

Appendix B

Air Quality Impact Analysis

AIR QUALITY IMPACT ANALYSIS

4th AND HEWITT PROJECT

LOS ANGELES, CALIFORNIA

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EXECUTIVE SUMMARY

The Project would develop an 18-story office and commercial building located on an approximately 1.31-acre parcel at the intersection of E. 4th Street and S. Hewitt Street, in the City Los Angeles, California (City). The Project Site is currently occupied by a 7,800-square foot (sf) building formerly occupied by the Architecture and Design (A+D Museum) at the corner of S. Colyton Street and E. 4th Street, which would remain in place, as well as 1,000 sf of storage space associated with the 7,800-sf building, approximately 6,030 sf of office and related garage/storage space, and approximately 39,751 sf of surface parking lots, which would be demolished.

The California Emissions Estimator Model (CalEEMod2016.3.2), approved by the South Coast Air Quality Management District (SCAQMD), was used to calculate the Project-related emissions during construction and operations, which were compared to relevant SCAQMD Air Quality Significance thresholds. The maximum daily emissions of criteria pollutants would not exceed applicable regional significance thresholds, or applicable local significance thresholds (LST) criteria during construction or operations. The proposed office and restaurant uses are not land uses typically associated with substantial emissions of toxic air contaminants (TAC) or substantial odor concentrations. Pursuant to SCAQMD guidance, projects that do not exceed relevant significance threshold quantities would also not have a substantial cumulative impact, and therefore, the Project would have a less than significant contribution to cumulative impacts.

CLIMATE AND METEOROLOGY

REGIONAL CLIMATE

The North Pacific high-pressure cell is the dominant climatic influence over the eastern North Pacific Ocean, particularly during the summer months. This high-pressure cell produces a predominantly northwesterly flow of maritime air over the California coastal waters. During the winter, the Pacific High weakens and moves south, resulting in weaker and less persistent northwesterly winds along the California coast than in the warmer half of the year.

As the air mass approaches the coast of California, this large-scale circulation pattern is modified by local influences. The differential heating between the desert and the adjacent Pacific Ocean modifies the prevailing winds, enhancing them during the warmer half of the year and weakening the winds during the colder portion. On a local and sub-regional basis, the airflow in California is channeled by its mountain ranges and valleys. The coastal mountain ranges limit the flow of maritime air into the interior of California. This transition from a cool and damp marine environment to a dry and warm continental climate therefore occurs over a fairly short distance.

SOUTH COAST AIR BASIN

The South Coast Air Basin (SCAB) is a 6,600-square mile coastal plain bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. SCAB conditions are characterized by warm summers,

mild winters, infrequent rainfall, moderate onshore daytime breezes, and moderate humidity levels.

All seasons generally exhibit onshore flows during the day and offshore flows at night, after the land cools below the temperature of the ocean. The likelihood of strong offshore flows, including Santa Ana winds, is greater during winter than during summer.

The topography and climate of Southern California combine to produce unhealthful air quality in the SCAB. Low temperature inversions, light winds, shallow vertical mixing, and extensive sunlight, in conjunction with topographical features such as adjacent mountain ranges that hinder dispersion of air pollutants, combine to create degraded quality, especially in inland valleys of the SCAB.

AIR QUALITY SETTING

AMBIENT AIR QUALITY STANDARDS (AAQS)

In order to gauge the significance of the air quality impacts of the Project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality that are considered to be safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, which as a group are referred to as "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent research has shown, however, that chronic exposure to ozone (O₃) (the primary ingredient in photochemical smog) may lead to adverse respiratory health even at concentrations close to the ambient standard.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. Because the State of California had established AAQS several years before the Federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between State and National clean air standards. New National AAQS were adopted in 1997, which included standards for chronic O₃ exposure (8+ hours per day) and for very small diameter particulate matter (PM_{2.5}). In 2002, the State adopted a Statewide PM_{2.5} standard that is more stringent than the Federal standard. The exact standards in effect for various pollutants have been revised over time. Those standards currently in effect in California are shown in **Table 1, Ambient Air Quality**. Sources and health and environmental effects of various pollutants are shown in **Table 2, Sources and Health and Environmental Effects of Major Criteria Pollutants**.

Table 1
Ambient Air Quality

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM ₁₀) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM _{2.5}) ⁹	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹¹	—	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m ³		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (5/4/16)

Table 1 (continued)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM10 standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2990

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Table 2
Sources and Health and Environmental Effects of Major Criteria Pollutants

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	<ul style="list-style-type: none"> Sources that burn fuel, such as automobiles, trucks, heavy construction equipment, farming equipment, and residential heating. 	<ul style="list-style-type: none"> Reduced tolerance for exercise. Impairment of fetal development. Possible impairment of central nervous system functions. Aggravation of some heart diseases (including angina pectoris).
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> Sources that burn fuel, such as automobiles, trucks, heavy construction equipment, farming equipment, and residential heating. 	<ul style="list-style-type: none"> Aggravation of chronic respiratory disease and asthma. Atmospheric discoloration.
Ozone (O ₃)	<ul style="list-style-type: none"> Formed when reactive organic gases (ROG) and nitrogen oxides react in the presence of sunlight. ROG sources include any source that burns fuels, (e.g., gasoline, natural gas, wood, oil) solvents, petroleum processing and storage, and pesticides. 	<ul style="list-style-type: none"> Pulmonary function decrements and localized lung injury in humans and animals. Increased respiratory related hospital admissions and emergency room visits. Increased mortality risk. Reduction of plant productivity.
Lead (Pb)	<ul style="list-style-type: none"> Metal Smelters. Resource Recovery. Leaded Gasoline. Deterioration of Lead Paint. 	<ul style="list-style-type: none"> Impairment of blood formation and nerve conduction. Kidney and heart disease. Decreased immunity and reproductive function. Behavioral and hearing problems in children.
Respirable Particulate Matter (PM ₁₀)	<ul style="list-style-type: none"> Road Dust. Windblown Dust (Agriculture). Construction (Fireplaces). Also formed from other pollutants (acid rain, NO_x, SO_x, organics). Incomplete combustion of any fuel. 	<ul style="list-style-type: none"> Aggravation of respiratory and cardiovascular diseases. Decline in lung function or growth in children. Increased risk of premature death. Increased risk of lung cancer. Reduced visibility.
Fine Particulate Matter (PM _{2.5})	<ul style="list-style-type: none"> Fuel Combustion in Motor Vehicles, Equipment and Industrial Sources. Residential and Agricultural Burning. Also formed from the reaction of other pollutants (acid rain, NO_x, SO_x, and organics). 	<ul style="list-style-type: none"> Aggravation of respiratory and cardiovascular diseases. Decline in lung function or growth in children. Increased risk of premature death. Increased risk of lung cancer.
Sulfur Dioxide (SO ₂)	<ul style="list-style-type: none"> Coal or Oil Burning Power Plants and Industries. Refineries. Diesel Engines. 	<ul style="list-style-type: none"> Respiratory symptoms (bronchoconstriction, possible wheezing, or shortness of breath) during exercise or physical activity in persons with asthma.
Sources: SCAQMD. 2017. Final AQMP, Table 2-1. March. CARB. 2009. ARB Fact Sheet: Air Pollution Sources, Effects and Control. December.		

BASELINE AIR QUALITY

Existing levels of ambient air quality and historical trends and projections in the Project area are well documented from measurements made by the South Coast Air Quality Management District (SCAQMD). The central Los Angeles (downtown) air monitoring station (Station 087) is closest to the Project Site and is therefore the most representative of the Project area air quality. **Table 3** is a 5-year summary of monitoring data for the major air pollutants compiled from this air monitoring station.

1. Photochemical smog (O₃) levels occasionally exceed standards. The 1-hour state standard was exceeded 12 times in the last five years near central Los Angeles. The federal 8-hour O₃ standard has been exceeded 11 times, and the 8-hour state O₃ standard has been exceeded 30 times in the past five years near central Los Angeles. The central Los Angeles O₃ air quality problem is much less severe than in inland valleys of the SCAB.
2. PM₁₀ levels as measured near the Project Site exceeded the State 24-hour standard on approximately 9 percent of all days monitored in the past five years, but did not exceed the national 24-hour particulate standard on any days monitored in the last five years.
3. A substantial fraction of PM₁₀ is comprised of ultra-small diameter particulates capable of being inhaled into deep lung tissue (PM_{2.5}). Approximately 1.1 percent of all days monitored in the Project vicinity in the past five years exceeded the current national 24-hour standard of 35 micrograms per cubic meter (µg/m³).
4. More localized pollutants, such as CO, NO_x, etc. are very low near the Project Site. There is substantial excess dispersive capacity to accommodate localized vehicular air pollutants, such as NO_x or CO, without any threat of violating applicable AAQS.

Table 3
Project Area Air Quality Monitoring Summary – 2015-2019
(Days that Standards Were Exceeded and Maximum Observed Levels)

Pollutant/Standard	2015	2016	2017	2018	2019
Ozone (O₃)					
1-Hour > 0.09 ppm (S)	2	2	6	2	0
8-Hour > 0.07 ppm (S)	6	4	14	4	2
8- Hour > 0.075 ppm (F)	0	1	9	0	1
Maximum 1-Hour Conc. (ppm)	0.104	0.103	0.116	0.098	0.085
Maximum 8-Hour Conc. (ppm)	0.074	0.078	0.086	0.073	0.080
Carbon Monoxide (CO)					
1-Hour > 20. ppm (S)	0	0	0	0	0
1-Hour > 9. ppm (S, F)	0	0	0	0	0
Maximum 8-Hour Conc. (ppm)	1.8	1.4	1.6	1.7	1.6
Nitrogen Dioxide (NO₂)					
1-Hour > 0.18 ppm (S)	0	0	0	0	0
Maximum 1-Hour Conc. (ppm)	0.079	0.065	0.081	0.071	0.070

Pollutant/Standard	2015	2016	2017	2018	2019
Inhalable Particulates (PM₁₀)					
24-Hour > 50 µg/m ³ (S)	26/336	18/277	41/340	31/363	3/9
24-Hour > 150 µg/m ³ (F)	0/336	0/277	0/340	0/363	0/9
Maximum 24-Hr. Conc. (µg/m ³)	88	67	96	81	62
Ultra-Fine Particulates (PM_{2.5})					
24-Hour > 35 µg/m ³ (F)	7/342	2/357	5/358	3/344	1/260
Maximum 24-Hour Conc. (µg/m ³)	56.4	44.4	49.2	43.8	43.50
Source: SCAQMD. Central Los Angeles Monitoring Station Reports. Available at: http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year . Accessed on May 6, 2021.					
S = State Standard. F = Federal Standard. ppm = parts per million. Conc. = Concentration.					

