Date: March 29, 2024

To: Office of Planning and Research
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From: City of Temple City (Lead Agency)
Community Development Department
Planning and Zoning Division
9701 Las Tunas Drive
Temple City, CA 91780

NOTICE OF CATEGORICAL EXEMPTION

1. **Project Title:** 6119 Temple City Boulevard 18-Unit Residential Project

2. **Project Applicant:** Longo Investment Inc., 812 S. Atlantic Boulevard #A, Monterey Park, CA 91754

3. **Project Location:** 6119 Temple City Boulevard, City of Temple City; Los Angeles County (see Exhibit 1, Regional Context Map); Cross Streets: Temple City Boulevard and Garibaldi Avenue (see Exhibit 2 Project Vicinity Map).

4. **Environmental Setting:** The Project site is located within an urbanized area of the City of Temple City, Los Angeles County, California (Assessor Parcel Number [APN] 5385-012-007). The 0.33-acre site is developed with a single family home and one accessory dwelling unit (ADU). The site also includes ornamental trees and landscaping. The site is bound by Temple City Boulevard to the east and residential development on the north, west, and south. The site has surface elevations ranging from approximately 425 to 429 feet relative to mean-sea-level (MSL), with general surface gradients gradually sloping southeast.

5. **Project Description:** The Project site currently contains a single-family home in the front and an ADU in the rear totaling approximately 3,200 square feet. The proposed Project includes demolition of the existing dwellings and construction of a 20,210-square foot, 3-story residential building with 18 units (see Exhibit 3, Floor Plans). The Project would include two (2) studio units, eight (8) one-bedroom units, six (6) two-bedroom units, and two (2) three-bedroom units. The studio units would be 600 square feet, the one-bedroom units would be either 760 square feet or 870 square feet, the two-bedroom units would be 1,100 square feet, and the three-bedroom units would be either 1,250 square feet or 1,620 square feet. Two of the eighteen dwelling units would be reserved as “very low income” housing. The Project would include basement parking and a total of 22 parking stalls, one of which would be Americans with Disabilities Act (ADA) accessible. Excavation for the basement parking would result in the net export of approximately 4,896 cubic yards of soils and would extend to approximately 11 feet below grade. The Project would have a modern architectural style with light sand finish stucco, wood siding, nature grey concrete, wood trellises, vinyl windows, and aluminum frame glass doors (see Exhibit 4, Project Elevations). The Project would include approximately 3,850 square feet of open space, courtyards, and landscaping. Vehicular

access would be provided via a driveway ramp on Temple City Boulevard. The driveway would provide direct access to the basement parking. The Project would collect stormwater in drains throughout the site and direct flows to storm drains under Temple City Boulevard. The proposed Project would connect to existing water and sewer facilities located within the Temple City Boulevard right-of-way, and utility undergrounding would be required. Because the Project includes units designated as very-low-income housing, the Project qualifies for a State affordable housing density bonus of fifty percent (50%) and height incentives up to 51 feet in height. With the State affordable housing density bonus, the proposed Project is allowed to develop up to 18 dwelling units. As previously described, the proposed Project consists of 18 units. Upon completion, the proposed development would be three stories and would have a maximum height of 45 feet at its highest point.

6. **Exceptions:** CEQA Guidelines Section 15300.2 (Exceptions) includes a list of circumstances in which a categorical exemption cannot be used. As part of a review for exemption, MIG evaluated the Project against each of the applicable exceptions, including project location, cumulative impacts, significant effects due to unusual circumstances, scenic highways, hazardous waste sites, and historical resources. The review provided below did not identify any significant effects that would occur from the Project, and the exceptions listed in CEQA Guidelines Section 15300.2 were found not to apply to the Project.

   Location. CEQA Guidelines Section 15300.2(a) specifies that Class 3, 4, 5, 6, and 11 exemptions are qualified by consideration of where the project is to be located – a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply in all instances, except where the project may affect an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, State, or local agencies. No such areas, such as an Alquist-Priolo Earthquake Fault zone or critical habitat pursuant to the federal Endangered Species Act, are known to occur at the Project site. In addition, the proposed Project qualifies for a Categorical Exemption under Class 32. Therefore, the locations exception under Section 15300.2(a) does not apply to the Project.

   Cumulative Impact. CEQA Guidelines Section 15300.2(b) specifies that a categorical exemption shall not be used when the cumulative impact of successive projects of the same type in the same place over time is significant. The City's Planning Department website has not identified any known or potential future projects in the area, which, when combined with the proposed Project, have the potential to create a significant cumulative impact on an environmental resource. Therefore, the cumulative impact exception under Section 15300.2(b) does not apply to the proposed Project.

   Significant Effect from Unusual Circumstances. CEQA Guidelines Section 15300.2(c) specifies that a categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity would have a significant effect on the environment due to unusual circumstances. The Project includes demolition of existing residential units and development of new residential units and would increase the population on the site by approximately 50 persons. Tree removals would be conducted outside of the bird-nesting season. The Project site is surrounded by similar uses on all sides and the Project would comply with the City's Municipal Code ordinances for the protection of trees within the public right-of-way (Ord. 13-983) and trees that are protected by covenant (Ord. 19-1036). No conflicts with theses ordinances are expected as no trees are planted within the public right-of-way, and no trees protected by covenant with the City are known to occur on the Project

site. No occurrences of special-status plant or wildlife species have been recorded on the Project site (see Attachment B). No adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan exists for the Project area. No unusual circumstances have been identified. Finally, as discussed below, the proposed Project would not result in significant noise or transportation impacts. Therefore, the exception under Section 15300.2(c) is not applicable.

Scenic Highways. CEQA Guidelines Section 15300.2(d) specifies that a categorical exemption shall not be used for a project that 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 State-designated scenic highways adjacent to the Project site (Caltrans 2020). Therefore, the exception under Section 15300.2(d) is not applicable to the proposed Project.

Hazardous Waste Sites. CEQA Guidelines Section 15300.2(e) specifies that a categorical exemption shall not be used for a project located on a site that is included on a list compiled pursuant to Section 65962.5 of the Government Code. To determine if any portion of the Project would be located on such a list, MIG reviewed online data resources that provide information on facilities or sites pursuant to Section 65962.5, as well as relevant reports to any listed hazardous waste sites. These include:

- Department of Toxic Substances Control EnviroStor database;
- List of Leaking Underground Storage Tank Sites from the Water Board GeoTracker database;
- List of solid waste disposal sites identified by the Water Board with waste constituents above hazardous waste levels;
- List of "active" Cease and Desist Orders and Cleanup and Abatement Orders from the Water Board;
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code.

The Project site is not included on any of the above-mentioned hazardous waste lists (CalEPA 2018). In addition, no adjacent sites were identified where contamination may have extended onto the Project site. Therefore, the exception under Section 15300.2(e) is not applicable.

Historical Resources. CEQA Guidelines Section 15300.2(f) specifies that a categorical exemption shall not be used for a project that may cause a substantial adverse change in the significance of a historical resource. While the single-family home at the front of the site was constructed in 1949, it is not listed or eligible for listing in the California Register of Historic Resources, the National Register of Historic Places, or City of Temple City Historic Resources Survey. Construction of the new residential development and underground parking garage would require excavation up to 11 feet below ground surface; however, such work would be located within areas that have been highly disturbed during the initial construction of the residences on the site. No information has become available to indicate that historic or archaeological resources were identified on the Project site during construction of the residences. Project activities are not expected to cause negative impact to any known or potential historical resources; therefore, the exception under Section 15300.2(f) is not applicable.

7. **Categorical Exemption Class:** Class 32 (CEQA Guidelines Section 15332) In-Fill Development Projects.

   A Class 32 Exemption consists of projects characterized in in-fill development meeting the conditions listed below:

   (a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designations 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.

8. **Justification for Exemption/Analysis of Impacts:** The Class 32 Exemption is intended to promote in-fill development within urbanized areas. The class consists of environmentally benign in-fill projects which are consistent with local general plan and zoning requirements. This class is not intended to be applied to projects which would result in any significant air quality, biological resources, noise, transportation, or water quality effects. The Project's potential environmental effects are discussed below.

   Air Quality Impacts

   An *Air Quality Analysis Memo* was performed by MIG analysts to assess potential air quality impacts from the proposed Project, and is included as **Attachment A**.

   Applicable Air Quality Management Plan
   A project that conflicts with or obstructs the implementation of the Southern California Air Quality Management District's (SCAQMD) South Coast Air Basin 2022 Air Quality Management Plan (AQMP) could hinder implementation of the AQMP, delay efforts to meet attainment deadlines, and/or interfere with SCAQMD efforts to maintain compliance with, and attainment of, applicable air quality standards. Pursuant to the methodology provided in Chapter 12 of the SCAQMD *CEQA Air Quality Handbook*, consistency with the AQMP is affirmed if the Project:

   1) Is consistent with the growth assumptions in the AQMP; and
   2) Does not increase the frequency or severity of an air quality standards violation or cause a new one.

   The proposed Project would not induce employment, and the population induced by the 18-unit residential Project would be well within that accounted for in the Southern California Association of Governments 2020 Regional Transportation Plan / Sustainable Communities Strategy (2020 RTP/SCS), which forms the growth assumptions for the current AQMP. Therefore, the proposed Project would not conflict with the first consistency criterion. As described in the analysis below, the proposed Project would not exceed the construction or operational air quality thresholds maintained by the SCAQMD, and would therefore not conflict with the second consistency criterion. Accordingly, the proposed Project would not conflict with or obstruct implementation of the SCAQMD 2022 AQMP.

Construction Emissions

The proposed Project involves construction activities including demolition, site preparation, grading, trenching, building construction, and architectural coating activities in an existing residential area of Temple City. Construction of the proposed Project was modeled to begin in June 2024 and last approximately 35 months. Construction phase and duration and the type and amount of equipment used during construction were generated using CalEEMod default assumptions and modified as necessary to reflect the following Project-specific context, information, and details:

- The type and length of construction phases, as well as the number of workers in each phase, was modified per information provided by the Project applicant;
- 4,896 cubic yards of soil was assumed to be exported from the Project site per information provided by the Project applicant;
- Fugitive dust control measures were incorporated into the model consistent with requirements contained in SCAQMD Rule 403, Fugitive Dust;
- Wood burning stoves were removed in accordance with SCAQMD Rule 445 and replaced with gas stoves.

The proposed Project's maximum daily unmitigated construction emissions are shown in Table 1, *Unmitigated Maximum Daily Regional Construction Emissions*. Please refer to Attachment A for CalEEMod output files and detailed construction emissions assumptions.

Table 1
Unmitigated Maximum Daily Regional Construction Emissions

Construction Season	Maximum Pollutant Emissions (Pounds Per Day)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Summer 2024	1.3	15.1	13.2	<0.1	3.6	1.8
Winter 2024	0.7	5.9	8.3	<0.1	0.6	0.3
Summer 2025	0.6	5.4	8.4	<0.1	0.5	0.3
Winter 2025	0.6	5.4	8.2	<0.1	0.5	0.3
Summer 2026	0.6	5.0	8.3	<0.1	0.5	0.2
Winter 2026	0.6	5.0	8.1	<0.1	0.5	0.2
Summer 2027	26.9	4.8	8.2	<0.1	0.5	0.2
Winter 2027	0.5	4.8	8.0	<0.1	0.1	0.1
SCAQMD Regional Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Threshold?	***No***	***No***	***No***	***No***	***No***	***No***
Source: MIG, 2023 (See Attachment A) and SCAQMD, 2023.						

As shown in Table 1, the proposed Project's maximum daily, unmitigated criteria air pollutant emissions would be well below the SCAQMD's recommended regional pollutant thresholds. Project construction, therefore, would not generate criteria air pollutant emissions levels that exceed SCAQMD regional CEQA thresholds.

Operational Emissions

The proposed Project's operational emissions were also estimated using CalEEMod, V. 2022.1. The modeling is based on the Project's first full year of operations (assumed to be

2027), using default data assumptions generated by CalEEMod, modified as necessary to reflect the following Project-specific context, information, and details:

- Project-specific land use information (i.e., lot acreage, building square footage, etc.) was applied to the model; and
- CalEEMod default trip lengths were replaced with the vehicle miles (VMT) travelled information contained in the Temple City Boulevard VMT Screening Analysis (MIG, 2023) prepared for the proposed Project.

The proposed Project's maximum daily unmitigated operational emissions are shown in Table 2, *Unmitigated Maximum Daily Regional Operational Emissions*. Please refer to Attachment A for CalEEMod output files and detailed construction emissions assumptions.

Table 2
Unmitigated Maximum Daily Regional Operational Emissions

Emissions Source	Maximum Daily Pollutant Emission (Pounds Per Day)[A]					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	0.7	0.3	1.7	<0.1	<0.1	<0.1
Energy Demand	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mobile Sources	0.3	0.3	3.2	<0.1	0.8	0.2
Total Daily Emissions[B]	1.0	0.6	4.9	<0.1	0.8	0.2
SCAQMD Regional Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	***No***	***No***	***No***	***No***	***No***	***No***

Source: MIG, 2023 (See Attachment A) and SCAQMD, 2023.
(A) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels.
(B) Totals may not equal due to rounding.

As shown in Table 2, the proposed Project's maximum daily, unmitigated operational criteria air pollutant emissions would be well below the SCAQMD's-recommended regional pollutant thresholds. Project operation, therefore, would not generate criteria air pollutant emissions levels that exceed SCAQMD regional CEQA thresholds.

Localized Construction and Operational Emissions

In addition to regional CEQA thresholds, the SCAQMD has also developed Local Significance Thresholds (LSTs) that represent the maximum emissions from a project that are expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standards, which would result in significant adverse localized air quality impacts.

The proposed Project's mitigated maximum daily construction emissions are compared against the SCAQMD's-recommended LSTs in Table 3, *Local Significance Threshold (LST) Construction Analysis* and the Project's maximum daily operational emissions are compared against the SCAQMD's-recommended LSTs in Table 4*, Operational Emissions Localized Significance Thresholds Analysis*. Consistent with the SCAQMD's LST methodology, the emissions included in the construction LST analysis and operational LST analysis are on-site emissions only, and the LST against which these on-site emissions are compared are based on the Project size, in acres. A one-acre project size, the closest project size to the 0.33-acre Project site, was used. The LST thresholds are for source receptor area (SRA) 9 (East San Gabriel Valley), the SRA in which the proposed Project is located, and are based on a receptor

distance of 25 meters (82 feet). While the sensitive receptors that border the Project site to the north, south, and west are located closer than 25 meters, the Localized Significance Threshold Methodology states that projects with receptors closer than 25 meters should use LSTs for receptors located at 25 meters.

As shown in Table 3, the proposed Project's mitigated construction emissions would not exceed the SCAQMD's recommended construction LSTs. Project construction, therefore, would not generate criteria air pollutant emissions levels that exceed SCAQMD local CEQA thresholds.

Table 3
Local Significance Threshold (LST) Construction Analysis

Construction Phase[A, B]	Maximum Pollutant Emissions (Pounds Per Day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Demolition 2024	4.7	5.8	0.4	0.2
Site Preparation 2024	4.6	5.6	0.4	0.2
Grading 2024	11.4	10.7	2.6	1.5
Trenching 2024	2.0	2.9	0.1	0.1
Building Construction (Foundation) 2024	5.6	7.0	0.3	0.2
Building Construction (Vertical and MEP) 2024	5.6	7.0	0.3	0.2
Building Construction (Vertical and MEP) 2025	5.1	6.9	0.2	0.2
Building Construction (Vertical and MEP) 2026	4.8	6.9	0.2	0.2
Building Construction (Vertical and MEP) 2027	4.6	6.9	0.2	0.2
Architectural Coating 2027	0.8	1.1	<0.1	<0.1
SCAQMD LST Threshold[C]	**89**	**623**	**5**	**3**
Exceeds Threshold?	***No***	***No***	***No***	***No***

Source: MIG 2023 (See Attachment A) and SCAQMD 2009.
(A) Emissions estimated using CalEEMod, v. 2020.4.0. Estimates are based on default model assumptions unless otherwise noted in this document.
(B) Emissions presented are worst-case emissions and may reflect summer or winter emission levels. In general, due to rounding, there is no difference between summer and winter emission levels for the purposes of this table.
(C) The LSTs are based on 1.0-acre Project size and 25-meter receptor distance in SRA 9.

As shown in Table 4, the proposed Project's operational emissions would not exceed the SCAQMD's recommended operational LSTs. Operation of the proposed Project, therefore, would not generate criteria air pollutant emission levels that exceed SCAQMD local CEQA threshold.

Table 4
Operational Emissions Localized Significance Thresholds Analysis

Operational Emission Source	Maximum On-Site Pollutant Emissions (lbs/day)[A]			
	NOx	CO	PM10	PM2.5
Mobile[B]	<0.1	0.3	0.1	<0.1
Area	0.3	1.7	<0.1	<0.1

Energy	<0.1	<0.1	<0.1	<0.1
Total On-Site Emissions	0.3	2.0	0.1	<0.1
SCAQMD LST Threshold(C)	**176**	**2,437**	**15**	**4**
Threshold Exceeded?	**No**	**No**	**No**	**No**

Source: MIG, 2022 (See Attachment A) and SCAQMD 2009
(A) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels.
(B) Total on-site mobile source emissions were presumed to be equal to 10% of total mobile emissions estimates.
(C) Totals may not equal due to rounding.

Sensitive Air Quality Receptors/Health Risks

The SCAQMD identifies sensitive receptors as populations more susceptible to the effects of air pollution than the general population. Some people are more affected by air pollution than others. Sensitive air quality receptors include specific subsets of the general population that are susceptible to poor air quality and the potential adverse health effects associated with poor air quality. Both CARB and the SCAQMD consider residences, schools, parks and playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes to be sensitive air quality land uses and receptors. The potential sensitive air quality receptors adjacent or in close proximity to the perimeter of the Project area include:

- The residential developments on Temple City Boulevard bordering the Project site to the north and south and the residential developments on Garibaldi Avenue bordering the Project site to the west;
- The residential developments on Temple City Boulevard approximately 80 feet east of the Project site;
- Longden Elementary school, approximately 660 feet northwest of the Project site;
- Pacific Friends School, approximately 740 feet northeast of the Project site;
- Playfactory Preschool, approximately 1,000 feet east of the Project site;
- Temple City National Little League baseball field, approximately 1,125 feet northwest of the Project site; and
- Temple City Park, approximately 1,580 feet southeast of the Project site.

A portion of the PM_{10} and $PM_{2.5}$ emissions generated during construction of the Project would be diesel particulate matter, or DPM, a known TAC. The proposed Project's construction activities would not expose adjacent residential receptors to substantial levels of DPM that would pose a substantial adverse health risk. The proposed Project does not involve substantial earthmoving or grading activities that would require large amounts of heavy-duty equipment associated with the highest DPM emissions. In addition, as shown in Table 3 above, construction activities associated with the Project would not exceed SCAQMD LST thresholds for PM_{10} and $PM_{2.5}$.

Odors

The proposed Project would involve construction and operational activities that would generate odors typical of many construction and residential land use operations. These types of odors (e.g., automobile exhaust) are typical of the area and would be quick to disperse. The proposed Project would not result in the creation of objectionable odors that would affect a substantial number of people.

Biological Resources Impacts

A *Rapid Biological Constraints Analysis (RBCA)* was performed by MIG biologists to assess potential biological resources that may be located on the Project site, and is included as **Attachment B**.

According to the findings of the RBCA, no significant impacts to biological resources would occur as a result of the proposed Project. Per the CEQA Guidelines, the following summary is provided to support the conclusion that no significant potential impacts to biological resources are expected:

- No sensitive species were detected during the site visit, and none would be expected as the Project area is already developed and modified from its natural state and does not represent habitats that typically support sensitive species. No significant impacts to any candidate, sensitive, or special status were found on the site nor would they be expected on this infill-type Project which has already been developed.
- No riparian habitat or sensitive natural community is present on the property. No impacts to riparian habitats or sensitive natural communities would be expected.
- No wetlands or water resources occur within the boundary of the Project; therefore, this resource is not expected to be impacted by the Project.
- No known wildlife corridors or nursery sites are known to occur within or in the vicinity of the Project and therefore there is no expected impact to this resource.
- The Temple City Municipal Code (TCMC) includes ordinances for the protection of trees, including those within the public right-of-way (Ord. 13-983) and those that are protected by covenant (Ord. 19-1036). However, no conflicts with theses ordinances are expected as no trees are planted within the public right-of-way, and no trees protected by covenant with the City are known to occur on the Project site. Temple City does not have any other ordinances that protect biological resources, except for within parks (Ord. 05-899; not applicable here), as the city is located within a well-developed area of Los Angeles County.
- No adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan is known to exist within the proposed Project boundary.

Land Use and Zoning Compatibility

The proposed Project site is located entirely within the City limits. The site is bound by Temple City Boulevard to the east and residential development on the north, west, and south.. The Project site has a General Plan Land Use Designation of High-Density Residential (RH) as described in the City of Temple City General Plan Land Use Element and is zoned as R-3 High Density Residential in the City's Zoning Ordinance. The RH designation and R-3 zone primarily provide for high-density, multi-family residential development up to thirty-six (36) dwelling units per acre, and applies to apartment and condominium/townhouse residential structures that house multiple dwelling units and may consist of two to three-story buildings (with a maximum of 40 feet). A portion of these units may be priced for low and moderate income households. On larger parcels with this designation, common open space and other shared amenities are typically provided. Structured parking may also be included. Other compatible uses, such as schools, childcare centers, parks, and religious facilities, may also locate in areas with this designation.

The zoning for the 0.33-acre Project site allows up to 12 dwelling units. The proposed Project includes 16 dwelling units. However, because the Project includes units designated as very-low-income housing, the Project would qualify for a State affordable housing density bonus of fifty percent (50%) and height incentives up to 51 feet in height. With the State affordable housing density bonus, the proposed project is allowed to develop up to 18 dwelling units. As previously described, the proposed project consists of 16 units. Upon completion, the proposed development would be three stories and would have a maximum height of 45 feet at its highest point.

In addition, as shown in Table 5, *General Plan Consistency,* the Project would be consistent with General Plan goals and policies.

Table 5
General Plan Consistency

General Plan Goal/Policy	Project Consistency Analysis
Goal LU 1 (Growth and Development)	The proposed Project would be orderly and well-planned while preserving the existing residential neighborhood. In addition, the proposed Project would make use of an underutilized property to accommodate for forecasted growth in the City.
Policy LU 1.1 (Basic Growth Policy)	The proposed Project is consistent with community values, character and scale and complements and enhances existing uses in the area.
Policy LU 1.3 (Development Capacity)	The proposed Project is consistent with the type and density of land uses depicted on the Land Use Diagram.
Policy LU 1.7 (Development Costs)	The proposed Project would contribute its share of the costs of providing necessary public services and facilities through equitable fees and exactions.
Goal LU 2 (Land Use Mix)	The proposed Project contributes to a complete, balanced community by providing vital additional housing units.
Policy LU 2.2 (Places to Live)	The proposed Project contributes to a full range of housing types, densities, locations, and affordability levels in the City to address the community's fair share of regional, senior, and workforce housing needs.
Policy LU 3.1 (Development Pattern and Urban Form)	The proposed Project is a distinct, compact residential development that maintains and enhances Temple City's urban form.
Policy LU 3.2 (Complete and Livable Neighborhoods)	The proposed Project maintains the pattern of distinct residential neighborhoods oriented around parks, schools, and community facilities that are connected to and walkable from neighborhood-serving businesses.
Goal LU 4 (Compatible Land Uses)	The proposed Project is located and designed to ensure compatibility among existing uses in the area that differ in the activities, physical form and scale, and design. The proposed Project also avoids negative impacts on residents and existing uses.
Policy LU 4.1 (Development Compatibility)	The proposed Project is located and designed to assure compatibility among land sues, addressing such

	elements as building orientation and setbacks, buffering, visibility and privacy, automobile access, noise and lighting impacts, landscape quality, and aesthetics.
Policy LU 4.7 (Development that is Compatible)	The proposed Project demonstrates a contextual relationship with neighboring structures and sites addressing such elements as building scale, massing, orientation, setbacks, buffering, arrangement of shared and private open spaces, visibility, privacy, automobile and truck access, impacts of noise and lighting, landscape quality, infrastructure, and aesthetics.
Policy LU 4.8 (Transition in Scale)	The scale and massing of the proposed Project provides appropriate transitions in building height and bulk, and provides lot coverage that retains the character of adjacent lower-density neighborhoods.
Goal LU 7 (Sustainable Built Environment)	The proposed Project would contribute to a sustainable environment, minimize consumption of scarce environmental resources, and reduce greenhouse gas emissions.
Policy LU 7.1 (Sustainable Land Development)	The proposed Project promotes land use and urban design development practices that reduces energy and water consumption, pollution, greenhouse gas emissions, and waste and noise generation by using drought tolerant and native landscapes, shading of exterior public spaces, and recycling and salvage for reuse of construction and demolition debris.
Policy LU 7.2 (Sustainable Design and Construction)	The proposed Project would comply with the Cal Green Code's sustainable building practices incorporating a "whole system" approach to designing and constructing buildings that consume comparatively less energy, water, and other natural resources, reduce wastes, facilitate natural ventilation, use daylight effectively, and are healthy, safe, comfortable, and durable.
Goal LU 8 (Equity and Environmental Justice)	The proposed Project provides fair and equitable access for all residents to housing.
Policy LU 8.1 (Equitable Distribution of Uses and Amenities)	The proposed Project provides for the equitable distribution of housing uses.
Policy LU 8.3 (Housing Type Distribution)	The proposed Project promotes an equitable distribution of housing types for all income groups and promotes mixed-income developments to avoid concentrations of below-market-rate housing in particular areas.
Policy LU 8.4 (Affordable Housing Provision)	The proposed Project integrates affordable housing units within a larger development to meet the housing needs of the community and larger region, as specified by the General Plan Housing Element.
Goal LU 9 (Livable Neighborhoods)	The proposed Project contributes to a city composed of safe and livable neighborhoods with a variety of housing types that are desirable places to live, are well maintained, and contribute to the quality of life.

Policy LU 9.1 (Neighborhood Conservation)	The proposed Project maintains the character and scale of Temple City's residential neighborhoods, recognizing their contribution to the City's identity, economic value, and quality of life.
Policy LU 9.2 (Neighborhood Character)	The proposed Project maintains elements of residential streets that unify and enhance the character of the neighborhood including parkways, street trees, and compatible setbacks.
Policy LU 9.3 (New Residential Development)	The proposed Project provides for the development of new residential development that is well-conceived, constructed, and maintained in a variety of types and densities, scales, and costs.
Goal LU 10 (Single-Family Neighborhoods)	The proposed Project contributes to the maintenance of distinct and quality single-family residential neighborhoods distinguished by their identity, scale, and character.
Policy LU 10.1 (Neighborhood Identity)	The proposed Project maintains distinguishing characteristics, such as housing scale and form, and public streetscaped that define and differentiate Temple City's single-family neighborhoods.
Policy 10.3 (Residential Character)	The proposed Project contributes to the discouragement of mansionization of existing single-family residential units by requiring building scale and massing that is compatible with existing neighborhood development.

Because the Project would replace an existing residential use, the Project would not substantially increase population or the need for additional utility services. The Project would increase the number of residents on the site from 6 to 56 (based on the average of 3.1 persons per unit as designated in the General Plan), an increase of 50 residents. The 2020 RTP/SCS accounted for a population growth of 6,700 in Temple City between 2016 and 2045 (SCAG, 2020). As such, the proposed Project would not substantially increase population in the City.

Finally, while the proposed Project would not be consistent with applicable General Plan and zoning designations related to density and height, the Project includes units designated as very-low-income housing, which qualifies the Project for a State affordable housing density bonus of fifty percent (50%) and height incentives up to 51 feet in height. With the State affordable housing density bonus, the proposed Project is allowed to develop up to 18 dwelling units. As previously described, upon completion the proposed development would include 18 units and would be three stories with a maximum height of 45 feet at its highest point. This height would be similar to residential development along both sides of Temple City Boulevard and the additional density would also assist the City in meeting its Regional Housing Needs Allocation for the 6th Cycle.

Noise Impacts

A *Noise Analysis Memo* was prepared by MIG analysts to assess potential construction- and operation-related impacts from the proposed Project, and is included as **Attachment C**.

Construction Noise

The proposed Project involves construction activities including demolition, site preparation, grading, trenching, building construction, and architectural coating activities in an existing residential area of the City. Construction activities are anticipated to begin in June 2024 and may last approximately 35 months. As shown in the Project *Noise Analysis Memo*, the City's Municipal Code exempts construction projects that have a building permit from specific noise level standards provided the construction activities occur within the timeframes listed below. The proposed Project, therefore, would not generate construction noise levels that exceed City standards or otherwise result in a substantial temporary increase in ambient noise levels because:

- Building construction activities would not require substantial heavy duty equipment operations. Worst case noise levels, which would occur during demolition, site preparation, grading, and trenching would only last approximately two of the 35 months of construction.
- Construction equipment contains standard noise suppression devices such as mufflers, engine shields/covers, and engine/mechanical isolators/mounts that typically reduce engine, mechanical, and exhaust noise levels below standard reference noise levels, which are based on older equipment operations.
- The proposed Project would comply with City of Temple City Municipal Code Section 9-1P-1, which limits construction activities to the hours of 7:00 AM to 7:00 PM on weekdays and 8:00 AM to 4:00 PM on Saturdays. This code requirement limits construction activities to daytime hours when people are generally considered to be least sensitive to environmental noise levels.

