

AIR QUALITY TECHNICAL MEMORANDUM

To: Mr. Addison Garza
From: Sharon Toland
RE: Impacts to Air Quality from the Aspire Project in Escondido, California
Date: August 1, 2019
Att: A, CalEEMod Results

This memorandum presents the results of Harris & Associates' analysis of the potential impacts to air quality from construction and operation of the proposed Aspire Project (project) in the City of Escondido (City). The project would consist of the construction of a six-story mixed-use building that includes 131 residential units including 9 units reserved for Very Low Income Households, 229 parking spaces, common areas and amenities, and approximately 4,289 square feet (sf) of ground floor commercial space situated on property in the Downtown Specific Planning Area on 1.04 gross acres (1.03 net acres). The site currently consists of the existing City Public Parking Lot #1 with some landscaped planters and lighting.

The project site is located in the developed and urban area of downtown Escondido. According to the Downtown Specific Plan (City of Escondido 2013), the project site lies within the Historic Downtown District. Immediately surrounding land uses to the project site consists of primarily commercial and retail uses. Directly north of the project site lies West Valley Parkway, a major arterial road that serves the City of Escondido, followed by Escondido City Hall and the California Center for the Arts, Escondido, on the north side of the street. A bank with surface parking lot surrounding the building borders the project site to the east and a one-way alley that services commercial businesses fronting Grand Avenue lies directly south. These commercial uses include restaurants, a salon, and bridal shop. Maple Street Plaza, a pedestrian plaza with a fountain, landscaping, lighting, benching, and trellises, borders the site to the west.

Construction of the proposed project is anticipated to begin in late 2019 and take approximately 20 months to complete. Grading and site preparation would be accomplished first; construction of the buildings, including architectural coating, would occur subsequently. Standard equipment expected to be used on the site would include a bulldozer, front-end loader, backhoe, grader, forklift, air compressor, welders, and generator. The project would involve 19,000 cubic yards (cy) of cut to include the demolition of the existing parking lot and the constructing of the underground parking structure. The total export from the project site would be disposed of at a permitted facility.

Air Quality

Existing Air Quality Levels

The project site is located within the San Diego Air Basin (SDAB). The San Diego Air Pollution Control District (SDAPCD) manages air quality in the SDAB. The SDAPCD operates a network of ambient air monitoring stations throughout the SDAB. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the California Ambient Air Quality Standards

(CAAQS) and the National Ambient Air Quality Standards (NAAQS). The City operates the Escondido–East Valley Parkway Monitoring Station located on East Valley Parkway, which measures ozone (O₃), nitrogen dioxide (NO₂), particulate matter less than 10 microns (PM₁₀), and particulate matter less than 2.5 microns (PM_{2.5}) concentrations. No carbon monoxide (CO) data are available from monitoring sites in the SDAB after 2012, and no data are available for sulfur dioxide (SO₂) after 2013. However, with one exception for CO during the firestorms of October 2003, the SDAB has not violated the state or federal standards for CO or SO₂ in the last 20 years (SDAPCD 2017).

Concentrations of pollutants from the operational station closest to the project site from 2015 to 2017 are presented in Table 1. Concentrations were reported from the Escondido–East Valley Parkway Monitoring Station in 2015. Concentrations of pollutants from San Diego–Kearny Villa Road Monitoring Station from 2016 and 2017 are presented because the Escondido–East Valley Parkway Monitoring Station was closed for remodeling during these years. Concentrations of 1-hour O₃ exceeded CAAQS in 2017, and 8-hour O₃ CAAQS and NAAQS were exceeded in 2015, 2016, and 2017. The NAAQS and CAAQS for PM₁₀ were not exceeded in any of the 3 years. The monitored 24-hour PM_{2.5} values were not exceeded either. Likewise, the 1-hour and annual NAAQS and CAAQS for NO₂ were not exceeded.

Table 1
Ambient Background Concentrations
(ppm unless otherwise indicated)

Pollutant	Averaging Time	2015 ¹	2016 ¹	2017 ¹	CAAQS Threshold	NAAQS Threshold
O ₃	1 hour	0.079	0.087	0.097	0.09	NA
	8 hour	0.071	0.075	0.084	0.070	0.070
PM ₁₀ (µg/m ³)	State maximum 24-hour concentration	31	35	47	50	NA
	Federal maximum 24-hour concentration	30	36	46	NA	150
PM _{2.5} (µg/m ³)	Maximum 24-hour concentration	29.4	20.3	27.5	NA	35
	Annual average concentration	—	7.8	8	12	12
NO ₂ (ppb)	Maximum 1-hour concentration	46	53	54	180	100
	Annual average concentration	10.06	9.19	9.15	30	53

Sources: CARB 2016; USEPA 2018.

Notes: — = insufficient data were available to determine the value; µg/m³ = micrograms per cubic meter; CAAQS = California Ambient Air Quality Standards; NA = a threshold has not been set; NAAQS = National Ambient Air Quality Standards; NO₂ = nitrogen dioxide; O₃ = ozone; PM₁₀ = particulate matter less than 10 microns in diameter; PM_{2.5} = particulate matter less than 2.5 microns in diameter; ppb = parts per billion; ppm = parts per million

¹ The Escondido–East Valley Parkway Monitoring Station is reported for year 2015. This station was closed for remodeling from 2015 to 2018. Concentrations from the San Diego–Kearny Villa Road Monitoring Station were used for subsequent years.

