

MEMORANDUM

DATE: April 2, 2024

To: Adriana Wright, Project Manager, Mister Car Wash

FROM: Cara Cunningham, Associate

SUBJECT: Air Quality Analysis for the Shoppes at the Lakes - Mister Car Wash and Day Care Project in Menifee, California

INTRODUCTION

LSA has prepared this Air Quality Analysis to evaluate the impacts associated with construction and operation of the proposed Shoppes at the Lakes - Mister Car Wash and Day Care Project (project) in Menifee, California. This analysis was prepared using methods and assumptions recommended in the air quality impact assessment guidelines of the South Coast Air Quality Management District (SCAQMD) in its *CEQA Air Quality Handbook* (1993) and associated updates. This analysis includes an assessment of criteria pollutant emissions, an assessment of carbon monoxide (CO) hot-spot impacts, and an assessment of the potential impacts of project-related emissions to sensitive receptors.

PROJECT LOCATION AND DESCRIPTION

The currently vacant 1.731-acre project site is at 29249 Newport Road, Menifee, California, within the existing Shoppes at the Lakes Commercial Center. The proposed project is immediately adjacent to existing commercial uses to the north and west, residential uses to the east opposite Laguna Vista Drive, and residential uses to the south opposite Rockport Road.

The proposed project would construct a 5,434-square-foot express car wash and an 11,992-square-foot day care with a 21,300-square-foot play area. The proposed car wash would include 12 vacuum stalls, three parking spaces, and a three-lane drive-through queue. The drive-through queue would also include an employee kiosk and a traffic arm barrier to control vehicle traffic within the drive-through lane. The proposed day care would provide 49 parking spaces, including 8 electric vehicle spaces. The proposed project would incorporate landscaping into the parking lots and areas surrounding each building. The proposed project location map and site plan are presented in Figures 1 and 2 (provided as Attachment A).

Construction of the proposed project would include site preparation, grading, building, paving, and architectural coating (painting) activities. Construction is expected to begin early 2025 and would take place over an 8-month duration. The proposed project would not require any soil import/export.

EXISTING LAND USES IN THE PROJECT AREA

For the purposes of this analysis, sensitive receptors are areas of the population that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include residences, schools, day care centers, hospitals, parks, and similar uses that are sensitive to air quality. Impacts on sensitive receptors are of particular concern because those receptors are the population most vulnerable to the effects of air pollution. The project site is surrounded primarily by existing commercial and residential uses. The closest sensitive receptors to the project site include residential uses 75 feet south of the project site across Rockport Road and 110 feet east of the project site across Laguna Vista Drive.

ENVIRONMENTAL SETTING

Air quality is primarily a function of local climate, local sources of air pollution, and regional pollution transport. The amount of a given pollutant in the atmosphere is determined by the amount of the pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain, and, for photochemical pollutants, sunshine.

A region's topographic features have a direct correlation with air pollution flow and are therefore used to determine the boundary of air basins. The proposed project is in the City of Menifee, which is within the jurisdiction of the SCAQMD, which regulates air quality in the South Coast Air Basin (Basin).

The Basin comprises approximately 10,000 square miles and covers all of Orange County and the urban parts of Los Angeles, Riverside, and San Bernardino counties. The Basin is on a coastal plain with connecting broad valleys and low hills to the east. Regionally, the Basin is bounded by the Pacific Ocean to the southwest and high mountains to the east, forming the inland perimeter.

Both State and federal governments have established health-based ambient air quality standards for six criteria air pollutants: CO, ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead, and suspended particulate matter. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Two criteria pollutants, O₃ and NO₂, are considered regional pollutants because they (or their precursors) affect air quality on a regional scale. Pollutants such as CO, SO₂, and lead are considered local pollutants that tend to accumulate in the air locally.

Air quality monitoring stations are located throughout the nation and are maintained by the local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations are used by the United States Environmental Protection Agency (EPA) to identify regions as "attainment" or "nonattainment" depending on whether the regions meet the requirements stated in the applicable National Ambient Air Quality Standards (NAAQS). Nonattainment areas are imposed with additional restrictions as required by the EPA. In addition, different classifications of attainment (e.g., marginal, moderate, serious, severe, and extreme) are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and comply with the NAAQS.

As shown in Table A, the Basin is designated as nonattainment by federal standards for O₃ and particulate matter less than 2.5 microns in diameter (PM_{2.5}) and nonattainment by State standards for O₃, particulate matter less than 10 microns in diameter (PM₁₀), and PM_{2.5}.

Table A: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O ₃ 1-hour	Nonattainment	N/A
O ₃ 8-hour	Nonattainment	Extreme Nonattainment
PM ₁₀	Nonattainment	Attainment/Maintenance
PM _{2.5}	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO ₂	Attainment	Unclassified/Attainment (1-hour) Attainment/Maintenance (Annual)
SO ₂	Attainment	Unclassified/Attainment
Lead	Attainment ¹	Unclassified/Attainment ¹
All Others	Attainment/Unclassified	Attainment/Unclassified

Source 1: NAAQS and CAAQS Attainment Status for South Coast Air Basin (SCAQMD 2016).

Source 2: Nonattainment Areas for Criteria Pollutants (Green Book) (EPA 2019).

¹ Only the Los Angeles County portion of the South Coast Air Basin is in nonattainment for lead.

CAAQS = California Ambient Air Quality Standards

CO = carbon monoxide

N/A = not applicable

NAAQS = National Ambient Air Quality Standards

NO₂ = nitrogen dioxide

O₃ = ozone

PM₁₀ = particulate matter less than 10 microns in diameter

PM_{2.5} = particulate matter less than 2.5 microns in diameter

SCAQMD = South Coast Air Quality Management District

SO₂ = sulfur dioxide

EPA = United States Environmental Protection Agency

REGULATORY SETTING

Applicable federal, State, regional, and local air quality regulations are discussed below.

Federal Regulations

The 1970 federal Clean Air Act (CAA) authorized the establishment of national health-based air quality standards and set deadlines for their attainment. The CAA Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required for areas of the nation that exceed the standards. Under the CAA, State and local agencies in areas that exceed the national standards are required to develop State Implementation Plans to demonstrate how they will achieve the national standards by specified dates.

State Regulations

In 1988, the California Clean Air Act (CCAA) required that all air districts in the State endeavor to achieve and maintain California Ambient Air Quality Standards (CAAQS) for CO, O₃, SO₂, and NO₂ by the earliest practical date. The CCAA provides districts with the authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and areawide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

The California Air Resources Board (CARB) is the State's "clean air agency." CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

Regional Regulations

South Coast Air Quality Management District

The proposed project would be required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best available control measures, so the presence of such dust does not remain visible in the atmosphere beyond the property line of the emissions source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. SCAQMD Rule 1113 limits the volatile organic compound (VOC) content of architectural coatings. Applicable dust suppression techniques from SCAQMD Rule 403 and low VOC content in paints under SCAQMD Rule 1113 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM₁₀ component). Compliance with these rules would reduce impacts on nearby sensitive receptors.