AIR QUALITY PLANNING

In the SCAB, the agencies designated by the governor to develop regional air quality plans are the SCAQMD and the Southern California Association of Governments (SCAG). The two agencies first adopted an Air Quality Management Plan (AQMP) in 1979, which has been revised several times. The 2016 AQMP, adopted in 2017, is the currently applicable AQMP for the SCAB.

The most current regional attainment emissions forecast for O₃ precursors (ROG,¹ and NO_x) and for CO and PM are shown in **Table 4**. Substantial reductions in emissions of ROG, NO_x and CO are forecast to continue throughout the next few decades, while PM₁₀ and PM_{2.5} are forecast to slightly increase.

Table 4
South Coast Air Basin Emissions Forecasts (Emissions in tons/day)

Pollutant	2020	2025	2030	2035
Nitrogen Oxide (NO_x)	357	289	266	257
Volatile Organic Compounds (VOCs)^a	400	393	393	391
PM₁₀	161	165	170	172
PM_{2.5}	67	68	70	71
Source: California Air Resources Board. 2013. Almanac of Air Quality.				
^a For purposes of this analysis, volatile organic compounds (VOC) and ROG are used interchangeably since ROG represents approximately 99.9 percent of VOC.				

The 2016 AQMP has projected the following attainment deadlines for all Federal non-attainment pollutants as follows²:

¹ For purposes of this analysis, volatile organic compounds (VOC) and ROG are used interchangeably since ROG represents approximately 99.9 percent of VOC.

² South Coast Air Quality Management District. 2017. Final 2016 Air Quality Management Plan, Table 2-3. March.

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- 1-hour O₃ (120 ppb) 2023 (revoked standard)
 - 8-hour O₃ (70 ppb) 2032
 - 8-hour O₃ (75 ppb) 2032 (old standard)
 - 24-hour PM_{2.5} (35 µg/m³) 2019
 - Annual PM_{2.5} (12 µg/m³) 2021

EXISTING LAND USE EMISSIONS

The Project Site currently contains 6,030 square feet (sf) of office space and related garage and storage space, a 7,800-sf building formerly occupied by the A+D Museum and its 1,000 sf of storage space, and approximately 39,750 sf of surface parking lots. The Project would remove the existing structures and parking lots from the Project Site, except for the 7,800-sf building, which would be retained.³ The existing uses to be removed currently generate criteria pollutant emissions due to use of electricity and other utilities, as well as mobile emissions from vehicle trips. The Project Transportation Impact Study estimates the existing vehicle trips generated by the former A+D Museum to be nine trips per day (which would continue with the Project) and the existing vehicle trips generated by the office use to be approximately 32 trips per day.⁴ However, due to the limited extent of the existing land uses and associated emissions, these are conservatively not quantified in this analysis; therefore, the actual net increase in Project emissions over existing conditions presented later in this report would be incrementally less than shown.

SENSITIVE RECEPTORS

Sensitive receptors are generally individuals that are most susceptible to respiratory distress, such as asthmatics, the elderly, young children, athletes, and people already weakened by other disease or illness; therefore, sensitive receptor locations typically include residences, schools, childcare centers, nursing homes, and hospitals, but they may also include playgrounds and athletic facilities. One sensitive receptor is located adjacent to the Project, and another sensitive receptor is located nearby. A small narrow structure, the 428 South Hewitt Street building, houses a residential unit in addition to its commercial use (Resident LA). This structure is located 80 feet southeast of the Project Site. The other sensitive use, with a larger concentration of receptors, is the 6-story multi-unit residential building located at 825 East 4th Street, which is located 200 feet northwest of the Project Site.

³ At the time that the Notice of Preparation for the Project was issued (September 20, 2017), the building was occupied by the A+D Museum. In the summer of 2020, the A+D Museum moved out of the building and began operating virtually. The building is currently vacant. While there are no plans for reoccupation as of the date of this study, it is anticipated that the building would be re-occupied with a use that is consistent with recent uses, such as the A+D Museum, for which the building interior is customized. The Project's requested discretionary approvals would not physically alter the 7,800-sf building.

⁴ Gibson Transportation Consulting, Inc. 2022. Transportation Impact Study for the 4th & Hewitt Project. April (Revised).

AIR QUALITY IMPACTS

STATE STANDARDS OF SIGNIFICANCE

Air quality impacts are considered “significant” if they cause clean air standards to be violated where they are currently met, or if they “substantially” contribute to an existing violation of standards. Any substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions, such as dust or odors, would also be considered a significant impact.

According to Appendix G of the California CEQA Guidelines, a project would have a potentially significant impact if it would:

- a) Conflict with or obstruct implementation of the applicable air quality plan;
- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard;
- c) Expose sensitive receptors to substantial pollutant concentrations; and/or
- d) Result in other emissions such as those leading to odors adversely affecting a substantial number of people.

As evaluated in the Initial Study prepared for the Project (City of Los Angeles Department of City Planning, September 2017), the Project involves a mixed-commercial development that includes commercial and office uses that do not typically create objectionable odors (as may be generated by manufacturing, industrial, or sewage treatment processes). During construction and operation of the Project, trash receptacles would be provided and covered and properly maintained to control odors. Therefore, potential odor impacts would be less than significant, and no mitigation measures would be required. No further analysis of Threshold d above is required.

SCAQMD AIR QUALITY SIGNIFICANCE THRESHOLDS

Primary and Secondary Pollutants

Primary pollutants are those that are emitted in their already unhealthful form and may cause air quality impacts near an emission source(s) where concentrations will be highest. CO is an example of such a pollutant. Primary pollutant impacts can generally be evaluated directly in comparison to appropriate clean air standards. Violations of these standards where they are currently met, or a measurable worsening of an existing or future violation, would be considered a significant impact. Many particulates, especially fugitive dust emissions, are also primary pollutants. Because of the non-attainment status of the SCAB for PM₁₀, an aggressive dust control program is generally required to control fugitive dust during construction projects.

Secondary pollutants are those that require time to transform from a more benign form to a more unhealthful contaminant, such as ozone. Their impact occurs regionally and is not limited to the immediate vicinity of an emission source of precursor pollutants. To determine the significance of

such pollutants, the SCAQMD has designated significant emissions levels of the precursor pollutants as surrogates for evaluating regional air quality impact significance independent of chemical transformation processes.

Projects with daily emissions that exceed any of the following emission thresholds shown in **Table 5** are recommended by the SCAQMD to be considered significant per the SCAQMD CEQA Air Quality Handbook guidelines.

Table 5
SCAQMD Daily Emissions Thresholds

Pollutant	Construction	Operations
ROG	75	55
NO _x	100	55
CO	550	550
PM ₁₀	150	150
PM _{2.5}	55	55
SO _x	150	150
Lead	3	3

Sources: SCAQMD. 1993. CEQA Air Quality Handbook. November.
SCAQMD. 2019. South Coast AQMD Air Quality Significance Thresholds. April.

Localized Significance Thresholds

The SCAQMD has developed analysis parameters to evaluate ambient air quality on a local level, in addition to the more regional emissions-based thresholds of significance. These analysis elements are called LSTs. LSTs were developed in response to the SCAQMD Governing Board's Environmental Justice Enhancement Initiative 1-4. The LST methodology was provisionally adopted in October 2003 and formally approved by the SCAQMD's Mobile Source Committee in February 2005. LSTs vary by site size and the distance to the nearest sensitive use. The SCAQMD provides look up tables to determine the appropriate thresholds to be used for any project.

Toxic Air Contaminants

Based on the SCAQMD's CEQA Air Quality Handbook, a project would cause a significant impact by exposing sensitive receptors to TACs if it would emit carcinogenic materials or TACs that exceed the maximum incremental cancer risk of ten in one million, or a cancer burden greater than 0.5 excess cancer cases (in areas greater than or equal to 1 in 1 million), or an acute or chronic hazard index of 1.0.

Cumulative Impacts

In August 2003, the SCAQMD prepared the White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution, the focus of which was to outline the strategy of how the SCAQMD intends to identify and further address cumulative impacts of air pollution, so that all communities under its purview receive equitable treatment and attention as to their local

air quality concerns.⁵ Appendix D to this white paper, Cumulative Impact Analysis Requirements Pursuant to CEQA, describes the procedures by which the SCAQMD complies with the requirement of CEQA to analyze cumulative impacts, where the SCAQMD is the Lead Agency, permitting entity, or commenting agency. The SCAQMD has not adopted numerical thresholds that apply to the summation or overlap of related projects under construction or operating at the same time as the construction or operational phases of a proposed project. Rather, as stated in Appendix D:

“As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is $HI > 1.0$ while the cumulative (facility-wide) is $HI > 3.0$.⁶ It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.

Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.”

For the Project, the SCAQMD is the commenting agency, while the Lead Agency is the City of Los Angeles. It should be noted, however, that the SCAQMD also states in Appendix D:

“As a Commenting Agency, the AQMD recommends that other public agencies perform cumulative impact analyses relative to air quality in the same manner as does AQMD.”

The assessment of cumulative impacts in this analysis is therefore consistent with the SCAQMD recommended methodology; Projects impacts that do not exceed the SCAQMD’s project-specific significance thresholds are not considered cumulatively considerable.

Additional Indicators

In its CEQA Air Quality Handbook, the SCAQMD also states that additional indicators should be used as screening criteria to determine the need for further analysis with respect to air quality. The additional indicators are as follows:

- Whether a project could interfere with the attainment of the Federal or State ambient air quality standards by either violating or contributing to an existing or projected air quality violation.

⁵ SCAQMD. 2003. White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. August.

⁶ The Hazard Index TAC significance threshold of 1.0 or less for projects or 3.0 or less for cumulative scenarios (facility-wide) pertains to the SCAQMD’s Rule 1402, which applies to existing facilities that emit TACs and not to the Project.

-
- Whether a project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP and in other than planned locations for the project's build-out year.
 - Whether a project could generate vehicle trips that cause a CO hot spot.

CONSTRUCTION PERIOD IMPACTS

Construction Activity Emissions

CalEEMod was developed by the SCAQMD to provide a model by which to calculate both construction emissions and operational emissions from a variety of land use projects. It calculates both the daily maximum and annual average emissions for criteria pollutants as well as total or annual greenhouse gas (GHG) emissions.

