
# 254 First Street East Residential Project

## Class 32 Categorical Exemption Report

*prepared for*

**North of the Mission LLC**
Contact: Kelso Barnett

*prepared by*

**Rincon Consultants, Inc.**
449 15th Street, Suite 303
Oakland, California 94612

**May 2024**

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

# Table of Contents



## Tables



## Figures



## Appendices

*This page intentionally left blank.*

# 1 Introduction

This report serves as the technical documentation of an environmental analysis performed by Rincon Consultants, Inc. for the 254 First Street East Residential Project ("proposed project") in the City of Sonoma. The intent of the analysis is to document whether the project is eligible for a Class 32 Categorical Exemption (CE) pursuant to *CEQA Guidelines* Section 15332. The report provides an introduction, project description, and evaluation of the project's consistency with the requirements for a Class 32 CE. The report concludes that the project is eligible for a Class 32 CE.

The *CEQA Guidelines* Section 15332 states that a CE is allowed when:

a. The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.
b. The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.
c. The project site has no value as habitat for endangered, rare, or threatened species.
d. Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.
e. The site can be adequately served by all required utilities and public services.

Additionally, *CEQA Guidelines* Section 15300.2 outlines exceptions to the applicability of a CE, including cumulative impacts, significant effects due to unusual circumstances, scenic highways, hazardous waste sites, and historical resources. A full listing of these exceptions and an assessment of their applicability to the proposed project is provided in this report.

Rincon Consultants, Inc. evaluated the project's consistency with the above requirements, including its potential impacts in the areas of biological resources, traffic, noise, air quality, and water quality, as well as the exceptions to the applicability of a CE, to confirm the project's eligibility for the Class 32 CE.

# 2 Project Description

## 2.1 Project Location and Setting

The project site encompasses one parcel (Assessor Parcel Number 018-131-018-000) which is currently 2.07-acres (90,169 gross square feet) but what is projected to be 1.995-acres (86,913 square feet) at the time of project construction located at 254 First Street East in Sonoma. The project site is bounded by First Street East to the west, multi family residential development to the east, single family residences to the north and Vintage House, a senior programming and event center, to the south. There are currently three buildings and one open-air carport on site totaling approximately 15,000 square feet of space in addition to a parking lot. The existing buildings on site support uses such as the Cannon Music School, Embassy Flag, Inc., Sonoma Car Club, and Armando's Party Rentals. The project site is generally flat and has 78 mature trees on site. The site has a General Plan land use designation of Mixed Use (City of Sonoma 2006) and is zoned Mixed Use (MX). Figure 1 shows the regional location of the project site and Figure 2 shows the project site in its immediate context.

## 2.2 Project Characteristics

The proposed project would involve the construction of 31 condominium units in six separate buildings (Building A through Building F). Building A would contain six units while the remaining buildings would contain five units each. The proposed site plan is shown on Figure 3. Each building would include one- and two-bedroom residential units. All of the buildings would be two stories tall with small portions (approximately 10%) of buildings B, C, D, E and F that would have three story roof decks with a maximum height of 30 feet. Two of the residential units would be available to low income and moderate income individuals to meet the city's 25 percent inclusionary housing requirement. The remainder of this requirement would be met through the payment of an in-lieu fee to Sonoma's Affordable Housing Trust Fund. The project would not require concessions or waivers and would comply with the development standards of the MX District. Table 1 shows the characteristics of the proposed project.

**Table 1 Project Characteristics**

| | |
|---|---|
| Address | 254 First Street East |
| Assessor's Parcel Numbers | 018-131-018 |
| Gross/Net Lot Area[1] | 90,169 SF |
| Lot Coverage | 38,247 SF |
| Floor Area | 0.36 |
| Height | Maximum: 30 feet<br>3 stories above grade |
| Residential Units | Total: 31 units (22 one-bedroom and 9 two-bedroom) |
| Vehicle Parking | Residential: 40 spaces |

SF = square feet

**Figure 1 Regional Location**

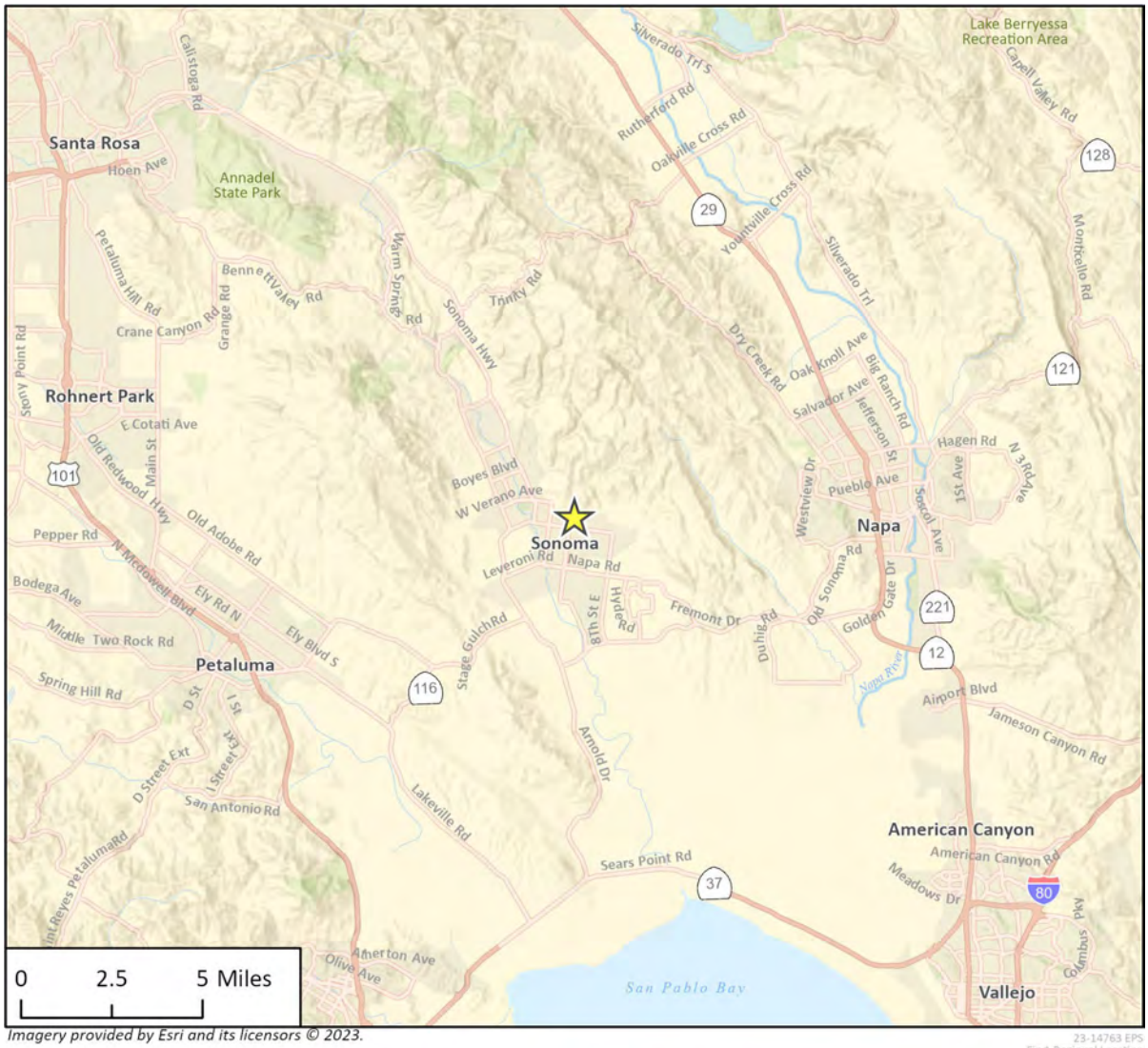


**Figure 2 Project Site Location**


*Imagery provided by Microsoft Bing and its licensors © 2023.*

23-14763 EPS
Fig 2 Project Site

**Figure 3 Proposed Site Plan**


*Source: Marcus & Willers Architects.*

## Landscaping and Open Space

There are currently 78 mature trees on the project site: 59 Coast live oak (*Quercus agrifolia)*, one coast redwood (*Sequoia sempervirens),* eight incense cedars (*Calocedrus decurrens*), two valley oaks (*Quercus lobata*), one Deodar cedar (*Cedrus deodara*), one Monterey cypress (*Cupressus macrocarpa*), one silk tree (*Albizia julibrissin),* three London plane trees *(Platanus × acerifolia),* one Mexican fan palm (*Washingtonia robusta*), and one bay laurel tree (*Laurus nobilis*).The proposed project would include the removal of 14 trees, one of which is a tree regulated under the City's Tree Protection Ordinance because its trunk size is over 18 inches in diameter. The removal of this tree would require a permit under the city's Tree Protection Ordinance. Sixty-four trees would remain on site.

The project would include 320 square feet of private open space for each one-bedroom unit (total 7,031 square feet) and 890 square feet of private open space per two-bedroom unit (total 8,009 square feet). The project would also include shared open space in the form of 17,150 square feet of landscaped yards surrounding each building and a 3,300 square foot pool area located along the southern edge of the property between Building B and Building C.

## Site Access, Parking, and Circulation

Vehicle access to the project site would be provided via a new driveway off of First Street East. The proposed driveway would be 20 feet wide and would provide direct access to the residential units. The project would also include a second emergency egress access to Blue Wing Drive through the neighboring property to the north via an existing easement. This egress would remain gated during operation and would only be used for emergencies.

The project would include 40 parking spaces in a paved central parking lot. Pedestrian access would be provided along internal pathways between each building.

## Utilities and Stormwater Management

The City of Sonoma Water Department provides water services to the city. Sonoma Clean Power provides electricity services to the city via Pacific Gas and Electric (PG&E) infrastructure. PG&E provides natural gas services to the city. Sonoma Garbage Collectors collects garbage and recycling within Sonoma. Utility lines for the proposed project would be connected to existing infrastructure on the project site and under First Street East.

## Construction

Project construction would occur over approximately 11 months. The project would involve the demolition of three buildings on the project site and the open air carport totaling approximately 15,000 square feet. A static or pneumatic roller would be used in areas of the site where paving would occur within 37 feet of off-site structures and off-road equipment of 100 hp or less would be used for grading/earthwork activities. The proposed project would require excavation of approximately 1,850 cubic yards of soil, of which 1,840 cubic yards would be exported.

# 3 Consistency Analysis

## 3.1 Criterion (a)

*The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.*

The project site is designated for Mixed Use in the General Plan and is zoned Mixed Use.

Consistent with the zoning and General Plan land use designations for the site, the site would include the development of 31 residential condominiums. This would comply with the density requirement of 20 du/acre or less required in mixed use zones.

The City of Sonoma has determined that the proposed project is consistent with the applicable 2020 General Plan designations and policies as well as with applicable zoning designations and regulations. Applicable 2020 General Plan policies include:

**Goal CD-4: Encourage quality, variety, and innovation in new development.**

**Policy 4.2** Encourage a variety of unit types in residential projects.

**Policy 4.3** Coordinate development on small contiguous lots to the extent possible.

**Policy 4.4** Require pedestrian and bicycle access and amenities in all development.

**Policy 5.5** Promote higher density, infill development, while ensuring that building mass, scale, and form are compatible with neighborhood and town character.

**Goal ER-1: Acquire and protect important open space in and around Sonoma.**

**Policy 1.4** Require new development to provide adequate private and, where appropriate, public open space.

**Goal ER-2: Identify, preserve, and enhance important habitat areas and significant environmental resources.**

**Policy 2.5** Require erosion control and soil conservation practices that support watershed protection.

**Policy 2.6** Preserve existing trees and plant new trees.

**Goal PS-1: Minimize risks to life and property associated with seismic and other geologic hazards, fire, hazardous materials, and flooding.**

**Policy 1.3** Ensure that all development projects provide adequate fire protection.

As described above in the Project Description, the project would comply with zoning ordinance requirements set forth in the Sonoma Municipal Code (SMC) related to building height, FAR, site coverage, open space, and parking. The project would also exceed the City's open space requirements for the MX District.

Therefore, the project would be consistent with the site's General Plan land use designations, General Plan policies, zoning designations, and zoning regulations. The project would meet the requirements of *criterion (a)*.

## 3.2 Criterion (b)

*The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.*

The project is located on what would be an approximately 1.995-acre site within a developed neighborhood in the City of Sonoma. It is immediately surrounded by residential and other urban uses on all sides. The project would be consistent with *criterion (b)*.

## 3.3 Criterion (c)

*The project site has no value as habitat for endangered, rare, or threatened species.*

Listed species are defined as species categorized as endangered, rare, or threatened (or as candidates for such designations) under the Federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA). A project site has no value as habitat for listed species if the site lacks suitable habitat and/or appropriate habitat and micro-habitat constituents for listed species, or if suitable habitat within the project site is outside of the listed species known range. Therefore, an analysis of listed species begins with an understanding of the habitat within and surrounding the project site. In this case, the project site consists of a partially developed parcel located within a mostly developed urban area. Except for an agricultural property located approximately 400 feet to the east across Second Street, the site is immediately surrounded by streets and/or development on all sides with no direct connectivity to natural habitats. In addition, the project site is substantially developed with commercial and industrial buildings and an associated paved surface parking lot.

Approximately one-half acre of the site is vacant and vegetated with non-native annual grassland and several large mature trees including coast live oak (*Quercus agrifolia*), cottonwoods (*Poplar fremontii*), sycamore (*Acer pseudoplatanus*), and other ornamental landscaped trees. A small man-made drainage ditch runs through the undeveloped non-native grassland portion of the project site. The ditch appears to collect runoff from the residential properties on the parcel located to the west of the project site along First Street East and does not appear to be connected to any discernable drainage courses or streams.

