2000e-004	6.0000e-005	7.4000e-004	0.0000	7.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0839	0.0839	0.0000	0.0000	0.0840
Total	**1.3000e-004**	**6.5000e-004**	**8.4000e-004**	**0.0000**	**7.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.1551**	**0.1551**	**1.0000e-005**	**0.0000**	**0.1554**

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					2.7000e-004	0.0000	2.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0101	0.0983	0.0691	1.1000e-004		5.7000e-003	5.7000e-003		5.3300e-003	5.3300e-003	0.0000	9.7493	9.7493	2.4200e-003	0.0000	9.8099

Total	**0.0101**	**0.0983**	**0.0691**	**1.1000e-004**	**2.7000e-004**	**5.7000e-003**	**5.9700e-003**	**4.0000e-005**	**5.3300e-003**	**5.3700e-003**	**0.0000**	**9.7493**	**9.7493**	**2.4200e-003**	**0.0000**	**9.8099**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	5.9000e-004	1.0000e-004	0.0000	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0713	0.0713	1.0000e-005	0.0000	0.0715
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	1.2000e-004	6.0000e-005	7.4000e-004	0.0000	7.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0839	0.0839	0.0000	0.0000	0.0840
Total	**1.3000e-004**	**6.5000e-004**	**8.4000e-004**	**0.0000**	**7.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.1551**	**0.1551**	**1.0000e-005**	**0.0000**	**0.1554**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1800e-003	0.0000	1.1800e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.1129	0.1252	1.9000e-004		6.4200e-003	6.4200e-003		5.9100e-003	5.9100e-003	0.0000	16.7104	16.7104	5.2900e-003	0.0000	16.8425
Total	**0.0111**	**0.1129**	**0.1252**	**1.9000e-004**	**1.1800e-003**	**6.4200e-003**	**7.6000e-003**	**1.7000e-004**	**5.9100e-003**	**6.0800e-003**	**0.0000**	**16.7104**	**16.7104**	**5.2900e-003**	**0.0000**	**16.8425**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.5800e-003	0.1138	0.0190	1.4000e-004	9.2000e-004	1.4000e-004	1.0700e-003	2.6000e-004	1.4000e-004	3.9000e-004	0.0000	13.7650	13.7650	1.6100e-003	0.0000	13.8052
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	9.0000e-005	1.1100e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1258	0.1258	1.0000e-005	0.0000	0.1260
Total	**2.7600e-003**	**0.1139**	**0.0201**	**1.4000e-004**	**1.0300e-003**	**1.4000e-004**	**1.1800e-003**	**2.9000e-004**	**1.4000e-004**	**4.2000e-004**	**0.0000**	**13.8908**	**13.8908**	**1.6200e-003**	**0.0000**	**13.9311**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1800e-003	0.0000	1.1800e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.1129	0.1252	1.9000e-004		6.4200e-003	6.4200e-003		5.9100e-003	5.9100e-003	0.0000	16.7103	16.7103	5.2900e-003	0.0000	16.8425

Total	**0.0111**	**0.1129**	**0.1252**	**1.9000e-004**	**1.1800e-003**	**6.4200e-003**	**7.6000e-003**	**1.7000e-004**	**5.9100e-003**	**6.0800e-003**	**0.0000**	**16.7103**	**16.7103**	**5.2900e-003**	**0.0000**	**16.8425**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.5800e-003	0.1138	0.0190	1.4000e-004	9.2000e-004	1.4000e-004	1.0700e-003	2.6000e-004	1.4000e-004	3.9000e-004	0.0000	13.7650	13.7650	1.6100e-003	0.0000	13.8052
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	9.0000e-005	1.1100e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1258	0.1258	1.0000e-005	0.0000	0.1260
Total	**2.7600e-003**	**0.1139**	**0.0201**	**1.4000e-004**	**1.0300e-003**	**1.4000e-004**	**1.1800e-003**	**2.9000e-004**	**1.4000e-004**	**4.2000e-004**	**0.0000**	**13.8908**	**13.8908**	**1.6200e-003**	**0.0000**	**13.9311**

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0205	0.2241	0.1123	2.2000e-004		0.0116	0.0116		0.0106	0.0106	0.0000	19.9129	19.9129	6.3000e-003	0.0000	20.0704
Total	**0.0205**	**0.2241**	**0.1123**	**2.2000e-004**		**0.0116**	**0.0116**		**0.0106**	**0.0106**	**0.0000**	**19.9129**	**19.9129**	**6.3000e-003**	**0.0000**	**20.0704**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2000e-004	9.6400e-003	1.6100e-003	1.0000e-005	8.0000e-005	1.0000e-005	9.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	1.1660	1.1660	1.4000e-004	0.0000	1.1694
Vendor	2.5200e-003	0.0813	0.0234	1.0000e-004	1.0700e-003	2.0000e-004	1.2700e-003	3.1000e-004	1.9000e-004	5.0000e-004	0.0000	9.2629	9.2629	1.0000e-003	0.0000	9.2878
Worker	3.6400e-003	1.7200e-003	0.0219	3.0000e-005	2.2100e-003	3.0000e-005	2.2400e-003	5.9000e-004	3.0000e-005	6.2000e-004	0.0000	2.4913	2.4913	1.2000e-004	0.0000	2.4943
Total	**6.3800e-003**	**0.0927**	**0.0470**	**1.4000e-004**	**3.3600e-003**	**2.4000e-004**	**3.6000e-003**	**9.2000e-004**	**2.3000e-004**	**1.1500e-003**	**0.0000**	**12.9202**	**12.9202**	**1.2600e-003**	**0.0000**	**12.9515**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9000e-004	0.0289	0.3691	2.2000e-004		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	7.4023	7.4023	2.3400e-003	0.0000	7.4608
Total	**5.9000e-004**	**0.0289**	**0.3691**	**2.2000e-004**		**4.9000e-004**	**4.9000e-004**		**4.9000e-004**	**4.9000e-004**	**0.0000**	**7.4023**	**7.4023**	**2.3400e-003**	**0.0000**	**7.4608**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2000e-004	9.6400e-003	1.6100e-003	1.0000e-005	8.0000e-005	1.0000e-005	9.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	1.1660	1.1660	1.4000e-004	0.0000	1.1694
Vendor	2.5200e-003	0.0813	0.0234	1.0000e-004	1.0700e-003	2.0000e-004	1.2700e-003	3.1000e-004	1.9000e-004	5.0000e-004	0.0000	9.2629	9.2629	1.0000e-003	0.0000	9.2878
Worker	3.6400e-003	1.7200e-003	0.0219	3.0000e-005	2.2100e-003	3.0000e-005	2.2400e-003	5.9000e-004	3.0000e-005	6.2000e-004	0.0000	2.4913	2.4913	1.2000e-004	0.0000	2.4943
Total	**6.3800e-003**	**0.0927**	**0.0470**	**1.4000e-004**	**3.3600e-003**	**2.4000e-004**	**3.6000e-003**	**9.2000e-004**	**2.3000e-004**	**1.1500e-003**	**0.0000**	**12.9202**	**12.9202**	**1.2600e-003**	**0.0000**	**12.9515**