Rule 403 Measures.

- Water active sites at least two times daily (locations where grading is to occur will be thoroughly watered prior to earthmoving).
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard in accordance with the requirements of California Vehicle Code Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).
- Traffic speeds on all unpaved roads shall be reduced to 15 miles per hour (mph) or less.

Rule 1113 Measures. SCAQMD Rule 1113 governs the sale, use, and manufacture of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction and operation of the proposed project. Therefore, all paints and solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1113.

Air Quality Management Plan. The SCAQMD is responsible for demonstrating regional compliance with ambient air quality standards but has limited indirect involvement in reducing emissions from fugitive, mobile, and natural sources. To that end, the SCAQMD works cooperatively with the CARB, the Southern California Association of Governments (SCAG), county transportation commissions, local governments, and other federal and State government agencies. It has responded to this requirement by preparing a series of Air Quality Management Plans (AQMPs) to meet CAAQS and NAAQS. The SCAQMD and SCAG are responsible for formulating and implementing the AQMP for the Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State

air quality standards. Every 3 years, the SCAQMD prepares a new AQMP, updating the previous plan and 20-year horizon.¹

The Final 2022 Air Quality Management Plan is the currently adopted AQMP. Key elements of the Final 2022 AQMP include:

- Calculating and taking credit for co-benefits from other planning efforts (e.g., climate, energy, and transportation)
- A strategy with fair-share emission reductions at the federal, State, and local levels
- Investment in strategies and technologies meeting multiple air quality objectives
- Seeking new partnerships and significant funding for incentives to accelerate deployment of zero-emission and near-zero emission technologies
- Enhanced socioeconomic assessment, including an expanded environmental justice analysis
- Attainment of the 24-hour PM_{2.5} standard in 2019 with no additional measures
- Attainment of the annual PM_{2.5} standard by 2025 with implementation of a portion of the O₃ strategy
- Attainment of the 1-hour O₃ standard by 2022 with no reliance on “black box” future technology (CAA Section 182(e)(5) measures)

The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emission technologies, when cost-effective and feasible, and low nitrogen oxide [NO_x] technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 8-hour ozone standard.

Southern California Association of Governments

SCAG is a council of governments for Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura counties. It is a regional planning agency and serves as a forum for regional issues relating to transportation, the economy and community development, and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With regard to air quality planning, SCAG prepares the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP), which address regional development and growth forecasts and form the basis for the land use and transportation control portions of the AQMP and are used in the preparation of the air quality forecasts and consistency analysis included in the AQMP. The RTP, RTIP, and AQMP are based on projections originating within local jurisdictions.

¹ SCAQMD. 2022. *2022 Air Quality Management Plan*. December. Website: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=16> (accessed November 2023).

Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality. SCAG's Regional Comprehensive Plan (RCP) provides growth forecasts that the SCAQMD uses in the development of air quality-related land use and transportation control strategies. The RCP is a framework for decision-making for local governments, assisting them in meeting federal and State mandates for growth management, mobility, and environmental standards, while maintaining consistency with regional goals regarding growth and changes. Policies within the RCP include consideration of air quality, land use, transportation, and economic relationships by all levels of government.

SCAG adopted the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal) on September 3, 2020. Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal is an important planning document for the region, allowing project sponsors to qualify for federal funding and taking into account operations and maintenance costs, to ensure reliability, longevity, and cost effectiveness. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in Connect SoCal, would reach the regional target of reducing GHG emissions from autos and light-duty trucks by 19 percent by 2035 (compared to 2005 levels).

Local Regulations

City of Menifee General Plan

The City of Menifee (City) addresses air quality in the Open Space and Conservation Element of the City's General Plan. The Open Space and Conservation Element contains goals, policies, and implementing actions that works toward reducing impacts to air quality at the local level by minimizing pollution and particulate matter. The following goals, policies, and implementing actions related to air quality are presented in the Conservation Element² and are applicable to the proposed project:

- **Policy OCS-9.2:** Buffer sensitive land uses, such as residences, schools, care facilities, and recreation areas from major air pollutant emission sources, including freeways, manufacturing, hazardous materials storage, wastewater treatment, and similar uses.
- **Policy OCS-9.3:** Comply with regional, state, and federal standards and programs for control of all airborne pollutants and noxious odors, regardless of source.
- **Policy OCS-9.4:** Support the Riverside County Regional Air Quality Task Force, the Southern California Association of Government's Regional Transportation Plan/Sustainable Communities Strategy, and the South Coast Air Quality Management District's Air Quality Management Plan to reduce air pollution at the regional level.

² City of Menifee. 2013. Menifee General Plan, Open Space and Conservation Element. Website: <https://www.cityofmenifee.us/250/Open-Space-Conservation-Element> (accessed March 2024).

- **Policy OCS-9.5:** Comply with the mandatory requirements of Title 24 Part 1 of the California Building Standards Code (CALGreen) and Title 24 Part 6 Building and Energy Efficiency Standards.

METHODOLOGY

Construction Emissions

Construction activities can generate a substantial amount of air pollution. Construction activities are considered temporary; however, short-term impacts can contribute to exceedances of air quality standards. Construction activities include demolition, site preparation, earthmoving, and general construction. The emissions generated from these common construction activities include fugitive dust from soil disturbance; fuel combustion from mobile heavy-duty, diesel- and gasoline-powered equipment, and portable auxiliary equipment; and worker commute trips.

LSA used the California Emissions Estimator Model version 2022.1 (CalEEMod) computer program to calculate emissions from on-site construction equipment and from worker and vehicle trips to the site. Construction would include site preparation, grading, building, paving, and architectural coating (painting) activities. Construction is expected to begin early 2025 and would take place over an 8-month duration, which was included in CalEEMod. In addition, this analysis assumes that the proposed project would use Tier 2 construction equipment and that the proposed project would comply with SCAQMD Rule 403 measures, which were also included in CalEEMod. All other construction details are not yet known; therefore, default assumptions (e.g., construction worker and truck trips and fleet activities) from CalEEMod were used.

Operational Emissions

This air quality analysis includes estimating emissions associated with long-term operation of the project. Indirect emissions of criteria pollutants with regional impacts would be emitted by project-generated vehicle trips. In addition, localized air quality impacts (i.e., higher CO concentrations or “hot spots”) near intersections or roadway segments in the project vicinity would also potentially occur due to project-generated vehicle trips.

