NOISE TECHNICAL REPORT

Introduction

This technical report evaluates noise impacts from construction and operation of the Proposed Sunset & Everett Project at 1147-1187 West Sunset Boulevard and 917-927 North Everett Street in the City of Los Angeles. The analysis discusses applicable regulations and compares impacts to appropriate thresholds of significance. Noise measurements, worksheets, and a map of noise receptors and measurement locations are included in the Technical Appendix to this analysis.

Fundamentals of Noise

Characteristics of Sound

Sound can be described in terms of its loudness (amplitude) and frequency (pitch). The standard unit of measurement for sound is the decibel (dB). Because the human ear is not equally sensitive to sound at all frequencies, the A-weighted scale (dBA) is used to reflect the normal hearing sensitivity range. On this scale, the range of human hearing extends from 3 to 140 dBA. Table 1 provides examples of A-weighted noise levels from common sources.

Table 1
A-Weighted Decibel Scale

Typical A-Weighted Sound Levels	Sound Level (dBA L_{eq})
Near Jet Engine	130
Rock and Roll Band	110
Jet flyover at 1,000 feet	100
Power Motor	90
Food Blender	80
Living Room Music	70
Human Voice at 3 feet	60
Residential Air Conditioner at 50 feet	50
Bird Calls	40
Quiet Living Room	30
Average Whisper	20
Rustling Leaves	10
Source: Cowan, James P., Handbook of Environmental Acoustics, 1993. These noise levels are approximations intended for general reference and informational use.	

Noise Definitions. This noise analysis discusses sound levels in terms of equivalent noise level (L_{eq}), maximum noise level (L_{max}) and the Community Noise Equivalent Level (CNEL).

- Equivalent Noise Level (L_{eq}): L_{eq} represents the average noise level on an energy basis for a specific time period. Average noise level is based on the energy content (acoustic energy) of sound. For example, the L_{eq} for one hour is the energy average noise level during that hour. L_{eq} can be thought of as a continuous noise level of a certain period equivalent in energy content to a fluctuating noise level of that same period.

- Maximum Noise Level (L_{max}): L_{max} represents the maximum instantaneous noise level measured during a given time period.

- Community Noise Equivalent Level (CNEL): CNEL is an adjusted noise measurement scale of average sound level during a 24-hour period. Due to increased noise sensitivities during evening and night hours, human reaction to sound between 7:00 P.M. and 10:00 P.M. is as if it were actually 5 dBA higher than had it occurred between 7:00 A.M. and 7:00 P.M. From 10:00 P.M. to 7:00 A.M., humans perceive sound as if it were 10 dBA higher. To account for these sensitivities, CNEL figures are obtained by adding an additional 5 dBA to evening noise levels between 7:00 P.M. and 10:00 P.M. and 10 dBA to nighttime noise levels between 10:00 P.M. and 7:00 A.M. As such, 24-hour CNEL figures are always higher than their corresponding actual 24-hour averages.

Effects of Noise. The degree to which noise can impact an environment ranges from levels that interfere with speech and sleep to levels that can cause adverse health effects. Most human response to noise is subjective. Factors that influence individual responses include the intensity, frequency, and pattern of noise; the amount of background noise present; and the nature of work or human activity exposed to intruding noise. According to the National Institute of Health (NIH), extended or repeated exposure to sounds at or above 85 dB can cause hearing loss. Sounds of 70 dBA or less, even after continuous exposure, are unlikely to cause hearing loss.[1] The World Health Organization (WHO) reports that adults should not be exposed to sudden "impulse" noise events of 140 dB or greater. For children, this limit is 120 dB.[2]

Exposure to elevated nighttime noise levels can disrupt sleep, leading to increased levels of fatigue and decreased work or school performance. For the preservation of healthy sleeping environments, the WHO recommends that continuous interior noise levels not exceed 30 dBA and that individual noise events of 45 dBA or higher be avoided.[3] Assuming a conservative exterior to interior sound reduction of 15 dBA, continuous exterior noise levels should therefore not exceed 45 dBA. Individual exterior events of 60 dBA or higher should also be limited. Some epidemiological studies have shown a weak association between long-term exposure to noise levels of 65 to 70 dBA and cardiovascular effects, including ischemic heart disease and hypertension. However, at this time, the relationship is largely inconclusive.

People with normal hearing sensitivity can recognize small changes in sound levels of approximately 3 dBA. Changes of at least 5 dBA can be readily noticeable while sound level increases of 10 dBA or greater are perceived as a doubling in loudness.[4] However, during daytime, few people are highly annoyed by noise levels below 55 dBA L_{eq}.[5]

1 National Institute of Health, National Institute on Deafness and Other Communication, www.nidcd.nih.gov/health/noise-induced-hearing-loss.

2 World Health Organization, Guidelines for Community Noise, 1999.

3 Ibid.

4 Federal Transit Administration, Transit Noise and Vibration Impact Assessment, 2018.

5 World Health Organization, Guidelines for Community Noise, 1999.

Noise Attenuation. Noise levels decrease as the distance from noise sources to receivers increases. For each doubling of distance, noise from stationary sources can decrease by about 6 dBA over hard surfaces (e.g., reflective surfaces such as parking lots) and 7.5 dBA over soft surfaces (e.g., absorptive surfaces such as soft dirt and grass). For example, if a point source produces a noise level of 89 dBA at a reference distance of 50 feet over an asphalt surface, its noise level would be approximately 83 dBA at a distance of 100 feet, 77 dBA at 200 feet, etc. Noises generated by mobile sources such as roadways decrease by about 3 dBA over hard surfaces and 4.5 dBA over soft surfaces for each doubling of distance. It should be noted that because decibels are logarithmic units, they cannot be added or subtracted. For example, two cars each producing 60 dBA of noise would not produce a combined 120 dBA.

Noise is most audible when traveling by direct line of sight, an unobstructed visual path between noise source and receptor. Barriers that break line of sight between sources and receivers, such as walls and buildings, can greatly reduce source noise levels by allowing noise to reach receivers by diffraction only. As a result, sound barriers can generally reduce noise levels by up to 15 dBA.[6] The effectiveness of barriers can be greatly reduced when they are not high or long enough to completely break line of sight from sources to receivers.

Regulatory Framework

Noise

Federal. No federal noise standards regulate environmental noise associated with short-term construction activities or long-term operations of development projects. As such, temporary and long-term noise impacts produced by the Project would be largely regulated or evaluated by State and City of Los Angeles standards designed to protect public well-being and health.

State. The State's 2017 General Plan Guidelines establish county and city standards for acceptable exterior noise levels based on land use. These standards are incorporated into land use planning processes to prevent or reduce noise and land use incompatibilities. Table 2 illustrates State compatibility considerations between land uses and exterior noise levels.

California Government Code Section 65302 also requires each county and city to prepare and adopt a comprehensive long-range general plan for its physical development. Section 65302(f) requires a noise element to be included in the general plan. This noise element must identify and appraise noise problems in the community, recognize Office of Noise Control guidelines, and analyze and quantify current and projected noise levels.

The State has also established noise insulation standards for new multi-family residential units, hotels, and motels that are subject to relatively high levels of noise from transportation. The noise insulation standards, collectively referred to as the California Noise Insulation Standards (Title 24, California Code of Regulations) set forth an interior standard of 45 dBA CNEL for habitable rooms. The standards require an acoustical analysis which indicates that dwelling units meet this interior standard where such units are proposed in areas subject to exterior noise levels greater than 60

6 California Department of Transportation, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.

dBA CNEL. Local jurisdictions typically enforce the California Noise Insulation Standards through the building permit application process.

Los Angeles County Airport Land Use Commission Comprehensive Land Use Plan. In Los Angeles County, the Regional Planning Commission has the responsibility for acting as the Airport Land Use Commission and for coordinating the airport planning of public agencies within the County. The Airport Land Use Commission coordinates planning for the areas surrounding public use airports. The Comprehensive Land Use Plan provides for the orderly expansion of Los Angeles County's public use airports and the areas surrounding them. It is intended to provide for the adoption of land use measures that will minimize the public's exposure to excessive noise and safety hazards. In formulating the Comprehensive Land Use Plan, the Los Angeles County Airport Land Use Commission has established provisions for safety, noise insulation, and the regulation of building height within areas adjacent to each of the public airports in the County.

City of Los Angeles General Plan Noise Element. The City of Los Angeles General Plan includes a Noise Element that includes policies and standards to guide the control of noise to protect residents, workers, and visitors. Its primary goal is to regulate long-term noise impacts to preserve acceptable noise environments for all types of land uses. It includes programs applicable to construction projects that call for protection of noise sensitive uses and use of best practices to minimize short-term noise impacts.[7] However, the Noise Element contains no quantitative or other thresholds of significance for evaluating a project's noise impacts. Instead, it adopts the State's guidance on noise and land use compatibility, shown in Table 2, "to help guide determination of appropriate land use and mitigation measures vis-à-vis existing or anticipated ambient noise levels." It also includes a policy and an objective that are relevant for the Proposed Project:

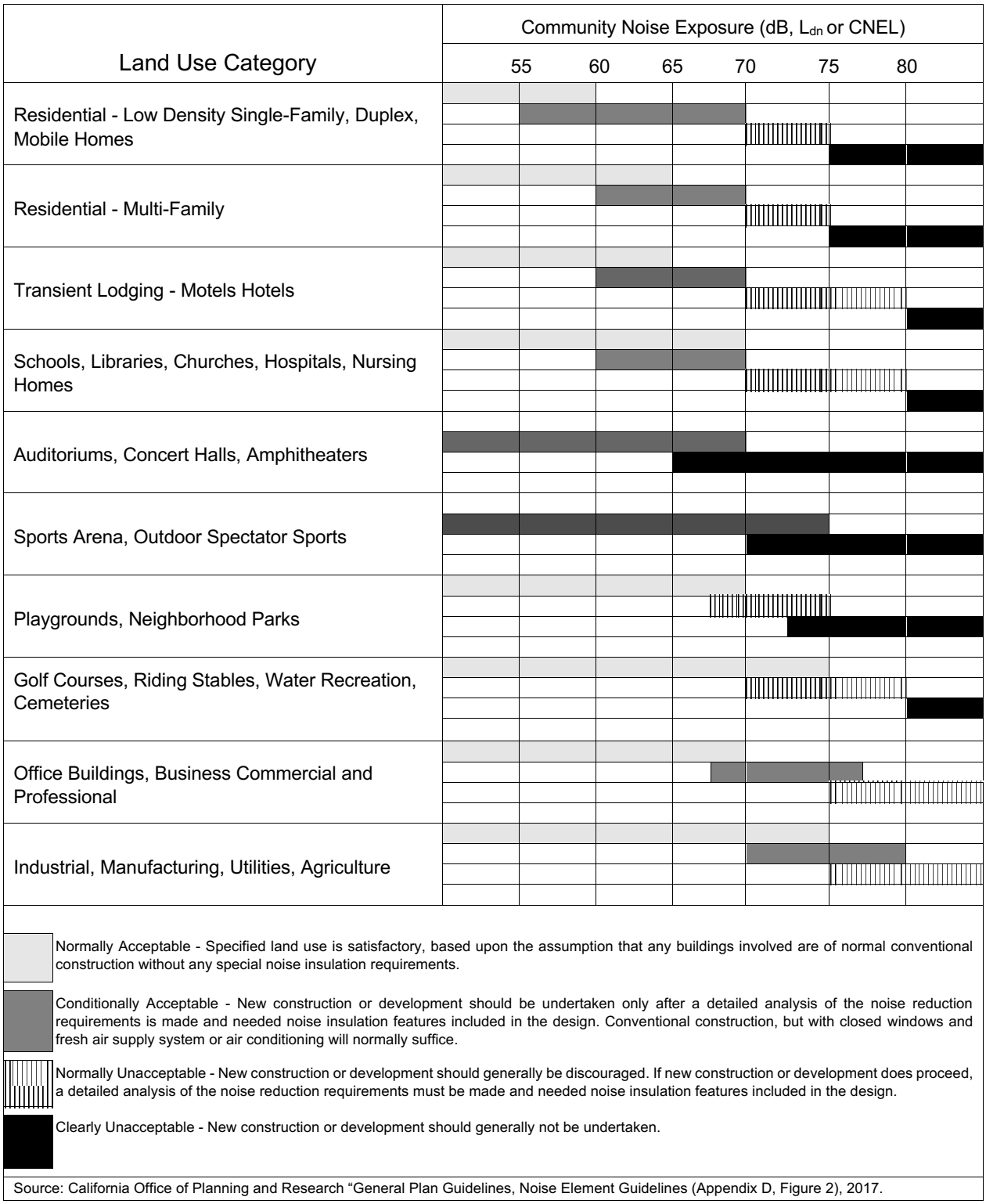
> **Policy 2.2:** Enforce and/or implement applicable city, state, and federal regulations intended to mitigate proposed noise producing activities, reduce intrusive noise and alleviate noise that is deemed a public nuisance.
>
> **Objective 3** (Land Use Development): Reduce or eliminate noise impacts associated with proposed development of land and changes in land use.

There are also two programs that are applicable to development projects:

> **Program 11:** For a proposed development project that is deemed to have a potentially significant noise impact on noise sensitive uses, as defined by this chapter, require mitigation measures, as appropriate, in accordance with California Environmental Quality Act and city procedures.

Table 2
State of California Noise/Land Use Compatibility Matrix

[7] The L.A. CEQA Thresholds Guide defined noise sensitive uses as residences, transient lodgings, schools, libraries, churches, hospitals, nursing homes, auditoriums, concert halls, amphitheaters, playgrounds, and parks.



Source: California Office of Planning and Research "General Plan Guidelines, Noise Element Guidelines (Appendix D, Figure 2), 2017.

Program 12: When issuing discretionary permits for a proposed noise-sensitive use (as defined by this chapter) or a subdivision of four or more detached single-family units and which use is determined to be potentially significantly impacted by existing or proposed noise

sources, require mitigation measures, as appropriate, in accordance with procedures set forth in the California Environmental Quality Act so as to achieve an interior noise level of a CNEL of 45 dB, or less, in any habitable room, as required by Los Angeles Municipal Code Section 91.

City of Los Angeles Municipal Code. The City of Los Angeles Municipal Code (LAMC) contains regulations that would regulate noise from the Project's temporary construction activities. Section 41.40(a) would prohibit construction activities between 9:00 P.M. and 7:00 A.M., Monday through Friday. Subdivision (c) would further prohibit such activities from occurring before 8:00 A.M. or after 6:00 P.M. on any Saturday or national holiday, or at any time on any Sunday. These restrictions serve to limit specific Project construction activities to Monday through Friday 7:00 A.M. to 9:00 P.M., and 8:00 A.M. to 6:00 P.M. on Saturdays or national holidays.

> *SEC.41.40. NOISE DUE TO CONSTRUCTION, EXCAVATION WORK—WHEN PROHIBITED.*
>
> *(a) No person shall, between the hours of 9:00 P.M. and 7:00 A.M. of the following day, perform any construction or repair work of any kind upon, or any excavating for, any building or structure, where any of the foregoing entails the use of any power drive drill, riveting machine excavator or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in any dwelling, hotel or apartment or other place of residence. In addition, the operation, repair or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited during the hours herein specified. Any person who knowingly and willfully violates the foregoing provision shall be deemed guilty of a misdemeanor punishable as elsewhere provided in this Code.*
>
> *(c) No person, other than an individual homeowner engaged in the repair or construction of his single-family dwelling shall perform any construction or repair work of any kind upon, or any earth grading for, any building or structure located on land developed with residential buildings under the provisions of Chapter I of this Code, or perform such work within 500 feet of land so occupied, before 8:00 A.M. or after 6:00 P.M. on any Saturday or national holiday nor at any time on any Sunday. In addition, the operation, repair, or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited on Saturdays and on Sundays during the hours herein specific…*

Section 112.04 of the LAMC bans the use of gas-powered leaf blowers within 500 feet of a residence between 10:00 P.M. and 7:00 A.M. This also includes lawn mowers, lawn edgers, riding tractors, or other equipment that makes loud sounds.

Section 112.05 of the LAMC establishes noise limits for powered equipment and hand tools operated in a residential zone or within 500 feet of any residential zone. Of particular importance to construction activities is subdivision (a), which institutes a maximum noise limit of 75 dBA as measured at a distance of 50 feet from the activity for the types of construction vehicles and equipment that would likely be used in the construction of the Project. However, the LAMC notes

that these limitations would not necessarily apply if it can be proven that the Project's compliance would be technically infeasible despite the use of noise-reducing means or methods.

> *SEC. 112.05. MAXIMUM NOISE LEVEL OF POWERED EQUIPMENT OR POWERED HAND TOOLS*
>
> *Between the hours of 7:00 A.M. and 10:00 P.M., in any residential zone of the City or within 500 feet thereof, no person shall operate or cause to be operated any powered equipment or powered hand tool that produces a maximum noise level exceeding the following noise limits at a distance of 50 feet therefrom:*
>
> *(a) 75 dBA for construction, industrial, and agricultural machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors and pneumatic or other powered equipment;*
>
> *(b) 75 dBA for powered equipment of 20 HP or less intended for infrequent use in residential areas, including chain saws, log chippers and powered hand tools;*
>
> *(c) 65 dBA for powered equipment intended for repetitive use in residential areas, including lawn mowers, backpack blowers, small lawn and garden tools and riding tractors.*
>
> *Said noise limitations shall not apply where compliance therewith is technically infeasible. The burden of proving that compliance is technically infeasible shall be upon the person or persons charged with a violation of this section. Technical infeasibility shall mean that said noise limitations cannot be complied with despite the use of mufflers, shields, sound barriers and/or other noise reduction device or techniques during the operation of the equipment.*

In addition, the LAMC regulates long-term operations of land uses, including but not limited to the following regulations.