Estimated construction emissions were modeled using CalEEMod Version 2016.3.2 to identify maximum daily emissions for each pollutant during Project construction. In 2004, United States Environmental Protection Agency (USEPA) finalized Tier 4 emission standards for nonroad diesel engines and sulfur reductions in nonroad diesel fuel that reduce harmful emissions and directly help states and local areas designated as 8-hour ozone nonattainment areas to improve their air quality.⁷ Section 1039.101 of the Code of Federal Regulations provides Tier 4 exhaust emission standards for PM, NO_x, and CO.⁸ All diesel-powered on-site construction equipment would incorporate USEPA Tier 4 emission reduction technology for nonroad diesel engines as Project Design Feature, AQ-PDF-1.

- **AQ-PDF-1:** All diesel-powered equipment utilized on-site during the construction period will meet, at a minimum, United States Environmental Protection Agency Tier 4 emission reduction technology for nonroad diesel engines.

Additionally, during construction activities, pursuant to SCAQMD Rule 403 (Fugitive Dust), the Project would be required to implement dust control measures. Although Rule 403 lists several dust control techniques that may be implemented, the only dust control action included in the modeling of the Project's construction emissions using CalEEMod was the watering of exposed soils twice daily.

The Project Site is 1.3-acres in size, and the Project entails the demolition of 7,030 sf of existing buildings and 39,751 sf of surface parking lots, requiring hauling of 1,518 cubic yards (CY) (1,822 tons) of demolition debris⁹ off-site for recycling or disposal. Grading export of 75,200 CY will be hauled in 14 CY trucks to the Azusa Land Reclamation Landfill (approximately 25 miles, one way). The Project proposes construction of 8,149 sf of restaurant space, 311,682 sf of office space, 16,294 sf of office exterior common areas, a parking structure for 660 vehicles, and other common

⁷ USEPA. Final Rule for Control of Emissions of Air Pollution From Nonroad Diesel Engines and Fuel. Available at: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-control-emissions-air-pollution-nonroad-diesel>. Accessed December 6, 2021.

⁸ Code of Federal Regulations, Title 40 Chapter I Subchapter U Part 1039 Subpart B § 1039.101.

⁹ Construction Debris including asphalt and concrete is approximately 2,400 pounds/cubic yard, according to data from CalRecycle. Solid Waste Cleanup Program Weights and Volumes for Project Estimates. Available at: <https://www.calrecycle.ca.gov/swfacilities/cdi/tools/calculations>. Accessed on December 20, 2019.

use landscaped and hardscaped areas. Construction was modeled in CalEEMod Version 2016.3.2 using a construction schedule provided by the Applicant (LIG – 900, 910 and 926 E. 4th St., 405-411 S. Hewitt St., LLC), with construction starting in 2021 and concluding in 2023 (refer to **Appendix A**). The Project development schedule has been revised, assuming that construction would begin in late 2022 and conclude in 2025. As construction equipment and vehicles are becoming “cleaner” (generating fewer emissions) over time as increasingly stringent Federal, State, and local regulations are implemented to reduce pollutants in the atmosphere, the Project’s construction emissions for a later start date would be the same or less than those reported in this evaluation. As such, the following analysis provides a more conservative estimate of emissions as the Project’s actual construction emissions would be anticipated to be reduced by use of more efficient vehicles and fuels that would be available and/or required in the future. The Project’s paving and architectural coating phases were modeled to overlap with the building construction phase. The CalEEMod default equipment fleet for a project of this size was used, though extra equipment was added to the grading phase to account for excavation of the underground parking structure. The schedule and equipment fleet modeled are shown in **Table 6**.

Table 6
Construction Activity Equipment Fleet

Phase Name and Duration	Equipment
Demolition (25 days)	1 Concrete Saw
	1 Dozer
	3 Loader/Backhoes
Grading (70 days)	1 Grader
	1 Dozer
	1 Excavator
	3 Loader/Backhoes
Construction (547 days)	1 Crane
	1 Loader/Backhoe
	1 Generator Set
	3 Welders
	1 Forklift
Paving (70 days) ¹	1 Paver
	1 Cement Mixer
	1 Paving Equipment
	1 Loader/Backhoe
	1 Roller
Architectural Coating (70 days) ¹	1 Air Compressor

¹ Paving and Architectural Coating activities would overlap with the Building Construction phase.

Utilizing the indicated equipment fleet and durations shown in Table 6, with implementation of Project Design Feature AQ-PDF-1 and the watering of exposed soils pursuant to SCAQMD Rule 403, the maximum daily construction emissions, as calculated by CalEEMod, are listed in **Table 7**. As shown in Table 7 below, Project construction activities would not exceed the applicable SCAQMD CEQA significance thresholds.

Construction Period Toxic Air Contaminants

Construction equipment exhaust, as from the operation of heavy-duty equipment, contains carcinogenic compounds, or TACs within the diesel exhaust particulates. The toxicity of diesel

exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. The SCAQMD does not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe and not over a relatively brief construction period (in the case of the Project, 28 months) due to the lack of health risk associated with such a brief exposure.

Table 7
Construction Activity Maximum Daily Emissions

Construction Period ^a	Maximum Daily Emissions (pounds/day) ^c					
	ROG ^b	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
2021^d						
Summer	2.61	51.86	27.21	0.18	6.10	2.36
Winter	2.73	52.74	27.72	0.18	6.10	2.37
2022						
Summer	2.42	17.46	23.89	0.07	3.48	1.22
Winter	2.54	17.50	23.43	0.07	3.48	1.22
2023						
Summer	48.50	18.65	36.26	0.09	4.24	1.51
Winter	48.64	18.69	35.60	0.09	4.24	1.51
Maximum Day Emissions	48.64	52.74	36.26	0.18	6.10	2.37
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No
^a The Project construction schedule has been revised to 2022 to 2025 since preparation of the CalEEMod output sheets for the Project. The estimates provided here are conservative, as emissions from construction equipment and vehicles remain the same or decrease over time. ^b SCAQMD significance threshold is in terms of VOC while CalEEMod calculates reactive organic compounds (ROG) emissions. For purposes of this analysis, VOC and ROG are used interchangeably since ROG represents approximately 99.9 percent of VOC emissions. ^c With required dust control (watering exposed soils twice daily) for compliance with SCAQMD Rule 403 and use of equipment with Tier 4 emissions reduction technology on diesel equipment (Project Design Feature AQ-PDF-1). CalEEMod output sheets provided in Appendix A reports these amounts in the “mitigated” scenario, although regulatory compliance and project features are not considered mitigation under CEQA. ^d Estimated for a 70-day grading/soil export duration. However, the Project’s updated haul route would limit soil export activities to 60 truck loads per day, which would require approximately 90 days for the grading/soil export duration (75,200 cy export/14 cy truck load/60 truck loads = 89.5 days). Extending the number of days for soil export hauling would decrease the Project’s maximum daily emissions during the grading/soil export activities relative to the estimates generated with CalEEMod, reducing criteria pollutant emissions. As SCAQMD thresholds are based on maximum daily emissions, the adjustment to the allowable hours for hauling within a 24-hour period would not affect the estimated maximum daily emissions, and thus not affect criteria pollutant emissions.						

Construction Period Localized Significance Thresholds

For the Project, the primary source of possible LST impact would be during construction. LSTs are applicable for a sensitive receptor where it is possible that an individual could remain for 24 hours, such as a residence, hospital, or convalescent facility. LSTs are only applicable to the following criteria pollutants: NO_x, CO, PM₁₀, and PM_{2.5}. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable Federal or State ambient air quality standard, and they are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

The SCAQMD has issued guidance on applying CalEEMod to LSTs. LST pollutant screening level concentration data is currently published for one, two, and five-acre sites for varying distances. For the Project, the most stringent thresholds for a one-acre site were applied. LST screening tables are available for 25, 50, 100, 200 and 500-meter source to receptor distances. The Project area is primarily comprised of commercial and light industrial land uses. However, there are scattered residential uses in proximity to the Project Site. The nearest sensitive receptor land use is a residence located approximately 80 feet (24.4 meters) from the Project Site on South Hewitt Street. Therefore, the most conservative 25-meter distance available was modeled for purposes of this analysis.¹⁰

During construction, the Project’s maximum daily on-site emissions, with implementation of Project Design Feature AQ-PDF-1 and the watering of exposed soils pursuant to SCAQMD Rule 403, are shown in **Table 8** with the applicable LST screening levels. As shown in Table 8, the maximum daily on-site emissions would be below any applicable LST screening levels.

Table 8
LST and Project Emissions - Construction

Construction Year ^a	Maximum Daily Emissions (pounds/day) ^{b, c}			
	NOx	CO	PM ₁₀	PM _{2.5}
2021	8.1	14.5	2.1	1.2
2022	7.7	13.3	0.4	0.4
2023 ^d	11.1	24.6	0.5	0.5
Construction LST^e	74	680	5	3
Exceeds LST Screening Level?	No	No	No	No
Source: CalEEMod Version 2016.3.2.2. (Output provided in Appendix A.)				
^a The Project construction schedule has been revised to 2022 to 2025 since preparation of the CalEEMod output sheets for the Project. The estimates provided here are conservative, as emissions from construction equipment and vehicles remain the same or decrease over time. ^b Maximum on-site emissions during any season. ^c Assumes compliance with SCAQMD Rule 403, which is a requirement for construction projects within the South Coast Air Basin, and implementation of AQ-PDF-1. While not considered mitigation, CalEEMod reports emissions with these reductions as “mitigated” within the CalEEMod output file. ^d Combined Building Construction, Paving, and Architectural Coating Activities. ^e SCAQMD LST 1.0 acre/25 meters Central LA				

The LST impacts during construction would not exceed SCAQMD screening criteria and would be less than significant.

¹⁰ Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters per South Coast Air Quality Management District guidance. Final Localized Significance Threshold Methodology (Revised July 2008). Available at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2>. Accessed on October 29, 2019.

OPERATIONAL PERIOD IMPACTS

Operational Period Emissions

Operational emissions were calculated using CalEEMod Version 2016.3.2 for an assumed Project opening year of 2023. (As previously described, the Project development schedule has been revised since preparation of the CalEEMod output sheets, and the Project opening year is now assumed to be 2025. However, as equipment and vehicles are generating fewer emissions over time as increasingly stringent regulations are implemented to reduce pollutants in the atmosphere, CalEEMod has not been revised, and the following analysis therefore provides a more conservative estimate of emissions.) Trip rates and VMT were provided in the Project Transportation Impact Study as determined using LADOT's VMT Calculator. For CalEEMod to calculate mobile source emissions based on VMT Calculator data, a separate land use titled "User Defined Commercial" was created in CalEEMod. The number of daily trips and daily VMT from the VMT Calculator, were input for the User Defined Commercial line item in the model to account for the combined proposed land uses, and all trips data default entries were deleted for the individual office and restaurant land use line items. In this way, the emissions estimated by CalEEMod are based on the Project-specific VMT as determined by the LADOT VMT Calculator, which considers the fact that the Project site is in a heavily urbanized area with nearby transit facilities that promote alternative travel modes and reduces VMT.