Although construction noise levels would not exceed applicable City standards, the Project Applicant would implement construction noise control Best Management Practices (BMPs) to further reduce noise levels at the residential receptors adjacent to the Project site. With implementation of construction noise control BMPs, the proposed Project's construction activities would not generate noise levels that exceed standards or otherwise result in a substantial, temporary increase in ambient noise levels at sensitive receptor locations.

Operational Noise

The Project would not generate substantial operational noise. The Project would generate noise from landscaping equipment, Project vehicles, heating ventilation and air conditioning (HVAC) units, and other residential activities. However, Section 9-1P-1 of the Temple City Municipal Code exempts these sources (property maintenance occurring between 7 AM and 7PM, motor vehicles, and heating and air conditioning equipment) from provisions in the code that regulate noise. In addition, the noise generated by the proposed 16-unit residential facility would be similar to the noise generated by existing residential uses. Therefore, the operation of the Project would not generate on-site noise that would exceed Municipal Code requirements or otherwise substantially increase ambient noise levels in the vicinity of the Project. In addition, the Project would not generate substantial off-site noise.

The existing vehicle traffic on the road segment adjacent to the Project site is much higher than the additional traffic the Project could generate. There is an estimated 29,119 average daily trips on the segment of Temple City Boulevard from El Camino Real to Garibaldi. By comparison, the average daily trips estimated for this Project using CalEEMod default assumptions was 87.0 trips for weekdays, 78.6 trips for Saturdays, and 65.4 trips for Sundays. Caltrans considers a doubling of total traffic volume to result in a three dBA increase in traffic-related noise levels. The operation of the Project would not double traffic volumes on local

roads used to access the site, therefore it would not generate a substantial increase in off-site noise levels.

Groundborne Vibration

The proposed Project would not include substantial construction or operational activities that could generate sustained groundborne vibration levels at existing residential buildings that could result in building damage or sustained human annoyance. The potential for ground-borne vibration is typically greatest when vibratory or large equipment such as rollers or bulldozers are in operation. For the proposed Project, these types of equipment would primarily operate during demolition, site preparation, grading, and trenching. This equipment would at worst-case operate adjacent to the site's property lines and within approximately 25 feet of the nearest residential building (to the south) but would generally take place 40 feet or more from receptor locations. Standard construction equipment (e.g., bulldozers, trucks, jackhammers, etc.) generally does not generate ground-borne vibration that has the potential to damage the structural integrity of any buildings near work areas, but may be felt by nearby receptors. For reference, Caltrans recommends a damage threshold for older residential structures of 0.3 inches/second. The maximum predicted groundborne vibration level at 25 feet for typical equipment is 0.089 inches/second, which is substantially less than the Caltrans threshold. In addition, vibratory rollers, which are equipment with higher vibration levels than the typical equipment, may potentially be used during the Project. Vibratory rollers would also generate vibration levels below the Caltrans damage threshold. The maximum predicted groundborne vibration from vibratory rollers at 25 feet, 0.210 inches/second, would be below the damage threshold of 0.3 inches/second. Therefore, construction vibration from the Project would not cause damage to nearby buildings.

While the predicted groundborne vibration would be below the Caltrans damage threshold, it would likely be perceptible to the residents surrounding the Project site. Caltrans categorizes transient vibration as barely perceptible at 0.035 inches/second and distinctly perceptible at 0.24 inches/second. The vibration levels associated with both typical equipment and equipment with higher vibration levels would be categorized as barely perceptible. This vibration would only occur intermittently for a short period of time (i.e., when heavy equipment is in use during the initial stages of construction), and only during daytime hours when people are generally considered to be least sensitive to environmental noise levels. Construction-related groundborne vibration levels, therefore, would not be excessively perceptible or annoying to nearby properties. Once operational, the proposed Project would not have any large equipment that would generate vibration. For the reasons, the proposed Project would not generate excessive groundborne vibration or noise levels.

Airport Noise

The closest airport, San Gabriel Valley Airport, is located approximately 2.3 miles southeast of the proposed Project. The proposed Project is not located within the planning boundaries of the airport. Thus, the proposed Project would not expose people working in or visiting the Project area to excessive airport-related noise levels.

Noise and Land Use Compatibility

The California Supreme Court in California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal.4th 369 (2015) ruled that CEQA review is focused on a project's impact on the environment "and not the environment's impact on the project." Per this ruling, a Lead Agency is not required to analyze how existing conditions might impact a project's future users or residents; however, a Lead Agency may elect to disclose information relevant to a project even if it not is considered an impact under CEQA: such information is

provided below. Furthermore, the City's General Plan Hazard Element sets noise standards for receiving land uses which require evaluation for consistency and compliance even if such evaluation is not required by CEQA.

Exterior Noise Exposure: The measured ambient noise level at the project property line adjacent to Temple City Boulevard was 71.5 CNEL. Based on modeling conducted for the City's General Plan, traffic noise levels on Temple City Boulevard are expected to change by 0.2 CNEL by 2050, meaning future noise exposure levels at the project property line could be up to 71.7 CNEL. The proposed Project property line is approximately 35 feet from the centerline Temple City Boulevard, while the nearest building façade (associated with exterior wall of the first and second floor units fronting Temple City Boulevard) would be at least 55 feet from the road centerline. At these distances, future exterior noise levels at the Project property line and exterior building façade fronting Temple City Boulevard would be approximately 71.7 CNEL and 69.6 CNEL, respectively.

The proposed Project includes yard/courtyard/garden areas on the eastern and southern side of the property that could be exposed to noise levels (up to 71.7 CNEL) that exceed the City's 70 CNEL conditionally acceptable noise level for multi-family residential land uses. It is noted that the majority of the approximately 240-foot-long side yard/garden area would be exposed to noise levels below 70 CNEL. Based on the ambient noise modeling conducted for the Project, future Temple City Boulevard traffic noise levels would attenuate to 70 CNEL approximately 50 feet from the road center, or 15 feet from the Project property line. Thus approximately 230 feet of the 245-foot-long sideyard would be exposed to noise levels less than 70 CNEL. However, the front yard and approximately 15 feet of the side yard (as measured from the property line fronting Temple City Boulevard) could be exposed to noise levels above 70 CNEL. To effectively control noise in the areas closest to Temple City Boulevard, the Applicant would need to incorporate a solid barrier along the eastern perimeter of the Project property line (fronting Temple City Boulevard); however, a solid barrier is not feasible for the proposed Project because the only pedestrian and vehicular access to the site is via the Temple City Boulevard frontage. A solid barrier, therefore, would preclude residential and vehicular access to the site. A solid barrier installed along only a part of the site's Temple City Boulevard frontage would not effectively reduce noise levels in the Courtyard area to below 70 CNEL. The Project, therefore, would have a compatibility issue regarding exterior noise exposure.

However, the City does not consider the compatibility issue a CEQA impact. The exterior noise exposure is an existing issue that the proposed Project does not exacerbate because it would not meaningfully change traffic volumes or traffic noise levels on Temple City Boulevard. As discussed above, *The California Supreme Court in California Building Industry Association v. Bay Area Air Quality Management District* 62 Cal.4th 369 (2015) ruled that the environment's impact on a project is not an impact under CEQA. The Project's exterior noise exposure would, therefore, be a planning issue, and not a CEQA issue. The proposed Project does not include any other common or private exterior use areas that would be subject to noise levels above 70 CNEL due to setbacks from Temple City Boulevard.

Interior Noise Compatibility: The California Building Standards Code establishes that interior noise levels attributable to exterior noise sources shall not exceed 45 DNL or CNEL (as established by the local General Plan) for residential developments. As described above, daily noise exposure levels at the exterior building façade fronting Temple City Boulevard could be up to 69.6 CNEL, requiring 24.6 dB of attenuation to meet the 45 CNEL interior noise standard.

Typical building construction provides an exterior-to-interior noise reduction of approximately 12 dBA with windows open and approximately 25 dBA with windows closed. For this study, typical standard construction techniques include a basic framed wall with an STC rating of 39, consisting of 5/8-inch siding, ½-inch insulation board sheathing, 2-inch x 4-inch studs spaced every 16-inches, standard fiberglass insulation, and ½-inch drywall; windows and doors are rated STC 27 and occupy no more than 50% of the exterior wall area. Exterior stucco walls, such as that included in the proposed Project, provide greater exterior to noise attenuation (approximately 27 to 30 dBA with windows closed) provided window and door coverings also do not exceed 50% of the exterior wall surface (which is the case for the proposed Project). Cracks and openings in window and door assemblies can reduce exterior to interior noise attenuation. Mechanical ventilation must also be provided to allow for use of residential areas with windows closed.

Based on the above, standard exterior wall and roof assembly requirements would be sufficient to meet the interior noise standard of 45 CNEL; however, the final exterior assemblies would need to be reviewed and confirmed, and mechanical ventilation must be provided for the Project. The proposed Project would implement BMPs to reduce interior noise levels in residential dwelling units as described in the Project Noise Analysis Memo (Attachment C). Implementation of these interior noise attenuation measures would reduce interior noise to levels 45 CNEL or less. With implementation of the interior noise attenuation BMPs described in the Project Noise Analysis Memo, the Project would comply with the General Plan noise standards.

Transportation Impacts

A *Vehicle Miles Traveled (VMT) Screening Assessment* was performed by MIG analysts to assess potential transportation impacts from the proposed Project, and is included as **Attachment D**.

The VMT screening assessment was prepared in accordance with the City's *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment*.. The guidelines have established screening criteria pertaining to project trip generation forecasts, project land use types (i.e., local serving retail, affordable housing, etc.), proximity to transit, and location within a low VMT-generating area. The City's *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment*. also establish screening thresholds for certain types of projects that may be presumed to cause a less than significant VMT impact based on substantial evidence provided in the Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018). The City's *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment*. specify the following three (3) types of potential screening criteria that may be applied to screen projects from project-level assessment: 1) Transit Priority Area (TPA) Screening; 2) Low VMT Area Screening; and 3) Project Type Screening. The results of the VMT screening assessment are as follows:

<u>Transit Priority Area (TPA) Screening</u>
The San Gabriel Valley Council of Governments (SGVCOG) VMT Screening Tool was used to determine if the Project is located within a TPA (See Attachment D). According to the Screening Tool, the Project site is not located within a TPA; therefore, the Project *would not* screen-out under this criterion.

Low VMT Area Screening
In accordance with the City's *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment*, a low VMT area for residential projects is defined as a Transportation Analysis Zone (TAZ) where total VMT per capita does not exceed 15 percent below the SGVCOG baseline total VMT per capita. Based on the SGVCOG VMT Screening Tool assessment, the proposed Project is located within TAZ 22199200. The proposed Project is consistent with existing residential land uses in the TAZ and there does not appear to be anything unique about the Project that would otherwise be mis-represented utilizing the data from the SGVCOG VMT Screening Tool. The Project TAZ 2022 total VMT per capita is equal to 12.5. The SGVCOG average 2022 total VMT per capita is equal to 15.6. Based on the screening tool, the Project TAZ VMT per capita is approximately 20% less than the regional VMT per capita. Therefore, the proposed Project *satisfies* the City-established screening criteria for projects located in low VMT areas and may be presumed to result in a less than significant VMT impact.

Project Type Screening
OPR provides additional recommendations on when the presumption of less than significant impacts may be appropriate, in addition to the formally recommended screening criteria described above. Thus, lead agencies may choose to screen out projects based on the type and size of the land use(s) being proposed. As outlined in the City's *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment* because the proposed Project consists of 18 multi-family units, the Project *would not* screen-out under this criterion.

Conclusion
The proposed Project is located within a low VMT-generating area within the City as confirmed in the SGVCOG VMT Screening Tool. The Project, therefore, is presumed to result in a less than significant VMT impact and is exempt from preparation of a detailed VMT analysis in accordance with the City's *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment*.

Public Services Impacts

As previously noted, the proposed Project would result in an increase of approximately 50 persons on the site compared to existing conditions. As discussed below, the proposed Project would be sufficiently served by existing public services including Fire and Police Protection Services, Public Schools, Parks and Recreation Facilities, and other public facilities.

Fire Protection Services
Fire protection services are provided to the Project site by the Los Angeles County Fire Department (LACFD). The nearest fire station is LACFD Station 47, located at 5946 Kauffman Avenue, which is approximately 0.27 miles southeast of the Project site. With adherence to federal, State and local building and safety regulations (e.g., California Fire Code, California Building Code), and with payment of public safety and development fees, the proposed Project would not increase demand for fire protection services. No new fire station or capital improvements would be needed to accommodate the proposed Project. In addition, no new fire personnel would need to be hired in order to maintain existing service ratios and response times, as the Project would not substantially increase population or the need for fire protection services. Therefore, the Project's approval would not result in any significant effects relating to fire protection services pursuant to CEQA Guidelines Section 15332(e).

Police Protection Services

Police protection services are provided to the Project site by the Los Angeles County Sheriff Department(LACSD). The nearest Sheriff station is the Temple City Station, located at 8838 East Las Tunas Drive, which is approximately 0.95 miles southwest of the Project site. The Project would not include any uses that would require expanded police protection services. Construction of the Project would not result in any need for additional police protection services since the site has been previously occupied with residential uses. The increase in population from the Project would not significantly increase usage of local and regional police facilities. In addition, the Project would be required to pay public safety fees. Therefore, the Project's approval would not result in any significant effects relating to police protection services pursuant to CEQA Guidelines Section 15332(e).

Public Schools

According to the *Residential and Commercial/Industrial Development School Fee Justification Study* prepared for the Temple City Unified School District in July 2020, the addition of sixteen net dwelling units to the site could result in an increase of up to five (5) school-aged children on the site (student generation factor of 0.3187 children per multi-family attached unit). The Project would be required to pay fees to the local school district pursuant to Senate Bill (SB) 50. Payment of these fees would ensure sufficient school capacity in the District. Therefore, the Project would not result in a significant increase in the school age student population and the Project's approval would not result in any significant effects relating to public schools pursuant to CEQA Guidelines Section 15332(e).

Parks and Recreation Facilities

The nearest parks to the Project site are Primrose Park, located approximately 0.20 miles to the south of the site at 5940 Primrose Avenue, and Temple City Park, located approximately 0.30 miles southeast of the site at 5939 Golden West Avenue. The Project would not generate enough new population that would significantly increase the demand for new or existing park and or recreational facilities. In addition, pursuant to the Quimby Act, the Project would be required to pay parks and recreation facilities and programs fees. Therefore, the Project's approval would not result in any significant effects relating to parks and recreation facilities pursuant to CEQA Guidelines Section 15332(e).

Other Public Facilities

The nearest library to the Project site is the Temple City Library, located approximately 0.30 miles southeast of the site at 5939 Golden West Avenue. The Project would not generate a significant increase in demand for other public facilities like libraries. The proposed Project would not include construction of any library facilities and would not require construction or improvement of any such facilities. Therefore, the Project's approval would not result in any significant effects relating to other public facilities pursuant to CEQA Guidelines Section 15332(e).

Utilities and Service Systems Impacts

Water

Based on the CalEEMod generation rates, water use during Project construction and operation would be approximately 2,016 gallons per day or 2.26 acre-feet per year (AFY) (see Attachment A). The Project site is within the water service boundaries of the Upper San Gabriel Valley Municipal Water District (USGVMWD). According to the District's 2020 Urban Water Management Plan (UWMP), the reliable quantities of projected water supply for Year

2025 and Year 2030 are 6,072 AFY and 6,197 AFY, respectively. As stated above, the Project would consume approximately 2,016 gallons of water per day, which equates to approximately 735,862 gallons of water per year, or 2.26 AFY. The estimated water consumption of the proposed Project is well within the USGVMWD's projected water supply for 2025 and 2030 and would not, therefore, significantly impact existing water service. Further, the Project site would be redeveloped in compliance with the California Green Building Standards Code (which includes water efficiency standards for appliances and fixtures), which would further reduce Project water usage. For these reasons, the proposed Project would not require or result in the construction of new water facilities.

Wastewater

Similar to the existing site condition, the proposed Project would convey sewage into the City's sewer collection system which is operated and maintained by the City's Public Works Department. Currently, the two dwelling units on the Project site generate approximately 204 gallons of wastewater per day. The Sanitation Districts of Los Angeles County (LACSD) manages, operates, and maintains the larger sewer trunk lines into which the City's collection system feeds. Wastewater generation on site is estimated to be equivalent to indoor water demand. As such, the Project would generate approximately 1,838 gallons of wastewater per day, which is an increase of 1,634 gallons of wastewater per day over existing conditions. The sanitary sewer system transports domestic sewage to a treatment plant. In Temple City, sewage travels from private sewer pipes on each property into the City's sanitary sewer system and then into the Los Angeles County sanitary sewer system, which eventually carries it to the San Jose Creek Water Reclamation Plant (SJCWRP) located in unincorporated Los Angeles County adjacent to the City of Whittier. The SJCWRP currently provides primary, secondary, and tertiary treatment for a design capacity of 100 million gallons of wastewater per day. As such, the potential daily increase in gallons of wastewater per day would be well within the treatment capacity of the SJCWRP. In addition, water and sewer fees would be required to be paid by the Project proponent and would be used by the utility providers, at least in part, to fund projects and programs necessary to meet their regulatory obligation with respect to treatment requirements, treatment capacity, and supply reliability. Because the proposed Project would be serviced by regional water/sewer providers with sufficient remaining treatment capacity, and would pay water and sewer fees, potential significant impacts with respect to wastewater treatment requirements would not occur.

Stormwater

The Project site is currently served by the City's existing storm drain system. Construction of the proposed Project would increase the net area of impervious surfaces on the Project site from approximately 5,185 square feet to approximately 10,650 square, which is an increase from 35.8% of the site to 73.4% of the site. Therefore, increased discharges to the City's existing storm drain system would likely occur. However, the drainage patterns of the site would not substantially change relative to existing conditions. Runoff from the site after Project development would result in an increase in impermeable surfaces as well as increased potential water contamination from urban pollutants that are commonly found in surface parking lots, ornamental landscape planters and from atmospheric buildup on rooftops. The proposed Project would drain the site into Temple City Boulevard where there is an existing storm drain system. In accordance with the City's Stormwater Quality and Urban Runoff Control Ordinance (Temple City Municipal Code Title 8 – Stormwater Pollution Elimination) and with the current Los Angeles Regional Water Quality Control Board (LARWQCB) National Pollution Discharge Elimination System (NPDES) permit, the Project proponent would be required to prepare and comply with a Low Impact Development Plan. Compliance with the City's Stormwater Quality and Urban Runoff Control Ordinance would reduce the peak volume

of stormwater runoff discharged into the City's storm drain system and would ensure that stormwater is retained on-site, to the extent feasible. As such, the proposed Project would not require the construction or expansion of off-site storm water drainage facilities, as the Project would not contribute a substantial amount of new stormwater runoff relative to existing conditions.

Electric Power

The Project site would be serviced by Southern California Edison (SCE). The Project site would connect to the existing power grid via underground lines. Although the Project would require new electrical line tie-ins for service, it would not result in the need for new electrical substations or electrical generating facilities. Further, the Project site would be redeveloped in compliance with the California Green Building Standards Code (which includes energy efficiency standards for appliances and fixtures), which would further reduce Project electricity usage. SCE conditions of service would apply to the proposed Project. Therefore, the Project would not require the expansion or construction of electrical supply facilities.

Natural Gas

SoCal Gas would provide natural gas services to the Project site. The Project site would utilize the existing SoCal Gas distribution grid to service the Project. All new connections and service installations would be reviewed and approved by the SoCal Gas and the City Public Works Department. Although the Project would require new natural gas service connections, it would not result in the need for new natural gas supplies or infrastructure.

Telecommunication Facilities

The Project site is supported by telecommunication services from a variety of providers. Fiber optic cables and high-speed connection services from wireless providers available to service the Project site. The Project site would be required to comply with all federal, State, and local regulations for installation and wiring of telecommunications to the Project. With adherence to existing City and State Electrical, Building and Safety code requirements, no new or expanded facilities would be required.

Solid Waste

Solid waste disposal services for the Project site would be provided by Athens Services (Athens) and/or Ware Disposal (Ware). Currently,. Based on default CalEEMod solid waste generation rates, the two dwelling units on the Project site currently generate approximately 1.5 tons of solid waste per year, and the proposed Project would generate approximately 13.2 tons of solid waste per year (see Attachment A). This would be an increase of approximately 11.7 tons of solid waste per year for the site. Solid waste generated by the proposed Project would be collected and transported to a local or regional landfill. According to the Los Angeles County *Countywide Integrated Waste Management Plan*, the remaining permitted disposal capacity of existing solid waste disposal facilities in Los Angeles County as of September 2020 was a combined 148 million tons. Therefore, regional landfills in the Los Angeles area are anticipated to have sufficient capacity to accommodate the minor increase in solid waste generation attributable to the proposed Project. Combined remaining capacities at the landfills would be adequate to accommodate the proposed Project. The Project proponent is required to comply with all local, State, and federal requirements for integrated waste management (e.g., recycling, green waste) and solid waste disposal. The proposed residential use would not generate hazardous waste of any kind.

Conclusion
For the reasons listed above, the proposed Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities; would have sufficient water supplies; would be served by a wastewater treatment provider that has adequate capacity to serve the Project; would not generate excess solid waste; and would comply with all federal, State, and local regulations related to solid waste.

Water Quality Impacts

A *Grading, Drainage and Low Impact Development (LID) Plan* will be prepared for the proposed Project to ensure the Project complies with the requirements of the local NPDES Stormwater Program requiring the preparation of the plan.

The owner of the site is responsible for implementation of the provisions of the *Grading, Drainage and LID Plan* and would ensure that the plan is consistent with the current Los Angeles County Watershed Management Program (WMP) and the intent of the non-point source NPDES Permit for Waste Discharge Requirements for the County of Los Angeles, Los Angeles County Flood Control District, and the incorporated Cities of Los Angeles County within the Santa Ana Region. The Project *Grading, Drainage and LID Plan* will include calculations to support the structural integrity of the selected LID or treatment control BMP as appropriate and prepared under the direction of a California Registered Civil Engineer. The owner of the site would be responsible for maintenance of the Project and for long term maintenance of the BMPs.

For LID requirements, the Project would utilize a series of drainage pipes, catch basins, and sump pumps to direct runoff to a proposed underground infiltration system for treatment. The developer would be required to establish standards for ownership/maintenance of all non-structural, structural, and treatment BMPs. The *Grading, Drainage and LID Plan* will identify BMPs that would be used onsite to control predictable pollutant runoff, the assignment of long term maintenance responsibilities, and the locations(s) of all structural BMPs. With adherence to the Project *Grading, Drainage and LID Plan*, impacts to water quality would be less than significant.

Conclusion

The City of Temple City hereby concludes that while the proposed Project would not be consistent with applicable General Plan and zoning designations related to density and height, the proposed Project is consistent with existing residential development in the area, would be consistent with all applicable General Plan policies and would assist the City in meeting its RHNA allocation.; In addition, the City concludes that the proposed development occurs within the City limits on a project site of no more than five acres substantially surrounded by urban uses; the Project site has no value as habitat for endangered, rare or threatened species; the Project would not result in any significant effects relating to traffic, noise, air quality, or water quality; and the Project site can be adequately served by all required utilities and public services. Therefore, the City of Temple City hereby concludes the proposed Project falls within the factors described in CEQA (Title 14, Article 9: Categorical Exemptions) and qualifies for an Urban Infill Exemption under CEQA Guidelines Section 15332.

Lead Agency Contact Person: __Andrew Coyne_____

Phone: __626-285-2171__

Email: _acoyne@templecity.us_

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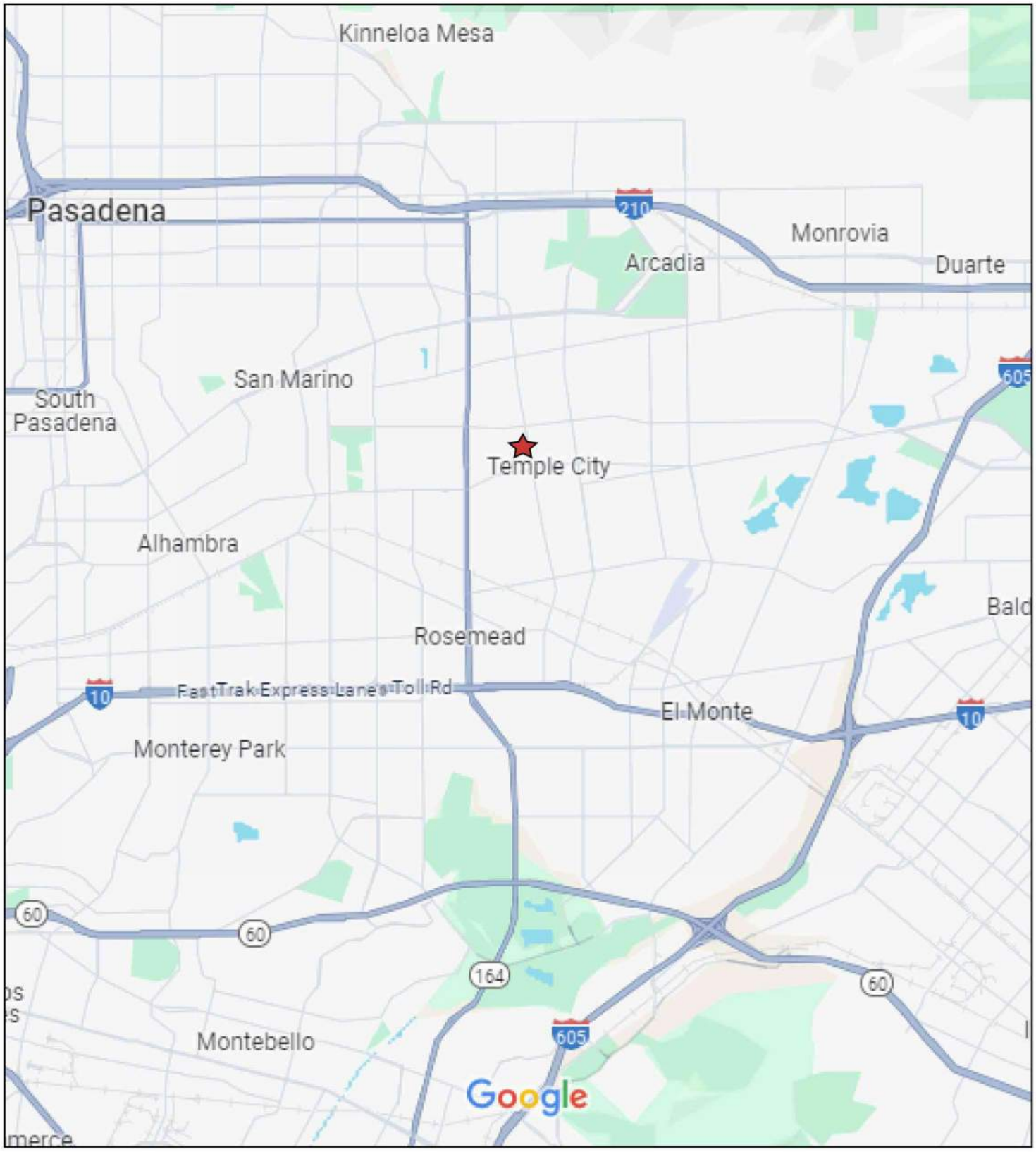

- Project Location

Not to Scale

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Exhibit 1 Regional Context Map

6119 Temple City Boulevard 18-Unit Residential Project
Temple City, California

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- Project Site

Not to Scale

Exhibit 2 Project Vicinity Map

6119 Temple City Boulevard 18-Unit Residential Project
Temple City, California

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THIRD FLOOR PLAN

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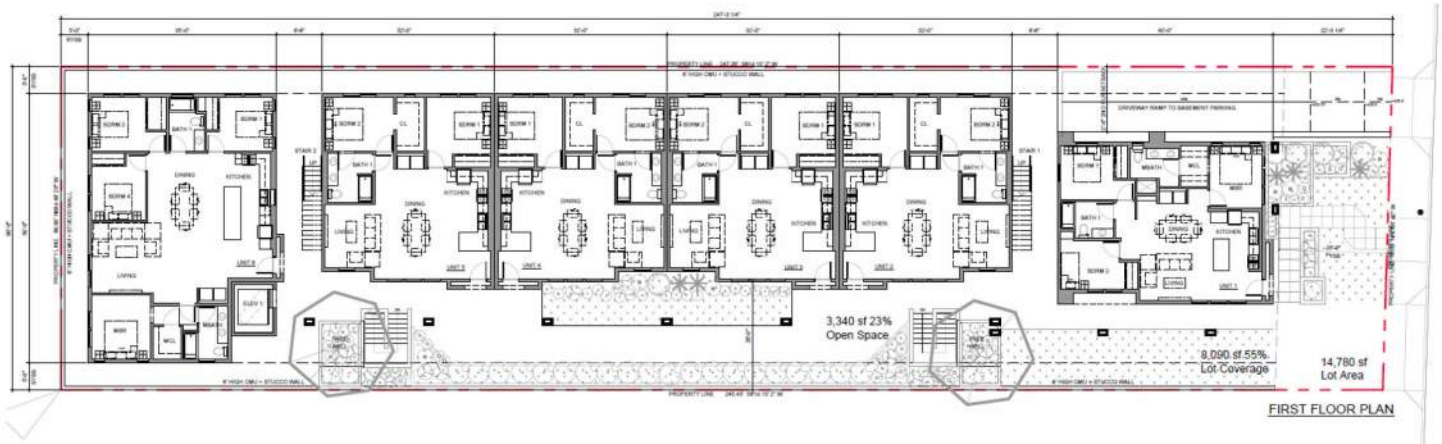
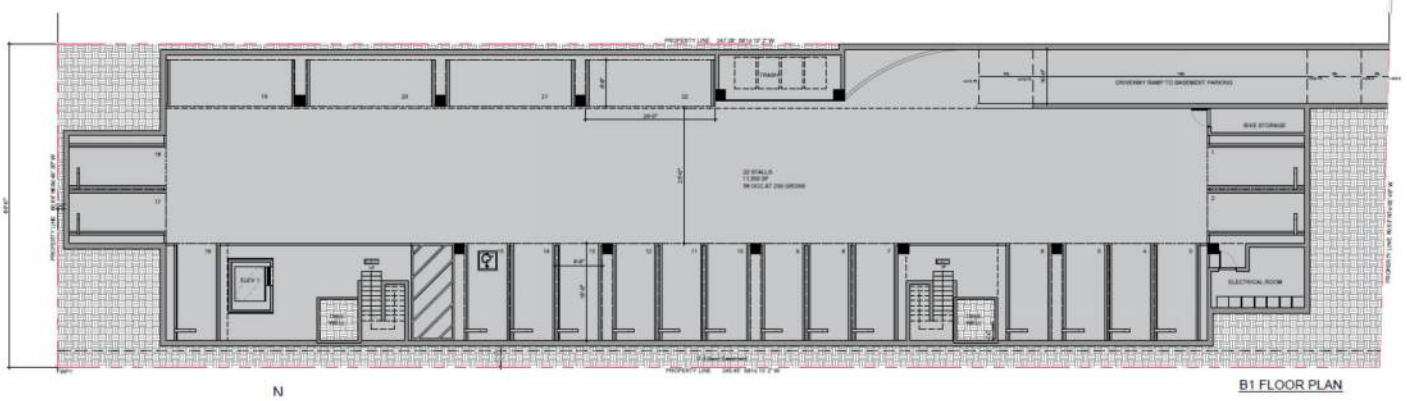
SECOND FLOOR PLAN



FIRST FLOOR PLAN



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B1 FLOOR PLAN

Source: Tag Design Works

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Exhibit 3 Floor Plans

6119 Temple City Boulevard 18-Unit Residential Project

Temple City, California

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1 LIGHT SAND FINISH STUCCO

2 COMPOSITE WOOD SIDING

3 NATURE GREY CONCRETE

4 COMPOSITE WOOD TRELLIS

EAST ELEVATION

SOUTH ELEVATION

KEYNOTE LEGEND		
1	LIGHT SAND FINISH STUCCO	
2	COMPOSITE WOOD SIDING	
3	NATURE GREY CONCRETE	
4	COMPOSITE WOOD TRELLIS	
5	VINYL WINDOW	
6	ALUMINUM FRAME GLASS DOOR	
7		
8		
9		
10		
11		
12		
13		

Maximum Building Height, as defined in the Irvine Zoning Ordinance sec. 3-9-1, states: Architectural features, antennae, Wireless Communication Facilities and flagpoles shall be permitted to exceed the maximum building height by ten feet, or by up to 15 feet for Class 4 antennae.