Section 111.02 discusses the measurement procedure and criteria regarding the sound level of "offending" noise sources. A noise source causing a 5 dBA increase over the existing average ambient noise levels of an adjacent property is considered to create a noise violation. However, Section 111.02(b) provides a 5 dBA allowance for noise sources lasting more than five but less than 15 minutes in any 1-hour period, and a 10 dBA allowance for noise sources causing noise lasting 5 minutes or less in any 1-hour period. In accordance with these regulations, a noise level increase from certain city-regulated noise sources of five dBA over the existing or presumed ambient noise level at an adjacent property is considered a violation.

Section 112.01 of the LAMC would prohibit any amplified noises, especially those from outdoor sources (e.g., outdoor speakers, stereo systems) from exceeding the ambient noise levels of adjacent properties by more than 5 dBA. Any amplified noises would also be prohibited from being audible at any distance greater than 150 feet from the Project's property line, as the Project is located within 500 feet of residential zones.

> *SEC.112.01. RADIOS, TELEVISION SETS, AND SIMILAR DEVICES*

(a) It shall be unlawful for any person within any zone of the City to use or operate any radio, musical instrument, phonograph, television receiver, or other machine or device for the producing, reproducing or amplification of the human voice, music, or any other sound, in such a manner, as to disturb the peace, quiet, and comfort of neighbor occupants or any reasonable person residing or working in the area.

(b) Any noise level caused by such use or operation which is audible to the human ear at a distance in excess of 150 feet from the property line of the noise source, within any residential zone of the City or within 500 feet thereof, shall be a violation of the provisions of this section.

(c) Any noise level caused by such use or operation which exceeds the ambient noise level on the premises of any other occupied property, or if a condominium, apartment house, duplex, or attached business, within any adjoining unit, by more than five (5) decibels shall be a violation of the provisions of this section.

Section 112.02 would prevent Project heating, ventilation, and air conditioning (HVAC) systems and other mechanical equipment from elevating ambient noise levels by more than 5 dBA.

SEC.112.02. AIR CONDITIONING, REFRIGERATION, HEATING, PLUMBING, FILTERING EQUIPMENT

(a) It shall be unlawful for any person, within any zone of the city, to operate any air conditioning, refrigeration or heating equipment for any residence or other structure or to operate any pumping, filtering or heating equipment for any pool or reservoir in such manner as to create any noise which would cause the noise level on the premises of any other occupied property … to exceed the ambient noise level by more than five decibels.

The LAMC also provides regulations regarding vehicle-related noise, including Sections 114.02, 114.03, and 114.06. Section 114.02 prohibits the operation of any motor driven vehicles upon any property within the City in a manner that would cause the noise level on the premises of any occupied residential property to exceed the ambient noise level by more than 5 dBA. Section 114.03 prohibits loading and unloading causing any impulsive sound, raucous or unnecessary noise within 200 feet of any residential building between the hours of 10:00 P.M. and 7:00 A.M. Section 114.06 requires vehicle theft alarm systems to be silenced within five minutes.

Existing Conditions

Noise Sensitive Receptors

The Project Site is located in a residential area within the Victor Heights neighborhood. Noise-sensitive receptors within 0.25 miles of the Project Site include, but are not limited to, the following representative sampling:

- Residences, Everett Street (west side); as close as five feet east of the Project Site.

- Residential structures[8], 1251-1255 Sunset Boulevard, five feet north of the Project Site.
- Residences, Everett Street (east side); 60 feet east of the Project Site.
- Residences, Sunset Boulevard (west side); as close as 100 feet west of the Project Site.
- Residences, 1190 Sunset Boulevard; 110 feet west of the Project Site.
- Residences, 1271 Sunset Boulevard; 200 feet north of the Project Site.
- Everett Park, 250 feet east of the Project Site.
- Preschool, 707 Kensington Road; about 500 feet west of the Project Site.

Existing Ambient Noise Levels

The Project Site is currently vacant of any structures. As such, there is no noise generated at the Project Site.

Traffic is the primary source of noise near the Project Site, largely from the operation of vehicles with internal combustion engines and frictional contact with the ground and air.[9] This includes traffic on Sunset Boulevard, which carries about 2,857 north- and southbound vehicles at Everett Street in the A.M. peak hour.[10]

In February 2023, DKA Planning took short-term noise measurements near the Project site to determine the ambient noise conditions of the neighborhood near sensitive receptors.[11] As shown in Table 3, noise levels along roadways near the Project Site ranged from 62.7 dBA L_{eq} on Everett St to 74.7 dBA L_{eq} on Sunset Boulevard, noise levels that are generally consistent with the traffic volumes on the applicable street(s). Figure 1 illustrates where ambient noise levels were measured near the Project Site to establish the noise environment and their relationship to the applicable sensitive receptor(s). 24-hour CNEL noise levels are generally considered "Conditionally Acceptable" and "Normally Unacceptable" for the types of land uses near the Project Site.

8 Note these structures are abandoned and have been since at least early 2021. However, for conservative analysis, we assume these could be sensitive receptors that could be re-occupied.

9 World Health Organization, https://www.who.int/docstore/peh/noise/Comnoise-2.pdf accessed March 18, 2021.

10 Transportation Assessment, Fehr & Peers, October 2023.

11 Noise measurements were taken using a Quest Technologies Sound Examiner SE-400 Meter. The Sound Examiner meter complies with the American National Standards Institute (ANSI) and International Electrotechnical Commission (IEC) for general environmental measurement instrumentation. The meter was equipped with an omni-directional microphone, calibrated before the day's measurements, and set at approximately five feet above the ground.

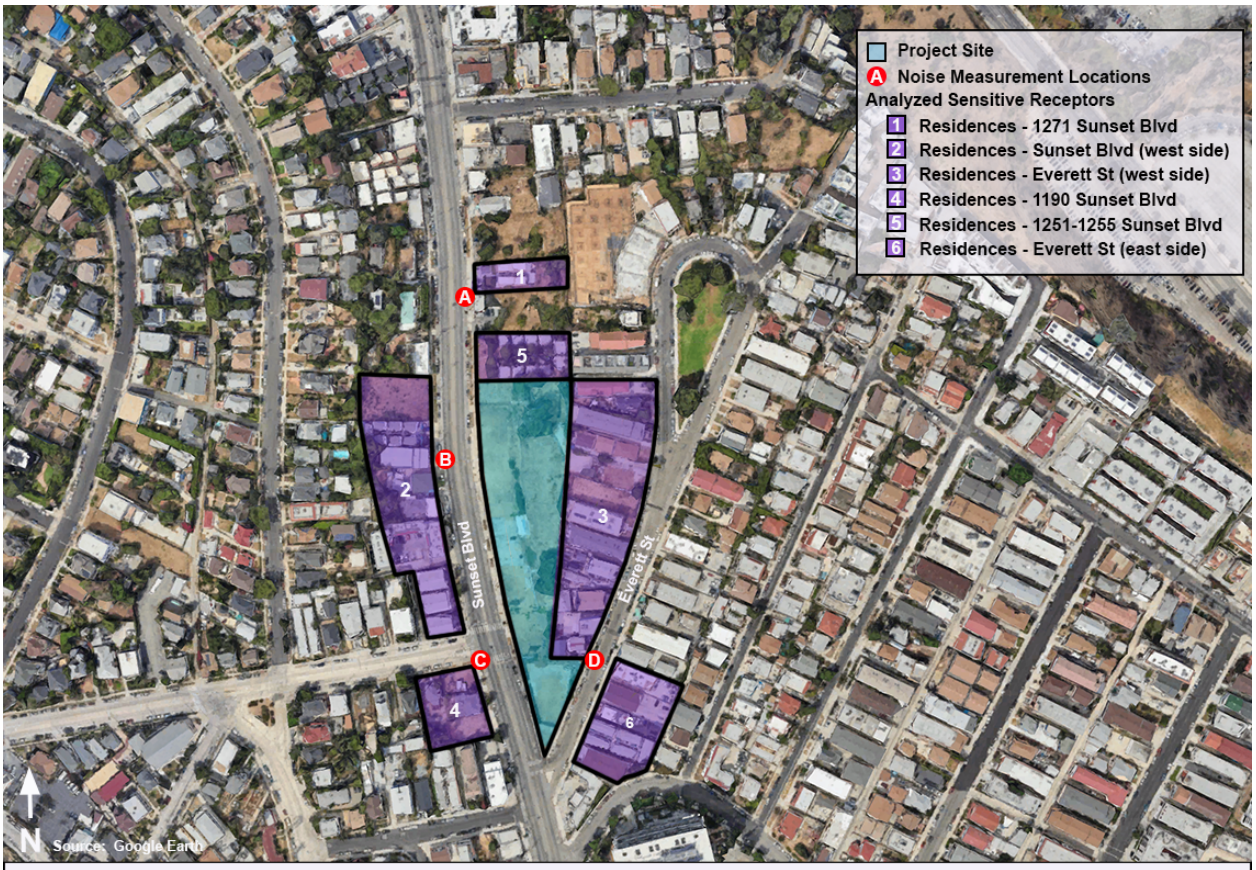


Figure 1
Noise Measurement Locations

Table 3
Existing Noise Levels

Noise Measurement Locations	Primary Noise Source	Sound Levels		Nearest Sensitive Receptor(s)	Noise/Land Use Compatibility[b]
		dBA (L_{eq})	dBA (CNEL)[a]		
A. 1257 Sunset Bl.	Traffic on Sunset Bl.	71.4	69.4	1. Residences, 1271 Sunset Bl.; 5. Residences,1251-1255 Sunset Bl.	Conditionally Acceptable
B. 1235 Sunset Bl.	Traffic on Sunset Bl.	74.7	72.7	2. Residences, Sunset Bl. (west side)	Normally Unacceptable
C. 1190 Sunset Bl	Traffic on Sunset Bl.	72.5	70.5	4. Residences, 1190 Sunset Bl.	Normally Unacceptable
D. 941 Everett St.	Traffic on Sunset Bl.	62.7	60.7	3. Residences, Everett St. (west side); 6. Residences, Everett St. (east side)	Conditionally Acceptable

[a] Estimated based on short-term (15-minute) noise measurement using Federal Transit Administration procedures from 2018 Transit Noise and Vibration Impact Assessment Manual, Appendix E, Option 4.
[b] Pursuant to California Office of Planning and Research "General Plan Guidelines, Noise Element Guidelines, 2017. When noise measurements apply to two or more land use categories, the more noise-sensitive land use category is used. See Table 2 above for definition of compatibility designations.

Source: DKA Planning, 2023

Project Impacts

Methodology

On-Site Construction Activities. Construction noise levels at off-site sensitive receptors were modeled employing the ISO 9613-2 sound attenuation methodologies using the SoundPLAN Essential model (version 5.1). This software package considers reference equipment noise levels, noise management techniques, distance to receptors, and any attenuating features to predict noise levels from sources like construction equipment. Construction noise sources were modeled as area sources to reflect the mobile nature of construction equipment. These vehicles would not operate directly where the Project's property line abuts adjacent structures, as they would retain some setback to preserve maneuverability. This equipment would also occasionally operate at reduced power and intensity to maintain precision at these locations.

Off-Site Construction Noise Activities. The Project's off-site construction noise impact from haul trucks, vendor deliveries, worker commutes, and other vehicles accessing the Project Site was analyzed by considering the Project's anticipated vehicle trip generation with existing traffic and roadway noise levels along local roadways, particularly those likely to be part of any haul route. Because it takes a doubling of traffic volumes on a roadway to generate the increased sound energy it takes to elevate ambient noise levels by 3 dBA,[12] the analysis focused on whether truck and auto traffic would double traffic volumes on key roadways to be used for hauling soils to and/or from the Project Site during construction activities.[13] Because haul trucks generate more noise than traditional passenger vehicles, a 19.1 passenger car equivalency (PCE) was used to convert haul truck trips to a reference level conversion to an equivalent number of passenger vehicles.[14] For vendor deliveries, a 9.55 PCE was used to reflect a blend of medium- and heavy-duty vehicles. It should be noted that because an approved haul route may not be approved as of the preparation of this analysis, assumptions were made about logical routes that would minimize haul truck traffic on local streets in favor of major arterials that can access regional-serving freeways.

On-Site Operational Noise Activities. The Project's potential to result in significant noise impacts from on-site operational noise sources was evaluated by identifying sources of on-site noise sources and considering the impact that they could produce given the nature of the source (i.e., loudness and whether noise would be produced during daytime or more-sensitive nighttime hours), distances to nearby sensitive receptors, ambient noise levels near the Project Site, the presence of similar noise sources in the vicinity, and maximum noise levels permitted by the LAMC.

12 Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

13 A tripling of traffic volumes (i.e., 3.15x) is needed to elevate traffic noise levels by 5 dBA.

14 Caltrans, Technical Noise Supplement Table 3-3, 2013.

Off-Site Operational Noise Activities. The Project's off-site noise impact from Project-related traffic was evaluated based its potential to increase traffic volumes on local roadways that serve the Project site. Because it takes a doubling of traffic volumes on a roadway to generate the increased sound energy it takes to elevate ambient noise levels by 3 dBA, the analysis focused on whether auto trips generated by the Proposed Project would double traffic volumes on key roadways that access the Project Site.

Thresholds of Significance

Construction Noise Thresholds. Based on guidelines from the City of Los Angeles City Department of Planning, the on-site construction noise impact would be considered significant if:

- Construction activities lasting more than one day would exceed existing ambient exterior sound levels by 10 dBA (hourly L_{eq}) or more at a noise-sensitive use;

- Construction activities lasting more than 10 days in a three-month period would exceed existing ambient exterior noise levels by 5 dBA (hourly L_{eq}) or more at a noise-sensitive use; or

- Construction activities of any duration would exceed the ambient noise level by 5 dBA (hourly L_{eq}) at a noise-sensitive use between the hours of 9:00 P.M. and 7:00 A.M. Monday through Friday, before 8:00 A.M. or after 6:00 P.M. on Saturday, or at any time on Sunday.

Operational Noise Thresholds. In addition to applicable City standards and guidelines that would regulate or otherwise moderate the Project's operational noise impacts, the following criteria are adopted to assess the impact of the Project's operational noise sources:

- Project operations would cause ambient noise levels at off-site locations to increase by 3 dBA CNEL or more to or within "normally unacceptable" or "clearly unacceptable" noise/land use compatibility categories, as defined by the State's 2017 General Plan Guidelines.
- Project operations would cause any 5 dBA CNEL or greater noise increase.[15]

Analysis of Project Impacts

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact.

[15] As a 3 dBA increase represents a slightly noticeable change in noise level, this threshold considers any increase in ambient noise levels to or within a land use's "normally unacceptable" or "clearly unacceptable" noise/land use compatibility categories to be significant so long as the noise level increase can be considered barely perceptible. In instances where the noise level increase would not necessarily result in "normally unacceptable" or "clearly unacceptable" noise/land use compatibility, a 5 dBA increase is still considered to be significant. Increases less than 3 dBA are unlikely to result in noticeably louder ambient noise conditions and would therefore be considered less than significant.

Construction

On-Site Construction Activities

Construction would generate noise during the construction process that would span 30 months of demolition, site preparation, grading, utilities trenching, building construction, and application of architectural coatings, as shown in Table 4. During all construction phases, noise-generating activities could occur at the Project Site between 7:00 A.M. and 9:00 P.M. Monday through Friday, in accordance with LAMC Section 41.40(a). On Saturdays, construction would be permitted to occur between 8:00 A.M. and 6:00 P.M.

Table 4
Construction Schedule Assumptions

Phase	Duration	Notes
Demolition	Month 1 (one week)	Removal of 6,000 square feet of asphalt/concrete surfaces and 1,344 square feet of billboards hauled 20 miles to landfill in 10-cubic yard capacity trucks.
Site Preparation	Month 1 (two weeks)	Removal of 16,000 square feet of trees/vegetation
Grading	Months 1-4	Approximately 40,000 cubic yards of soil (including 25 percent swell factor)[16] hauled 20 miles to landfill in 10-cubic yard capacity trucks.
Trenching	Month 5	Trenching for utilities, including gas, water, electricity, and telecommunications.
Building Construction	Months 6-29	Footings and foundation work, framing, welding; installing mechanical, electrical, and plumbing. Floor assembly, cabinetry and carpentry, elevator installations, low voltage systems, trash management.
Architectural Coatings	Months 28-30	Application of interior and exterior coatings and sealants.
Estimates provided by the Applicant, May 2023.		

Noise levels would generally peak during the demolition and grading phases, when diesel-fueled heavy-duty equipment like excavators and dozers are used to move large amounts of debris and dirt, respectively. This equipment is mobile in nature and does not always operate at in a steady-state mode full load, but rather powers up and down depending on the duty cycle needed to conduct work. As such, equipment is occasionally idle during which time no noise is generated.

During other phases of construction (e.g., site preparation, trenching, building construction, architectural coatings), noise impacts are generally lesser because they are less reliant on using heavy equipment with internal combustion engines. Smaller equipment such as forklifts, generators, and various powered hand tools and pneumatic equipment would often be utilized. Off-site secondary noises would be generated by construction worker vehicles, vendor deliveries,

16 Estimates provided by the Applicant, May 2023.

and haul trucks. Figure 2 illustrates construction noise levels during the demolition and grading phases.