In addition to the adjustments made regarding mobile source emissions, the following adjustments were also made in the model:

- **Energy Emissions.** To account for additional reductions due to the 2019 Title 24 requirements compared to the 2016 Title 24 requirements, the Title 24 electricity energy intensity and lighting energy intensity rates determined by CalEEMod were reduced by 30 percent.
- **Water Use.** Project-specific water demand rates determined by the Project Water Supply Assessment (WSA) prepared by the Los Angeles Department of Water and Power were used to adjust the CalEEMod annual water use inputs.
- **Solid Waste Generation.** The CalEEMod default solid waste generation inputs were adjusted to reflect a 75 percent reduction in solid waste disposal per the Assembly Bill 341 statewide goal for 2020.

The total Project-related daily emissions calculated by CalEEMod are shown in **Table 9**. As the Project would remove approximately 3,515 square feet of existing office space from the Project Site, eliminating associated emissions from those existing facilities, the Project's net increase in emissions would be marginally less than those shown in Table 9.

Table 9
Project Daily Operational Emissions

Source	Operational Emissions (pounds/day)					
	ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
Summer						
Area	7.6	0.0	0.1	0.0	0.0	0.0
Energy	0.2	1.4	1.2	0.0	0.1	0.1
Mobile	4.1	16.5	50.2	0.2	15.5	4.2
Total	11.9	17.9	51.5	0.2	15.6	4.3
Winter						
Area	7.6	0.0	0.1	0.0	0.0	0.0
Energy	0.2	1.4	1.2	0.0	0.1	0.1
Mobile	3.9	16.8	47.9	0.2	15.5	4.2
Total	11.7	18.2	49.2	0.2	15.6	4.3
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod Version 2016.3.2 2. (Output provided in Appendix A.)

As shown in Table 9, the Project's operational emissions would not exceed the SCAQMD CEQA significance thresholds. Therefore, the Project's operational emissions impacts would be less than significant.

No mitigation measures would be necessary to support this finding.

Operations Period Localized Significance Thresholds

The Project would generate emissions from its commercial and office use vehicle trips. To a lesser extent, the Project would also generate emissions from area and energy sources, which would result in negligible pollutant concentrations of CO, NO₂, PM_{2.5}, and PM₁₀ at nearby sensitive receptors. The Project's maximum daily emissions from on-site operations activities and the applicable LSTs are shown in Table 10. As shown, the Project's maximum daily on-site (non-mobile) emissions of CO, NOx, PM₁₀ and PM_{2.5} would be below applicable LST criteria during operations. The Project would not expose sensitive receptors to substantial pollutant concentrations emitted onsite during operations and impacts would be less than significant.

Table 10
LST and Project Emissions – Operations (pounds/day)

Emissions Source	Maximum Daily Onsite Emissions ^a			
	NOx	CO	PM ₁₀	PM _{2.5}
Area	< 0.01	0.1	< 0.01	< 0.01
Energy (Natural Gas) ^b	1.4	1.2	0.1	0.1
On-Site Total	1.4	1.3	0.1	0.1
Operations LST^c	74	680	2	1
Exceed LST Screening Level?	No	No	No	No

Source: CalEEMod Version 2016.3.2 2. (Output provided in Appendix A.)

^a Onsite emissions during any season.
^b LST would not apply to emissions associated with offsite generation of electricity.
^c SCAQMD LST 1.0 acre/25 meters Central LA

Operational Period Toxic Air Contaminants

Development projects that involve the use of heavy-duty trucks and other mobile sources that operate on diesel fuel have the potential to generate a substantial amount of hazardous TACs. Such projects generally include industrial and manufacturing land uses. However, the Project does not involve such land uses and would not generate a substantial amount of heavy-duty truck trips. Therefore, a health risk assessment of proposed land uses and their effect on sensitive receptors in the Project area is not warranted. Furthermore, as the Project does not involve land uses that would constitute a sensitive receptor, such as residences, a school, or hospital, it would not expose additional sensitive receptors to existing sources of TACs in the Project area.

MICRO-SCALE IMPACT ANALYSIS

There is a direct relationship between traffic/circulation congestion and CO impacts, since exhaust fumes from vehicular traffic are the primary source of CO. As CO is a localized gas that dissipates very quickly under normal meteorological conditions, CO concentrations decrease substantially as distance from the source (intersection) increases. The highest CO concentrations are typically found in areas directly adjacent to congested roadway intersections. These areas of vehicle congestion have historically had the potential to create pockets of elevated levels of CO, which are called CO “hot spots.” However, with the turnover of older vehicles, introduction of cleaner fuels, and the implementation of control technology on industrial facilities, CO concentrations in the Project vicinity and region have steadily declined, as shown based on historical air quality monitoring data provided in Table 3.

Micro-scale air quality impacts have traditionally been analyzed in environmental documents where the region was a non-attainment area for CO. However, the SCAQMD has demonstrated in the CO attainment redesignation request to the EPA that there are no “hot spots” anywhere in Southern California, even at intersections with higher volumes, worse congestion, and higher background CO levels than those located in the Project area. If the worst-case intersections in the SCAB have no “hot spot” potential, local impacts near the Project Site would be below thresholds, with a large margin of safety.

A project is considered to have significant impacts if project-related mobile-source emissions result in an exceedance of the California one-hour and eight-hour CO standards, which are:

- 1-hour = 20 ppm
- 8-hour = 9 ppm

The maximum ambient 8-hour CO concentration in 2016 was 1.4 ppm. To cause an exceedance of the CO standard, a six-fold worsening of total automotive traffic would be required. Project impacts would not cause an exceedance of CO standards.

Further, for the 2003 AQMP, the SCAQMD conducted CO modeling for the four worst-case intersections in the Basin, including the intersections of: (a) Wilshire Boulevard and Veteran Avenue; (b) Sunset Boulevard and Highland Avenue; (c) La Cienega Boulevard and Century

Boulevard; and (d) Long Beach Boulevard and Imperial Highway. The SCAQMD noted that the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day. The emission data provided in Table 4-10 of Appendix V of the 2003 AQMP demonstrates that the peak modeled CO concentration due to vehicle emissions at these four intersections was 4.6 ppm (one-hour average) and 3.2 (eight-hour average) at Wilshire Boulevard and Veteran Avenue. When added to the existing background CO concentrations, the worst-case CO levels in the Basin would be 7.6 ppm (one-hour average) and 5.6 ppm (eight-hour average), which is well under the SCAQMD's thresholds of significance of 20 ppm (one-hour average), and 9.0 ppm (eight-hour average), respectively. Based on the ratio of the one-hour CO standard (20.0 ppm) and the modeled worse-case emission value (4.6 ppm) the CO threshold of significance would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day. Thus, if a study intersection impacted by a project is below 400,000 vehicles a day, it can reasonably be concluded that the project would not generate a significant CO hotspot impact and no further analysis is warranted.

Based on data provided by Gibson Transportation Consulting, Inc.,¹¹ with the addition of Project-generated trips, the intersection with the highest average daily trips at Project buildout (2025) in the Project vicinity would be Alameda Street and 3rd Street/4th Place, with approximately 60,500 vehicles per day. This would be well below 400,000 vehicles per day, the level at which CO concentrations could exceed thresholds as evaluated in the 2003 AQMP and described in Methodology above.

CUMULATIVE IMPACTS

CONSTRUCTION PERIOD CUMULATIVE IMPACTS

As previously described and according to the SCAQMD, individual construction projects that do not exceed the SCAQMD's recommended daily thresholds for project-specific impacts would similarly not result in a cumulatively considerable increase in emissions for those pollutants for which the SCAB is in non-attainment. Construction-related daily mass emissions at the Project Site would not exceed the SCAQMD's significance thresholds listed above in Table 5; therefore, the Project would result in a less than significant cumulative impact due to construction-related regional emissions.

According to SCAQMD methodology, health effects from carcinogenic air toxics are described in the context of individual cancer risk, which is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime would develop cancer, based on the use of standard risk-assessment methodology. However, construction of the Project, and the construction activities of each individual Related Project would not result in a long-term (i.e., 70-year exposure) substantial source of TAC emissions, construction would occur over approximately 30 months. Based on the SCAQMD'S CEQA guidance and duration of construction activities, cumulative

¹¹ Wong, Emily (Gibson Transportation Consultants, Inc.). 2021. E-mail communication with Envicom Corporation (Intersection Volumes). December.

TAC emission impacts during construction would not be cumulatively considerable and therefore would be less than significant.

For localized air quality impacts, Project maximum construction emissions would similarly not exceed the SCAQMD LST screening criteria. Therefore, Project-related construction activities would not expose sensitive receptors to substantial criteria pollutant concentrations, and localized emissions would be less than significant. Consistent with the SCAQMD's guidance, the Project's localized emissions would therefore have a less than significant cumulative impact as well.

OPERATIONAL PERIOD CUMULATIVE IMPACTS

As previously described and pursuant to the SCAQMD's guidance for CEQA impact analyses, an individual project that results in air emissions of criteria pollutants that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also result in a cumulatively considerable net increase of the specified criteria pollutants. Operational emissions from the Project would not exceed the SCAQMD's regional significance thresholds for VOC, NO_x, CO, PM₁₀, and PM_{2.5} listed above in Table 5. Therefore, the emissions of non-attainment pollutants and precursors generated by Project operations would not exceed the SCAQMD's project-level thresholds and therefore would result in a less than significant cumulative impact.

With respect to TAC emissions, neither the Project nor Related Projects (which are largely residential and retail/commercial) would represent a substantial source of TAC emissions, which are typically associated with large-scale industrial, manufacturing, and transportation hub facilities. Based on recommended screening level siting distances for TAC sources pursuant to the CARB's Land Use Guidelines, the Project and Related Projects would not result in a cumulative impact requiring further evaluation. However, the Project and each of the Related Projects would likely generate minimal TAC emissions related to the use of consumer products and landscape maintenance activities, among others. Pursuant to California Assembly Bill 1807, which directs the CARB to identify substances as TAC and to adopt airborne toxic control measures (ATCMs) to control such substances, the SCAQMD has adopted numerous rules (primarily in Regulation XIV) that specifically address TAC emissions. These SCAQMD rules have resulted in and will continue to result in substantial SCAB-wide TAC emissions reductions. As such, cumulative TAC emissions during long-term Project operations would be less than significant. In addition, the Project would not result in sources of TACs that have been identified by the CARB Land Use Guidelines and therefore would result in a less than significant cumulative impact.