To identify listed species with potential to occur within the habitat of the project site, a variety of technical information was reviewed including queries of the United States Fish and Wildlife Service (USFWS) Environmental Conservation Online System: Information, Planning and Conservation System (USFWS 2023a), USFWS Critical Habitat Portal (USFWS 2023b), USFWS National Wetland Inventory (USFWS 2023c), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2023a), CDFW Biogeographic Information and Observation System (CDFW 2023b) and California Native Plant Society (CNPS) Online Inventory of Rare, Threatened and Endangered Plants of California (CNPS 2023). However, due to the developed and disturbed nature of the project site, the project site is not expected to support listed species, and no listed species were determined to have a moderate or high potential to occur.

Within the project site, it was determined that the vacant area of the site might be considered marginal habitat for Crotch's bumblebee (*Bombus crotchii*), a candidate species for listing under the

CESA. However, the project site no longer lies within the bee's known range due to dramatic population decline of Crotch's bumblebee in recent decades (Xerces Society et al. 2018). Additionally, the invasive grassland habitat on site would not be expected to include the plant genera that provide required food sources for the bee, including species such as Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum. Based on this information, the project site is not considered to provide value as habitat for Crotch's bumblebee.

## 3.4 Criterion (d)

*Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.*

The following discussion provides an analysis of the project's potential effects with respect to traffic, noise, air quality, and water quality.

### *A. Traffic*

The VMT analysis included in this section is based primarily on a Preliminary VMT Assessment prepared by W-Trans for the project in September 2023. This report is included in Appendix A.

#### Vehicle Miles Traveled (VMT)

The City of Sonoma has not adopted a standard of significance for evaluating VMT, therefore the California Governor's Office of Planning and Research's (OPR) *Technical Advisory on Evaluation Transportation Impacts in CEQA* was used to complete this analysis. The Technical Advisory indicates that residential projects generating vehicle travel that is 15 or more percent below the existing citywide VMT per capita may indicate a less than significant transportation impact.

Table 2 shows the project's anticipated VMT rate as calculated by W-trans compared to the baseline and significance threshold. As shown in Table 2, the project would result in a VMT rate of 24.32 per capita, which is below the significance threshold of 24.60 miles per capita (15 percent below citywide VMT). Impacts related to VMT would be less than significant.

**Table 2 VMT Analysis – Baseline Compared to the Project**

| VMT Metric | Baseline Citywide VMT Rate | Significance Threshold (15% below countywide average) | Project VMT Rate with Adjustments[1] | Significance |
|---|---|---|---|---|
| Residential VMT per Capita | 28.94 | 24.60 | 24.32 | Less than Significant |

Source: W-Trans 2023 (Appendix A)

[1]Project VMT was estimated using the Sonoma County Transportation Authority (SCTA) VMT assessment tool which includes adjustments to avoid potential double counting based on the application of multiple reductions. See Appendix A for a detailed explanation of this tool and how it was used for this analysis.

#### Emergency Vehicle Access

As required by the California Fire Code (CFC) the project site would include two points of emergency egress: one on the northern side of the project area and one on the western side of the project area. The access roads within the project site would be 20 feet wide and would allow adequate emergency vehicle access.

## Truck Access and Circulation

According to SMC Section 19.48.120, residential uses are not required to provide a loading space. Therefore, the project is not required to provide an on-site loading space. Truck access to the project site would be provided via the driveway on First Street East.

## Pedestrian, Bicycle, and Transit Analysis

The Sonoma General Plan contains the following applicable goals and policies to encourage the use of non-automobile transportation modes, including walking and bicycling.

**Goal CE-2: Establish Sonoma as a place where bicycling is safe and convenient.**

**Policy 2.1** Promote bicycling as an efficient alternative to driving.

**Policy 2.5** Incorporate bicycle facilities and amenities in new development.

### *Pedestrian Facilities*

Pedestrians would access the site via the existing sidewalks along the project site. Internal pedestrian circulation within the site would be provided via a network of walkways. Pedestrian facilities would be required to be built to satisfy City of Sonoma standards pursuant to SMC Section 19.48.080.

### *Bicycle Facilities*

According to the City of Sonoma City Bicycle and Pedestrian Master Plan, bikeways are classified into three categories:

- **Class I Bikeways/Multi-Use Paths:** A paved path with an 8-foot minimum paved width, that is solely for bicycle and pedestrian travel.
- **Class II Bike Lanes:** A painted lane for one-way bicycle travel with a minimum 5 foot width.
- **Class III Bike Routes:** A street that is designated for shared bicycle and motor vehicle use by placement of bike route signs along the roadway

Table 3 summarizes bicycle facilities in the project vicinity which are currently existing and planned as described in the City of Sonoma Bicycle and Pedestrian Master Plan.

**Table 3 Bicycle Facilities Summary in Project Vicinity**

| Bicycle Facility | Type | Length (miles) | Begin Point | End Point |
|---|---|---|---|---|
| **Existing** | | | | |
| Sonoma City Trail | Class I | 1.48 | Sonoma Highway (Highway 12) | 4th Street |
| 3rd Street West | Class III | 0.8 | Sonoma City Trail | Nicoli Lane |
| 2nd Street East | Class III | 0.76 | Sonoma City Trail | MacArthur Street |
| **Planned** | | | | |
| 4th Street East | Class III | 0.12 | East Napa Street | Sonoma City Trail |

Source: SCTA 2014

The proposed project would be adequately served by existing and planned bicycle facilities. Further, the project would not interrupt or otherwise impact existing or planned bicycle facilities.

*Transit Services*

Transit services are provided by Sonoma County Transit (SCT). The nearest stop to the project site is the Sonoma Plaza stop approximately 0.3 miles south of the project site. Additional transit riders associated with the proposed project would be spread out over multiple buses and times; the volume of riders generated from the project would be unlikely to exceed the carrying capacity of existing transit services near the project site.

### Conclusion

Compliance with standard City requirements would ensure that impacts related to traffic remain less than significant. VMT per capita from the project would be below the significance threshold included in OPR's *Technical Advisory on Evaluation Transportation Impacts in CEQA*. Based on a review of the project site plan, there would be no substantial issues regarding site access along First Street East and no issues are expected to arise regarding on-site circulation or emergency access. Furthermore, the proposed project would not have an adverse effect on the existing transit, pedestrian, or bicycle facilities in the area. Therefore, the project would meet the requirements for Traffic under *criterion (d)*.

## *B. Noise*

### Existing Ambient Noise Levels

The project site is located within an existing residential neighborhood. Noise sources in the project area include traffic on First Street East, recreational activity at Hughes Field and Teeter Field across First Street East, and residential sources such as speech and property maintenance. Figure NE-2 from the City of Sonoma General Plan Noise Element shows that the project site is located outside of the 60 dBA $L_{dn}$[1] noise contours (City of Sonoma 2006). Therefore, existing ambient noise levels in the project area are expected to be less than 60 dBA $L_{dn}$.

### Construction Noise

Construction of the Project would generate temporary noise that would be audible at nearby single-family and multi-family residences to the north, multi-family residences to the east, and the baseball fields and adjacent single-family residences to the west of the project site. Noise associated with construction is a function of the type of construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of the construction activities. Based on construction details provided by the applicant, it is estimated that the construction period would involve approximately 13 days for demolition, 14 days for site preparation, 90 days for grading, six months for building construction, 30 days for paving, and 30 days for architectural coating.

While all phases of construction would generate noise, the demolition phase would represent the loudest period of noise-generating activity. According to the project applicant, pile drivers would not be used during construction of the project. The loudest equipment anticipated during demolition of the Project would be a concrete saw, which produces a noise level of up to 90 dBA at (FHWA 2006). Construction noise levels would, therefore, not exceed the City's construction noise

[1] The $L_{dn}$ is the "Day-Night Average Level" and is a metric used to quantify community noise. The $L_{dn}$ is the average noise level over a 24-hour period, calculated by applying a +10 dB "penalty" for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.), as noise generated during this period is typically more disruptive than noise generated during daytime hours.

limit of 90 dBA $L_{max}$ at any point outside the property line, as specified in Section 9.56.050 of the City of Sonoma Municipal Code.

Additionally, project construction activity specified by the applicant (scheduled for Mondays through Fridays between 8:00 a.m. and 5:00 p.m.), would occur within the allowable construction day and time limits defined in the City of Sonoma Municipal Code: between 8:00 a.m. and 6:00 p.m. Monday through Friday, between 9:00 a.m. and 6:00 p.m. on Saturday, and between 10:00 a.m. and 6:00 p.m. on Sundays and holidays. Therefore, impacts related to temporary construction noise would be less than significant.

## Operational Noise

### *Stationary Sources*

The primary stationary source of operational noise generated by the project would be heating, ventilation, and air-conditioning (HVAC) units mounted to the exterior of each proposed building. These HVAC units would comprise part of a mini-split heating and cooling system provided for each residential unit.

Section 9.56.040 of the City of Sonoma Municipal Code states that no noise level may be produced such as to exceed the following noise level limits, as measured on a receiving residential property:

| | |
|---|---|
| Daytime[2] | 60 dBA intermittent, 50 dBA constant |
| Nighttime | 50 dBA intermittent, 40 dBA constant |

If the HVAC units were mounted on the building walls closest to the neighboring residences to the north, noise levels generated by the project's HVAC equipment would exceed the noise limits at nearby residential property lines, and a significant impact would occur. During plan check, the final project design would be required to comply with the City's noise level limits through the selection and placement of equipment so as to maintain noise levels below these limits.

In addition to mechanical equipment, the project would generate noise from people gathering on roof decks, private balconies, and the pool area. The main noise source associated with the use of these proposed outdoor spaces would be speech from conversations. Typically, a conversation between two people using a normal voice (not raised) at a distance of three feet is 60 dBA (Engineering ToolBox 2005). No amplified sound is proposed at any of these outdoor areas; noise associated with speech from conversations would quickly dissipate and would not interfere with surrounding outdoor activities and noise-sensitive uses. Furthermore, pursuant to Assembly Bill 1307 (2023), the effect of noise generated by residential project occupants and their guests is not a significant effect on the environment. Therefore, this impact would be less than significant.

### *Off-Site Traffic Noise*

The project would result in an increase in vehicle trips due to residents traveling to and from the site. However, the project is an infill residential project located in a primarily residential area of the city. Because of the type of project and location, traffic noise generated on nearby roadways would not be substantial based on the proposed 31 residential units. Traffic noise impacts would be less than significant.

[2] Per the City of Sonoma Municipal Code, daytime hours are between 7 a.m. and 9 p.m. Sunday through Thursday and between 7 a.m. and 10 p.m. Friday and Saturday; nighttime hours are between 9 p.m. and 7 a.m. Sunday through Thursday and between 10 p.m. and 7 a.m. on Friday and Saturday.

## Vibration

To determine potential impacts from construction vibration, this analysis is based on vibration limits contained in the 2018 Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment Manual*, which are shown in Table 4.

**Table 4 Groundborne Vibration Architectural Damage Criteria**

| Building Category | PPV (in/sec) |
|---|---|
| I. Reinforced concrete, steel, or timber (no plaster) | 0.5 |
| II. Engineered concrete and masonry (no plaster) | 0.3 |
| III. Non-engineered timber and masonry buildings | 0.2 |
| IV. Buildings extremely susceptible to vibration damage | 0.12 |

in/sec = inches per second; PPV = peak particle velocity

Source: FTA 2018

Based on FTA recommendations, limiting vibration levels to below 0.2 inches per second peak particle velocity (in/sec PPV) at residential structures would prevent structural damage regardless of building construction type (FTA 2018).

Project construction would not involve activities typically associated with excessive groundborne vibration, such as pile driving or blasting. The greatest anticipated sources of vibration during general project construction activities would be a static roller during the paving phase and a small grader or dozer (less than 100 hp) during the site preparation and grading phases.

The static roller may be used as close as 20 feet from the nearest residential structure during construction, while the grader may be used as close as 5 feet from the nearest residential structure. Table 5 presents the estimated vibration levels produced by construction equipment at respective distances to the nearest sensitive receivers.

**Table 5 Groundborne Vibration Levels During Construction**

| Equipment | Vibration Level at Reference Distance of 25 feet (in/sec PPV) | Distance to Nearest Sensitive Receiver (feet) | Approximate Vibration Level (in/sec PPV) | Vibration Threshold of 0.2 in/sec PPV exceeded? |
|---|---|---|---|---|
| Static Roller | 0.05 | 20 | 0.07 | No |
| Dozer/Grader (less than 100 hp) | 0.003 | 5 | 0.034 | No |

Source: FTA 2018 and McIver 2012

As shown in Table 5, use of the static roller would generate a vibration level of approximately 0.07 in/sec PPV at the nearest offsite residential structure located 20 feet away, which would not exceed the FTA threshold of 0.2 in/sec PPV. Similarly, use of a small dozer or grader would generate a vibration level of approximately 0.034 at the nearest residential structure located five feet away, which is also below the FTA threshold of 0.2 in/sec PPV. Therefore, temporary vibration impacts associated with construction would be less than significant. In addition, the project does not include substantial vibration sources associated with operation, such as railroad or subway lines. Thus, operational vibration impacts would also be less than significant.

## Airport Noise

The closest airport or air strip to the project site is the Sonoma Skypark, located approximately 2.75 miles southeast of the project. Since the project site is not located within the published noise contours of the airport (Sonoma County 2020) or within two miles of other airports, implementation of the Project would not expose people in the project area to excessive airport noise levels. There would be no impact.