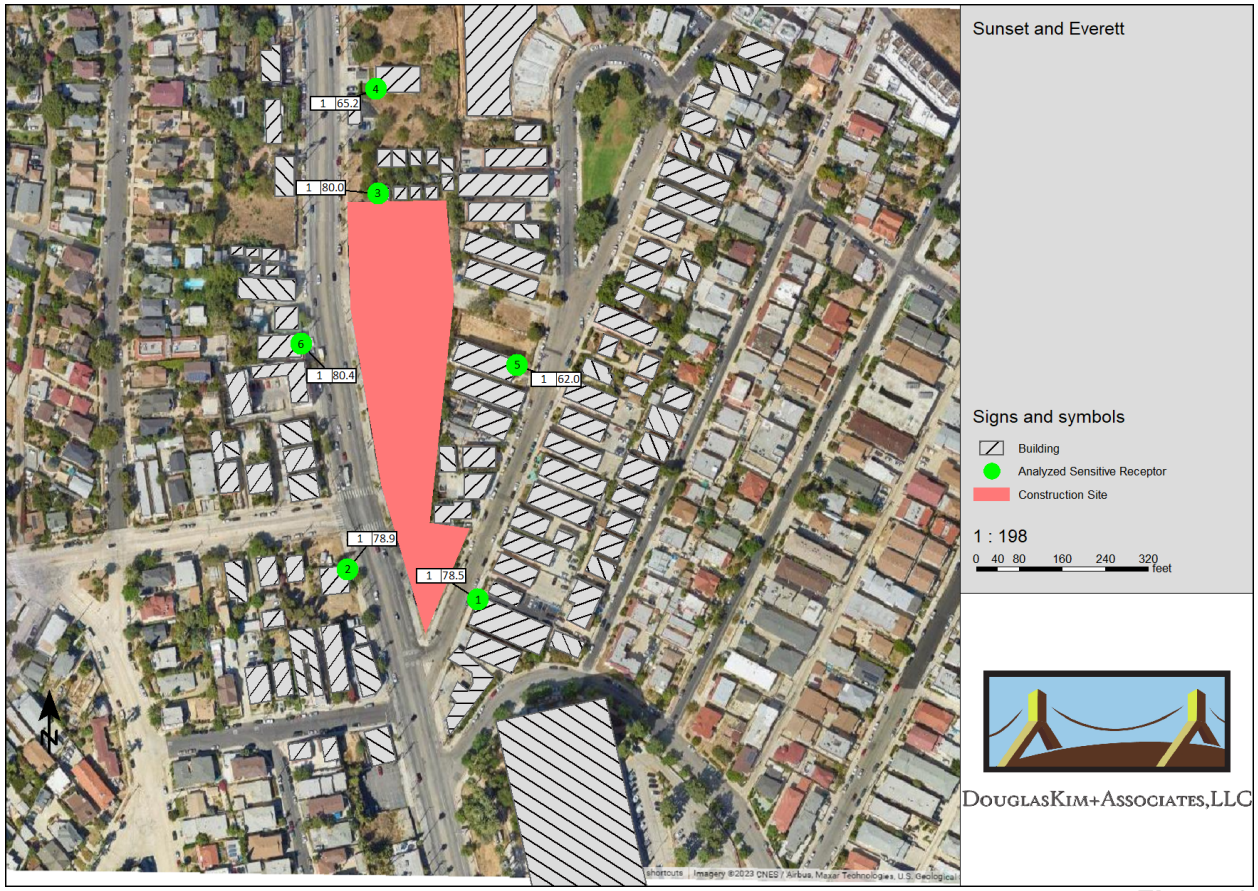


Figure 2
Construction Noise Impacts at Sensitive Receptors (Without Mitigation)

Because the Project's construction phase would occur for more than three months, the applicable City threshold of significance for the Project's construction noise impacts is an increase of 5 dBA over existing ambient noise levels. As shown in Table 5, when considering ambient noise levels, the use of multiple pieces of powered equipment simultaneously would increase ambient noise levels anywhere from 0.9 dBA L_{eq} to 15.9 dBA L_{eq} at the six analyzed sensitive receptors during the building construction phase, where approximately twenty pieces of equipment could concurrently operate. These construction noise levels would exceed the City's significance threshold of 5 dBA. Therefore, the Project's on-site construction noise impact would be significant and mitigable.

Table 5
Construction Noise Impacts at Off-Site Sensitive Receptors (Without Mitigation)

Receptor	Maximum Construction Noise Level (dBA L_{eq})	Existing Ambient Noise Level (dBA L_{eq})	New Ambient Noise Level (dBA L_{eq})	Increase (dBA L_{eq})	Potentially Significant?

1. Residences, 1271 Sunset Bl.	65.2	71.4	72.3	0.9	No
2. Residences, Sunset Bl (west side)	80.4	74.7	81.4	6.7	Yes
3. Residences, Everett St. (west side)	62.0	62.7	65.4	2.7	No
4. Residences, 1190 Sunset Bl.	78.9	72.5	79.8	7.3	Yes
5. Residences, 1251-1255 Sunset Bl.	80.0	71.4	80.6	9.2	Yes
6. Residences, Everett St. (east side)	78.5	62.7	78.6	15.9	Yes
Source: DKA Planning, 2023.					

Off-Site Construction Activities

The Project would also generate noise at off-site locations from haul trucks moving debris and soil from the Project Site during demolition and grading activities, respectively; vendor trips; and worker commute trips during construction. These activities would generate up to an estimated 431 peak hourly PCE vehicle trips, as summarized in Table 6, during the building construction phase.[17] This would represent about 15.1 percent of traffic volumes on Sunset Boulevard, which carries about 2,857 north- and southbound vehicles at Everett Street in the A.M. peak hour.[18]

Because workers and vendors will likely use more than one route to travel to and from the Project Site, this conservative assessment of traffic volumes overstates the likely traffic volumes from construction activities at this intersection.

Sunset Boulevard would serve as part of the haul route for debris and soil exported from the Project Site given its access to the Harbor and Hollywood Freeways. Because the Project's construction-related trips would not cause a doubling in traffic volumes (i.e., 100 percent increase) on Sunset Boulevard, the Project's construction-related traffic would not increase existing noise levels by 3 dBA or more, which is less than the 5 dBA threshold of significance for off-site construction noise activities. Therefore, the Project's noise impacts from construction-related traffic would be less than significant.

Table 6
Construction Vehicle Trips (Maximum Hourly)

Construction Phase	Worker Trips [a]	Vendor Trips	Haul Trips	Total Trips	Percent of Peak A.M. Hour Trips on Sunset Blvd.[f]
Demolition	5	0	55[b]	60	2.1
Site Preparation	8	0	294[c]	302	10.6
Grading	20	0	291[d]	311	10.9

17 This is a conservative, worst-case scenario, as it assumes all workers travel to the worksite at the same time and that vendor and haul trips are made in the same early hour, using the same route as haul trucks to travel to and from the Project Site.

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Trenching	8	0	0	8	0.3
Building Construction	284	147[e]	0	431	15.1
Architectural Coating	57	0	0	57	2.0

[a] Assumes all worker trips occur in the peak hour of construction activity.

[b] Assumes 1,344 square feet of billboard mixed debris at 10-feet of height = 498 CY divided by 10 CY haul truck capacity = 49.8 haul trucks x 2 = 100 one-way haul trips. Assumes 6,000 sq. ft. of asphalt/concrete at six inches of depth = 111 cubic yards divided by 10 CY haul truck capacity = 11.1 truck trips x 2 = 22 one-way haul trips. Thus, the project would generate 122 haul trips during demolition over a six-day period with seven-hour work days. Because haul trucks emit more noise than passenger vehicles, a 19.1 passenger car equivalency (PCE) was used to convert haul truck trips to a passenger car equivalent. 122 haul trips x 19.1 PCE factor = 2,230 PCEs divided bv 7 hours of hauling a day over 6 days = 55.5 hourly PCE trips.

[c] Assumes 16,028 square feet of vegetative debris at 10 feet of height = 5,936 cubic yards divided by 10 CY haul truck capacity = 594 haul trucks x 2 = 1,187 one-way haul trips during site preparation. 1,187 haul trips x 19.1 PCE factor = 22,672 PCEs divided bv 7 hours of hauling a day over eleven days = 194.4 hourly PCE trips.

[d] Assumes 40,000 CY of soil exported divided by 10 CY haul truck capacity = 4,000 haul trucks x 2 = 8,000 one-way haul trips during grading. 8,000 haul trips x 19.1 PCE factor = 152,800 PCEs divided bv 7 hours of hauling a day over 75 days = 194.4 hourly PCE trips = 291 hourly PCE trips.

[e] This phase would generate 53.7 vendor truck trips daily during construction over a seven-hour work day (53.7 x 2 trips) x 9.55 PCE) / 7 hours.

[f] Percent of existing traffic volumes on Sunset Boulevard at Everett Street, which carries about 2,857 north- and southbound vehicles in the A.M. peak hour. Transportation Assessment, Fehr & Peers, October 2023.

Source: DKA Planning, 2023

Mitigation Measures

MM-NOI-1. Construction staging shall be located as far from sensitive receptors as possible.

MM-NOI-2. Temporary sound barriers capable of attenuating construction noise (e.g., construction sound barrier with sound blankets) and blocking the line-of-sight between the adjacent sensitive receptors shall be installed. Such barriers shall be capable of reducing sound pressure by at least 2.4 dBA L_{eq} at 1190 Sunset Boulevard; 4.3 dBA L_{eq} at 1251-1255 Sunset Boulevard; 1.8 dBA L_{eq} at off-site receptors to the west across Sunset Boulevard; and 11.0 dBA L_{eq} at off-site receptors at 906-924 Everett Street.

MM-NOI-3. All powered construction equipment shall be equipped with advanced exhaust mufflers or other noise reduction devices.

Implementation of Mitigation Measures MM-NOI-1 through MM-NOI-3 would substantially reduce noise exposure at all off-site sensitive receptors below a 5 dBA L_{eq} increase in ambient noise levels (Table 7).

Table 7
Construction Noise Impacts at Off-Site Sensitive Receptors (With Mitigation)

Receptor	Maximum Construction	Existing Ambient	New Ambient	Increase	Potentially Significant?

	Noise Level (dBA L_{eq})	Noise Level (dBA L_{eq})	Noise Level (dBA L_{eq})	(dBA L_{eq})	
1. Residences, 1271 Sunset Bl.	65.2	71.4	72.3	0.9	No
2. Residences, Sunset Bl (west side)	77.9	74.7	79.6	4.9	No
3. Residences, Everett St. (west side)	62.0	62.7	65.4	2.7	No
4. Residences, 1190 Sunset Bl.	75.7	72.5	77.4	4.9	No
5. Residences, 1251-1255 Sunset Bl.	74.6	71.4	76.3	4.9	No
6. Residences, Everett St. (east side)	65.9	62.7	67.6	4.9	No
Source: DKA Planning, 2023.					

Operation

On-Site Operational Noise

During long-term operations, the Project would produce noise from on-site sources such as mechanical equipment associated with the structures themselves or from activity in outdoor spaces.

Mechanical Equipment

The Project would operate mechanical equipment on each building, 91 feet above grade for Building A and 86 feet for Building B that would generate incremental long-term noise impacts. This analysis assumes the use of typical HVAC equipment heat pumps for each multi-family residence (e.g., 2.5-ton Carrier 24ABC630A003 Carrier 25HBC5), with each unit distributed across the roof as needed to serve each residence. Noise from heat pumps and air conditioners is a function of the model, airflow, and pressure flow generated by fans and compressors. Most modern heat pumps are relatively quiet. While each unit would have a sound power of up to 76 dBA, the location on the roof would help shield the noise path to nearby sensitive receptors. As blocking the line of sight to a noise source generally results in a 5-decibel reduction, each rooftop unit would generate about 50.3 dBA at ten feet of distance.[19] Compliance with LAMC Section 112.02 would further limit the impact of HVAC equipment on noise levels at adjacent properties.

As summarized in Table 8, the operational noise impact of mechanical equipment, when combined with traffic noise from vehicles accessing the Project Site and outdoor noise sources (e.g., roof decks, pool) would not substantially elevate ambient CNEL noise levels.

Table 8
Operational Noise Impacts at Off-Site Sensitive Receptors

[19] Washington State Department of Transportation, Noise Walls and Barriers. https://wsdot.wa.gov/construction-planning/protecting-environment/noise-walls-barriers. Assumes the Carrier's rated sound power of 76 dB.

Receptor	Existing Noise Level (dBA CNEL)	Composite Noise Impact* (dBA CNEL)	New Ambient Noise Level (dBA CNEL)	Threshold of Significance (dBA CNEL)	Significant?
1. Residences, 1271 Sunset Bl.	69.4	44.9	69.4	74.4	No
2. Residences, Sunset Bl (west side)	72.7	51.1	72.7	75.7	No
3. Residences, Everett St. (west side)	60.7	42.5	60.8	65.7	No
4. Residences, 1190 Sunset Bl.	70.5	51.1	70.5	73.5	No
5. Residences, 1251-1255 Sunset Bl.	69.4	44.9	69.4	72.4	No
6. Residences, Everett St. (east side)	60.7	59.2	63.0	63.7	No
* Includes Project traffic near the Project Site, mechanical equipment, and outdoor noise sources. See Technical Appendix for inventory of sources. Source: DKA Planning, 2023.					

Pad-mounted oil transformers that lower high voltage to standard household voltage used to power electronics, appliances and lighting would be located on the ground level in an unobstructed location fronting Sunset Boulevard at the western portion of the Project Site. These transformers are housed in a steel cabinet and generally do not involve pumps, though fans may be needed on some units. Switchgear responsible for distributing power through the development could be located externally, though no mechanical processes that generate noise would be necessary.

Otherwise, all other mechanical equipment would be fully enclosed within the structure. This can include mechanical, electrical, and plumbing rooms, a utility fan room, as well as elevator equipment (including hydraulic pump, switches, and controllers) in the subterranean basement. Vaults that house pool and spa equipment and pumps would be located in the three subterranean parking levels. All these activities would generally occur within the envelope of the development, operational noise would be shielded from off-site noise-sensitive receptors.

Auto-Related Activities

The majority of vehicle-related noise impacts at the Project Site would come from vehicles entering and exiting the residential development from three driveways off Sunset Boulevard. During the peak P.M. hour, 137 vehicles would generate noise in and out of the garage, with up to 152 vehicles using the garage in the peak A.M. hour.[20]

Nearby residences across Sunset Boulevard would have a direct line of sight to vehicle traveling on Sunset and accessing the Project's driveways, 100 feet or more away. The relative low number

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of vehicles accessing the development combined with the distance to sensitive receptors and ambient noise from traffic volumes would limit any elevation of ambient noise levels to less than 0.1 dBA CNEL, well below the 5 dBA threshold of significance for operational sources of noise. As summarized in Table 8, the operational noise impact of traffic noise from vehicles accessing the Project Site, when combined with rooftop mechanical equipment and outdoor noise sources (e.g., roof decks, pool) would not substantially elevate ambient CNEL noise levels.

Parking garage noise would include tire friction as vehicles navigate to and from parking spaces, doors slamming, car alarms, and minor engine acceleration. Most of these sources are instantaneous (e.g., car alarm chirp, door slam) while others may last a few seconds. Parking garage-related noise impacts would be negligible given their location in an enclosed garage would limit any line of sight from the garage. As such, the Project's parking garage activities would not have a significant impact on the surrounding noise environment.

Outdoor Uses

While most operations would be conducted inside the development, outdoor activities could generate noise that could impact local sensitive receptors. This would include human conversation, recreation, trash collection, landscape maintenance, and commercial loading. These are discussed below:

- Human conversation. While noise associated with everyday residential activities would largely occur internally within the development, there could include passive activities where human conversation, socializing, and passive recreation in outdoor spaces could occur, including:

    - Ground floor plaza. A 2,100 square-foot outdoor plaza would be located at the corner of Everett Street and Sunset Boulevard outside a retail space in Building B. This would be a shared use space for outdoor dining, socializing, or passive recreation (e.g., reading), with intermittent use largely during day or evening hours.

    - Second floor interior courtyard. This would be a shared use space for socializing or passive recreation (e.g., reading, walking), with intermittent use largely during day or evening hours. No powered speakers are proposed that would amplify either speech or music.

    - Private balconies on all floors on the north, east, and south elevations. These would be private spaces for residents used for socializing or passive recreation (e.g., reading), with intermittent use largely during day or evening hours. Some of these would be recessed into the building façade, reducing the sound path on three sides, while other open balconies would shield noise on one side. No powered speakers are proposed that would amplify either speech or music.

    - Roof decks on Building B. A 1,065 square-foot deck on the western end of Building B's roof facing Sunset Boulevard and a 750 square-foot deck on the eastern end of the Building B at the corner of Sunset Boulevard and Everette Street are proposed.

These use spaces for socializing, passive recreation (e.g., reading), with intermittent use largely during day or evening hours would be located about 78 feet above grade.

- Roof deck on Building A. A 3,010 square-foot deck centered on the southern edge of Building A's roof facing Sunset Boulevard is proposed, approximately 73 feet above grade. This would be a shared use space for socializing, passive recreation (e.g., reading), with intermittent use largely during day or evening hours.

The primary use of these spaces would be for human conversation, which would produce negligible noise impacts, based on the Lombard effect. This phenomenon recognizes that voice noise levels in face-to-face conversations generally increase proportionally to background ambient noise levels. Specifically, vocal intensity increases about 0.38 dB for every 1.0 dB increase in noise levels above 55 dB.[21] For example, the sound of a human voice at 60 dB would produce a noise level of 39 dB at ten feet, which would not elevate ambient noise levels at any of the analyzed sensitive receptors by more than 0.2 dBA L_{eq}. Moreover, noise levels from human speech would attenuate rapidly with greater distance, resulting in a 33 dB noise level at twenty feet, and 27 dB at 40 feet. Further, the infrequent nature of outdoor use of these spaces and any acoustic noise (e.g., speech) makes it impossible to individually or collectively elevate 24-hour noise levels by 5 dBA CNEL or more at any nearby noise-sensitive receptors.