As evaluated above, the Project would not cause an exceedance of CO standards and would therefore not cause new, or exacerbate existing, CO hotspots. As a result, the Project would not expose sensitive receptors to substantial pollutant concentrations related to localized mobile-source CO emissions, and cumulative impacts would also be less than significant pursuant to the SCAQMD's guidance.

SUMMARY

CONSTRUCTION PERIOD EMISSIONS

Exhaust emissions would result from on- and off-site construction equipment. All diesel-powered on-site construction equipment would incorporate USEPA Tier 4 emission reduction technology for nonroad diesel engines as Project Design Feature AQ-PDF-1.

- **AQ-PDF-1:** All diesel-powered equipment utilized on-site during the construction period will meet, at a minimum, United States Environmental Protection Agency Tier 4 emission reduction technology for nonroad diesel engines.

Additionally, the Project is required to implement dust control measures during construction for compliance with SCAQMD Rule 403.

Construction period emissions would not exceed SCAQMD significance thresholds. Impacts would be less than significant and would not require implementation of mitigation measures.

OPERATIONAL PERIOD EMISSIONS

Operational period emissions would not exceed SCAQMD significance thresholds. Impacts would be less than significant and would not require the implementation of mitigation measures.

CUMULATIVE EMISSIONS

Individual projects that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions.

The Project's construction period and operational period emissions would not exceed the SCAQMD's thresholds and would be less than significant. Per SCAQMD methodology, the Project's contribution to cumulative construction period and operational period emissions would not be cumulatively considerable and, therefore, would also be less than significant.

APPENDIX A

CALEEMOD VERSION 2016.3.2 COMPUTER MODEL OUTPUT

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

4th and Hewitt Project MXD-TDM
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	327.98	1000sqft	1.31	327,980.00	0
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Enclosed Parking with Elevator	660.00	Space	0.00	254,881.00	0
Other Non-Asphalt Surfaces	11.10	1000sqft	0.00	11,098.00	0
High Turnover (Sit Down Restaurant)	8.15	1000sqft	0.00	8,150.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	11			Operational Year	2023
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

Project Characteristics -

Land Use - 1.31 ac site. 327,980 sf office, 8,150 sf sit down restaurant, 660 space parking garage 254,881 sf, 11,098 sf non-asphalt surface. User Defined Commercial

Construction Phase - 25 demo, 70 grad, 547 bldg, 70 pave and coat overlap bldg.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - 3 backhoe, excavator

Off-road Equipment -

Off-road Equipment - no prep

Trips and VMT - 10,744 soil export trips (5,372 loads), 218 demo haul trips (109 loads). 27 mi dist.

Demolition - 1,822 tons building and asphalt demo

Grading - 75,200 cy export

Vehicle Trips - 7.2 vmt/emp trip

Water And Wastewater - Per WSA Water demand. Office/restaruant combined

Construction Off-road Equipment Mitigation - dust control and Tier 4 equipment

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Energy Mitigation -

Energy Use - 2019 Title 24

Solid Waste - Required diversion

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	70.00
tblConstructionPhase	NumDays	200.00	547.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	4.00	70.00
tblConstructionPhase	NumDays	10.00	70.00
tblConstructionPhase	NumDays	2.00	0.00
tblEnergyUse	LightingElect	1.75	1.22
tblEnergyUse	LightingElect	3.77	2.64
tblEnergyUse	LightingElect	7.87	5.50
tblEnergyUse	T24E	3.92	2.74
tblEnergyUse	T24E	4.60	3.22
tblEnergyUse	T24E	8.11	5.68
tblGrading	AcresOfGrading	26.25	1.50
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialExported	0.00	75,200.00
tblLandUse	LandUseSquareFeet	264,000.00	254,881.00

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

tblLandUse	LandUseSquareFeet	11,100.00	11,098.00
tblLandUse	LotAcreage	7.53	1.31
tblLandUse	LotAcreage	5.94	0.00
tblLandUse	LotAcreage	0.25	0.00
tblLandUse	LotAcreage	0.19	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblSolidWaste	SolidWasteGenerationRate	305.02	76.26
tblSolidWaste	SolidWasteGenerationRate	96.99	24.25
tblTripsAndVMT	HaulingTripLength	20.00	27.00
tblTripsAndVMT	HaulingTripLength	20.00	27.00
tblTripsAndVMT	HaulingTripNumber	180.00	218.00
tblTripsAndVMT	HaulingTripNumber	9,400.00	10,744.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	7.20
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	0.00	2,756.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	0.00	2,756.00
tblVehicleTrips	WD_TR	11.03	0.00

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	0.00	2,756.00
tblWater	IndoorWaterUseRate	58,293,114.67	15,919,475.00
tblWater	IndoorWaterUseRate	2,473,799.76	0.00
tblWater	OutdoorWaterUseRate	0.00	61,320.00
tblWater	OutdoorWaterUseRate	35,728,038.02	139,430.00
tblWater	OutdoorWaterUseRate	157,902.11	0.00

2.0 Emissions Summary

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast 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					
2021	3.4949	69.8829	25.7610	0.1811	8.4504	1.0819	9.5323	3.5407	1.0015	4.5422	0.0000	19,362.34 36	19,362.34 36	1.8448	0.0000	19,408.46 33
2022	2.8144	22.2293	23.2792	0.0715	3.0929	0.6253	3.7182	0.8347	0.6030	1.4377	0.0000	7,116.320 2	7,116.320 2	0.5701	0.0000	7,130.573 5
2023	49.1834	26.8516	34.8510	0.0924	3.7301	0.9253	4.6553	1.0036	0.8816	1.8852	0.0000	9,125.602 4	9,125.602 4	0.9811	0.0000	9,150.128 9
Maximum	49.1834	69.8829	34.8510	0.1811	8.4504	1.0819	9.5323	3.5407	1.0015	4.5422	0.0000	19,362.34 36	19,362.34 36	1.8448	0.0000	19,408.46 33

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					
2021	2.6051	51.8614	27.2131	0.1811	5.8869	0.4424	6.0952	2.1638	0.4399	2.3646	0.0000	19,362.34 36	19,362.34 36	1.8448	0.0000	19,408.46 33
2022	2.4217	17.4582	23.8934	0.0715	3.0929	0.3878	3.4807	0.8347	0.3855	1.2202	0.0000	7,116.320 2	7,116.320 2	0.5701	0.0000	7,130.573 5
2023	48.5049	18.6513	36.2561	0.0924	3.7301	0.5121	4.2421	1.0036	0.5036	1.5072	0.0000	9,125.602 4	9,125.602 4	0.9811	0.0000	9,150.128 9
Maximum	48.5049	51.8614	36.2561	0.1811	5.8869	0.5121	6.0952	2.1638	0.5036	2.3646	0.0000	19,362.34 36	19,362.34 36	1.8448	0.0000	19,408.46 33

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast 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	3.53	26.05	-4.14	0.00	16.78	49.01	22.83	25.60	46.54	35.26	0.00	0.00	0.00	0.00	0.00	0.00

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast 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	7.6331	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004		0.2351
Energy	0.1565	1.4222	1.1947	8.5300e-003		0.1081	0.1081		0.1081	0.1081		1,706.6771	1,706.6771	0.0327	0.0313	1,716.8191
Mobile	4.0675	16.4686	50.1608	0.1855	15.3590	0.1368	15.4958	4.1102	0.1272	4.2373		18,898.8747	18,898.8747	0.9187		18,921.8414
Total	11.8570	17.8917	51.4584	0.1940	15.3590	0.2452	15.6042	4.1102	0.2356	4.3458		20,605.7725	20,605.7725	0.9520	0.0313	20,638.8955

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	7.6331	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004		0.2351
Energy	0.1565	1.4222	1.1947	8.5300e-003		0.1081	0.1081		0.1081	0.1081		1,706.6771	1,706.6771	0.0327	0.0313	1,716.8191
Mobile	4.0675	16.4686	50.1608	0.1855	15.3590	0.1368	15.4958	4.1102	0.1272	4.2373		18,898.8747	18,898.8747	0.9187		18,921.8414
Total	11.8570	17.8917	51.4584	0.1940	15.3590	0.2452	15.6042	4.1102	0.2356	4.3458		20,605.7725	20,605.7725	0.9520	0.0313	20,638.8955

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast 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	Demolition	Demolition	6/7/2021	7/9/2021	5	25	
2	Site Preparation	Site Preparation	7/12/2021	7/11/2021	5	0	
3	Grading	Grading	7/12/2021	10/15/2021	5	70	
4	Building Construction	Building Construction	10/18/2021	11/21/2023	5	547	
5	Paving	Paving	8/9/2023	11/14/2023	5	70	
6	Architectural Coating	Architectural Coating	8/9/2023	11/14/2023	5	70	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 504,195; Non-Residential Outdoor: 168,065; Striped Parking Area: 15,959 (Architectural Coating – sqft)

OffRoad Equipment

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast 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	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	0	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
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	3	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	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	218.00	14.70	6.90	27.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	10,744.00	14.70	6.90	27.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	220.00	99.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	44.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					1.5596	0.0000	1.5596	0.2361	0.0000	0.2361			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.7171	2,322.7171	0.5940		2,337.5658
Total	1.9930	19.6966	14.4925	0.0241	1.5596	1.0409	2.6005	0.2361	0.9715	1.2076		2,322.7171	2,322.7171	0.5940		2,337.5658

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0933	2.8733	0.7054	8.8600e-003	0.2058	9.5800e-003	0.2154	0.0564	9.1700e-003	0.0656		961.5473	961.5473	0.0629		963.1191
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	0.0557	0.0383	0.5236	1.4900e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		148.0401	148.0401	4.3600e-003		148.1491
Total	0.1491	2.9116	1.2290	0.0104	0.3511	0.0108	0.3618	0.0949	0.0103	0.1052		1,109.5874	1,109.5874	0.0672		1,111.2682

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					0.7018	0.0000	0.7018	0.1063	0.0000	0.1063			0.0000			0.0000
Off-Road	0.6033	3.9847	14.5338	0.0241		0.2023	0.2023		0.2023	0.2023	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658
Total	0.6033	3.9847	14.5338	0.0241	0.7018	0.2023	0.9041	0.1063	0.2023	0.3085	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Grading - 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					
Fugitive Dust					4.6608	0.0000	4.6608	2.5035	0.0000	2.5035			0.0000			0.0000
Off-Road	1.7880	19.2634	12.7407	0.0234		0.9119	0.9119		0.8389	0.8389		2,266.7839	2,266.7839	0.7331		2,285.1120
Total	1.7880	19.2634	12.7407	0.0234	4.6608	0.9119	5.5726	2.5035	0.8389	3.3424		2,266.7839	2,266.7839	0.7331		2,285.1120