Consistent with SCAQMD guidance for estimating emissions associated with land use development projects, the CalEEMod computer program was used to calculate the long-term operational emissions associated with the project. As previously discussed in the Project Location and Description section, the proposed project would construct a 5,434-square-foot express car wash, an 11,992-square-foot day care with a 21,300-square-foot play area, and a total of 64 parking spaces. Therefore, the analysis was conducted using land use codes *Automobile Care Center*, *Day Care Center*, *City Park*, and *Parking Lot*. Where project-specific data were not available, default assumptions (e.g., trip generation, energy usage, water usage, and solid waste generation) from CalEEMod were used to estimate project emissions. CalEEMod output sheets are included in Attachment B.

THRESHOLDS OF SIGNIFICANCE

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse air quality impact if project-generated pollutant emissions would do any of the following:

- Conflict with or obstruct implementation of the applicable air quality plan
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under applicable NAAQS or CAAQS
- Expose sensitive receptors to substantial pollutant concentrations
- Result in other emissions (such as those leading to odors) affecting a substantial number of people

Certain air districts (e.g., SCAQMD) have created guidelines and requirements to conduct air quality analysis. The SCAQMD's current guidelines, the *CEQA Air Quality Handbook*³ with associated updates, were followed in this assessment of air quality impacts for the proposed project.

Regional Emissions Thresholds

The SCAQMD has established daily emissions thresholds for construction and operation of proposed projects in the Basin. The emission thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks. Table B lists the California Environmental Quality Act (CEQA) significance thresholds for construction and operational emissions established for the Basin.

Table B: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (lbs/day)					
	VOCs	NO _x	CO	PM ₁₀	PM _{2.5}	SO _x
Construction	75	100	550	150	55	150
Operations	55	55	550	150	55	150

Source: SCAQMD Air Quality Significance Thresholds (April 2019).

CO = carbon monoxide

lbs/day = pounds per day

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO_x = sulfur oxides

VOCs = volatile organic compounds

Projects in the Basin with construction- or operation-related emissions that exceed any of their respective emission thresholds would be considered significant under SCAQMD guidelines. These thresholds, which the SCAQMD developed and which apply throughout the Basin, apply as both

³ South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook*. Website: [\(http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-\(1993\)\)](http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993)) (accessed March 2024).

project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact.

Local Microscale Concentration Standards

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the Basin, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 (parts per million) ppm
- California State 8-hour CO standard of 9 ppm

Localized Impacts Analysis

The SCAQMD published its *Final Localized Significance Threshold Methodology* in July 2008, recommending that all air quality analyses include an assessment of air quality impacts to nearby sensitive receptors.⁴ This guidance was used to analyze potential localized air quality impacts associated with construction of the proposed project. Localized significance thresholds (LSTs) are developed based on the size or total area of the emission source, the ambient air quality in the Source Receptor Area (SRA), and the distance to the project. Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality.

LSTs are based on the ambient concentrations of that pollutant within the project SRA and the distance to the nearest sensitive receptor. For the proposed project, the appropriate SRA for the LST is the Perris Valley area (SRA 24). The SCAQMD provides LST screening tables for 25-, 50-, 100-, 200-, and 500-meter source-receptor distances. As identified above, the closest sensitive receptors to the project site include residential uses 75 feet south of the project site across Rockport Road and 110 feet east of the project site across Laguna Vista Drive. In cases where receptors may be closer than 82 feet (25 meters), any distances within the 82-foot (25-meter) buffer zone can be used. As such, the minimum distance of 25 meters was used. Based on the anticipated construction equipment, it is assumed that the maximum daily disturbed acreage for the proposed project would be 1.5 acres.⁵ The 1.5-acre threshold was also used for project operation. Table C lists the emission thresholds that apply during project construction and operation.

⁴ SCAQMD. 2008. *Final Localized Significance Threshold Methodology*. July.

⁵ SCAQMD. n.d. *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf> (accessed March 2024).

Table C: SCAQMD Localized Significance Thresholds

Emissions Source	Pollutant Emissions Threshold (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Construction (1.5-acre, 25-meter distance)	144.0	743.0	5.5	3.5
Operations (1.5-acre, 25-meter distance)	144.0	743.0	1.5	1.0

Source: Final Localized Significance Threshold Methodology (SCAQMD 2008).

CO = carbon monoxide

lbs/day = pounds per day

NO_x = nitrogen oxides

PM₁₀ = particulate matter less than 10 microns in size

PM_{2.5} = particulate matter less than 2.5 microns in size

SCAQMD = South Coast Air Quality Management District

IMPACT ANALYSIS

Air pollutant emissions associated with the project would occur over the short term from construction activities and over the long term from project-related vehicular trips and due to energy consumption (e.g., electricity) by the proposed land uses.

Consistency with Applicable Air Quality Plans

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans.

The proposed project would include the construction of a 5,434-square-foot car wash and an 11,992-square-foot day care with a 21,300-square-foot play area. The proposed project is not considered a project of state-wide, regional, or area-wide significance (e.g., large-scale projects such as airports, electrical generating facilities, petroleum and gas refineries, residential developments of more than 500 dwelling units, and shopping centers or business establishments employing more than 1,000 persons or encompassing more than 500,000 square feet of floor space) as defined in the California Code of Regulations (Title 14, Division 6, Chapter 3, Article 13, §15206(b)). Because the proposed project would not be defined as a regionally significant project under CEQA, it does not meet SCAG's Intergovernmental Review criteria.

The City's General Plan is consistent with the SCAG Regional Comprehensive Plan Guidelines and the SCAQMD AQMP. Pursuant to the methodology provided in the SCAQMD *CEQA Air Quality Handbook*, consistency with the Basin 2022 AQMP is affirmed when a project (1) would not increase the frequency or severity of an air quality standards violation or cause a new violation, and (2) is consistent with the growth assumptions in the AQMP. Consistency review is presented as follows:

1. The project would result in short-term construction and long-term operational pollutant emissions that are all less than the CEQA significance emissions thresholds established by the SCAQMD, as demonstrated below; therefore, the project would not result in an increase in the frequency or severity of an air quality standards violation or cause a new air quality standards violation.

2. The *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities. The project site is currently designated as Commercial in the City's General Plan. The proposed uses are allowed under this General Plan designation; therefore, the proposed project would not require a change to the General Plan land use designation and would be consistent with the City's General Plan and Zoning Ordinance.

Based on the consistency analysis presented above, the proposed project would be consistent with the regional AQMP.

Criteria Pollutant Analysis

The Basin is currently designated as nonattainment for the federal and State standards for O₃ and PM_{2.5}. In addition, the Basin is in nonattainment for the PM₁₀ standard. The Basin's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of an ambient air quality standard. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SCAQMD considered the emissions levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is not necessary. The following analysis assesses the potential project-level air quality impacts associated with construction and operation of the proposed project.

Construction Emissions

During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by grading, building construction, paving, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, VOCs, directly emitted PM_{2.5} or PM₁₀, and TACs such as diesel particulate matter.