Significance Thresholds

Appendix G of the California Environmental Quality Act Guidelines states that significance criteria established by the applicable air quality management or air pollution control district may be relied on to make determinations of impact. SDAPCD Rule 20.2 presents air quality impact analysis trigger levels that can be used as numeric methods to demonstrate that a project’s total emissions would not result in a significant impact to air quality. Because SDAPCD does not have air quality impact analysis significance thresholds for emissions of PM_{2.5} and volatile organic compounds (VOCs), it is appropriate to use the *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Air Quality* (Guidelines for Determining Significance – Air Quality) (County of San Diego 2007) as thresholds for these pollutants. The screening thresholds are listed in Table 2.

Table 2
Screening Level Criteria Thresholds for Air Quality Impacts

Pollutant	Emission Rate		
	(pounds/hour)	(pounds/day)	(tons/year)
PM ₁₀	--	100	15
PM _{2.5}		55	10
NO _x	25	250	40
SO _x	25	250	40
CO	100	550	100
Pb	--	3.2	0.6
VOC		75	13.7

Sources: SDAPCD Regulation II, Rule 20.2; County of San Diego 2007.

PM₁₀ – Particulate Matter less than 10 microns

PM_{2.5} – Particulate matter less than 2.5 microns

NO_x – Oxides of Nitrogen

SO_x – Oxides of Sulfur

CO – Carbon Monoxide

Pb – Lead and lead compounds

VOC – Volatile organic compounds

The thresholds listed in Table 2 represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. For nonattainment pollutants (O₃, with ozone precursors NO_x and VOCs, and PM₁₀), if emissions exceed the thresholds shown in Table 2, the proposed project could result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

Regarding evaluating whether a project would have a significant impact on sensitive receptors, air quality regulators typically define sensitive receptors as schools (preschool–12th grade), hospitals, resident care facilities, daycare centers, or other facilities that may house individuals with health conditions who would be adversely impacted by changes in air quality. Any project that has the potential to directly impact a sensitive receptor located within 1 mile and results in a cancer health risk greater than 10 in 1 million would be deemed to have a potentially significant impact.

SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

Compliance with Air Quality Standards

The following analysis estimates construction and operational emissions that would potentially result from the project and compares the results to the significance criteria in Table 2.

Construction

Construction of the proposed project is anticipated to begin in late 2019 and take approximately 20 months to complete. Grading and site preparation would be accomplished first; construction of the buildings, including architectural coating, would occur subsequently. Standard equipment expected to be used on the site for construction would include a bulldozer, excavator, concrete saw, front-end loader, backhoe, grader, crane, forklift, air compressor, welders, cement trucks, and generator. The total export from the project site would be 19,000 cy of materials, which would be disposed of at a permitted facility. Approximately 1,430 total two-way

truck trips would be required for material export, and approximately 32 daily two-way vendor trips would be required for material delivery during the grading and building construction phases, including cement trucks.

Construction of the proposed project would result in temporary air pollutants associated with soil disturbance, dust emissions, employee and material delivery vehicle exhaust, off-gassing from paving and coating activities, and combustion pollutants from off-road construction equipment. Construction-related air pollution emissions can vary day to day, depending on the level of activity, the type of activity, and the prevailing weather conditions. The primary air pollutants of concern from construction activities are particulate matter (including both PM₁₀ and PM_{2.5}), carbon monoxide, and ozone precursors (including volatile organic compounds (VOC) and oxides of nitrogen (NO_x)).

The proposed project is smaller than the air quality study trigger criteria presented in Table 4.3-12 of the City of Escondido General Plan EIR that would trigger the need for an air quality impact assessment (the level for apartment land uses with a density of 20 or more dwelling units per acre is 420 dwelling units) (City of Escondido 2012). Nonetheless, anticipated air pollution emissions were quantified to further demonstrate consistency with the SDAPCD thresholds. Consistent with the City of Escondido General Plan EIR, emissions associated with the project were compared to SDAPCD’s “Air Quality Impact Analysis (AQIA) Trigger Levels” as contained within the SDAPCD Regulation II, Rule 20.2. The project’s criteria pollutant emissions were calculated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. Table 3, Estimated Maximum Daily Construction Emissions (pounds/day), shows the estimated maximum daily construction emissions associated with the construction of the proposed project.

Table 3
Estimated Maximum Daily Construction Emissions (pounds/day)

Construction Year	VOC	NO _x	CO	PM ₁₀	PM _{2.5}
2019	4.2	52.5	25.9	5.1	2.7
2020	46.2	33.6	27.3	3.1	1.7
2021	45.8	30.0	26.2	2.9	1.5
Maximum Daily Emissions	46.2	52.5	27.3	5.1	2.7
<i>Significance Threshold</i>	75	250	550	100	55
Level Exceeded?	No	No	No	No	No

Sources: CalEEMod version 2016.3.2 (output data provided in Attachment A).
SDAPCD Regulation II, Rule 20.2.

County of San Diego Guidelines for Determining Significance – Air Quality, March 19, 2007q1.

Note: Assumes watering of construction site twice daily, use of low-VOC paints, and reduction of construction vehicle speed in compliance with Regulation 4, Rule 52, Particulate Matter, Rule 55, Fugitive Dust Rule, and Rule 67, Architectural Coatings, of the SDAPCD’s rules and regulations, and City of Escondido General Plan EIR Mitigation measure Air-1.