## Conclusion

Construction noise during the demolition phase would generate noise levels of up to 90 dBA $L_{max}$ at a distance of 50 feet from the equipment, which would not exceed the City's threshold of 90 dBA $L_{max}$ at the property line of nearby sensitive receptors. In addition, construction would be limited to hours allowed by the City's Municipal Code, which are between 8:00 a.m. and 6:00 p.m., Monday through Friday, between 9:00 a.m. and 6:00 p.m. on Saturdays, and between 10:00 a.m. and 6:00 p.m. on Sundays and holidays. Therefore, construction noise impacts would be less than significant. Vibration from construction equipment would not exceed the FTA threshold of 0.2 in/sec PPV at the nearest off-site residential structures, and impacts would be less than significant.

The project would introduce sources of operational noise to the site, primarily outdoor HVAC equipment. In order to avoid potential noise exceedances upon the nearby adjacent residential properties, all HVAC equipment would be required by the Sonoma Municipal Code to be selected and placed in areas of the site so as to maintain noise levels below the City's noise level limits at surrounding residential property lines.

Project traffic would not substantially increase traffic noise on nearby roadways over existing conditions. The project would be located in a primarily residential area of the city and would not substantially generate vehicle trips above those generated by nearby residential land uses in the vicinity of the site. Therefore, the project's traffic noise impacts would be less than significant. Implementation of the project would not expose people in the project area to excessive airport noise levels.

# *C. Air Quality*

A significant adverse air quality impact may occur when a project individually or cumulatively interferes with progress toward the attainment of the ozone standard by releasing emissions that equal or exceed the established long term quantitative thresholds for pollutants or causes an exceedance of a state or federal ambient air quality standard for any criteria pollutant. Primary criteria pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere. Primary criteria pollutants include reactive organic gases (ROG), nitric oxides ($NO_x$), carbon monoxide (CO), sulfur oxides ($SO_X$), and particulate matter ($PM_{10}$ and $PM_{2.5}$). $PM_{10}$ is particulate matter measuring no more than 10 microns in diameter, while $PM_{2.5}$ is fine particulate matter measuring no more than 2.5 microns in diameter. The project site is located within the San Francisco Bay Area Basin and falls under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). In April 2022, the BAAQMD Board of Directors adopted updated thresholds of significance to assist in the review of projects under CEQA.

## Thresholds of Significance and Screening Criteria

This air quality analysis conforms to the methodologies recommended by *BAAQMD's 2022 CEQA Guidelines* (BAAQMD 2022). Table 6 shows the significance thresholds that have been

recommended by BAAQMD for project operations and construction in the San Francisco Bay Area Air Basin.

**Table 6 Air Quality Thresholds of Significance**

| Pollutant/ Precursor | Construction-Related Thresholds | Operation-Related Thresholds | |
|---|---|---|---|
| | Average Daily Emissions (pounds per day) | Maximum Annual Emissions (tpy) | Average Daily Emissions (lbs/day) |
| ROG | 54 | 10 | 54 |
| $NO_X$ | 54 | 10 | 54 |
| $PM_{10}$ | 82 (exhaust) | 15 | 82 |
| $PM_{2.5}$ | 54 (exhaust) | 10 | 54 |

Notes: tpy = tons per year; lbs/day = pounds per day; NOX = oxides of nitrogen; PM2.5 = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM10 = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ROG = reactive organic gases; tpy = tons per year.

Source: BAAQMD 2022, Table 3-1

According to Chapter 4 of *BAAQMD's 2022 CEQA Guidelines,* which includes BAAQMD's screening criteria, construction of a project would result in less than significant impacts related to criteria air pollutants if:

- The project size is at or below the applicable screening level size shown in Table 4-1.
- All best management practices (see Table 5-2 in Chapter 5, "Project-Level Air Quality Impacts") are included in the project design and implemented during construction.
- Construction-related activities would not overlap with operational activities.
- Construction-related activities would not include:
  - demolition,
  - simultaneous occurrence of two or more construction phases (e.g., paving and building construction would occur simultaneously),
  - extensive site preparation (e.g., grading, cut and fill, or earth movement),
  - extensive material transport (e.g., soil import and export requiring a considerable amount of haul truck activity), or
  - stationary sources (e.g., backup generators) subject to Air District rules and regulations.

If a project includes any of the screening criteria above, then the lead agency would need to perform a detailed assessment of the project's criteria air pollutant and precursor emissions.

Additionally, operation of a project would result in less than significant impacts related to criteria air pollutants if:

- The project size is at or below the applicable operational screening level size shown in Table 4-1.
- Operational activities would not include stationary engines (e.g., backup generators) and industrial sources subject to Air District rules and regulations.
- Operational activities would not overlap with construction-related activities.

## Construction Emissions

The proposed project would involve the construction of 31 condominium units which would be below the BAAQMD's construction screening criteria of 416 units. However, the project would involve the demolition of three existing buildings and the open-air carport on the project site and therefore the project would not meet all of the screening criteria. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.20. Data input into the model was sourced from the client and defaults were used for unknown information. Construction emissions for the proposed project are shown in Table 7 below.

**Table 7 Construction Emissions**

| | Maximum Daily Emissions (pounds per day)[1] | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_X$ | CO | $PM_{10}$ | $PM_{2.5}$ | $SO_X$ |
| Construction Emissions, 2024 | 0.72 | 22.5 | 25.9 | <1 | <1 | <1 |
| Construction Emissions, 2025 | 21.7 | 14.6 | 18.0 | <1 | <1 | <1 |
| Maximum Daily Construction Emissions | 21.7 | 22.5 | 25.9 | <1 | <1 | <1 |
| BAAQMD Thresholds | 54 | 54 | N/A | 82 | 54 | N/A |
| Threshold Exceeded? | No | No | N/A | No | No | N/A |

See Appendix B for CalEEMod worksheets; emission data presented is the highest of winter or summer outputs.
N/A = not applicable; lbs/day = pounds per day; ROG = reactive organic gases; $NO_X$ = oxides of nitrogen; CO = Carbon Monoxide; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; $PM_{10}$ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; $SO_X$ = oxides of sulfur
No BAAQMD threshold for CO or $SO_X$
[1] Emissions are provided as the maximum daily emissions from CalEEMod for a conservative analysis; average daily emissions would be less than the values shown.

As indicated in Table 7, the proposed project would not exceed BAAQMD thresholds for construction emissions.

## Operational Emissions

The proposed project would involve the construction of 31 condominiums which would be well below the BAAQMD's operational screening criteria of 416 units. Operational activities would not include stationary engines or industrial sources and would not overlap with construction-related activities. Therefore, the proposed project would satisfy BAAQMD's operational screening criteria and operational-related impacts would be less than significant.

## Project Consistency with the 2017 Bay Area Clean Air Plan

The California Clean Air Act requires that air districts create a Clean Air Plan that describes how the jurisdiction will meet air quality standards. The most recently adopted air quality plan is the 2017 Bay Area Clean Air Plan (2017 Plan). The 2017 Plan focuses on two paramount goals, both consistent with the mission of BAAQMD:

- Protect air quality and health at the regional and local scale by attaining all national and state air quality standards and eliminating disparities among Bay Area communities in cancer health risk from TACs

- Protect the climate by reducing Bay Area GHG emissions to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050

Under BAAQMD's methodology, a determination of consistency with the 2017 Plan should demonstrate that a project:

- Supports the primary goals of the air quality plan
- Includes applicable control measures from the air quality plan
- Does not disrupt or hinder implementation of any air quality plan control measures

A project that would not support the 2017 Plan's goals would not be considered consistent with the 2017 Plan. On an individual project basis, consistency with BAAQMD quantitative thresholds is interpreted as demonstrating support with the 2017 Plan's goals. The project would not result in exceedances of BAAQMD thresholds for criteria air pollutants and thus would not conflict with the 2017 Plan's goal to attain air quality standards.

The 2017 Plan includes goals and measures to promote building decarbonization, conservation of water, use of on-site renewable energy, and energy efficiency. The project would be supplied electricity by PG&E, which is required to procure 100 percent of its energy supply from renewable sources by 2045. The project would comply with any applicable California Green Building Standards, including installation of energy-efficient equipment and lighting. Therefore, the project would not conflict with or obstruct the implementation of an applicable air quality plan, and impacts would be less than significant impact.

## CO Emissions

According to BAAQMD Chapter 4, *Screening for Criteria Air Pollutants and Precursors*, a project would have less than significant CO impacts if:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, the regional transportation plan, and local congestion management agency plans.
- Project-generated traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- Project-generated traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The project is presumed to be consistent with applicable congestion management programs. There are no intersections in the project vicinity with volumes of more than 44,000 vehicles per hour. Additionally, the San Francisco Bay Area Air Basin has been designated attainment for both federal and State standards for CO since 1998 (BAAQMD 2017). Therefore, impacts related to CO emissions would be less than significant.

## Toxic Air Contaminants

Certain population groups such as children, the elderly, and people with health issues are particularly sensitive to air pollution. The majority of sensitive receptor locations are schools, residences and hospitals. The closest sensitive receptors to the project site are the adjacent single-

family residences along the northern, and western edges of the project site and the Senior Facility to the south of the project. The following subsections discuss the project's potential to result in impacts related to TAC emissions during construction and operation.

### *Construction*

Construction-related activities would result in temporary project-generated emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998 (CARB 2023).

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately four months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the California Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., 24 months) is approximately seven percent of the total exposure period used for 30-year health risk calculations. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk (BAAQMD 2022).

The maximum $PM_{10}$ and $PM_{2.5}$ emissions would occur during demolition, site preparation and grading activities. These activities would last for approximately four months. PM emissions would decrease for the remaining construction period because construction activities such as building construction and paving would require less intensive construction equipment. While the maximum DPM emissions associated with site preparation and grading activities would only occur for a portion of the overall construction period, these activities represent the worst-case condition for the total construction period. This would represent less than one percent of the total 30-year exposure period for health risk calculation. Given the aforementioned discussion, DPM generated by project construction would not create conditions where the probability is greater than one in one million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than one for the Maximally Exposed Individual. Therefore, project construction would not expose sensitive receptors to substantial TAC concentrations, and impacts would be less than significant.

### *Operation*

Sources of operational TACs include, but are not limited to, land uses such as freeways and high-volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene, and gasoline dispensing facilities. The project does not include construction of new gas stations, dry cleaners, highways, roadways, or other sources that could be considered new permitted or non-permitted sources of TAC or $PM_{2.5}$ in proximity to sensitive

receptors. In addition, mobile emissions generated from the project would be minimal and spread over a broad geographical area. Therefore, project operation would not expose sensitive receptors to substantial TAC concentrations, and impacts would be less than significant.

### *Odors*

BAAQMD's 2022 CEQA Air Quality Guidelines identifies land uses that have the potential to generate substantial odor complaints. The uses in the table include wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, and chemical plants (BAAQMD 2022). Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills.

The project does not involve, nor would locate, new sensitive receptors in proximity to odor-emitting uses as identified in BAAQMD's 2022 CEQA Air Quality Guidelines. The proposed uses would not generate objectionable odors that would affect a substantial number of people. Furthermore, the project would be subject to BAAQMD Regulation 7, Odorous Substances, which requires abatement of any nuisance generating an odor complaint. Therefore, the project would not substantially cause new sources of odors and would not significantly expose sensitive receptors to existing or new odors, and impacts would be less than significant.

## Conclusion

The proposed project would not generate significant air quality impacts or require analysis for CO hotspots or TACs based on BAAQMD criteria. Therefore, the project would meet the requirements for Air Quality under *criterion (d)*.

## *E. Water Quality*

The project site is currently developed with surface parking and existing structures and there are no wetlands on or near the project site (USFWS 2023c). As a result, construction of the proposed project would not alter the course of a pond or creek or other stream or river. The project site is connected to an existing stormwater drainage system managed and maintained by the City of Sonoma.

Currently the project site is partially covered in impervious paving and structures. The project would replace impervious and pervious surfaces with new imperious paving, landscaping, and buildings. Because the project would replace or create more than 2,500 square feet of impervious surface, the project is subject to compliance with the City's NPDES Permit. Additionally, the proposed project would be required to comply with Chapter 13.32 of the SMC which sets requirements for stormwater management including the requirement to implement Best Management Practices (BMPs) and the requirement to create an erosion and sediment control plan to reduce stormwater pollution. Impervious surface that would result from the construction of the proposed project would not create or contribute runoff that would exceed the capacity of the existing stormwater conveyance infrastructure or otherwise result in flooding on or near the project site.

Because the project would not substantially increase stormwater runoff and would be required to comply with City requirements to control and filter runoff, development of the proposed project would not degrade the quality of stormwater runoff from the site. Impacts related to water quality would be less than significant.

### Conclusion

The proposed project would not introduce new surface water discharges, would not substantially increase runoff volumes, result in substantial erosion or siltation, or result in flooding on- or off-site. Additionally, the project would not substantially alter the existing drainage pattern of the site such that flooding or water quality violations would occur. Therefore, the project would meet the requirements for Hydrology and Water Quality under *criterion (d)*.

## 3.5 Criterion (e)

*The site can be adequately served by all required utilities and public services.*

The project would be located in an existing urban area served by existing public utilities and services. The proposed project is relatively small with only 31 units and would not result in a substantial increase in demand for services or utilities. The City of Sonoma Water Department provides water services to the city. Sonoma clean Power provides electricity services to the city via Pacific Gas and Electric (PG&E) infrastructure. PG&E provides natural gas services to the city. Sonoma Garbage Collectors collects garbage and recycling within Sonoma. Utility lines for the proposed project would be connected to existing infrastructure on the project site and under First Street East.

### Conclusion

The proposed project involves infill development on a project site in an urban area that is already served by existing utilities and public services. As discussed under criterion (a), the project is within the allowed density for the site and is consistent with the General Plan land use designation for the site. The project would not increase the intensity of use such that existing utility and public service providers would not be able to serve the project site. Therefore, the project would meet the requirements for Utilities and Service Systems under *criterion (e)*.