3.5 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4034					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.9300e-003	0.0615	0.0617	1.0000e-004		4.3100e-003	4.3100e-003		4.3100e-003	4.3100e-003	0.0000	8.5534	8.5534	7.2000e-004	0.0000	8.5715
Total	**0.4124**	**0.0615**	**0.0617**	**1.0000e-004**		**4.3100e-003**	**4.3100e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**8.5534**	**8.5534**	**7.2000e-004**	**0.0000**	**8.5715**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	2.1000e-004	2.7200e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.3091	0.3091	1.0000e-005	0.0000	0.3095
Total	**4.5000e-004**	**2.1000e-004**	**2.7200e-003**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.3091**	**0.3091**	**1.0000e-005**	**0.0000**	**0.3095**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4034					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	1.0000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.4034**	**0.0000**	**0.0000**	**1.0000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	2.1000e-004	2.7200e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.3091	0.3091	1.0000e-005	0.0000	0.3095
Total	**4.5000e-004**	**2.1000e-004**	**2.7200e-003**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.3091**	**0.3091**	**1.0000e-005**	**0.0000**	**0.3095**

3.5 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-004	2.5300e-003	2.7500e-003	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.3830	0.3830	3.0000e-005	0.0000	0.3837
Total	**0.0184**	**2.5300e-003**	**2.7500e-003**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**0.3830**	**0.3830**	**3.0000e-005**	**0.0000**	**0.3837**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.1000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0134	0.0134	0.0000	0.0000	0.0134
Total	**2.0000e-005**	**1.0000e-005**	**1.1000e-004**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0134**	**0.0134**	**0.0000**	**0.0000**	**0.0134**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	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	**0.0181**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.1000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0134	0.0134	0.0000	0.0000	0.0134
Total	**2.0000e-005**	**1.0000e-005**	**1.1000e-004**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0134**	**0.0134**	**0.0000**	**0.0000**	**0.0134**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8300e-003	0.0183	0.0183	3.0000e-005		1.1600e-003	1.1600e-003		1.0700e-003	1.0700e-003	0.0000	2.2021	2.2021	7.1000e-004	0.0000	2.2199
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8300e-003**	**0.0183**	**0.0183**	**3.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**2.2021**	**2.2021**	**7.1000e-004**	**0.0000**	**2.2199**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	1.0300e-003	1.7000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.1299	0.1299	1.0000e-005	0.0000	0.1302
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	1.0000e-005	1.6000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0203	0.0203	0.0000	0.0000	0.0204
Total	**5.0000e-005**	**1.0400e-003**	**3.3000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.1502**	**0.1502**	**1.0000e-005**	**0.0000**	**0.1506**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8300e-003	0.0183	0.0183	3.0000e-005		1.1600e-003	1.1600e-003		1.0700e-003	1.0700e-003	0.0000	2.2021	2.2021	7.1000e-004	0.0000	2.2199
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**1.8300e-003**	**0.0183**	**0.0183**	**3.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**2.2021**	**2.2021**	**7.1000e-004**	**0.0000**	**2.2199**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	1.0300e-003	1.7000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.1299	0.1299	1.0000e-005	0.0000	0.1302
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	1.0000e-005	1.6000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0203	0.0203	0.0000	0.0000	0.0204
Total	**5.0000e-005**	**1.0400e-003**	**3.3000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.1502**	**0.1502**	**1.0000e-005**	**0.0000**	**0.1506**

Project Name: 5696 Stevens Creek Blvd. Hotel - AC by Marriott

Project Size

168 Hotel Rooms — 0.42 total project acres disturbed

0 s.f. office/commercial — 0 s.f. other, specify:

0 s.f. other, specify:

56165 s.f. parking garage — 100 spaces

0 s.f. parking lot — 0 spaces

Construction Hours 7 am to 3 pm

Complete ALL Portions in Yellow

Qty	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Comments
	Demolition	**Start Date:**	**1/1/2019**	**Total phase:**	**20**		**Overall Import/Export Volumes**
		End Date:	**1/28/2019**				
1	Concrete/Industrial Saws	81	0.73	8	10	4	**Demolition Volume**
0	Excavators	162	0.38	0	0	0	Square footage of buildings to be demolished
1	Rubber-Tired Dozers	255	0.4	3	20	3	(*or* total tons to be hauled)
2	Tractors/Loaders/Backhoes	97	0.37	6	20	6	**_?_** square feet *or*
							_5_ Hauling volume (tons)
	Site Preperation	**Start Date:**	**N/A**	**Total phase:**	**2**		Any pavement demolished and hauled? **_20_ tons**
		End Date:	**N/A**				**Soil Hauling Volume**
0	Graders	174	0.41	0	0	0	
0	Rubber Tired Dozers	255	0.4	0	0	0	Export volume = **N/A** cubic yards?
0	Tractors/Loaders/Backhoes	97	0.37	0	0	0	Import volume = **NA** cubic yards?
	Grading / Excavation	**Start Date:**	**1/29/2019**	**Total phase:**	**60**		
		End Date:	**4/23/2019**				**Soil Hauling Volume**
0	Scrapers	**361**	**0.48**		0	0	
1	Excavators	162	0.38	6	60	6	Export volume = **_17,000_** cubic yards?
0	Graders	174	0.41	0	0	0	Import volume = **_0_** cubic yards?
0	Rubber Tired Dozers	255	0.4	1	0	0	
1	Tractors/Loaders/Backhoes	97	0.37	6	60	6	
0	Concrete/Industrial Saws	81	0.73	8	0		
	Building - Exterior	**Start Date:**	**4/24/2019**	**Total phase:**	**110**		**Cement Trucks? _90_ Total Round-Trips**
		End Date:	**9/30/2019**				
1	Cranes	226	0.29	4	110	4	**Electric? (Y/N) _Y__ Otherwise assumed diesel**
1	Forklifts	89	0.2	6	110	6	Liquid Propane (LPG)? (Y/N) _Y__ Otherwise Assumed diesel
0	Generator Sets	84	0.74			0	Or temporary line power? (Y/N) _Y__
0	Tractors/Loaders/Backhoes	97	0.37	0	0	0	otherwise, assume diesel generator
0	Welders	46	0.45		0	0	
	Other Equipment? ***No***					0	
	Building - Interior/Architectural Coating	**Start Date:**	**9/30/2019**	**Total phase:**	**70**		
		End Date:	**1/13/2020**				
1	Air Compressors	78	0.48	6	70	6	**Electric? (Y/N) _Y__ Otherwise assumed diesel**
	Aerial Lift	62	0.31			0	
	Other Equipment? ***No***						
	Paving	**Start Date:**	**1/14/2020**	**Total phase:**	**10**		**Asphalt? ___ cubic yards or __10__ round trips?**
		Start Date:	**1/29/2020**				
0	Cement and Mortar Mixers	9	0.56	6	0	0	
0	Pavers	125	0.42	7	0	0	
0	Paving Equipment	130	0.36			0	
1	Rollers	80	0.38	7	10	7	
1	Tractors/Loaders/Backhoes	97	0.37	7	10	7	
	Other Equipment? ***No***						

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horepower or load factor, as appropriate

Typical Equipment Type & Load Factors

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

Attachment 3: Construction Health Risk Calculations

AC Marriot, San Jose CA - Construction Health Impact Summary

Maximum Impacts at MEI Location - Unmitigated

Emissions Year	Maximum Concentrations		Cancer Risk (per million)		Hazard Index	Maximum Annual PM2.5 Concentration
	Exhaust PM10/DPM ($\mu g/m^3$)	Fugitive PM2.5 ($\mu g/m^3$)	Infant/Child	Adult	(-)	($\mu g/m^3$)
2019	0.0594	0.0127	**9.7**	**0.2**	**0.012**	**0.07**