As shown in Table 3, daily construction emissions would not exceed the significance thresholds for VOC, NO_x, CO, PM₁₀, or PM_{2.5}; therefore, impacts during construction would be less than significant.

Operation

After construction has been completed, the project would be associated with ongoing air pollution associated with mobile vehicle sources, energy consumption, as well as “area” sources of emissions, which include landscaping, off-gassing from painting, and other consumer products.

The main operational emissions sources associated with the project would be from traffic. Project-specific estimates of daily vehicle trips were obtained from the Transportation Impact Analysis (LLG 2019). CalEEMod defaults were used for trip length, distribution, purpose, weekday/weekend ratios, vehicle mix, and vehicle emissions factors. Operational energy source emissions would result from on-site natural gas usage. Emissions associated with area sources such as consumer product use and landscaping would also be generated. It was assumed that the project would not include hearths or wood-burning stoves in the proposed residential units.

As with construction emissions, the project’s criteria pollutant emissions were calculated using CalEEMod version 2016.3.2. Table 4, Estimated Maximum Daily Operational Emissions, presents a summary of maximum daily operational emissions for the proposed project at full buildout, and compares these emissions with the SDAPCD AQIA significance thresholds.

Table 4
Estimated Maximum Daily Operational Emissions (pounds/day)

Source	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area	4.8	0.1	10.9	<0.1	<0.1	<0.1
Energy	<0.1	0.2	0.1	<0.1	<0.1	<0.1
Mobile	2.1	8.1	22.0	<0.1	6.1	1.7
Maximum Daily Emissions	6.9	8.4	33.0	<0.1	6.1	1.7
<i>Significance Threshold</i>	75	250	550	250	100	55
Level Exceeded?	No	No	No	No	No	No

Sources: CalEEMod version 2016.3.2 (output data provided in Attachment A).
SDAPCD Regulation II, Rule 20.2.

County of San Diego Guidelines for Determining Significance – Air Quality, March 19, 2007.

Notes: In compliance with Rule 67, Architectural Coatings, of the SDAPCD’s rules and regulations, assumes use of low-VOC paints.
Assumes no hearths or woodstoves.

As shown, operational emissions for the proposed project would be substantially below the significance threshold for all criteria pollutants. Therefore, operation of the project would not violate any air quality standard or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment. Impacts related to project operation would be less than significant.

Cumulative Impacts and Plan Consistency

In analyzing cumulative impacts from the proposed project, the analysis must specifically evaluate a project’s contribution to the cumulative increase in pollutants for which the basin is designated as nonattainment for the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). If the proposed project does not exceed thresholds and is determined to have less than significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality if the emissions from the project, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, the project would only be considered to have a significant cumulative impact if the project’s contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a “cumulatively considerable contribution” to the cumulative air quality impact).

In addition, in analyzing cumulative impacts from the proposed project, the analysis must evaluate a project’s consistency with the plans that serve as the long-term regional air quality planning documents for the purpose of assessing cumulative operational emissions in the basin to ensure the SDAB continues to make progress toward NAAQS- and CAAQS-attainment status (i.e., the San Diego Regional Air Quality Strategy [RAQS]). The project site is located within the SDAB. The SDAPCD manages air quality in the SDAB. Air quality plans applicable to the SDAB include the RAQS, addressing state requirements, and applicable portions of the California State Implementation Plan (SIP), addressing federal requirements. The RAQS and SIP outline the SDAPCD’s plans and control measures designed to attain state and federal air quality standards. The RAQS and SIP were most recently updated in 2016.

The RAQS and SIP rely on San Diego Association of Government (SANDAG) growth projections, which are based in part on city and San Diego County (County) general plans. As such, projects that propose development consistent with the growth anticipated by the applicable general plan(s) are consistent with the RAQS and applicable portions of the SIP. In the event that a project proposes development which is less dense than anticipated within the General Plan, the project would be consistent. If a project proposes development that is greater than that anticipated in the local plan and SANDAG’s growth projections, the project might be in conflict

with the SIP and RAQS and may contribute to a potentially significant cumulative impact on air quality. Cumulative projects located in the SDAB would have the potential to result in a cumulative impact to air quality if, in combination, they would conflict with or obstruct implementation of the RAQS. Individual projects that are inconsistent with the regional planning documents upon which the RAQS is based would have the potential to result in cumulative operational impacts if they represent development and population increases beyond regional projections.

The SDAB has been designated as a federal nonattainment area for ozone (O₃) and a state nonattainment area for O₃, PM₁₀, and PM_{2.5}. Emissions of PM₁₀ and PM_{2.5} associated with construction generally result in short-term impacts. As discussed previously, the emissions of all criteria pollutants from construction would be below the significance levels (see Table 3). Construction would be short-term and temporary in nature. Once construction is completed, construction-related emissions would cease. Long-term operation of the facility would include customer and employee use of commercial facilities, residents living in the building, and associated services to serve and maintain the building, such as mail delivery, trash removal, and landscape and pool maintenance. Projected ongoing operational emissions generated by the proposed project from area, mobile, and energy sources would not exceed the significance thresholds for criteria pollutants VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} (see Table 4). As such, the proposed project would result in less than significant impacts related to criteria pollutant emissions from construction and operation.