WEST ELEVATION

NORTH ELEVATION

Source: Tag Design Works

Exhibit 4 Project Elevations

6119 Temple City Boulevard 18-Unit Residential Project

Temple City, California

MIG

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Attachment A: Air Quality Analysis Memo

1650 SPRUCE STREET, STE 106
RIVERSIDE, CA 92507
951.787.9222
WWW.MIGCOM.COM

Memo

To: Alex Lai, Manager, Longo Investment Inc.

CC: Cameron Hile, Senior Analyst, MIG

From: Chris Dugan, William Deeman, and Kasey Kitowski, MIG

Date: March 19, 2024

SUBJECT: Air Quality Analysis for 6119 Temple City Boulevard 18-Unit Residential Project

MIG, Inc. (MIG) has prepared this memorandum at the request of Longo Investment, Inc. This memorandum estimates the potential air quality emissions for the proposed 6119 Temple City Boulevard 18-Unit Residential Project (proposed Project) and evaluates Project emissions against applicable South Coast Air Quality Management District (SCAQMD)-recommended California Environmental Quality Act (CEQA) significance thresholds. As explained in this memorandum, the proposed Project does not have the potential to result in emissions that exceed SCAQMD thresholds.

PROJECT DESCRIPTION

The proposed Project involves the redevelopment of a site located near the geographical north of Temple City, California. The redevelopment would occur on an approximately 0.33-acre property located at 6119 Temple City Boulevard. The site currently contains two existing residential buildings consisting of one one-story building and one two-story building. The proposed Project would demolish the existing structures and build an 20,210-square-foot, three-story multi-family residential building with one level of basement parking with 22 parking spaces. The Project would also include 3,850 square feet of open space and a 1,200 square foot front yard.

The site is bound by Temple City Boulevard to the east and residential development on the north, west, and south. The closest school, Longden Elementary School, is approximately 660 feet northwest of the Project site. In addition, Pacific Friends School is approximately 740 feet northeast of the Project site and Playfactory Preschool is approximately 1,000 feet east of the Project site. Temple City National Little League baseball field is approximately 1,125 feet northwest of the Project site and Temple City Park is approximately 1,580 feet southeast of the Project site. The closest airport, San Gabriel Valley Airport, is approximately 2.3 miles southeast of the Project site.

The proposed Project would involve the demolition of the three existing buildings, site preparation, grading, trenching, new building construction, and architectural coating. Construction of the proposed Project was modeled to begin in June 2024 and last approximately 35 months. The proposed Project's construction schedule and anticipated equipment usage is listed in Table 1*, Temple City Boulevard Residential Project Construction Activities.*

Table 1: Temple City Boulevard Residential Project Construction Activities		
Construction Phase	**Construction Schedule**	**Typical Equipment Used**
Demolition	June 2024	Concrete/Industrial Saw, Dozer, Backhoe
Site Preparation	June 2024	Grader, Backhoe
Grading	June 2024-July 2024	Grader, Dozer, Backhoe
Trenching	July 2024	Excavator, Backhoe
Building Construction (Foundation)	July 2024-November 2024	Crane, Forklift, Backhoe
Building Construction (Vertical and MEP)	November 2024-April 2027	Crane, Forklift, Backhoe
Architectural Coating	April 2027 -May 2027	Air compressor

The proposed Project was modeled to be operational in mid-2027. Once operational, the proposed Project would operate as a residential land use, similar to the existing residential uses in the area.

AIR QUALITY ANALYSIS

The proposed Project is located within the South Coast Air Basin (Basin), where efforts to attain state and federal air quality standards are governed by the SCAQMD. Both the State of California and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as criteria pollutants). These pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), inhalable particulate matter with a diameter of 10 microns or less (PM_{10}), fine particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$), and lead (Pb). The State has also established AAQS for additional pollutants. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the state and federal standards differ, California AAQS (CAAQS) are more stringent than the national AAQS (NAAQS). The U.S. Environmental Protection Agency (U.S. EPA), California Air Resources Board (CARB), and the SCAQMD assess the air quality of an area by measuring and monitoring the amount of pollutants in the ambient air and comparing pollutant levels against NAAQS and CAAQS. Based on these comparisons, regions are classified into one of the following categories:

- **Attainment.** A region is “in attainment” if monitoring shows ambient concentrations of a specific pollutant are less than or equal to NAAQS or CAAQS. In addition, an area that has been re-designated from nonattainment to attainment is classified as a “maintenance area” for 10 years to ensure that the air quality improvements are sustained.
- **Nonattainment.** If the NAAQS or CAAQS are exceeded for a pollutant, the region is designated as nonattainment for that pollutant. It is important to note that some NAAQS and CAAQS require multiple exceedances of the standard in order for a region to be classified as nonattainment. Federal and state laws require nonattainment areas to develop strategies, plans, and control measures to reduce pollutant concentrations to levels that meet, or attain, standards.
- **Unclassified.** An area is unclassified if the ambient air monitoring data are incomplete and do not support a designation of attainment or nonattainment.

Air pollution levels are measured at monitoring stations located throughout the Basin. Table 2, *South Coast Air Basin Attainment Status*, summarizes the Basin's attainment status for the NAAQS and CAAQS.

Table 2: South Coast Air Basin Attainment Status

Pollutant	Attainment Status[(A)]	
	NAAQS	CAAQS
O_3 (1-hr)	Nonattainment	Nonattainment
O_3 (8-hr)	Nonattainment	Nonattainment
PM_{10} (24-hr)	Attainment	Nonattainment
PM_{10} (Annual)	--	Nonattainment
$PM_{2.5}$ (24-hr)	Nonattainment	--
$PM_{2.5}$ (Annual)	Nonattainment	Nonattainment
CO	Attainment (Maintenance)	Attainment
NO_2 (1-hr)	Attainment	Attainment
NO_2 (Annual)	Attainment (Maintenance)	Attainment
SO_2	Attainment	Attainment
Lead	Partial Nonattainment	Attainment
Visibility Reducing Particles	--	Unclassified
SO_4	--	Attainment
H_2S	--	Attainment

Source: SCAQMD, 2018

(A) This table summarizes the Basin's attainments status for the NAAQS and CAAQS. This table does not prevent comprehensive information regarding the CAAQS and NAAQS, each of which has its own averaging time, standard unit of measurement, measurement method, and statistical test for determining if a specific standard has been exceeded. Refer to the table source for detailed information on the NAAQS and CAAQS.

The proposed Project would generate both short-term construction emissions and long-term operational emissions. The SCAQMD adopts rules that establish permissible air pollutant emissions levels for a variety of business, processes, operations, and products that are subject to federal and state air quality requirements. In general, the proposed Project and its potential emissions sources would be subject to the following state and SCAQMD rules:

- **Rule 401 (Visible Emissions)** prohibits discharge into the atmosphere from any single source of emission for any contaminant for a period or periods aggregating more than three minutes in any one hour that is as dark or darker in shade than that designated as No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines.
- **Rule 402 (Nuisance)** prohibits discharges of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- **Rule 403 (Fugitive Dust)** prohibits emissions of fugitive dust from any grading activity, storage pile, or other disturbed surface area if it crosses the project property line or if emissions caused by vehicle movement cause substantial impairment of visibility (defined as exceeding 20 percent capacity in the air). Rule 403 requires the implementation of Best

Available Control Measures and includes additional provisions for projects disturbing more than five acres and those disturbing more than fifty acres.

- **Rule 445 (Wood Burning Devices)** prohibits installation of woodburning devices such as fireplaces and wood-burning stoves in new development unless the development is located at an elevation above 3,000 feet or if existing infrastructure for natural gas service is not available within 150-feet of the development. All fireplaces installed within the Proposed Project area will be natural gas fueled fireplaces.
- **Rule 1108 (Cutback Asphalt)** prohibits the sale or use of any cutback asphalt containing more than 0.5 percent by volume organic compounds which evaporate at 260°C (500°F) or lower.
- **Rule 1113 (Architectural Coatings)** establishes maximum concentrations of volatile organic compounds (VOCs) in paints and other applications and establishes the thresholds for low-VOC coatings.
- **Rule 1143 (Consumer Paint Thinners and Multi-Purpose Solvents)** prohibits the supply, sale, manufacture, blend, package or repackage of any consumer paint thinner or multi-purpose solvent for use in the District unless consumer paint thinners or other multi-purpose solvents comply with applicable VOC content limits.

These SCAQMD rules would serve to limit and control the proposed Project's potential to emit air pollutants. As described in more detail below, the proposed Project would not generate short-term or long-term emissions that exceed SCAQMD-recommended pollutant thresholds.

Regional Construction and Operational Emissions

The proposed Project involves construction activities including demolition, site preparation, grading, trenching, building construction, and architectural coating activities in an existing residential area of Temple City. Total construction activities may last 35 months in total.
The proposed Project's potential construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version (V.) 2022.1.1.22. Construction phase and duration and the type and amount of equipment used during construction were generated using CalEEMod default assumptions and modified as necessary to reflect the following Project-specific context, information, and details:

- The type and length of construction phases, as well as the number of workers in each phase, was modified per information provided by the Project applicant;
- 4,896 cubic yards of soil was assumed to be exported from the Project site per information provided by the Project applicant;
- Fugitive dust control measures were incorporated into the model consistent with requirements contained in SCAQMD Rule 403, Fugitive Dust;
- Wood burning stoves were removed in accordance with SCAQMD Rule 445 and replaced with gas stoves.

The proposed Project's maximum daily unmitigated construction emissions are shown in Table 3, *Unmitigated Maximum Daily Regional Construction Emissions*. Please refer to Attachment 1 for CalEEMod output files and detailed construction emissions assumptions.

Table 3: Unmitigated Maximum Daily Regional Construction Emissions						
Construction Season	**Maximum Pollutant Emissions (Pounds Per Day)**					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Summer 2024	1.3	15.1	13.2	<0.1	3.6	1.8
Winter 2024	0.7	5.9	8.3	<0.1	0.6	0.3
Summer 2025	0.6	5.4	8.4	<0.1	0.5	0.3
Winter 2025	0.6	5.4	8.2	<0.1	0.5	0.3
Summer 2026	0.6	5.0	8.3	<0.1	0.5	0.2
Winter 2026	0.6	5.0	8.1	<0.1	0.5	0.2
Summer 2027	26.9	4.8	8.2	<0.1	0.5	0.2
Winter 2027	0.5	4.8	8.0	<0.1	0.1	0.1
SCAQMD Regional Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Threshold?	***No***	***No***	***No***	***No***	***No***	***No***
Source: MIG, 2023 (See Attachment 1) and SCAQMD, 2023a.						

As shown in Table 3, the proposed Project's maximum daily, unmitigated criteria air pollutant emissions would be well below the SCAQMD's recommended regional pollutant thresholds. Project construction, therefore, would not generate criteria air pollutant emissions levels that exceed SCAQMD regional CEQA thresholds.

Once operational, the proposed Project would generate long-term emissions from the following sources:

- **"Area" Sources.** The proposed Project would generate emissions from small area sources, including landscaping equipment, the use of consumer products (e.g., paints, cleaners, and fertilizers) that result in the evaporation of chemicals into the atmosphere during product use.
- **Energy Use and Consumption.** The proposed Project would generate emissions from the combustion of natural gas in water and space heating equipment.
- **Mobile Sources.** The proposed Project would generate emissions from vehicles traveling to and from the Project site.

The proposed Project's operational emissions were also estimated using CalEEMod, V. 2022.1.1.22. The modeling is based on the Project's first year of operations (assumed to be 2027), using default data assumptions generated by CalEEMod, modified as necessary to reflect the following Project-specific context, information, and details:

- Project-specific land use information (i.e., lot acreage, building square footage, etc.) was applied to the model; and
- CalEEMod default trip lengths were replaced with the vehicle miles travelled (VMT) information contained in the Temple City Boulevard VMT Screening Analysis (MIG, 2023) prepared for the proposed Project.

The proposed Project's maximum daily unmitigated operational emissions are shown in Table 4, *Unmitigated Maximum Daily Regional Operational Emissions*. Please refer to Attachment 1 for CalEEMod output files and detailed construction emissions assumptions.

Table 4: Unmitigated Maximum Daily Regional Operational Emissions						
Emissions Source	**Maximum Daily Pollutant Emission (Pounds Per Day)[(A)]**					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	0.7	0.3	1.7	<0.1	<0.1	<0.1
Energy Demand	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
Mobile Sources	0.3	0.3	3.2	<0.1	0.8	0.2
Total Daily Emissions[(B)]	1.0	0.6	4.9	<0.1	0.8	0.2
SCAQMD Regional Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	***No***	***No***	***No***	***No***	***No***	***No***

Source: MIG, 2023 (See Attachment 1) and SCAQMD, 2023a.
(A) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels.
(B) Totals may not equal due to rounding.

As shown in Table 4, the proposed Project's maximum daily, unmitigated operational criteria air pollutant emissions would be well below the SCAQMD's-recommended regional pollutant thresholds. Project operation, therefore, would not generate criteria air pollutant emissions levels that exceed SCAQMD regional CEQA thresholds.

Localized Construction and Operational Emissions

In addition to regional CEQA thresholds, the SCAQMD has also developed Local Significance Thresholds (LSTs) that represent the maximum emissions from a project that are expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards, which would result in significant adverse localized air quality impacts.

The proposed Project's mitigated maximum daily construction emissions are compared against the SCAQMD's-recommended LSTs in Table 5, *Local Significance Threshold (LST) Construction Analysis* and the Project's maximum daily operational emissions are compared against the SCAQMD's-recommended LSTs in *Table 6, Operational Emissions Localized Significance Thresholds Analysis*. Consistent with the SCAQMD's LST methodology, the emissions included in the construction LST analysis and operational LST analysis are on-site emissions only, and the LST against which these on-site emissions are compared are based on the Project size, in acres. A one-acre project size, the closest project size to the 0.33-acre Project site, was used. The LST thresholds are for source receptor area (SRA) 9 (East San Gabriel Valley), the SRA in which the proposed Project is located, and are based on a receptor distance of 25 meters (82 feet). While the sensitive receptors that border the Project site to the north, south, and west are located closer than 25 meters, the Localized Significance Threshold Methodology states that projects with receptors closer than 25 meters should use LSTs for receptors located at 25 meters (SCAQMD 2008).

As shown below in Table 5, the proposed Project's unmitigated construction emissions would not exceed the SCAQMD's recommended construction LSTs. Project construction, therefore, would not generate criteria air pollutant emissions levels that exceed SCAQMD local CEQA thresholds.

Table 5: Local Significance Threshold Construction Analysis				
Construction Phase[A]	**Maximum Pollutant Emissions (Pounds Per Day)[B]**			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Demolition 2024	4.7	5.8	0.4	0.2
Site Preparation 2024	4.6	5.6	0.4	0.2
Grading 2024	11.4	10.7	2.6	1.5
Trenching 2024	2.0	2.9	0.1	0.1
Building Construction (Foundation) 2024	5.6	7.0	0.3	0.2
Building Construction (Vertical and MEP) 2024	5.6	7.0	0.3	0.2
Building Construction (Vertical and MEP) 2025	5.1	6.9	0.2	0.2
Building Construction (Vertical and MEP) 2026	4.8	6.9	0.2	0.2
Building Construction (Vertical and MEP) 2027	4.6	6.9	0.2	0.2
Architectural Coating 2027	0.8	1.1	<0.1	<0.1
SCAQMD LST Threshold[C]	**89**	**623**	**5**	**3**
Exceeds Threshold?	***No***	***No***	***No***	***No***

Source: MIG 2023 (See Attachment 1) and SCAQMD 2009.

(A) Estimates are based on-site emissions.

(B) Emissions presented are worst-case emissions and may reflect summer or winter emission levels. In general, due to rounding, there is no difference between summer and winter emission levels for the purposes of this table.

(C) The LSTs are based on 1.0-acre Project size and 25-meter receptor distance in SRA 9.

As shown below in Table 6, the proposed Project's operational emissions would not exceed the SCAQMD's recommended operational LSTs. Operation of the proposed Project, therefore, would not generate criteria air pollutant emission levels that exceed SCAQMD local CEQA threshold.

Table 6: Operational Emissions Localized Significance Thresholds Analysis				
Operational Emission Source[A]	**Maximum On-Site Pollutant Emissions (Pounds Per Day) [B]**			
	NOx	**CO**	**PM_{10}**	**$PM_{2.5}$**
Mobile[C]	<0.1	0.3	0.1	<0.1
Area	0.3	1.7	<0.1	<0.1
Energy	0.1	<0.1	<0.1	<0.1
Total On-Site Emissions[D]	0.3	2.0	0.1	<0.1
SCAQMD LST Threshold[E]	**176**	**2,437**	**15**	**4**
Threshold Exceeded?	**No**	**No**	**No**	**No**

Source: MIG, 2023 (See Attachment 1) and SCAQMD 2009

(A) Estimates are based on-site emissions.

(B) Emissions presented are worst-case emissions and may reflect summer or winter emission levels. In general, due to rounding, there is no difference between summer and winter emission levels for the purposes of this table.

(C) Total on-site mobile source emissions were presumed to be equal to 10% of total mobile emissions estimates.

(D) Totals may not equal due to rounding.

(E) The LSTs are based on 1.0-acre Project size and 25-meter receptor distance in SRA 9.

Sensitive Air Quality Receptors/Health Risks

The SCAQMD identifies sensitive receptors as populations more susceptible to the effects of air pollution than the general population. Some people are more affected by air pollution than others. Sensitive air quality receptors include specific subsets of the general population that are susceptible to poor air quality and the potential adverse health effects associated with poor air quality. Both CARB and the SCAQMD consider residences, schools, parks and playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes to be sensitive air quality land uses and receptors (CARB 2005). The potential sensitive air quality receptors adjacent or in close proximity to the perimeter of the Project area include:

- The residential developments on Temple City Boulevard bordering the Project site to the north and south and the residential developments on Garibaldi Avenue bordering the Project site to the west;
- The residential developments on Temple City Boulevard approximately 80 feet east of the Project site;
- Longden Elementary school, approximately 660 feet northwest of the Project site;
- Pacific Friends School, approximately 740 feet northeast of the Project site;
- Playfactory Preschool, approximately 1,000 feet east of the Project site;
- Temple City National Little League baseball field, approximately 1,125 feet northwest of the Project site; and
- Temple City Park, approximately 1,580 feet southeast of the Project site.

In addition to criteria air pollutants, the U.S. EPA and CARB have classified certain pollutants as Hazardous Air Pollutants (HAPs) (by U.S. EPA) or Toxic Air Contaminants (TACs) (by CARB), respectively. These pollutants can cause severe health effects at very low concentrations (non-cancer effects), and many are suspected or confirmed carcinogens (i.e., can cause cancer). People exposed to HAPs/TACs at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and/or other health problems.

A portion of the PM_{10} and $PM_{2.5}$ emissions generated during construction of the Project would be diesel particulate matter, or DPM, a known TAC. The proposed Project's construction activities would not expose adjacent residential receptors to substantial levels of DPM that would pose a substantial adverse health risk because the Project does not involve substantial earthmoving or grading activities that would require large amounts of heavy-duty equipment associated with the highest DPM emissions. In addition, construction activities associated with the Project would not exceed SCAQMD LST thresholds for PM_{10} and $PM_{2.5}$ (see Table 5).

Conflict with or Obstruct Implementation of the Applicable Air Quality Plan

A project that conflicts with or obstructs the implementation of the SCAQMD's South Coast Air Basin 2022 Air Quality Management Plan (AQMP) could hinder implementation of the AQMP, delay efforts to meet attainment deadlines, and/or interfere with SCAQMD efforts to maintain compliance with, and attainment of, applicable air quality standards. Pursuant to the methodology provided in Chapter 12 of the SCAQMD *CEQA Air Quality Handbook*, consistency with the AQMP is affirmed if the Project (SCAQMD, 2023b):

1) Is consistent with the growth assumptions in the AQMP; and

2) Does not increase the frequency or severity of an air quality standards violation or cause a new one.

The proposed Project would not induce employment, and the population induced by an 18-unit residential project would be well within that accounted for in the Southern California Association of Governments 2020 Regional Transportation Plan / Sustainable Communities Strategy (2020 RTP/SCS), which forms the growth assumptions for the current AQMP.[1] Therefore, the proposed Project would not conflict with the first consistency criterion. As described in the preceding analysis, the proposed Project would not exceed the construction or operational air quality thresholds maintained by the SCAQMD, and, therefore, would not conflict with the second consistency criterion. Accordingly, the proposed Project would not conflict with or obstruct implementation of the SCAQMD 2022 AQMP (SCAQMD, 2022).

Odors

The proposed Project would involve construction and operational activities that could generate odors typical of many construction and residential land use operations. These types of odors (e.g., exhaust) are typical of the area and would be quick to disperse. The proposed Project would not result in the creation of objectionable odors that would affect a substantial number of people.

CONCLUSION

As described in this memo, the proposed Project would not exceed any applicable SCAQMD-recommended CEQA thresholds of significance and is consistent with all applicable air quality plans, policies, and regulations adopted for the purposes of reducing air quality impacts. The proposed Project, therefore, would not result in substantial adverse air quality effects on the environment.

REFERENCES

The following references were used to prepare this memorandum:

California Air Resources Board (CARB) 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* Sacramento, CA. April 2005.

MIG 2023. VMT Screening Analysis.

South Coast Air Quality Management District (SCAQMD) 2008. Final Localized Significance Threshold Methodology. Diamond Bar, CA. Revised July 2008. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2>

_____2009. *Mass Rate LST Lookup Table*. Diamond Bar, CA. October 2009. Available online at: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>

_____2018. *National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin.* Diamond Bar,

[1] The 2020 RTP/SCS accounted for a population growth of 6,700 in Temple City between 2016 and 2045 (SCAG, 2020).

CA. September 2018. Available online at: <http://www.aqmd.gov/home/air-quality/clean-air-plans>

_____2022. 2022 Air Quality Management Plan. Diamond Bar, CA. December 2, 2022. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=16

_____2023a. *South Coast AQMD Air Quality Significance Thresholds.* Diamond Bar, CA. Revised March 2023. Available online at: https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25

_____2023b. Air Quality Analysis Handbook – South Coast AQMD Air Quality Significance Thresholds (Updated March 2023). Available online at: https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook

Southern California Association of Governments (SCAG) 2020. *2020 Regional Transportation Plan / Sustainable Communities Strategy*. "Demographics & Growth Forecast Appendix." September 2020. < https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579>

TAG Design Works, 2024. 6119 Temple City Boulevard Site Plan. Conceptual Design 18-unit Residential.