# 4 Exceptions to the Exemption

*CEQA Guidelines* Section 15300.2 outlines exceptions to the applicability of a Categorical Exemption, including cumulative impacts, significant effects due to unusual circumstances, scenic highways, hazardous waste sites, and historical resources. These exceptions are discussed below. As shown, none of the exceptions would apply.

## 4.1 Cumulative Impacts Criterion

*CEQA Guidelines* Section 15300.2 states that "all exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant." Table 8 includes a list of cumulative projects within 0.5 miles of the project site.

**Table 8 Cumulative Projects List**

| Project Location | Land Use | Size | Status | Distance to Project Site |
|---|---|---|---|---|
| 153 West Napa Street and 541 First Street West | Commercial | 62 guestrooms, 8 residential units | Approved | 0.4 miles |

Source: City of Sonoma 2023.

As discussed in Section 3.3, Criterion (C) above, the project would not affect sensitive biological resources and therefore would not result in a cumulative impact related to biological resources. As discussed in Sections 3.4, Criterion (D), subsections A and C above, VMT and air quality analyses already take into account cumulative impacts and these impacts were found to be less than significant. As discussed in Section 3.4, Criterion (D), subsection E and Section 3.5, Criterion (E), the proposed project would not contribute pollutants such that water quality would be impacted and would be served by available utilities and public services. Therefore, impacts related to these issue areas were found to be less than significant and the project would not result in a cumulatively considerable contribution to potential cumulative impacts.

The project would involve temporary noise and vibration during construction; however, these effects are localized and would cease upon cessation of construction activities. Therefore, the project would not result in a cumulatively considerable contribution to a cumulative noise increase. Construction noise impacts may overlap for the proposed project and the projects listed above. However, due to the distance between the proposed project site and the project included in the cumulative projects list and because construction noise impacts are temporary, the project would not result in significant cumulative noise impacts. Overall, the project would not result in significant cumulative impacts Therefore, this exception does not apply to the proposed project.

## 4.2 Significant Effects due to Unusual Circumstances Criterion

*CEQA Guidelines* Section 15300.2 states that "a categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances." As discussed under Section 2.1, *Project Location and Setting*, the project site is currently developed with surface parking and existing structures. The project site is generally flat and does not possess characteristics which would qualify as unusual

circumstances under *CEQA Guidelines* Section 15300.2. There are no known unusual circumstances at the project site or related to project operations that would result in a reasonable possibility of significant effects to the environment. This exception would not apply to the project.

## 4.3 Scenic Highways Criterion

*CEQA Guidelines* Section 15300.2 states that a categorical exemption "shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway." There are no designated State Scenic Highways in the vicinity of the project site. The closest scenic highway is Highway 12, located approximately 0.3 miles south of the project site, which has been recognized as eligible for designation as a State Scenic Highway (Caltrans 2018). Due to distance and intervening structures and trees, the project site is not visible from Highway 12. The project would not damage scenic resources within a highway officially designated as a state scenic highway. This exception would not apply to the project.

## 4.4 Hazardous Waste Sites Criterion

*CEQA Guidelines* Section 15300.2 states that a categorical exemption "shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code." A search of the EnviroStor environmental database, the California Department of Toxic Substances Control Hazardous Waste and Substances Sites (Cortese) List, and the Geotracker Database (SWRCB 2023) was conducted in November 2023 (DTSC 2023). The records review indicated that this project site is not listed on any of these lists. Therefore, this exception does not apply to the project, and the additional discussion below is provided for informational purposes only.

According to the Phase II Assessment Report prepared for the project site by Aqua Science Engineers in September 2014, a portion of the project site may have been historically used for growing grapes. Due to this the soil on the project site was sampled and analyzed and one compound, arsenic, was detected above typical regulatory guidelines at 33 parts per million (ppm), which exceeds the residential environmental screening level (ESL) for arsenic. Further soil sampling and analysis showed that it is likely that the bulk of the contaminated soil is within the top 12 inches of native soil and is concentrated in the undeveloped portion of the site east of the two existing residences. While not required under *CEQA Guidelines* Section 15300.2, the City of Sonoma may include the following Condition of Approval as part of their standard review process:

#### CONDITION OF APPROVAL

In accordance with recommendations made in the Phase II Report, soil on the project site that contains arsenic concentrations at or above 15 ppm shall be removed and disposed of off-site. Upon completion of removal of the contaminated soil, confirmation soil samples shall be collected and analyzed for arsenic to confirm residual levels of arsenic are below residential ESLs prior to issuance of a certificate of occupancy.

## 4.5 Historic Resources Criterion

*CEQA Guidelines* Section 15300.2 states that a categorical exemption "shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource." Rincon Consultants, Inc. completed a Historical Resources Evaluation of the project site in September 2023 (Appendix C). According to the Historical Resources Evaluation, the existing structures on the project site are ineligible for listing in the NRHP, CRHR, and locally under all criteria for lack of historic and architectural significance. As such, the property does not qualify as a historical resource and the proposed project would not result in a significant adverse impact to historical resources and this exception does not apply to the project.

# 5 Summary

Based on this analysis, the proposed 254 First Street East Project meets all criteria for a Class 32 Categorical Exemption pursuant to *CEQA Guidelines* Section 15332. Further, none of the exceptions to the Categorical Exemption listed in *CEQA Guidelines* Section 15300.2 apply to the proposed project.

# 6 References

Bay Area Air Quality Management District (BAAQMD). 2017. Clean Air Plan. https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf (Accessed December 2023).

.2022. BAAQMD's CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans. https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-3-thresholds_final_v2-pdf.pdf?la=en (Accessed November 2023).

California Air Resources Board (CARB). 2023. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. (Accessed November 2023).

California Department of Fish and Wildlife(CDFW). 2023a. California Natural Diversity Database, Rarefind V. 5. (accessed November 2023).

California Department of Transportation (Caltrans). 2018. California State Scenic Highway System Map. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa (Accessed December 2023)

CNPS, Rare Plant Program. 2023. Rare Plant Inventory. (online edition, v9.5). http://www.rareplants.cnps.org (Accessed June 2023).

Department of Toxic Substances Control. 2023. EnviroStor. https://www.envirostor.dtsc.ca.gov/public/map/ (Accessed December 2023).

Federal Highway Administration (FHWA). 2006. *Roadway Construction Noise Model User's Guide*.

Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment*. November. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

McIver, IR. 2012. Ground vibration from road construction. May.

Sonoma, City of. 2006. 2020 General Plan. https://www.sonomacity.org/documents/2020-general-plan/. (Accessed November 2023).

.2023. Development Projects. https://www.sonomacity.org/development-projects/ (Accessed December 2023).

Sonoma, County of. 2020. Sonoma County General Plan 2020. Air Transportation Element. https://permitsonoma.org/Microsites/Permit%20Sonoma/Documents/Long%20Range%20Plans/General-Plan-Map_AT7.pdf. (Accessed December 2023).

Sonoma County Transit Authority (SCTA). 2014. Bicycle and Pedestrian Master Plan. https://storage.googleapis.com/proudcity/sonomaca/uploads/2017/08/SonomaBikePedPlan.pdf (accessed November 2023).

The Engineering ToolBox (2005). Sound Pressure. Available at: https://www.engineeringtoolbox.com/voice-level-d_938.html (Accessed November 2023).

USWFS. 2023a. Information for Planning and Conservation. http://ecos.fws.gov/ipac/ (Accessed June 2023).

.2023b. Critical Habitat Portal. http://criticalhabitat.fws.gov (accessed June 2023).

.2023c. National Wetlands Inventory. http://www.fws.gov/wetlands/ (accessed June 2023).

. 2023b. Biogeographic Information and Observation System. http://bios.dfg.ca.gov (accessed June 2023).

Xerces Society et al. 2018 (https://xerces.org/sites/default/files/2019-10/CESA-petition-Bombus-Oct2018.pdf).

*This page intentionally left blank.*

# Appendix A

Local Transportation Analysis

September 14, 2023

Mr. Kelso Barnett
North of the Mission LLC
P.O. Box 1452
Sonoma, CA 95476

# Preliminary VMT Assessment for the 254 First Street East Project

Dear Mr. Barnett;

As requested, W-Trans has prepared a vehicle miles traveled (VMT) assessment for the residential development proposed for 254 First Street East in the City of Sonoma. The purpose of this letter is to estimate the anticipated VMT impact of the project and determine if the impact would be significant under the California Environmental Quality Act (CEQA).

## Project Description

The proposed project includes 31 multifamily residential units, two of which would be designated as affordable units. There is currently approximately 4,000 square feet of existing warehouse space and 8,500 square feet of office space on the site; all of the existing commercial uses would be removed to make way for the project.

## Vehicle Miles Traveled Assessment

Senate Bill (SB) 743 established the change in the VMT as the metric to be applied for determining traffic impacts associated with development projects. Because the City of Sonoma has not adopted a standard of significance for evaluating VMT, guidance provided by the California Governor's Office of Planning and Research (OPR) in the publication *Technical Advisory on Evaluation Transportation Impacts in CEQA*, December 2018, was used to conduct this analysis. The Technical Advisory indicates that a residential project generating vehicle travel that is 15 or more percent below the existing citywide residential VMT per capita may indicate a less-than-significant transportation impact.

Based on data from the most recent version of the Sonoma County Transportation Authority (SCTA) travel demand model, the City of Sonoma has a baseline average residential VMT of 28.94 miles per capita. Applying OPR's guidance, a residential project generating a VMT that is 15 percent or more below this value, or 24.60 miles per capita or less, would have a less-than-significant VMT impact. The SCTA model includes traffic analysis zones (TAZ) covering geographic areas throughout Sonoma County. The project site is located within TAZ 823, which has a baseline VMT per capita of 28.88 miles. Based on the model, for the project to achieve the applied threshold of 15 percent below the citywide average, its projected VMT per capita would need to be reduced by 14.8 percent.

Consideration was given to whether adjustments to the baseline per-capita VMT estimates produced by the SCTA model are warranted to reflect project-specific characteristics. Increased residential density and the inclusion of affordable housing are project characteristics that have both been found to be associated with reduced VMT, as noted in *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*, California Air Pollution Control Officers Association (CAPCOA), 2021.

SCTA has developed a VMT assessment tool to apply the CAPCOA methodology to analyze and estimate the VMT impacts of development projects in Sonoma County. The tool includes adjustments to avoid potential double counting based on the application of multiple reductions. Analyzed individually using the SCTA VMT tool, the project density would reduce the estimated VMT by 14.21 percent, and the reduction associated with the inclusion of two affordable units is 1.85 percent. Considering both of these factors together, the total VMT reduction is 15.8 percent, resulting in a project-specific rate of 24.32 VMT per capita, which is below the applied VMT significance

threshold of 24.60 VMT/capita. Accordingly, the project as proposed would be expected to result in a less than significant VMT impact. The VMT findings are summarized in Table 1.

**Table 1 – Vehicle Miles Traveled Analysis Summary**

| VMT Metric | Baseline VMT Rate (Citywide Avg) | Significance Threshold (15% Below Citywide Avg) | Project VMT Rate | | |
|---|---|---|---|---|---|
| | | | Base Unadjusted (TAZ 823) | With Adjustments | Significance Finding |
| Residential VMT per Capita (Citywide Baseline) | 28.94 | 24.60 | 28.88 | 24.32 | Less than Significant |

Source: 2019 SCTA travel demand model
Note: VMT Rate is measured in VMT per Capita, or the number of daily miles driven per resident; TAZ=Traffic Analysis Zone

In addition to considering the model outputs, it is noted that future residents of the project would be able to use multiple modes of transportation to access nearby destinations, which supports reductions in vehicle trips. The project is located within walking distance of a wide variety of destinations, including shopping and restaurants. The project site is also within walking distance of the City of Sonoma's main bus stop, located less than 0.5 miles away at Sonoma Plaza, where five Sonoma Transit routes can be accessed. The Sonoma Bike Path is located adjacent to the site and extends from State Route 12 (SR 12) to Fourth Street East.

## Conclusions and Recommendations

- After accounting for the proposed density of the project and provision of two affordable units, the project would have a VMT per capita of 24.32, which is less than the significance threshold of 24.60. Therefore, the VMT associated with this development would be less than significant.

- The location of the project in downtown Sonoma supports reduced vehicle trips as residents would be able to walk, bicycle, or use transit to reach many local destinations.

Thank you for giving W-Trans the opportunity to provide these services. Please call if you have any questions.