- Recreation. A 45,000-gallon open air pool and spa are proposed along the northern portion of the Project Site between Buildings A and B. Socializing and swimming would occur during day, evening, and occasionally during night hours.
- Trash collection. On-site trash and recyclable materials for the residents would be managed from the waste collection area within the parking garage for each building that represents street level for the sloped site. Dumpsters would be moved to the street manually or with container handler trucks that use hydraulic-powered lifts that use beeping alerts during operation. Haul trucks would access solid waste from Sunset Boulevard, where solid waste activities would include use of trash compactors and hydraulics associated with the refuse trucks themselves. Noise levels of approximately 71 dBA L_{eq} and 66 dBA L_{eq} could be generated by collection trucks and trash compactors, respectively, at 50 feet of distance.[22] Because CNEL levels represent the energy average of sound levels during a 24-hour period, the modest sound power from a few minutes of trash collection activities during daytime hours would negligibly affect CNEL sound levels.
- Landscape maintenance. Noise from gas-powered leaf blowers, lawnmowers, and other landscape equipment can generated substantial bursts of noise during regular maintenance. For example, two gas powered leaf blowers with two-stroke engines and a hose vacuum can generate an average of 85.5 dBA L_{eq} and cause nuisance or potential noise impacts for nearby receptors.[23] The landscape plan focuses on a modest palette of accent trees and raised planters on the ground floor and upper floors where common space (i.e., outdoor patios, roof

21 Acoustical Society of America, Volume 134; Evidence that the Lombard effect is frequency-specific in humans, Stowe and Golob, July 2013.

22 RK Engineering Group, Inc. Wal-Mart/Sam's Club reference noise level, 2003.

23 Erica Walker et al, Harvard School of Public Health; Characteristics of Lawn and Garden Equipment Sound; 2017. These equipment generated a range of 74.0-88.5 dBA Leq at 50 feet.

decks) that will minimize the need for powered landscaping equipment, as some of this can be managed by hand. Because CNEL levels represent the energy average of sound levels during a 24-hour period, the modest sound power from a few minutes of maintenance activities during daytime hours would negligibly affect CNEL sound levels.

- Commercial loading. On-site loading and unloading activities would be managed within the enclosed parking garages of each building, where they would be obscured from off-site sensitive receptors. As a result, there would be negligible noise impacts on off-site receptors and impacts would not increase CNEL noise levels at off-site locations. Further, LAMC Section 114.03 would regulate loading and unloading activities between 10:00 P.M. and 7:00 A.M.

As summarized in Table 8, the operational noise impact of traffic noise from vehicles accessing the Project Site, operation of rooftop mechanical equipment, outdoor noise sources (e.g., roof decks, pool) would not substantially elevate ambient CNEL noise levels. As such, the Project would not result in an exposure of persons to or a generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The Project would also not increase surrounding noise levels by more than 5 dBA CNEL where ambient noise levels are "Conditionally Acceptable" and not more than 3 dBA CNEL where noise levels are currently considered "Normally Unacceptable." As a result, the Project's on-site operational noise impacts would be considered less than significant.

Off-Site Operational Noise

The majority of the Project's operational noise impacts would be off-site from vehicles traveling to and from the development. The Project would add up to 1,850 vehicle trips to the local roadway network on a peak weekday at the start of operations in 2027, including 152 and 137 vehicles entering and exiting the development during the peak A.M. and P.M. hours, respectively.[24] This would represent 4.7 and 4.4 percent of the 3,250 and 3,122 vehicles currently using Sunset Boulevard at Beaudry Avenue in the A.M. and P.M. peak hours, respectively.[25]

Because it takes a doubling of traffic volumes (i.e., 100 percent) to increase ambient noise levels by 3 dBA L_{eq}, the Project's traffic would neither increase ambient noise levels 3 dBA or more into "normally unacceptable" or "clearly unacceptable" noise/land use compatibility categories, nor increase ambient noise levels 5 dBA or more. Twenty-four hour CNEL impacts would similarly be minimal, far below criterion for significant operational noise impacts, which begin at 3 dBA. As such, this impact would be considered less than significant.

Consistency with City General Plan Noise Element

While the City's Noise Element focuses on a number of measures for Citywide implementation by municipal government, there are some objectives, policies, and programs that are applicable to development projects. Table 9 summarizes the Proposed Project's consistency with these.

24 Transportation Assessment, Fehr & Peers, October 2023.

25 Transportation Assessment, Fehr & Peers, October 2023.

Table 9
Project Consistency with City of Los Angeles General Plan Noise Element

Objective/Policy/Program	Project Consistency
Policy 2.2: Enforce and/or implement applicable city, state, and federal regulations intended to mitigate proposed noise producing activities, reduce intrusive noise and alleviate noise that is deemed a public nuisance.	**Consistent.** The Project would comply with City, state, and other applicable noise regulations to ensure that noise impacts are considered less than significant.
Objective 3 (Land Use Development): Reduce or eliminate noise impacts associated with proposed development of land and changes in land use.	**Consistent.** The project is being evaluated under CEQA and would result in less-than-significant impacts on noise.
Program 11. For a proposed development project that is deemed to have a potentially significant noise impact on noise sensitive uses, as defined by this chapter, require mitigation measures, as appropriate, in accordance with California Environmental Quality Act and city procedures.	**Consistent.** The Project would not have a significant noise impact on noise-sensitive uses and as such, would not require mitigation under CEQA.
Program 12. When issuing discretionary permits for a proposed noise-sensitive use (as defined by this chapter) or a subdivision of four or more detached single-family units and which use is determined to be potentially significantly impacted by existing or proposed noise sources, require mitigation measures, as appropriate, in accordance with procedures set forth in the California Environmental Quality Act so as to achieve an interior noise level of a CNEL of 45 dB, or less, in any habitable room, as required by Los Angeles Municipal Code Section 91.	**Consistent.** The noise-sensitive project is being evaluated under CEQA and would before being entitled would comply with Building Code and Title 24 noise insulation requirements to achieve an interior noise level of 45 dB.
Source: DKA Planning, 2023.	

b. For a project located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact.

The Project Site is located about 11.6 miles east of the Santa Monica Airport and 10.2 miles southeast of Hollywood Burbank Airport. Because the Proposed Project would not be located within the vicinity of a private airstrip or within two miles of a public airport, the Project would not expose local workers or residents in the area to excessive noise levels. This would be considered a less than significant impact.

Cumulative Impacts

Construction

On-Site Construction Noise

During construction of the proposed Project, there could be other construction activity in the area that contributes to cumulative noise impacts at sensitive receptors. Construction-related noise levels from any related project would be intermittent and temporary. As with the Project, any related projects would comply with the LAMC's restrictions, including restrictions on construction hours and noise from powered equipment. Noise associated with cumulative construction activities would be reduced to the degree reasonably and technically feasible through proposed mitigation measures for each individual related project and compliance with the noise ordinance.

Noise from construction of development projects is localized and can affect noise-sensitive uses within 500 feet, based on the City's screening criteria. As such, noise from two construction sites within 1,000 feet of each other can contribute to cumulative noise impacts for receptors located between. There are nine potential related projects identified by the City of Los Angeles within 0.5 miles of the Proposed Project, as illustrated in Figure 3.[26]

26 City of Los Angeles, Related Projects Summary from Case Logging and Tracking System, February 3, 2023. Internal team research added Related Project No. 9.

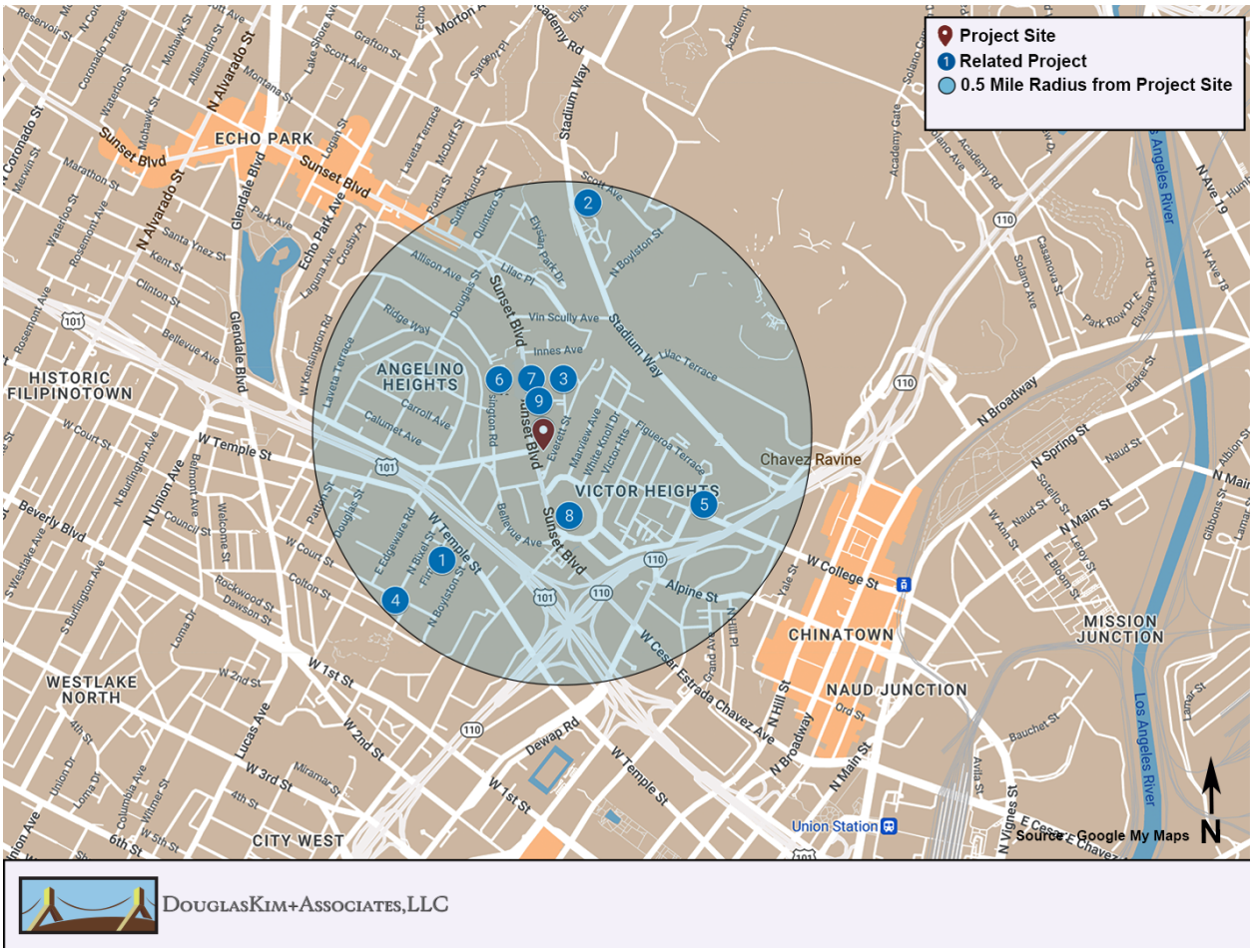

Figure 3
Location of Related Projects

As illustrated in Table 10, two of the nine related projects are completed (Nos. 1 and 4) and one (No. 3) is under construction and would be completed and operational by the time the Project breaks ground in 2025.

Therefore, four Related Projects (Nos. 6, 7, 8, 9) have the potential for overlapping construction with the Project and contributing to cumulative air quality impacts. The impact of cumulative development on short-term construction and long-term operations noise is discussed below.

Table 10
Related Projects Within 0.5 Miles of Project Site

#	Address	Distance from Project Site	Use	Size	Status
1	418 Firmin Street	1,450 feet southwest	Apartments	64 units	Completed in 2022.
2	2000 Stadium Way	2,050 feet north	Medical	80,545 sf	To be constructed.
3	1013 Everett Street	150 feet north	Apartments	49 units	Framed as of 2023.
4	1246 Court Street	2,225 feet southwest	Apartments	54 units	Completed in 2021.

Table 10
Related Projects Within 0.5 Miles of Project Site

5	765 College Street	1,775 feet east	Medical	100,000 sf 62 beds	To be constructed.
6	1274 Sunset Blvd	240 feet northwest	Hotel Restaurant	8 rooms 1,470 sf	To be constructed.
7	1275 Sunset Blvd	260 feet north	Apartments	77 units	To be constructed.
8	1111 Sunset Blvd	275 feet south	Apartment Hotel Office Commercial	737 units 180 rooms 48,000 sf 95,000	To be constructed.
9	1251 Sunset Blvd	5 feet north	Apartment	74 units	To be constructed.

Source: Related Projects List, Related Projects Summary from Case Logging and Tracking System Los Angeles Department of Transportation, February 3, 2023.
#9: DIR-2018-6634-TOC-A1

As illustrated in Table 11, the cumulative noise impacts at the analyzed sensitive receptors would be considered significant, as they would exceed 5.0 dBA L_{eq} at three of the five analyzed sensitive receptor (note that the sixth sensitive receptor in this technical report at 1251 Sunset Boulevard is a related project construction site that would remove the existing receptor). The noise contours from these related project(s) are illustrated in Figure 4. Based on this, there would be a significant but mitigable cumulative noise impact at nearby sensitive uses located near the Project Site in the event of concurrent construction activities.

Table 11
Cumulative Construction Noise Impacts at Off-Site Sensitive Receptors (Without Mitigation)

Receptor	Maximum Construction Noise Level (dBA L_{eq})	Existing Ambient Noise Level (dBA L_{eq})	New Ambient Noise Level (dBA L_{eq})	Increase (dBA L_{eq})	Potentially Significant?
1. Residences, 1271 Sunset Bl.	65.8	71.4	72.5	1.1	No
2. Residences, Sunset Bl (west side)	80.4	74.7	81.4	6.7	Yes
3. Residences, Everett St. (west side)	58.9	62.7	64.2	1.5	No
4. Residences, 1190 Sunset Bl.	79.0	72.5	79.9	7.4	Yes
5. Residences, Everett St. (east side)	78.5	62.7	78.6	15.9	Yes

Source: DKA Planning, 2023.

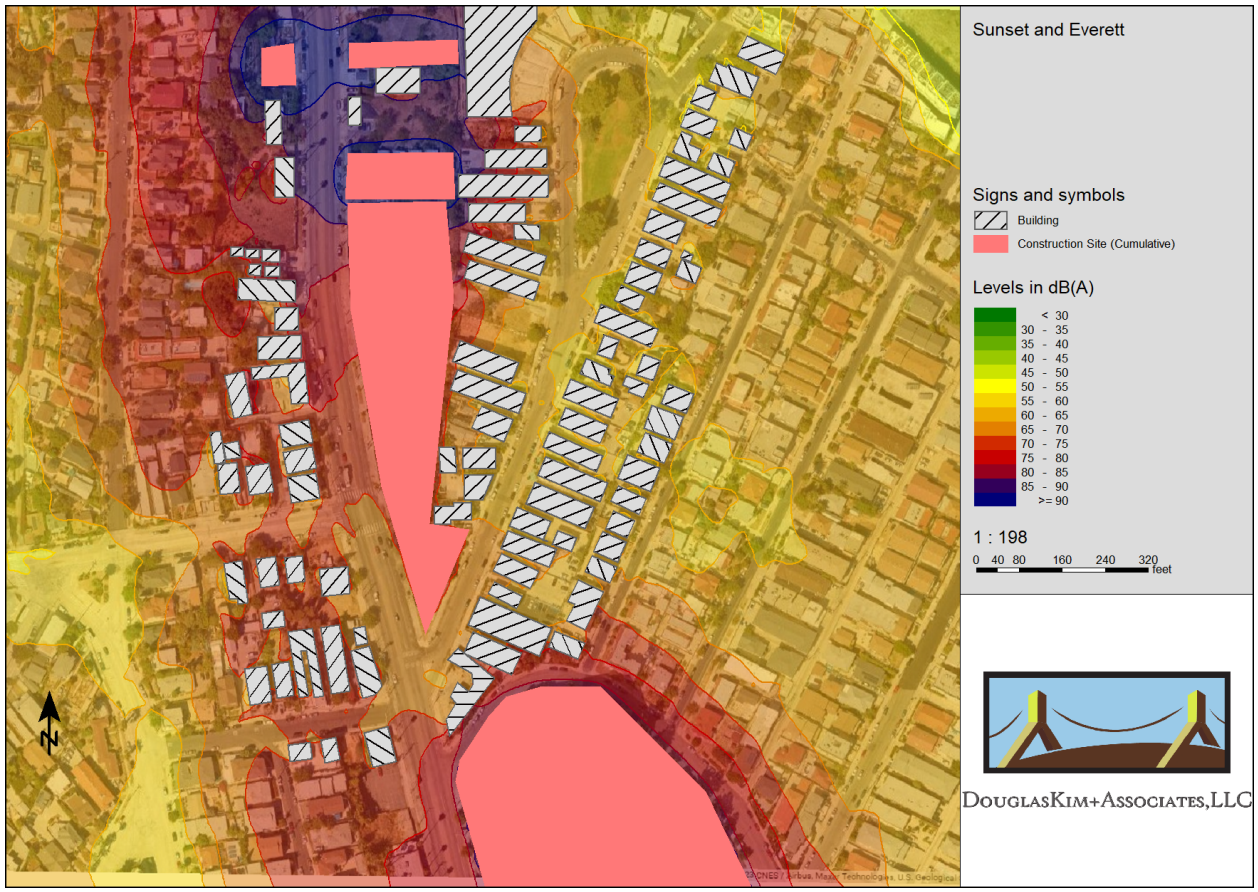

Figure 4
Construction Noise Contours from Cumulative Development

However, with implementation of Mitigation Measures MM-NOI-1 through MM-NOI-3 for the Proposed Project, cumulative noise impacts at the sensitive receptors analyzed in this report would drop substantially. As illustrated in Table 12, cumulative impacts would be lower than 5.0 dBA L_{eq} threshold of significance at all receptors. As a result, the Proposed Project's impact on cumulative construction noise levels is not considered significant.