Attachment 1

CalEEMod Project File Outputs

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Longo Investment Inc 6119 Temple City Blvd Residential Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Longo Investment Inc 6119 Temple City Blvd Residential
Construction Start Date	1/1/2024
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	18.2
Location	34.11076687214273, -118.06226141026568
County	Los Angeles-South Coast
City	Temple City
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4978
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Enclosed Parking with Elevator	14.7	1000sqft	0.34	13,075	4,630	0.00	—	—
Apartments Mid Rise	18.0	Dwelling Unit	0.00	20,210	0.00	0.00	53.0	—

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.	1.71	26.9	15.1	13.2	0.03	0.57	3.02	3.59	0.53	1.25	1.78	—	4,802	4,802	0.23	0.48	7.45	4,959
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.78	0.65	5.87	8.33	0.01	0.26	0.30	0.55	0.24	0.07	0.31	—	1,704	1,704	0.07	0.04	0.04	1,717
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.52	0.50	3.86	5.89	0.01	0.16	0.23	0.37	0.14	0.08	0.19	—	1,214	1,214	0.05	0.03	0.42	1,224
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09	0.09	0.70	1.08	< 0.005	0.03	0.04	0.07	0.03	0.01	0.04	—	201	201	0.01	0.01	0.07	203

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	1.71	1.32	15.1	13.2	0.03	0.57	3.02	3.59	0.53	1.25	1.78	—	4,802	4,802	0.23	0.48	7.45	4,959
2025	0.72	0.61	5.37	8.40	0.01	0.22	0.30	0.52	0.20	0.07	0.27	—	1,710	1,710	0.07	0.04	1.37	1,725
2026	0.68	0.57	5.02	8.26	0.01	0.19	0.30	0.49	0.17	0.07	0.25	—	1,702	1,702	0.07	0.04	1.26	1,717
2027	0.66	26.9	4.76	8.16	0.01	0.17	0.30	0.46	0.15	0.07	0.23	—	1,694	1,694	0.07	0.04	1.15	1,708
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.78	0.65	5.87	8.33	0.01	0.26	0.30	0.55	0.24	0.07	0.31	—	1,704	1,704	0.07	0.04	0.04	1,717
2025	0.72	0.61	5.39	8.19	0.01	0.22	0.30	0.52	0.20	0.07	0.27	—	1,696	1,696	0.07	0.04	0.04	1,709
2026	0.68	0.57	5.04	8.08	0.01	0.19	0.30	0.49	0.17	0.07	0.25	—	1,688	1,688	0.07	0.04	0.03	1,701
2027	0.65	0.55	4.78	7.98	0.01	0.17	0.30	0.46	0.15	0.07	0.23	—	1,681	1,681	0.06	0.04	0.03	1,693
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.34	0.28	2.71	3.49	0.01	0.11	0.23	0.34	0.10	0.08	0.18	—	786	786	0.03	0.03	0.35	797
2025	0.52	0.43	3.86	5.89	0.01	0.16	0.21	0.37	0.14	0.05	0.19	—	1,214	1,214	0.05	0.03	0.42	1,224
2026	0.49	0.41	3.61	5.81	0.01	0.14	0.21	0.35	0.12	0.05	0.17	—	1,209	1,209	0.05	0.03	0.39	1,218
2027	0.15	0.50	1.13	1.89	< 0.005	0.04	0.07	0.11	0.04	0.02	0.05	—	395	395	0.01	0.01	0.12	398
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.06	0.05	0.49	0.64	< 0.005	0.02	0.04	0.06	0.02	0.01	0.03	—	130	130	0.01	0.01	0.06	132
2025	0.09	0.08	0.70	1.08	< 0.005	0.03	0.04	0.07	0.03	0.01	0.04	—	201	201	0.01	< 0.005	0.07	203
2026	0.09	0.07	0.66	1.06	< 0.005	0.02	0.04	0.06	0.02	0.01	0.03	—	200	200	0.01	< 0.005	0.06	202
2027	0.03	0.09	0.21	0.35	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	65.5	65.5	< 0.005	< 0.005	0.02	66.0

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.	0.57	0.97	0.57	4.91	0.01	0.03	0.78	0.81	0.03	0.20	0.23	8.42	1,391	1,400	0.90	0.04	2.74	1,436
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.37	0.78	0.58	3.01	0.01	0.03	0.78	0.81	0.03	0.20	0.23	8.42	1,351	1,359	0.90	0.04	0.21	1,393
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.46	0.88	0.36	3.95	0.01	0.01	0.73	0.74	0.01	0.19	0.20	8.42	1,037	1,046	0.90	0.04	1.21	1,080
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	0.16	0.06	0.72	< 0.005	< 0.005	0.13	0.14	< 0.005	0.03	0.04	1.39	172	173	0.15	0.01	0.20	179

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	0.34	0.30	0.26	3.20	0.01	< 0.005	0.78	0.78	< 0.005	0.20	0.20	—	841	841	0.03	0.03	2.60	854
Area	0.22	0.67	0.26	1.69	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	312	312	0.01	< 0.005	—	313
Energy	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	231	231	0.02	< 0.005	—	231
Water	—	—	—	—	—	—	—	—	—	—	—	1.29	7.16	8.44	0.13	< 0.005	—	12.7
Waste	—	—	—	—	—	—	—	—	—	—	—	7.14	0.00	7.14	0.71	0.00	—	25.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14	0.14
Total	0.57	0.97	0.57	4.91	0.01	0.03	0.78	0.81	0.03	0.20	0.23	8.42	1,391	1,400	0.90	0.04	2.74	1,436

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.33	0.30	0.29	2.89	0.01	< 0.005	0.78	0.78	< 0.005	0.20	0.20	—	806	806	0.04	0.03	0.07	816
Area	0.03	0.48	0.24	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	307	307	0.01	< 0.005	—	308
Energy	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	231	231	0.02	< 0.005	—	231
Water	—	—	—	—	—	—	—	—	—	—	—	1.29	7.16	8.44	0.13	< 0.005	—	12.7
Waste	—	—	—	—	—	—	—	—	—	—	—	7.14	0.00	7.14	0.71	0.00	—	25.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14	0.14
Total	0.37	0.78	0.58	3.01	0.01	0.03	0.78	0.81	0.03	0.20	0.23	8.42	1,351	1,359	0.90	0.04	0.21	1,393
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.32	0.28	0.28	2.83	0.01	< 0.005	0.73	0.74	< 0.005	0.19	0.19	—	775	775	0.03	0.03	1.07	786
Area	0.14	0.60	0.03	1.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	24.5	24.5	< 0.005	< 0.005	—	24.6
Energy	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	231	231	0.02	< 0.005	—	231
Water	—	—	—	—	—	—	—	—	—	—	—	1.29	7.16	8.44	0.13	< 0.005	—	12.7
Waste	—	—	—	—	—	—	—	—	—	—	—	7.14	0.00	7.14	0.71	0.00	—	25.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14	0.14
Total	0.46	0.88	0.36	3.95	0.01	0.01	0.73	0.74	0.01	0.19	0.20	8.42	1,037	1,046	0.90	0.04	1.21	1,080
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	0.05	0.05	0.52	< 0.005	< 0.005	0.13	0.13	< 0.005	0.03	0.03	—	128	128	0.01	0.01	0.18	130
Area	0.02	0.11	< 0.005	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	4.06	4.06	< 0.005	< 0.005	—	4.07
Energy	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	38.2	38.2	< 0.005	< 0.005	—	38.3
Water	—	—	—	—	—	—	—	—	—	—	—	0.21	1.19	1.40	0.02	< 0.005	—	2.10
Waste	—	—	—	—	—	—	—	—	—	—	—	1.18	0.00	1.18	0.12	0.00	—	4.13
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	0.08	0.16	0.06	0.72	< 0.005	< 0.005	0.13	0.14	< 0.005	0.03	0.04	1.39	172	173	0.15	0.01	0.20	179

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	0.51	4.69	5.79	0.01	0.19	—	0.19	0.17	—	0.17	—	852	852	0.03	0.01	—	855
Demolition	—	—	—	—	—	—	0.18	0.18	—	0.03	0.03	—	—	—	—	—	—	—
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	0.14	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.7	25.7	< 0.005	< 0.005	—	25.8
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.25	4.25	< 0.005	< 0.005	—	4.27
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.04	0.04	0.04	0.60	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	113	113	< 0.005	< 0.005	0.45	115
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	0.02	0.01	0.30	0.12	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	244	244	0.01	0.04	0.56	256
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	—	3.27	3.27	< 0.005	< 0.005	0.01	3.32
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	—	7.34	7.34	< 0.005	< 0.005	0.01	7.71
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.55
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.22	1.22	< 0.005	< 0.005	< 0.005	1.28

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	0.60	0.50	4.60	5.56	0.01	0.24	—	0.24	0.22	—	0.22	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.8	11.8	< 0.005	< 0.005	—	11.8
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.95	1.95	< 0.005	< 0.005	—	1.95
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.02	0.02	0.02	0.38	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	70.6	70.6	< 0.005	< 0.005	0.28	71.7

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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.94
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	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.19	11.4	10.7	0.02	0.53	—	0.53	0.49	—	0.49	—	1,713	1,713	0.07	0.01	—	1,719
Dust From Material Movement	—	—	—	—	—	—	2.07	2.07	—	1.00	1.00	—	—	—	—	—	—	—
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	0.06	0.05	0.47	0.44	< 0.005	0.02	—	0.02	0.02	—	0.02	—	70.4	70.4	< 0.005	< 0.005	—	70.6
Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.7	11.7	< 0.005	< 0.005	—	11.7
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	1.13	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	212	212	0.01	0.01	0.84	215
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	0.22	0.06	3.60	1.39	0.02	0.04	0.76	0.79	0.04	0.21	0.24	—	2,877	2,877	0.15	0.46	6.61	3,025
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	—	8.37	8.37	< 0.005	< 0.005	0.01	8.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.16	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	118	118	0.01	0.02	0.12	124
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.39	1.39	< 0.005	< 0.005	< 0.005	1.41
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	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.6	19.6	< 0.005	< 0.005	0.02	20.6

3.7. Foundation (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	0.67	0.56	5.60	6.98	0.01	0.26	—	0.26	0.23	—	0.23	—	1,305	1,305	0.05	0.01	—	1,309
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	0.67	0.56	5.60	6.98	0.01	0.26	—	0.26	0.23	—	0.23	—	1,305	1,305	0.05	0.01	—	1,309
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	0.15	0.13	1.29	1.61	< 0.005	0.06	—	0.06	0.05	—	0.05	—	300	300	0.01	< 0.005	—	301

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	0.03	0.02	0.24	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	49.7	49.7	< 0.005	< 0.005	—	49.9
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	0.10	1.51	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	282	282	0.01	0.01	1.11	287
Vendor	0.01	< 0.005	0.15	0.08	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	131	131	0.01	0.02	0.36	137
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	0.11	1.28	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	268	268	0.01	0.01	0.03	271
Vendor	0.01	< 0.005	0.16	0.08	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	131	131	0.01	0.02	0.01	137
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	0.02	0.02	0.03	0.31	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	62.5	62.5	< 0.005	< 0.005	0.11	63.4
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	30.2	30.2	< 0.005	< 0.005	0.04	31.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.02	10.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.00	5.00	< 0.005	< 0.005	0.01	5.22
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. Vertical MEP/other (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	0.67	0.56	5.60	6.98	0.01	0.26	—	0.26	0.23	—	0.23	—	1,305	1,305	0.05	0.01	—	1,309
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	0.05	0.04	0.44	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	102	102	< 0.005	< 0.005	—	102
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	0.08	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.9	16.9	< 0.005	< 0.005	—	17.0
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	0.10	0.09	0.11	1.28	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	268	268	0.01	0.01	0.03	271
Vendor	0.01	< 0.005	0.16	0.08	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	131	131	0.01	0.02	0.01	137
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	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.3	21.3	< 0.005	< 0.005	0.04	21.6
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.01	10.7
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	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.52	3.52	< 0.005	< 0.005	0.01	3.57
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.70	1.70	< 0.005	< 0.005	< 0.005	1.77
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. Vertical MEP/other (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	0.62	0.52	5.14	6.94	0.01	0.22	—	0.22	0.20	—	0.20	—	1,305	1,305	0.05	0.01	—	1,309
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	0.62	0.52	5.14	6.94	0.01	0.22	—	0.22	0.20	—	0.20	—	1,305	1,305	0.05	0.01	—	1,309

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	0.44	0.37	3.67	4.96	0.01	0.16	—	0.16	0.14	—	0.14	—	932	932	0.04	0.01	—	935
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	0.08	0.07	0.67	0.90	< 0.005	0.03	—	0.03	0.03	—	0.03	—	154	154	0.01	< 0.005	—	155
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	0.09	1.39	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	277	277	0.01	0.01	1.01	281
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	129	129	0.01	0.02	0.35	135
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	0.09	0.08	0.10	1.18	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	262	262	0.01	0.01	0.03	265
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	129	129	0.01	0.02	0.01	135
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	0.07	0.06	0.07	0.88	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	190	190	0.01	0.01	0.31	193
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	92.2	92.2	< 0.005	0.01	0.11	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.5	31.5	< 0.005	< 0.005	0.05	31.9
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.3	15.3	< 0.005	< 0.005	0.02	15.9
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

3.13. Vertical MEP/other (2026) - 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	0.59	0.49	4.81	6.91	0.01	0.19	—	0.19	0.17	—	0.17	—	1,304	1,304	0.05	0.01	—	1,309
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	0.59	0.49	4.81	6.91	0.01	0.19	—	0.19	0.17	—	0.17	—	1,304	1,304	0.05	0.01	—	1,309
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	0.42	0.35	3.43	4.93	0.01	0.13	—	0.13	0.12	—	0.12	—	932	932	0.04	0.01	—	935
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	0.08	0.06	0.63	0.90	< 0.005	0.02	—	0.02	0.02	—	0.02	—	154	154	0.01	< 0.005	—	155

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	0.08	0.07	0.08	1.29	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	271	271	0.01	0.01	0.92	275
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	127	127	0.01	0.02	0.34	133
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	0.08	0.07	0.09	1.10	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	257	257	0.01	0.01	0.02	260
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	127	127	0.01	0.02	0.01	132
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	0.06	0.05	0.07	0.82	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	186	186	0.01	0.01	0.28	189
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	90.6	90.6	< 0.005	0.01	0.11	94.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.8	30.8	< 0.005	< 0.005	0.05	31.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.0	15.0	< 0.005	< 0.005	0.02	15.7
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

3.15. Vertical MEP/other (2027) - 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	0.57	0.48	4.56	6.90	0.01	0.17	—	0.17	0.15	—	0.15	—	1,304	1,304	0.05	0.01	—	1,309
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	0.57	0.48	4.56	6.90	0.01	0.17	—	0.17	0.15	—	0.15	—	1,304	1,304	0.05	0.01	—	1,309
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	0.13	0.11	1.06	1.61	< 0.005	0.04	—	0.04	0.04	—	0.04	—	304	304	0.01	< 0.005	—	305
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	0.19	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	50.3	50.3	< 0.005	< 0.005	—	50.5
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	0.08	0.07	0.07	1.20	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	266	266	0.01	0.01	0.83	270
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	124	124	0.01	0.02	0.32	130
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	0.08	0.07	0.09	1.02	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	252	252	< 0.005	0.01	0.02	255
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	124	124	0.01	0.02	0.01	130
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	0.02	0.02	0.02	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	59.5	59.5	< 0.005	< 0.005	0.08	60.3
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.0	29.0	< 0.005	< 0.005	0.03	30.2
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.86	9.86	< 0.005	< 0.005	0.01	9.98
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.80	4.80	< 0.005	< 0.005	0.01	5.00
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

3.17. Architectural Coating (2027) - 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	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	26.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectural Coatings	—	0.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Architectural Coatings	—	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.03	0.03	0.03	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.1	98.1	< 0.005	< 0.005	0.31	99.5
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	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.31

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	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
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

3.19. Trenching (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	0.26	0.22	2.05	2.93	< 0.005	0.08	—	0.08	0.08	—	0.08	—	432	432	0.02	< 0.005	—	434
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	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.7
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	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.76	1.76	< 0.005	< 0.005	—	1.77

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	0.04	0.04	0.04	0.60	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	113	113	< 0.005	< 0.005	0.45	115
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	—	2.68	2.68	< 0.005	< 0.005	< 0.005	2.72
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	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.45
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Apartments Mid Rise	0.34	0.30	0.26	3.20	0.01	< 0.005	0.78	0.78	< 0.005	0.20	0.20	—	841	841	0.03	0.03	2.60	854
Total	0.34	0.30	0.26	3.20	0.01	< 0.005	0.78	0.78	< 0.005	0.20	0.20	—	841	841	0.03	0.03	2.60	854
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Apartments Mid Rise	0.33	0.30	0.29	2.89	0.01	< 0.005	0.78	0.78	< 0.005	0.20	0.20	—	806	806	0.04	0.03	0.07	816
Total	0.33	0.30	0.29	2.89	0.01	< 0.005	0.78	0.78	< 0.005	0.20	0.20	—	806	806	0.04	0.03	0.07	816
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Apartments Mid Rise	0.06	0.05	0.05	0.52	< 0.005	< 0.005	0.13	0.13	< 0.005	0.03	0.03	—	128	128	0.01	0.01	0.18	130
Total	0.06	0.05	0.05	0.52	< 0.005	< 0.005	0.13	0.13	< 0.005	0.03	0.03	—	128	128	0.01	0.01	0.18	130

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	70.3	70.3	< 0.005	< 0.005	—	70.6
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	96.2	96.2	0.01	< 0.005	—	96.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	167	167	0.01	< 0.005	—	167
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	70.3	70.3	< 0.005	< 0.005	—	70.6
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	96.2	96.2	0.01	< 0.005	—	96.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	167	167	0.01	< 0.005	—	167
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	11.6	11.6	< 0.005	< 0.005	—	11.7
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	15.9	15.9	< 0.005	< 0.005	—	16.0

Total	—	—	—	—	—	—	—	—	—	—	—	—	27.6	27.6	< 0.005	< 0.005	—	27.7

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.1	64.1	0.01	< 0.005	—	64.3
Total	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.1	64.1	0.01	< 0.005	—	64.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.1	64.1	0.01	< 0.005	—	64.3
Total	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.1	64.1	0.01	< 0.005	—	64.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Apartments	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.6	10.6	< 0.005	< 0.005	—	10.6
Total	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.6	10.6	< 0.005	< 0.005	—	10.6

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	0.03	0.01	0.24	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	307	307	0.01	< 0.005	—	308
Consumer Products	—	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.20	0.18	0.01	1.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.07	5.07	< 0.005	< 0.005	—	5.09
Total	0.22	0.67	0.26	1.69	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	312	312	0.01	< 0.005	—	313
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.03	0.01	0.24	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	307	307	0.01	< 0.005	—	308
Consumer Products	—	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.03	0.48	0.24	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	307	307	0.01	< 0.005	—	308
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.49	3.49	< 0.005	< 0.005	—	3.49
Consumer Products	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	0.02	< 0.005	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.57	0.57	< 0.005	< 0.005	—	0.58
Total	0.02	0.11	< 0.005	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	4.06	4.06	< 0.005	< 0.005	—	4.07

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.50	0.50	< 0.005	< 0.005	—	0.50
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.29	6.66	7.94	0.13	< 0.005	—	12.2

Total	—	—	—	—	—	—	—	—	—	—	—	1.29	7.16	8.44	0.13	< 0.005	—	12.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.50	0.50	< 0.005	< 0.005	—	0.50
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.29	6.66	7.94	0.13	< 0.005	—	12.2
Total	—	—	—	—	—	—	—	—	—	—	—	1.29	7.16	8.44	0.13	< 0.005	—	12.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.08	0.08	< 0.005	< 0.005	—	0.08
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	0.21	1.10	1.31	0.02	< 0.005	—	2.02
Total	—	—	—	—	—	—	—	—	—	—	—	0.21	1.19	1.40	0.02	< 0.005	—	2.10

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	7.14	0.00	7.14	0.71	0.00	—	25.0
Total	—	—	—	—	—	—	—	—	—	—	—	7.14	0.00	7.14	0.71	0.00	—	25.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	7.14	0.00	7.14	0.71	0.00	—	25.0
Total	—	—	—	—	—	—	—	—	—	—	—	7.14	0.00	7.14	0.71	0.00	—	25.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.18	0.00	1.18	0.12	0.00	—	4.13
Total	—	—	—	—	—	—	—	—	—	—	—	1.18	0.00	1.18	0.12	0.00	—	4.13

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14	0.14
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14	0.14
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14	0.14
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14	0.14
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02

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	6/1/2024	6/17/2024	5.00	11.0	—
Site Preparation	Site Preparation	6/18/2024	6/24/2024	5.00	5.00	—

Grading	Grading	6/25/2024	7/15/2024	5.00	15.0	—
Foundation	Building Construction	7/27/2024	11/21/2024	5.00	84.0	—
Vertical MEP/other	Building Construction	11/22/2024	4/29/2027	5.00	635	—
Architectural Coating	Architectural Coating	4/30/2027	5/6/2027	5.00	5.00	—
Trenching	Trenching	7/16/2024	7/26/2024	5.00	9.00	—

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	Average	2.00	6.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	1.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Foundation	Cranes	Diesel	Average	1.00	4.00	367	0.29
Foundation	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Foundation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Vertical MEP/other	Cranes	Diesel	Average	1.00	4.00	367	0.29
Vertical MEP/other	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Vertical MEP/other	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Trenching	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37

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	8.00	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	3.45	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	40.8	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Foundation	—	—	—	—
Foundation	Worker	20.0	18.5	LDA,LDT1,LDT2
Foundation	Vendor	4.07	10.2	HHDT,MHDT
Foundation	Hauling	0.00	20.0	HHDT

Foundation	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	7.38	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Vertical MEP/other	—	—	—	—
Vertical MEP/other	Worker	20.0	18.5	LDA,LDT1,LDT2
Vertical MEP/other	Vendor	4.07	10.2	HHDT,MHDT
Vertical MEP/other	Hauling	0.00	20.0	HHDT
Vertical MEP/other	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	8.00	18.5	LDA,LDT1,LDT2
Trenching	Vendor	—	10.2	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	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	40,925	13,642	662	73.5	883

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	3,300	—
Site Preparation	0.00	0.00	2.50	0.00	—
Grading	0.00	4,896	11.3	0.00	—

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Enclosed Parking with Elevator	0.34	100%
Apartments Mid Rise	—	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	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005
2026	0.00	532	0.03	< 0.005
2027	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apartments Mid Rise	87.0	78.6	65.4	30,201	1,097	990	825	380,534

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	15
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	2
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)

40925.25	13,642	662	73.5	883

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Enclosed Parking with Elevator	48,265	532	0.0330	0.0040	0.00
Apartments Mid Rise	65,985	532	0.0330	0.0040	199,923

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Enclosed Parking with Elevator	0.00	64,934
Apartments Mid Rise	670,928	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Enclosed Parking with Elevator	0.00	—

Apartments Mid Rise	13.2	—

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
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	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)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	18.9	annual days of extreme heat
Extreme Precipitation	6.35	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	78.0
AQ-PM	67.5
AQ-DPM	14.1
Drinking Water	78.2
Lead Risk Housing	81.1
Pesticides	22.9
Toxic Releases	74.9
Traffic	25.4
Effect Indicators	—
CleanUp Sites	31.5

Groundwater	36.9
Haz Waste Facilities/Generators	41.8
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	16.1
Cardio-vascular	19.6
Low Birth Weights	67.6
Socioeconomic Factor Indicators	—
Education	45.9
Housing	86.1
Linguistic	84.2
Poverty	59.4
Unemployment	26.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	47.37585012
Employed	39.30450404
Median HI	46.58026434
Education	—
Bachelor's or higher	65.46901065
High school enrollment	100
Preschool enrollment	74.72090337
Transportation	—

Auto Access	60.64416784
Active commuting	29.78313871
Social	—
2-parent households	28.38444758
Voting	34.68497369
Neighborhood	—
Alcohol availability	40.3567304
Park access	37.62350828
Retail density	72.39830617
Supermarket access	67.39381496
Tree canopy	76.97934043
Housing	—
Homeownership	36.75093032
Housing habitability	34.24868472
Low-inc homeowner severe housing cost burden	66.1619402
Low-inc renter severe housing cost burden	5.222635699
Uncrowded housing	53.4838958
Health Outcomes	—
Insured adults	32.06723983
Arthritis	0.0
Asthma ER Admissions	84.3
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0

Life Expectancy at Birth	84.6
Cognitively Disabled	95.5
Physically Disabled	92.6
Heart Attack ER Admissions	61.7
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	57.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	68.4
Elderly	43.3
English Speaking	16.3
Foreign-born	95.6
Outdoor Workers	58.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	28.5
Traffic Density	52.2
Traffic Access	23.0
Other Indices	—

Hardship	45.1
Other Decision Support	—
2016 Voting	22.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	52.0
Healthy Places Index Score for Project Location (b)	47.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Updated land use information based on site plan received in March 2024.
Construction: Construction Phases	Construction schedule provided by project applicant.
Construction: Off-Road Equipment	Updated Trenching equipment to include one excavator and one backhoe.
Construction: Trips and VMT	Updated number of workers based on information provided by applicant.

Operations: Hearths	Removed wood stoves per SCAQMD Rule 445.
Operations: Vehicle Data	Updated trip lengths based on SGVCOG VMT Screening Tool output created 2/24/22.

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Attachment B: Rapid Biological Constraints Analysis

Rapid Biological Constraints Analysis (RBCA)

This MIG Rapid Biological Constraints Analysis (RBCA) provides a basic overview of potential natural resources associated with the 6119 Temple City 18-Unit Residential Project. This form provides information utilizing governmental and industry databases such as: United States Fish and Wildlife Service (USFWS), Information for Planning and Consultation (IPAC) database, California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB), National Wetland Inventory (NWI), United States Geological Society (USGS) quadrangle maps, and a review of available aerial photography. This information is subject to limitations set forth on this form (see Terms and Conditions).

In addition to a desktop assessment, MIG biologist Elizabeth Kempton, PhD conducted a reconnaissance-level assessment of the Project site on January 26, 2022. Dr. Kempton traversed the Project site and recorded biological resource observations. The survey extended past the boundaries of the Project site when practicable through the biologist's line-of-sight, but no attempt was made to cross into private residences that surround the Project site (see Figure 3, Project Location).

No sensitive natural resources were observed on the site or would be expected to inhabit the Project site based on the results of the analysis herein.

PROPERTY INFORMATION			
Property Owner's Name and Address:	**Longo Investment Inc. c/o Alex Lai 812 S. Atlantic Boulevard #A Monterey Park, CA 91754**	City, County:	**6119 Temple City Boulevard, Temple City, Los Angeles County, California 91780**
Parcel Number	**5385-012-007**	Approximate Acreage:	**0.33-acre**

PROJECT DESCRIPTION

The proposed Project involves the redevelopment of a site located near the geographical north of Temple City, California.

The proposed redevelopment would occur on an approximately 0.33-acre property located at 6119 Temple City Boulevard. The site currently contains two existing residential buildings. The proposed Project would demolish the existing structures and construct a 20,210 square foot, three-story multi-family residential building with one level of basement parking with 22 parking spaces. There would be 3,850 square feet of open space.

The site is bound by Temple City Boulevard to the east and by residential units to the south, north, and west. The closest school, Longden Elementary School, is approximately 660 feet northwest of the Project site. In addition, Pacific Friends School is approximately 740 feet northeast of the Project site and Playfactory Preschool is approximately 1,000 feet east of the Project site. Temple City National Little League baseball field is approximately 1,125 feet northwest of the Project site and Temple City Park is approximately 1,580 feet southeast of the Project site. The closest airport, San Gabriel Valley Airport, is approximately 2.3 miles southeast of the Project site.

The proposed Project would involve the demolition of the three existing buildings, site preparation, grading, trenching, new building construction, and architectural coating. Construction of the Project is anticipated to begin in June 2024 and last approximately 35 months. The proposed Project's construction schedule and anticipated equipment usage is listed in Table 1*, Project Construction Activities and Schedule.* The project is expected to be operational in 2026. Once operational, the proposed Project would operate as a residential land use, similar to the existing residential uses in the area.

Table 1
Project Construction Activities and Schedule

Construction Phase	Construction Schedule	Typical Equipment Used
Demolition	June 2024	Concrete/ Industrial Saw, Dozer, Backhoe
Site Preparation	June 2024	Grader, Backhoe
Grading	June 2024-July 2024	Grader, Dozer, Backhoe
Trenching	July 2024	Excavator, Backhoe
Foundation	July 2024-November 2024	Crane, Forklift, Backhoe
Vertical MEP/other	November 2024-April 2027	Crane, Forklift, Backhoe
Architectural Coating	April 2027-May 2027	Air Compressor

RESULTS

Figures	Figure 1, Project Vicinity Map Figure 2, USGS Topographic Map Figure 3, Project Location Figure 4, National Wetlands Inventory (NWI) Map Figure 5, Soils Map Figure 6, Current Project Site Photographs
Attachments	Attachment 1, California Natural Diversity Database Search Results Attachment 2, California Native Plant Society Rare Plant Inventory Search Results Attachment 3, USFWS Information for Planning and Consultation Search Results

Environmental Resources Identified On-Site (General Biological Description and Setting)

The proposed Project is located within an urban residential setting. Temple City Boulevard is a very active street, and noise and vibrations from the traffic can be heard throughout the Project site. The existing residences were occupied at the time of the visit. Soils observed during the site visit were disturbed and modified historically for landscaping typical of residential areas. No known sensitive biological resources have been recorded on this site based on record searches (see Attachments 1-3).

Wildlife observed during the visit included those that would be typically found in residential areas of the San Gabriel basin, such as: black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), Anna's hummingbirds (*Calypte anna*), mourning dove (*Zenaida macroura*), rock pigeon (*Columba livia*), and American crow (*Corvus brachyrhynchos*). It

expected that limited wildlife was encountered due to noise and vibrations from traffic on Temple City Boulevard.

Vegetation was dominated by invasive or planted ornamental species. Naturally occurring plants included species such as: wood sorrel (*Oxalis pes-caprae*), shepherd's purse (*Capsella bursa-pastoris*), cheeseweed (*Malva parviflora*), horseweed (*Erigeron canadensis*), annual bluegrass (*Poa annua*), erect veldtgrass (*Ehrharta erecta*), common fig (*Ficus carica*), Henbit deadnettle (*Lamium amplexicaule*), prickly lettuce (*Lactuca serriola*), and sow thistle (*Sonchus oleraceus*). Planted plants observed included species such as: English yew (*Taxus baccata*), citrus (*Citrus* sp.), rose (*Rosa* sp.), daffodil (*Narcissus* sp.), bear's breeches (*Acanthus mollis*), foxtail agave (*Agave attenuata*), elephant bush (*Portulacaria afra*), calla lily (*Zantedeschia aethiopica*), and iris (*Iris* sp.). None of the latter species found on-site are listed as rare, sensitive, or special-status by any regulatory agency.

National Wetlands Inventory (NWI, 2022)

No wetland or sensitive jurisdictional water resources were identified on site. No USGS maps show blue line streams (Figure 3), and no features are mapped by the National Wetlands Inventory (Figure 4).

Soil types located on-site include (National Resources Conservation Service [NRCS, 2022]) soils:

- Urban land-Palmview-Tujunga complex, 0 to 5 percent slopes
- Urban land, frequently flooded, 0 to 5 percent slopes

A soils map is presented in Figure 5. The Project site does not contain any hydric soils. The Project also does not contain any soils known to support sensitive plants.

Special status plant and wildlife species with potential to occur within the area of interest (~1 mile), as determined by federal, state and/or county natural resource databases:

No special status plants or animals were identified in the CNDDB (2022) as occurring on the Project site or within 1 mile of the Project site. Attachments 1-3 provide lists of sensitive species that have potential to occur per the California Natural Diversity Database (CNDDB, Attachment 1), California Native Plant Society (CNPS) Rare Plant Inventory (Attachment 2), and the USFWS Information for Planning and Consultation (IPAC, Location search).

No special-status plant or animal species are expected to have suitable habitat on the property based on the site visit that January 26, 2022. No sensitive plants are expected to occur on the property due to the extensive modification of soils in this well-developed urban residential parcel and immediate vicinity. Due to the levels of disturbance (including traffic noise, human activity, etc.) it is not expected that any sensitive wildlife would be found on the Project site. Further the Project site does not occur within USFWS Critical Habitat for any special status species (see Attachment 3, page 2).

Natural Communities within the Project Site boundary.