Regarding long-term cumulative operational emissions in relation to consistency with local air quality plans, the applicable general plan for the City is the May 2012 General Plan (City of Escondido 2012). The project proposes to construct 131 units on a 1.04 site with a land use designation that anticipates 75 du/acre. The 1.04 acre site would then allow an initial base density of 78 units. However, by relying on the State Density Bonus Law and the City's density transfer pool, the level of development proposed by the project would not conflict with the overall growth forecasted in the General Plan for the Downtown Escondido area. Therefore, with 28 density bonus units per the State Density Bonus Law and transfer of 25 du from the City's downtown density pool the proposed project would be consistent with SANDAG and the local General Plan's growth projections and would not conflict with or obstruct implementation of the SIP or RAQS. Therefore, the project's contribution to cumulative air quality impacts would be less than significant.

Sensitive Receptors

Sensitive receptors are people most likely to be affected by air pollution and include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases (CARB 2005). For the purposes of this analysis, residents are also considered sensitive receptors. The project area is an existing commercial and retail area and there are no residences or other sensitive receptors within at least 500 feet of the project site boundary. However, receptors also include future tenants of the proposed project. The two primary emissions of concern regarding health effects for land development projects are carbon monoxide and toxic air contaminants (TACs).

A carbon monoxide (CO) hotspot is an area of localized CO pollution caused by high vehicle intensity, such as congested intersections and parking garages. If a project increases average delay at signalized intersections operating at Level of Service (LOS) E or F or causes an intersection that would operate at LOS D or better without the project to operate at LOS E or F with the project, a quantitative screening is required. The intersections relevant to the analysis of the project's potential for CO hotspots are those included in the study area for the Transportation Impact Analysis (LLG 2019), which are the intersections with the potential to accommodate the most project traffic. According to the Transportation Impact Analysis (LLG 2019), all study area intersections are forecasted to continue to operate at an acceptable LOS with the project. There would be no potential for a CO hotspot or exposure of sensitive receptors to substantial, project-generated, local CO emissions. Associated hotspot impacts would be less than significant.

According to the San Diego County Guidelines for Determining Significance – Air Quality (County of San Diego 2007), for typical land use projects that do not propose stationary sources of emissions regulated by SDAPCD, Diesel Particulate Matter (DPM), is the primary Toxic Air Contaminant (TAC) of concern. CARB identified DPM as

a TAC in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual (MEI) are higher if a fixed exposure occurs over a longer time period. Health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, are typically based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with a project.

Project construction would result in short-term emissions of DPM from the exhaust of off-road, heavy-duty diesel equipment. As presented in Table 3, maximum daily particulate emissions, which include DPM, would be relatively low compared to the significance thresholds. Additionally, the construction period would be relatively short (20 months) compared to the typical 70-year analysis conducted for health risk assessments. Combined with the dispersive properties of DPM, construction-related emissions of TACs would not expose sensitive receptors to substantial emissions of TACs. Impacts would be less than significant.

As the proposed project would involve the development of primarily multi-family residential uses, project operation would not introduce any new stationary sources of TACs such as diesel-fueled backup generators that are more commonly associated with large commercial and industrial uses. In addition, the project is sited approximately one mile from the nearest freeway (Interstate 15), well over the 500-foot threshold set by CARB (CARB 2005) to avoid exposure of residents to TACs. The site is not within buffer distances included in the City of Escondido General Plan EIR that would require preparation of a Health Risk Assessment (within 500 feet of a waste transfer facility or one mile of operating industrial land uses, medical facilities, or research and development facilities that generate a substantial source of TACs). As discussed above, the proposed project would not have the potential to expose sensitive receptors to TACs from mobile sources to an extent that health risks could result and associated impacts would be less than significant.

Odors

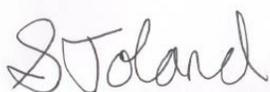
Land uses and industrial operations typically associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass manufacturing (CARB 2005). The proposed project would not involve a land use typically associated with odor complaints. Trash receptacles for the project would be enclosed within a room adjacent to the parking structure. Odors may be generated from vehicles and equipment exhaust emissions during construction of the proposed project. Odors produced during construction would be attributable to emissions from tailpipes of construction equipment and architectural coatings. Such odors are temporary and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, odor impacts resulting from project construction and operation would be less than significant.

Summary

Implementation of the proposed Aspire Project would not result in significant air quality impacts associated with construction and operation of the project. Therefore, no mitigation measures are necessary.

Should you have any questions regarding this memo, please contact me at (619) 481-5002 or Sharon.Toland@WeAreHarris.com.

Sincerely,



Sharon Toland
Project Manager
Harris & Associates

References

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Attachment A
CalEEMod Results

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Touchstone Aspire - San Diego County, Summer

Touchstone Aspire

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	229.00	Space	0.31	91,600.00	0
Recreational Swimming Pool	14.50	1000sqft	0.10	14,539.00	0
Apartments High Rise	131.00	Dwelling Unit	0.50	131,000.00	375
Strip Mall	4.30	1000sqft	0.13	4,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Touchstone Aspire - San Diego County, Summer

Project Characteristics -

Land Use - lot acreage adjusted to add up to 1.04. All common open space areas assumed in pool.