Table 12
Cumulative Construction Noise Impacts at Off-Site Sensitive Receptors (With Mitigation)

Receptor	Maximum Construction Noise Level (dBA L_{eq})	Existing Ambient Noise Level (dBA L_{eq})	New Ambient Noise Level (dBA L_{eq})	Increase (dBA L_{eq})	Potentially Significant?
1. Residences, 1271 Sunset Bl.	64.7	71.4	72.2	0.8	No
2. Residences, Sunset Bl (west side)	74.2	74.7	77.5	2.8	No
3. Residences, Everett St. (west side)	54.1	62.7	63.3	0.6	No
4. Residences, 1190 Sunset Bl.	71.5	72.5	75.0	2.5	No

5. Residences, Everett St. (east side)	65.6	62.7	67.4	4.7	No
Source: DKA Planning, 2023.					

Off-Site Construction Noise

Other concurrent construction activities from related projects can contribute to cumulative off-site impacts if haul trucks, vendor trucks, or worker trips for any related project(s) were to utilize the same roadways. Distributing trips to and from each related project construction site substantially reduces the potential that cumulative development could more than double traffic volumes on existing streets, which would be necessary to increase ambient noise levels by 3 dBA. The Proposed Project would contribute about 431 peak hourly PCE vehicle trips during the grading phase.[27] This would represent about 15.1 percent of traffic volumes on Sunset Boulevard, which carries about 2,857 north- and southbound vehicles at Everett Street in the A.M. peak hour.[28] Any related projects would have to add 2,426 peak hour vehicle trips to double volumes on Sunset Boulevard.

The four related projects within 1,000 feet of the Project Site would not be capable of generating this much truck traffic:

1. Related Project No. 6, 1274 Sunset Boulevard. This eight-room hotel with 1,470 square feet of restaurant space would be much smaller in scale than the Proposed Project and would likely not add more than 100 peak hour PCEs to Sunset Boulevard.

2. Related Project No. 7, 1275 Sunset Boulevard. This 77-unit apartment development would be smaller in scale than the Proposed Project and would likely not add more than 200 peak hour PCEs to Sunset Boulevard.

3. Related Project No. 8, 1111 Sunset Boulevard. This mixed-use development with 737 apartment units; 180 hotel rooms; 48,000 square feet of office and 95,000 square feet of commercial development would be larger in scale than the Proposed Project. As such, it may add more than 900 peak hour PCEs to Sunset Boulevard.

4. Related Project No. 9, 1251 Sunset Boulevard. This 70-unit apartment development would be smaller in scale than the Proposed Project and would likely not add more than 200 peak hour PCEs to Sunset Boulevard.

These four related projects would likely generate fewer than 1,500 PCEs during any peak hour of traffic, far fewer than the number needed to significantly elevate traffic noise by 5 dBA. As such, cumulative noise due to construction truck traffic from the Project and related projects do not have the potential to double traffic volumes on any roadway necessary to elevate traffic noise levels by 3 dBA, let alone the 5 dBA threshold of significance for traffic impacts. As such, cumulative noise impacts from off-site construction would be less than significant.

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27 This is a conservative, worst-case scenario, as it assumes all workers travel to the worksite at the same time and that vendor and haul trips are made in the same early hour, using the same route as haul trucks to travel to and from the Project Site.

28 Transportation Assessment, Fehr & Peers, October 2023.

Operation

The Project Site and Victor Heights neighborhood has been developed with residential and commercial land uses that have previously generated, and will continue to generate, noise from a number of operational noise sources, including mechanical equipment (e.g., HVAC systems), outdoor activity areas, and vehicle travel. The four related projects in the vicinity of the Project Site are residential or mixed-use in nature and would also generate stationary-source and mobile-source noise due to ongoing day-to-day operations. These types of uses generally do not involve use of noisy heavy-duty equipment such as compressors, diesel-fueled equipment, or other sources typically associated with excessive noise generation.

On-Site Stationary Noise Sources

Noise from on-site mechanical equipment (e.g., HVAC units) and any other human activities from related projects would not be typically associated with excessive noise generation that could result in increases of 5 dBA or more in ambient noise levels at sensitive receptors when combined with operational noise from the Proposed Project. The presence of intervening multi-story buildings along Sunset Boulevard and the residential neighborhoods that flank it will generally shield noise impacts from one or more projects that may generate operational noise. Therefore, cumulative stationary source noise impacts associated with operation of the Project and related projects would be less than significant.

Off-Site Mobile Noise Sources

The Project would add up to 1,850 vehicle trips to the local roadway network on a peak weekday at the start of operations in 2027, including up to 152 vehicle trips in the A.M. peak hour. Related projects would have to generate 2,488 vehicle trips onto Sunset Boulevard in the peak A.M. hour to elevate noise by 3 dBA. Instead, the four nearby related projects would generate about 611 A.M. peak hour trips (Table 13).

Table 13
Related Project Trip Generation

Related Project	Address	A.M. Peak Hour	P.M. Peak Hour
6	1274 Sunset Bl.[1]	24	29
7	1275 Sunset Bl.[1]	27	30
8	1111 Sunset Bl.[1]	531	668
9	1251 Sunset Bl.[2]	29	34
TOTAL		611	761

[1] Transportation Assessment, Fehr & Peers, October 2023.
[2] 1251 Sunset Boulevard Technical Memorandum, Jano Baghdanian & Associates, August 2018.

When combined with the Proposed Project, these five developments would add 763 A.M. peak hour trips, a 26.7 percent increase in volume to traffic on Sunset Boulevard at Everett Street in the A.M. peak hour, assuming all vehicle trips use this roadway segment. As this would not

increase traffic volumes by 100 percent, cumulative noise impacts due to off-site traffic would not increase ambient noise levels by 3 dBA, let alone by the 5 dBA threshold of significance. Additionally, the Project would not result in an exposure of persons to or a generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Therefore, cumulative noise impacts due to off-site traffic would not increase ambient noise levels by 3 dBA to or within their respective “Normally Unacceptable” or “Clearly Unacceptable” noise categories, or by 5 dBA or greater overall. Additionally, the Project would not result in an exposure of persons to or a generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

TECHNICAL APPENDIX

DouglasKim+Associates,LLC

AMBIENT NOISE MEASUREMENTS

DouglasKim+Associates,LLC

Figure 1
Noise Measurement Locations

Session Report

2/4/2023

Information Panel

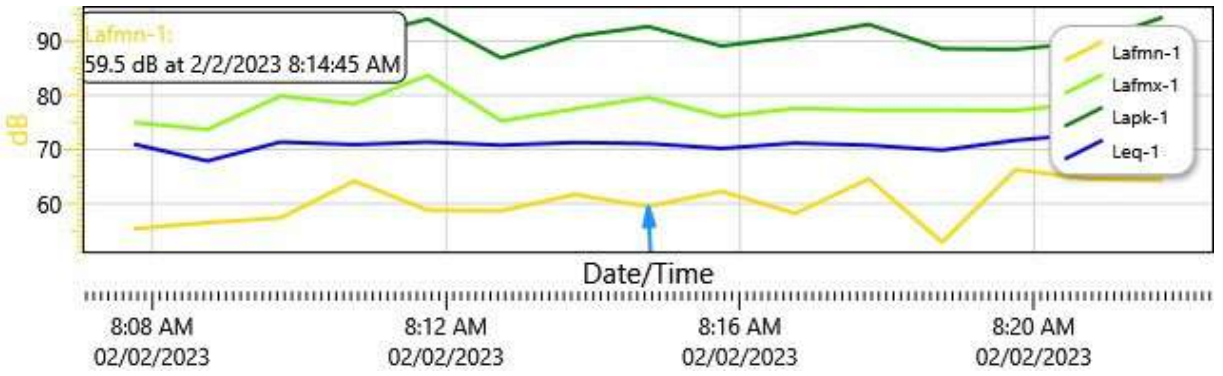
Name	1257 Sunset Boulevard
Comments	
Start Time	2/2/2023 8:06:45 AM
Stop Time	2/2/2023 8:21:52 AM
Run Time	00:15:07
Serial Number	SE40213991
Device Name	SE40213991
Model Type	Sound Examiner
Device Firmware Rev	R.11C
Company Name	
Description	
Location	
User Name	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	71.4 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	OFF

Logged Data Chart

1257 Sunset Boulevard: Logged Data Chart



Logged Data Table

Date/Time	Lapk-1	Lafmn-1	Lafmx-1	Leq-1

Date/Time	Lapk-1	Lafmn-1	Lafmx-1	Leq-1
2/2/2023 8:07:45 AM	87.5	55.4	75	71
8:08:45 AM	88.5	56.5	73.7	67.9
8:09:45 AM	91.5	57.4	79.9	71.4
8:10:45 AM	90.6	64.2	78.4	70.9
8:11:45 AM	94.1	58.8	83.7	71.4
8:12:45 AM	86.9	58.7	75.3	70.8
8:13:45 AM	90.9	61.7	77.5	71.3
8:14:45 AM	92.7	59.5	79.6	71.1
8:15:45 AM	89.1	62.3	76.1	70.2
8:16:45 AM	90.8	58.2	77.6	71.2
8:17:45 AM	93.1	64.6	77.3	70.8
8:18:45 AM	88.6	52.9	77.3	69.9
8:19:45 AM	88.5	66.3	77.2	71.7
8:20:45 AM	89.8	64.6	78.6	72.9
8:21:45 AM	94.4	64.4	83.2	74.9

Session Report

2/4/2023

Information Panel

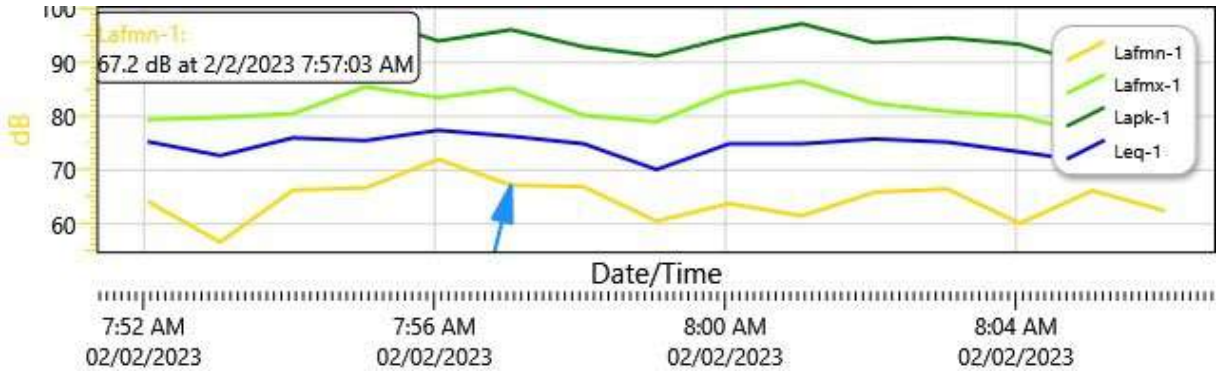
Name	1236 Sunset Boulevard
Comments	
Start Time	2/2/2023 7:51:03 AM
Stop Time	2/2/2023 8:06:09 AM
Run Time	00:15:06
Serial Number	SE40213991
Device Name	SE40213991
Model Type	Sound Examiner
Device Firmware Rev	R.11C
Company Name	
Description	
Location	
User Name	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	74.7 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	OFF

Logged Data Chart

1236 Sunset Boulevard: Logged Data Chart



Logged Data Table

Date/Time	Lapk-1	Lafmn-1	Lafmx-1	Leq-1

Date/Time	Lapk-1	Lafmn-1	Lafmx-1	Leq-1
2/2/2023 7:52:03 AM	96.3	64.2	79.4	75.3
7:53:03 AM	94.2	56.6	79.8	72.7
7:54:03 AM	94.1	66.3	80.5	76
7:55:03 AM	98.4	66.7	85.5	75.5
7:56:03 AM	94	72	83.5	77.4
7:57:03 AM	96.1	67.2	85.2	76.3
7:58:03 AM	92.9	66.9	80.2	74.9
7:59:03 AM	91.2	60.5	79	70.1
8:00:03 AM	94.7	63.8	84.5	74.9
8:01:03 AM	97.2	61.5	86.5	74.9
8:02:03 AM	93.7	65.9	82.4	75.8
8:03:03 AM	94.6	66.5	80.9	75.2
8:04:03 AM	93.4	60.1	80	73.4
8:05:03 AM	89.6	66.2	76.7	71.5
8:06:03 AM	88.2	62.4	76.5	70.2

Session Report

2/4/2023

Information Panel

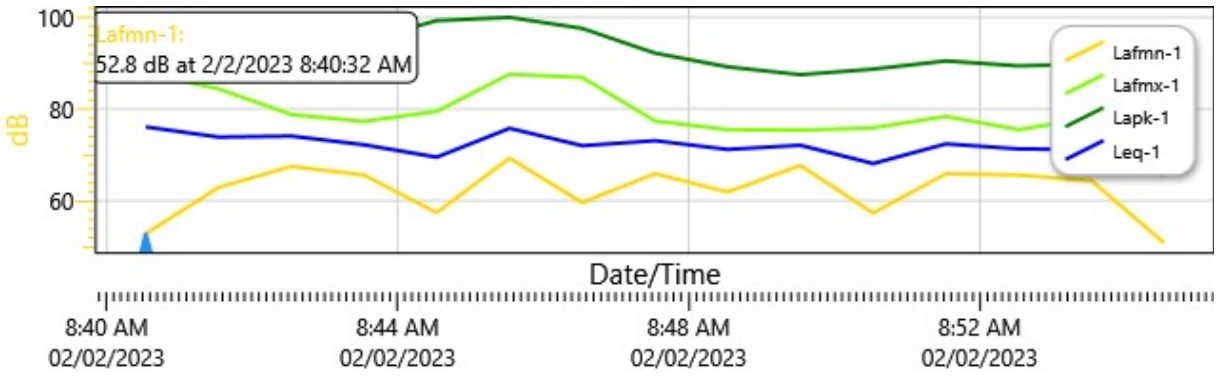
Name	1190 Sunset Boulevard
Comments	
Start Time	2/2/2023 8:39:32 AM
Stop Time	2/2/2023 8:54:36 AM
Run Time	00:15:04
Serial Number	SE40213991
Device Name	SE40213991
Model Type	Sound Examiner
Device Firmware Rev	R.11C
Company Name	
Description	
Location	
User Name	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	72.5 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	OFF

Logged Data Chart

1190 Sunset Boulevard: Logged Data Chart



Logged Data Table

Date/Time	Lapk-1	Lafmn-1	Lafmx-1	Leq-1

Date/Time	Lapk-1	Lafmn-1	Lafmx-1	Leq-1
2/2/2023 8:40:32 AM	99.5	52.8	87.8	76.1
8:41:32 AM	94.2	62.9	84.4	73.9
8:42:32 AM	90.2	67.5	78.8	74.1
8:43:32 AM	94.9	65.6	77.3	72.2
8:44:32 AM	99.3	57.4	79.5	69.5
8:45:32 AM	100	69.3	87.6	75.8
8:46:32 AM	97.6	59.6	86.9	72
8:47:32 AM	92.2	65.9	77.4	73.1
8:48:32 AM	89.2	61.9	75.5	71.2
8:49:32 AM	87.5	67.7	75.4	72.1
8:50:32 AM	88.7	57.3	75.9	68.1
8:51:32 AM	90.5	65.9	78.4	72.4
8:52:32 AM	89.4	65.6	75.5	71.3
8:53:32 AM	89.8	64.4	78.1	71.2
8:54:32 AM	86.2	50.8	73.9	65.7

Session Report

2/4/2023

Information Panel

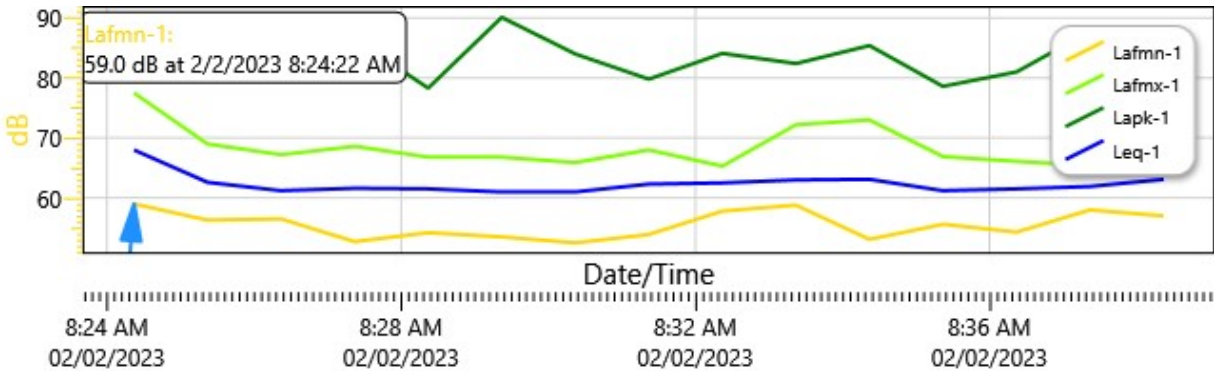
Name	941 Everett Street
Comments	
Start Time	2/2/2023 8:23:22 AM
Stop Time	2/2/2023 8:38:29 AM
Run Time	00:15:07
Serial Number	SE40213991
Device Name	SE40213991
Model Type	Sound Examiner
Device Firmware Rev	R.11C
Company Name	
Description	
Location	
User Name	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	62.7 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	OFF