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6426	50.5752	12.4162	0.1560	3.6219	0.1687	3.7906	0.9927	0.1614	1.1541		16,924.74 42	16,924.74 42	1.1066		16,952.41 00
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	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	1.7069	50.6194	13.0203	0.1577	3.7896	0.1700	3.9596	1.0372	0.1626	1.1998		17,095.55 97	17,095.55 97	1.1117		17,123.35 13

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					2.0974	0.0000	2.0974	1.1266	0.0000	1.1266			0.0000			0.0000
Off-Road	0.2866	1.2420	14.1928	0.0234		0.0382	0.0382		0.0382	0.0382	0.0000	2,266.783 9	2,266.783 9	0.7331		2,285.112 0
Total	0.2866	1.2420	14.1928	0.0234	2.0974	0.0382	2.1356	1.1266	0.0382	1.1648	0.0000	2,266.783 9	2,266.783 9	0.7331		2,285.112 0

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6426	50.5752	12.4162	0.1560	3.6219	0.1687	3.7906	0.9927	0.1614	1.1541		16,924.74 42	16,924.74 42	1.1066		16,952.41 00
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	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	1.7069	50.6194	13.0203	0.1577	3.7896	0.1700	3.9596	1.0372	0.1626	1.1998		17,095.55 97	17,095.55 97	1.1117		17,123.35 13

3.5 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	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.220 0	2,001.220 0	0.3573		2,010.151 7
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.220 0	2,001.220 0	0.3573		2,010.151 7

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/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	0.3009	9.6119	2.5128	0.0255	0.6338	0.0197	0.6535	0.1825	0.0188	0.2013		2,721.318 2	2,721.318 2	0.1603		2,725.326 3
Worker	0.9430	0.6482	8.8610	0.0252	2.4591	0.0199	2.4790	0.6522	0.0183	0.6705		2,505.293 7	2,505.293 7	0.0738		2,507.139 1
Total	1.2440	10.2601	11.3738	0.0506	3.0929	0.0395	3.1324	0.8347	0.0371	0.8717		5,226.611 9	5,226.611 9	0.2341		5,232.465 4

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	1.3612	8.1079	13.4184	0.0221		0.4028	0.4028		0.4028	0.4028	0.0000	2,001.220 0	2,001.220 0	0.3573		2,010.151 7
Total	1.3612	8.1079	13.4184	0.0221		0.4028	0.4028		0.4028	0.4028	0.0000	2,001.220 0	2,001.220 0	0.3573		2,010.151 7

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/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	0.3009	9.6119	2.5128	0.0255	0.6338	0.0197	0.6535	0.1825	0.0188	0.2013		2,721.318 2	2,721.318 2	0.1603		2,725.326 3
Worker	0.9430	0.6482	8.8610	0.0252	2.4591	0.0199	2.4790	0.6522	0.0183	0.6705		2,505.293 7	2,505.293 7	0.0738		2,507.139 1
Total	1.2440	10.2601	11.3738	0.0506	3.0929	0.0395	3.1324	0.8347	0.0371	0.8717		5,226.611 9	5,226.611 9	0.2341		5,232.465 4

3.5 Building Construction - 2022

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	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.542 9	2,001.542 9	0.3486		2,010.258 1
Total	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.542 9	2,001.542 9	0.3486		2,010.258 1

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022

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	0.2824	9.1407	2.3775	0.0252	0.6338	0.0172	0.6510	0.1825	0.0164	0.1989		2,697.6103	2,697.6103	0.1548		2,701.4804
Worker	0.8834	0.5855	8.1753	0.0243	2.4591	0.0193	2.4783	0.6522	0.0177	0.6699		2,417.1671	2,417.1671	0.0667		2,418.8350
Total	1.1658	9.7262	10.5527	0.0495	3.0929	0.0364	3.1293	0.8347	0.0342	0.8688		5,114.7774	5,114.7774	0.2215		5,120.3154

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	1.2560	7.7320	13.3406	0.0221		0.3514	0.3514		0.3514	0.3514	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581
Total	1.2560	7.7320	13.3406	0.0221		0.3514	0.3514		0.3514	0.3514	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022

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	0.2824	9.1407	2.3775	0.0252	0.6338	0.0172	0.6510	0.1825	0.0164	0.1989		2,697.6103	2,697.6103	0.1548		2,701.4804
Worker	0.8834	0.5855	8.1753	0.0243	2.4591	0.0193	2.4783	0.6522	0.0177	0.6699		2,417.1671	2,417.1671	0.0667		2,418.8350
Total	1.1658	9.7262	10.5527	0.0495	3.0929	0.0364	3.1293	0.8347	0.0342	0.8688		5,114.7774	5,114.7774	0.2215		5,120.3154

3.5 Building Construction - 2023

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	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023

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	0.2095	6.9356	2.1472	0.0244	0.6338	8.0100e-003	0.6419	0.1825	7.6600e-003	0.1902		2,612.6835	2,612.6835	0.1372		2,616.1131
Worker	0.8295	0.5297	7.5287	0.0234	2.4591	0.0187	2.4778	0.6522	0.0172	0.6694		2,328.6604	2,328.6604	0.0602		2,330.1642
Total	1.0391	7.4654	9.6759	0.0478	3.0929	0.0267	3.1196	0.8347	0.0249	0.8595		4,941.3439	4,941.3439	0.1973		4,946.2773

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	1.1650	7.3923	13.2804	0.0221		0.3064	0.3064		0.3064	0.3064	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.1650	7.3923	13.2804	0.0221		0.3064	0.3064		0.3064	0.3064	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023

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	0.2095	6.9356	2.1472	0.0244	0.6338	8.0100e-003	0.6419	0.1825	7.6600e-003	0.1902		2,612.6835	2,612.6835	0.1372		2,616.1131
Worker	0.8295	0.5297	7.5287	0.0234	2.4591	0.0187	2.4778	0.6522	0.0172	0.6694		2,328.6604	2,328.6604	0.0602		2,330.1642
Total	1.0391	7.4654	9.6759	0.0478	3.0929	0.0267	3.1196	0.8347	0.0249	0.8595		4,941.3439	4,941.3439	0.1973		4,946.2773

3.6 Paving - 2023

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	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

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	0.0490	0.0313	0.4449	1.3800e-003	0.1453	1.1100e-003	0.1464	0.0385	1.0200e-003	0.0396		137.6027	137.6027	3.5500e-003		137.6915
Total	0.0490	0.0313	0.4449	1.3800e-003	0.1453	1.1100e-003	0.1464	0.0385	1.0200e-003	0.0396		137.6027	137.6027	3.5500e-003		137.6915

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	0.3243	2.3534	9.5382	0.0136		0.1033	0.1033		0.0970	0.0970	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3243	2.3534	9.5382	0.0136		0.1033	0.1033		0.0970	0.0970	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

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	0.0490	0.0313	0.4449	1.3800e-003	0.1453	1.1100e-003	0.1464	0.0385	1.0200e-003	0.0396		137.6027	137.6027	3.5500e-003		137.6915
Total	0.0490	0.0313	0.4449	1.3800e-003	0.1453	1.1100e-003	0.1464	0.0385	1.0200e-003	0.0396		137.6027	137.6027	3.5500e-003		137.6915

3.7 Architectural Coating - 2023

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	45.5699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	45.7616	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2023

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	0.1659	0.1060	1.5057	4.6700e-003	0.4918	3.7400e-003	0.4956	0.1304	3.4400e-003	0.1339		465.7321	465.7321	0.0120		466.0328
Total	0.1659	0.1060	1.5057	4.6700e-003	0.4918	3.7400e-003	0.4956	0.1304	3.4400e-003	0.1339		465.7321	465.7321	0.0120		466.0328

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	45.5699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	45.7616	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2023

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	0.1659	0.1060	1.5057	4.6700e-003	0.4918	3.7400e-003	0.4956	0.1304	3.4400e-003	0.1339		465.7321	465.7321	0.0120		466.0328
Total	0.1659	0.1060	1.5057	4.6700e-003	0.4918	3.7400e-003	0.4956	0.1304	3.4400e-003	0.1339		465.7321	465.7321	0.0120		466.0328

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast 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	4.0675	16.4686	50.1608	0.1855	15.3590	0.1368	15.4958	4.1102	0.1272	4.2373		18,898.87 47	18,898.87 47	0.9187		18,921.84 14
Unmitigated	4.0675	16.4686	50.1608	0.1855	15.3590	0.1368	15.4958	4.1102	0.1272	4.2373		18,898.87 47	18,898.87 47	0.9187		18,921.84 14

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
User Defined Commercial	2,756.00	2,756.00	2756.00	7,222,925	7,222,925
Total	2,756.00	2,756.00	2,756.00	7,222,925	7,222,925

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Commercial	7.20	0.00	0.00	100.00	0.00	0.00	100	0	0

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
General Office Building	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
High Turnover (Sit Down Restaurant)	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Other Non-Asphalt Surfaces	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
User Defined Commercial	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.1565	1.4222	1.1947	8.5300e-003		0.1081	0.1081		0.1081	0.1081		1,706.6771	1,706.6771	0.0327	0.0313	1,716.8191
NaturalGas Unmitigated	0.1565	1.4222	1.1947	8.5300e-003		0.1081	0.1081		0.1081	0.1081		1,706.6771	1,706.6771	0.0327	0.0313	1,716.8191

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

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
General Office Building	9354.17	0.1009	0.9171	0.7703	5.5000e-003		0.0697	0.0697		0.0697	0.0697		1,100.4905	1,100.4905	0.0211	0.0202	1,107.0302
High Turnover (Sit Down Restaurant)	5152.59	0.0556	0.5052	0.4243	3.0300e-003		0.0384	0.0384		0.0384	0.0384		606.1866	606.1866	0.0116	0.0111	609.7889
Other Non-Asphalt Surfaces	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
User Defined Commercial	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
Total		0.1565	1.4222	1.1947	8.5300e-003		0.1081	0.1081		0.1081	0.1081		1,706.6771	1,706.6771	0.0327	0.0313	1,716.8191