Project construction activities would include grading, site preparation, building construction, architectural coating, and paving activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM₁₀ emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM₁₀

emissions would depend on soil moisture, silt content of soil, wind speed, and amount of operating equipment. Larger dust particles would settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SCAQMD has established Rule 403: Fugitive Dust, which would require the applicant to implement measures that would reduce the amount of particulate matter generated during the construction period. The Rule 403 measures that were incorporated in this analysis include:

- Water active sites at least twice daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.

In addition to dust-related PM₁₀ emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, sulfur oxides (SO_x), NO_x, VOCs, and some soot particulate (PM_{2.5} and PM₁₀) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using CalEEMod and are summarized in Table D. CalEEMod output sheets are provided in Attachment B.

Table D: Project Construction Emissions

Project Construction	Maximum Pollutant Emissions (lbs/day)					
	VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Maximum (lbs/day)	17.1	18.9	14.8	<0.1	3.4	1.9
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0	55.0
Exceeds Thresholds?	No	No	No	No	No	No

Source: Compiled by LSA (March 2024).

CO = carbon monoxide

lbs/day = pounds per day

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO_x = sulfur oxides

VOCs = volatile organic compounds

As shown in Table D, construction emissions associated with the project would not exceed the daily SCAQMD thresholds for VOCs, NO_x, CO, SO_x, PM_{2.5}, or PM₁₀ emissions. Therefore, construction of the proposed project would not result in emissions that would result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under an applicable NAAQS or CAAQS.

Operational Air Quality Impacts

Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle and truck trips), area sources (e.g., architectural coatings, the use of landscape maintenance equipment, and the use of consumer products), and energy sources (e.g., natural gas) related to the proposed project.

PM₁₀ emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM₁₀ occurs when vehicle tires pulverize small rocks and pavement and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other particulate matter emission processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel-powered vehicles.

Energy source emissions result from activities in buildings for which natural gas is used. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source.

Area-source emissions consist of direct sources of air emissions at the project site, including architectural coatings, consumer products, and use of landscape maintenance equipment.

Long-term operational emissions associated with the proposed project were calculated using CalEEMod. Table E provides the proposed project's estimated operational emissions. CalEEMod output sheets are provided in Attachment B.

Table E: Project Operational Emissions

Emission Type	Pollutant Emissions (lbs/day)					
	VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Mobile Sources	2.8	2.0	18.0	<0.1	3.4	0.9
Area Sources	0.7	<0.1	0.8	<0.1	<0.1	<0.1
Energy Sources	<0.1	0.1	0.1	<0.1	<0.1	<0.1
Total Project Emissions	3.5	2.2	18.9	<0.1	3.4	0.9
SCAQMD Threshold	55.0	55.0	550.0	150.0	150.0	55.0
Exceeds Threshold?	No	No	No	No	No	No

Source: Compiled by LSA (March 2024).

Note: Some values may not appear to add correctly due to rounding.

CO = carbon monoxide

lbs/day = pounds per day

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO_x = sulfur oxides

VOCs = volatile organic compounds

The results shown in Table E indicate the proposed project would not exceed the significance criteria for daily VOCs, NO_x, CO, SO_x, PM₁₀, or PM_{2.5} emissions. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable NAAQS or CAAQS.

Long-Term Microscale (CO Hot Spot) Analysis

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the vicinity of the proposed project site. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service (LOS) or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

The proposed project did not meet the criteria for an evaluation of study area intersection or roadway segment LOS. Therefore, given the extremely low level of CO concentrations in the project area and the lack of traffic impacts at any intersections, project-related vehicles are not expected to result in CO concentrations exceeding the State or federal CO standards. No CO hot spots would occur, and the project would not result in any project-related impacts on CO concentrations.

Health Risk on Nearby Sensitive Receptors

Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. As identified above, the closest existing sensitive receptors to the project site include residential uses 75 feet south of the project site across Rockport Road and 110 feet east of the project site across Laguna Vista Drive.

The SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors such as residential land uses in the immediate vicinity of a project site as a result of construction activities. The thresholds are based on standards established by the SCAQMD in its LST methodology and are measured against emissions that occur on a specific project site. Project construction and operation emissions were compared to the LST screening tables in SRA 24 based on a 25-meter source-receptor distance. Tables F and G show the results of the LST analysis during project construction and operation, respectively.

By design, the localized impact analysis only includes on-site sources; however, the CalEEMod outputs do not separate on-site and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions detailed in Table G assume all area- and energy-source emissions would occur on site, and 5 percent of the project-related new mobile sources (which is an estimate of the amount of project-related on-site vehicle and truck travel) would occur on site. Considering the total trip length included in CalEEMod, the 5 percent assumption is conservative. Table G indicates the localized operational emissions would not exceed the LSTs at nearby residences. Therefore, the proposed operational activity would not result in a locally significant air quality impact.

Table F: Project Localized Construction Emissions

Source	Pollutant Emissions (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
On-Site Emissions	18.8	14.2	3.3	1.8
Localized Significance Threshold	144.0	743.0	5.5	3.5
Significant?	No	No	No	No

Source: Compiled by LSA (March 2024).

Note: Source Receptor Area 24, based on a 1.5-acre construction disturbance daily area, at a distance of 25 meters (82 feet) from the project boundary.

CO = carbon monoxide

PM_{2.5} = particulate matter less than 2.5 microns in size

lbs/day = pounds per day

PM₁₀ = particulate matter less than 10 microns in size

NO_x = nitrogen oxides

Table G: Project Localized Operational Emissions

Source	Pollutant Emissions (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
On-Site Emissions	0.2	1.8	0.2	<0.1
Localized Significance Thresholds	144.0	743.0	1.5	1.0
Significant?	No	No	No	No

Source: Compiled by LSA (March 2024).

Note: Source Receptor Area 24, based on a 1.5-acre operational disturbance daily area, at a distance of 25 meters (82 feet) from the project boundary.

CO = carbon monoxide

PM_{2.5} = particulate matter less than 2.5 microns in size

lbs/day = pounds per day

PM₁₀ = particulate matter less than 10 microns in size

NO_x = nitrogen oxides

As detailed in Tables F and G, the emissions levels indicate that the project would not exceed SCAQMD LSTs during project construction or operation. The project's peak operational on-site NO_x emissions are 0.2 pound per day. Due to the small size of the proposed project in relation to the overall Basin, the level of emissions is not sufficiently high to use a regional modeling program to correlate health effects on a Basin-wide level. On a regional scale, the quantity of emissions from the project is incrementally minor. Because the SCAQMD has not identified any other methods to quantify health impacts from small projects and due to the size of the project, it is speculative to assign any specific health effects to small project-related emissions. However, based on this localized analysis, the proposed project would not expose existing sensitive receptors to substantial pollutant concentrations.