Logged Data Chart

941 Everett Street: Logged Data Chart



Logged Data Table

Date/Time	Lapk-1	Lafmn-1	Lafmx-1	Leq-1

Date/Time	Lapk-1	Lafmn-1	Lafmx-1	Leq-1
2/2/2023 8:24:22 AM	89.1	59	77.5	68
8:25:22 AM	89.1	56.3	69	62.6
8:26:22 AM	80.6	56.5	67.2	61.2
8:27:22 AM	86.5	52.7	68.6	61.6
8:28:22 AM	78.3	54.2	66.8	61.5
8:29:22 AM	90.1	53.5	66.8	61
8:30:22 AM	84	52.5	65.9	61
8:31:22 AM	79.8	53.9	68	62.3
8:32:22 AM	84.1	57.8	65.3	62.5
8:33:22 AM	82.4	58.8	72.2	63
8:34:22 AM	85.4	53.1	73	63.1
8:35:22 AM	78.6	55.6	66.9	61.2
8:36:22 AM	81	54.3	66.1	61.5
8:37:22 AM	87.8	58	65.4	61.9
8:38:22 AM	86.5	57	66.1	63.1

DouglasKim+Associates,LLC

CONSTRUCTION NOISE IMPACTS
UNMITIGATED

DouglasKim+Associates,LLC

Grading Phase

Source	Sound Pressure Level
Grader	85
Grader	85
Air Compressor	80
Bore/Drill Rig	80
Cement and Mortar Mixer	85
Concrete/Industrial Saw	76
Excavator	80
Other Construction Equipmen	80
Total	91.4

=IF(D17<0,"n/a",10*LOG(D17))

Building Construction Phase

Source	Sound Pressure Level
Crane	83
Forklift	80
Generator Set	82
Generator Set	82
Tractor/Loader/Backhoe	80
Welder	80
Welder	80
Welder	80
Air Compressor	80
Air Compressor	80
Air Compressor	80
Cement and Mortar Mixer	85
Concrete/Inustrial Saw	76
Dumper/Tender	80
Dumper/Tender	80
Dumper/Tender	80
Other Construction Equipmen	80
Other Construction Equipmen	80
Pump	77
Skid Steer Loader	80
Total	93.7

Noise emissions of industry sources

Source name	Size m/m²	Reference	Level Day dB(A)	Level Evening dB(A)	Level Night dB(A)	Corrections Cwall dB	Corrections CI dB	Corrections CT dB
Consruction Site	10035 m²	Lw/unit	128.4	-	-	-	-	-

Receiver list

No.	Receiver name	Building side	Floor	Level Day dBA
1	Residences - 1271 Sunset Bl.	West	GF	65.2
2	Residences - Sunset Bl. (west side)	East	GF	80.4
3	Residences - Everett St. (west side)	East	GF	62.0
4	Residences - 1190 Sunset Bl.	East	GF	78.9
5	Residences - 1251-1255 Sunset Bl.	West	GF	80.0
6	Residences - Everett St. (east side)	North west	GF	78.5

Contribution levels of the receivers

Source name		Traffic lane	Level Day dB(A)
Residences - 1190 Sunset Bl.	GF		78.9
Consruction Site		-	78.9
Residences - 1251-1255 Sunset Bl.	GF		80.0
Consruction Site		-	80.0
Residences - 1271 Sunset Bl.	GF		65.2
Consruction Site		-	65.2
Residences - Everett St. (east side)	GF		78.5
Consruction Site		-	78.5
Residences - Everett St. (west side)	GF		62.0
Consruction Site		-	62.0
Residences - Sunset Bl. (west side)	GF		80.4
Consruction Site		-	80.4

Sunset and Everett

Signs and symbols

Building

Construction Site

Levels in dB(A)

< 30
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
70 - 75
75 - 80
80 - 85
85 - 90
>= 90

1 : 198

0 40 80 160 240 320 feet

DouglasKim+Associates,LLC

Sunset and Everett

Signs and symbols

Building

Analyzed Sensitive Receptor

Construction Site

1 : 198

0 40 80 160 240 320 feet

DouglasKim+Associates,LLC

Construction Noise Impacts (Without Mitigation)

DouglasKim+Associates,LLC

Receptor	Existing Leq	Noise	New Leq	Difference Leq	Significant?
Residences - 1271 Sunset Bl.	71.4	65.2	72.3	0.9	**No**
Residences - Sunset Bl (west side)	74.7	80.4	81.4	6.7	**Yes**
Residences - Everett St. (west side)	62.7	62.0	65.4	2.7	**No**
Residences - 1190 Sunset Bl.	72.5	78.9	79.8	7.3	**Yes**
Residences - 1251-1255 Sunset Bl.	71.4	80.0	80.6	9.2	**Yes**
Residences - Everett St. (east side)	62.7	78.5	78.6	15.9	**Yes**

Note: Sound Power Level (Lw) assumes full sphere propagation

OFF-SITE CONSTRUCTION-RELATED TRAVEL VOLUMES

Construction Phase	Worker Trips	Vendor Trips	Haul Trips	Total	% of Traffic Volumes
Demolition	5	0	55.5	60	2.1%
Site Preparation	7.5	0	294.4	302	10.6%
Grading	20	0	291.0	311	10.9%
Trenching	7.5	0		8	0.3%
Building Construction	284	146.5		431	15.1%
Architectural Coatings	56.7	0		56.7	2.0%
Haul trips represent heavy-duty truck trips with a 19.1 Passenger Car Equivalent applied; Vendor trips are a blend of vehicle types with a 9.5					

2,857 Traffic Volumes on Sunset Boulevard at Everett Street in the peak A.M. hour

DouglasKim+Associates,LLC

CONSTRUCTION BUILDING DEBRIS

Materials	Total SF	Height	Cubic Yards	Pounds per Cub	Tons	Truck Capacity (CY)	Truck Trips	Source
Construction and Debris	0	0	-	484	-	10	-	Florida Department of Environmental Protection A Fact Sheet for C&D Debris Facility Operators
General Building		12	-	1,000	-	10	-	*Federal Emergency Management Agency, Debris Estimating Field Guide (FEMA 329), September 2010. General Building Formula*
Single Family Residence	-	12	-	1,000	-	10	-	Federal Emergency Management Agency. Debris Estimating Field Guide (FEMA 329), September 2010. Single Family Residence Formula, assumes 1 story, Medium vegetative cover multiplier (1.3)
Multi-Family Residence		12	-	1,000	-	10	-	
Mobile Home				1,000	-	10	-	
Mixed Debris	1,344	10	498	480	119	10	100	Florida Department of Environmental Protection A Fact Sheet for C&D Debris Facility Operators
Vegetative Debris (Hardwoods)			-	500	-	10	-	
Vegetative Debris (Softwoods)	16,028	10	5,936	333	989	10	1,187	
Asphalt or concrete (Constructior	6,000	0.5	111	2,400	133	10	22	
TOTAL			6,545		1,242		1,309	

DouglasKim+Associates,LLC

CONSTRUCTION NOISE IMPACTS MITIGATED

Noise emissions of industry sources

Source name	Size m/m²	Reference	Level Day dB(A)	Level Evening dB(A)	Level Night dB(A)	Corrections Cwall dB	Corrections CI dB	Corrections CT dB
Consruction Site	10035 m²	Lw/unit	109.8	-	-	-	-	-

Receiver list

No.	Receiver name	Building side	Floor	Level Day dBA
1	Residences - 1271 Sunset Bl.	West	GF	46.6
2	Residences - Sunset Bl. (west side)	East	GF	61.8
3	Residences - Everett St. (west side)	East	GF	43.4
4	Residences - 1190 Sunset Bl.	East	GF	60.3
5	Residences - 1251-1255 Sunset Bl.	West	GF	61.4
6	Residences - Everett St. (east side)	North west	GF	59.9

Contribution levels of the receivers

Source name		Traffic lane	Level Day dB(A)
Residences - 906-924 Everett St.	GF		59.9
Consruction Site		-	59.9
Residences - 1190 Sunset Bl.	GF		60.3
Consruction Site		-	60.3
Residences - 1251-1255 Sunset Bl.	GF		61.4
Consruction Site		-	61.4
Residences - 1271 Sunset Bl.	GF		46.6
Consruction Site		-	46.6
Residences - Everett St.	GF		43.4
Consruction Site		-	43.4
Residences - Sunset Bl. (west side)	GF		61.8
Consruction Site		-	61.8

Construction Noise Impacts (With Mitigation)

DouglasKim+Associates,LLC

Receptor	Existing Leq	Noise	New Leq	Difference Leq	Significant?
Residences - 1271 Sunset Bl.	71.4	65.2	72.3	0.9	**No**
Residences - Sunset Bl (west side)	74.7	77.9	79.6	4.9	**No**
Residences - Everett St.	62.7	62.0	65.4	2.7	**No**
Residences - 1190 Sunset Bl.	72.5	75.7	77.4	4.9	**No**
Residences - 1251-1255 Sunset Bl.	71.4	74.6	76.3	4.9	**No**
Residences - 906-924 Everett St.	62.7	65.9	67.6	4.9	**No**

Note: Sound Power Level (Lw) assumes full sphere propagation

DouglasKim+Associates,LLC

OPERATIONS NOISE CALCULATIONS

Receiver list

No.	Receiver name	Building side	Floor	Day dBA	Evening dBA	Night dBA	Lden
1	Residences - 1271 Sunset Bl.	West	GF	45.4	44.7	38.1	44.9
2	Residences - Sunset Bl. (west side)	East	GF	52.0	50.9	45.5	51.1
3	Residences - Everett St. (west side)	East	GF	43.7	42.3	37.7	42.5
4	Residences - 1190 Sunset Bl.	East	GF	52.1	51	45.6	51.1
5	Residences - 1251-1255 Sunset Bl.	West	GF	45.3	44.6	38.1	44.9
6	Residences - Everett St. (east side)	North west	GF	60.4	59	54.4	59.2

Contribution levels of the receivers

Source name		Traffic lane	Level Day	Evening	Night	Lden
			dB(A)			
Residences - Everett St. east side)	GF		60.4	59.0	54.4	59.2
Driveway A North		-	-28.3	-29.0	-35.6	-28.8
Driveway A South		-	34.4	33.7	27.0	33.9
Driveway B North		-	-34.0	-34.7	-41.3	-34.5
Driveway B South		-	34.5	33.8	27.1	34.0
Driveway C North		-	-5.4	-6.1	-12.7	-5.9
Driveway C South		-	34.4	33.7	27.0	33.9
Driveway C South		-	-11.3	-12.0	-18.7	-11.8
HVAC Units		-	51.7	50.3	45.7	50.4
HVAC Units		-	58.6	57.2	52.6	57.4
HVAC Units		-	50.4	49.0	44.4	49.1
HVAC Units		-	42.9	41.5	36.9	41.7
HVAC Units		-	-7.2	-7.2	-7.2	-5.3
HVAC Units		-	-6.2	-6.2	-6.2	-4.4
HVAC Units		-	49.0	47.6	43.0	47.8
HVAC Units		-	3.2	3.2	3.2	5.1
HVAC Units		-	1.5	1.5	1.5	3.4
HVAC Units		-	-3.8	-3.8	-3.8	-1.9
HVAC Units		-	-0.1	-0.1	-0.1	1.8
HVAC Units		-	8.2	8.2	8.2	10.1
HVAC Units		-	2.7	2.7	2.7	4.6
HVAC Units		-	-1.7	-1.7	-1.7	0.2
HVAC Units		-	7.5	7.5	7.5	9.3
HVAC Units		-	5.6	5.6	5.6	7.5
HVAC Units		-	-5.1	-5.1	-5.1	-3.2
HVAC Units		-	11.0	11.0	11.0	12.8
HVAC Units		-	12.8	12.8	12.8	14.6
HVAC Units		-	6.2	6.2	6.2	8.0
Plaza		-	35.0	33.6	28.9	33.7
Pool and Spa		-	23.6	22.2	17.5	22.3
Roof Deck		-	31.0	29.6	24.9	29.7
Roof Deck		-	34.5	33.1	28.5	33.3
Roof Deck		-	0.1	-1.3	-5.9	-1.2
Residences - 1271 Sunset Bl.	GF		45.4	44.7	38.1	44.9
Driveway A North		-	40.6	39.9	33.2	40.1
Driveway A South		-	28.8	28.1	21.4	28.3
Driveway B North		-	40.0	39.3	32.7	39.6
Driveway B South		-	22.3	21.6	15.0	21.9
Driveway C North		-	19.1	18.4	11.7	18.6
Driveway C South		-	21.0	20.3	13.7	20.5
Driveway C South		-	40.6	39.9	33.3	40.2
HVAC Units		-	20.3	19.0	14.3	19.1
HVAC Units		-	20.2	18.9	14.2	19.0
HVAC Units		-	20.3	18.9	14.2	19.0
HVAC Units		-	12.4	11.0	6.4	11.2
HVAC Units		-	10.0	10.0	10.0	11.8
HVAC Units		-	8.9	8.9	8.9	10.8
HVAC Units		-	20.4	19.1	14.4	19.2
HVAC Units		-	-1.5	-1.5	-1.5	0.4
HVAC Units		-	0.2	0.2	0.2	2.1
HVAC Units		-	6.5	6.5	6.5	8.4
HVAC Units		-	2.1	2.1	2.1	4.0
HVAC Units		-	-4.8	-4.8	-4.8	-3.0
HVAC Units		-	4.0	4.0	4.0	5.9
HVAC Units		-	4.2	4.2	4.2	6.1
HVAC Units		-	-5.8	-5.8	-5.8	-4.0
HVAC Units		-	-3.2	-3.2	-3.2	-1.3
HVAC Units		-	8.1	8.1	8.1	10.0
HVAC Units		-	-6.4	-6.4	-6.4	-4.5
HVAC Units		-	-7.9	-7.9	-7.9	-6.0
HVAC Units		-	-0.6	-0.6	-0.6	1.3
Plaza		-	5.7	4.3	-0.3	4.4
Pool and Spa		-	-1.2	-2.6	-7.2	-2.4

Contribution levels of the receivers

Source name		Traffic lane	Level Day	Evening	Night	Lden
			dB(A)			
Roof Deck		-	2.3	1.0	-3.7	1.1
Roof Deck		-	0.1	-1.3	-5.9	-1.2
Roof Deck		-	1.0	-0.4	-5.0	-0.2
Residences - 1190 Sunset Bl.	GF		52.1	51.0	45.6	51.2
Driveway A North		-	25.8	25.1	18.4	25.3
Driveway A South		-	43.2	42.5	35.8	42.7
Driveway B North		-	24.0	23.3	16.7	23.5
Driveway B South		-	42.8	42.1	35.5	42.4
Driveway C North		-	36.1	35.4	28.7	35.6
Driveway C South		-	42.8	42.1	35.5	42.3
Driveway C South		-	32.3	31.6	24.9	31.8
HVAC Units		-	42.8	41.4	36.7	41.5
HVAC Units		-	42.5	41.1	36.4	41.2
HVAC Units		-	43.7	42.3	37.7	42.4
HVAC Units		-	35.8	34.4	29.8	34.6
HVAC Units		-	7.4	7.4	7.4	9.2
HVAC Units		-	9.1	9.1	9.1	10.9
HVAC Units		-	44.2	42.8	38.2	42.9
HVAC Units		-	6.3	6.3	6.3	8.2
HVAC Units		-	4.8	4.8	4.8	6.7
HVAC Units		-	14.0	14.0	14.0	15.9
HVAC Units		-	5.9	5.9	5.9	7.7
HVAC Units		-	8.0	8.0	8.0	9.9
HVAC Units		-	18.7	18.7	18.7	20.6
HVAC Units		-	7.8	7.8	7.8	9.7
HVAC Units		-	12.2	12.2	12.2	14.1
HVAC Units		-	7.2	7.2	7.2	9.1
HVAC Units		-	10.9	10.9	10.9	12.8
HVAC Units		-	9.1	9.1	9.1	10.9
HVAC Units		-	11.2	11.2	11.2	13.1
HVAC Units		-	12.4	12.4	12.4	14.3
Plaza		-	30.3	28.9	24.2	29.0
Pool and Spa		-	22.2	20.8	16.2	20.9
Roof Deck		-	32.8	31.4	26.7	31.5
Roof Deck		-	32.8	31.4	26.8	31.5
Roof Deck		-	16.2	14.8	10.2	15.0
Residences - 1251-1255 Sunset Bl.	GF		45.3	44.6	38.1	44.9
Driveway A North		-	40.4	39.7	33.1	40.0
Driveway A South		-	24.3	23.6	16.9	23.8
Driveway B North		-	39.5	38.8	32.1	39.0
Driveway B South		-	16.0	15.3	8.7	15.5
Driveway C North		-	18.9	18.2	11.6	18.4
Driveway C South		-	13.5	12.8	6.2	13.0
Driveway C South		-	41.1	40.4	33.7	40.6
HVAC Units		-	23.9	22.5	17.9	22.7
HVAC Units		-	23.0	21.6	17.0	21.8
HVAC Units		-	23.0	21.6	17.0	21.7
HVAC Units		-	16.0	14.6	9.9	14.7
HVAC Units		-	17.0	17.0	17.0	18.9
HVAC Units		-	13.8	13.8	13.8	15.7
HVAC Units		-	23.9	22.5	17.9	22.6
HVAC Units		-	2.0	2.0	2.0	3.9
HVAC Units		-	4.0	4.0	4.0	5.9
HVAC Units		-	11.2	11.2	11.2	13.1
HVAC Units		-	6.2	6.2	6.2	8.1
HVAC Units		-	-1.8	-1.8	-1.8	0.1
HVAC Units		-	7.6	7.6	7.6	9.5
HVAC Units		-	8.6	8.6	8.6	10.5
HVAC Units		-	-2.8	-2.8	-2.8	-0.9
HVAC Units		-	0.1	0.1	0.1	2.0
HVAC Units		-	13.0	13.0	13.0	14.9
HVAC Units		-	-3.6	-3.6	-3.6	-1.7
HVAC Units		-	-5.2	-5.2	-5.2	-3.4