No sensitive natural communities listed in the CNDDB (2022) are present on the Project site. The Project site contains the following vegetation communities:

- Disturbed/Developed lands (0.33 ac)

Wildlife Corridors

The Project site is not located within a documented wildlife corridor. As the Project site is located within a residential neighborhood with high traffic, it is not expected that wildlife movement would be impacted by the Project.

CONCLUSIONS / RECOMENDATIONS

No significant impacts to biological resources based on the current Project Description. This assessment of potential impacts to biological resources is only for this Project as currently planned, and significant changes to the Project plans may require reassessment. Our understanding assumes that the client proposes to redevelop the site, which currently contains three residential buildings that will be demolished to accommodate the proposed three-story residential building. We also assume that the placement of new structures is within the existing footprint (APN 5385-012-007) and that no additional features (such as glass walls/buildings, wind energy turbines, etc.) would be present.

Per Appendix G of the CEQA guidelines the following summary is provided to support the conclusion that no significant potential impacts to biological resources are expected.

a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

   No sensitive species were detected during the site visit, and none would be expected as the Project site is already modified and does not represent habitats that typically support sensitive species. No significant impacts to any candidate, sensitive, or special status would be expected by this infill-type Project.

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*

   No riparian habitat or sensitive natural community is present on the property. No impacts to riparian habitats or sensitive natural communities would be expected.

c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

No wetlands or water resources occur within the boundary of the Project; therefore, this resource is not expected to be impacted by the Project.

d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

No known wildlife corridors or nursery sites are known to occur within or in the vicinity of the Project and therefore there is no expected impact to this resource.

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Temple City has a few local ordinances that protect trees, including those within the public right-of-way (Ord. 13-983) and those that are protected by covenant (Ord. 19-1036); these ordinances are not applicable to this Project as currently designed.

No conflicts with theses ordinances are expected as no trees are planted within the public right-of-way, and no trees protected by covenant with the City are known to occur on the property.

Temple City does not have any further ordinances that protects other biological resources, except for within parks (Ord. 05-899; not applicable here), as the city is located within a well-developed area of Los Angeles County.

f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

No adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan is known to exist within the proposed Project boundary.

TERMS AND CONDITIONS

This report is a reconnaissance level investigation of the Project site and is not a substitute for agency-approved protocol-level surveys for biological resources. It is meant to provide the Client with a general outline of potential environmental issues based on interpretation of the available electronic and field data that MIG has collected. This report is meant to provide general information on the potential presence of sensitive species and habitats and is not a formal assessment that may be required for Project approval by any local, state, or federal agency. This report is not a "Corps Jurisdictional Wetland and Waters Delineation" and should not be interpreted as such. Species occurrence data and regulatory requirements may change, and the information contained in this analysis may not be applicable in a final determination.

The data resources utilized for the publication of this report do not necessarily provide a complete biological inventory for the Project site. These resources include, but are not limited to: CNDDB, State resource agency electronic inventory records, San Bernardino County Biotic Overlays, NWI records, USGS topographic quadrangle maps, NRCS soils data, FEMA flood data, and ArcGIS aerial images. Consultation with the resource agencies and agency-approved protocol-level surveys may be required to determine the presence of sensitive species or resources. This report is only intended to be used by the client as a snapshot of the potential environmental issues associated with a property to better aid preliminary Project site engineering and design decisions. This report may also be useful to ascertain the need for future biological studies to satisfy regulatory requirements.

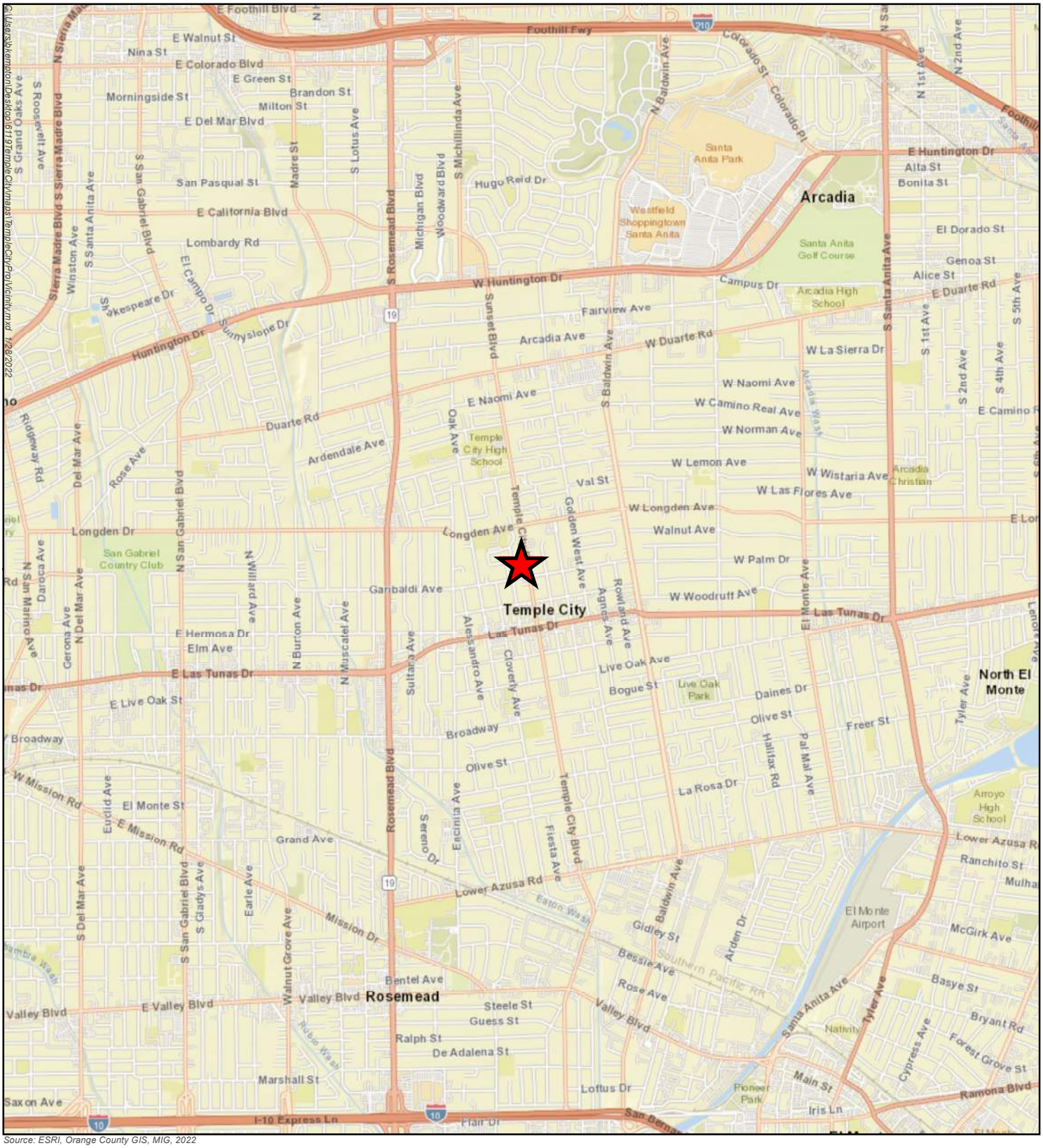
Approval of any potential permits and additional study recommendations are dependent upon a specific Project Description. The Conclusions/Recommendations section is meant to give the Client a broader understanding of the regulatory framework and requirements that may apply to the property based on our interpretation of data considered. Though general information is provided, MIG staff are available to answer specific questions regarding the potential environmental issues and regulatory requirements that may be associated with the property.

MIG is available and highly qualified to advise on regulatory and permitting issues as published in federal and state regulatory notices. In addition, the Client is advised to consult with independent legal counsel to interpret recent statutory, administrative, and decisional authority as they relate to natural resource regulation compliance. The Client is also advised to consult legal counsel regarding action(s) that may require permit issuance. The landowner assumes responsibility for all actions conducted on the land that may lead to enforcement actions by federal or state government or regulatory agencies. All parties understand that environmental regulations and laws pertaining to any potential Project on this property may change at any time and that concerns expressed by governing agencies and the public cannot be predicted as they relate to any proposed Project. MIG is not responsible for unforeseen circumstances that may require additional field work, agency consultation, and/or public hearings. MIG is available to assist in resolving issues that may arise and can provide the Client with a formal scope of work and cost estimate for identified tasks.

Any and all work products related to this analysis, or the assessment described therein are confidential and are prepared for the Client's use only. The aforementioned work product(s) may not be distributed, copied, or utilized in any manner other than to provide an overview of potential environmental issues associated with the Project site. Any other uses of work product(s) related to this analysis are strictly prohibited. MIG will not be held liable for unapproved use of this analysis. This work product is subject to the Client's acceptance of MIG's General Terms and Conditions, including limits of liability, provided under separate cover.

GLOSSARY	
Term	**Definition**
Blue Line Stream	A perennial or intermittent stream so designated and delineated by USGS as shown as solid or dash-dot blue line on a quadrangle map. Generally, identifies streams considered to be habitat for fish and aquatic organisms.
California Natural Diversity Database (CNDDB)	The CNDDB is a program that inventories the status and locations of rare plants and animals. CNDDB staff work with partners to maintain current lists of rare species as well as maintain an ever-growing database of mapped locations for these species. Electronic data is available through NatureServe and/or state natural resource agencies.
Critical Habitat	Specific geographic areas, whether occupied by listed species or not, that are determined to be essential for the conservation and management of listed species, and that have been formally described in the Federal Register.
Endangered	The classification provided to an animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range.
Hydric Soils	A soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part.
Jurisdictional Wetland and Waters Delineation	A jurisdictional wetland and waters delineation is a focused evaluation of indicators of wetlands and waters within a property. The methods used are based on the U.S. Army Corps of Engineers Wetlands Delineation Manual ("Corps Manual"; Environmental Laboratory 1987) and appropriate Regional Supplements to the Corps Manual (i.e., *Regional Supplement to the Corps of Engineers Wetland Delineation manual: Mid-West Region V2*).
Jurisdictional Wetland/Waters	The U.S. Army Corps of Engineers (Corps) regulates "Waters of the United States" under Section 404 of the Clean Water Act. "Waters of the U.S." are defined broadly as waters susceptible to use in commerce, including interstate waters and wetlands, all other waters (intrastate water bodies, including wetlands), and their tributaries (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands stated in the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987), are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Areas that are inundated for sufficient duration and depth to exclude growth of hydrophytic vegetation are subject to Section 404 jurisdiction as "other waters" and are often characterized by an ordinary high-water mark (OHWM). Other waters, for example, generally include lakes, rivers, and streams. The placement of fill material into "Waters of the U.S." (including wetlands) generally requires an individual or nationwide permit from the Corps under Section 404 of the Clean Water Act.
National Wetlands Inventory (NWI)	The National Wetlands Inventory (NWI) of the USFWS produces information on the characteristics, extent, and status of the Nation's wetlands and deep-water habitats. The National Wetlands Inventory information is used by Federal, State, and local agencies, academic institutions, U.S. Congress, and the private sector. Congressional mandates in the Emergency Wetlands Resources Act require the Service to map wetlands, and to digitize, archive and distribute the maps.
Protocol-level	This term is used to refer to assessments or surveys that are done following specific regulatory agency guidance and that are suitable for submittal to the appropriate agency.

GLOSSARY	
Term	**Definition**
Riparian	Refers to the area or subsequent vegetation adjacent to a waterway such as a stream or river.
Sensitive Species	A species of plant or animal that is rare, threatened or endangered and warrants protection by the state or federal government. This term includes fully protected species and state and federal threatened and endangered species.
Threatened	The classification provided to an animal or plant likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
Wetland	For regulatory purposes under the Clean Water Act, the term 'wetlands' means "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas."



Legend

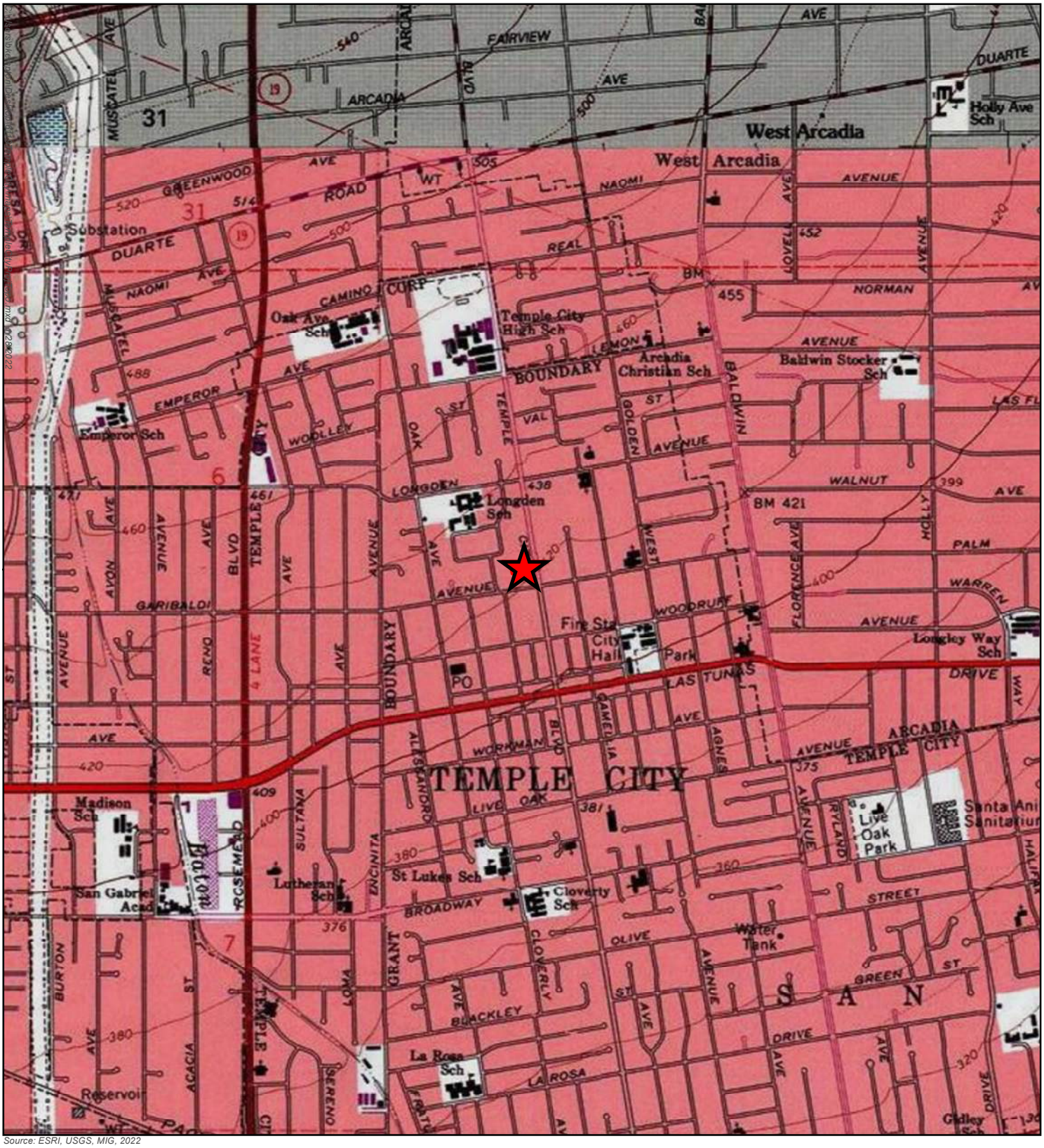
★ Project Area (Parcel No. 5385-012-007)

0 2,400 4,800 9,600 Feet

N

Figure 1. Project Vicinity Map
6119 Temple City Blvd., Temple City, CA
Longo Investment, Inc.

MIG



Source: ESRI, USGS, MIG, 2022

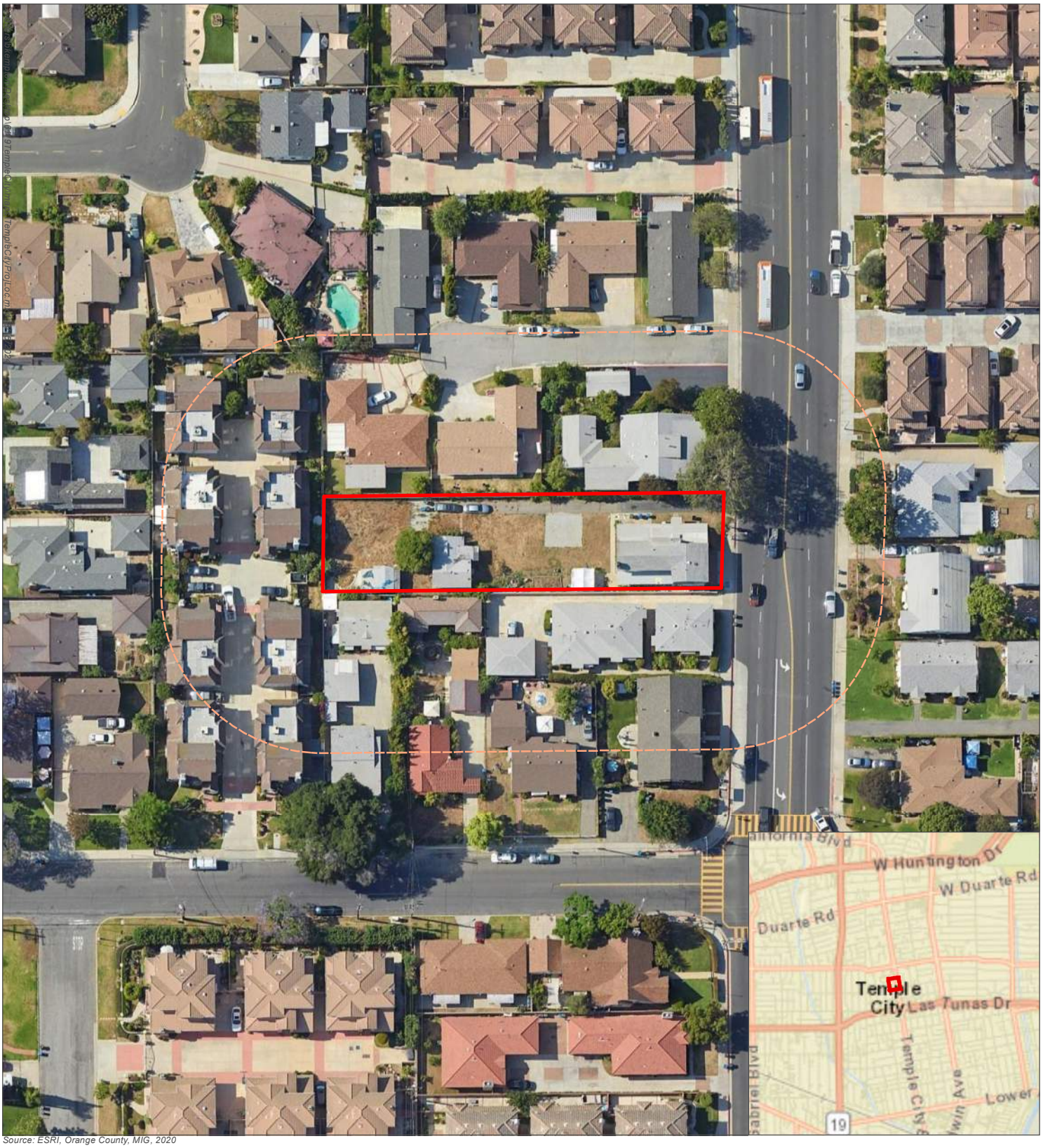
Legend

★ Project Area (Parcel No. 5385-012-007)

0 1,150 2,300 4,600 Feet

Figure 2. USGS Topographic Map
6119 Temple City Blvd., Temple City, CA
Longo Investment, Inc.

MIG



Source: ESRI, Orange County, MIG, 2020

Legend

Project Area (Parcel No. 5385-012-007)

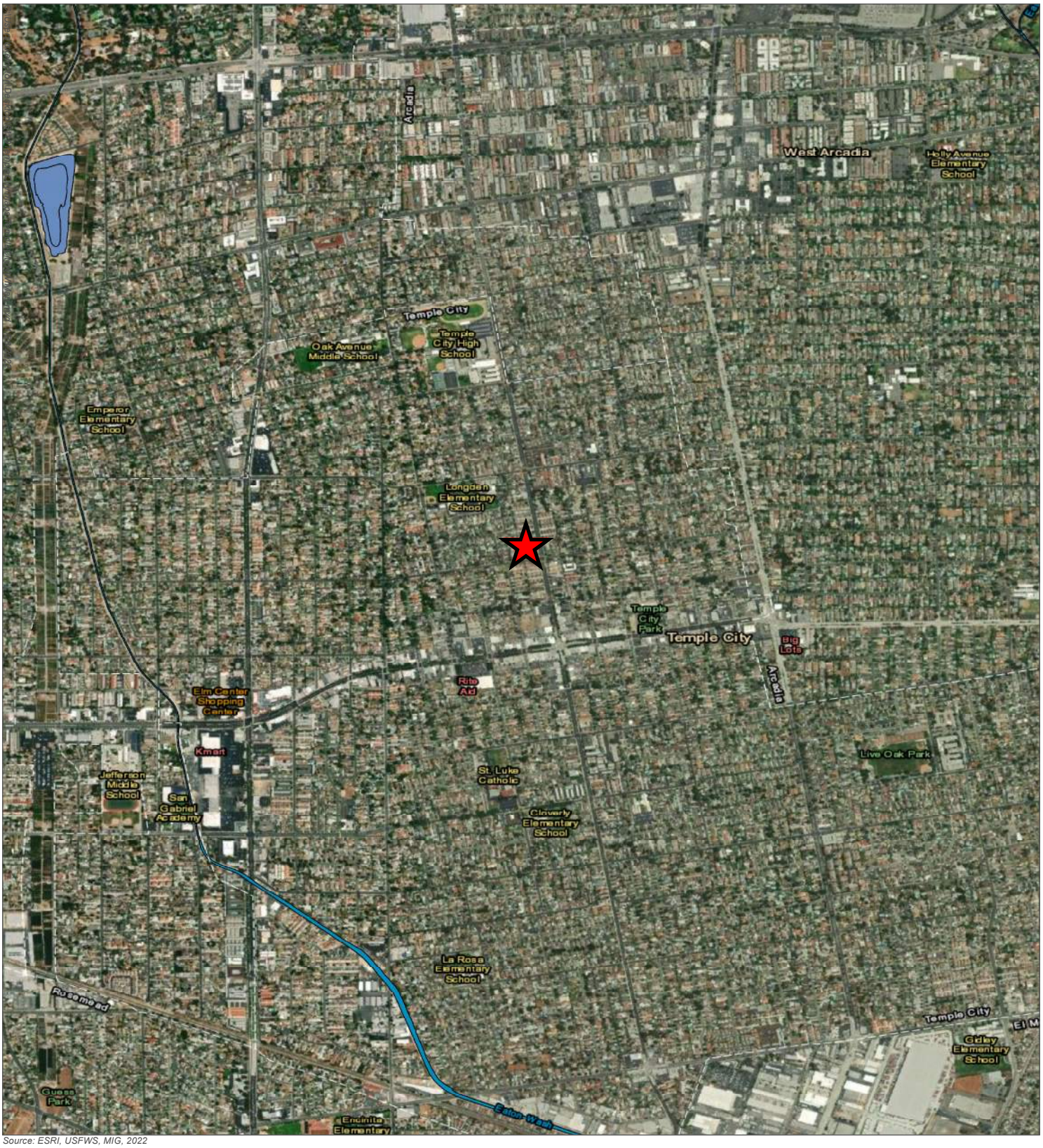
Survey Boundary (Approximate Line of Sight)

0 40 80 160 Feet

Figure 3. Project Location

6119 Temple City Blvd., Temple City, CA

Longo Investment, Inc.



Source: ESRI, USFWS, MIG, 2022

Legend

Project Area

NWI Wetland Types:

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

0 1,050 2,100 4,200 Feet

N

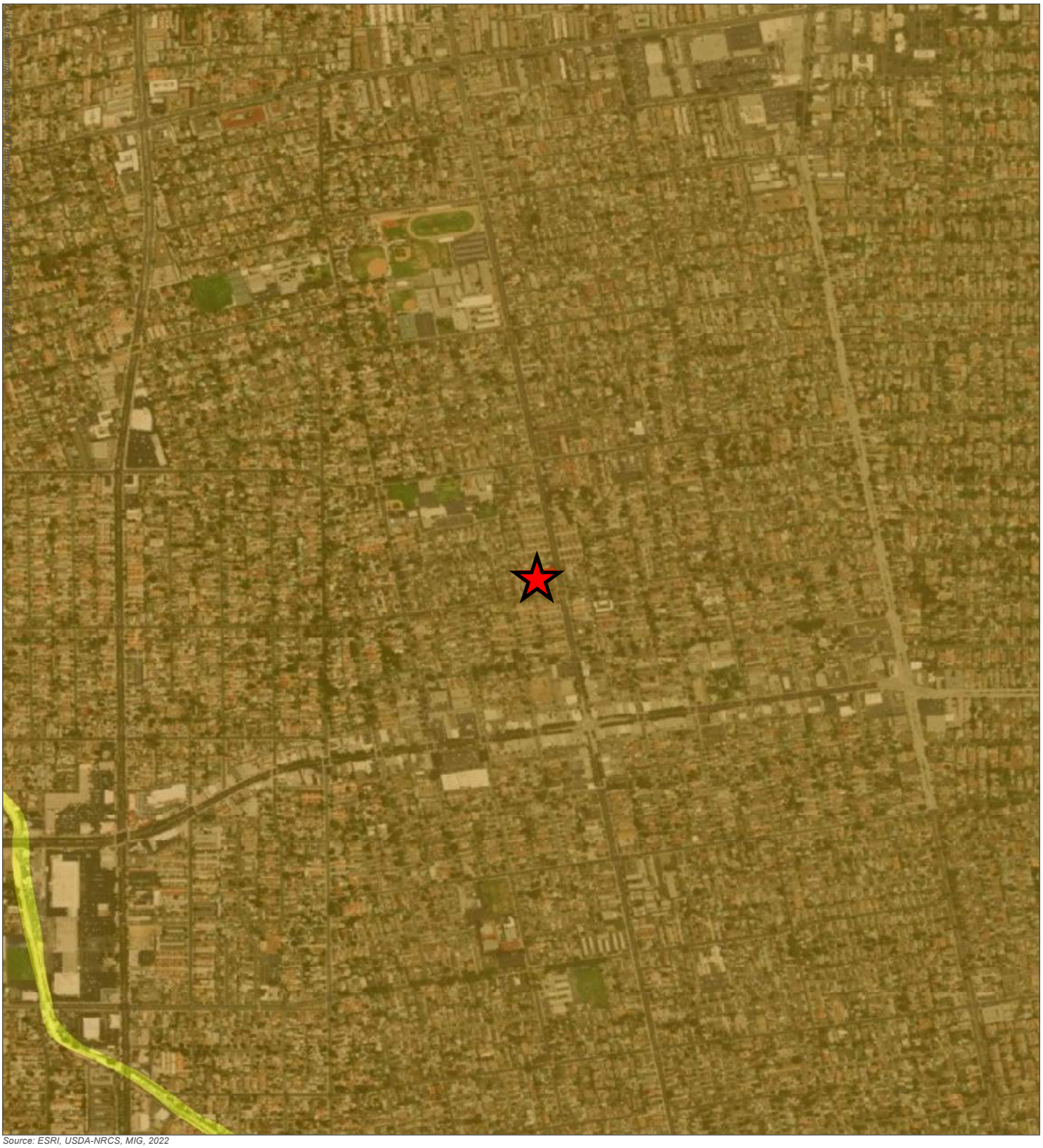
Figure 4. National Wetlands Inventory Map

6119 Temple City Blvd., Temple City, CA

Longo Investment, Inc.

Legend

MIG



Source: ESRI, USDA-NRCS, MIG, 2022

Legend

Project Area (Parcel No. 5385-012-007)

NWI Wetland Types:

Urban land-Palmview-Tujunga complex, 0 to 5 percent slopes

Urban land, frequently flooded, 0 to 5 percent slopes

0 700 1,400 2,800 Feet

N

Figure 5. Soils Map

6119 Temple City Blvd., Temple City, CA

Longo Investment, Inc.

MIG

Figure 6. Current Project Site Photographs

Photo 1. Looking south from R/W along Temple City Blvd. towards front residence on property.

Photo 2. Looking west toward property at entrance from Temple City Blvd.

Photo 3. Looking south, just west of front residence from driveway.

Photo 4. Looking west toward back residence from just past front residence.

Photo 5. Looking southeasterly toward residences from west boundary of property.

Photo 6. Looking northeasterly from southwest corner of property.