In addition, the proposed day care use would be considered a sensitive receptor. The proposed day care would be located approximately 75 feet from the proposed car wash. Vehicle queuing associated with the car wash has the potential to result in localized impacts at the day care. However, it is expected that vehicles would have short dwell times and would not be expected to idle for a considerable duration. As such, based on the short duration of idling expected to occur, the proposed car wash would not be expected to result in localized concentrations that would expose the day care to substantial pollutant concentrations. In addition, because the proposed day care is the closest sensitive receptor, localized concentrations of pollutants impacting other uses such as residential uses would also not be expected to result in significant impacts to those uses.

Therefore, the project would not expose sensitive receptors to substantial levels of pollutant concentrations.

Odors

Heavy-duty equipment on the project site during construction would emit odors, primarily from equipment exhaust. However, the construction activity would cease after individual construction is completed. No other sources of objectionable odors have been identified for the proposed project.

SCAQMD Rule 402 regarding nuisances states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property." The proposed uses are not anticipated to emit any objectionable odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

CONCLUSION

Based on the analysis presented above, construction and operation of the proposed project would not result in the generation of criteria air pollutants that would exceed SCAQMD thresholds of significance. Compliance with SCAQMD Rule 403: Fugitive Dust would further reduce construction dust impacts. In addition, the proposed project is not expected to produce significant emissions that would affect nearby sensitive receptors. The project would also be consistent with the 2022 AQMP and would also not result in objectionable odors affecting a substantial number of people.

Attachments: A: Figures 1 and 2
B: CalEEMod Output Sheets

ATTACHMENT A

FIGURES

Figure 1: Project Location

Figure 2: Site Plan

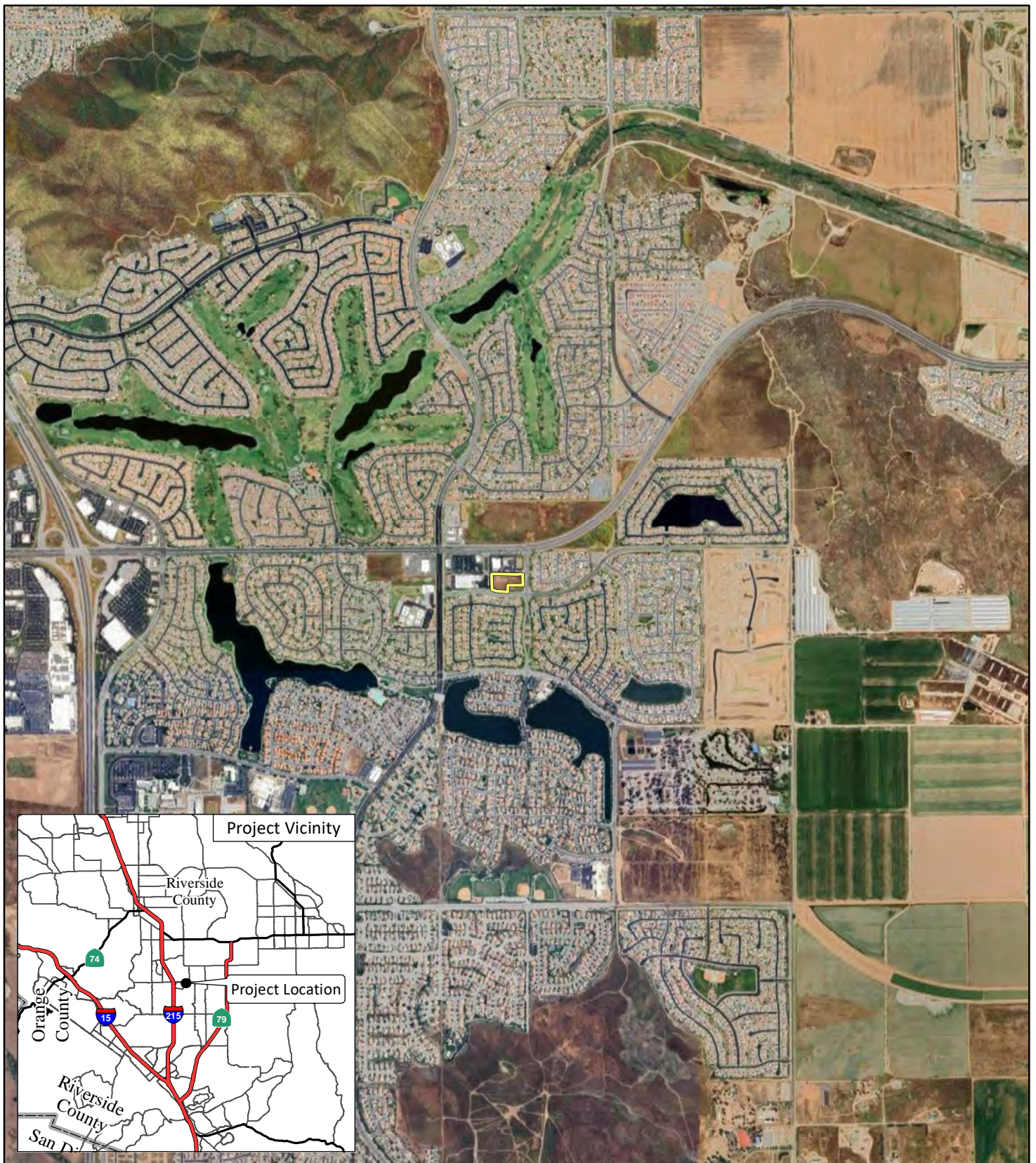


FIGURE 1

LSA

LEGEND

 Project Location



0 1000 2000
FEET

SOURCE: Google Maps (2021)