Sincerely,

Barry Bergman, AICP
Senior Planner


Dalene J. Whitlock, PE, PTOE
Senior Principal

DJW/bdb/SON074.L1

# Appendix B

California Emissions Estimator Model (CalEEMod) Results

# 254 First Street E. Custom Report

## Table of Contents

8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | 254 First Street E. |
| Construction Start Date | 9/1/2024 |
| Operational Year | 2025 |
| Lead Agency | City of Sonoma |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 3.60 |
| Precipitation (days) | 40.4 |
| Location | 254 1st St E, Sonoma, CA 95476, USA |
| County | Sonoma-San Francisco |
| City | Sonoma |
| Air District | Bay Area AQMD |
| Air Basin | San Francisco Bay Area |
| TAZ | 980 |
| EDFZ | 2 |
| Electric Utility | Pacific Gas & Electric Company |
| Gas Utility | Pacific Gas & Electric |
| App Version | 2022.1.1.21 |

## 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 |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 31.0 | Dwelling Unit | 1.94 | 32,218 | 17,150 | — | 79.0 | — |

### 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. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.68 | 21.7 | 22.5 | 25.9 | 0.05 | 0.97 | 2.00 | 2.72 | 0.88 | 0.36 | 1.01 | — | 4,633 | 4,633 | 0.21 | 0.25 | 3.42 | 4,716 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.76 | 0.72 | 15.0 | 19.6 | 0.03 | 0.66 | 7.26 | 7.89 | 0.60 | 3.47 | 4.04 | — | 3,464 | 3,464 | 0.15 | 0.07 | 0.03 | 3,488 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.29 | 1.53 | 5.75 | 7.10 | 0.01 | 0.26 | 1.35 | 1.51 | 0.24 | 0.63 | 0.77 | — | 1,175 | 1,175 | 0.05 | 0.02 | 0.18 | 1,181 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.05 | 0.28 | 1.05 | 1.30 | < 0.005 | 0.05 | 0.25 | 0.28 | 0.04 | 0.11 | 0.14 | — | 194 | 194 | 0.01 | < 0.005 | 0.03 | 196 |

### 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2024 | 1.68 | 1.49 | 22.5 | 25.9 | 0.05 | 0.97 | 2.00 | 2.72 | 0.88 | 0.36 | 1.01 | — | 4,633 | 4,633 | 0.21 | 0.25 | 3.42 | 4,716 |
| 2025 | 0.76 | 21.7 | 14.6 | 18.0 | 0.03 | 0.66 | 0.21 | 0.87 | 0.60 | 0.05 | 0.65 | — | 2,999 | 2,999 | 0.12 | 0.04 | 1.05 | 3,016 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2024 | 0.65 | 0.62 | 15.0 | 19.6 | 0.03 | 0.63 | 7.26 | 7.89 | 0.57 | 3.47 | 4.04 | — | 3,464 | 3,464 | 0.15 | 0.07 | 0.03 | 3,488 |
| 2025 | 0.76 | 0.72 | 14.6 | 17.9 | 0.03 | 0.66 | 0.21 | 0.87 | 0.60 | 0.05 | 0.65 | — | 2,986 | 2,986 | 0.12 | 0.04 | 0.03 | 3,002 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2024 | 0.19 | 0.18 | 3.83 | 4.84 | 0.01 | 0.16 | 1.35 | 1.51 | 0.15 | 0.63 | 0.77 | — | 873 | 873 | 0.04 | 0.02 | 0.13 | 880 |
| 2025 | 0.29 | 1.53 | 5.75 | 7.10 | 0.01 | 0.26 | 0.08 | 0.34 | 0.24 | 0.02 | 0.26 | — | 1,175 | 1,175 | 0.05 | 0.02 | 0.18 | 1,181 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2024 | 0.03 | 0.03 | 0.70 | 0.88 | < 0.005 | 0.03 | 0.25 | 0.28 | 0.03 | 0.11 | 0.14 | — | 145 | 145 | 0.01 | < 0.005 | 0.02 | 146 |
| 2025 | 0.05 | 0.28 | 1.05 | 1.30 | < 0.005 | 0.05 | 0.01 | 0.06 | 0.04 | < 0.005 | 0.05 | — | 194 | 194 | 0.01 | < 0.005 | 0.03 | 196 |

## 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. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.42 | 2.12 | 1.20 | 9.85 | 0.02 | 0.03 | 1.41 | 1.45 | 0.03 | 0.36 | 0.39 | 14.2 | 2,039 | 2,053 | 1.55 | 0.09 | 7.20 | 2,127 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.20 | 1.91 | 1.33 | 7.96 | 0.02 | 0.03 | 1.41 | 1.45 | 0.03 | 0.36 | 0.39 | 14.2 | 1,952 | 1,966 | 1.56 | 0.10 | 0.41 | 2,035 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.15 | 1.86 | 1.17 | 7.69 | 0.02 | 0.03 | 1.23 | 1.27 | 0.03 | 0.31 | 0.34 | 14.2 | 1,793 | 1,807 | 1.54 | 0.09 | 2.93 | 1,874 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.21 | 0.34 | 0.21 | 1.40 | < 0.005 | 0.01 | 0.23 | 0.23 | 0.01 | 0.06 | 0.06 | 2.35 | 297 | 299 | 0.26 | 0.01 | 0.48 | 310 |

## 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 1.23 | 1.14 | 0.98 | 8.00 | 0.02 | 0.02 | 1.41 | 1.43 | 0.01 | 0.36 | 0.38 | — | 1,702 | 1,702 | 0.08 | 0.08 | 6.97 | 1,737 |
| Area | 0.17 | 0.97 | 0.02 | 1.75 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 0.00 | 4.70 | 4.70 | < 0.005 | < 0.005 | — | 4.72 |
| Energy | 0.02 | 0.01 | 0.20 | 0.09 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 329 | 329 | 0.03 | < 0.005 | — | 331 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1.91 | 2.79 | 4.71 | 0.20 | < 0.005 | — | 11.0 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 12.3 | 0.00 | 12.3 | 1.23 | 0.00 | — | 43.0 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.23 | 0.23 |
| Total | 1.42 | 2.12 | 1.20 | 9.85 | 0.02 | 0.03 | 1.41 | 1.45 | 0.03 | 0.36 | 0.39 | 14.2 | 2,039 | 2,053 | 1.55 | 0.09 | 7.20 | 2,127 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 1.18 | 1.08 | 1.13 | 7.88 | 0.02 | 0.02 | 1.41 | 1.43 | 0.01 | 0.36 | 0.38 | — | 1,620 | 1,620 | 0.10 | 0.09 | 0.18 | 1,650 |
| Area | 0.00 | 0.81 | 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 |
| Energy | 0.02 | 0.01 | 0.20 | 0.09 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 329 | 329 | 0.03 | < 0.005 | — | 331 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1.91 | 2.79 | 4.71 | 0.20 | < 0.005 | — | 11.0 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 12.3 | 0.00 | 12.3 | 1.23 | 0.00 | — | 43.0 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.23 | 0.23 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 1.20 | 1.91 | 1.33 | 7.96 | 0.02 | 0.03 | 1.41 | 1.45 | 0.03 | 0.36 | 0.39 | 14.2 | 1,952 | 1,966 | 1.56 | 0.10 | 0.41 | 2,035 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 1.04 | 0.96 | 0.96 | 6.74 | 0.01 | 0.01 | 1.23 | 1.25 | 0.01 | 0.31 | 0.33 | — | 1,458 | 1,458 | 0.08 | 0.08 | 2.70 | 1,487 |
| Area | 0.08 | 0.89 | 0.01 | 0.87 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 0.00 | 2.32 | 2.32 | < 0.005 | < 0.005 | — | 2.33 |
| Energy | 0.02 | 0.01 | 0.20 | 0.09 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 329 | 329 | 0.03 | < 0.005 | — | 331 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1.91 | 2.79 | 4.71 | 0.20 | < 0.005 | — | 11.0 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 12.3 | 0.00 | 12.3 | 1.23 | 0.00 | — | 43.0 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.23 | 0.23 |
| Total | 1.15 | 1.86 | 1.17 | 7.69 | 0.02 | 0.03 | 1.23 | 1.27 | 0.03 | 0.31 | 0.34 | 14.2 | 1,793 | 1,807 | 1.54 | 0.09 | 2.93 | 1,874 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.19 | 0.18 | 0.18 | 1.23 | < 0.005 | < 0.005 | 0.23 | 0.23 | < 0.005 | 0.06 | 0.06 | — | 241 | 241 | 0.01 | 0.01 | 0.45 | 246 |
| Area | 0.02 | 0.16 | < 0.005 | 0.16 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 0.00 | 0.38 | 0.38 | < 0.005 | < 0.005 | — | 0.39 |
| Energy | < 0.005 | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 54.5 | 54.5 | 0.01 | < 0.005 | — | 54.8 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 0.32 | 0.46 | 0.78 | 0.03 | < 0.005 | — | 1.83 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 2.04 | 0.00 | 2.04 | 0.20 | 0.00 | — | 7.12 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.04 | 0.04 |
| Total | 0.21 | 0.34 | 0.21 | 1.40 | < 0.005 | 0.01 | 0.23 | 0.23 | 0.01 | 0.06 | 0.06 | 2.35 | 297 | 299 | 0.26 | 0.01 | 0.48 | 310 |

# 3. Construction Emissions Details

## 3.1. Demolition (2024) - Unmitigated

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

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

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.61 | 0.61 | 15.8 | 19.1 | 0.03 | 0.71 | — | 0.71 | 0.64 | — | 0.64 | — | 3,137 | 3,137 | 0.13 | 0.03 | — | 3,147 |
| Demolition | — | — | — | — | — | — | 1.54 | 1.54 | — | 0.23 | 0.23 | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.02 | 0.43 | 0.52 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 85.9 | 85.9 | < 0.005 | < 0.005 | — | 86.2 |
| Demolition | — | — | — | — | — | — | 0.04 | 0.04 | — | 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.08 | 0.10 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 14.2 | 14.2 | < 0.005 | < 0.005 | — | 14.3 |
| Demolition | — | — | — | — | — | — | 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 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09 | 0.08 | 0.06 | 0.92 | 0.00 | 0.00 | 0.14 | 0.14 | 0.00 | 0.03 | 0.03 | — | 155 | 155 | 0.01 | 0.01 | 0.69 | 158 |
| 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 | 0.00 | 0.00 |
| Hauling | 0.11 | 0.02 | 1.89 | 0.72 | 0.02 | 0.02 | 0.31 | 0.33 | 0.02 | 0.09 | 0.10 | — | 1,341 | 1,341 | 0.08 | 0.22 | 2.73 | 1,410 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 4.00 | 4.00 | < 0.005 | < 0.005 | 0.01 | 4.06 |
| 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 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | 0.05 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 36.7 | 36.7 | < 0.005 | 0.01 | 0.03 | 38.6 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.66 | 0.66 | < 0.005 | < 0.005 | < 0.005 | 0.67 |
| 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 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 6.08 | 6.08 | < 0.005 | < 0.005 | 0.01 | 6.39 |

## 3.3. Site Preparation (2024) - Unmitigated

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

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.60 | 1.43 | 22.4 | 25.1 | 0.04 | 0.97 | — | 0.97 | 0.88 | — | 0.88 | — | 4,161 | 4,161 | 0.17 | 0.03 | — | 4,175 |
| 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 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05 | 0.04 | 0.68 | 0.76 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 125 | 125 | 0.01 | < 0.005 | — | 126 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.12 | 0.14 | < 0.005 | 0.01 | — | 0.01 | < 0.005 | — | < 0.005 | — | 20.8 | 20.8 | < 0.005 | < 0.005 | — | 20.8 |
| 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 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.07 | 0.05 | 0.79 | 0.00 | 0.00 | 0.12 | 0.12 | 0.00 | 0.03 | 0.03 | — | 133 | 133 | 0.01 | 0.01 | 0.59 | 136 |
| 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 | 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 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 3.77 | 3.77 | < 0.005 | < 0.005 | 0.01 | 3.83 |
| 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 | 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.62 | 0.62 | < 0.005 | < 0.005 | < 0.005 | 0.63 |
| 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 | 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 | 0.00 | 0.00 |

## 3.5. Grading (2024) - Unmitigated

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

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.55 | 0.55 | 14.4 | 18.8 | 0.03 | 0.63 | — | 0.63 | 0.57 | — | 0.57 | — | 3,097 | 3,097 | 0.13 | 0.03 | — | 3,107 |
| Dust From Material Movemen | — | — | — | — | — | — | 7.08 | 7.08 | — | 3.43 | 3.43 | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10 | 0.10 | 2.57 | 3.34 | 0.01 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | — | 551 | 551 | 0.02 | < 0.005 | — | 553 |
| Dust From Material Movemen | — | — | — | — | — | — | 1.26 | 1.26 | — | 0.61 | 0.61 | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.02 | 0.47 | 0.61 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 91.3 | 91.3 | < 0.005 | < 0.005 | — | 91.6 |
| Dust From Material Movemen | — | — | — | — | — | — | 0.23 | 0.23 | — | 0.11 | 0.11 | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.06 | 0.06 | 0.70 | 0.00 | 0.00 | 0.12 | 0.12 | 0.00 | 0.03 | 0.03 | — | 124 | 124 | 0.01 | 0.01 | 0.02 | 126 |
| 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 | 0.00 | 0.00 |
| Hauling | 0.03 | 0.01 | 0.45 | 0.19 | < 0.005 | < 0.005 | 0.05 | 0.06 | < 0.005 | 0.02 | 0.02 | — | 243 | 243 | 0.02 | 0.04 | 0.01 | 255 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.12 | 0.00 | 0.00 | 0.02 | 0.02 | 0.00 | 0.01 | 0.01 | — | 22.3 | 22.3 | < 0.005 | < 0.005 | 0.05 | 22.6 |
| 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 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | 0.08 | 0.03 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 43.3 | 43.3 | < 0.005 | 0.01 | 0.04 | 45.5 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 3.69 | 3.69 | < 0.005 | < 0.005 | 0.01 | 3.75 |
| 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 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 7.16 | 7.16 | < 0.005 | < 0.005 | 0.01 | 7.53 |