Attachment 1. California Natural Diversity Database Search Results

Includes El Monte quadrangle and surrounding quadrangles (Baldwin Park Los Angeles, Azusa, Mt. Wilson, Pasadena, La Habra, South Gate, Whittier)

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Baldwin Park (3411718) OR El Monte (3411811) OR Los Angeles (3411812) OR Azusa (3411728) OR Mt. Wilson (3411821) OR Pasadena (3411822) OR La Habra (3311788) OR South Gate (3311882) OR Whittier (3311881))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S3	WL
Ammodramus savannarum grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
Anaxyrus californicus arroyo toad	AAABB01230	Endangered	None	G2G3	S2S3	SSC
Anniella stebbinsi Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Arctostaphylos glandulosa ssp. gabrielensis San Gabriel manzanita	PDERI042P0	None	None	G5T3	S3	1B.2
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus brauntonii Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex parishii Parish's brittlescale	PDCHE041D0	None	None	G1G2	S1	1B.1
Atriplex serenana var. davidsonii Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
Berberis nevinii Nevin's barberry	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
Bombus crotchii Crotch bumble bee	IIHYM24480	None	None	G3G4	S1S2	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
California Walnut Woodland California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
Calochortus clavatus var. gracilis slender mariposa-lily	PMLIL0D096	None	None	G4T2T3	S2S3	1B.2
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Calochortus weedii var. intermedius intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T2	S3	1B.2
Calystegia felix lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	ABPBG02095	None	None	G5T3Q	S3	SSC
Canyon Live Oak Ravine Forest Canyon Live Oak Ravine Forest	CTT61350CA	None	None	G3	S3.3	
Catostomus santaanae Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	
Centromadia parryi ssp. australis southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
Centromadia pungens ssp. laevis smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
Chorizanthe parryi var. parryi Parry's spineflower	PDPGN040J2	None	None	G3T2	S2	1B.1
Cladium californicum California saw-grass	PMCYP04010	None	None	G4	S2	2B.2
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G4	S2	SSC
Cuscuta obtusiflora var. glandulosa Peruvian dodder	PDCUS01111	None	None	G5T4?	SH	2B.2
Cypseloides niger black swift	ABNUA01010	None	None	G4	S2	SSC
Dodecahema leptoceras slender-horned spineflower	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1
Dudleya cymosa ssp. crebrifolia San Gabriel River dudleya	PDCRA040A8	None	None	G5T2	S2	1B.2
Dudleya densiflora San Gabriel Mountains dudleya	PDCRA040B0	None	None	G2	S2	1B.1
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Galium grande San Gabriel bedstraw	PDRUB0N0V0	None	None	G1	S1	1B.2
Gila orcuttii arroyo chub	AFCJB13120	None	None	G2	S2	SSC
Glyptostoma gabrielense San Gabriel chestnut	IMGASB1010	None	None	G2	S2	
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S1S2	
Helianthus nuttallii ssp. parishii Los Angeles sunflower	PDAST4N102	None	None	G5TX	SX	1A
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
Imperata brevifolia California satintail	PMPOA3D020	None	None	G4	S3	2B.1
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G3G4	S3S4	
Lasiurus blossevillii western red bat	AMACC05060	None	None	G4	S3	SSC
Lasiurus cinereus hoary bat	AMACC05030	None	None	G3G4	S4	
Lasiurus xanthinus western yellow bat	AMACC05070	None	None	G4G5	S3	SSC
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Lepidium virginicum var. robinsonii Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
Lepus californicus bennettii San Diego black-tailed jackrabbit	AMAEB03051	None	None	G5T3T4	S3S4	SSC
Linanthus concinnus San Gabriel linanthus	PDPLM090D0	None	None	G2	S2	1B.2
Muhlenbergia californica California muhly	PMPOA480A0	None	None	G4	S4	4.3
Navarretia prostrata prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.2
Nyctinomops femorosaccus pocketed free-tailed bat	AMACD04010	None	None	G5	S3	SSC
Nyctinomops macrotis big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
Onychomys torridus ramona southern grasshopper mouse	AMAFF06022	None	None	G5T3	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Open Engelmann Oak Woodland	CTT71181CA	None	None	G2	S2.2	
Open Engelmann Oak Woodland						
Orcuttia californica	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
California Orcutt grass						
Orobanche valida ssp. valida	PDORO040G2	None	None	G4T2	S2	1B.2
Rock Creek broomrape						
Ovis canadensis nelsoni	AMALE04013	None	None	G4T4	S3	FP
desert bighorn sheep						
Palaeoxenus dohrni	IICOL5K010	None	None	G3?	S3?	
Dohrn's elegant eucnemid beetle						
Phacelia stellaris	PDHYD0C510	None	None	G1	S1	1B.1
Brand's star phacelia						
Phrynosoma blainvillii	ARACF12100	None	None	G3G4	S3S4	SSC
coast horned lizard						
Polioptila californica californica	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
coastal California gnatcatcher						
Pseudognaphalium leucocephalum	PDAST440C0	None	None	G4	S2	2B.2
white rabbit-tobacco						
Rana boylii	AAABH01050	None	Endangered	G3	S3	SSC
foothill yellow-legged frog						
Rana muscosa	AAABH01330	Endangered	Endangered	G1	S1	WL
southern mountain yellow-legged frog						
Rhinichthys osculus ssp. 8	AFCJB3705K	None	None	G5T1	S1	SSC
Santa Ana speckled dace						
Ribes divaricatum var. parishii	PDGRO020F3	None	None	G5TX	SX	1A
Parish's gooseberry						
Riparia riparia	ABPAU08010	None	Threatened	G5	S2	
bank swallow						
Riversidian Alluvial Fan Sage Scrub	CTT32720CA	None	None	G1	S1.1	
Riversidian Alluvial Fan Sage Scrub						
Scutellaria bolanderi ssp. austromontana	PDLAM1U0A1	None	None	G4T3	S3	1B.2
southern mountains skullcap						
Sidalcea neomexicana	PDMAL110J0	None	None	G4	S2	2B.2
salt spring checkerbloom						
Southern California Arroyo Chub/Santa Ana Sucker Stream	CARE2330CA	None	None	GNR	SNR	
Southern California Arroyo Chub/Santa Ana Sucker Stream						
Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
Southern Coast Live Oak Riparian Forest						
Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Southern Sycamore Alder Riparian Woodland						
Spea hammondii	AAABF02020	None	None	G2G3	S3	SSC
western spadefoot						

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Symphyotrichum defoliatum San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
Symphyotrichum greatae Greata's aster	PDASTE80U0	None	None	G2	S2	1B.3
Taricha torosa Coast Range newt	AAAAF02032	None	None	G4	S4	SSC
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis hammondii two-striped gartersnake	ARADB36160	None	None	G4	S3S4	SSC
Thelypteris puberula var. sonorensis Sonoran maiden fern	PPTHE05192	None	None	G5T3	S2	2B.2
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Walnut Forest Walnut Forest	CTT81600CA	None	None	G1	S1.1	

Record Count: 90

Attachment 2. California Native Plant Society Rare Plant Inventory Search Results

Includes El Monte quadrangle and surrounding quadrangles (Baldwin Park Los Angeles, Azusa, Mt. Wilson, Pasadena, La Habra, South Gate, Whittier)

Search Results

62 matches found. Click on scientific name for details

Search Criteria: 9-Quad include [3411718:3411811:3411812:3411728:3411821:3411822:3311788:3311882:3311881]

SCIENTIFIC NAME	COMMON NAME	▲ FAMILY	FED LIST	STATE LIST	CA RARE PLANT RANK	LIFEFORM	BLOOMING PERIOD	LOWEST ELEVATION (M)	HIGHEST ELEVATION (M)
Asplenium vespertinum	western spleenwort	Aspleniaceae	None	None	4.2	perennial rhizomatous herb	Feb-Jun	180	1000
Centromadia parryi ssp. australis	southern tarplant	Asteraceae	None	None	1B.1	annual herb	May-Nov	0	480
Centromadia pungens ssp. laevis	smooth tarplant	Asteraceae	None	None	1B.1	annual herb	Apr-Sep	0	640
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Asteraceae	None	None	1A	perennial rhizomatous herb	Aug-Oct	10	1525
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Asteraceae	None	None	1B.1	annual herb	Feb-Jun	1	1220
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	None	None	2B.2	perennial herb	(Jul)Aug-Nov(Dec)	0	2100
Senecio astephanus	San Gabriel ragwort	Asteraceae	None	None	4.3	perennial herb	May-Jul	400	1500
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	None	None	1B.2	perennial rhizomatous herb	Jul-Nov	2	2040
Symphyotrichum greatae	Greata's aster	Asteraceae	None	None	1B.3	perennial rhizomatous herb	Jun-Oct	300	2010
Berberis nevinii	Nevin's barberry	Berberidaceae	FE	CE	1B.1	perennial evergreen shrub	(Feb)Mar-Jun	70	825
Harpagonella palmeri	Palmer's grapplinghook	Boraginaceae	None	None	4.2	annual herb	Mar-May	20	955
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Brassicaceae	None	None	4.3	annual herb	Jan-Jul	1	885
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	None	None	1B.1	annual herb	Jun-Oct	25	1900
Atriplex serenana var. davidsonii	Davidson's saltscale	Chenopodiaceae	None	None	1B.2	annual herb	Apr-Oct	10	200
Calystegia felix	lucky morning-glory	Convolvulaceae	None	None	1B.1	annual rhizomatous herb	Mar-Sep	30	215
Convolvulus simulans	small-flowered	Convolvulaceae	None	None	4.2	annual herb	Mar-Jul	30	740

	morning-glory								
Cuscuta obtusiflora var. *glandulosa*	Peruvian dodder	Convolvulaceae	None	None	2B.2	annual vine (parasitic)	Jul-Oct	15	280
Dudleya cymosa ssp. *crebrifolia*	San Gabriel River dudleya	Crassulaceae	None	None	1B.2	perennial herb	Apr-Jul	275	457
Dudleya densiflora	San Gabriel Mountains dudleya	Crassulaceae	None	None	1B.1	perennial herb	Mar-Jul	244	610
Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	None	None	1B.2	perennial herb	Apr-Jul	15	790
Cladium californicum	California saw-grass	Cyperaceae	None	None	2B.2	perennial rhizomatous herb	Jun-Sep	60	1600
Arctostaphylos glandulosa ssp. *gabrielensis*	San Gabriel manzanita	Ericaceae	None	None	1B.2	perennial evergreen shrub	Mar	595	1500
Astragalus brauntonii	Braunton's milk-vetch	Fabaceae	FE	None	1B.1	perennial herb	Jan-Aug	4	640
Rupertia rigida	Parish's rupertia	Fabaceae	None	None	4.3	perennial herb	Jun-Aug	700	2500
Quercus durata var. *gabrielensis*	San Gabriel oak	Fagaceae	None	None	4.2	perennial evergreen shrub	Apr-May	450	1000
Quercus engelmannii	Engelmann oak	Fagaceae	None	None	4.2	perennial deciduous tree	Mar-Jun	50	1300
Ribes divaricatum var. *parishii*	Parish's gooseberry	Grossulariaceae	None	None	1A	perennial deciduous shrub	Feb-Apr	65	300
Phacelia hubbyi	Hubby's phacelia	Hydrophyllaceae	None	None	4.2	annual herb	Apr-Jul	0	1000
Phacelia ramosissima var. *austrolitoralis*	south coast branching phacelia	Hydrophyllaceae	None	None	3.2	perennial herb	Mar-Aug	5	300
Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	None	None	1B.1	annual herb	Mar-Jun	1	400
Juglans californica	Southern California black walnut	Juglandaceae	None	None	4.2	perennial deciduous tree	Mar-Aug	50	900
Clinopodium mimuloides	monkey-flower savory	Lamiaceae	None	None	4.2	perennial herb	Jun-Oct	305	1800
Lepechinia fragrans	fragrant pitcher sage	Lamiaceae	None	None	4.2	perennial shrub	Mar-Oct	20	1310
Scutellaria bolanderi ssp. *austromontana*	southern mountains skullcap	Lamiaceae	None	None	1B.2	perennial rhizomatous herb	Jun-Aug	425	2000
Calochortus catalinae	Catalina mariposa lily	Liliaceae	None	None	4.2	perennial bulbiferous herb	(Feb)Mar-Jun	15	700

Calochortus clavatus var. *clavatus*	club-haired mariposa lily	Liliaceae	None	None	4.3	perennial bulbiferous herb	(Mar)May-Jun	30	1300
Calochortus clavatus var. *gracilis*	slender mariposa-lily	Liliaceae	None	None	1B.2	perennial bulbiferous herb	Mar-Jun(Nov)	320	1000
Calochortus plummerae	Plummer's mariposa-lily	Liliaceae	None	None	4.2	perennial bulbiferous herb	May-Jul	100	1700
Calochortus weedii var. *intermedius*	intermediate mariposa-lily	Liliaceae	None	None	1B.2	perennial bulbiferous herb	May-Jul	105	855
Lilium humboldtii ssp. *ocellatum*	ocellated Humboldt lily	Liliaceae	None	None	4.2	perennial bulbiferous herb	Mar-Jul(Aug)	30	1800
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	None	None	2B.2	perennial herb	Mar-Jun	15	1530
Orobanche valida ssp. *valida*	Rock Creek broomrape	Orobanchaceae	None	None	1B.2	perennial herb (parasitic)	May-Sep	1030	2000
Romneya coulteri	Coulter's matilija poppy	Papaveraceae	None	None	4.2	perennial rhizomatous herb	Mar-Jul(Aug)	20	1200
Diplacus johnstonii	Johnston's monkeyflower	Phrymaceae	None	None	4.3	annual herb	May-Aug	975	2920
Hordeum intercedens	vernal barley	Poaceae	None	None	3.2	annual herb	Mar-Jun	5	1000
Imperata brevifolia	California satintail	Poaceae	None	None	2B.1	perennial rhizomatous herb	Sep-May	0	1215
Muhlenbergia californica	California muhly	Poaceae	None	None	4.3	perennial rhizomatous herb	Jun-Sep	100	2000
Orcuttia californica	California Orcutt grass	Poaceae	FE	CE	1B.1	annual herb	Apr-Aug	15	660
Linanthus concinnus	San Gabriel linanthus	Polemoniaceae	None	None	1B.2	annual herb	Apr-Jul	1520	2800
Navarretia prostrata	prostrate vernal pool navarretia	Polemoniaceae	None	None	1B.2	annual herb	Apr-Jul	3	1210
Acanthoscyphus parishii var. *parishii*	Parish's oxytheca	Polygonaceae	None	None	4.2	annual herb	Jun-Sep	1220	2600
Chorizanthe parryi var. *parryi*	Parry's spineflower	Polygonaceae	None	None	1B.1	annual herb	Apr-Jun	275	1220
Dodecahema leptoceras	slender-horned spineflower	Polygonaceae	FE	CE	1B.1	annual herb	Apr-Jun	200	760
Horkelia cuneata var. *puberula*	mesa horkelia	Rosaceae	None	None	1B.1	perennial herb	Feb-Jul(Sep)	70	810

puberula						herb	Jul(Sep)		
Galium angustifolium ssp. *gabrielense*	San Antonio Canyon bedstraw	Rubiaceae	None	None	4.3	perennial herb	Apr-Aug	1200	2650
Galium angustifolium ssp. *gracillimum*	slender bedstraw	Rubiaceae	None	None	4.2	perennial herb	Apr-Jun(Jul)	130	1550
Galium cliftonsmithii	Santa Barbara bedstraw	Rubiaceae	None	None	4.3	perennial herb	May-Jul	200	1220
Galium grande	San Gabriel bedstraw	Rubiaceae	None	None	1B.2	perennial deciduous shrub	Jan-Jul	425	1500
Galium jepsonii	Jepson's bedstraw	Rubiaceae	None	None	4.3	perennial rhizomatous herb	Jul-Aug	1540	2500
Galium johnstonii	Johnston's bedstraw	Rubiaceae	None	None	4.3	perennial herb	Jun-Jul	1220	2300
Heuchera caespitosa	urn-flowered alumroot	Saxifragaceae	None	None	4.3	perennial rhizomatous herb	May-Aug	1155	2650
Thelypteris puberula var. *sonorensis*	Sonoran maiden fern	Thelypteridaceae	None	None	2B.2	perennial rhizomatous herb	Jan-Sep	50	610

Showing 1 to 62 of 62 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2022. Inventory of Rare and Endangered Plants of California (online edition, v9-01 1.0). Website https://www.rareplants.cnps.org [accessed 26 January 2022].

Attachment 3. USFWS Information for Planning and Consultation Search Results

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Los Angeles County, California

Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

http://www.fws.gov/carlsbad/

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/5945	Endangered

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Nevin's Barberry *Berberis nevinii* Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8025	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Allen's Hummingbird *Selasphorus sasin* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
California Thrasher *Toxostoma redivivum* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Clark's Grebe *Aechmophorus clarkii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Common Yellowthroat *Geothlypis trichas sinuosa* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Lawrence's Goldfinch *Carduelis lawrencei* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Marbled Godwit *Limosa fedoa* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Nuttall's Woodpecker *Picoides nuttallii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse *Baeolophus inornatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

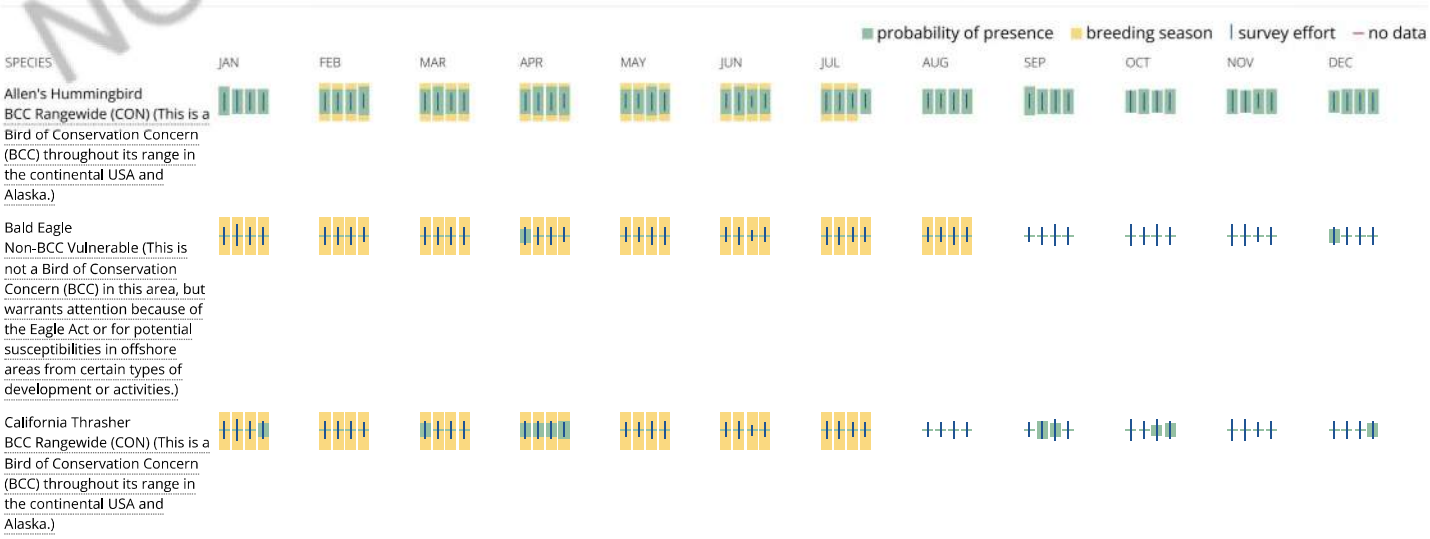
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

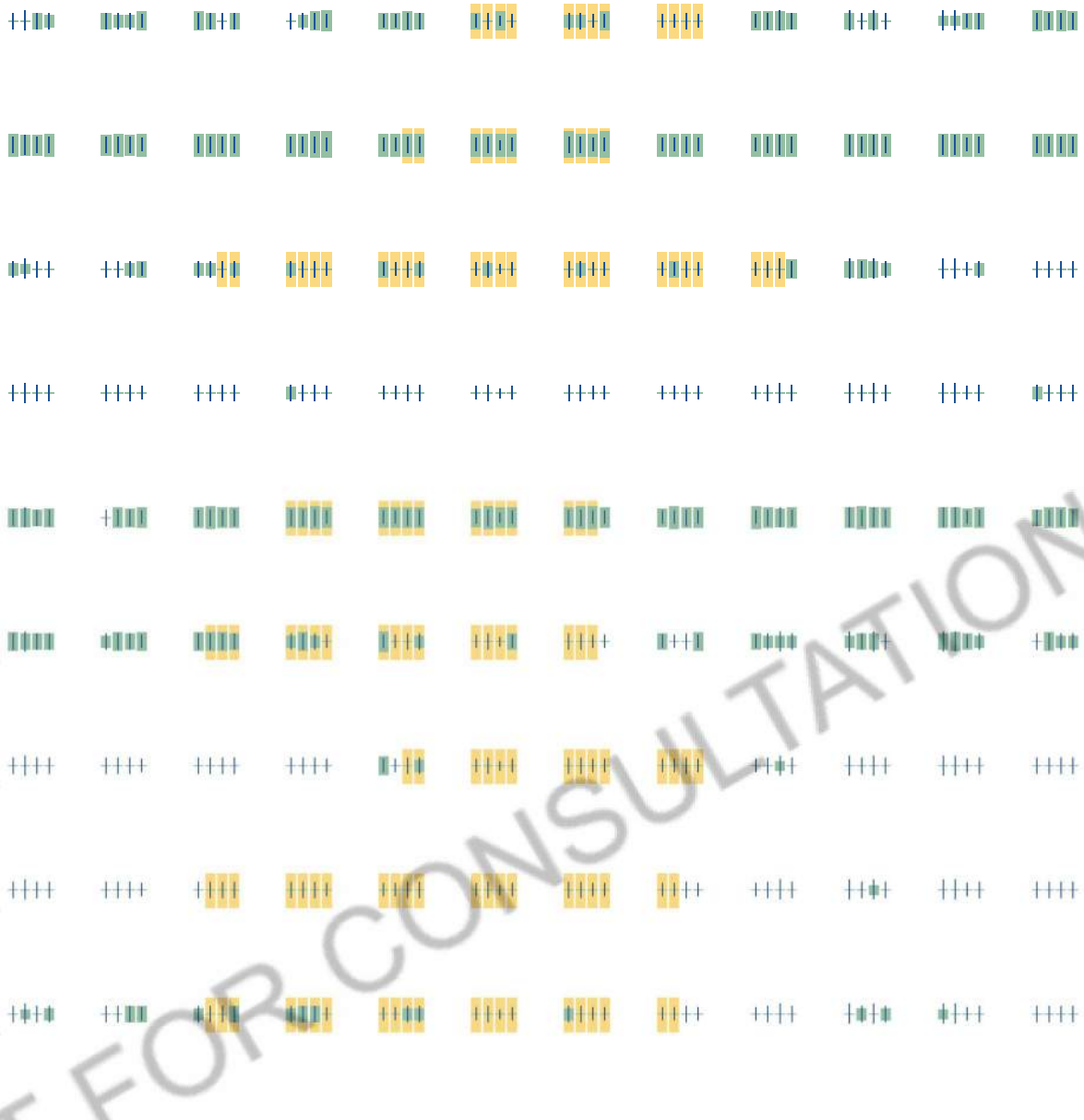
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds

elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Attachment C: Noise Analysis Memo

1650 SPRUCE STREET, STE 106
RIVERSIDE, CA 92507
951.787.9222
WWW.MIGCOM.COM

Memo

To: Alex Lai, Manager, Longo Investment Inc.

CC: Cameron Hile, MIG

From: Kasey Kitowski and Chris Dugan

Date: March 25, 2023

SUBJECT: Temple City Boulevard18-Unit Residential Project Noise Analysis

MIG, Inc. (MIG) has prepared this memorandum at the request of Longo Investment, Inc. This memorandum estimates the potential noise and vibration levels for the proposed 6119 Temple City Boulevard 18-Unit Residential Project (proposed Project) and evaluates those noise and vibration levels against applicable standards established by Temple City (City). As explained in this memorandum, the proposed Project does not have the potential to result in noise or vibration levels that would exceed applicable standards or otherwise substantially alter the existing environment because the Project has incorporated best management practices (BMP) for the control of construction noise levels into the project design, does not include substantial on- or off-site operational noise generating equipment, and would not be subjected to excessive airport-related noise levels. Refer to Attachment 1 for environmental noise background information.

PROJECT DESCRIPTION

The proposed Project involves the redevelopment of a site located near the geographical north of Temple City, California. The proposed redevelopment would occur on an approximately 0.33-acre property located at 6119 Temple City Boulevard. The site currently contains two existing residential buildings consisting of one one-story building and one two-story building. The proposed Project would demolish the existing structures and build an 20,210-square-foot, three-story multi-family residential building with one level of basement parking with 22 parking spaces. The Project would also include 3,850 square feet of open space and a 1,200 square foot front yard. (TAG Design Works, 2024).

The site is bound by Temple City Boulevard to the east and residential development on the north, west, and south. The closest school, Longden Elementary School, is approximately 660 feet northwest of the Project site. In addition, Pacific Friends School is approximately 740 feet northeast of the Project site and Playfactory Preschool is approximately 1,000 feet east of the Project site. Temple City National Little League baseball field is approximately 1,125 feet northwest of the Project site and Temple City Park is approximately 1,580 feet southeast of the Project site. The closest airport, San Gabriel Valley Airport, is approximately 2.3 miles southeast of the Project site.

The proposed Project would involve the demolition of the three existing buildings, site preparation, grading, trenching, new building construction, and architectural coating. Construction of the proposed Project is anticipated to begin in June 2024 and last approximately 35 months. The proposed Project's construction schedule and anticipated equipment usage is listed in Table 1*, Temple City Boulevard Residential Project Construction Activities.*

Table 1: Temple City Boulevard Residential Project Construction Activities		
Construction Phase	**Construction Schedule**	**Typical Equipment Used**
Demolition	June 2024	Concrete/Industrial Saw, Dozer, Backhoe
Site Preparation	June 2024	Grader, Backhoe
Grading	June 2024-July 2024	Grader, Dozer, Backhoe
Trenching	July 2024	Excavator, Backhoe
Building Construction (Foundation)	July 2024-November 2024	Crane, Forklift, Backhoe
Building Construction (Vertical and MEP)	November 2024-April 2027	Crane, Forklift, Backhoe
Architectural Coating	April 2027 -May 2027	Air compressor

The following sections describe the ambient noise environment near the proposed Project and evaluate the proposed Project's potential to impact the existing noise environment near the Project. Please refer to Attachment 1 for background information on environmental noise and vibration, including commonly used terminology.

EXISTING NOISE ENVIRONMENT

The proposed Project is located near the geographical north of Temple City, in an area designated as High-Density Residential by the City's General Plan and Zoning Code (City of Temple City 2017a, City of Temple City 2020).

Traffic noise modeling that was conducted using the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model is shown in the City's General Plan DEIR. On the segment of Temple City Boulevard between El Camino Real and Garibaldi Street, which borders the Project site to the east, existing traffic noise levels are shown as 71.5 CNEL at a distance of 100 feet from the road centerline (City of Temple City, 2017b).[1] Traffic noise levels are anticipated to increase to 71.7 CNEL by 2050.

The closest airport, San Gabriel Valley Airport, is located approximately 2.3 miles southeast of the proposed Project. The proposed Project is not located within the planning boundaries of the airport (County of Los Angeles 1995, San Gabriel Valley Airport 2015).

MIG conducted ambient noise level monitoring at the proposed project site from approximately 12 PM on Wednesday, August 23, 2023, to approximately 12 PM on Wednesday, August 24, 2023 (see Attachment 2). The ambient noise levels were digitally measured and stored using one Larson Davis SoundTrack LxT sound level meter and one Picollo-II sound level meter that meet American National Standards Institute requirements for Type 1 and Type 2 integrating sound level meters, respectively. Each sound meter was calibrated immediately before and after the monitoring period and found to be operating within normal parameters for sensitivity.

[1] Table 5.9-9 indicates the traffic noise level on Temple City Boulevard between El Camino Real and Garibaldi Avenue is 71.5 CNEL at a distance of 50 feet from the road centerline; however, the distances to the 70 CNEL (126 feet), 65 CNEL (272 feet), and 60 CNEL (586) contours assume traffic noise levels are 71.5 CNEL at 100 feet. The modeling also assumes an attenuation rate of 4.5 dBA per doubling of distance from the road centerline.