Construction Phase - construction schedule provided by applicant 7/24 and CatEx Report 7/2019

Off-road Equipment -

Off-road Equipment - Off-highway trucks represent cement trucks

Off-road Equipment - Added equipment for parking lot demo and lot excavation

Trips and VMT - assumes 12 CY per truck trip and 32 two-way vendor trips

Grading - Export provided in grading plan; total acres adjusted to 1.04

Vehicle Trips - Adjust to reflect TIA (July 2019)

Woodstoves - No hearths or woodstoves according to development permit

Solid Waste - removed solid waste from swimming pool because it would double count residents

Construction Off-road Equipment Mitigation -

Area Mitigation - SDAPCD Rule 67

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	109.00
tblConstructionPhase	NumDays	200.00	371.00
tblConstructionPhase	NumDays	4.00	40.00
tblConstructionPhase	PhaseEndDate	6/25/2020	3/29/2021
tblConstructionPhase	PhaseEndDate	6/11/2020	3/29/2021
tblConstructionPhase	PhaseEndDate	9/5/2019	10/25/2019
tblConstructionPhase	PhaseStartDate	6/12/2020	10/28/2020
tblConstructionPhase	PhaseStartDate	9/6/2019	10/28/2019
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00

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tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	72.05	0.00
tblFireplaces	NumberNoFireplace	13.10	131.00
tblFireplaces	NumberWood	45.85	0.00
tblGrading	AcresOfGrading	15.00	1.04
tblGrading	MaterialExported	0.00	19,000.00
tblLandUse	LandUseSquareFeet	14,500.00	14,539.00
tblLandUse	LotAcreage	2.06	0.31
tblLandUse	LotAcreage	0.33	0.10
tblLandUse	LotAcreage	2.11	0.50
tblLandUse	LotAcreage	0.10	0.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Building Construction
tblSolidWaste	SolidWasteGenerationRate	82.65	0.00
tblTripsAndVMT	HaulingTripNumber	2,375.00	3,167.00
tblTripsAndVMT	VendorTripNumber	0.00	64.00
tblTripsAndVMT	VendorTripNumber	32.00	64.00
tblVehicleTrips	HO_TTP	39.60	40.00
tblVehicleTrips	HS_TTP	18.80	20.00
tblVehicleTrips	HW_TTP	41.60	40.00
tblVehicleTrips	ST_TR	4.98	5.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	ST_TR	42.04	148.20

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tblVehicleTrips	SU_TR	3.65	5.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	SU_TR	20.43	148.20
tblVehicleTrips	WD_TR	4.20	5.00
tblVehicleTrips	WD_TR	33.82	0.00
tblVehicleTrips	WD_TR	44.32	148.20
tblWoodstoves	NumberCatalytic	6.55	0.00
tblWoodstoves	NumberNoncatalytic	6.55	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

Touchstone Aspire - San Diego County, Summer

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	4.1812	52.4914	25.8626	0.1043	6.5344	1.3714	7.6857	3.0280	1.3057	4.1062	0.0000	11,084.2469	11,084.2469	1.3507	0.0000	11,118.0134
2020	46.1968	33.5881	27.3352	0.0766	1.8133	1.2974	3.1108	0.4908	1.2404	1.7312	0.0000	7,498.2121	7,498.2121	1.1947	0.0000	7,528.0791
2021	45.7887	29.9526	26.2403	0.0759	1.8133	1.0912	2.9046	0.4908	1.0432	1.5340	0.0000	7,433.3657	7,433.3657	1.1691	0.0000	7,462.5936
Maximum	46.1968	52.4914	27.3352	0.1043	6.5344	1.3714	7.6857	3.0280	1.3057	4.1062	0.0000	11,084.2469	11,084.2469	1.3507	0.0000	11,118.0134

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	4.1812	52.4914	25.8626	0.1043	3.9985	1.3714	5.1497	1.6553	1.3057	2.7335	0.0000	11,084.2469	11,084.2469	1.3507	0.0000	11,118.0134
2020	46.1968	33.5881	27.3352	0.0766	1.8133	1.2974	3.1108	0.4908	1.2404	1.7312	0.0000	7,498.2121	7,498.2121	1.1947	0.0000	7,528.0791
2021	45.7887	29.9526	26.2403	0.0759	1.8133	1.0912	2.9046	0.4908	1.0432	1.5340	0.0000	7,433.3657	7,433.3657	1.1691	0.0000	7,462.5936
Maximum	46.1968	52.4914	27.3352	0.1043	3.9985	1.3714	5.1497	1.6553	1.3057	2.7335	0.0000	11,084.2469	11,084.2469	1.3507	0.0000	11,118.0134

Touchstone Aspire - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	24.96	0.00	18.51	34.24	0.00	18.62	0.00	0.00	0.00	0.00	0.00	0.00

Touchstone Aspire - San Diego County, Summer

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	4.8142	0.1253	10.8566	5.7000e-004		0.0598	0.0598		0.0598	0.0598	0.0000	19.5146	19.5146	0.0190	0.0000	19.9897
Energy	0.0290	0.2483	0.1067	1.5800e-003		0.0201	0.0201		0.0201	0.0201		316.7620	316.7620	6.0700e-003	5.8100e-003	318.6443
Mobile	2.0686	8.0869	21.9894	0.0728	6.0219	0.0600	6.0819	1.6095	0.0561	1.6656		7,399.4891	7,399.4891	0.3925		7,409.3017
Total	6.9118	8.4605	32.9527	0.0750	6.0219	0.1399	6.1618	1.6095	0.1359	1.7454	0.0000	7,735.7657	7,735.7657	0.4176	5.8100e-003	7,747.9357