## 3.7. 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.65 | 0.63 | 14.4 | 16.8 | 0.03 | 0.66 | — | 0.66 | 0.60 | — | 0.60 | — | 2,713 | 2,713 | 0.11 | 0.02 | — | 2,722 |
| 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 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.65 | 0.63 | 14.4 | 16.8 | 0.03 | 0.66 | — | 0.66 | 0.60 | — | 0.60 | — | 2,713 | 2,713 | 0.11 | 0.02 | — | 2,722 |
| 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 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 0.22 | 5.04 | 5.90 | 0.01 | 0.23 | — | 0.23 | 0.21 | — | 0.21 | — | 951 | 951 | 0.04 | 0.01 | — | 955 |
| 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 0.04 | 0.92 | 1.08 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 158 | 158 | 0.01 | < 0.005 | — | 158 |
| 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 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.10 | 0.09 | 0.07 | 1.09 | 0.00 | 0.00 | 0.18 | 0.18 | 0.00 | 0.04 | 0.04 | — | 194 | 194 | 0.01 | 0.01 | 0.82 | 198 |
| Vendor | 0.01 | < 0.005 | 0.12 | 0.05 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | 0.01 | 0.01 | — | 91.9 | 91.9 | < 0.005 | 0.01 | 0.24 | 96.2 |
| 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 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.10 | 0.09 | 0.09 | 0.97 | 0.00 | 0.00 | 0.18 | 0.18 | 0.00 | 0.04 | 0.04 | — | 181 | 181 | 0.01 | 0.01 | 0.02 | 184 |
| Vendor | 0.01 | < 0.005 | 0.13 | 0.05 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | 0.01 | 0.01 | — | 91.9 | 91.9 | < 0.005 | 0.01 | 0.01 | 96.0 |
| 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 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.03 | 0.03 | 0.03 | 0.33 | 0.00 | 0.00 | 0.06 | 0.06 | 0.00 | 0.01 | 0.01 | — | 64.1 | 64.1 | < 0.005 | < 0.005 | 0.12 | 65.1 |
| Vendor | < 0.005 | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 32.2 | 32.2 | < 0.005 | < 0.005 | 0.04 | 33.7 |
| 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.06 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 10.6 | 10.6 | < 0.005 | < 0.005 | 0.02 | 10.8 |
| Vendor | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 5.34 | 5.34 | < 0.005 | < 0.005 | 0.01 | 5.58 |
| 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 | 0.00 | 0.00 |

## 3.9. Paving (2025) - Unmitigated

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

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.29 | 0.29 | 8.02 | 10.9 | 0.02 | 0.36 | — | 0.36 | 0.33 | — | 0.33 | — | 1,604 | 1,604 | 0.07 | 0.01 | — | 1,609 |
| Paving | — | 0.00 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.02 | 0.51 | 0.68 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 101 | 101 | < 0.005 | < 0.005 | — | 101 |
| Paving | — | 0.00 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.09 | 0.12 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 16.7 | 16.7 | < 0.005 | < 0.005 | — | 16.8 |
| Paving | — | 0.00 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.06 | 0.05 | 0.73 | 0.00 | 0.00 | 0.12 | 0.12 | 0.00 | 0.03 | 0.03 | — | 131 | 131 | 0.01 | 0.01 | 0.55 | 133 |
| 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 | 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 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.04 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 7.74 | 7.74 | < 0.005 | < 0.005 | 0.01 | 7.86 |
| 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 | 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 1.28 | 1.28 | < 0.005 | < 0.005 | < 0.005 | 1.30 |
| 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 | 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 | 0.00 | 0.00 |

## 3.11. 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11 | 0.11 | 2.25 | 1.99 | < 0.005 | 0.14 | — | 0.14 | 0.13 | — | 0.13 | — | 281 | 281 | 0.01 | < 0.005 | — | 282 |
| Architectural Coatings | — | 21.6 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.13 | 0.11 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 16.2 | 16.2 | < 0.005 | < 0.005 | — | 16.2 |
| Architectural Coatings | — | 1.24 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 2.68 | 2.68 | < 0.005 | < 0.005 | — | 2.69 |
| Architectural Coatings | — | 0.23 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.01 | 0.22 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.01 | 0.01 | — | 38.9 | 38.9 | < 0.005 | < 0.005 | 0.16 | 39.6 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 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 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 2.10 | 2.10 | < 0.005 | < 0.005 | < 0.005 | 2.14 |
| 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 | 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.35 | 0.35 | < 0.005 | < 0.005 | < 0.005 | 0.35 |
| 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 | 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 | 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 1.23 | 1.14 | 0.98 | 8.00 | 0.02 | 0.02 | 1.41 | 1.43 | 0.01 | 0.36 | 0.38 | — | 1,702 | 1,702 | 0.08 | 0.08 | 6.97 | 1,737 |
| Total | 1.23 | 1.14 | 0.98 | 8.00 | 0.02 | 0.02 | 1.41 | 1.43 | 0.01 | 0.36 | 0.38 | — | 1,702 | 1,702 | 0.08 | 0.08 | 6.97 | 1,737 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 1.18 | 1.08 | 1.13 | 7.88 | 0.02 | 0.02 | 1.41 | 1.43 | 0.01 | 0.36 | 0.38 | — | 1,620 | 1,620 | 0.10 | 0.09 | 0.18 | 1,650 |
| Total | 1.18 | 1.08 | 1.13 | 7.88 | 0.02 | 0.02 | 1.41 | 1.43 | 0.01 | 0.36 | 0.38 | — | 1,620 | 1,620 | 0.10 | 0.09 | 0.18 | 1,650 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.19 | 0.18 | 0.18 | 1.23 | < 0.005 | < 0.005 | 0.23 | 0.23 | < 0.005 | 0.06 | 0.06 | — | 241 | 241 | 0.01 | 0.01 | 0.45 | 246 |
| Total | 0.19 | 0.18 | 0.18 | 1.23 | < 0.005 | < 0.005 | 0.23 | 0.23 | < 0.005 | 0.06 | 0.06 | — | 241 | 241 | 0.01 | 0.01 | 0.45 | 246 |

## 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | 71.7 | 71.7 | 0.01 | < 0.005 | — | 72.4 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 71.7 | 71.7 | 0.01 | < 0.005 | — | 72.4 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | 71.7 | 71.7 | 0.01 | < 0.005 | — | 72.4 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 71.7 | 71.7 | 0.01 | < 0.005 | — | 72.4 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | 11.9 | 11.9 | < 0.005 | < 0.005 | — | 12.0 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 11.9 | 11.9 | < 0.005 | < 0.005 | — | 12.0 |

### 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.02 | 0.01 | 0.20 | 0.09 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 258 | 258 | 0.02 | < 0.005 | — | 258 |
| Total | 0.02 | 0.01 | 0.20 | 0.09 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 258 | 258 | 0.02 | < 0.005 | — | 258 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | 0.02 | 0.01 | 0.20 | 0.09 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 258 | 258 | 0.02 | < 0.005 | — | 258 |
| Total | 0.02 | 0.01 | 0.20 | 0.09 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 258 | 258 | 0.02 | < 0.005 | — | 258 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | < 0.005 | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 42.7 | 42.7 | < 0.005 | < 0.005 | — | 42.8 |
| Total | < 0.005 | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 42.7 | 42.7 | < 0.005 | < 0.005 | — | 42.8 |

### 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 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 |
| Consumer Products | — | 0.69 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.12 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.17 | 0.16 | 0.02 | 1.75 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 4.70 | 4.70 | < 0.005 | < 0.005 | — | 4.72 |
| Total | 0.17 | 0.97 | 0.02 | 1.75 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 0.00 | 4.70 | 4.70 | < 0.005 | < 0.005 | — | 4.72 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 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 |
| Consumer Products | — | 0.69 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.12 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 0.00 | 0.81 | 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 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 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consumer Products | — | 0.13 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.02 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.02 | 0.01 | < 0.005 | 0.16 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.38 | 0.38 | < 0.005 | < 0.005 | — | 0.39 |
| Total | 0.02 | 0.16 | < 0.005 | 0.16 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 0.00 | 0.38 | 0.38 | < 0.005 | < 0.005 | — | 0.39 |

## 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 1.91 | 2.79 | 4.71 | 0.20 | < 0.005 | — | 11.0 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1.91 | 2.79 | 4.71 | 0.20 | < 0.005 | — | 11.0 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 1.91 | 2.79 | 4.71 | 0.20 | < 0.005 | — | 11.0 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1.91 | 2.79 | 4.71 | 0.20 | < 0.005 | — | 11.0 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Condo/T | — | — | — | — | — | — | — | — | — | — | — | 0.32 | 0.46 | 0.78 | 0.03 | < 0.005 | — | 1.83 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 0.32 | 0.46 | 0.78 | 0.03 | < 0.005 | — | 1.83 |

## 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 12.3 | 0.00 | 12.3 | 1.23 | 0.00 | — | 43.0 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 12.3 | 0.00 | 12.3 | 1.23 | 0.00 | — | 43.0 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 12.3 | 0.00 | 12.3 | 1.23 | 0.00 | — | 43.0 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 12.3 | 0.00 | 12.3 | 1.23 | 0.00 | — | 43.0 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | 2.04 | 0.00 | 2.04 | 0.20 | 0.00 | — | 7.12 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 2.04 | 0.00 | 2.04 | 0.20 | 0.00 | — | 7.12 |

## 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.23 | 0.23 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.23 | 0.23 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.23 | 0.23 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.23 | 0.23 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Condo/Townhouse | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.04 | 0.04 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.04 | 0.04 |

## 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | 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 |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Demolition | Demolition | 9/2/2024 | 9/15/2024 | 5.00 | 10.0 | — |
| Site Preparation | Site Preparation | 9/16/2024 | 9/30/2024 | 5.00 | 11.0 | — |
| Grading | Grading | 10/1/2024 | 12/30/2024 | 5.00 | 65.0 | — |
| Building Construction | Building Construction | 1/2/2025 | 6/30/2025 | 5.00 | 128 | — |
| Paving | Paving | 7/1/2025 | 7/31/2025 | 5.00 | 23.0 | — |
| Architectural Coating | Architectural Coating | 8/1/2025 | 8/31/2025 | 5.00 | 21.0 | — |

## 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 |
|---|---|---|---|---|---|---|---|
| Demolition | Tractors/Loaders/Backhoes | Diesel | Tier 3 | 3.00 | 8.00 | 84.0 | 0.37 |
| Demolition | Rubber Tired Dozers | Diesel | Tier 3 | 1.00 | 8.00 | 367 | 0.40 |
| Demolition | Concrete/Industrial Saws | Diesel | Tier 3 | 1.00 | 8.00 | 33.0 | 0.73 |
| Demolition | Excavators | Diesel | Tier 3 | 1.00 | 8.00 | 36.0 | 0.38 |
| Demolition | Rubber Tired Loaders | Diesel | Tier 3 | 1.00 | 8.00 | 150 | 0.36 |
| Site Preparation | Graders | Diesel | Tier 3 | 1.00 | 8.00 | 148 | 0.41 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Tier 3 | 2.00 | 7.00 | 84.0 | 0.37 |
| Site Preparation | Rubber Tired Dozers | Diesel | Tier 3 | 1.00 | 8.00 | 367 | 0.40 |
| Site Preparation | Rubber Tired Loaders | Diesel | Tier 3 | 1.00 | 8.00 | 150 | 0.36 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 1.00 | 7.00 | 367 | 0.40 |
| Grading | Graders | Diesel | Tier 3 | 1.00 | 8.00 | 148 | 0.41 |
| Grading | Rubber Tired Dozers | Diesel | Tier 3 | 1.00 | 8.00 | 367 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Tier 3 | 2.00 | 7.00 | 84.0 | 0.37 |
| Grading | Excavators | Diesel | Tier 3 | 1.00 | 8.00 | 36.0 | 0.38 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Grading | Rubber Tired Loaders | Diesel | Tier 3 | 1.00 | 8.00 | 150 | 0.36 |
| Building Construction | Cranes | Diesel | Tier 3 | 1.00 | 8.00 | 367 | 0.29 |
| Building Construction | Forklifts | Diesel | Tier 3 | 2.00 | 7.00 | 82.0 | 0.20 |
| Building Construction | Generator Sets | Diesel | Average | 1.00 | 8.00 | 14.0 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Tier 3 | 2.00 | 6.00 | 84.0 | 0.37 |
| Building Construction | Welders | Diesel | Tier 3 | 2.00 | 8.00 | 46.0 | 0.45 |
| Building Construction | Rubber Tired Loaders | Diesel | Tier 3 | 1.00 | 8.00 | 150 | 0.36 |
| Paving | Tractors/Loaders/Backhoes | Diesel | Tier 3 | 1.00 | 8.00 | 84.0 | 0.37 |
| Paving | Pavers | Diesel | Tier 3 | 1.00 | 8.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Tier 3 | 1.00 | 8.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Tier 3 | 1.00 | 8.00 | 36.0 | 0.38 |
| Paving | Cement and Mortar Mixers | Diesel | Tier 3 | 1.00 | 8.00 | 10.0 | 0.56 |
| Paving | Rubber Tired Loaders | Diesel | Tier 3 | 1.00 | 8.00 | 150 | 0.36 |
| Architectural Coating | Air Compressors | Diesel | Tier 3 | 1.00 | 6.00 | 37.0 | 0.48 |
| Architectural Coating | Aerial Lifts | Diesel | Tier 3 | 1.00 | 8.00 | 46.0 | 0.31 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | — | — | — | — |
| Demolition | Worker | 17.5 | 11.7 | LDA,LDT1,LDT2 |
| Demolition | Vendor | 0.00 | 8.40 | HHDT,MHDT |
| Demolition | Hauling | 17.3 | 20.0 | HHDT |
| Demolition | Onsite truck | 0.00 | — | HHDT |

| | | | | |
|---|---|---|---|---|
| Site Preparation | — | — | — | — |
| Site Preparation | Worker | 15.0 | 11.7 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | 0.00 | 8.40 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00 | 6.00 | HHDT |
| Site Preparation | Onsite truck | 0.00 | — | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 15.0 | 11.7 | LDA,LDT1,LDT2 |
| Grading | Vendor | 0.00 | 8.40 | HHDT,MHDT |
| Grading | Hauling | 10.0 | 6.00 | HHDT |
| Grading | Onsite truck | 0.00 | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 22.3 | 11.7 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 3.31 | 8.40 | HHDT,MHDT |
| Building Construction | Hauling | 0.00 | 20.0 | HHDT |
| Building Construction | Onsite truck | 0.00 | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 15.0 | 11.7 | LDA,LDT1,LDT2 |
| Paving | Vendor | 0.00 | 8.40 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20.0 | HHDT |
| Paving | Onsite truck | 0.00 | — | HHDT |
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 4.46 | 11.7 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | 0.00 | 8.40 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00 | 20.0 | HHDT |
| Architectural Coating | Onsite truck | 0.00 | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