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SHOPPES AT THE LAKES - MISTER CAR WASH AND DAY CARE PROJECT

Regional Project Location

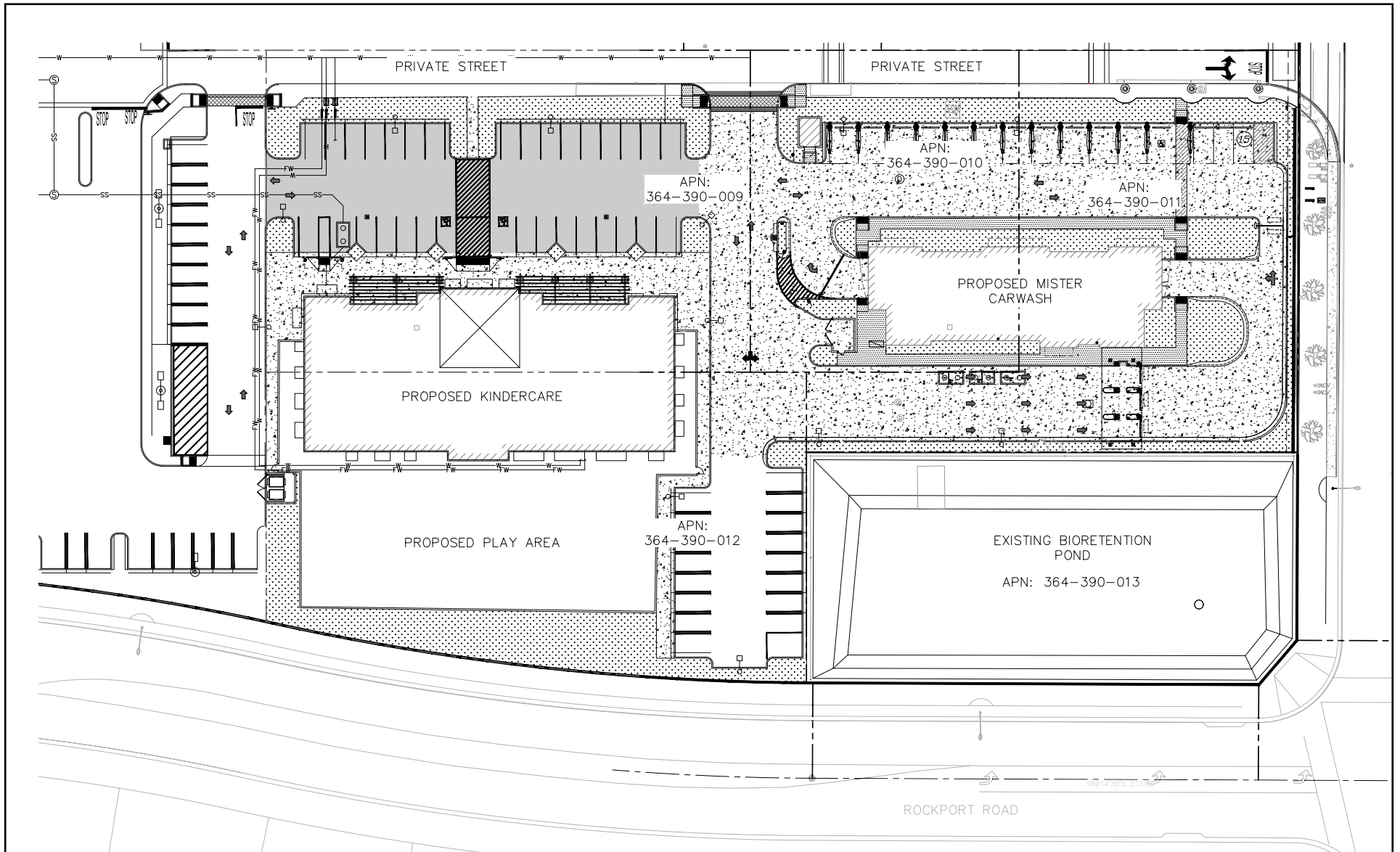


FIGURE 2

LSA



NOT TO SCALE

SOURCE: Kimley Horn

I:\CWP2205\G\Site_Plan.ai (3/29/2024)

SHOPPES AT THE LAKES - MISTER CAR WASH AND DAY CARE PROJECT

Site Plan

ATTACHMENT B

CALEEMOD OUTPUT SHEETS

Shoppes at the Lakes - Mister Car Wash and Day Care Project Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Shoppes at the Lakes - Mister Car Wash and Day Care Project
Construction Start Date	1/6/2025
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	14.0
Location	33.68342290260388, -117.14999974776893
County	Riverside-South Coast
City	Menifee
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5508
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
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Automobile Care Center	5.43	1000sqft	0.20	5,434	8,715	—	—	—
Day-Care Center	12.0	1000sqft	0.29	11,992	12,675	—	—	—
City Park	0.49	Acre	0.49	0.00	213,445	213,445	—	—
Parking Lot	64.0	Space	0.75	0.00	32,670	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.1	13.5	11.0	0.02	0.55	0.16	0.67	0.51	0.04	0.54	—	1,984	1,984	0.08	0.03	1,996
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.60	18.9	14.8	0.02	0.55	2.89	3.45	0.51	1.37	1.87	—	2,584	2,584	0.11	0.03	2,594
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.70	6.18	5.00	0.01	0.25	0.16	0.41	0.23	0.07	0.29	—	895	895	0.04	0.01	900
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.13	1.13	0.91	< 0.005	0.04	0.03	0.07	0.04	0.01	0.05	—	148	148	0.01	< 0.005	149

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	17.1	13.5	11.0	0.02	0.55	0.16	0.67	0.51	0.04	0.54	—	1,984	1,984	0.08	0.03	1,996
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.60	18.9	14.8	0.02	0.55	2.89	3.45	0.51	1.37	1.87	—	2,584	2,584	0.11	0.03	2,594
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.70	6.18	5.00	0.01	0.25	0.16	0.41	0.23	0.07	0.29	—	895	895	0.04	0.01	900
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.13	1.13	0.91	< 0.005	0.04	0.03	0.07	0.04	0.01	0.05	—	148	148	0.01	< 0.005	149

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.46	2.18	18.9	0.04	0.04	3.41	3.45	0.04	0.87	0.91	21.6	4,617	4,639	2.40	0.21	5,903
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.13	2.32	15.7	0.04	0.04	3.41	3.45	0.04	0.87	0.91	21.6	4,366	4,388	2.41	0.21	5,638
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	2.62	1.80	12.7	0.03	0.03	2.47	2.50	0.03	0.63	0.66	21.6	3,355	3,377	2.36	0.16	4,616
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.48	0.33	2.32	0.01	0.01	0.45	0.46	0.01	0.11	0.12	3.57	556	559	0.39	0.03	764

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.79	2.03	18.0	0.04	0.03	3.41	3.44	0.03	0.87	0.89	—	4,141	4,141	0.20	0.20	4,221
Area	0.67	0.01	0.76	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.12	3.12	< 0.005	< 0.005	3.13
Energy	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	398	398	0.03	< 0.005	399
Water	—	—	—	—	—	—	—	—	—	—	1.97	75.0	76.9	0.21	0.01	83.7
Waste	—	—	—	—	—	—	—	—	—	—	19.6	0.00	19.6	1.96	0.00	68.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,127
Total	3.46	2.18	18.9	0.04	0.04	3.41	3.45	0.04	0.87	0.91	21.6	4,617	4,639	2.40	0.21	5,903
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.58	2.18	15.6	0.04	0.03	3.41	3.44	0.03	0.87	0.89	—	3,893	3,893	0.21	0.21	3,960
Area	0.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	398	398	0.03	< 0.005	399
Water	—	—	—	—	—	—	—	—	—	—	1.97	75.0	76.9	0.21	0.01	83.7
Waste	—	—	—	—	—	—	—	—	—	—	19.6	0.00	19.6	1.96	0.00	68.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,127
Total	3.13	2.32	15.7	0.04	0.04	3.41	3.45	0.04	0.87	0.91	21.6	4,366	4,388	2.41	0.21	5,638