Maximum Impacts at Daycare

Construction Year	Unmitigated Emissions				
	Maximum Concentrations				
	Exhaust PM2.5/DPM ($\mu g/m^3$)	Fugitive PM2.5 ($\mu g/m^3$)	Child Cancer Risk (per million)	Hazard Index (-)	Maximum Annual PM2.5 Concentration ($\mu g/m^3$)
2019	0.0080	0.0029	**0.2**	**0.00**	**0.01**

AC Marriot, San Jose CA

DPM Construction Emissions and Modeling Emission Rates

Construction Year	Activity	DPM (ton/year)	Source Type	No. Sources	DPM Emissions (lb/yr)	DPM Emissions (lb/hr)	DPM Emissions (g/s)	Emissions per Point Source (g/s)
2019	Construction	0.0142	Point	72	28.3	0.00862	1.09E-03	1.51E-05
		hr/day =	9	(7am - 4pm)				
		days/yr =	365					
		hours/year =	3285					

DPM Construction Emissions and Modeling Emission Rates - With Mitigation

Construction Year	Activity	DPM (ton/year)	Source Type	No. Sources	DPM Emissions (lb/yr)	DPM Emissions (lb/hr)	DPM Emissions (g/s)	Emissions per Point Source (g/s)
2019	Construction	0.0000	Point	72	0.0	0.00000	0.00E+00	0.00E+00
		hr/day =	9	(7am - 4pm)				
		days/yr =	365					
		hours/year =	3285					

AC Marriot, San Jose CA

PM2.5 Fugitive Dust Construction Emissions for Modeling

Construction Year	Activity	Area Source	PM2.5 Emissions (ton/year)	PM2.5 Emissions (lb/yr)	PM2.5 Emissions (lb/hr)	PM2.5 Emissions (g/s)	Modeled Area (m^2)	DPM Emission Rate g/s/m^2
2019	Construction	CON_FUG	0.00150	3.0	0.00091	1.15E-04	1,682	6.84E-08
		hr/day =	9	(7am - 4pm)				
		days/yr =	365					
		hours/year =	3285					

PM2.5 Fugitive Dust Construction Emissions for Modeling - With Mitigation

Construction Year	Activity	Area Source	PM2.5 Emissions (ton/year)	PM2.5 Emissions (lb/yr)	PM2.5 Emissions (lb/hr)	PM2.5 Emissions (g/s)	Modeled Area (m^2)	DPM Emission Rate g/s/m^2
2019	Construction	CON_FUG	0.00000	0.0	0.00000	0.00E+00	1,682	0.00E+00
		hr/day =	9	(7am - 4pm)				
		days/yr =	365					
		hours/year =	3285					

Marriott., San Jose CA - Construction Impacts -
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction Impacts at Off-Site MEI Location - 1.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child				Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 9**	**2 - 16**	**16 - 30**
Parameter					
ASF =	10	10	3	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	631	572	261
A =	1	1	1	1	1
EF =	350	350	350	350	350
AT =	70	70	70	70	70
FAH =	1.00	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information			Infant/Child Cancer Risk	Adult - Exposure Information			Adult Cancer Risk	Maxi
				DPM Conc (ug/m3)	Age Sensitivity			Modeled DPM Conc (ug/m3)	Age Sensitivity		
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Annual**	**Factor**	**(per million)**	**Year**	**Annual**	**Factor**	**(per million)**	**Fugitive PM2.5**
0	0.25	-0.25 - 0*	-	-	10	-	-	-	-	-	
1	1	0 - 1	2019	0.0386	10	6.33	2019	0.0386	1	0.11	0.0195
2	1	1 - 2	2020	0.0000	10	0.00	2020	0.0000	1	0.00	
3	1	2 - 3	2021	0.0000	3	0.00	2021	0.0000	1	0.00	
4	1	3 - 4	2022	0.0000	3	0.00	2022	0.0000	1	0.00	
5	1	4 - 5	2023	0.0000	3	0.00	2023	0.0000	1	0.00	
6	1	5 - 6	2024	0.0000	3	0.00	2024	0.0000	1	0.00	
7	1	6 - 7	2025	0.0000	3	0.00	2025	0.0000	1	0.00	
8	1	7 - 8	2026	0.0000	3	0.00	2026	0.0000	1	0.00	
9	1	8 - 9	2027	0.0000	3	0.00	2027	0.0000	1	0.00	
10	1	9 - 10	2028	0.0000	3	0.00	2028	0.0000	1	0.00	
11	1	10 - 11	2029	0.0000	3	0.00	2029	0.0000	1	0.00	
12	1	11 - 12	2030	0.0000	3	0.00	2030	0.0000	1	0.00	
13	1	12 - 13	2031	0.0000	3	0.00	2031	0.0000	1	0.00	
14	1	13 - 14	2032	0.0000	3	0.00	2032	0.0000	1	0.00	
15	1	14 - 15	2033	0.0000	3	0.00	2033	0.0000	1	0.00	
16	1	15 - 16	2034	0.0000	3	0.00	2034	0.0000	1	0.00	
17	1	16-17	2035	0.0000	1	0.00	2035	0.0000	1	0.00	
18	1	17-18	2036	0.0000	1	0.00	2036	0.0000	1	0.00	
19	1	18-19	2037	0.0000	1	0.00	2037	0.0000	1	0.00	
20	1	19-20	2038	0.0000	1	0.00	2038	0.0000	1	0.00	
21	1	20-21	2039	0.0000	1	0.00	2039	0.0000	1	0.00	
22	1	21-22	2040	0.0000	1	0.00	2040	0.0000	1	0.00	
23	1	22-23	2041	0.0000	1	0.00	2041	0.0000	1	0.00	
24	1	23-24	2042	0.0000	1	0.00	2042	0.0000	1	0.00	
25	1	24-25	2043	0.0000	1	0.00	2043	0.0000	1	0.00	
26	1	25-26	2044	0.0000	1	0.00	2044	0.0000	1	0.00	
27	1	26-27	2045	0.0000	1	0.00	2045	0.0000	1	0.00	
28	1	27-28	2046	0.0000	1	0.00	2046	0.0000	1	0.00	
29	1	28-29	2047	0.0000	1	0.00	2047	0.0000	1	0.00	
30	1	29-30	2048	0.0000	1	0.00	2048	0.0000	1	0.00	