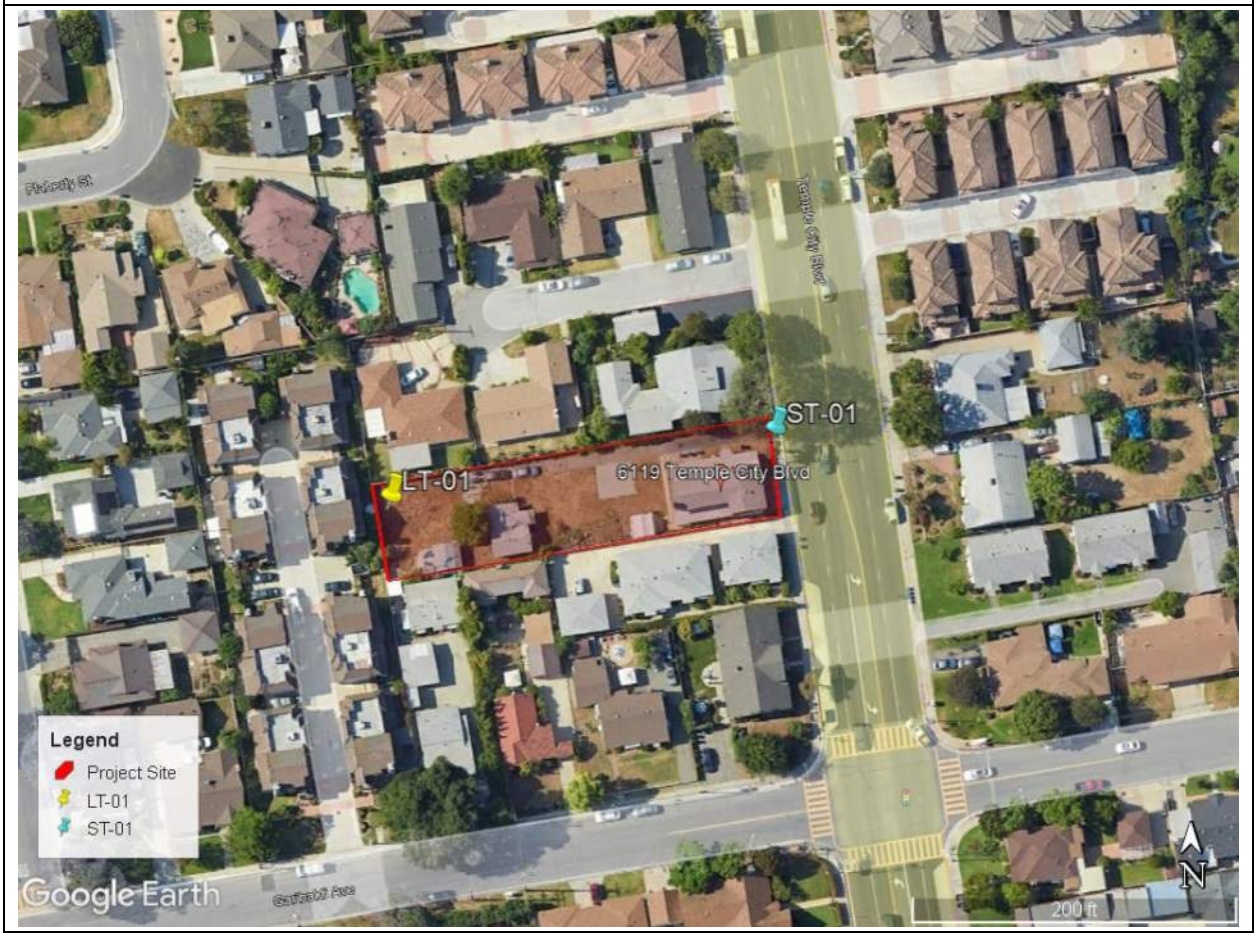
Weather conditions during the monitoring were generally clear and partially cloudy during the daytime and clear and cool during the nighttime. Temperatures ranged from the mid 60's (overnight) to the mid 80's (in the later afternoon). Winds were generally calm to mild.The ambient noise monitoring conducted included one (1) long-term (LT) and one (1) short-term (ST) measurement at locations selected to:

- Provide direct observations and measurements of existing noise sources at and in the vicinity of the proposed Project;
- Determine typical ambient noise levels at and in the vicinity of the proposed Project.

The ambient noise monitoring locations are described below and shown in Figure 1.

- Site LT-01 was located on the western side of the site, approximately five (5) feet and 14 feet from the western and northern property lines, respectively, shared with adjacent residential uses.
- Site ST-01 was on the eastern side of the site, approximately 35 feet from the centerline of Temple City Boulevard.

Figure 1: Ambient Noise Monitoring Sites



Based on observations made during the ambient noise monitoring, vehicle traffic on Temple City Boulevard is the predominant noise source in the vicinity of the project site. The results of the ambient noise monitoring are summarized in Table 2, *Summary of Measured Short-Term Ambient Noise Levels (dBA)* and Table 3, *Summary of Measured Long-Term Ambient Noise Levels (dBA)*. Refer to Attachment 2 for detailed ambient noise monitoring results.

Table 2: Summary of Measured Short-Term Ambient Noise Levels

Day/Site	Duration	Measured Noise Levels (dBA)					
		L_{eq}(A)	L_{min}(B)	L_{90}(C)	L_{50}(C)	$L_{8.3}$(C)	L_{max}(B)
Wednesday, August 23, 2023, 12:45 PM to 1:45 PM							
ST-01	1 hour	66.4	42.6	61.1	65.0	70.3	85.9
LT-01	1 hour	44.1	35.8	40.0	43.1	46.8	63.1

Source: MIG (see Attachment 2)

(A) The L_{eq} value represents the equivalent steady-state noise level that would contain the same amount of acoustical energy as the time-varying noise level during the listed period.

(B) The L_{min} and L_{max} represent the lowest and highest instantaneous noise levels measured during the listed period, respectively.

(C) Values represent the noise level exceed a certain percentage of the period, e.g., L_{90} is the noise level that was exceeded 90% of the time for the listed period.

Table 3: Summary of Measured Long-Term Ambient Noise Levels (dBA)

Day/Site	Duration	Measured Range in Hourly Noise Levels (dBA L_{eq})(A)			Calculated CNEL(B)
		Daytime (7 AM to 7 PM)	Evening (7 PM to 10 PM)	Nighttime (10 PM to 7 AM)	
Wednesday, August 23, 2023, to Thursday, August 24, 2023					
LT-01	24 hours	44.0 – 53.3	44.9 – 47.5	36.0 – 45.0	49.5

Source: MIG (see Attachment 2)

(A) Values are the lowest and highest measured average hourly values during the listed time.

(B) The 24-hour CNEL value is calculated by applying a 5 dB penalty to measured evening noise levels and a 10 dB penalty to measured nighttime noise levels. The CNEL is calculated for the following period: 11:50 AM on Wednesday, August 23, 2023, to 11:50 AM on Thursday, August 24, 2023.

As shown in Table 2 and Table 3, the measured ambient noise levels on the east side of the site next to Temple City Boulevard (ST-01) were approximately 22 dBA L_{eq} higher than the measured ambient noise levels on the interior of the site (LT-01). Based on the calculated CNEL at LT-01 (49.5 CNEL), the CNEL at the property line approximately 35 feet from the center of Temple City Boulevard is estimated to be 71.5 CNEL. This measured noise level is consistent with but slightly lower than traffic noise modeling conducted for the City's General Plan, which identified noise levels of 76 and 76.2 CNEL 50 feet from the center of Temple City Boulevard (see above).

NOISE AND VIBRATION ANALYSIS

The proposed Project would generate noise during the construction of the proposed facility. The following analysis evaluates if the Project would:

- Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of the standards established in the City of Temple City Municipal Code Title 9 (Zoning Regulations), Article P (Regulation of Excessive Noise);
- Generate excessive groundborne vibration or groundborne noise levels; or
- Expose people residing or working in the Project area to excessive airport-related noise levels.

With regard to item a), the City's Municipal Code establishes the following standards applicable to construction noise, noise / land use compatibility, and operational noise.

Construction Noise

Section 9-1P-1 of the City's Municipal Code exempts construction projects that require a building permit from noise regulations, provided that such construction activities occur on weekdays between 7:00 AM and 7:00 PM, and Saturdays between 8:00 AM to 4:00 PM., and does not occur on Sundays or federal holidays (City of Temple City, 2021).

Noise / Land Use Compatibility

The City's General Plan Hazards Element provides land use compatibility standards for community noise environments. For single-family, duplex, and multiple-family residential land uses the City's Hazard Element establishes 60 CNEL as the normally acceptable noise level, 70 CNEL as the conditionally acceptable noise level, and 75 CNEL as the normally unacceptable noise level.

Operational Noise

Section 9-1P-3 of the City's Municipal Code sets forth that no person shall create or allow the creation of any sound that causes the exterior sound level on occupied residential property to exceed 55 dBA during the daytime (7 AM to 10 PM) and 45 dBA during the nighttime (10 PM to 7 AM). Section 9-1P-1 exempts the following sources of noise from the City's Municipal Code standards:

- Property maintenance, including, but not limited to, the operation of lawn mowers, leaf blowers, etc., provided such maintenance occurs between the hours of 7 AM and 7 PM.
- Motor vehicles, other than off highway vehicles. This exemption does not include sound emanating from motor vehicle sound systems.
- Heating and air conditioning equipment.

Construction Noise (Temporary Increases in Ambient Noise Levels)

The proposed Project involves construction activities including demolition, site preparation, grading, trenching, building construction, and architectural coating activities in an existing residential area of the City. Construction activities are anticipated to begin in June 2024 and may last approximately 35 months. Typical construction equipment noise levels are shown in Table 4, *Potential Project Construction Equipment Noise Levels*.

Table 4: Potential Project Construction Equipment Noise Levels

Typical Equipment	Noise Level at 50 feet (L_{max})(A)	Percent Usage Factor(B)	Predicted Equipment Noise Levels (L_{eq})(C)						
			25 Feet	50 Feet	75 Feet	100 Feet	150 Feet	200 Feet	250 Feet
Bulldozer	85	40	87	81	77	75	71	69	67
Backhoe	80	40	82	76	72	70	66	64	62
Concrete mixer	85	40	87	81	77	75	71	69	67
Crane	88	16	86	80	77	74	70	68	66
Excavator	85	40	87	81	77	75	71	69	67
Generator	82	50	85	79	75	73	69	67	65
Pneumatic tools	85	50	88	82	78	76	72	70	68
Roller	85	20	84	78	74	72	68	66	64
Scraper	85	40	87	81	77	75	71	69	67
Delivery Truck	84	40	86	80	76	74	70	68	66

Sources: Caltrans, 2013, FHWA, 2017, and FTA 2018.

(A) L_{max} noise levels based on manufacturer's specifications.

(B) Usage factor refers to the amount (percent) of time the equipment produces noise over the time period

(C) Estimate does not account for any atmospheric or ground attenuation factors. Calculated noise levels based on Caltrans, 2013: L_{eq} (hourly) = L_{max} at 50 feet – 20log (D/50) + 10log (UF), where: L_{max} = reference L_{max} from manufacturer or other source; D = distance of interest; UF = usage fraction or fraction of time period of interest equipment is in use.

Construction activities would occur in close proximity to adjacent residential properties. As shown in Table 4, worst case hourly L_{eq} and L_{max} construction equipment noise levels are predicted to be approximately 82 and 88 dBA, respectively, at 50 feet; however, the magnitude of the Project's temporary and periodic increase in ambient noise levels would depend on the nature of the construction activity (i.e., demolition, building construction, grading) and the distance between the construction activity and sensitive receptors/outdoor use areas. Sensitive residential receptors would be within 25 feet of work areas at certain times, such as during site grading, at which distance construction equipment may reach 87 dBA L_{eq}.

The City's Municipal Code exempts construction projects that have a building permit from specific noise level standards provided the construction activities occur within specific timeframes. The proposed Project, therefore, would not generate construction noise levels that exceed City standards or otherwise result in a substantial temporary increase in ambient noise levels because:

- Building construction activities would not require substantial heavy duty equipment operations. Worst case noise levels, which would occur during demolition, site preparation, grading, and trenching would only last approximately two of the 35 months of construction.
- Construction equipment contains standard noise suppression devices such as mufflers, engine shields/covers, and engine/mechanical isolators/mounts that typically reduce engine, mechanical, and exhaust noise levels below standard reference noise levels, which are based on older equipment operations.
- The proposed Project would comply with City of Temple City Municipal Code Section 9-1P-1, which limits construction activities to the hours of 7:00 AM to 7:00 PM on weekdays

and 8:00 AM to 4:00 PM on Saturdays. This code requirement generally limits construction activities to daytime hours when people are generally considered to be least sensitive to environmental noise levels.

For the reasons described above, construction noise levels would not exceed applicable City standards, and would not result in a significant impact.

Construction Noise Control BMPs Incorporated into the Project

The Applicant would implement the following BMPs to further reduce residents' exposure to noise:

1) **Notify Residential Land Uses of Planned Construction Activities.** This notice would be provided at least one week prior to the start of any construction activities, describe the noise control measures to be implemented by the Project, and include the name and phone number of the designated contact for the Applicant/project representative and the City of Temple City responsible for handling construction-related noise complaints (per Section 6 below). This notice would be provided to: A) The owner/occupants of residential dwelling units within 200 feet of construction work areas.
2) **Restrict Work Hours:** All construction-related work activities, including deliveries, would be subject to the requirements of City Municipal Code Section 9-1P-1(G):
   a. Construction activities would not take place between the hours of 7PM and 7 AM on weekdays, between the hours of 5 PM and 8 AM on Saturdays, or at any time on Sunday or a national holiday.
   b. The Project representative and/or its construction contractor would post a sign at all entrances to the construction site informing contractors, subcontractors, construction workers, etc. of this requirement.
3) **Control Construction Traffic and Site Access.** Construction traffic, including soil and debris hauling, would follow City-designated truck routes and would avoid routes that contain residential dwelling units to the maximum extent feasible given specific Project location and access needs.
4) **Construction Equipment Selection, Use, and Noise Control Measures.** The following measures would apply to Project construction equipment:
   a. Contractors would use the smallest size equipment capable of safely completing necessary work activities.
   b. Construction staging would occur as far away from residential and other noise-sensitive land uses as possible.
   c. All stationary noise-generating equipment such as pumps, compressors, and welding machines would be shielded and located as far from noise-sensitive land uses as practical. Shielding may consist of structures or three- or four-sided enclosures provided the structure/enclosure breaks the line of sight between the equipment and the noise-sensitive land use and provides for proper ventilation and equipment operation.
   d. Heavy equipment engines would be equipped with standard noise suppression devices such as mufflers, engine covers, and engine/mechanical isolators, mounts, etc. Equipment would be maintained in accordance with manufacturer's recommendations during active construction activities.
   e. Pneumatic tools would include a noise suppression device on the compressed air exhaust.

f. The Project would connect to existing electrical service at the site to avoid the use of stationary power generators (if feasible and approved by the electric service provider).
g. Sequence demolition activities to take advantage of existing shielding/noise reduction by existing buildings or parts of buildings and use methods that minimize noise and vibration, such as sawing concrete blocks and prohibiting on-site hydraulic breakers, crushing, or other pulverization activities.

5) **Install Temporary Noise Barrier.** During all demolition, excavation site preparation, grading, and structural foundation work activities at the Project site, a physical noise barrier would be installed and maintained around the site perimeter (exempting Temple City Boulevard frontage) to the maximum extent feasible given site constraints and access requirements.
   a. The barrier would reach a height of eight (8 feet) above grade and would consist of any solid material (i.e., free of openings or gaps other than weep holes) with a density of four pounds per square foot or otherwise documented to have a minimum transmission loss (TL) value of 20 dBA . Alternatively, acoustic panels or other products such as acoustic barrier blankets that have a minimum sound transmission class (STC) or TL value of 20 dB may be affixed to chain link or other fencing.
   b. The noise barrier may be removed following the completion of building foundation work (i.e., it is not necessary once framing and typical vertical building construction begins provided no other grading, foundation, etc. work is still occurring on-site).
6) **Prepare a Construction Noise Complaint Plan.** The Construction Noise Complaint Plan would:
   a. Identify the name and/or title and contact information (including phone number and email) for a designated Project and City representative responsible for addressing construction-related noise issues.
   b. Include procedures describing how the designated Project representative will receive, respond, and resolve construction noise complaints.

At a minimum, upon receipt of a noise complaint, the Project representative would notify the City contact, identify the noise source generating the complaint, determine the cause of the complaint, and take steps to resolve the complaint.

For the reasons outlined above, including the implementation of BMPs, the proposed Project's construction activities would not generate noise levels that exceed City standards or otherwise result in a substantial, temporary increase in ambient noise levels at sensitive receptor locations.

Operational Noise Levels

The Project would not generate substantial operational noise from landscaping equipment, vehicle parking, heating, ventilation, and air conditioning (HVAC) units, and other residential activities. Section 9-1P-1 of the Temple City Municipal Code exempts these sources (property maintenance occurring between 7 AM and 7 PM, motor vehicles, and heating and air conditioning equipment) from provisions in the code that regulate noise. In addition, the noise generated by the proposed 18-unit residential facility would be similar to the noise generated by existing residential uses. Therefore, the operation of the Project would not generate on-site noise that would exceed Municipal Code requirements or otherwise substantially increase ambient noise levels in the vicinity of the Project. In addition, the Project would not generate substantial off-site noise. The existing vehicle traffic on the road segment adjacent to the Project site is much higher than the additional traffic the Project could generate. There is an estimated 29,119 average daily trips on the segment of Temple City Boulevard from El Camino Real to Garibaldi (City of Temple

City 2017a). By comparison, the average daily trips estimated for this Project using CalEEMod default assumptions was 87.0 trips for weekdays, 78.6 trips for Saturdays, and 65.4 trips for Sundays (MIG, 2023). Caltrans considers a doubling of total traffic volume to result in a three dBA increase in traffic-related noise levels (Caltrans, 2013). The operation of the Project would not double traffic volumes on local roads used to access the site, therefore it would not generate a substantial increase in off-site noise levels.

Groundborne Vibration

The potential for groundborne vibration is typically greatest when vibratory or large equipment such as rollers or bulldozers are in operation. For the proposed Project, these types of equipment would primarily operate during demolition, site preparation, grading, and paving. This equipment would, at worst-case, operate adjacent to the site's property lines and within approximately 25 feet of the nearest residential building (to the south) but would generally take place 40 feet or more from receptor locations. The potential groundborne vibration levels that typical construction equipment can produce is listed in Table 5, *Potential Project Construction Equipment Vibration Levels*.

Table 5: Potential Project Construction Equipment Vibration Levels

Equipment	Peak Particle Velocity (in/sec) (A)				Velocity Decibels (VdB) (B)			
	25 feet	50 feet	75 feet	100 feet	25 feet	50 feet	75 feet	100 feet
Vibratory Roller	0.210	0.074	0.040	0.026	94.0	85.0	79.7	75.9
Large bulldozer	0.089	0.031	0.017	0.011	87.0	78.0	72.7	68.9
Auger Drill Rig	0.089	0.031	0.017	0.011	87.0	78.0	72.7	68.9
Loaded truck	0.076	0.027	0.015	0.010	86.0	77.0	71.7	67.9
Jackhammer	0.035	0.012	0.007	0.004	79.0	70.0	64.7	60.9
Small bulldozer	0.03	0.001	0.001	<0.001	58.0	49.0	43.7	39.9

Source FTA 2018.

(A) Estimated Peak Particle Velocity (PPV) calculated as: PPV(D)=PPV(ref)*(25/D)^1.5 where PPV(D)= Estimated PPV at distance; PPVref= Reference PPV at 25 ft; D= Distance from equipment to receiver; and n= ground attenuation rate (1.5 per FTA guidance).

(B) Estimated Lv calculated as: Lv(D)=Lv(25 feet)-30Log(D/25) where Lv(D)= estimated velocity level in decibels at distance, Lv(25 feet)= RMS velocity amplitude at 25 feet; and D= distance from equipment to receiver.

The City's General Plan evaluated construction-induced vibration effects using Federal Transit Administration (FTA) guidelines for potential human annoyance and architectural damage (City of Temple City, 2017, Table 5.9-13). For human annoyance at residential land uses, the General Plan applied a vibration level threshold, in decibels (VdB), of 78 VdB for potential daytime annoyance effects. For architectural damage, the General Plan applied a peak particle velocity (PPV) threshold of 0.2 inches per second as the threshold at which there is a risk of architectural damage to normal dwellings (i.e., houses with plastered ceiling and walls). As shown in Table 5, specific vibration levels associated with specific construction equipment are highly dependent on distance and intensity of the equipment used. Specifically:

- **Potential for Physical Damage to a Building or Structure:** Typical equipment operations (e.g., bulldozer, jack hammer, trucks, etc.) are estimated to produce a maximum PPV level of 0.089 in/sec at 25 feet, which is less than the 0.2 in/sec PPV threshold for architectural damage for normal dwellings identified in the City's General Plan. Specific vibration-generating equipment, such as a large vibratory roller could produce a maximum PPV level of 0.210 in/sec at 25 feet, which would be above the 0.2 in/sec PPV threshold identified in the City's General Plan.
- **Potential for Human Annoyance:** For most typical equipment operations, groundborne vibration levels would not exceed 78 VdB at a distance of 50 feet; however, within 50 feet, the use of large, heavy equipment such as a large bulldozer or drill rig could produce vibration levels above 78 VdB. Specific vibration-generating equipment could generally produce vibration levels that exceed 78 VdB up to 90 feet from equipment operating areas.

Most equipment that would be used to construct the proposed Project would not generate excessive vibrations because equipment operations would be intermittent (not occur every day), limited in duration (equipment would move throughout work areas and not operate in the same location for a prolonged amount of time), and occur during the daytime (when receptors would not be sleeping and, therefore, are considered less sensitive to vibration levels). While typical equipment would not have the potential to produce vibration levels that could result in architectural damage, large bulldozers and other similar equipment could generate vibrations at residences within approximately 50 feet of work areas that could be perceptible and annoying. Specific vibration-generating equipment such as a vibratory roller would have the potential to generate vibration levels that could result in architectural damage to buildings (vibration levels above 0.2 in/sec PPV) and human annoyance (vibration levels above 78 VdB) within 25 feet and 90 feet of work areas, respectively. The applicant would implement BMPs for the control of ground borne vibrations, including the use of wheeled instead of tracked equipment (which is usually heavier, larger, and generates more vibrations) and a prohibition on the use of a vibratory roller at the site or, if such prohibition is not feasible, the preparation of a project-specific vibration plan that ensures equipment and work activities would not result in vibrations that exceed City vibration thresholds for architectural damage (0.2 in/sec PPV) or human annoyance at residential daytime uses (78 VdB). The incorporation of these BMPs into the project design would render the proposed project's potential construction vibration levels a less than significant impact. Once operational, the proposed Project would not have any large equipment that would generate vibration.

Construction Vibration Control BMPs incorporated into the Project

The Applicant would incorporate the following BMPs into the project design to ensure construction vibration levels do not exceed 0.2 in/sec PPV and/or 78 VdB at adjacent structures:

1) **Minimize Vibration-Generating Activities.** The applicant would employ demolition methods that minimize vibration, such as sawing concrete blocks and prohibiting the use of hydraulic breakers, crushing activities, or other pulverization activities.
2) **Minimize Use of Vibration-Generating Equipment**. The applicant would:
    a. Use the smallest size equipment capable of safely completing necessary work activities.
    b. Use wheeled equipment instead of tracked equipment. The use of tracked equipment would be prohibited at the project site.

c. Prohibit the use of vibratory rollers, vibratory/impact hammers and other potential large vibration-generating equipment (e.g., hydraulic breakers/hoe rams) would be prohibited within 25 feet of adjacent buildings. Plate compactors and compactor rollers are acceptable. If it is not feasible to prohibit the use of vibratory equipment within 25 feet of a building façade due to site- or project-specific conditions or design considerations, a project-specific construction vibration evaluation plan would be prepared that identifies planned vibration-generating construction activities and potential ground-borne vibration levels (given specific equipment and soil conditions) at specific receptor locations and the vibration control measures that will be employed to ensure equipment and work activities would not result in vibrations that exceed the City's architectural damage (0.2 inches/second peak particle velocity) and human annoyance criterion for daytime residential uses (78 VdB). Such measures may include but are not limited to the use of vibration monitoring to measure actual vibration levels, the use of photo monitoring or documentation of building conditions prior to, during, and after construction activities, and/or the use of trenches or barriers that attenuate ground-borne vibration

d. Auger drill any deep foundation piers or caissons required as part of the project.

Airport-Related Noise

The closest airport, San Gabriel Valley Airport, is located approximately 2.3 miles southeast of the proposed Project. The proposed Project is not located within the planning boundaries of the airport (County of Los Angeles 1995, San Gabriel Valley Airport 2015). Thus, the proposed Project would not expose people working in or visiting the Project area to excessive airport-related noise levels.

Other Planning Considerations – Noise and Land Use Compatibility

The *California Supreme Court in California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal.4th 369 (2015) ruled that CEQA review is focused on a project's impact on the environment "and not the environment's impact on the project." Per this ruling, a Lead Agency is not required to analyze how existing conditions might impact a project's future users or residents; however, a Lead Agency may elect to disclose information relevant to a project even if it not is considered an impact under CEQA. Furthermore, the City's General Plan Hazard Element sets noise standards for receiving land uses which require evaluation for consistency and compliance even if such evaluation is not required by CEQA.

<u>Exterior Noise Exposure</u>

As described above, the measured ambient noise level at the project property line adjacent to Temple City Boulevard was 71.5 CNEL. Based on modeling conducted for the City's General Plan, traffic noise levels on Temple City Boulevard are expected to change by 0.2 CNEL by 2050, meaning future noise exposure levels at the project property line could be up to 71.7 CNEL.

The proposed Project property line is approximately 35 feet from the centerline Temple City Boulevard, while the nearest building façade (associated with exterior wall of the first and second floor units fronting Temple City Boulevard) would be at least 55 feet from the road centerline. At these distances, future exterior noise levels at the Project property line and exterior building façade fronting Temple City Boulevard would be approximately 71.7 CNEL and 69.6 CNEL, respectively.

The proposed Project includes yard/courtyard/garden areas on the eastern and southern side of the property that could be exposed to noise levels (up to 71.7 CNEL) that exceed the City's 70 CNEL conditionally acceptable noise level for multi-family residential land uses. It is noted that the majority of the approximately 240-foot-long side yard/garden area would be exposed to noise levels below 70 CNEL.[2] However, the front yard and approximately 15 feet of the side yard (as measured from the property line fronting Temple City Boulevard) could be exposed to noise levels above 70 CNEL. To effectively control noise in the areas closest to Temple City Boulevard, the Applicant would need to incorporate a solid barrier along the eastern perimeter of the Project property line (fronting Temple City Boulevard); however, a solid barrier is not feasible for the proposed Project because the only pedestrian and vehicular access to the site is via the Temple City Boulevard frontage. A solid barrier, therefore, would preclude residential and vehicular access to the site. A solid barrier installed along only a part of the site's Temple City Boulevard frontage would not effectively reduce noise levels in the Courtyard area to below 70 CNEL. The Project, therefore, would have a compatibility issue regarding exterior noise exposure.

The City does not consider the compatibility issue a CEQA impact. The exterior noise exposure is an existing issue that the proposed Project does not exacerbate because it would not meaningfully change traffic volumes or traffic noise levels on Temple City Boulevard. As discussed above, *The California Supreme Court in California Building Industry Association v. Bay Area Air Quality Management District* 62 Cal.4th 369 (2015) ruled that the environment's impact on a project is not an impact under CEQA. The Project's exterior noise exposure would, therefore, be a planning issue, and not a CEQA issue.

The proposed Project does not include any other common or private exterior use areas that would be subject to noise levels above 70 CNEL due to setbacks from Temple City Boulevard.

Interior Noise Compatibility

The California Building Standards Code establishes that interior noise levels attributable to exterior noise sources shall not exceed 45 DNL or CNEL (as established by the local General Plan) for residential developments. As described above, daily noise exposure levels at the exterior building façade fronting Temple City Boulevard could be up to 69.6 CNEL, requiring 24.6 dB of attenuation to meet the 45 CNEL interior noise standard.

Typical building construction provides an exterior-to-interior noise reduction of approximately 12 dBA with windows open and approximately 25 dBA with windows closed. [3] For this study, typical standard construction techniques include a basic framed wall with an STC rating of 39, consisting of 5/8" siding, ½" insulation board sheathing, 2"x4" studs spaced every 16", standard fiberglass insulation, and ½" drywall; windows and doors are rated STC 27 and occupy no more than 50% of the exterior wall area. Exterior stucco walls, such as that included in the proposed Project, provide greater exterior to noise attenuation (approximately 27 to 30 dBA with windows closed) provided window and door coverings also do not exceed 50% of the exterior wall surface (which

[2] Based on the ambient noise modeling conducted for the Project, future Temple City Boulevard traffic noise levels would attenuate to 70 CNEL approximately 50 feet from the road center, or 15 feet from the Project property line. Thus approximately 230 feet of the 245-foot-long sideyard would be exposed to noise levels less than 70 CNEL.

[3] The U.S. Department of Housing and Urban Development (HUD) Noise Guidebook and supplement (2009a, 2009b) includes information on noise attenuation provided by building materials and different construction techniques. As a reference, a standard exterior wall consisting of 5/8-inch siding, wall sheathing, fiberglass insulation, two by four wall studs on 16-inch centers, and 1/2-inch gypsum wall board with single strength windows provides approximately 35 dBs of attenuation between exterior and interior noise levels. Increasing window space may also decrease attenuation, with a reduction of 10 dBs possible if windows occupy 30% of the exterior wall façade.

is the case for the proposed Project). Cracks and openings in window and door assemblies can reduce exterior to interior noise attenuation. Mechanical ventilation must also be provided to allow for use of residential areas with windows closed.

Based on the above, standard exterior wall and roof assembly requirements would be sufficient to meet the interior noise standard of 45 CNEL; however, the final exterior assemblies would need to be reviewed and confirmed, and mechanical ventilation must be provided for the Project.