Contribution levels of the receivers

Source name	Traffic lane	Level Day	Evening	Night	Lden
		dB(A)			
HVAC Units	-	4.4	4.4	4.4	6.3
Plaza	-	-1.8	-3.2	-7.8	-3.0
Pool and Spa	-	-1.3	-2.7	-7.4	-2.6
Roof Deck	-	7.0	5.6	1.0	5.8
Roof Deck	-	3.9	2.5	-2.2	2.6
Roof Deck	-	15.1	13.8	9.1	13.9
Residences - Everett St. (west side) GF		43.7	42.3	37.7	42.5
Driveway A North	-	-0.3	-1.0	-7.7	-0.8
Driveway A South	-	20.8	20.1	13.4	20.3
Driveway B North	-	-0.8	-1.5	-8.2	-1.3
Driveway B South	-	18.1	17.4	10.7	17.6
Driveway C North	-	-0.6	-1.3	-8.0	-1.1
Driveway C South	-	17.7	17.0	10.4	17.2
Driveway C South	-	0.0	-0.7	-7.4	-0.5
HVAC Units	-	37.8	36.4	31.8	36.5
HVAC Units	-	37.1	35.8	31.1	35.9
HVAC Units	-	36.7	35.3	30.7	35.5
HVAC Units	-	29.7	28.3	23.7	28.5
HVAC Units	-	7.2	7.2	7.2	9.1
HVAC Units	-	7.6	7.6	7.6	9.5
HVAC Units	-	37.7	36.3	31.7	36.4
HVAC Units	-	11.0	11.0	11.0	12.9
HVAC Units	-	10.5	10.5	10.5	12.4
HVAC Units	-	8.7	8.7	8.7	10.6
HVAC Units	-	10.1	10.1	10.1	12.0
HVAC Units	-	11.0	11.0	11.0	12.8
HVAC Units	-	10.1	10.1	10.1	11.9
HVAC Units	-	9.6	9.6	9.6	11.4
HVAC Units	-	10.3	10.3	10.3	12.2
HVAC Units	-	10.9	10.9	10.9	12.8
HVAC Units	-	8.2	8.2	8.2	10.0
HVAC Units	-	11.0	11.0	11.0	12.9
HVAC Units	-	10.7	10.7	10.7	12.6
HVAC Units	-	10.0	10.0	10.0	11.9
Plaza	-	10.2	8.9	4.2	9.0
Pool and Spa	-	13.6	12.2	7.6	12.4
Roof Deck	-	19.3	17.9	13.2	18.0
Roof Deck	-	24.3	22.9	18.3	23.0
Roof Deck	-	2.0	0.7	-4.0	0.8
Residences - Sunset Bl. (west side) GF		52.0	50.9	45.5	51.1
Driveway A North	-	32.8	32.1	25.5	32.3
Driveway A South	-	42.8	42.1	35.4	42.3
Driveway B North	-	31.7	31.0	24.4	31.2
Driveway B South	-	37.0	36.3	29.7	36.5
Driveway C North	-	42.3	41.6	34.9	41.8
Driveway C South	-	30.5	29.8	23.1	30.0
Driveway C South	-	43.9	43.2	36.5	43.4
HVAC Units	-	44.6	43.2	38.6	43.3
HVAC Units	-	39.1	37.7	33.1	37.9
HVAC Units	-	39.3	37.9	33.3	38.1
HVAC Units	-	34.8	33.5	28.8	33.6
HVAC Units	-	10.0	10.0	10.0	11.9
HVAC Units	-	10.7	10.7	10.7	12.6
HVAC Units	-	45.6	44.2	39.6	44.4
HVAC Units	-	17.5	17.5	17.5	19.3
HVAC Units	-	19.7	19.7	19.7	21.5
HVAC Units	-	12.0	12.0	12.0	13.9
HVAC Units	-	19.5	19.5	19.5	21.4
HVAC Units	-	11.2	11.2	11.2	13.1
HVAC Units	-	13.5	13.5	13.5	15.4
HVAC Units	-	19.1	19.1	19.1	21.0
HVAC Units	-	11.3	11.3	11.3	13.1
HVAC Units	-	11.5	11.5	11.5	13.3

Contribution levels of the receivers

Source name	Traffic lane	Level			
		Day	Evening	Night	Lden
		dB(A)			
HVAC Units	-	11.4	11.4	11.4	13.3
HVAC Units	-	10.6	10.6	10.6	12.5
HVAC Units	-	10.1	10.1	10.1	12.0
HVAC Units	-	12.1	12.1	12.1	14.0
Plaza	-	12.7	11.3	6.7	11.4
Pool and Spa	-	7.3	6.0	1.3	6.1
Roof Deck	-	30.2	28.8	24.2	29.0
Roof Deck	-	19.6	18.2	13.6	18.4
Roof Deck	-	31.1	29.7	25.0	29.8

DouglasKim+Associates,LLC

Operational Noise Impacts

Composite Noise Impact Summary

Sensitive Receptor	Existing CNEL	Traffic	Mechanical	Outdoor Spaces	Project Composite	Existing + Project	Increase	Threshold of Significance	Significant?
Residences - 1271 Sunset Bl.	69.4	47.7	48.3	35.8	44.9	69.4	0.0	74.4	No
Residences - Sunset Bl (west side)	72.7	48.0	48.1	32.7	51.1	72.7	0.0	75.7	No
Residences - Everett St. (west side	60.7	23.6	42.4	24.8	42.5	60.8	0.1	65.7	No
Residences - 1190 Sunset Bl.	70.5	44.9	26.0	13.5	51.1	70.5	0.0	73.5	No
Residences - 1251-1255 Sunset Bl.	69.4	44.7	29.6	16.7	44.9	69.4	0.0	72.4	No
Residences - Everett St. (east side	60.7	38.7	58.7	37.5	59.2	63.0	2.3	63.7	No

Sensitive Receptor **Residences - 1271 Sunset Bl.**

Source	Sound Pressu	10^(x/10)
Traffic	47.7	58699
Mechanical	48.3	67393
Outdoor Spaces	35.8	3790
Total	51.1	129888.996

Sensitive Receptor **Residences - Sunset Bl (west side)**

Source	Sound Pressu	10^(x/10)
Traffic	48.0	62490
Mechanical	48.1	64562
Outdoor Spaces	32.7	1852
Total	51.1	128911.2001

Sensitive Receptor **Residences - Everett St. (west side)**

Source	Sound Pressu	10^(x/10)
Traffic	23.6	231
Mechanical	42.4	17208
Outdoor Spaces	24.8	305
Total	42.5	17751.51658

Sensitive Receptor **Residences - 1190 Sunset Bl.**

Source	Sound Pressu	10^(x/10)
Traffic	44.9	30851
Mechanical	26.0	398
Outdoor Spaces	13.5	22
Total	45.0	31278.63957

Sensitive Receptor **1251-1255 Sunset Bl.**

Source	Sound Pressu	10^(x/10)
Traffic	44.7	29512
Mechanical	29.6	912
Outdoor Spaces	16.7	47
Total	44.8	30477.87662

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Sensitive Receptor **Residences - Everett St. (east side)**

Source	Sound Pressu	10^(x/10)
Traffic	38.7	7413
Mechanical	58.7	741310
Outdoor Spaces	37.5	-5623
Total	58.7	743107.9305

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TRAFFIC NOISE MODELING

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Contr devic	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Driveway A South			Traffic direction: in entry direction									
0+00	744	Total	-	18	18	3	-	none	-	-	Average (of DGAC a	0.0
		Automobiles	-	18	18	3	56					
		Medium trucks	-	-	-	-	-					
		Heavy trucks	-	-	-	-	-					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					
Driveway A North			Traffic direction: in entry direction									
0+00	744	Total	-	18	18	3	-	none	-	-	Average (of DGAC a	0.0
		Automobiles	-	18	18	3	56					
		Medium trucks	-	-	-	-	-					
		Heavy trucks	-	-	-	-	-					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					
Driveway B South			Traffic direction: in entry direction									
0+00	744	Total	-	18	18	3	-	none	-	-	Average (of DGAC a	0.0
		Automobiles	-	18	18	3	56					
		Medium trucks	-	-	-	-	-					
		Heavy trucks	-	-	-	-	-					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					
Driveway B North			Traffic direction: in entry direction									
0+00	744	Total	-	18	18	3	-	none	-	-	Average (of DGAC a	0.0
		Automobiles	-	18	18	3	56					
		Medium trucks	-	-	-	-	-					
		Heavy trucks	-	-	-	-	-					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					
Driveway C South			Traffic direction: in entry direction									
0+00	744	Total	-	18	18	3	-	none	-	-	Average (of DGAC a	0.0
		Automobiles	-	18	18	3	56					
		Medium trucks	-	-	-	-	-					
		Heavy trucks	-	-	-	-	-					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					
Driveway C South			Traffic direction: in entry direction									
0+00	744	Total	-	18	18	3	-	none	-	-	Average (of DGAC a	0.0
		Automobiles	-	18	18	3	56					
		Medium trucks	-	-	-	-	-					
		Heavy trucks	-	-	-	-	-					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					
Driveway C North			Traffic direction: in entry direction									
0+00	744	Total	-	18	18	3	-	none	-	-	Average (of DGAC a	0.0
		Automobiles	-	18	18	3	56					
		Medium trucks	-	-	-	-	-					
		Heavy trucks	-	-	-	-	-					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					

DouglasKim+Associates,LLC

OPERATIONS ANALYSIS
MECHANICAL EQUIPMENT

Carrier

Turn to the experts

Qualifying Systems Only

COMFORT™ SERIES HEAT PUMPS

Proven, reliable comfort, up to 16.0 SEER and 9.0 HSPF ratings

Models 25HBC5, 25HCE4, 25HCE4**C

DESIGNED WITH YOUR COMFORT IN MIND

Innovation, efficiency, quality: Carrier Comfort™ Series heat pumps represent years of research and design with one goal in mind – making your family comfortable. With standard models and units designed specifically for the rigors of coastal area installations, Comfort™ Series heat pumps represent the Carrier quality, environmental stewardship and lasting durability that have endured for more than a century. And, to ensure maximum year-round efficiency with both gas and electric heating capabilities, your dealer can include a new Carrier gas furnace and compatible thermostat to create a Hybrid Heat® dual-fuel system.

EFFICIENCY

SEER (Seasonal Energy Efficiency Ratio) and HSPF (Heating Seasonal Performance Factor) ratings are like your car's MPG – the higher the number, the greater the potential for savings. Comfort™ Series heat pumps offer a range of efficiencies that start at 14.0 SEER and reach as high as 16.0 SEER and up to 9.0 HSPF.

DURABILITY

A galvanized steel cabinet, heavy-duty wire coil guard and baked-on powder paint provide superior protection against dings, dents and other outdoor threats. For home comfort in a coastal environment, ask about Comfort™ Series models with WeatherShield™ protection for extra-tough, longer lasting corrosion resistance to withstand the harsh sea coast air.

ENVIRONMENT

Carrier was the first to offer systems with Puron® refrigerant, which does not contribute to ozone depletion. By replacing an older, less efficient heat pump, you are reducing energy use and your environmental impact.

HYBRID HEAT® SYSTEM

Combining a gas furnace, an electric heat pump and a compatible thermostat, a Carrier Hybrid Heat system automatically switches between electric and gas heating to optimize the efficiency of each fuel source. It's a great defense against unpredictable utility costs.

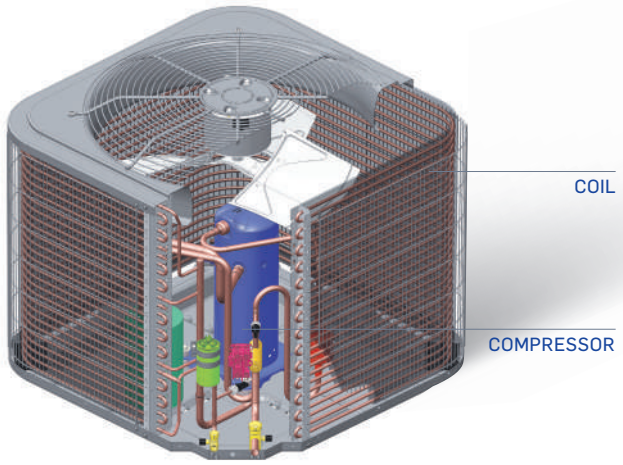
LIMITED WARRANTY

To the original owner, our Comfort™ Series heat pumps are covered by a 10-year parts limited warranty upon timely registration. The limited warranty period is five years if not registered within 90 days of installationexcept in jurisdictions where warranty benefits cannot be conditioned upon registration. See warranty certificate at carrier.com for complete details and restrictions.

THE CARRIER DIFFERENCE

If you could look under the hood of a Carrier Comfort™ Series heat pump, you'd see what drives the performance: a serious commitment to quality. Our microtube coil technology saves space and provides lasting comfort with its corrosion-resistant construction. And, our smooth-running compressor represents the solid, reliable performance you expect.

Comfort™ Series heat pumps are built to look their best while enduring exposure to hail, errant soccer balls, lawn equipment and more. The cabinet plays an important role in sound as well, using an aerodynamic top to facilitate airflow and keep operating sound to a minimum.



COMFORT™ 15
HEAT PUMP

A RANGE OF COMFORT

Carrier delivers heating and cooling systems in a range of shapes and sizes. Check out this side-by-side comparison to see how our efficient Comfort™ Series heat pumps measure up against our Infinity® and Performance™ models

	Infinity® System	Performance™ Series	Comfort™ Series
Motor Performance	Variable-speed rotary, variable-speed and two-stage scroll compressors available	Two-stage and single-stage scroll compressors available	Single-stage scroll compressor
Efficiency	Up to 24.0 SEER and 13.0 HSPF ratings	Up to 18.0 SEER and up to 9.5 HSPF rating	Up to 16.0 SEER and up to 9.0 HSPF rating
Durability	WeatherArmor™ Ultra cabinet protection	WeatherArmor™ Ultra cabinet protection	WeatherArmor™ cabinet protection
Sound	Silencer System II™, dBA as low as 51	dBA as low as 67	dBA as low as 69
Recommended Control*	Infinity® system control	ecobee Smart Thermostat, powered by Carrier	ecobee Smart Thermostat, powered by Carrier
Limited Warranty	10-year parts† 10-year unit replacement (25VNA4 compressor failure only)†	10-year parts†	10-year parts†

* Control sold separately, other options available.
† Upon timely registration. The warranty period is five years if not registered within 90 days of installation except in jurisdictions where warranty benefits cannot be conditioned upon registration. See limited warranty certificate for complete details and restrictions.

GAIN MORE CONTROL WITH A COMPLETE HOME COMFORT SYSTEM

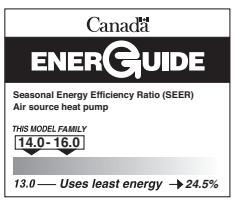
Control	Fan Coil	Evaporator Coil	Air Purifier	Humidifier	Ventilator
					
Wi-Fi®-enabled smart thermostat learns your schedule for greater efficiency and comfort.	The indoor section of your heat pump and should be properly matched to the outdoor unit for improved efficiency and long-term reliability.	Matches to the proper outdoor unit to provide more cooling efficiency and years of reliable service.	Uses Captures & Kills® technology to inactivate 99% of select airborne pathogens trapped by the filter, including coronavirus, bacteria and other pathogens.[1]	Adds moisture to the air, helping keep static and dry skin at bay.	Combines fresh outdoor air with conditioned indoor air for improved air quality.

[1] The Infinity® air purifier has demonstrated effectiveness against the murine coronavirus, based on third-party testing (2020) showing a >99% inactivation, which is a virus similar to the human novel coronavirus (SARS-CoV-2) that causes COVID-19. Therefore, the Infinity air purifier can be expected to be effective against SARS-CoV-2 when used in accordance with its directions for use. Third-party testing (2012, 2007) also shows ≥99% inactivation for the type of virus that causes common colds, Streptococcus pyogenes and human influenza. Airborne particles must flow through your HVAC system and be trapped by the Infinity filter to be inactivated at 99%. Learn how it works at Carrier.com/purifier.

MORE THAN A CENTURY OF COOL

In 1902, a determined engineer answered one of mankind's most nagging questions: How do we make hot, sticky, indoor air go away? In creating the world's first modern air conditioning system, Willis Carrier forever changed indoor life, and, more than a century later, the corporation that bears his name takes inspiration from his example.

Carrier strives to improve on our founder's breakthroughs, introducing new technologies that make life at home even cooler. Today, a nationwide network of experts continues to advance Willis Carrier's lifework. Your expert Carrier dealer is equipped to evaluate your home and create a customized system designed around your lifestyle.