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	4.8142	0.1253	10.8566	5.7000e-004		0.0598	0.0598		0.0598	0.0598	0.0000	19.5146	19.5146	0.0190	0.0000	19.9897
Energy	0.0290	0.2483	0.1067	1.5800e-003		0.0201	0.0201		0.0201	0.0201		316.7620	316.7620	6.0700e-003	5.8100e-003	318.6443
Mobile	2.0686	8.0869	21.9894	0.0728	6.0219	0.0600	6.0819	1.6095	0.0561	1.6656		7,399.4891	7,399.4891	0.3925		7,409.3017
Total	6.9118	8.4605	32.9527	0.0750	6.0219	0.1399	6.1618	1.6095	0.1359	1.7454	0.0000	7,735.7657	7,735.7657	0.4176	5.8100e-003	7,747.9357

Touchstone Aspire - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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	Grading	Grading	9/1/2019	10/25/2019	5	40	
2	Building Construction	Building Construction	10/28/2019	3/29/2021	5	371	
3	Architectural Coating	Architectural Coating	10/28/2020	3/29/2021	5	109	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.04

Acres of Paving: 0.31

Residential Indoor: 265,275; Residential Outdoor: 88,425; Non-Residential Indoor: 27,434; Non-Residential Outdoor: 9,145; Striped Parking Area: 5,496 (Architectural Coating – sqft)

OffRoad Equipment

Touchstone Aspire - San Diego County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Concrete/Industrial Saws	1	6.00	81	0.73
Grading	Excavators	1	6.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Off-Highway Trucks	2	6.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
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
Grading	5	13.00	64.00	3,167.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	140.00	64.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	28.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Touchstone Aspire - San Diego County, Summer

3.2 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					4.6109	0.0000	4.6109	2.4958	0.0000	2.4958			0.0000			0.0000
Off-Road	1.9617	20.7385	11.8305	0.0227		1.0055	1.0055		0.9389	0.9389		2,224.2343	2,224.2343	0.5944		2,239.0937
Total	1.9617	20.7385	11.8305	0.0227	4.6109	1.0055	5.6164	2.4958	0.9389	3.4346		2,224.2343	2,224.2343	0.5944		2,239.0937

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	0.6873	23.7820	5.1337	0.0628	1.3835	0.0898	1.4733	0.3792	0.0859	0.4650		6,852.3802	6,852.3802	0.6064		6,867.5403
Vendor	0.2946	7.9352	2.0486	0.0177	0.4333	0.0552	0.4885	0.1247	0.0528	0.1775		1,894.5065	1,894.5065	0.1463		1,898.1631
Worker	0.0510	0.0356	0.4022	1.1400e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		113.1260	113.1260	3.6100e-003		113.2163
Total	1.0329	31.7529	7.5845	0.0816	1.9236	0.1457	2.0693	0.5322	0.1394	0.6716		8,860.0126	8,860.0126	0.7563		8,878.9197

Touchstone Aspire - San Diego County, Summer

3.2 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					2.0749	0.0000	2.0749	1.1231	0.0000	1.1231			0.0000			0.0000
Off-Road	1.9617	20.7385	11.8305	0.0227		1.0055	1.0055		0.9389	0.9389	0.0000	2,224.2343	2,224.2343	0.5944		2,239.0937
Total	1.9617	20.7385	11.8305	0.0227	2.0749	1.0055	3.0804	1.1231	0.9389	2.0620	0.0000	2,224.2343	2,224.2343	0.5944		2,239.0937

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	0.6873	23.7820	5.1337	0.0628	1.3835	0.0898	1.4733	0.3792	0.0859	0.4650		6,852.3802	6,852.3802	0.6064		6,867.5403
Vendor	0.2946	7.9352	2.0486	0.0177	0.4333	0.0552	0.4885	0.1247	0.0528	0.1775		1,894.5065	1,894.5065	0.1463		1,898.1631
Worker	0.0510	0.0356	0.4022	1.1400e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		113.1260	113.1260	3.6100e-003		113.2163
Total	1.0329	31.7529	7.5845	0.0816	1.9236	0.1457	2.0693	0.5322	0.1394	0.6716		8,860.0126	8,860.0126	0.7563		8,878.9197

Touchstone Aspire - San Diego County, Summer

3.3 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	3.3370	26.7646	19.4822	0.0419		1.3080	1.3080		1.2454	1.2454		3,979.6197	3,979.6197	1.0086		4,004.8340
Total	3.3370	26.7646	19.4822	0.0419		1.3080	1.3080		1.2454	1.2454		3,979.6197	3,979.6197	1.0086		4,004.8340

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	0.2946	7.9352	2.0486	0.0177	0.4333	0.0552	0.4885	0.1247	0.0528	0.1775		1,894.5065	1,894.5065	0.1463		1,898.1631
Worker	0.5497	0.3836	4.3318	0.0122	1.1501	8.2000e-003	1.1583	0.3051	7.5500e-003	0.3126		1,218.2795	1,218.2795	0.0389		1,219.2521
Total	0.8443	8.3188	6.3804	0.0299	1.5833	0.0634	1.6467	0.4298	0.0604	0.4901		3,112.7859	3,112.7859	0.1852		3,117.4152

Touchstone Aspire - San Diego County, Summer

3.3 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	3.3370	26.7646	19.4822	0.0419		1.3080	1.3080		1.2454	1.2454	0.0000	3,979.6197	3,979.6197	1.0086		4,004.8340
Total	3.3370	26.7646	19.4822	0.0419		1.3080	1.3080		1.2454	1.2454	0.0000	3,979.6197	3,979.6197	1.0086		4,004.8340