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.98	1.65	12.1	0.03	0.02	2.47	2.49	0.02	0.63	0.65	—	2,880	2,880	0.16	0.15	2,935
Area	0.63	< 0.005	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.13	2.13	< 0.005	< 0.005	2.14
Energy	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	398	398	0.03	< 0.005	399
Water	—	—	—	—	—	—	—	—	—	—	1.97	75.0	76.9	0.21	0.01	83.7
Waste	—	—	—	—	—	—	—	—	—	—	19.6	0.00	19.6	1.96	0.00	68.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,127
Total	2.62	1.80	12.7	0.03	0.03	2.47	2.50	0.03	0.63	0.66	21.6	3,355	3,377	2.36	0.16	4,616
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.36	0.30	2.20	0.01	< 0.005	0.45	0.45	< 0.005	0.11	0.12	—	477	477	0.03	0.03	486
Area	0.11	< 0.005	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	0.35
Energy	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	65.9	65.9	< 0.005	< 0.005	66.1
Water	—	—	—	—	—	—	—	—	—	—	0.33	12.4	12.7	0.03	< 0.005	13.9
Waste	—	—	—	—	—	—	—	—	—	—	3.25	0.00	3.25	0.32	0.00	11.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	187
Total	0.48	0.33	2.32	0.01	0.01	0.45	0.46	0.01	0.11	0.12	3.57	556	559	0.39	0.03	764

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	15.6	11.9	0.02	0.45	—	0.45	0.41	—	0.41	—	2,065	2,065	0.08	0.02	2,072
Dust From Material Movement	—	—	—	—	—	2.44	2.44	—	1.17	1.17	—	—	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.21	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.3	28.3	< 0.005	< 0.005	28.4
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	0.02	0.02	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.68	4.68	< 0.005	< 0.005	4.70
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	97.2	97.2	< 0.005	< 0.005	98.4

Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.35	1.35	< 0.005	< 0.005	1.37
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	0.23
Vendor	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
Hauling	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

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	18.8	14.2	0.02	0.55	—	0.55	0.51	—	0.51	—	2,455	2,455	0.10	0.02	2,463
Dust From Material Movement	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.52	0.39	< 0.005	0.02	—	0.02	0.01	—	0.01	—	67.3	67.3	< 0.005	< 0.005	67.5
Dust From Material Movement	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.09	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.1	11.1	< 0.005	< 0.005	11.2
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	130	130	0.01	< 0.005	131
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.59	3.59	< 0.005	< 0.005	3.65
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.60	0.60	< 0.005	< 0.005	0.60

Vendor	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
Hauling	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

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	13.4	10.5	0.02	0.55	—	0.55	0.51	—	0.51	—	1,801	1,801	0.07	0.01	1,807
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	13.4	10.5	0.02	0.55	—	0.55	0.51	—	0.51	—	1,801	1,801	0.07	0.01	1,807
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	5.14	4.02	0.01	0.21	—	0.21	0.20	—	0.20	—	691	691	0.03	0.01	693
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.94	0.73	< 0.005	0.04	—	0.04	0.04	—	0.04	—	114	114	< 0.005	< 0.005	115
Onsite truck	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

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.52	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	95.5	95.5	< 0.005	< 0.005	96.9
Vendor	< 0.005	0.10	0.03	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	87.4	87.4	< 0.005	0.01	91.6
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.40	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	87.8	87.8	< 0.005	< 0.005	88.9
Vendor	< 0.005	0.10	0.03	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	87.4	87.4	< 0.005	0.01	91.5
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	34.1	34.1	< 0.005	< 0.005	34.6
Vendor	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.5	33.5	< 0.005	0.01	35.1
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.65	5.65	< 0.005	< 0.005	5.73
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.55	5.55	< 0.005	< 0.005	5.81
Hauling	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

3.7. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.31	8.40	6.65	0.01	0.36	—	0.36	0.34	—	0.34	—	992	992	0.04	0.01	995
Paving	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.23	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.2	27.2	< 0.005	< 0.005	27.3
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.50	4.50	< 0.005	< 0.005	4.51
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.97	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	176	176	0.01	0.01	179
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.49	4.49	< 0.005	< 0.005	4.56
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.74	0.74	< 0.005	< 0.005	0.75
Vendor	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
Hauling	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

3.9. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	134
Architectu ral Coatings	17.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.66	3.66	< 0.005	< 0.005	3.67
Architectu ral Coatings	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.61	0.61	< 0.005	< 0.005	0.61
Architectural Coatings	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.1	19.1	< 0.005	< 0.005	19.4
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	0.49
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	0.08
Vendor	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
Hauling	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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.56	0.53	4.86	0.01	0.01	1.00	1.01	0.01	0.25	0.26	—	1,203	1,203	0.05	0.05	1,225
Day-Care Center	2.23	1.50	13.2	0.03	0.02	2.41	2.43	0.02	0.61	0.63	—	2,938	2,938	0.15	0.15	2,997
City Park	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
Parking Lot	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
Total	2.79	2.03	18.0	0.04	0.03	3.41	3.44	0.03	0.87	0.89	—	4,141	4,141	0.20	0.20	4,221
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.52	0.57	4.08	0.01	0.01	1.00	1.01	0.01	0.25	0.26	—	1,130	1,130	0.05	0.05	1,147
Day-Care Center	2.06	1.61	11.5	0.03	0.02	2.41	2.43	0.02	0.61	0.63	—	2,763	2,763	0.16	0.15	2,813
City Park	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
Parking Lot	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

Total	2.58	2.18	15.6	0.04	0.03	3.41	3.44	0.03	0.87	0.89	—	3,893	3,893	0.21	0.21	3,960
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.08	0.07	0.52	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	117	117	0.01	0.01	119
Day-Care Center	0.28	0.23	1.68	< 0.005	< 0.005	0.34	0.34	< 0.005	0.09	0.09	—	360	360	0.02	0.02	367
City Park	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
Parking Lot	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
Total	0.36	0.30	2.20	0.01	< 0.005	0.45	0.45	< 0.005	0.11	0.12	—	477	477	0.03	0.03	486

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	75.8	75.8	< 0.005	< 0.005	76.1
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	114	114	0.01	< 0.005	114
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	41.7	41.7	< 0.005	< 0.005	41.9
Total	—	—	—	—	—	—	—	—	—	—	—	231	231	0.01	< 0.005	232

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	75.8	75.8	< 0.005	< 0.005	76.1
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	114	114	0.01	< 0.005	114
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	41.7	41.7	< 0.005	< 0.005	41.9
Total	—	—	—	—	—	—	—	—	—	—	—	231	231	0.01	< 0.005	232
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	12.5	12.5	< 0.005	< 0.005	12.6
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	18.8	18.8	< 0.005	< 0.005	18.9
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	6.91	6.91	< 0.005	< 0.005	6.93
Total	—	—	—	—	—	—	—	—	—	—	—	38.3	38.3	< 0.005	< 0.005	38.4