AC Marriot, San Jose CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction Impacts at Off-Site MEI Location - 4.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child				Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 9**	**2 - 16**	**16 - 30**
Parameter					
ASF =	10	10	3	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	631	572	261
A =	1	1	1	1	1
EF =	350	350	350	350	350
AT =	70	70	70	70	70
FAH =	1.00	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information			Infant/Child	Adult - Exposure Information			Adult	
						Cancer	Modeled			Cancer	Maxi
Exposure	Exposure Duration		DPM Conc (ug/m3)		Age Sensitivity	Risk	DPM Conc (ug/m3)		Age Sensitivity	Risk	Fugitive
Year	(years)	Age	Year	Annual	Factor	(per million)	Year	Annual	Factor	(per million)	PM2.5
0	0.25	-0.25 - 0*	-	-	10	-	-	-	-	-	
1	1	0 - 1	2019	0.0594	10	9.75	2019	0.0594	1	0.17	0.0127
2	1	1 - 2	2020	0.0000	10	0.00	2020	0.0000	1	0.00	
3	1	2 - 3	2021	0.0000	3	0.00	2021	0.0000	1	0.00	
4	1	3 - 4	2022	0.0000	3	0.00	2022	0.0000	1	0.00	
5	1	4 - 5	2023	0.0000	3	0.00	2023	0.0000	1	0.00	
6	1	5 - 6	2024	0.0000	3	0.00	2024	0.0000	1	0.00	
7	1	6 - 7	2025	0.0000	3	0.00	2025	0.0000	1	0.00	
8	1	7 - 8	2026	0.0000	3	0.00	2026	0.0000	1	0.00	
9	1	8 - 9	2027	0.0000	3	0.00	2027	0.0000	1	0.00	
10	1	9 - 10	2028	0.0000	3	0.00	2028	0.0000	1	0.00	
11	1	10 - 11	2029	0.0000	3	0.00	2029	0.0000	1	0.00	
12	1	11 - 12	2030	0.0000	3	0.00	2030	0.0000	1	0.00	
13	1	12 - 13	2031	0.0000	3	0.00	2031	0.0000	1	0.00	
14	1	13 - 14	2032	0.0000	3	0.00	2032	0.0000	1	0.00	
15	1	14 - 15	2033	0.0000	3	0.00	2033	0.0000	1	0.00	
16	1	15 - 16	2034	0.0000	3	0.00	2034	0.0000	1	0.00	
17	1	16-17	2035	0.0000	1	0.00	2035	0.0000	1	0.00	
18	1	17-18	2036	0.0000	1	0.00	2036	0.0000	1	0.00	
19	1	18-19	2037	0.0000	1	0.00	2037	0.0000	1	0.00	
20	1	19-20	2038	0.0000	1	0.00	2038	0.0000	1	0.00	
21	1	20-21	2039	0.0000	1	0.00	2039	0.0000	1	0.00	
22	1	21-22	2040	0.0000	1	0.00	2040	0.0000	1	0.00	
23	1	22-23	2041	0.0000	1	0.00	2041	0.0000	1	0.00	
24	1	23-24	2042	0.0000	1	0.00	2042	0.0000	1	0.00	
25	1	24-25	2043	0.0000	1	0.00	2043	0.0000	1	0.00	
26	1	25-26	2044	0.0000	1	0.00	2044	0.0000	1	0.00	
27	1	26-27	2045	0.0000	1	0.00	2045	0.0000	1	0.00	
28	1	27-28	2046	0.0000	1	0.00	2046	0.0000	1	0.00	
29	1	28-29	2047	0.0000	1	0.00	2047	0.0000	1	0.00	
30	1	29-30	2048	0.0000	1	0.00	2048	0.0000	1	0.00	

AC Marriot, San Jose CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk Calculations From Construction
Daycare - 1.0 meters - Child Exposure

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child				Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 9**	**2 - 16**	**16 - 30**
Parameter					
ASF =	10	10	3	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	631	572	261
A =	1	1	1	1	1
EF =	350	350	350	350	350
AT =	70	70	70	70	70
FAH =	1.00	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

		Child - Exposure Information			
		DPM Conc (ug/m3)			
Exposure Year	**Exposure Duration (years)**	**Year**	**Annual**	**Age* Sensitivity Factor**	**Child Cancer Risk (per million)**
1	1	2019	0.0080	3	0.2

* Children assumed to be from 2 to 9 years of age

Attachment 4

Gas Station Distance Multipler

Distance meters	Distance feet	Distance adjustment multiplier	Enter Risk or Hazard	Adjusted Risk or Hazard
20	66	1.000		0
25	82	0.728		0
30	98	0.559	5.55	3.102652829
35	115	0.445	5.55	2.470426803
40	131	0.365	5.55	2.024130093
45	148	0.305		0
50	164	0.260		0
55	180	0.225		0
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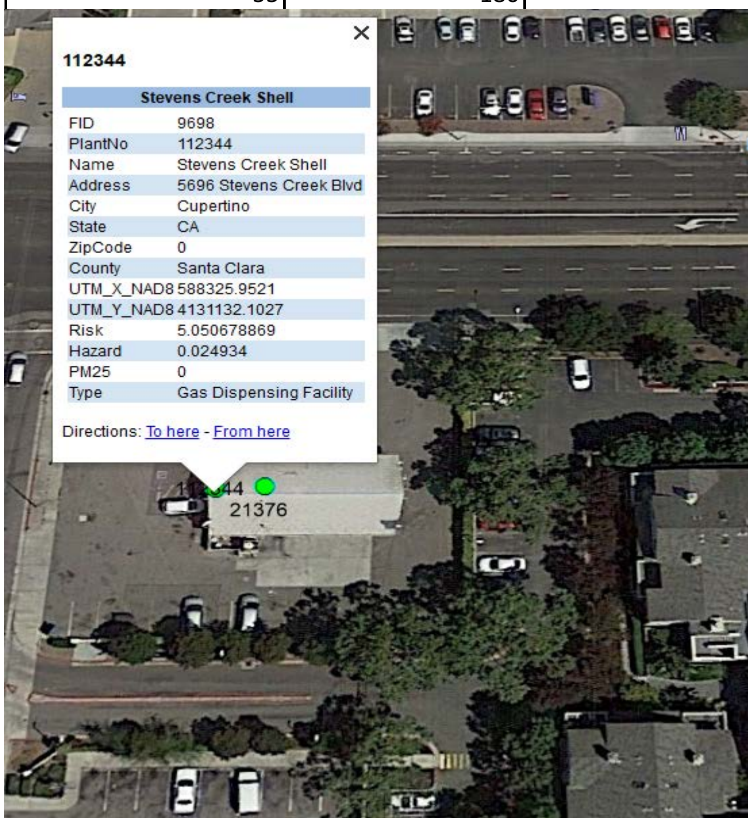
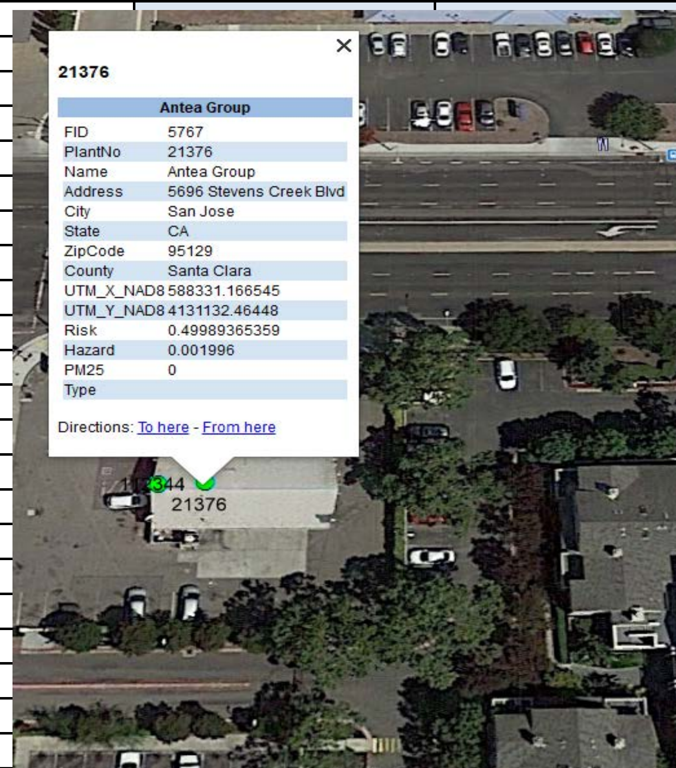
		0.038		0
175	574	0.036		0
180	590	0.034		0





BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Risk & Hazard Stationary Source Inquiry Form

This form is required when users request stationary source data from BAAQMD

This form is to be used with the BAAQMD's Google Earth stationary source screening tables.

Click here for guidance on coducting risk & hazard screening, including roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.

Click here for District's Recommended Methods for Screening and Modeling Local Risks and Hazards document.

Table A: Requester Contact Information

Date of Request	**7/16/2018**
Contact Name	Casey Zaglin
Affiliation	Illingworth & Rodkin, Inc.
Phone	707-794-0400 x23
Email	czaglin@illingworthrodkin.com
Project Name	
Address	
City	
County	
Type (residential, commercial, mixed use, industrial, etc.)	
Project Size (# of units or building square feet)	
Comments:	

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

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

2. Download and install the free program Google Earth, **http://www.google.com/earth/download/ge/,** and then download the county specific Google Earth stationary source application files from the District's website, **http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.** The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's Information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration.

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

4. Identify stationary sources within at least a 1000ft radius of project site. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm the source's address location. Please report any mapping errors to the District.

5. List the stationary source information in Table B e section only.

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

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

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

Submit forms, maps, and questions to Areana Flores at 415-749-4616, or aflores@baaqmd.gov

Table B: Google Earth data

Distance from Receptor (feet) or MEI[1]	Facility Name	Address	Plant No.	Cancer Risk[2]	Hazard Risk[2]	$PM_{2.5}$[2]	Source No.[3]	Type of Source[4]	Fuel Code[5]	Status/Comments	Distance Adjustment Multiplier	Adjusted Cancer Risk Estimate	Adjusted Hazard Risk	Adjusted PM2.5
											Construction MEI			
640	Perry-Arrillaga	5409 Stevens Creek Blvd	2181	2.770	0.0073	0.0034		Generator			0.08	0.22	5.81E-04	2.73E-04
680	Rotten Robbie #25	19030 Stevens Creek Blvd	108709	23.338	0.1152			Gas Dispensing Facility			0.028	0.65	3.20E-03	
670	DOWNTOWN PROPERTIES	5425 Stevens Creek Blvd	22425	11.406	0.0085	0.0148		Generator			0.08	0.91	6.78E-04	1.19E-03
850	DOWNTOWN PROPERTIES	10100 N Tantau	22426	30.114	0.0156	0.0392		Generator			0.05	1.51	7.82E-04	1.96E-03

Footnotes:

1. Maximally exposed individual
2. These Cancer Risk, Hazard Index, and PM2.5 columns represent the values in the Google Earth Plant Information Table.
3. Each plant may have multiple permits and sources.
4. Permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc.
5. Fuel codes: 98 = diesel, 189 = Natural Gas.
6. If a Health Risk Screening Assessment (HRSA) was completed for the source, the application number will be listed here.
7. The date that the HRSA was completed.
8. Engineer who completed the HRSA. For District purposes only.
9. All HRSA completed before 1/5/2010 need to be multiplied by an age sensitivity factor of 1.7.
10. The HRSA "Chronic Health" number represents the Hazard Index.
11. Further information about common sources:
    a. Sources that only include diesel internal combustion engines can be adjusted using the BAAQMD's Diesel Multiplier worksheet.
    b. The risk from natural gas boilers used for space heating when <25 MM BTU/hr would have an estimated cancer risk of one in a million or less, and a chronic
    c. BAAQMD Reg 11 Rule 16 required that all co-residential (sharing a wall, floor, ceiling or is in the same building as a residential unit) dry cleaners cease use of perc on July 1, 2010. Therefore, there is no cancer risk, hazard or PM2.5 concentrations from co-residential dry cleaning businesses in the BAAQMD.
    d. Non co-residential dry cleaners must phase out use of perc by Jan. 1, 2023. Therefore, the risk from these dry cleaners does not need to be factored in over a 70-year period,
    e. Gas stations can be adjusted using BAAQMD's Gas Station Distance Mulitplier worksheet.
    f. Unless otherwise noted, exempt sources are considered insignificant. See BAAQMD Reg 2 Rule 1 for a list of exempt sources.
    g. This spray booth is considered to be insignificant.

Date last updated:
03/13/2018

Bay Area Air Quality Management District

Roadway Screening Analysis Calculator

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

INSTRUCTIONS:

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

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

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

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

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

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

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

Notes and References listed below the Search Boxes

Search Parameters

County	Santa Clara
Roadway Direction	East-West
Side of the Roadway	South
Distance from Roadway	190 feet
Annual Average Daily Traffic (ADT)	28,355

Results

Santa Clara County

EAST-WEST DIRECTIONAL ROADWAY

PM2.5 annual average

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

Cancer Risk

6.70 (per million)

Stevens Creek Boulevard

Cumulative plus project volumes from traffic report

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

Adjusted for 2015 OEHHA and EMFAC2014 for 2018

4.61

(per million)

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

Notes and References:

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

Link 289 (6ft elevation)

	PM2.5	Risk	Chron.HI	Acute.HI
10 ft S	0.983	93.844	0.108	0.072
25 ft S	0.822	78.564	0.090	0.059
50 ft S	0.638	61.143	0.070	0.046
75 ft S	0.518	49.764	0.057	0.035
100 ft S	0.435	41.826	0.048	0.030
200 ft S	0.257	24.930	0.028	0.021
300 ft S	0.171	16.769	0.019	0.017
400 ft S	0.119	11.778	0.013	0.014
500 ft S	0.086	8.555	0.009	0.011
750 ft S	0.042	4.316	0.004	0.009
1000 ft S	0.023	2.477	0.002	0.007
10 ft N	0.887	97.265	0.103	0.071
25 ft N	0.735	81.562	0.086	0.057
50 ft N	0.577	64.776	0.068	0.046
75 ft N	0.480	54.281	0.056	0.039
100 ft N	0.412	46.870	0.048	0.034
200 ft N	0.261	30.328	0.031	0.021
300 ft N	0.187	22.055	0.022	0.017
400 ft N	0.140	16.712	0.017	0.014
500 ft N	0.108	13.029	0.013	0.012

Attachment D
Comment Letter from
Lozeau Drury LLP
dated October 30, 2018

LOZEAU DRURY LLP
T 510.836.4200
F 510.836.4205
410 12th Street, Suite 250
Oakland, Ca 94607
www.lozeaudrury.com
michael@lozeaudrury.com

October 30, 2018 Via E-mail

Rosalynn Hughey, Director
Sylvia Do, Acting Deputy Director
Robert Rivera, Panning Project Manager
Krinjal Mathur, Environmental Project Manager
Planning, Building and Code Enforcement
City of San José
200 E. Santa Clara Street, 3rd FL
San Jose, CA 95113
rosalynn.hughey@sanjoseca.gov
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robert.rivera@sanjoseca.gov

Re: AC by Marriott - West San Jose Project
(October 31, 2018 Director's Hearing, Agenda Item 4.a; Project File No. HI7-023)

Dear Director Hughey, Deputy Director Do, Mr. Rivera, and Ms. Mathur:

Please accept the following supplemental comments submitted on behalf of Laborers International Union of North America, Local Union 270 and its members ("LIUNA") regarding the Initial Study and Mitigated Negative Declaration ("IS/MND") prepared for the AC by Marriott - West San Jose Project ("Project") (Project File No. HI7-023). Certified Industrial Hygienist, Francis "Bud" Offermann, PE, CIH, has conducted a review of the Project, the IS/MND and relevant appendices regarding the Project's indoor air emissions. Indoor Environmental Engineering Comments (Oct. 29, 2018) (attached). Mr. Offerman concludes that it is likely that the Project will expose future workers employed at the hotel to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde. Mr. Offermann is one of the world's leading experts on indoor air quality and has published extensively on the topic.

Mr. Offermann explains that many composite wood products typically used in hotel construction contain formaldehyde-based glues which off-gas formaldehyde over a very long time period. He states, "The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particle board. These materials are

commonly used in residential and hotel building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims."

Formaldehyde is a known human carcinogen. Mr. Offermann states that there is a fair argument that full-time workers at the AC by Marriott project will be exposed to a cancer risk from formaldehyde of approximately 18.4 per million. This is almost double the Bay Area Air Quality Management District (BAAQMD) CEQA significance threshold for airborne cancer risk of 10 per million. Mr. Offermann states:

> With respect to this project, AC by Marriott - West San Jose, since this is a hotel, guests are expected to have short term exposures (e.g. less than a week), but employees are expected to experience longer term exposures (e.g. 40 hours per week, 50 weeks per year). The longer term exposures for employees is anticipated to result in significant cancer risks resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in residences and hotels.

Offermann Comments, p. 4. Mr. Offermann concludes that this significant environmental impact should be analyzed in an EIR and mitigation measures should be imposed to reduce the risk of formaldehyde exposure. *Id*., pp. 6-7. Mr. Offermann suggests several feasible mitigation measures, such as requiring the use of no-added-formaldehyde composite wood products, which are readily available. Offermann Comments, pp. 6-7. Mr. Offermann also suggests requiring air ventilation systems which would reduce formaldehyde levels. *Id*. Since the MND does not analyze this impact at all, none of these or other mitigation measures are considered.

When a Project exceeds a duly adopted CEQA significance threshold, as here, this alone establishes a fair argument that the project will have a significant adverse environmental impact and an EIR is required. Indeed, in many instances, such air quality thresholds are the only criteria reviewed and treated as dispositive in evaluating the significance of a project's air quality impacts. See, e.g. *Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 960 (County applies BAAQMD's "published CEQA quantitative criteria" and "threshold level of cumulative significance"). See also *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 110-111 ("A 'threshold of significance' for a given environmental effect is simply that level at which the lead agency finds the effects of the project to be significant"). The California Supreme Court made clear the substantial importance that an air district significance threshold plays in providing substantial evidence of a significant adverse impact. *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 327 ("As the [South Coast Air Quality Management] District's established significance threshold for NOx is 55 pounds per day, these estimates [of NOx emissions of 201 to 456 pounds per day] constitute substantial evidence supporting a fair argument for a significant adverse impact"). Since expert evidence demonstrates that the Project will exceed the BAAQMD's CEQA significance

threshold, there is a fair argument that the Project will have significant adverse impacts and an EIR is required.

Mr. Offermann also notes that the high cancer risk that may be posed by the Project's indoor air emissions likely will be exacerbated by the additional cancer risk that exists from vehicle emissions from the adjacent Stevens Creek Boulevard and other nearby roadways. As the previous comments submitted by SWAPE point out, however, the applicant and City have not estimated the cumulative health risk impacts of the Project either on nearby sensitive receptors or future workers at the Project. *See* SWAPE Comment (Oct. 24, 2018). Consistent with SWAPE's observations, Mr. Offermann notes:

> The [IS/MND] does not assess the impact of existing or future traffic related emissions of $PM_{2.5}$ upon the outdoor or indoor air concentrations. The air quality analyses in this MND focuses only on the emissions (pounds/day) of air contaminants from construction and operation and compares these emissions to the requirements established by the Bay Area Air Quality Management District (BAAQMD). The MND contains no air dispersion calculations of the cumulative impact these project related emissions and existing emissions have upon the concentrations of air contaminants in the outdoor and indoor air that people inhale each day.

Offermann Comments, p. 6. Mr. Offermann identifies a rule adopted in San Francisco that identifies a level of PM2.5 that triggers the installation of air filter systems in new development. "The San Francisco Department of Public Health, 2014. Article 38, Enhanced Ventilation Required for Urban Infill Sensitive Use Developments, requires that air filtration, with a minimum efficiency of MERV 13 be installed to remove $PM_{2.5}$ from mechanically supplied outdoor air in all $PM_{2.5}$ impacted areas." Offermann Comments, p. 6. A PM2.5 impacted area includes "[a]ll areas within 500 feet of any freeway or high-traffic road way (defined as urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day), unless air dispersion modeling shows total (traffic and ambient) outdoor concentrations of less than an annual average of 10 $\mu g/m^3$ $PM_{2.5}$, are defined as $PM_{2.5}$ impacted areas." *Id*. Mr. Offermann concludes that:

> It is my experience that based on the high future traffic noise level of 79 dBA L_{dn}. (City of San Jose, 2018, Revised Public Review Draft Initial Study – Mitigative Negative Declaration, Table 14 - Predicted Future Traffic Noise Exposure) that the annual average concentration of $PM_{2.5}$ will be substantially higher than 10 $\mu g/m^3$, and warrant installation of MERV 13 air filters in all mechanically supplied outdoor air ventilation systems.

Id.

LIUNA has previously brought Mr. Offermann's indoor air pollution concerns to the attention of the City. During a Planning Commission hearing held on September 26,

2018 regarding a project proposed at 715 West Julian Street, Planning Department staff responded to the indoor air pollution concerns raised by LIUNA. During that hearing, staff claimed that a California Supreme Court decision – *California Building Industry Ass'n v. Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 386 ("*CBIA"*) – ruled that this type of air quality impact need not be addressed under CEQA because future residents of a mixed use project are part of the project and CEQA does not require evaluation of health or other impacts of a project on itself. To the extent staff again takes the position that future workers are not worthy of considering health protections under CEQA because they are part of the AC by Marriott project, staff's responses would be incorrect as a matter of law. Indeed, rather than support staff's response, the California Supreme Court in *CBIA* expressly holds that potential adverse impacts to future users and residents from pollution generated by a proposed project ***must be addressed*** under CEQA.

At issue in *CBIA* was whether the Air District could enact CEQA guidelines that advised lead agencies that they must analyze the impacts of adjacent environmental conditions on a project. The Supreme Court held that CEQA does not generally require lead agencies to consider the environment's effects on a project. (*CBIA*, 62 Cal.4th at 800-801.) However, to the extent a project may exacerbate existing adverse environmental conditions at or near a project site, those would still have to be considered pursuant to CEQA. (*Id*. at 801) ("CEQA calls upon an agency to evaluate existing conditions in order to assess whether a project could exacerbate hazards that are already present"). In so holding, the Court expressly held that CEQA's statutory language required lead agencies to disclose and analyze "impacts on ***a project's users or residents*** that arise ***from the project's effects*** on the environment." (*Id*. at 800 (emphasis added).)

The carcinogenic formaldehyde emissions identified by Mr. Offermann are not an existing environmental condition. Those emissions to the air will be from the Project. Employees will be users of the hotel. Currently, there is presumably little if any formaldehyde emissions at the site. Once the Project, emissions will begin at levels that pose significant health risks. Rather than excusing the City from addressing the impacts of carcinogens emitted into the indoor air from the Project, the Supreme Court in *CBIA* expressly finds that this type of effect by the project on the environment and a "project's users and residents" must be addressed in the CEQA process.

The Supreme Court's reasoning is well-grounded in CEQA's statutory language. CEQA expressly includes a project's effects on human beings as an effect on the environment that must be addressed in an environmental review. "Section 21083(b)(3)'s express language, for example, requires a finding of a 'significant effect on the environment' (§ 21083(b)) whenever the 'environmental effects of a project will cause substantial adverse effects *on human beings,* either directly or indirectly.'" (*CBIA*, 62 Cal.4th at 800 (emphasis in original.) Likewise, "the Legislature has made clear—in declarations accompanying CEQA's enactment—that public health and safety are of great importance in the statutory scheme." (*Id*., citing e.g., §§ 21000, subds. (b), (c), (d),

(g), 21001, subds. (b), (d).) It goes without saying that the hundreds of future employees at the Project are human beings and the health and safety of those workers is as important to CEQA's safeguards as nearby residents currently living adjacent to the Project site.

For the above additional reasons, the IS/MND for the Project should be withdrawn, an EIR should be prepared, and the draft EIR should be circulated for public review and comment in accordance with CEQA. Thank you for considering these comments.

Sincerely,

Michael R. Lozeau
Lozeau | Drury LLP

ATTACHMENT

IEE INDOOR ENVIRONMENTAL ENGINEERING IEE
1448 Pine Street, Suite 103 San Francisco, California 94109
Telephone: (415) 567-7700
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http://www.iee-sf.com

Date: October 29, 2018

To: Michael R. Lozeau
Lozeau | Drury LLP
410 12th Street, Suite 250
Oakland, California 94607

From: Francis J. Offermann PE CIH

Subject: Indoor Air Quality: AC by Marriott - West San Jose

Pages: 9

Indoor Air Quality Impacts

Indoor air quality (IAQ) directly impacts the comfort and health of building occupants, and the achievement of acceptable IAQ in newly constructed and renovated buildings is a well-recognized design objective. For example, IAQ is addressed by major high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014). Indoor air quality in homes is particularly important because occupants, on average, spend approximately ninety percent of their time indoors with the majority of this time spent at home (EPA, 2011). Some segments of the population that are most susceptible to the effects of poor IAQ, such as the very young and the elderly, occupy their homes almost continuously. Additionally, an increasing number of adults are working from home at least some of the time during the workweek. Indoor air quality also is a serious concern for workers in hotels, offices and other business establishments.

The concentrations of many air pollutants often are elevated in homes and other buildings relative to outdoor air because many of the materials and products used indoors contain and release a variety of pollutants to air (Hodgson et al., 2002; Offermann and Hodgson,

2011). With respect to indoor air contaminants for which inhalation is the primary route of exposure, the critical design and construction parameters are the provision of adequate ventilation and the reduction of indoor sources of the contaminants.

Indoor Formaldehyde Concentrations Impact. In the California New Home Study (CNHS) of 108 new homes in California (Offermann, 2009), 25 air contaminants were measured, and formaldehyde was identified as the indoor air contaminant with the highest cancer risk as determined by the California Proposition 65 Safe Harbor Levels (OEHHA, 2017), No Significant Risk Levels (NSRL) for carcinogens. The NSRL is the daily intake level calculated to result in one excess case of cancer in an exposed population of 100,000 (i.e., ten in one million cancer risk) and for formaldehyde is 40 µg/day. The NSRL concentration of formaldehyde that represents a daily dose of 40 µg is 2 $\mu g/m^3$, assuming a continuous 24-hour exposure, a total daily inhaled air volume of 20 m^3, and 100% absorption by the respiratory system. All of the CNHS homes exceeded this NSRL concentration of 2 $\mu g/m^3$. The median indoor formaldehyde concentration was 36 $\mu g/m^3$, and ranged from 4.8 to 136 $\mu g/m^3$, which corresponds to a median exceedance of the 2 $\mu g/m^3$ NSRL concentration of 18 and a range of 2.3 to 68.

Therefore, the cancer risk of a resident living in a California home with the median indoor formaldehyde concentration of 36 $\mu g/m^3$, is 180 per million as a result of formaldehyde alone. Assuming this project will be built using typical materials and construction methods used in California, there is a fair argument that future residents will experience a cancer risk from formaldehyde of approximately 180 per million. The CEQA significance threshold for airborne cancer risk is 10 per million, as established by the Bay Area Air Quality Management District (BAAQMD, 2017). There is a fair argument that this project will expose future residents to a significant airborne cancer risk of 180 per million, which is 18 times above the CEQA significance threshold. This impact should be analyzed in an environmental impact report ("EIR"), and the agency should impose all feasible mitigation measures to reduce this impact. Several feasible mitigation measures are discussed below and these and other measures should be analyzed in an EIR.

Besides being a human carcinogen, formaldehyde is also a potent eye and respiratory irritant. In the CNHS, many homes exceeded the non-cancer reference exposure levels (RELs) prescribed by California Office of Environmental Health Hazard Assessment (OEHHA, 2017). The percentage of homes exceeding the RELs ranged from 98% for the Chronic REL of 9 $\mu g/m^3$ to 28% for the Acute REL of 55 $\mu g/m^3$.

The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particle board. These materials are commonly used in residential and hotel building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims.

In January 2009, the California Air Resources Board (CARB) adopted an airborne toxics control measure (ATCM) to reduce formaldehyde emissions from composite wood products, including hardwood plywood, particleboard, medium density fiberboard, and also furniture and other finished products made with these wood products (California Air Resources Board 2009). While this formaldehyde ATCM has resulted in reduced emissions from composite wood products sold in California, they do not preclude that homes built with composite wood products meeting the CARB ATCM will have indoor formaldehyde concentrations that are below cancer and non-cancer exposure guidelines.

A follow up study to the California New Home Study (CNHS) was conducted in 2016-2018 (Chan et. al., 2018), and found that the median indoor formaldehyde in new homes built after the 2009 CARB formaldehyde ATCM had lower indoor formaldehyde concentrations, with a median indoor concentrations of 25 $\mu g/m^3$ as compared to a median of 36 $\mu g/m^3$ found in the 2007 CNHS.

Thus, while new homes built after the 2009 CARB formaldehyde ATCM have a 30% lower median indoor formaldehyde concentration and cancer risk, the median lifetime cancer risk is still 125 per million for homes built with CARB compliant composite wood products which is more than 12 times the NSRL 10 in a million cancer risk.

With respect to this project, AC by Marriott - West San Jose, since this is a hotel, guests are expected to have short term exposures (e.g. less than a week), but employees are expected to experience longer term exposures (e.g. 40 hours per week, 50 weeks per year). The longer term exposures for employees is anticipated to result in significant cancer risks resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in residences and hotels.

Assuming that the hotel is constructed with CARB Phase 2 Formaldehyde ATCM materials, and is ventilated with the minimum code required amount of outdoor air, the indoor hotel formaldehyde concentrations are likely similar to those concentrations observed in residences built with CARB Phase 2 Formaldehyde ATCM materials, which is a median of 25 $\mu g/m^3$.