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast 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					
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
General Office Building	9.35417	0.1009	0.9171	0.7703	5.5000e-003		0.0697	0.0697		0.0697	0.0697		1,100.4905	1,100.4905	0.0211	0.0202	1,107.0302
High Turnover (Sit Down Restaurant)	5.15259	0.0556	0.5052	0.4243	3.0300e-003		0.0384	0.0384		0.0384	0.0384		606.1866	606.1866	0.0116	0.0111	609.7889
Other Non-Asphalt Surfaces	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
User Defined Commercial	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
Total		0.1565	1.4222	1.1947	8.5300e-003		0.1081	0.1081		0.1081	0.1081		1,706.6771	1,706.6771	0.0327	0.0313	1,716.8191

6.0 Area Detail

6.1 Mitigation Measures Area

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast 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	7.6331	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004		0.2351
Unmitigated	7.6331	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004		0.2351

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	0.8739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.7496					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5300e-003	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004		0.2351
Total	7.6331	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004		0.2351

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast 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	0.8739					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Consumer Products	6.7496					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Landscaping	9.5300e-003	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004			0.2351
Total	7.6331	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004			0.2351

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

Fire Pumps and Emergency Generators

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Summer

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

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

4th and Hewitt Project MXD-TDM
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	327.98	1000sqft	1.31	327,980.00	0
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Enclosed Parking with Elevator	660.00	Space	0.00	254,881.00	0
Other Non-Asphalt Surfaces	11.10	1000sqft	0.00	11,098.00	0
High Turnover (Sit Down Restaurant)	8.15	1000sqft	0.00	8,150.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	11			Operational Year	2023
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MW hr)	1227.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

Project Characteristics -

Land Use - 1.31 ac site. 327,980 sf office, 8,150 sf sit down restaurant, 660 space parking garage 254,881 sf, 11,098 sf non-asphalt surface. User Defined Commercial

Construction Phase - 25 demo, 70 grad, 547 bldg, 70 pave and coat overlap bldg.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - 3 backhoe, excavator

Off-road Equipment -

Off-road Equipment - no prep

Trips and VMT - 10,744 soil export trips (5,372 loads), 218 demo haul trips (109 loads). 27 mi dist.

Demolition - 1,822 tons building and asphalt demo

Grading - 75,200 cy export

Vehicle Trips - 7.2 vmt/emp trip

Water And Wastewater - Per WSA Water demand. Office/restaruant combined

Construction Off-road Equipment Mitigation - dust control and Tier 4 equipment

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Energy Mitigation -

Energy Use - 2019 Title 24

Solid Waste - Required diversion

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	70.00
tblConstructionPhase	NumDays	200.00	547.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	4.00	70.00
tblConstructionPhase	NumDays	10.00	70.00
tblConstructionPhase	NumDays	2.00	0.00
tblEnergyUse	LightingElect	1.75	1.22
tblEnergyUse	LightingElect	3.77	2.64
tblEnergyUse	LightingElect	7.87	5.50
tblEnergyUse	T24E	3.92	2.74
tblEnergyUse	T24E	4.60	3.22
tblEnergyUse	T24E	8.11	5.68
tblGrading	AcresOfGrading	26.25	1.50
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialExported	0.00	75,200.00
tblLandUse	LandUseSquareFeet	264,000.00	254,881.00

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

tblLandUse	LandUseSquareFeet	11,100.00	11,098.00
tblLandUse	LotAcreage	7.53	1.31
tblLandUse	LotAcreage	5.94	0.00
tblLandUse	LotAcreage	0.25	0.00
tblLandUse	LotAcreage	0.19	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblSolidWaste	SolidWasteGenerationRate	305.02	76.26
tblSolidWaste	SolidWasteGenerationRate	96.99	24.25
tblTripsAndVMT	HaulingTripLength	20.00	27.00
tblTripsAndVMT	HaulingTripLength	20.00	27.00
tblTripsAndVMT	HaulingTripNumber	180.00	218.00
tblTripsAndVMT	HaulingTripNumber	9,400.00	10,744.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	7.20
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	0.00	2,756.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	0.00	2,756.00
tblVehicleTrips	WD_TR	11.03	0.00

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	0.00	2,756.00
tblWater	IndoorWaterUseRate	58,293,114.67	15,919,475.00
tblWater	IndoorWaterUseRate	2,473,799.76	0.00
tblWater	OutdoorWaterUseRate	0.00	61,320.00
tblWater	OutdoorWaterUseRate	35,728,038.02	139,430.00
tblWater	OutdoorWaterUseRate	157,902.11	0.00

2.0 Emissions Summary

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.5328	70.7598	26.2725	0.1789	8.4504	1.0838	9.5342	3.5407	1.0034	4.5441	0.0000	19,127.3070	19,127.3070	1.8755	0.0000	19,174.1935
2022	2.9305	22.2669	22.8194	0.0694	3.0929	0.6259	3.7188	0.8347	0.6036	1.4382	0.0000	6,900.8014	6,900.8014	0.5761	0.0000	6,915.2049
2023	49.3185	26.8911	34.1985	0.0900	3.7301	0.9257	4.6558	1.0036	0.8820	1.8856	0.0000	8,883.5787	8,883.5787	0.9843	0.0000	8,908.1868
Maximum	49.3185	70.7598	34.1985	0.1789	8.4504	1.0838	9.5342	3.5407	1.0034	4.5441	0.0000	19,127.3070	19,127.3070	1.8755	0.0000	19,174.1935

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					
2021	2.7261	52.7383	27.7246	0.1789	5.8869	0.4430	6.0971	2.1638	0.4406	2.3664	0.0000	19,127.3070	19,127.3070	1.8755	0.0000	19,174.1935
2022	2.5378	17.4958	23.4336	0.0694	3.0929	0.3883	3.4813	0.8347	0.3861	1.2207	0.0000	6,900.8014	6,900.8014	0.5761	0.0000	6,915.2049
2023	48.6399	18.6907	35.6036	0.0900	3.7301	0.5125	4.2425	1.0036	0.5040	1.5076	0.0000	8,883.5787	8,883.5787	0.9843	0.0000	8,908.1868
Maximum	48.6399	52.7383	35.6036	0.1789	5.8869	0.5125	6.0971	2.1638	0.5040	2.3664	0.0000	19,127.3070	19,127.3070	1.8755	0.0000	19,174.1935

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	3.37	25.85	-4.17	0.00	16.78	49.01	22.83	25.60	46.54	35.25	0.00	0.00	0.00	0.00	0.00	0.00

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

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	7.6331	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004		0.2351
Energy	0.1565	1.4222	1.1947	8.5300e-003		0.1081	0.1081		0.1081	0.1081		1,706.6771	1,706.6771	0.0327	0.0313	1,716.8191
Mobile	3.9365	16.8070	47.9285	0.1764	15.3590	0.1375	15.4965	4.1102	0.1279	4.2380		17,980.6564	17,980.6564	0.9189		18,003.6291
Total	11.7260	18.2302	49.2261	0.1849	15.3590	0.2460	15.6050	4.1102	0.2363	4.3465		19,687.5542	19,687.5542	0.9522	0.0313	19,720.6832

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	7.6331	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004		0.2351
Energy	0.1565	1.4222	1.1947	8.5300e-003		0.1081	0.1081		0.1081	0.1081		1,706.6771	1,706.6771	0.0327	0.0313	1,716.8191
Mobile	3.9365	16.8070	47.9285	0.1764	15.3590	0.1375	15.4965	4.1102	0.1279	4.2380		17,980.6564	17,980.6564	0.9189		18,003.6291
Total	11.7260	18.2302	49.2261	0.1849	15.3590	0.2460	15.6050	4.1102	0.2363	4.3465		19,687.5542	19,687.5542	0.9522	0.0313	19,720.6832

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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	6/7/2021	7/9/2021	5	25	
2	Site Preparation	Site Preparation	7/12/2021	7/11/2021	5	0	
3	Grading	Grading	7/12/2021	10/15/2021	5	70	
4	Building Construction	Building Construction	10/18/2021	11/21/2023	5	547	
5	Paving	Paving	8/9/2023	11/14/2023	5	70	
6	Architectural Coating	Architectural Coating	8/9/2023	11/14/2023	5	70	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 504,195; Non-Residential Outdoor: 168,065; Striped Parking Area: 15,959 (Architectural Coating – sqft)

OffRoad Equipment

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast 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	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	0	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
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	3	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	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	218.00	14.70	6.90	27.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	10,744.00	14.70	6.90	27.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	220.00	99.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	44.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					1.5596	0.0000	1.5596	0.2361	0.0000	0.2361			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.7171	2,322.7171	0.5940		2,337.5658
Total	1.9930	19.6966	14.4925	0.0241	1.5596	1.0409	2.6005	0.2361	0.9715	1.2076		2,322.7171	2,322.7171	0.5940		2,337.5658

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0951	2.9229	0.7374	8.7400e-003	0.2058	9.6900e-003	0.2155	0.0564	9.2700e-003	0.0657		948.7610	948.7610	0.0646		950.3768
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	0.0620	0.0424	0.4787	1.4000e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.3926	139.3926	4.1000e-003		139.4952
Total	0.1571	2.9653	1.2161	0.0101	0.3511	0.0109	0.3619	0.0949	0.0104	0.1053		1,088.1536	1,088.1536	0.0687		1,089.8719

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					0.7018	0.0000	0.7018	0.1063	0.0000	0.1063			0.0000			0.0000
Off-Road	0.6033	3.9847	14.5338	0.0241		0.2023	0.2023		0.2023	0.2023	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658
Total	0.6033	3.9847	14.5338	0.0241	0.7018	0.2023	0.9041	0.1063	0.2023	0.3085	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Grading - 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					
Fugitive Dust					4.6608	0.0000	4.6608	2.5035	0.0000	2.5035			0.0000			0.0000
Off-Road	1.7880	19.2634	12.7407	0.0234		0.9119	0.9119		0.8389	0.8389		2,266.7839	2,266.7839	0.7331		2,285.1120
Total	1.7880	19.2634	12.7407	0.0234	4.6608	0.9119	5.5726	2.5035	0.8389	3.3424		2,266.7839	2,266.7839	0.7331		2,285.1120

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6733	51.4474	12.9794	0.1539	3.6219	0.1706	3.7925	0.9927	0.1632	1.1559		16,699.6854	16,699.6854	1.1376		16,728.1256
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	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	1.7448	51.4963	13.5318	0.1555	3.7896	0.1719	3.9615	1.0372	0.1645	1.2017		16,860.5231	16,860.5231	1.1423		16,889.0815