Carrier
Turn to the experts

Comfort SERIES

carrier.com 1-800-CARRIER

As an ENERGY STAR® partner, Carrier Corporation has determined that qualifying models meet ENERGY STAR guidelines for energy efficiency. Ask your dealer for details or visit www.energystar.gov.

01-825-099-25
11/2020

Noise emissions of industry sources

Source na	Size	Referenc	Level		Frequency spectrum [dB(A)]																						Correction		
	m/m²			dB(A)	63 Hz	80 Hz	100 Hz	125 Hz	160 Hz	200 Hz	250 Hz	315 Hz	400 Hz	500 Hz	630 Hz	800 Hz	1 kHz	1.3 kHz	1.6 kHz	2 kHz	2.5 kHz	3.2 kHz	4 kHz	5 kHz	6.3 kHz	8 kHz	Cwa dB	CI dB	CT dB
HVAC Uni			Night	85.0	-	-	-	-	-	-	-	-	-	85.(	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	32.32 m	Lw/unit	Day	85.0	-	-	-	-	-	-	-	-	-	85.(	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Evenir	85.0	-	-	-	-	-	-	-	-	-	85.(	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Night	85.0	-	-	-	-	-	-	-	-	-	85.(	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	32.32 m	Lw/unit	Day	85.0	-	-	-	-	-	-	-	-	-	85.(	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Evenir	85.0	-	-	-	-	-	-	-	-	-	85.(	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Night	85.0	-	-	-	-	-	-	-	-	-	85.(	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	32.32 m	Lw/unit	Day	85.0	-	-	-	-	-	-	-	-	-	85.(	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Evenir	85.0	-	-	-	-	-	-	-	-	-	85.(	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Night	85.0	-	-	-	-	-	-	-	-	-	85.(	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DouglasKim+Associates,LLC

OPERATIONS ANALYSIS
OUTDOOR SPACES

DouglasKim+Associates,LLC

Outdoor Sources Noise Impacts (Without Mitigation)
Sensitive Receptor: Residences - 1271 Sunset Bl.

Source	Sound Pressure Level
Plaza	29
Pool and Spa	20.9
Roof Deck	31.5
Roof Deck	31.5
Roof Deck	15
Total	**35.8**

Outdoor Sources Noise Impacts (Without Mitigation)
Sensitive Receptor: Residences - Sunset Bl (west si

Source	Sound Pressure Level
Plaza	11.4
Pool and Spa	6.1
Roof Deck	29
Roof Deck	18.4
Roof Deck	29.8
Total	**32.7**

Outdoor Sources Noise Impacts (Without Mitigation)
Sensitive Receptor: Residences - Everett St. (west s

Source	Sound Pressure Level
Plaza	9
Pool and Spa	12.4
Roof Deck	18
Roof Deck	23
Roof Deck	0.8
Total	**24.8**

Outdoor Sources Noise Impacts (Without Mitigation)
Sensitive Receptor: Residences - 1190 Sunset Bl.

Source	Sound Pressure Level
Plaza	4.4
Pool and Spa	-2.4
Roof Deck	1.1
Roof Deck	-1.2
Roof Deck	-0.2
Total	**13.5**

Outdoor Sources Noise Impacts (Without Mitigation)
Sensitive Receptor: Residences - 1251-1255 Sunse

Source	Sound Pressure Level
Plaza	-3
Pool and Spa	-2.6
Roof Deck	5.8
Roof Deck	2.6
Roof Deck	13.9
Total	**16.7**

Outdoor Sources Noise Impacts (Without Mitigation)
Sensitive Receptor: Residences - Everett St. (east si

Source	Sound Pressure Level
Plaza	33.7
Pool and Spa	22.3
Roof Deck	29.7
Roof Deck	33.3
Roof Deck	-1.2
Total	**37.5**

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OPERATIONS NOISE CALCULATIONS
(DAY)

Sunset and Everett

Signs and symbols

Building

HVAC/Pool/Roof Deck

Levels in dB(A)

< 20
20 - 25
25 - 30
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
70 - 75
75 - 80
>= 80

1 : 198

0 40 80 160 240 320 Feet

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OPERATIONS NOISE CALCULATIONS
(EVENING)

Sunset Everett

Signs and symbols

Building

HVAC/Pool/Roof Deck

Levels in dB(A)

< 20
20 - 25
25 - 30
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
70 - 75
75 - 80
>= 80

1 : 198

0 40 80 160 240 320 Feet

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OPERATIONS NOISE CALCULATIONS
(NIGHT)

Sunset Everett

Signs and symbols

Building

HVAC/Pool/Roof Deck

Levels in dB(A)

< 20
20 - 25
25 - 30
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
70 - 75
75 - 80
>= 80

1 : 198

0 40 80 160 240 320 feet

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OPERATIONS NOISE CALCULATIONS
(CNEL)

Sunset Everett

Signs and symbols

Building

HVAC/Pool/Roof Deck

Levels in dB(A)

< 20
20 - 25
25 - 30
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
70 - 75
75 - 80
>= 80

1 : 198

0 40 80 160 240 320 Feet

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DEMOLITION ANALYSIS

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CONSTRUCTION BUILDING DEBRIS

Materials	Total SF	Height	Cubic Yards	Pounds per Cub	Tons	Truck Capacity (CY)	Truck Trips	Source
Construction and Debris	0	0	-	484	-	10	-	Florida Department of Environmental Protection A Fact Sheet for C&D Debris Facility Operators
General Building		12	-	1,000	-	10	-	*Federal Emergency Management Agency, Debris Estimating Field Guide (FEMA 329), September 2010. General Building Formula*
Single Family Residence	-	12	-	1,000	-	10	-	Federal Emergency Management Agency. Debris Estimating Field Guide (FEMA 329), September 2010. Single Family Residence Formula, assumes 1 story, Medium vegetative cover multiplier (1.3)
Multi-Family Residence		12	-	1,000	-	10	-	
Mobile Home				1,000	-	10	-	
Mixed Debris	1,344	10	498	480	119	10	100	Florida Department of Environmental Protection A Fact Sheet for C&D Debris Facility Operators
Vegetative Debris (Hardwoods)			-	500	-	10	-	
Vegetative Debris (Softwoods)	16,028	10	5,936	333	989	10	1,187	
Asphalt or concrete (Constructior	6,000	0.5	111	2,400	133	10	22	
TOTAL			6,545		1,242		1,309	

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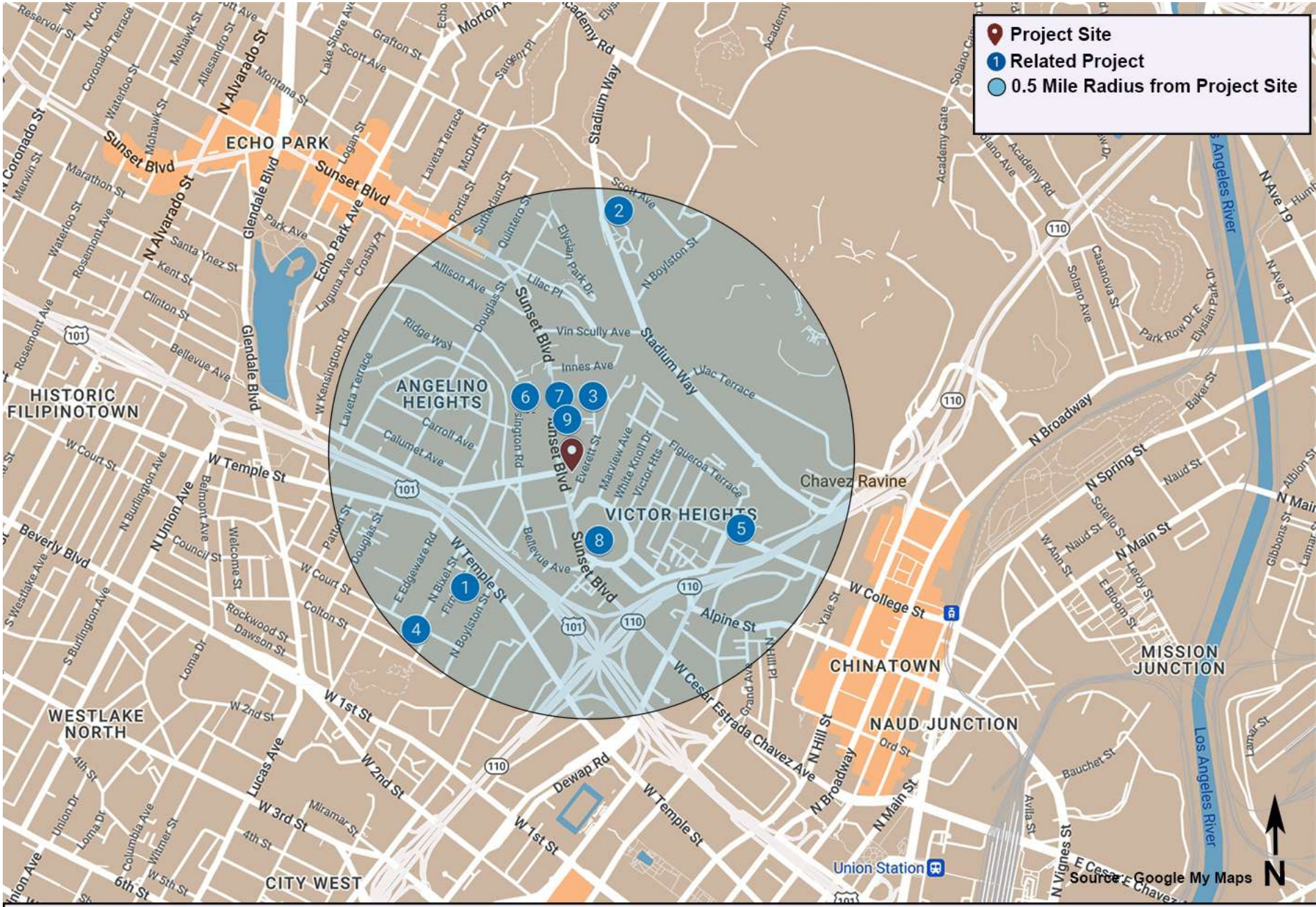
CUMULATIVE PROJECTS

Table 2: Related Projects

ID	PROJECT TITLE	PROJECT ADDRESS	LAND USE	SIZE	Trip Generation Estimates [a]					
					AM PEAK HOUR			PM PEAK HOUR		
					In	Out	Total	In	Out	Total
1	Firmin Court Residential	418 N Firmin St	Apartments	64 du	6	9	15	6	4	10
2	Barlow Skilled Nursing Facility	2000 N Stadium Way	Medical	80.545 ksf	19	7	26	11	22	33
3	Evertt St (2016) Project	1013 N Everett St	Apartments	49 du	5	20	25	19	10	29
4	Apartments	1246 W Court St	Apartments	54 du	6	22	28	21	12	33
5	Kaiser LA Specialty Medical Center	765 W College St	Medical	100 ksf	178	48	226	78	198	276
			Mental Health Facility	62 beds						
6	1274 Sunset Hotel	1274 Sunset Blvd	Hotel	8 rooms	2	2	4	3	2	5
			Restaurant	1.47 ksf	11	9	20	12	12	24
7	1275 Sunset Residential	1275 Sunset Blvd	Apartments	77 du	7	20	27	18	12	30
8	1111 Sunset Mixed Use	1111 Sunset Blvd	Mixed Use	N/A [b]	241	290	531	386	282	668

du = dwelling units
ksf = one thousand square feet
[a] Based on information provided by LADOT on February 3, 2023 and *ITE Trip Generation Manual, 11th ed* , 2021
[b] Trip generation estimates for 1111 Sunset Mixed Use drawn from the project's Draft EIR.



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CUMULATIVE CONSTRUCTION NOISE IMPACTS UNMITIGATED

Receiver list

No.	Receiver name	Building side	Floor	Level Day dBA
1	Residences - 1271 Sunset Bl.	West	GF	65.8
2	Residences - Sunset Bl. (west side)	East	GF	80.4
3	Residences - Everett St. (west side)	East	GF	58.9
4	Residences - 1190 Sunset Bl.	East	GF	79.0
5	Residences - 1251-1255 Sunset Bl.	West	GF	
6	Residences - Everett St. (east side)	North west	GF	78.5

Contribution levels of the receivers

Source name		Traffic lane	Level Day dB(A)
Residences - 1190 Sunset Bl.	GF		79.0
Construction Site		-	79.0
Related Project - 1111 Sunset Bl.		-	45.6
Related Project - 1251 Sunset Bl.		-	48.7
Related Project - 1274 Sunset Bl.		-	29.8
Related Project - 1275 Sunset Bl.		-	27.4
Residences - 1271 Sunset Bl.	GF		65.8
Construction Site		-	61.1
Related Project - 1111 Sunset Bl.		-	26.3
Related Project - 1251 Sunset Bl.		-	49.5
Related Project - 1274 Sunset Bl.		-	63.6
Related Project - 1275 Sunset Bl.		-	51.7
Residences - Everett St. (east side)	GF		78.5
Construction Site		-	78.5
Related Project - 1111 Sunset Bl.		-	41.5
Related Project - 1251 Sunset Bl.		-	43.0
Related Project - 1274 Sunset Bl.		-	33.0
Related Project - 1275 Sunset Bl.		-	24.8
Residences - Everett St. (west side)	GF		58.9
Construction Site		-	58.8
Related Project - 1111 Sunset Bl.		-	41.6
Related Project - 1251 Sunset Bl.		-	34.0
Related Project - 1274 Sunset Bl.		-	29.7
Related Project - 1275 Sunset Bl.		-	28.7
Residences - Sunset Bl. (west side)	GF		80.4
Construction Site		-	80.3
Related Project - 1111 Sunset Bl.		-	40.2
Related Project - 1251 Sunset Bl.		-	59.1
Related Project - 1274 Sunset Bl.		-	36.5
Related Project - 1275 Sunset Bl.		-	37.3

Sunset and Everett

Signs and symbols

Building

Construction Site (Cumulative)

Levels in dB(A)

< 30
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
70 - 75
75 - 80
80 - 85
85 - 90
>= 90

1 : 198

0 40 80 160 240 320 feet

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Cumulative Construction Noise Impacts (Without M

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Receptor	Existing Leq	Noise	New Leq	Difference Leq	Significant?
Residences - 1271 Sunset Bl.	71.4	65.8	72.5	1.1	**No**
Residences - Sunset Bl (west side)	74.7	80.4	81.4	6.7	**Yes**
Residences - Everett St. (west side)	62.7	58.9	64.2	1.5	**No**
Residences - 1190 Sunset Bl.	72.5	79.0	79.9	7.4	**Yes**
Residences - Everett St. (east side)	62.7	78.5	78.6	15.9	**Yes**

Note: Sound Power Level (Lw) assumes full sphere propagation

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CUMULATIVE CONSTRUCTION NOISE IMPACTS MITIGATED

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Level Day dB(A)	Conflict Day dB
1	Residences - 1190 Sunset Bl.	11384626.39	3770390.03	East	GF	128.62	-	71.5	-
2	Residences - 1271 Sunset Bl.	11384642.33	3770661.59	West	GF	143.05	-	64.7	-
3	Residences - Everett St. (east side)	11384699.57	3770371.98	North west	GF	129.60	-	65.6	-
4	Residences - Everett St. (west side)	11384722.36	3770506.14	East	GF	144.39	-	54.1	-
5	Residences - Sunset Bl. (west side)	11384599.94	3770517.43	East	GF	133.63	-	74.2	-

Contribution levels of the receivers

Source name		Traffic lane	Level Day dB(A)
Residences - 1190 Sunset Bl.	GF		71.5
Construction Site		-	71.5
Related Project - 1111 Sunset Bl.		-	45.7
Related Project - 1251 Sunset Bl.		-	48.5
Related Project - 1274 Sunset Bl.		-	30.5
Related Project - 1275 Sunset Bl.		-	27.4
Residences - 1271 Sunset Bl.	GF		64.7
Construction Site		-	56.1
Related Project - 1111 Sunset Bl.		-	26.3
Related Project - 1251 Sunset Bl.		-	49.5
Related Project - 1274 Sunset Bl.		-	63.6
Related Project - 1275 Sunset Bl.		-	51.7
Residences - Everett St. (east side)	GF		65.6
Construction Site		-	65.6
Related Project - 1111 Sunset Bl.		-	41.4
Related Project - 1251 Sunset Bl.		-	41.8
Related Project - 1274 Sunset Bl.		-	33.1
Related Project - 1275 Sunset Bl.		-	24.8
Residences - Everett St. (west side)	GF		54.1
Construction Site		-	53.8
Related Project - 1111 Sunset Bl.		-	41.7
Related Project - 1251 Sunset Bl.		-	34.0
Related Project - 1274 Sunset Bl.		-	29.7
Related Project - 1275 Sunset Bl.		-	28.7
Residences - Sunset Bl. (west side)	GF		74.2
Construction Site		-	74.0
Related Project - 1111 Sunset Bl.		-	40.3
Related Project - 1251 Sunset Bl.		-	59.1
Related Project - 1274 Sunset Bl.		-	36.5
Related Project - 1275 Sunset Bl.		-	37.3

Cumulative Construction Noise Impacts (With Mitig

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Receptor	Existing Leq	Noise	New Leq	Difference Leq	Significant?
Residences - 1271 Sunset Bl.	71.4	64.7	72.2	0.8	**No**
Residences - Sunset Bl (west side)	74.7	74.2	77.5	2.8	**No**
Residences - Everett St. (west side)	62.7	54.1	63.3	0.6	**No**
Residences - 1190 Sunset Bl.	72.5	71.5	75.0	2.5	**No**
Residences - Everett St. (east side)	62.7	65.6	67.4	4.7	**No**

Note: Sound Power Level (Lw) assumes full sphere propagation