MIG recommends the Project implement the following BMPs to reduce interior noise levels in residential dwelling units:

Interior Noise Control BMPs

To ensure residential unit interior noise levels do not exceed 45 CNEL, the Applicant would incorporate the following interior noise control measures into the Project design:

1) **Provide mechanical ventilation.** The Project will require forced air mechanical ventilation in all units to permit occupancy of units with windows closed.
2) **Window and sliding door sound transmission class (STC) ratings.** All windows and doors (including sliding doors) included in all exterior wall assemblies for units fronting Temple City Boulevard would have a minimum STC rating of 30.
3) **Window and door assemblies.** Solid core doors would be used in all non-sliding exterior door designs. All window and door assemblies (including sliding doors) would be well-fitted, sealed, and weather-stripped. Window and would assemblies (perimeter of assembly and any gaps during assembly installation) would be sealed with an acoustical caulk/sealant to reduce noise transmission.
4) **Prepare final acoustical analysis.** The Applicant would prepare a final acoustical analysis demonstrating the final exterior wall assembly for units fronting Temple City Boulevard provides a minimum exterior-to-interior noise reduction of 25 dBA.

The implementation of the interior noise control BMPs above would reduce interior noise to levels 45 CNEL or less and require the Applicant to verify the final design of the exterior wall assembly meets applicable noise standards.

CONCLUSION

As described in this memo, the proposed Project would not generate temporary or permanent noise levels that would conflict with the City's standards or otherwise result in a substantial increase in ambient noise levels, would not generate excessive groundborne vibration or groundborne noise levels, and would not expose people residing or working in the Project area to excessive aircraft noise levels. The proposed Project, therefore, would not result in a substantial, adverse noise-related effect on the environment.

REFERENCES

The following references were used to prepare this memorandum:

California Department of Transportation (Caltrans) 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol.* Sacramento, California. September 2013.

_____2020. *Transportation and Construction Vibration Guidance Manual*. Sacramento, California. April 2020.

City of Temple City. 2017a. Temple City Mid-Century General Plan. December 5, 2017. https://www.arcgis.com/apps/MapSeries/index.html?appid=0b31b861a64d4eeba44228116c60c78c

_____. 2017b. Temple City General Plan Update and Temple City Crossroads Specific Plan Draft EIR. Prepared by Placeworks. June 2017. https://www.ci.temple-city.ca.us/DocumentCenter/View/9537/Attachment-B---Draft-Environmental-Impact-Report?bidId=

_____2017c. Temple City Mid-Century General Plan. December 5, 2017. https://www.arcgis.com/apps/MapSeries/index.html?appid=0b31b861a64d4eeba44228116c60c78c

_____2020. Temple City Updated Zoning Map. https://templecitypw.maps.arcgis.com/apps/View/index.html?appid=cffc8ef0aff74b428d6d1cf85983ed5e

_____2021. Temple City, CA Code of Ordinances. Title 9 Zoning Regulations. Article P. Regulation of Excessive Noise. https://codelibrary.amlegal.com/codes/templecityca/latest/templecity_ca/0-0-0-36579

County of Los Angeles. 1995. El Monte Airport Master Report. El Monte, California. June 1995. https://dpw.lacounty.gov/avi/airports/documents/SGV_MP.pdf

MIG, Inc. 2023. Air Quality Analysis for 6119 Temple City Boulevard Residential Project. September 14, 2023.

San Gabriel Valley Airport. 2015. Airport Layout Plan Drawing Set. Prepared by AECOM. May 2015. https://planning.lacounty.gov/assets/upl/project/aluc_elmonte-plan.pdf

TAG Design Works, 2024. 6119 Temple City Boulevard Site Plan. Conceptual Design 18-unit Residential.

U.S. Federal Highway Administration (FHWA) 2017. “Construction Noise Handbook, Chapter 9 Construction Equipment Noise Levels and Ranges: 2010. Updated August 24, 2017. < https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm>

U.S. Federal Transit Administration (FTA) 2018. *Transit Noise and Vibration Impact Assessment Manual*. FTA Report No. 0123. Prepared by John A. Volpe National Transportation Systems Center. Washington, DC. September 2018.

U.S. HUD. 2009a.HUD Noise Guidebook. Prepared by the Environmental Planning Division, Office of Environment and Energy. March 2009.

_____2009b. HUD Noise Guidebook, Chapter 4 Supplement: Sound Transmission Class Guidance. Prepared by the Environmental Planning Division, Office of Environment and Energy. March 2009.

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Attachment 1

Noise Background

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NOISE BACKGROUND

Noise may be defined as loud, unpleasant, or unwanted sound. The frequency (pitch), amplitude (intensity or loudness), and duration of noise all contribute to the effect on a listener, or receptor, and whether the receptor perceives the noise as objectionable, disturbing, or annoying.

The Decibel Scale (dB)

The decibel scale (dB) is a unit of measurement that indicates the relative amplitude of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a tenfold increase in acoustic energy, while 20 dBs is 100 times more intense, 30 dBs is 1,000 more intense, and so on. In general, there is a relationship between the subjective noisiness, or loudness of a sound, and its amplitude, or intensity, with each 10 dB increase in sound level perceived as approximately a doubling of loudness. Due to the logarithmic basis, decibels cannot be directly added or subtracted together using common arithmetic operations:

$$50\ decibels + 50\ decibels\ \neq 100\ decibels$$

Instead, the combined sound level from two or more sources must be combined logarithmically. For example, if one noise source produces a sound power level of 50 dBA, two of the same sources would combine to produce 53 dB as shown below.

$$10 * \ 10\ log\left(10^{\left(\frac{50}{10}\right)} + \ 10^{\left(\frac{50}{10}\right)}\right) = 53\ decibels$$

In general, when one source is 10 dB higher than another source, the quieter source does not add to the sound levels produced by the louder source because the louder source contains ten times more sound energy than the quieter source.

Sound Characterization

There are several methods of characterizing sound. The most common method is the "A-weighted sound level," or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is typically most sensitive. Thus, most environmental measurements are reported in dBA, meaning decibels on the A-scale.

Human hearing matches the logarithmic A-weighted scale, so that a sound of 60 dBA is perceived as twice as loud as a sound of 50 dBA. In a quiet environment, an increase of 3 dB is usually perceptible, however, in a complex noise environment such as along a busy street, a noise increase of less than 3 dB is usually not perceptible, and an increase of 5 dB is usually perceptible. Normal human speech is in the range from 50 to 65 dBA. Generally, as environmental noise exceeds 50 dBA, it becomes intrusive and above 65 dBA noise becomes excessive. Nighttime activities, including sleep, are more sensitive to noise and are considered affected over a range of 40 to 55 dBA.

Sound levels are typically not steady and can vary over a short time period. The equivalent noise level (L_{eq}) is used to represent the average character of the sound over a period of time. The L_{eq} represents the level of steady noise that would have the same acoustical energy as the sum of the time-varying noise measured over a given time period. L_{eq} is useful for evaluating shorter time periods over the course of a day. The most common L_{eq} averaging period is hourly, but L_{eq} can describe any series of noise events over a given time period.

Variable noise levels are values that are exceeded for a portion of the measured time period. Thus, L_{01} is the level exceeded one percent of the time and L90 is the level exceeded 90 percent of the time. The L_{90} value usually corresponds to the background sound level at the measurement location.

Noise exposure over the course of an entire day is described by the day/night average sound level, or DNL (also referred to as L_{dn}), and the community noise equivalent level, or CNEL. Both descriptors represent the 24-hour noise impact on a community. For DNL, the 24-hour day is divided into a 15-hour daytime period (7 AM to 10 PM) and a nine-hour nighttime period (10 PM to 7 AM) and a 10 dB "penalty" is added to measure nighttime noise levels when calculating the 24-hour average noise level. For example, a 45-dBA nighttime sound level would contribute as much to the overall day-night average as a 55-dBA daytime sound level. The CNEL descriptor is similar to DNL, except that it includes an additional 5 dBA penalty beyond the 10 dBA for sound events that occur during the evening time period (7 PM to 10 PM). The artificial penalties imposed during DNL and CNEL calculations are intended to account for a receptor's increased sensitivity to sound levels during quieter nighttime periods.

Sound Propagation

The energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out and travels away from the noise generating source. Theoretically, the sound level of a point source attenuates, or decreases, by 6 dB with each doubling of distance from a point source. Sound levels are also affected by certain environmental factors, such as ground cover (asphalt vs. grass or trees), atmospheric absorption, and attenuation by barriers. Outdoor noise is also attenuated by the building envelope so that sound levels inside a residence are from 10 to 20 dB less than outside, depending mainly on whether windows are open for ventilation or not.

For an ideal "point" source of sound, the energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out in a spherical pattern and travels away from the point source. Theoretically, the sound level attenuates, or decreases, by 6 dB with each doubling of distance from the point source. The change in noise levels between two distances can be calculated according to Equation 1 (California Department of Transportation (Caltrans), 2013a) as follows:

Equation 1

$$dBA2 = dBA1 + 20\log (D1/D2)$$

Where:

dBA1 = Known noise level, such as a reference noise level
D1 = Distance associated with dBA1
dBA2 = Noise level at distance 2
D2 = Distance associated with dBA2

For an ideal line source of sound, the energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out in a cylindrical pattern from the source. Theoretically, the sound level attenuates, or decreases, by 3 dB with each doubling of distance from the line source. The change in noise levels between two distances can be calculated according to Equation 2 as follows:

Equation 2
dBA2 = dBA1 + 10log (D1/D2)

Where:

dBA1 = Known noise level, such as a reference noise level
D1 = Distance associated with dBA1
dBA2 = Noise level at distance 2
D2 = Distance associated with dBA2

Noise Effects on Humans

Noise effects on human beings are generally categorized as:

- Subjective effects of annoyance, nuisance, and/or dissatisfaction
- Interference with activities such as speech, sleep, learning, or relaxing
- Physiological effects such as startling and hearing loss

Most environmental noise levels produce subjective or interference effects; physiological effects are usually limited to high noise environments such as industrial manufacturing facilities or airports.

Predicting the subjective and interference effects of noise is difficult due to the wide variation in individual thresholds of annoyance and past experiences with noise; however, an accepted method to determine a person's subjective reaction to a new noise source is to compare it the existing environment without the noise source, or the "ambient" noise environment. In general, the more a new noise source exceeds the ambient noise level, the more likely it is to be considered annoying and to disturb normal activities.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1-dB changes in sound levels when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency (1,000–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness that would almost certainly cause an adverse response from community noise receptors.

When exposed to high noise levels, humans may suffer hearing damage. Sustained exposure to high noise levels (e.g., 90 dBs for hours at a time) can cause gradual hearing loss, which is usually temporary, whereas sudden exposure to a very high noise level (e.g., 130 to 140 dBs) can cause sudden and permanent hearing loss. In addition to hearing loss, noise can cause stress in humans and may contribute to stress-related diseases, such as hypertension, anxiety, and heart disease (Caltrans, 2013).

Vibration

Vibration is the movement of particles within a medium or object such as the ground or a building. As is the case with airborne sound, groundborne vibrations may be described by amplitude and frequency. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared, in inches per second (in/sec). PPV represents the maximum instantaneous positive or negative peak of a vibration signal and is most appropriate for evaluating the potential for building damage. Human response to groundborne vibration is subjective and varies from person to person.

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Attachment 2

Ambient Noise Data

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6119 Temple City Boulevard 18-Unit Residential Project - Temple City, CA
Attachment 2: Ambient Noise Monitoring Data Summary Prepared by MIG, August 2023

TABLE 1: SUMMARY OF SITE LT1 NOISE MONITORING DATA

Date	Time	Duration	Leq	CNEL	Lmin	Lmax	L1.7	L8.3	L16.7	L25	L50	L90
8/23/2023	11:40 AM	20 mins	49.2	49.2	33.0	73.9	60.1	52.2	49.5	48.1	44.4	39.6
8/23/2023	12:00 PM	50 mins	48.4	48.4	33.5	71.2	55.7	53.0	51.5	49.3	44.9	40.4
8/23/2023	1:00 PM	1 hour	44.0	44.0	35.8	58.6	49.2	46.8	45.6	44.8	43.2	40.1
8/23/2023	2:00 PM	1 hour	47.5	47.5	39.1	70.8	54.7	50.5	49.1	47.9	45.6	43.4
8/23/2023	3:00 PM	1 hour	53.3	53.3	39.0	67.4	57.8	56.8	55.7	54.5	52.1	48.6
8/23/2023	4:00 PM	1 hour	48.1	48.1	42.1	66.7	54.7	51.7	49.5	48.3	46.3	44.2
8/23/2023	5:00 PM	1 hour	46.6	46.6	42.0	59.2	51.0	48.9	48.0	47.3	45.8	44.0
8/23/2023	6:00 PM	1 hour	46.2	46.2	41.4	57.1	50.3	48.6	47.6	47.0	45.5	43.5
8/23/2023	7:00 PM	1 hour	47.5	52.5	35.9	68.7	54.9	51.3	48.7	47.6	45.3	43.3
8/23/2023	8:00 PM	1 hour	45.6	50.6	34.7	64.6	51.3	49.2	47.9	46.7	44.4	40.0
8/23/2023	9:00 PM	1 hour	44.9	49.9	38.1	69.5	52.6	48.6	45.4	44.3	42.7	41.2
8/23/2023	10:00 PM	1 hour	42.5	52.5	36.6	52.0	46.3	44.7	43.8	43.2	41.8	40.4
8/23/2023	11:00 PM	1 hour	41.2	51.2	37.1	51.3	45.4	43.4	42.1	41.5	40.4	39.5
8/23/2023	12:00 AM	1 hour	38.5	48.5	35.1	48.3	43.0	40.6	39.3	38.5	37.6	36.9
8/23/2023	1:00 AM	1 hour	39.0	49.0	34.9	63.1	46.8	41.8	39.1	38.0	37.1	36.6
8/23/2023	2:00 AM	1 hour	37.1	47.1	32.9	51.1	42.6	39.4	37.6	36.9	36.2	35.7
8/23/2023	3:00 AM	1 hour	36.0	46.0	31.9	50.3	42.3	38.9	36.7	35.7	34.5	33.9
8/23/2023	4:00 AM	1 hour	37.3	47.3	33.0	49.7	42.9	40.3	38.5	37.3	35.9	35.1
8/23/2023	5:00 AM	1 hour	40.6	50.6	35.4	61.1	46.9	43.7	41.9	40.9	38.9	37.3
8/23/2023	6:00 AM	1 hour	45.0	55.0	36.5	68.1	53.2	48.5	46.3	45.3	42.9	39.6
8/23/2023	7:00 AM	1 hour	46.9	46.9	36.1	66.8	53.5	50.5	48.6	47.6	45.6	41.0
8/23/2023	8:00 AM	1 hour	46.0	46.0	35.4	67.1	52.1	49.0	47.7	46.9	44.9	41.2
8/23/2023	9:00 AM	1 hour	46.3	46.3	37.0	65.7	52.6	49.5	48.0	47.0	44.9	41.9
8/23/2023	10:00 AM	1 hour	45.8	45.8	33.1	70.9	53.4	49.8	47.8	46.5	43.7	39.7
8/23/2023	11:00 AM	50 mins	46.5	46.5	31.5	68.8	54.6	50.7	48.8	46.3	43.7	39.3
Daytime (7 AM to 7 PM)			*48.0*	*--*	*31.5*	*73.9*	*55.1*	*51.6*	*50.1*	*48.8*	*46.4*	*43.1*
Evening (7 PM to 10 PM)			*46.1*	*--*	*34.7*	*69.5*	*53.2*	*49.8*	*47.6*	*46.4*	*44.3*	*41.7*
Nightime (10 PM to 7 AM)			*40.6*	*--*	*31.9*	*68.1*	*47.1*	*43.5*	*41.7*	*40.8*	*39.2*	*37.7*
	24-hour CNEL		--	***49.5***			**-**	-	-	-	-	-

TABLE 2: SUMMARY OF SITE ST-01 and LT-01 NOISE MONITORING DATA

Date	Site	Time	Duration	Leq	Lmin	Lmax	L8.3	L50	L90
8/23/2023	ST-01	12:45 PM	1 hour	66.4	42.6	85.9	70.3	65.0	61.1
8/23/2023	LT-01	12:45 PM	1 hour	44.1	35.8	63.1	46.8	43.1	40.0

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Attachment D: Vehicle Miles Traveled (VMT) Screening Assessment

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Memo

To: Alex Lai, Manager, Longo Investment Inc.

From: Cameron Hile, Senior Analyst, MIG
Chris Dugan, Director Air Quality, Greenhouse Gas, and Noise Services, MIG

Date: March 18, 2024

SUBJECT: Vehicle Miles Traveled (VMT) Screening Assessment for the Proposed 6119 Temple City Boulevard 18-Unit Residential Project

MIG is pleased to provide this Vehicle Miles Traveled (VMT) screening assessment for the proposed 6119 Temple City Boulevard 18-Unit Residential Project in the City of Temple City, California. We understand the City of Temple City has requested the preparation of this VMT screening assessment to support the environmental review of the proposed Project. This document evaluates the proposed Project's VMT against the City's Local Transportation Assessment Guidelines regarding VMT thresholds of significance for the purposes of analyzing transportation impacts under the California Environmental Quality Act (CEQA). The City's thresholds are also consistent with the recommended screening criteria contained in the State of California Governor's Office of Planning and Research (OPR)'s 2018 *Technical Advisory on Evaluating Transportation Impacts in CEQA.*

PROJECT DESCRIPTION

The proposed Project is located at 6119 Temple City Boulevard (APN #5385-012-007) in the City of Temple City, California. The proposed Project includes demolition of two existing dwelling units and construction of a 3-story, residential building with multi-family dwelling 18 units. The Project would include two (2) studio units, eight (8) one-bedroom units, six (6) two-bedroom units, and two (2) three-bedroom units. The studio units would be 600 square feet, the one-bedroom units would be either 760 square feet or 870 square feet, the two-bedroom units would be 1,100 square feet, and the three-bedroom units would be either 1,250 square feet or 1,620 square feet. Two of the eighteen dwelling units would be reserved as "very low income" housing. The Project would include basement parking and a total of 22 parking stalls, one of which would be ADA accessible. Excavation for the basement parking would result in the net export of approximately 4,896 cubic yards of soils and would extend to approximately 11 feet below grade. The Project would have a modern architectural style with light sand finish stucco, wood siding, nature grey concrete, wood trellises, vinyl windows, and aluminum frame glass doors. The Project includes approximately 3,850 square feet of open space, courtyards, and landscaping. Vehicular access would be provided via a driveway ramp on Temple City Boulevard. The driveway would provide direct access to the basement parking.

OVERVIEW OF SENATE BILL 743 & VMT-BASED ANALYSIS

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743 (Steinberg, 2013). Among other things, SB 743 creates a process to change the methodology to analyze transportation impacts under CEQA (Public Resources Code section 21000 and following), which could include

analysis based on project VMT rather than impacts to intersection Level of Service (LOS). Under SB 743, the focus of transportation analysis pursuant to CEQA shifts from driver delay, or LOS, to reduction of VMT, reduction in greenhouse gas emissions, creation of multimodal networks and promotion of mixed-use developments.

On December 30, 2013, the OPR released a preliminary evaluation of alternative methods of transportation analysis. The intent of the original guidance documentation was geared first towards projects located within areas that are designated as transit priority areas, to be followed by other areas of the State. OPR updated the technical advisory that accompanies the revised CEQA Guidelines in April 2018 and submitted the proposed updates to the CEQA Guidelines to the California Natural Resources Agency (NRA). In December 2018, the California Natural Resources Agency certified and adopted amendments to the CEQA Guidelines implementing SB 743 with an implementation date of July 1, 2020.

The updated CEQA Guidelines allow for Lead Agency discretion in establishing methodologies and thresholds provided there is substantial evidence to demonstrate that the established procedures promote the intended goals of the legislation. Where quantitative models or methods are unavailable, CEQA Guidelines Section 15064.3 allows agencies to assess VMT qualitatively using factors such as availability of transit and proximity to other destinations. The *Technical Advisory on Evaluating Transportation Impacts in CEQA* ("*Technical Advisory*") provides considerations regarding methodologies and thresholds with a focus on office, residential, and retail developments as these projects tend to have the greatest influence on VMT. As of the preparation of this assessment, many jurisdictions including the City of Temple City have now implemented updated procedures for VMT analysis.

VMT SCREENING ASSESSMENT

This VMT screening assessment has been prepared in accordance with the City's *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment*. Pursuant to current statutes, the City of Temple City has adopted VMT as the metric for determining environmental impacts. The guidelines have established screening criteria pertaining to project trip generation forecasts, project land use types (i.e., local serving retail, affordable housing, etc.), proximity to transit, and locality within a low VMT-generating area. The City's *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment* also establish screening thresholds for certain types of projects that may be presumed to cause a less than significant VMT impact based on substantial evidence provided in the OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018). The City's *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment* specify the following three (3) types of potential screening criteria that may be applied to screen projects from project-level assessment: 1) Transit Priority Area (TPA) Screening; 2) Low VMT Area Screening; and 3) Project Type Screening.

<u>Transit Priority Area (TPA) Screening</u>
Projects located within a TPA (half mile area around an existing major transit stop or an existing stop along a high-quality transit corridor) may be presumed to have a less than significant impact absent substantial evidence to the contrary. This presumption may not be appropriate if the project:

1. Has a Floor Area Ratio (FAR) of less than 0.75;
2. Includes more parking for use by residents, customers, or employees of the project than required by the City;

3. Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency with input from the Southern California Association of Governments [SCAG]): or
4. Replaces affordable residential units with a smaller number of moderate or high-income residential units.

The San Gabriel Valley Council of Governments (SGVCOG) VMT Screening Tool was used to determine if the project is located within a TPA (See Attachment 1). The Project site is not located within a TPA based on the SGVCOG VMT Screening Tool assessment; therefore, the Project *would not* screen-out under this criteria.

Low VMT Area Screening

As outlined in the City's *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment*, residential and office projects located within a low VMT generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident or per worker that is similar to the existing land uses in the low VMT area. For this screening, the SGVCOG VMT Screening Tool, which relies on data consistent with the Southern California Association of Governments (SCAG) travel forecasting model, was used to measure VMT performance for the individual traffic analysis zone (TAZ) in which the Project is located. TAZs are geographic polygons similar to census block groups used to represent areas of homogenous travel behavior. Total daily home-based VMT per capita was estimated for each TAZ. This presumption may not be appropriate if the project land uses would alter the existing built environment in such a way as to increase the rate or length of vehicle trips.

In accordance with the City's *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment*, a low VMT area for residential projects is defined as a TAZ where total VMT per capita does not exceed 15 percent below the SGVCOG baseline total VMT per capita. Based on the SGVCOG VMT Screening Tool assessment, the proposed Project is located within TAZ 22199200. The proposed Project is consistent with existing residential land uses in the TAZ and does not contain unique characteristics or other features that would otherwise be mis-represented utilizing the data from the SGVCOG VMT Screening Tool. The Project TAZ 2022 total VMT per service population is equal to 12.5. The SGVCOG average 2022 total VMT per service population is equal to 15.65. Based on the screening tool, the Project TAZ VMT per capita is approximately 20.1% less than the regional VMT per capita. Therefore, the proposed Project *satisfies* the City-established screening criteria for projects located in low VMT areas and may be presumed to result in a less than significant VMT impact. Attachment 1 shows the SGVCOG VMT Screening Tool results for the Project site.

Project Type Screening

Some project types have been identified as having the presumption of a less than significant impact as they are local serving by nature, or they are small enough to not warrant assessment. The following uses can be presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature:

- Local-serving K-12 schools
- Local parks
- Day care centers
- Local-serving retail uses less than 50,000 square feet, including:
    - Gas stations

  - Banks
  - Restaurants
  - Shopping Center
- Local-serving hotels (e.g., non-destination hotels)
- Local-serving assembly uses (places of worship, community organizations)
- Community institutions (public libraries, fire stations, local government)
- Affordable, supportive, or transitional housing
- Assisted living facilities
- Senior housing (as defined by HUD)
- Local-serving community colleges that are consistent with the assumptions noted in the RTP/SCS
- Student housing projects on or adjacent to a college campus
- Other local-serving uses as approved by the City Traffic Engineer
- Projects generating less than 110 daily vehicle trips. This generally corresponds to the following "typical" development potentials:
  - 11 single family housing units
  - 16 multi-family, condominiums, or townhouse housing units
  - 10,000 square feet of office
  - 15,000 square feet of light industrial
  - 63,000 square feet of warehousing
  - 79,000 square feet of high-cube transload and short-term storage warehouse

Local serving retail projects with a total square footage less than 50,000 square feet may be presumed to have a less than significant impact absent substantial evidence to the contrary. Local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel.

The proposed Project consists of 18 multi-family units; therefore, the Project *would not* screen-out under this criteria.

VMT SCREENING ASSESSMENT FINDINGS

The proposed Project is located within a low VMT-generating area within the City as confirmed in the SGVCOG VMT Screening Tool. The Project, therefore, is presumed to result in a less than significant VMT impact and is exempt from preparation of a detailed VMT analysis in accordance with the City's *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment*.

REFERENCES

The following references were used to prepare this memorandum:

City of Temple City. *Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment*. October 2022.

San Gabriel Valley Council of Governments (SGVCOG) 2023. *Regional Vehicle Miles Travelled Analysis Tool.* Web: https://www.sgvcog.org/vmt-analysis-tool [Accessed February 2022].

Attachment 1

SGVCOG Regional VMT Evaluation Tool Report

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SGVCOG VMT Evaluation Tool Report

Project Details

Timestamp of Analysis: March 11, 2024, 01:56:39 PM

Project Name: 6119 Temple City Blvd. Residential Project

Project Description: 18 Unit Residential Development

Project Location

jurisdiction:
Temple City

apn	TAZ
5385-012-007	22199200

Inside a TPA?

No (Fail)

Analysis Details

Data Version: SCAG Regional Travel Demand Model 2016 RTP Base Year 2012

Analysis Methodology: TAZ

Baseline Year: 2024

Project Land Use

Residential:

Single Family DU:	
Multifamily DU:	18
Total DUs:	18

Non-Residential:

Office KSF:	
Local Serving Retail KSF:	
Industrial KSF:	

Residential Affordability (percent of all units):

Extremely Low Income:	0 %
Very Low Income:	15 %
Low Income:	0 %

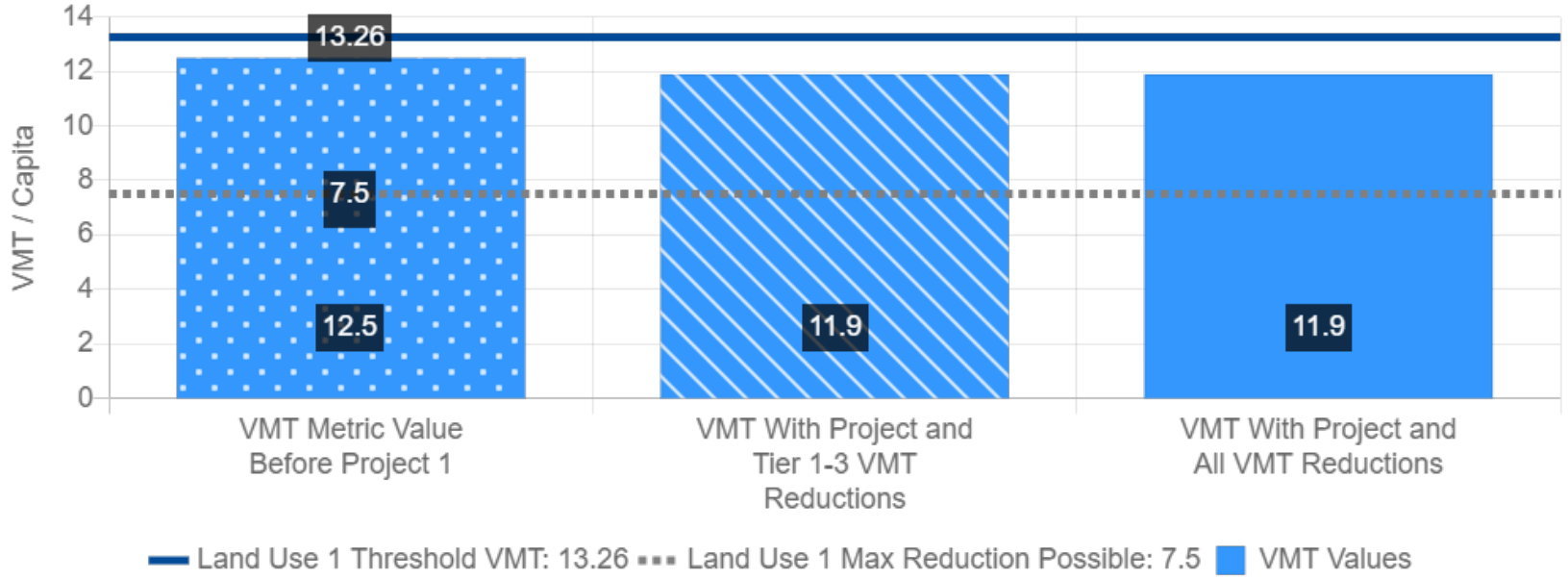
Parking:

Motor Vehicle Parking:	22
Bicycle Parking:	

Residential Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Residential
VMT Without Project 1:	Home-based VMT per Capita
VMT Baseline Description 1:	SGVCOG Average
VMT Baseline Value 1:	15.6
VMT Threshold Description 1:	-15%
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	12.5	11.9	11.9
Low VMT Screening Analysis	Yes (Pass)	Yes (Pass)	Yes (Pass)



Tier 1 Project Characteristics

PC01 Increase Residential Density

Existing Residential Density:	6.94
With Project Residential Density:	7.17

PC03 Affordable Housing

Very Low Income:	15 %

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