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					2.0974	0.0000	2.0974	1.1266	0.0000	1.1266			0.0000			0.0000
Off-Road	0.2866	1.2420	14.1928	0.0234		0.0382	0.0382		0.0382	0.0382	0.0000	2,266.7839	2,266.7839	0.7331		2,285.1120
Total	0.2866	1.2420	14.1928	0.0234	2.0974	0.0382	2.1356	1.1266	0.0382	1.1648	0.0000	2,266.7839	2,266.7839	0.7331		2,285.1120

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6733	51.4474	12.9794	0.1539	3.6219	0.1706	3.7925	0.9927	0.1632	1.1559		16,699.6854	16,699.6854	1.1376		16,728.1256
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	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	1.7448	51.4963	13.5318	0.1555	3.7896	0.1719	3.9615	1.0372	0.1645	1.2017		16,860.5231	16,860.5231	1.1423		16,889.0815

3.5 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	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/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	0.3159	9.5920	2.7796	0.0248	0.6338	0.0203	0.6541	0.1825	0.0194	0.2019		2,646.720 7	2,646.720 7	0.1709		2,650.992 3
Worker	1.0490	0.7175	8.1016	0.0237	2.4591	0.0199	2.4790	0.6522	0.0183	0.6705		2,358.952 4	2,358.952 4	0.0694		2,360.687 8
Total	1.3649	10.3095	10.8812	0.0485	3.0929	0.0402	3.1331	0.8347	0.0377	0.8723		5,005.673 1	5,005.673 1	0.2403		5,011.680 1

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	1.3612	8.1079	13.4184	0.0221		0.4028	0.4028		0.4028	0.4028	0.0000	2,001.220 0	2,001.220 0	0.3573		2,010.151 7
Total	1.3612	8.1079	13.4184	0.0221		0.4028	0.4028		0.4028	0.4028	0.0000	2,001.220 0	2,001.220 0	0.3573		2,010.151 7

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/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	0.3159	9.5920	2.7796	0.0248	0.6338	0.0203	0.6541	0.1825	0.0194	0.2019		2,646.7207	2,646.7207	0.1709		2,650.9923
Worker	1.0490	0.7175	8.1016	0.0237	2.4591	0.0199	2.4790	0.6522	0.0183	0.6705		2,358.9524	2,358.9524	0.0694		2,360.6878
Total	1.3649	10.3095	10.8812	0.0485	3.0929	0.0402	3.1331	0.8347	0.0377	0.8723		5,005.6731	5,005.6731	0.2403		5,011.6801

3.5 Building Construction - 2022

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	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.5429	2,001.5429	0.3486		2,010.2581
Total	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.5429	2,001.5429	0.3486		2,010.2581

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022

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	0.2966	9.1159	2.6311	0.0245	0.6338	0.0178	0.6516	0.1825	0.0170	0.1995		2,623.2058	2,623.2058	0.1649		2,627.3273
Worker	0.9853	0.6480	7.4619	0.0228	2.4591	0.0193	2.4783	0.6522	0.0177	0.6699		2,276.0528	2,276.0528	0.0627		2,277.6196
Total	1.2818	9.7638	10.0930	0.0474	3.0929	0.0370	3.1299	0.8347	0.0347	0.8694		4,899.2586	4,899.2586	0.2275		4,904.9469

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	1.2560	7.7320	13.3406	0.0221		0.3514	0.3514		0.3514	0.3514	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581
Total	1.2560	7.7320	13.3406	0.0221		0.3514	0.3514		0.3514	0.3514	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022

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	0.2966	9.1159	2.6311	0.0245	0.6338	0.0178	0.6516	0.1825	0.0170	0.1995		2,623.2058	2,623.2058	0.1649		2,627.3273
Worker	0.9853	0.6480	7.4619	0.0228	2.4591	0.0193	2.4783	0.6522	0.0177	0.6699		2,276.0528	2,276.0528	0.0627		2,277.6196
Total	1.2818	9.7638	10.0930	0.0474	3.0929	0.0370	3.1299	0.8347	0.0347	0.8694		4,899.2586	4,899.2586	0.2275		4,904.9469

3.5 Building Construction - 2023

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	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023

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	0.2203	6.9041	2.3380	0.0237	0.6338	8.4300e-003	0.6423	0.1825	8.0500e-003	0.1906		2,541.7390	2,541.7390	0.1451		2,545.3673
Worker	0.9282	0.5861	6.8589	0.0220	2.4591	0.0187	2.4778	0.6522	0.0172	0.6694		2,192.7853	2,192.7853	0.0564		2,194.1960
Total	1.1485	7.4902	9.1969	0.0457	3.0929	0.0271	3.1201	0.8347	0.0253	0.8599		4,734.5242	4,734.5242	0.2016		4,739.5633

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	1.1650	7.3923	13.2804	0.0221		0.3064	0.3064		0.3064	0.3064	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.1650	7.3923	13.2804	0.0221		0.3064	0.3064		0.3064	0.3064	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023

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	0.2203	6.9041	2.3380	0.0237	0.6338	8.4300e-003	0.6423	0.1825	8.0500e-003	0.1906		2,541.7390	2,541.7390	0.1451		2,545.3673
Worker	0.9282	0.5861	6.8589	0.0220	2.4591	0.0187	2.4778	0.6522	0.0172	0.6694		2,192.7853	2,192.7853	0.0564		2,194.1960
Total	1.1485	7.4902	9.1969	0.0457	3.0929	0.0271	3.1201	0.8347	0.0253	0.8599		4,734.5242	4,734.5242	0.2016		4,739.5633

3.6 Paving - 2023

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	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

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	0.0549	0.0346	0.4053	1.3000e-003	0.1453	1.1100e-003	0.1464	0.0385	1.0200e-003	0.0396		129.5737	129.5737	3.3300e-003		129.6570
Total	0.0549	0.0346	0.4053	1.3000e-003	0.1453	1.1100e-003	0.1464	0.0385	1.0200e-003	0.0396		129.5737	129.5737	3.3300e-003		129.6570

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	0.3243	2.3534	9.5382	0.0136		0.1033	0.1033		0.0970	0.0970	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3243	2.3534	9.5382	0.0136		0.1033	0.1033		0.0970	0.0970	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

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	0.0549	0.0346	0.4053	1.3000e-003	0.1453	1.1100e-003	0.1464	0.0385	1.0200e-003	0.0396		129.5737	129.5737	3.3300e-003		129.6570
Total	0.0549	0.0346	0.4053	1.3000e-003	0.1453	1.1100e-003	0.1464	0.0385	1.0200e-003	0.0396		129.5737	129.5737	3.3300e-003		129.6570

3.7 Architectural Coating - 2023

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	45.5699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	45.7616	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2023

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	0.1856	0.1172	1.3718	4.4000e-003	0.4918	3.7400e-003	0.4956	0.1304	3.4400e-003	0.1339		438.5571	438.5571	0.0113		438.8392
Total	0.1856	0.1172	1.3718	4.4000e-003	0.4918	3.7400e-003	0.4956	0.1304	3.4400e-003	0.1339		438.5571	438.5571	0.0113		438.8392

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	45.5699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	45.7616	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2023

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	0.1856	0.1172	1.3718	4.4000e-003	0.4918	3.7400e-003	0.4956	0.1304	3.4400e-003	0.1339		438.5571	438.5571	0.0113		438.8392
Total	0.1856	0.1172	1.3718	4.4000e-003	0.4918	3.7400e-003	0.4956	0.1304	3.4400e-003	0.1339		438.5571	438.5571	0.0113		438.8392

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.9365	16.8070	47.9285	0.1764	15.3590	0.1375	15.4965	4.1102	0.1279	4.2380		17,980.65 64	17,980.65 64	0.9189		18,003.62 91
Unmitigated	3.9365	16.8070	47.9285	0.1764	15.3590	0.1375	15.4965	4.1102	0.1279	4.2380		17,980.65 64	17,980.65 64	0.9189		18,003.62 91

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
User Defined Commercial	2,756.00	2,756.00	2756.00	7,222,925	7,222,925
Total	2,756.00	2,756.00	2,756.00	7,222,925	7,222,925

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Commercial	7.20	0.00	0.00	100.00	0.00	0.00	100	0	0

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
General Office Building	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
High Turnover (Sit Down Restaurant)	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Other Non-Asphalt Surfaces	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
User Defined Commercial	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

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	0.1565	1.4222	1.1947	8.5300e-003		0.1081	0.1081		0.1081	0.1081		1,706.6771	1,706.6771	0.0327	0.0313	1,716.8191
NaturalGas Unmitigated	0.1565	1.4222	1.1947	8.5300e-003		0.1081	0.1081		0.1081	0.1081		1,706.6771	1,706.6771	0.0327	0.0313	1,716.8191

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

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
General Office Building	9354.17	0.1009	0.9171	0.7703	5.5000e-003		0.0697	0.0697		0.0697	0.0697		1,100.4905	1,100.4905	0.0211	0.0202	1,107.0302
High Turnover (Sit Down Restaurant)	5152.59	0.0556	0.5052	0.4243	3.0300e-003		0.0384	0.0384		0.0384	0.0384		606.1866	606.1866	0.0116	0.0111	609.7889
Other Non-Asphalt Surfaces	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
User Defined Commercial	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
Total		0.1565	1.4222	1.1947	8.5300e-003		0.1081	0.1081		0.1081	0.1081		1,706.6771	1,706.6771	0.0327	0.0313	1,716.8191

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

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					
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
General Office Building	9.35417	0.1009	0.9171	0.7703	5.5000e-003		0.0697	0.0697		0.0697	0.0697		1,100.4905	1,100.4905	0.0211	0.0202	1,107.0302
High Turnover (Sit Down Restaurant)	5.15259	0.0556	0.5052	0.4243	3.0300e-003		0.0384	0.0384		0.0384	0.0384		606.1866	606.1866	0.0116	0.0111	609.7889
Other Non-Asphalt Surfaces	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
User Defined Commercial	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
Total		0.1565	1.4222	1.1947	8.5300e-003		0.1081	0.1081		0.1081	0.1081		1,706.6771	1,706.6771	0.0327	0.0313	1,716.8191

6.0 Area Detail

6.1 Mitigation Measures Area

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.6331	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004		0.2351
Unmitigated	7.6331	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004		0.2351

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	0.8739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.7496					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5300e-003	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004		0.2351
Total	7.6331	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004		0.2351

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.7496					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5300e-003	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004		0.2351
Total	7.6331	9.4000e-004	0.1029	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2207	0.2207	5.8000e-004		0.2351

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

Fire Pumps and Emergency Generators

4th and Hewitt Project MXD-TDM - Los Angeles-South Coast County, Winter

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