## 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 | 65,241 | 21,747 | 0.00 | 0.00 | — |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (Cubic Yards) | Material Exported (Cubic Yards) | Acres Graded (acres) | Material Demolished (Building Square Footage) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Demolition | 0.00 | 0.00 | 0.00 | 15,000 | — |
| Grading | 0.00 | 1,840 | 6.00 | 0.00 | — |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | — |

### 5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

## 5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|
| Condo/Townhouse | — | 0% |

## 5.8. Construction Electricity Consumption and Emissions Factors

**kWh per Year and Emission Factor (lb/MWh)**

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2024 | 0.00 | 204 | 0.03 | < 0.005 |

| | | | | |
|---|---|---|---|---|
| 2025 | 0.00 | 204 | 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 |
|---|---|---|---|---|---|---|---|---|
| Condo/Townhouse | 227 | 252 | 195 | 82,470 | 1,782 | 1,982 | 1,529 | 647,705 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

| Hearth Type | Unmitigated (number) |
|---|---|
| Condo/Townhouse | — |
| Wood Fireplaces | 0 |
| Gas Fireplaces | 0 |
| Propane Fireplaces | 0 |
| Electric Fireplaces | 0 |
| No Fireplaces | 31 |
| Conventional Wood Stoves | 0 |
| Catalytic Wood Stoves | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves | 0 |

### 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) |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| 65241.45 | 21,747 | 0.00 | 0.00 | — |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 180 |

## 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) |
|---|---|---|---|---|---|
| Condo/Townhouse | 128,295 | 204 | 0.0330 | 0.0040 | 804,235 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Condo/Townhouse | 999,341 | 187,773 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Condo/Townhouse | 22.8 | — |

## 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 |
|---|---|---|---|---|---|---|---|
| Condo/Townhouse | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.50 | 2.50 | 10.0 |
| Condo/Townhouse | Household refrigerators and/or freezers | R-134a | 1,430 | 0.12 | 0.60 | 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 |
|---|---|---|---|---|---|---|

## 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 |
|---|---|---|---|---|---|---|

### 5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|---|---|---|---|---|---|

## 5.17. User Defined

| Equipment Type | Fuel Type |
|---|---|

## 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 |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 8. User Changes to Default Data

| Screen | Justification |
|---|---|
| Land Use | lot acreage edited to match site plans which were revised to reflect the projected selling of a portion of the project parcel, building SF edited based on data request form |
| Operations: Hearths | no fireplaces per data request |
| Construction: Construction Phases | Changes based on info in data request form |
| Construction: Off-Road Equipment | Changes based on data request form |
| Construction: Dust From Material Movement | Changes based on data request form |
| Construction: Trips and VMT | Revised based on data request |

# Appendix C

Historical Resources Evaluation

Rincon Consultants, Inc.
449 15th Street, Suite 303
Oakland, California 94612
510-834-4455

September 15, 2023
Project No: 23-14763

Kelso G. Barnett
North of the Mission LLC
Via email: kelsogbarnett@gmail.com

**Subject: Cultural Resources Assessment for the Residential Project Proposed at 254 1st Street East, Sonoma, California**

Dear Mr. Barnett:

This letter report presents the findings of a cultural resources assessment completed in support of the residential project proposed at 254 1st Street East (proposed project), in Sonoma, California. North of the Mission LLC retained Rincon Consultants, Inc. (Rincon) to support the proposed project's compliance with the California Environmental Quality Act (CEQA), in particular to prepare a Class 32 Categorical Exemption (CE). The study summarized herein was prepared in support of the Class 32 CE. This letter report documents the results of the cultural resources-related tasks performed by Rincon, specifically a cultural resources records search, archival and background research, a built environment survey, and consideration of 254 1st Street East (subject property) for historical resources eligibility. All work was completed in accordance with CEQA and applicable local regulations, including the City of Sonoma Historic Preservation Ordinance.

Rincon Architectural Historian Ashley Losco, MSHP, is the primary author of this letter report and conducted archival and background research. Rincon Senior Architectural Historian JulieAnn Murphy, MSHP, served as the project manager and provided management oversight. Architectural Historian and Cultural Resources Program Manager Rachel Perzel, MA and Principal Shannon Carmack, provided additional oversight and reviewed this letter report for quality control. All of those noted above meet the Secretary of the Interior's Professional Qualifications Standards (PQS) for history and architectural history (36 CFR, Part 61).

## Project Site and Description

The project site is located in the City of Sonoma, Sonoma County, California (Figure 1). Specifically, the proposed project site encompasses portions of Section 7 of Township 05 North, Range 05 West of the *Sonoma, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle. The project site, addressed 254 1st Street East (Assessor's Parcel Number [APN] 018-131-018-000), is approximately 2.07 acres and currently developed with four light industrial buildings and surface parking historically associated with the former Acme Leather Factory Complex (Figure 2). Figures of the project site and the surrounding region are included in Attachment A.

The following project description was developed based on information provided by North of the Mission LLC. The project involves demolition of the existing light industrial buildings and construction of a new 31-unit multifamily development.

# Methods

## Background and Archival Research

Rincon completed background and archival research in support of this assessment in August 2023. A variety of primary and secondary source materials were consulted. Sources included, but were not limited to, historical maps, aerial photographs, and written histories of the area. The current assessment relied on and integrated the information presented in *Survey and Evaluation for 216, 230 & 254 First Street East, Sonoma* prepared by Baseline Consulting in August 2013 in support of a previously proposed project's compliance with CEQA (Dawson 2013). The following sources, in addition to those listed in the references section, were utilized to develop an understanding of the project site and its context:

- Sonoma County Assessor's Office
- Historical aerial photographs accessed via Nationwide Educational Title Research (NETR Online)
- Historical aerial photographs accessed via University of California, Santa Barbara Library FrameFinder
- Historical United States Geological Survey (USGS) topographic maps
- City of Sonoma Building Permits accessed via the City of Sonoma Building Division
- City of Sonoma Local Historic Resources and Local Districts Inventory List
- Historical newspaper clippings obtained from Newspapers.com, ProQuest Historical Newspapers.com, and the California Digital Newspaper Collection

## California Historical Resources Information System Records Search

On August 14, 2023, Rincon received California Historical Resources Information System (CHRIS) records search results (No. 23-0007) from the Northwest Information Center (NWIC) (Attachment B). The NWIC, housed at Sonoma State University, is the official state repository for cultural resources records and reports for Sonoma County. The purpose of the CHRIS records search was to identify previously recorded cultural resources, as well as cultural resources studies that have been previously prepared within the project site and a 0.5-mile radius surrounding it. Rincon also reviewed the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), the California Historical Landmarks list, City of Sonoma List of Local historic resources and districts, and the Built Environment Resources Directory (BERD).

## Built Environment Survey

Under the direction of Rincon Senior Architectural Historian JulieAnn Murphy, MSHP, Biologist Beth Wilson and Environmental Planner Hannah Bireschi conducted a built environment survey of the project site on July 10, 2023. The purpose of the survey was to document the current conditions of the property at 254 1st Street East and note any changes that have occurred since it was last evaluated by Baseline Consulting in August 2013. All built environment features within the project site, including buildings, structures, and associated landscape elements, were visually inspected. Pursuant to California Office of Historic Preservation (OHP) Guidelines (California OHP 1995: 2), properties over 45 years of age were recorded and evaluated for listing in the NRHP, CRHR, and local listing on California Department of Parks (DPR) 523 series forms, which are included in Attachment C. Overall condition and integrity of the built features within the project site were documented using photograph

and field notes which were later reviewed by Ms. Murphy. Field notes and digital photographs are maintained at our Rincon Oakland office.

## Findings

### Known Cultural Resources Studies

The CHRIS records search and background research identified 51 cultural resources studies that have been previously conducted within 0.5 mile of the project site (Attachment B). Of these studies, two include a portion of the project site (S-44604 and S-46942). Approximately 100 percent of the project site has been studied, and approximately 100 percent has been surveyed in the last 10 years. Known studies that occurred within or adjacent to the project site are discussed in further detail below.

#### Study S-44604

Study S-44604, *Survey and Evaluation for 216, 230, & 254 First Street East, Sonoma,* was prepared by Arthur Dawson of Baseline Consulting in 2013 (Dawson 2013). The study summarized in the report surveyed the current project site at 254 1st Street East, in addition to adjacent properties outside the project site at 216 and 230 1st Street East, included research on the history of the properties, and provided historic context. The study included an evaluation (P-49-004739) of the current project site as well as the adjacent properties for eligibility for listing in the CRHR, excluding any buildings or structures which were not age eligible at the time of evaluation.. As described in more detail below, Baseline Consulting recommended the properties, including the current project site, as ineligible for listing in the CRHR under all criteria.

#### Study S-46942

Study S-46942, *Sonoma League for Historic Preservation Survey Update (Sonoma Valley Survey Update),* was prepared by Diana J. Painter of Painter Preservation in August 2015 (Painter 2015). The study was a survey update to the Sonoma League for Historic Preservation's survey records to assist in preservation efforts and provide accurate information on Sonoma Valley's historic resources. Initial efforts included a record search at the NWIC and research through the Sonoma League's records and windshield surveys. The windshield survey re-surveyed 250 properties which were originally surveyed by Sonoma League in 1978/79 and 1998. All surveyed properties were documented. However, only 50 properties were recorded on DPR forms. Though the project site was documented in the study, it was not recorded on a DPR forms.

### Known Cultural Resources and Previous Evaluations

The CHRIS records search and background research identified 37 cultural resources that have been previously recorded within 0.5 mile of the project site. Resources recorded in the search radius are listed in Attachment B. Of these resources, one is within the project site (P-49-004739). It is discussed in further detail below.

As mentioned above, the project site, 254 1st Street East, was previously recorded and evaluated by Baseline Consulting in August 2013. The cultural resources assessment (S-44604/P-49-004739) was prepared to fulfill the regulatory requirements of CEQA for a previously planned project and included evaluation of the subject property, historically known as the Acme Leather Factory as well as two adjacent residential properties, 216 and 230 1st Street East. Baseline Consulting's assessment included a cover memorandum and preparation of DPR forms that included the following information: a detailed architectural description of the two residences (216 and 230 1st Street East) and the subject

property, and a development history, historic context, and a discussion and evaluation of each of the properties' eligibility for the CRHR. The evaluation of the Acme Leather Factory included the 1949 Acme Leather Factory Building and Carport and Storage Building and did not address features that were less than 50 years old at the time of evaluation – a c. 1970 Warehouse Building and a c. 1970 Carport. Baseline Consulting concluded that none of the properties were eligible for listing in the CRHR under any criteria for lack of historical or architectural significance (Attachment D).

## Aerial Imagery and Historical Topographic Maps Review

Rincon completed a review of historical topographic maps and aerial imagery to confirm the development history of the project site. A historical topographic map from 1902 depicts the project site as undeveloped and sited north of the California Northeastern Railroad and downtown Sonoma which was developed with some commercial and residential buildings around the central plaza southwest of the current project site at the time (USGS 2023). By 1942 historical topographic maps show that development within downtown Sonoma had extended east and west from the central plaza; however, the project site and surrounding area north of the California Northeastern Railroad were still undeveloped with the exception of a few residential buildings (USGS 2023). A historical aerial from 1948 confirms the project site and surrounding area north of downtown Sonoma was undeveloped land (NETR Online 2023). However, a 1968 aerial of the area depicts the project site as developed with several buildings associated with the Acme Leather Factory complex including the Acme Factory building, the Carport and Storage building, and a third unidentified structure; the surrounding area to the west, east, and north of the project site had some new development including a multifamily residential community and baseball fields (NETR Online 2023). Between 1968 and 1982, the Warehouse building was added to the project site and additional multifamily residential communities were constructed to the north, west, and east of the project site (NETR Online 2023). Between 1982 and 1993, the Carport building was constructed at the east end project site. Between 1993 and 2020, the surrounding area experienced little development with the exception of construction of one single-family community to the east of the project site (NETR Online 2023). The project site and surrounding area appear unchanged since then.

## Survey Results

### Built Environment Resources

The following section summarizes the results of all background research and fieldwork as they pertain to built environment resources that may qualify as historical resources. The field work and background research confirmed the presence of one previously recorded historic-age property within the project site: 254 1st Street East, the former Acme Leather Factory Complex (Figure 3). This property was recorded and evaluated for historical resources eligibility, including consideration of elements which have become age eligible since its last evaluation in 2013 on updated DPR series 523 forms, which are included in Attachment C and summarized below.

*254 1st Street East*

#### Physical Description

The property at 254 1st Street East (subject property) is a light industrial property on the east side of 1st Street East sited on an L-shaped parcel (APN 018-131-018-000), formerly part of the larger Acme Leather Factory Complex. The northern half of the parcel is undeveloped open land while the southern half is developed with four light industrial buildings: the Acme Factory Building, the Carport and Storage Building, the Warehouse Building, and the Second Carport Building, identified in (Figure 5). The site is

accessed by a vehicular drive at the north end of the site that provides access to an asphalt parking lot that fronts the buildings and continues to additional surface parking at the rear of the buildings.