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Automobile Care Center	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	74.8	74.8	0.01	< 0.005	75.0
Day-Care Center	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	92.0	92.0	0.01	< 0.005	92.3
City Park	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
Parking Lot	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
Total	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	167	167	0.01	< 0.005	167
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	74.8	74.8	0.01	< 0.005	75.0
Day-Care Center	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	92.0	92.0	0.01	< 0.005	92.3
City Park	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
Parking Lot	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
Total	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	167	167	0.01	< 0.005	167
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.4	12.4	< 0.005	< 0.005	12.4
Day-Care Center	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.2	15.2	< 0.005	< 0.005	15.3
City Park	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
Parking Lot	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
Total	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.6	27.6	< 0.005	< 0.005	27.7

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectu ral Coatings	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscap e Equipmen t	0.12	0.01	0.76	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.12	3.12	< 0.005	< 0.005	3.13
Total	0.67	0.01	0.76	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.12	3.12	< 0.005	< 0.005	3.13
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectu ral Coatings	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectu ral Coatings	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscap Equipment	0.02	< 0.005	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	0.35
Total	0.11	< 0.005	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	0.35

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobil e Care Center	—	—	—	—	—	—	—	—	—	—	0.98	6.14	7.12	0.10	< 0.005	10.4
Day-Care Center	—	—	—	—	—	—	—	—	—	—	0.99	6.66	7.64	0.10	< 0.005	10.9
City Park	—	—	—	—	—	—	—	—	—	—	0.00	58.2	58.2	< 0.005	< 0.005	58.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	4.01	4.01	< 0.005	< 0.005	4.02
Total	—	—	—	—	—	—	—	—	—	—	1.97	75.0	76.9	0.21	0.01	83.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobil e Care Center	—	—	—	—	—	—	—	—	—	—	0.98	6.14	7.12	0.10	< 0.005	10.4
Day-Care Center	—	—	—	—	—	—	—	—	—	—	0.99	6.66	7.64	0.10	< 0.005	10.9
City Park	—	—	—	—	—	—	—	—	—	—	0.00	58.2	58.2	< 0.005	< 0.005	58.4

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	4.01	4.01	< 0.005	< 0.005	4.02
Total	—	—	—	—	—	—	—	—	—	—	1.97	75.0	76.9	0.21	0.01	83.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	0.16	1.02	1.18	0.02	< 0.005	1.72
Day-Care Center	—	—	—	—	—	—	—	—	—	—	0.16	1.10	1.27	0.02	< 0.005	1.81
City Park	—	—	—	—	—	—	—	—	—	—	0.00	9.63	9.63	< 0.005	< 0.005	9.67
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.66	0.66	< 0.005	< 0.005	0.67
Total	—	—	—	—	—	—	—	—	—	—	0.33	12.4	12.7	0.03	< 0.005	13.9

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	11.2	0.00	11.2	1.12	0.00	39.1
Day-Care Center	—	—	—	—	—	—	—	—	—	—	8.40	0.00	8.40	0.84	0.00	29.4
City Park	—	—	—	—	—	—	—	—	—	—	0.02	0.00	0.02	< 0.005	0.00	0.08
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00

Total	—	—	—	—	—	—	—	—	—	—	19.6	0.00	19.6	1.96	0.00	68.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	11.2	0.00	11.2	1.12	0.00	39.1
Day-Care Center	—	—	—	—	—	—	—	—	—	—	8.40	0.00	8.40	0.84	0.00	29.4
City Park	—	—	—	—	—	—	—	—	—	—	0.02	0.00	0.02	< 0.005	0.00	0.08
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	19.6	0.00	19.6	1.96	0.00	68.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	1.85	0.00	1.85	0.19	0.00	6.48
Day-Care Center	—	—	—	—	—	—	—	—	—	—	1.39	0.00	1.39	0.14	0.00	4.87
City Park	—	—	—	—	—	—	—	—	—	—	< 0.005	0.00	< 0.005	< 0.005	0.00	0.01
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	3.25	0.00	3.25	0.32	0.00	11.4

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
----------	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,127
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,127
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,127
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,127
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	187
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	187

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/6/2025	1/10/2025	5.00	5.00	—
Grading	Grading	1/13/2025	1/24/2025	5.00	10.0	—
Building Construction	Building Construction	1/27/2025	8/8/2025	5.00	140	—
Paving	Paving	8/11/2025	8/22/2025	5.00	10.0	—
Architectural Coating	Architectural Coating	8/25/2025	9/5/2025	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	1.00	7.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 2	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 2	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Tier 2	1.00	6.00	10.0	0.56

Paving	Pavers	Diesel	Tier 2	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 2	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	6.78	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	2.86	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	18.5	LDA,LDT1,LDT2

Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1.36	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	26,139	8,713	1,960

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	4.69	0.00	—

Grading	—	—	10.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.75

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Automobile Care Center	0.00	0%
Day-Care Center	0.00	0%
City Park	0.00	0%
Parking Lot	0.75	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMt/Weekday	VMt/Saturday	VMt/Sunday	VMt/Year
Automobile Care Center	129	129	64.6	43,692	787	1,414	708	315,871

Day-Care Center	571	74.6	70.0	156,424	3,396	818	768	968,128
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	26,139	8,713	1,960

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBtu/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBtu/yr)
Automobile Care Center	51,998	532	0.0330	0.0040	233,392
Day-Care Center	78,045	532	0.0330	0.0040	287,094
City Park	0.00	532	0.0330	0.0040	0.00

Parking Lot	28,619	532	0.0330	0.0040	0.00
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5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Automobile Care Center	511,237	138,183
Day-Care Center	514,332	200,971
City Park	0.00	7,520,716
Parking Lot	0.00	518,006

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Automobile Care Center	20.8	—
Day-Care Center	15.6	—
City Park	0.04	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Automobile Care Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Automobile Care Center	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Day-Care Center	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Day-Care Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Day-Care Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Day-Care Center	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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8. User Changes to Default Data

Screen	Justification
Land Use	The proposed project would include a construct a 5,434-square-foot express car wash, an 11,992-square-foot day care with a 21,300-square-foot play area, and and a total of 64 parking spaces (including 12 vacuum stalls). This analysis assumes approximately 10% of the project site would be landscaped.
Construction: Construction Phases	Project construction is expected to begin early 2025 and would occur for approximately 8 months.

Construction: Off-Road Equipment	Assuming the use of Tier 2 construction equipment.
Operations: Vehicle Data	Assuming default trip rates, except no new trips associated with the play area as that use would be part of the Day Care Center.