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	0.2946	7.9352	2.0486	0.0177	0.4333	0.0552	0.4885	0.1247	0.0528	0.1775		1,894.5065	1,894.5065	0.1463		1,898.1631
Worker	0.5497	0.3836	4.3318	0.0122	1.1501	8.2000e-003	1.1583	0.3051	7.5500e-003	0.3126		1,218.2795	1,218.2795	0.0389		1,219.2521
Total	0.8443	8.3188	6.3804	0.0299	1.5833	0.0634	1.6467	0.4298	0.0604	0.4901		3,112.7859	3,112.7859	0.1852		3,117.4152

Touchstone Aspire - San Diego County, Summer

3.3 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	3.0252	24.2723	18.9032	0.0419		1.1415	1.1415		1.0867	1.0867		3,919.0925	3,919.0925	0.9918		3,943.8872
Total	3.0252	24.2723	18.9032	0.0419		1.1415	1.1415		1.0867	1.0867		3,919.0925	3,919.0925	0.9918		3,943.8872

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	0.2392	7.2165	1.8385	0.0175	0.4333	0.0353	0.4686	0.1247	0.0338	0.1585		1,881.8565	1,881.8565	0.1388		1,885.3271
Worker	0.5137	0.3461	3.9684	0.0118	1.1501	8.0700e-003	1.1581	0.3051	7.4400e-003	0.3125		1,179.8459	1,179.8459	0.0352		1,180.7266
Total	0.7529	7.5627	5.8069	0.0294	1.5833	0.0434	1.6267	0.4298	0.0412	0.4710		3,061.7024	3,061.7024	0.1741		3,066.0538

Touchstone Aspire - San Diego County, Summer

3.3 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	3.0252	24.2723	18.9032	0.0419		1.1415	1.1415		1.0867	1.0867	0.0000	3,919.0925	3,919.0925	0.9918		3,943.8872
Total	3.0252	24.2723	18.9032	0.0419		1.1415	1.1415		1.0867	1.0867	0.0000	3,919.0925	3,919.0925	0.9918		3,943.8872

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	0.2392	7.2165	1.8385	0.0175	0.4333	0.0353	0.4686	0.1247	0.0338	0.1585		1,881.8565	1,881.8565	0.1388		1,885.3271
Worker	0.5137	0.3461	3.9684	0.0118	1.1501	8.0700e-003	1.1581	0.3051	7.4400e-003	0.3125		1,179.8459	1,179.8459	0.0352		1,180.7266
Total	0.7529	7.5627	5.8069	0.0294	1.5833	0.0434	1.6267	0.4298	0.0412	0.4710		3,061.7024	3,061.7024	0.1741		3,066.0538

Touchstone Aspire - San Diego County, Summer

3.3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7214	21.5311	18.3059	0.0419		0.9739	0.9739		0.9272	0.9272		3,919.0045	3,919.0045	0.9775		3,943.4425
Total	2.7214	21.5311	18.3059	0.0419		0.9739	0.9739		0.9272	0.9272		3,919.0045	3,919.0045	0.9775		3,943.4425

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	0.1935	6.5171	1.6608	0.0173	0.4333	0.0137	0.4469	0.1247	0.0131	0.1378		1,864.6525	1,864.6525	0.1332		1,867.9833
Worker	0.4843	0.3146	3.7133	0.0114	1.1501	7.9400e-003	1.1580	0.3051	7.3200e-003	0.3124		1,140.2172	1,140.2172	0.0325		1,141.0308
Total	0.6778	6.8317	5.3741	0.0288	1.5833	0.0216	1.6050	0.4298	0.0204	0.4502		3,004.8697	3,004.8697	0.1658		3,009.0141

Touchstone Aspire - San Diego County, Summer

3.3 Building Construction - 2021

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	2.7214	21.5311	18.3059	0.0419		0.9739	0.9739		0.9272	0.9272	0.0000	3,919.0045	3,919.0045	0.9775		3,943.4425
Total	2.7214	21.5311	18.3059	0.0419		0.9739	0.9739		0.9272	0.9272	0.0000	3,919.0045	3,919.0045	0.9775		3,943.4425

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	0.1935	6.5171	1.6608	0.0173	0.4333	0.0137	0.4469	0.1247	0.0131	0.1378		1,864.6525	1,864.6525	0.1332		1,867.9833
Worker	0.4843	0.3146	3.7133	0.0114	1.1501	7.9400e-003	1.1580	0.3051	7.3200e-003	0.3124		1,140.2172	1,140.2172	0.0325		1,141.0308
Total	0.6778	6.8317	5.3741	0.0288	1.5833	0.0216	1.6050	0.4298	0.0204	0.4502		3,004.8697	3,004.8697	0.1658		3,009.0141

Touchstone Aspire - San Diego County, Summer

3.4 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	42.0738					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	42.3160	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	0.1028	0.0692	0.7937	2.3700e-003	0.2300	1.6100e-003	0.2316	0.0610	1.4900e-003	0.0625		235.9692	235.9692	7.0500e-003		236.1453
Total	0.1028	0.0692	0.7937	2.3700e-003	0.2300	1.6100e-003	0.2316	0.0610	1.4900e-003	0.0625		235.9692	235.9692	7.0500e-003		236.1453