Assuming that the employees work 8 hours per day and inhale 20 m^3 of hotel air per day, the formaldehyde dose per work-day at the hotel is 167 µg/day.

Assuming that the hotel employees work 5 days per week and 50 weeks per year for 45 years (start at age 20 and retire at age 65) the average 70 year lifetime formaldehyde daily dose is 73.6 µg/day.

This is 1.84 times the NSRL of 40 µg/day and represents a cancer risk of 18.4 per million, which exceeds the CEQA cancer risk of 10 per million.

Outdoor Air Ventilation Impact. Another important finding of the CNHS, was that the outdoor air ventilation rates in the homes were very low. Outdoor air ventilation is a very important factor influencing the indoor concentrations of air contaminants, as it is the primary removal mechanism of all indoor air generated air contaminants. Lower outdoor air exchange rates cause indoor generated air contaminants to accumulate to higher indoor air concentrations. Many homeowners rarely open their windows or doors for ventilation as a result of their concerns for security/safety, noise, dust, and odor concerns (Price, 2007). In the CNHS field study, 32% of the homes did not use their windows during the 24-hour Test Day, and 15% of the homes did not use their windows during the entire

preceding week. Most of the homes with no window usage were homes in the winter field session. Thus, a substantial percentage of homeowners never open their windows, especially in the winter season. The median 24-hour measurement was 0.26 ach, with a range of 0.09 ach to 5.3 ach. A total of 67% of the homes had outdoor air exchange rates below the minimum California Building Code (2001) requirement of 0.35 ach. Thus, the relatively tight envelope construction, combined with the fact that many people never open their windows for ventilation, results in homes with low outdoor air exchange rates and higher indoor air contaminant concentrations.

The AC by Marriott - West San Jose is located close to roads with moderate to high traffic, and as a result has been determined to be a sound impacted site according to the Revised Public Review Draft Initial Study – Mitigative Negative Declaration (City of San Jose, 2018), Table 14 – Predicted Future Traffic Noise Exposure, exterior noise levels of up to 79 dBA L_{dn} may occur at upper floor facades of the proposed building.

As a result of the high traffic related outdoor noise levels, the current project anticipates the need for mechanical supply of outdoor air ventilation air to allow for a habitable interior environment with closed windows and doors. Such a ventilation system would allow windows and doors to be kept closed at the occupant's discretion to control exterior noise within residential interiors.

$PM_{2.5}$ Outdoor Concentrations Impact. An additional impact of the nearby motor vehicle traffic associated with this project, are the increased outdoor concentrations of $PM_{2.5}$. The Revised Public Review Draft Initial Study – Mitigative Negative Declaration (City of San Jose, 2018), does not assess the impact of existing or future traffic related emissions of $PM_{2.5}$ upon the outdoor or indoor air concentrations. The air quality analyses in this MND focuses only on the emissions (pounds/day) of air contaminants from construction and operation and compares these emissions to the requirements established by the Bay Area Air Quality Management District (BAAQMD). The MND contains no air dispersion calculations of the cumulative impact these project related emissions and existing emissions have upon the concentrations of air contaminants in the outdoor and indoor air that people inhale each day.

The San Francisco Department of Public Health, 2014. Article 38, Enhanced Ventilation Required for Urban Infill Sensitive Use Developments, requires that air filtration, with a minimum efficiency of MERV 13 be installed to remove $PM_{2.5}$ from mechanically supplied outdoor air in all $PM_{2.5}$ impacted areas. All areas within 500 feet of any freeway or high-traffic road way (defined as urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day), unless air dispersion modeling shows total (traffic and ambient) outdoor concentrations of less than an annual average of 10 $\mu g/m^3$ $PM_{2.5}$, are defined as $PM_{2.5}$ impacted areas.

It is my experience that based on the high future traffic noise level of 79 dBA L_{dn}. (City of San Jose, 2018, Revised Public Review Draft Initial Study – Mitigative Negative Declaration, Table 14 - Predicted Future Traffic Noise Exposure) that the annual average concentration of $PM_{2.5}$ will be substantially higher than 10 $\mu g/m^3$, and warrant installation of MERV 13 air filters in all mechanically supplied outdoor air ventilation systems.

Indoor Air Quality Impact Mitigation Measures

The following are recommended mitigation measures to minimize the impacts upon indoor quality:

- indoor formaldehyde concentrations
- outdoor air ventilation
- $PM_{2.5}$ outdoor air concentrations

Indoor Formaldehyde Concentrations Mitigation. Use only composite wood materials (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins or ultra-low emitting formaldehyde (ULEF) resins (CARB, 2009).

Outdoor Air Ventilation Mitigation. Provide each habitable room with a continuous mechanical supply of outdoor air that meets or exceeds the California 2016 Building

Energy Efficiency Standards (California Energy Commission, 2015) requirements of the greater of 15 cfm/occupant or 0.15 cfm/ft^2 of floor area. Following installation of the system conduct testing and balancing to insure that required amount of outdoor air is entering each habitable room and provide a written report documenting the outdoor air flow rates. Do not use exhaust only mechanical outdoor air systems, use only balanced outdoor air supply and exhaust systems or outdoor air supply only systems. Provide a manual for the hotel management that describes the purpose of the mechanical outdoor air system and the operation and maintenance requirements of the system.

$PM_{2.5}$ Outdoor Air Concentration Mitigation. Install air filtration with a minimum efficiency of MERV 13 to filter the outdoor air entering the mechanical outdoor air supply system. Install the air filters in the system such that they are accessible for replacement by the hotel maintenance staff. Include in the mechanical outdoor air ventilation system manual instructions on how to replace the air filters and the estimated frequency of replacement.

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- M.S. Mechanical Engineering Stanford University, Stanford, CA.
- Graduate Studies in Air Pollution Monitoring and Control University of California, Berkeley, CA.
- B.S. in Mechanical Engineering Rensselaer Polytechnic Institute, Troy, N.Y.

Professional Affiliations

ACGIH, AIHA, ASHRAE, CSI, ASTM, ISIAQ, PARMA, and USGBC

Work Experience

Mr. Offermann PE, CIH, has 36 years experience as an IAQ researcher, technical author, and workshop instructor. He is president of Indoor Environmental Engineering, a San Francisco based IAQ R&D consulting firm. As president of Indoor Environmental Engineering, Mr. Offermann directs an interdisciplinary team of environmental scientists, chemists, and mechanical engineers in indoor air quality building investigations. Under Mr. Offermann's supervision, IEE has developed both pro-active and reactive IAQ measurement methods and diagnostic protocols. He has supervised over 2,000 IAQ investigations in commercial, residential, and institutional buildings and conducted numerous forensic investigations related to IAQ.

Litigation Experience

Mr. Offermann has been qualified numerous times in court as an expert in the field of indoor air quality and ventilation for both plaintiffs and defendants. He has been deposed over 150 times in cases involving indoor air quality/ventilation issues in commercial, residential, and institutional buildings involving construction defects, and/or operation and maintenance problems. Examples of indoor air quality cases he has worked on are alleged personal injury and/or property damages from mold and bacterial contamination/moisture intrusion, building renovation activities, insufficient outdoor air ventilation, off gassing of volatile organic compounds from building materials and coatings, malfunctioning gas heaters and carbon monoxide poisoning, and applications of pesticides. Mr. Offermann has testified with respect to the scientific admissability of expert testimony regarding indoor air quality issues via Daubert and Kelly-Frye motions.