The Acme Factory Building was constructed in 1949 (Dawson 2013) (Figure 6). A vernacular, light industrial building, it is rectangular in plan and sits on a concrete foundation. The one-story building has a flat roof with wide overhanging eaves and is constructed of concrete masonry units (CMUs). The primary, east-facing elevation's, main entrance has a flush metal door recessed under the primary roofline and is supported by one circular column at the southwest corner of the building. Adjacent to the entrance is a decorative brick wall with a brick planter and a perpendicular glass block wall. The primary elevation also has a large opening with a metal roll-up door and two steel casement windows with brick sills, which characterize the windows throughout the building. The north elevation has a full width covered porch on a concrete foundation and covered by a flat roof with exposed beams added to the building between 1968 and 1982 (NETR Online 2023) (Figure 7). The south elevation is characterized by ten steel casement windows and one entrance with a flush wood door, and the east elevation is characterized by a large opening with a metal roll-up door, three steel casement windows, and a partial-width wood frame covered porch.

North of the factory building is the Carport and Storage Building, also constructed in 1949 and updated in the 1970s (Dawson 2013). The vernacular building is rectangular in plan sited east-west on a concrete foundation adjacent to 1st Street East (Figure 8). Capped with a flat roof with wide overhanging eaves, the building is constructed of multiple materials: the original 1949 storage areas are constructed of CMU at the western end and center of the building, while the original open carport areas were enclosed with a combination of large plywood boards and vertical wood boards in the 1970s (Figure 9). The primary, south-facing elevation has multiple entrances including two flush wood doors, a glazed wood door, and double flush wood doors. Openings at the west end of the building are covered by a partial width flat roof porch supported by thin metal posts, and openings at the east end feature curved metal awnings. The building has one multilite steel window on the west elevation and a vinyl vertical sash window on the south elevation. The east elevation has a concrete porch that extends for the width of the building and is covered by a flat metal corrugated roof. Constructed between 1968 and 1982, it is open on all sides and is supported by metal posts and abuts the Second Carport Building to the east (NETR Online 2023).

The Second Carport Building was constructed between 1982 and 1993 (NETR Online 2023). It is rectangular in plan, sited east-west on a concrete foundation, and continues for four bays. The building is steel-frame construction and has a flat roof sheathed in corrugated metal sheets. It has corrugated metal walls at the north and east elevations and is open along its south elevation for two bays for covered parking spaces at its west end. The two easternmost bays are enclosed with plywood for storage areas and include paired plywood doors at the center of each bay (**Error! Reference source not found.** and Figure 11).

The Warehouse Building is at the southeast corner of the property. Constructed in the 1970s, the building is rectangular in plan and sits on a concrete foundation and is capped with a flat corrugated metal roof (Dawson 2013) (Figure 12). It is steel-frame construction and has a corrugated metal exterior. The primary, north-facing elevation has two large garage openings with metal roll-up doors and two entrances with flush metal doors. The building's west elevation includes two additional garage openings. The easternmost garage opening is topped by a flat roof carport addition. The steel frame and corrugated metal addition extends south for two bays and each bay is enclosed by chain link fencing (Figure 13). Other elevations are devoid of openings or ornamentation.

## PROPERTY HISTORY

The following property history was largely derived from the cultural resources assessment prepared by Baseline Consulting in 2013. See Attachment D for a copy of the cultural resources assessment.

The subject property was first developed in 1949 for Acme Leather Products. The company relocated from San Francisco and the Sonoma City Council amended local zoning to extend the industrial area in order to accommodate construction of the factory. Its development was consistent with Sonoma's post war development boom, which included increased commercial and residential development. The property's first buildings, the Acme Factory Building and the Carport and Storage Building, were constructed in 1949 and were designed by San Francisco engineer August Waegemann and constructed by general contractor C.C. Bean of Sonoma (Dawson 2013). Waegemann (1919-1994) studied civil engineering at UC Berkely, receiving his BS in 1942. He opened his own practice after serving in the Navy during World War II and worked steadily throughout the Bay Area up to the 1980s (HALS CA-43 2009).

*The Sonoma Index-Tribune* reported that Acme Leather Products was, "well-known makers of handbags, briefcases, albums and pictures." Owned by partners R.V. Wright, Theodore Thretcher, and J.H. Richards, the company operated from the subject property for many years. After the relocation of the company to Sonoma, it specialized in the production of tooled leather handbags, while continuing to manufacture items such as belts, briefcases, and wallets. They initially employed 6-12 people in the plant, and eventually increased the staff to 15-18, after investing in machines to produce tooling, thereby increasing productivity. In the 1950s, J.H. Richards sold his interests in the company to Wright and Thretcher, who continued to operate the business from the subject property until it closed 1957 (Dawson 2013).

Richard and Gloria Peterson purchased the property, then operating as a military surplus store, in 1963. Since then, and typical of a light industrial property, it has housed a number of commercial businesses including: an industrial sheet metal, plumbing, and piping company; a food catering business; and a commercial glass-blowing company (Dawson 2013).

Since the property was last evaluated in 2013, it was sold in 2015 and again in 2023 (Sonoma County Assessor 2013). It currently houses several businesses including a music school, a flag company, and a vintage car auto works.

## HISTORICAL RESOURCES EVALUATION

As previously described, Acme Leather Factory Complex was evaluated by Baseline Consultants in August 2013 to ensure compliance with CEQA for a previous, unrealized project. More than five years have passed since the 2013 evaluation was completed. OHP Guidelines recommend updating evaluations older than five years to ensure accuracy (OHP 1995). Furthermore, several components of the subject property, including alterations to the Carport and Storage Building and the construction of the Second Carport Building and the Warehouse Building have since reached 45 years, the age threshold recommended by OHP for evaluation for historical resources eligibility.

254 1st Street East, including all four buildings, was recorded and evaluated for listing in the NRHP, CRHR, and for local listing as a City of Sonoma Historic Resource. Rincon recommends the property ineligible for listing in the NRHP, CRHR, and as a local historic resource under all criteria.

254 1st Street East was associated with the City of Sonoma's expansion after World War II. 254 1st Street East was part of the industrial expansion in Sonoma in the Post-World War II era; however, research did not indicate the property made a significant contribution to that expansion. It was also not identified as being the location of historical events with significance to Sonoma's history, or that

of the state or nation. Therefore, the property, including all extant buildings, is recommended ineligible for listing in the NRHP, CRHR, and as a local resource under Criteria A/1/a.

Research identified the original owners of the Acme Leather Products company and subject property as Theodore W. Trechter, R.V. Wright, and J.H. Richards. Research did not identify any significant associations between the owners and local, state, or national history. After their ownership ended in 1957, and typical of a light industrial commercial building, the property had numerous tenants. Archival research did not reveal any evidence to suggest that the property was strongly associated with any individual who made significant contributions to local, state, or national history. Therefore, 254 1st Street East is recommended ineligible for listing in the NRHP, CRHR, and as a local resource under Criteria B/2/b.

The buildings at 254 1st Street East are light industrial buildings constructed between 1949 and 1993. All four buildings are unassuming vernacular industrial buildings designed with no distinctive characteristics of an architectural style or method of construction. They are utilitarian buildings constructed of simple industrial materials. The Acme Factory Building and the Carport and Storage Building were designed by August Waegemann and constructed by C.C. Bean. Though August Waegemann was a respected structural engineer in the Bay Area, research did not identify Waegemann as a master in his field and the subject property does not support otherwise. Similarly, available archival information suggests that C.C. Bean does not appear to have been a significant builder, no other architects associated with the property were identified, and the property does not possess artistic value. 254 1st Street East is, therefore, recommended ineligible for listing in the NRHP, CRHR, and as a local resource under Criteria C/3/c.

A review of available evidence and CHRIS records search results does not suggest 254 1st Street East, including all extant buildings, has yielded or may be likely to yield information important to local, state, or national prehistory or history; therefore, it is recommended ineligible for listing in the NRHP, CRHR, and as a local resource under Criteria D/4/d.

## Conclusions and Recommendations

The built environment survey and background research confirmed the presence of one previously identified built-environment historical resource in the project site, the Acme Leather Factory Complex. As detailed above, the subject property, inclusive of only the 1949 Acme Leather Factory Building and Carport and Storage Building was previously evaluated by Baseline Consultants in August 2013 and found ineligible for listing in the CRHR for lack of historical or architectural significance. The current assessment performed an updated evaluation all buildings on the project site, including those that have become age-eligible since the previous evaluation, and recommends the property at 254 1st Street East ineligible for listing in the NRHP, CRHR, and locally under all criteria for lack of historic and architectural significance. As such, the property does not qualify as a historical resource and the proposed project would not result in a significant adverse impact as defined by Section 15064.5 of the CEQA Guidelines. Rincon recommends a finding of ***no impact to historical resources*** pursuant to CEQA.

Should you have any questions concerning this assessment, please do not hesitate to contact the undersigned at (510) 834-4455 or jmurphy@rinconconsultants.com.

Sincerely,
**Rincon Consultants, Inc.**

Ashley Losco, MSHP
Architectural Historian

JulieAnn Murphy, MSHP
Architectural Historian Project Manager

**Attachments**

| | |
|---|---|
| Attachment A | Figures |
| Attachment B | California Historic Resources Information System Records Search Results |
| Attachment C | Department of Parks and Recreation 523 Series Forms |
| Attachment D | Baseline Consulting 2013 Cultural Resources Assessment (S-44604/P-49-004739) |

## References

Dawson, Arthur. 2013. *Survey and Evaluation for 216, 230 & 254 First Street East, Sonoma*. Baseline Consulting, August 29.

California Office of Historic Preservation (OHP). 1995. *Instructions for Recording Historical Resources*. March.

Nationwide Education Title Research, LLC (NETR Online). 2023. Historic aerials and topographic maps of the project site and surrounding area. Accessed August 2023, through https://www.historicaerials.com/viewer.

National Park Service (NPS). 2009. HALS CA-43, Flemming Garden, Berkeley, Alameda County, California.

Painter, Diana J. 2015. *Sonoma League for Historic Preservation Survey Update (Sonoma Valley Survey Update).* Painter Preservation, August. Accessed August 2023 through the NWIC as Study S-46942.

United States Geological Survey (USGS). 2023. TopoViewer. Accessed August 2023, through https://ngmdb.usgs.gov/topoview/viewer/#14/38.2896/-122.4472.

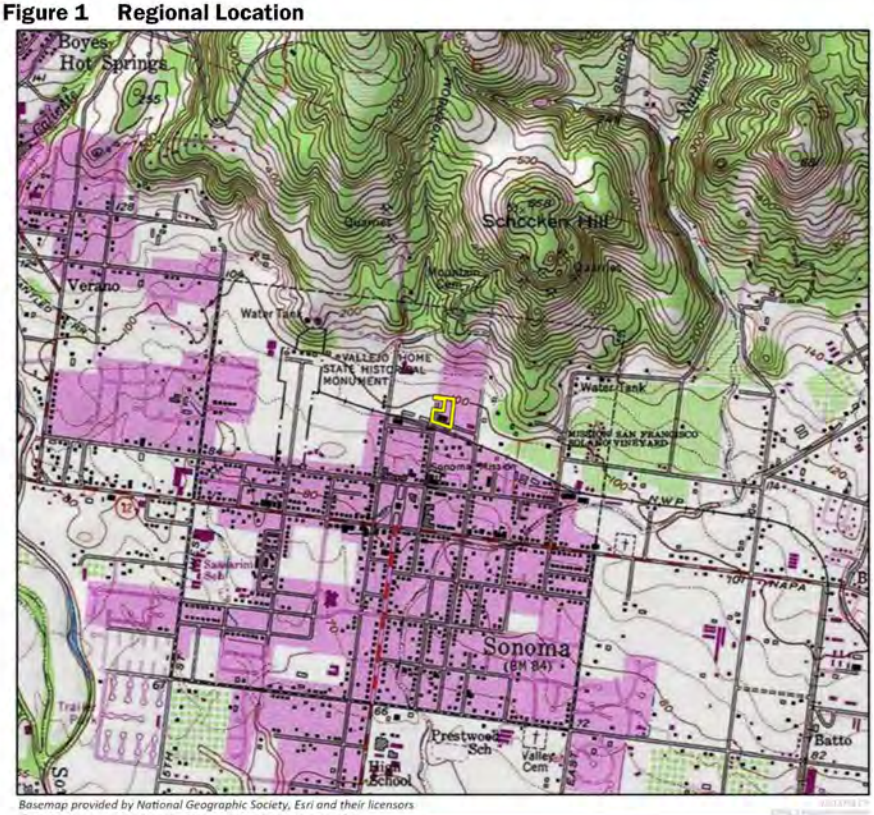
Waegemann, August E. 1956. *California Civil Engineer and Engineer in Training Examinations.*

# Attachment A

Figures

North of the Mission LLC
**Proposed Residential Project at 254 1st Street East**

**Figure 1 Regional Location**




*Basemap provided by National Geographic Society, Esri and their licensors © 2023. Sonoma Quadrangle. T05N R05W S7. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.*

1-1

rincon

North of the Mission LLC
**Proposed Residential Project at 254 1st Street East**

**Figure 2 Project Location**


1-2

**Figure 3 Built Environment Resources – 254 1st Street**


**Figure 4 Proposed Project Plans**

1-1

**Figure 5 254 1st Street East Property, View East**

**Figure 6 Acme Factory Building West and South Elevations, View Northeast**

1-1

**Figure 7 Acme Factory Building North Elevation, View Southwest**

**Figure 8 Carport and Storage Building West Elevation, View Southeast**

**Figure 9 Carport and Storage Building South Elevation, View Northeast**

**Figure 10 Carport Building, View Northeast**

**Figure 11 Carport Building South and West Elevations, View Northwest**

**Figure 12 Warehouse Building North and West Elevations, View Southeast**

**Figure 13 Warehouse Building West Elevation Carport Addition, View Southeast**