Touchstone Aspire - San Diego County, Summer

3.4 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	42.0738					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	42.3160	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	0.1028	0.0692	0.7937	2.3700e-003	0.2300	1.6100e-003	0.2316	0.0610	1.4900e-003	0.0625		235.9692	235.9692	7.0500e-003		236.1453
Total	0.1028	0.0692	0.7937	2.3700e-003	0.2300	1.6100e-003	0.2316	0.0610	1.4900e-003	0.0625		235.9692	235.9692	7.0500e-003		236.1453

Touchstone Aspire - San Diego County, Summer

3.4 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	42.0738					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	42.2927	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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	0.0969	0.0629	0.7427	2.2900e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4600e-003	0.0625		228.0435	228.0435	6.5100e-003		228.2062
Total	0.0969	0.0629	0.7427	2.2900e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4600e-003	0.0625		228.0435	228.0435	6.5100e-003		228.2062

Touchstone Aspire - San Diego County, Summer

3.4 Architectural Coating - 2021

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	42.0738					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	42.2927	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

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	0.0969	0.0629	0.7427	2.2900e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4600e-003	0.0625		228.0435	228.0435	6.5100e-003		228.2062
Total	0.0969	0.0629	0.7427	2.2900e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4600e-003	0.0625		228.0435	228.0435	6.5100e-003		228.2062

4.0 Operational Detail - Mobile

Touchstone Aspire - San Diego County, Summer

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	2.0686	8.0869	21.9894	0.0728	6.0219	0.0600	6.0819	1.6095	0.0561	1.6656		7,399.4891	7,399.4891	0.3925		7,409.3017
Unmitigated	2.0686	8.0869	21.9894	0.0728	6.0219	0.0600	6.0819	1.6095	0.0561	1.6656		7,399.4891	7,399.4891	0.3925		7,409.3017

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	655.00	655.00	655.00	1,858,544	1,858,544
Enclosed Parking with Elevator	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Strip Mall	637.26	637.26	637.26	981,401	981,401
Total	1,292.26	1,292.26	1,292.26	2,839,945	2,839,945

4.3 Trip Type Information

Touchstone Aspire - San Diego County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	10.80	7.30	7.50	40.00	20.00	40.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Enclosed Parking with Elevator	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Recreational Swimming Pool	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Strip Mall	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Touchstone Aspire - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0290	0.2483	0.1067	1.5800e-003		0.0201	0.0201		0.0201	0.0201		316.7620	316.7620	6.0700e-003	5.8100e-003	318.6443
NaturalGas Unmitigated	0.0290	0.2483	0.1067	1.5800e-003		0.0201	0.0201		0.0201	0.0201		316.7620	316.7620	6.0700e-003	5.8100e-003	318.6443

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					
Apartments High Rise	2666.21	0.0288	0.2457	0.1046	1.5700e-003		0.0199	0.0199		0.0199	0.0199		313.6712	313.6712	6.0100e-003	5.7500e-003	315.5352
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
Recreational Swimming Pool	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
Strip Mall	26.2712	2.8000e-004	2.5800e-003	2.1600e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		3.0907	3.0907	6.0000e-005	6.0000e-005	3.1091
Total		0.0290	0.2483	0.1067	1.5900e-003		0.0201	0.0201		0.0201	0.0201		316.7619	316.7619	6.0700e-003	5.8100e-003	318.6443

Touchstone Aspire - San Diego County, Summer

5.2 Energy by Land Use - NaturalGas

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					
Apartments High Rise	2.66621	0.0288	0.2457	0.1046	1.5700e-003		0.0199	0.0199		0.0199	0.0199		313.6712	313.6712	6.0100e-003	5.7500e-003	315.5352
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
Recreational Swimming Pool	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
Strip Mall	0.0262712	2.8000e-004	2.5800e-003	2.1600e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		3.0907	3.0907	6.0000e-005	6.0000e-005	3.1091
Total		0.0290	0.2483	0.1067	1.5900e-003		0.0201	0.0201		0.0201	0.0201		316.7619	316.7619	6.0700e-003	5.8100e-003	318.6443

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed

Touchstone Aspire - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.8142	0.1253	10.8566	5.7000e-004		0.0598	0.0598		0.0598	0.0598	0.0000	19.5146	19.5146	0.0190	0.0000	19.9897
Unmitigated	4.8142	0.1253	10.8566	5.7000e-004		0.0598	0.0598		0.0598	0.0598	0.0000	19.5146	19.5146	0.0190	0.0000	19.9897

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	1.2565					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.2272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3305	0.1253	10.8566	5.7000e-004		0.0598	0.0598		0.0598	0.0598		19.5146	19.5146	0.0190		19.9897
Total	4.8142	0.1253	10.8566	5.7000e-004		0.0598	0.0598		0.0598	0.0598	0.0000	19.5146	19.5146	0.0190	0.0000	19.9897

Touchstone Aspire - San Diego County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2565					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.2272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3305	0.1253	10.8566	5.7000e-004		0.0598	0.0598		0.0598	0.0598		19.5146	19.5146	0.0190		19.9897
Total	4.8142	0.1253	10.8566	5.7000e-004		0.0598	0.0598		0.0598	0.0598	0.0000	19.5146	19.5146	0.0190	0.0000	19.9897

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Touchstone Aspire - San Diego County, Summer

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation
