4.9 NOISE

This section evaluates the proposed project's potential impact to existing local noise conditions. Both temporary construction noise and long-term noise generated by operation of the proposed project are evaluated.

4.7.1 Setting

a. Overview of Sound Measurement. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

The sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB, and a sound that is 10 dB less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dB change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while those along arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of 6 dB per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dB per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dB per doubling of distance.

In addition to the actual instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the daytime. Two commonly used noise metrics – the Day-Night average level (Ldn) and the Community Noise Equivalent Level (CNEL) - recognize this fact by weighting hourly Leqs over a 24-hour period. The Ldn is a 24-hour average noise level that adds 10 dB to actual nighttime (10:00 PM to 7:00 AM) noise levels to account for the greater sensitivity to noise during that time period. The CNEL is identical to the Ldn, except it also adds a 5 dB penalty for noise occurring during the evening (7:00 PM to 10:00 PM).

b. Sensitive Receptors. Noise sensitive receptors are land uses that are considered more sensitive to noise than others. Residences, hospitals, schools, guest lodging, and libraries are most sensitive to noise intrusion and therefore have more stringent noise exposure targets than manufacturing or industrial uses that are not subject to effects such as sleep disturbance. Sensitive receptors in the project area are single family residences adjacent to those lots that would potentially be developed under the proposed project. Although the distances to neighboring residences vary from lot to lot, for the purposes of this EIR analysis, it is assumed that sensitive receptors would be approximately 50 feet from any of the 31 undeveloped lots in Zone 2.

c. Fundamentals of Environmental Groundborne Vibration. Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. The ground motion caused by vibration is measured as particle velocity in inches per second and, in the U.S., is referenced as vibration decibels (VdB).

The background vibration velocity level in residential and educational areas is usually around 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

The general human response to different levels of groundborne vibration velocity levels is described in Table 4.9-1.

Table 4.9-1
Human Response to Different Levels of Groundborne Vibration

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

Source: Federal Transit Administration (FTA) 2018.

d. Regulatory Setting. The City of Rancho Palos Verdes General Plan Noise Element (2018) identifies existing and potential future sources of noise in the community, and identifies strategies to limit the exposure of the community to excessive noise levels. The Noise Element also includes several policies on noise and acceptable noise levels. As included in the City's General Plan Update Noise and Vibration Technical Report (2017), the maximum "normally acceptable" noise level for single family residential areas is 60 dBA CNEL (See Table 4.9-2). A "normally acceptable" noise level means that the specified land use would be compatible based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements. In addition, according to the Noise Element, exterior noise levels should be such that interior noise levels will not exceed 45 dBA CNEL, which is consistent with the State of California Interior Noise Standard.

Table 4.9-2
Land Use Compatibility for Noise Environments

Land Use Category	Community Noise Exposure Level			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential - Low Density, Single-Family, Duplex, Mobile Homes	50-60	55-70	70-75	75-85
Residential – Multiple Family	50-65	60-70	70-75	75-85
Transient Lodging – Motel, Hotels	50-65	60-70	70-80	80-85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-70	60-70	70-80	80-85
Auditoriums, Concert Halls, Amphitheaters	NA	50-70	NA	65-85
Sports Arenas, Outdoor Spectator Sports	NA	50-75	NA	70-85
Playgrounds, Neighborhood Parks	50-70	NA	67.5-75	72.5-85
Golf Courses, Riding Stable, Water Recreation, Cemeteries	50-75	NA	70-80	80-85
Office Buildings, Business Commercial and Professional	50-70	67.5-77.5	75-85	NA
Industrial, Manufacturing, Utilities, Agriculture	50-75	70-80	75-85	NA

Source: State of California Governor's Office of Planning and Research, General Plan Guidelines,2003

Notes: NA - Not Applicable
Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements
Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Normally Unacceptable – New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Clearly Unacceptable – New construction or development should generally not be undertaken.

Although the City does not have a Noise Ordinance to implement the City's noise policies, the City's Municipal Code contains a number of provisions that regulate or limit noise production in the City. Table 4.9-3 identifies the section and noise topic included in the City's Municipal

Code. In some cases, existing noise regulations have no numerical standards, but restrict unnecessary or excessive noise within the City limits.

Table 4.9-3
City of Rancho Palos Verdes
Existing Noise Regulations

Code Section	Topic
6.04.060	Prohibition on persistent animal noises that disturb the peace.
8.20.120	Noise Controls applicable to solid waste collection
9.24	Unruly Parties and Gatherings; recovery of law enforcement expenses
10.04.040	Limitation on Off-road vehicle operation that disturbs the peace
17.08.030 C.	Home occupation standards prohibiting activities injurious to neighboring properties for reasons of noise
17.12.030 F.	Limitation on commercial uses regarding deliveries, trash pick-up, parking lot trash sweepers, operation of machinery or mechanical equipment can exceed sixty-five (65) dBA, as measured from the closest property line shall only be allowed on commercial properties which abut a residential district, between the hours of seven a.m. and seven p.m., Monday through Sunday.
17.48.030 E.5.b.	65 dBA limitation on mechanical equipment at closest property line
17.56.020 B.	Restricts the hours of operation for construction equipment to between the hours 7 AM and 6 PM Monday through Friday and between the hours 9 AM to 5 PM on Saturday. No work is allowed to occur on Sunday or Federal holidays. A Special Construction Permit could be obtained to allow work on Federal holidays and Sundays during the permitted hours stated above.
17.60.050 A.6.e.	Conditional Use Permit Standards and conditions to protect against noise impacts
17.62.060 B.4.	Special Use Permit Standards and conditions to protect against noise impacts
17.76.040 G. 4 .	Grading Permits – conditions of approval to address noise impacts of grading activities

Source: Rancho Palos Verdes Municipal Code

e. Existing Noise Conditions and Sources. The most common sources of noise in the project vicinity are transportation-related, such as automobiles, trucks, and motorcycles. Motor vehicle noise is of concern because it is characterized by a high number of individual events, which often create a sustained noise level, and because of its proximity to areas sensitive to noise exposure. The primary source of roadway noise near the project area is traffic on roads on and around the project area, including Palos Verdes Drive South, which is located south of the project area. In light of this, weekday morning 10-minute noise measurements were taken using an ANSI Type II integrating sound level meter on November 28, 2018. Noise monitoring locations are shown in Figure 4.9-1 and results of the noise monitoring are shown in Table 4.9-4. Complete noise monitoring data can be found in Appendix F.

Figure 4.9-1

Table 4.9-4
Existing Noise Monitoring Results

Measurement Identification Number	Measurement Location	Primary Noise Source	Approximate Distance to Primary Noise Source	Leq (dBA)	Nearest Sensitive Receptor
1	Narcissa Drive west of Vanderlip Drive	Traffic on Narcissa Drive	15 feet from center line	54.0	Single-family residence
2	Cinnamon Lane between Narcissa Drive and Thyme Place	Traffic on Cinnamon Lane	15 feet from center line	48.0	Single-family residence
3	Narcissa Drive between Plumtree Road and Cinammon Lane	Traffic on Narcissa Drive	15 feet from center line	47.9	Single-family residence
4	Palos Verdes Drive South between Peppertree Lane and Cherry Hill Lane (outside of project area)	Traffic on Palos Verdes Drive South	30 feet from center line	68.4	Single-family residence
5	Palos Verdes Drive South between Narcissa Drive and Barkentine Road (outside of project area)	Traffic on Palos Verdes Drive South	48 feet from center line	70.0	Single-family residence

Source: Field measurements using ANSI Type II Integrating sound level meter.
See Appendix F for noise monitoring data sheets

4.7.2 Impact Analysis

a. Methodology and Significance Thresholds. The following analysis of noise impacts considers the effects of both temporary construction-related activities and long-term operation of the project, including increased vehicle trips.

Construction Activities – Short Term. Temporary construction activity would expose adjacent noise-sensitive receptors to construction noise generated by the use of on-site construction equipment. Construction noise was estimated using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM). The RCNM uses baseline noise levels, distances to receptors, shielding information, and construction equipment utilized to calculate the construction noise level from each piece of construction equipment and overall construction noise at each receptor. To calculate noise generated by each piece of equipment, the model uses equipment noise levels from a study done by the Environmental Protection Agency (EPA) and acoustical usage factors for equipment (i.e., the fraction of time each equipment is operating at full power) from the Empire State Electric Energy Research Corp. Guide (FHWA 2006). The modeled construction equipment for each construction phase was based on the CalEEMod Version 2016.3.2 equipment defaults for construction of the 31 residences. CalEEMod uses project characteristics, such as land use, building sizes, and lot acreage, to estimate a project's emissions and uses default equipment lists in its modeling based on empirical data. The RCNM results and equipment list from CalEEMod are included in Appendix F.

Although the City does not have established quantitative thresholds for construction noise, for this analysis a significant noise impact would occur if construction noise would exceed typical speech interference levels. Noise peaks generated by construction equipment could result in speech interference in nearby residences if the noise level in the interior of the building exceeds 50 dBA. A typical building can reduce noise levels by 20 dBA with windows closed. Assuming a 20 dBA reduction with windows closed, an exterior noise level of 70 dBA (Leq) at receptors would maintain an acceptable interior noise environment of 50 dBA. Additionally, construction generated by the project would also result in significant impacts if it occurred outside of the hours identified in the City's Municipal Code (17.56.020(B)), which are 7:00 AM to 6:00 PM, Monday through Friday, and 9:00 AM to 5:00 PM Saturday, unless a Special Construction Permit is obtained from the Community Development Director. No such activity is permitted on Sunday or on legal holidays.

Groundborne Noise and Vibration. The City of Rancho Palos Verdes does not have adopted specific thresholds for groundborne vibration impacts. Therefore, this analysis uses the Federal Railway Administration's vibration impact thresholds for sensitive buildings to determine whether groundborne vibration would be "excessive." A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Therefore, the Federal Railway Administration recommends an 80 VdB threshold at residences and buildings where people normally sleep (e.g., nearby residences) and 83 VdB at institutional buildings (e.g., Wayfarer's Chapel, which is the closest institutional building to the Zone 2 area). These thresholds apply to conditions where there are an infrequent number of events per day.[1]

Off-Site Roadway Traffic – Long Term. Noise levels associated with existing and future traffic along area roadways would constitute the main operational noise source associated with the proposed project. Other operational noise associated with the project would be typical of residential neighborhoods, of which the project area is already a part, and would be governed by the existing regulations listed in section 4.7.1d of this EIR. To determine project impacts, roadway noise was modeled using the U.S. Department of Housing and Urban Development (HUD) Exchange Day/Night Noise Level (DNL) Calculator (HUD 2018). Noise modeling data sheets can be viewed in Appendix F. The model calculations are based on traffic data from the traffic study completed for the proposed project (see Appendix G). Cumulative traffic conditions consider pending development in the City as indicated in Section 3.0, *Environmental Setting*, Table 3-1.

The City does not have adopted thresholds for mobile noise sources. Therefore, this analysis uses thresholds contained in the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* (2018) as guidance to determine whether or not a change in traffic would result in a significant permanent increase in roadway noise. Table 4.9-5 shows the FTA criteria for identifying significant changes in noise, which apply to both the noise generated by the project alone and cumulative noise increases. Using the FTA criteria, the significance threshold is based on the existing ambient noise level. Roadways with lower ambient noise levels have a higher noise level increase threshold, while roadways with a higher

[1] "Infrequent events" is defined by the Federal Railroad Administration as being fewer than 70 vibration events per day.

ambient noise level have a lower noise level increase threshold. If sensitive receptors would be exposed to traffic noise increases exceeding the criteria below, impacts would be considered significant.

Table 4.9-5
Significance of Changes in Operational Roadway Noise Exposure

Ldn or Leq in dBA	
Existing Noise Exposure	**Significant Noise Exposure Increase**
45-50	7
50-55	5
55-60	3
60-65	2
65-70	1
70-75	1
75+	0

Source: Federal Transit Administration (FTA), 2018.

b. Project Impacts and Mitigation Measures.

Impact N-1 Temporary project construction would intermittently generate high noise levels in and adjacent to the project area. This would be a Class III, *less than significant,* impact, though mitigation has been added to ensure compliance with applicable requirements.

Nearby noise-sensitive land uses in the vicinity of the project area include single-family residences located approximately 50 feet from any of the project's 31 lots in Zone 2. Noise impacts are a function of the type of activity being undertaken and the distance to the receptor location. As indicated in Section 2.0, *Project Description*, the proposed project would involve ordinance revisions that would allow for the potential construction of single family homes on 31 lots. Construction of individual residences would require grading and building phases that have the potential to affect nearby receptors.

Table 4.9-6 shows typical noise levels associated with activities during various phases of construction at a distance of 50 feet from the noise source based on types of equipment assumed by CalEEMod for construction of the 31 residences. As shown in Table 4.9-6, typical construction noise levels range from about 74 dBA to 89 dBA. The grading/excavation phase of project construction tends to be the shortest in duration and create some of the highest construction noise levels because of the operation of heavy equipment, although it should be noted that only a limited amount of equipment can operate near a given location at a particular time. Equipment typically used during this stage includes heavy-duty trucks, backhoes,

bulldozers, excavators, front-end loaders, and scrapers. Operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Other primary sources of noise would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). Construction of residences would typically be the longest phase of construction and involve smaller equipment due to the nature of the work; however, construction noise levels would also be among the highest during this phase. Work associated with building may include heavy trucks, air compressors, generators, and hand-held mechanical tools.

Construction noise generally attenuates by about 6 dB per doubling of distance. The receptors nearest to the project area would be adjacent single-family residences. Although the distances to neighboring residences vary from lot-to-lot, for the purposes of this EIR analysis, it is assumed that sensitive receptors would be located approximately 50 feet from any of the project's 31 lots in Zone 2. Therefore, the maximum noise level at the nearby residences during clearing and excavation activities would be approximately 89 dBA, as shown in Table 4.9-6. Such noise would be intermittently audible at nearby residences. However, it would be temporary in nature and compliance with Section 17.57.020 of the Rancho Palos Verdes Municipal Code would limit construction, grading, or landscaping activities, or the operation of heavy equipment, to occur only between the hours of 7:00 AM and 6:00 PM, Monday through Friday and between 9:00 AM and 5:00 PM Saturday, and would prohibit such activities any other time and on legal holidays and Sundays. This would restrict construction noise to daytime hours when ambient noise levels are higher and people are typically at work and/or not sleeping. Compliance with the City's Municipal Code would reduce construction noise impacts of the proposed project to a less than significant level.

Table 4.9-6
Typical Noise Levels at Construction Sites

Construction Phase	Type of Equipment	Average Noise Level at 50 Feet
Demolition	Excavators (3), Concrete Saw, Rubber Tired Dozers (2)	86 dBA
Site Preparation	Tractors/Loaders/Backhoes (4), Rubber Tired Dozers (3)	88 dBA
Grading	Excavators (2), Grader, Tractors/Loaders/Backhoes (2), Scrapers (2)	88 dBA
Building Construction	Crane, Forklifts (3), Generator Set, Tractors/Loaders/Backhoes (3), Welder	89 dBA
Paving	Pavers (2), Rollers (2), Paving Equipment (2)	87 dBA
Architectural Coating	Air Compressor	74 dBA

See Appendix F for RCNM results and CalEEMod equipment list.

Mitigation Measures. No mitigation measures are required, but the following measures would ensure compliance with the RPVMC's allowed construction days and hours as well as with Portuguese Bend Community Association (PBCA) Architectural Conditions of Approval related to construction noise.

N-1(a) **Construction Schedule**. Permitted hours and days of construction activity are 7:00 AM to 6:00 PM, Monday through Friday and 9:00 AM to 5:00 PM Saturday, with no construction activity permitted on Sundays or on the legal holidays specified in Section 17.56.020 of the Rancho Palos Verdes Municipal Code without a special construction permit.

N-1(b) **PBCA Conditions of Approval.** All project area construction contractors shall comply with the following standard Portuguese Bend Community Association conditions:

- *Large truck deliveries must enter and exit from the Peppertree Gate. Semi-trucks allowed for heavy equipment delivery only. All other deliveries limited to 3 axle or smaller trucks.*
- *Concrete Deliveries: Only one truck on-site at a time. Second and third trucks can stay on Narcissa or Sweetbay. No more than three trucks in PBCA at a time. All trucks must enter and exit through the Peppertree Gate.*
- *Noise from radios or other amplified sound devices shall not be audible beyond the property.*

Significance After Mitigation. Impacts would be less than significant without mitigation. Measures N-1(a) and (b) would ensure compliance with RPMC timing restrictions and applicable PBCA conditions.

Impact N-2 **Construction facilitated by the proposed ordinance revisions could generate intermittent levels of groundborne vibration affecting residences and other buildings near the project area. However, these impacts are temporary in nature and would not exceed thresholds. Therefore, impacts would be Class III, *less than significant*.**

Construction activities that would occur at any of the 3131 lots in Zone 2 that make up the project area have the potential to generate low levels of groundborne vibration. Table 4.9-7 identifies various vibration velocity levels for the types of construction equipment that would operate in the project area during construction activities.

Based on the information presented in Table 4.9-7, vibration levels could reach approximately 85 VdB at nearby existing residences which, for the purposes of this EIR, are assumed to be at least 50 feet away from the construction site. This would be more than the groundborne velocity threshold level of 80 vibration decibels (VdB) established by the Federal Railway Administration for noise-sensitive buildings and residences where people normally sleep, and the 83 VdB threshold for institutional uses such as Wayfarer's Chapel. However, construction activities and their associated vibration levels would be limited to daytime hours between 7:00

AM to 6:00 PM Monday through Friday and 9:00 AM to 5:00 PM Saturday in accordance with the City's Municipal Code Section 17.56.020 B. The proposed project is required to comply with these regulations. Therefore, construction activities would not occur during recognized sleep hours for residential uses. In addition, construction would not generate vibration levels of 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. As such, impacts to the residential uses near the project area would be less than significant.

Table 4.9-7
Vibration Source Levels for Construction Equipment

Equipment	Approximate VdB			
	25 Feet	50 Feet	75 Feet	100 Feet
Large Bulldozer	87	78	73	69
Loaded Trucks	86	77	71	68
Small Bulldozer	58	48	43	39

See Appendix C for vibration calculations.

Mitigation Measures. Impacts would be less than significant without mitigation.

Significance After Mitigation. Impacts would be less than significant without mitigation.

Impact N-3 Traffic generated by the potential development of up to 31 new residences in Zone 2 would incrementally increase noise levels on area roadways. However, the increase in noise would not exceed significance thresholds and would therefore be Class III, *less than significant*.

Potential buildout under the proposed ordinance revisions would increase the number of vehicle trips to and from the site, which would incrementally increase traffic noise on area roadways and at neighboring uses. The street network in the project vicinity has many residential receptors. Because they represent the busiest traffic conditions, daily traffic volumes for roadway segments studied in the Transportation Impact Study (2019)(see Appendix G) prepared by LLG were used to model the change in noise levels resulting from increased traffic for both the existing and future conditions. Table 4.10-10 in Section 4.10, *Transportation and Traffic*, shows the daily traffic volumes for the studied roadway segments under existing and future conditions. Table 4.9-8 shows the associated increase in roadway generated noise at sensitive receptors along the studied roadways.

As indicated in Table 4.9-8, the highest noise level increase at studied roadway segments would be 0.6 dBA under Year 2030 traffic conditions, which is below the 1 dBA FTA increase threshold for roadways with existing noise levels between 70 dBA and 75 dBA (see Table 4.9-5). Therefore, impacts related to project-generated traffic noise would be less than significant in relation to the sensitive receptors that are the focus of this noise impact analysis.

Table 4.9-8
Project Contribution to Roadway Noise Levels (in dBA, CNEL)

Roadway Segment	Existing Traffic Noise	Year 2030 with Related Projects Traffic Noise	Year 2030 Traffic Noise Increase Compared to Existing Traffic	Year 2030 with Related Projects and Proposed Project Traffic Noise	Year 2030 Cumulative Increase Compared to Existing Traffic (	Year 2030 Project Only Increase Compared to Year 2030 Traffic
Palos Verdes Drive South west of Narcissa Drive (4-Lane Divided Arterial)	70.8	71.4	**+0.6**	71.4	**+0.6**	**<0.1**
Palos Verdes Drive South east of Narcissa Drive (4-Lane Divided Arterial)	73.1	73.6	**+0.5**	73.6	**+0.5**	**<0.1**

Source: See Appendix F for the Department of Housing and Urban Development modeling data sheets

Mitigation Measures. Mitigation is not required since significant impacts have not been identified.

Significance After Mitigation. Impacts would be less than significant without mitigation.

c. Cumulative Impacts. The proposed project and related projects in and around the City, as identified in Table 3-1 in Section 3.0, *Environmental Setting*, would generate temporary noise during construction. However, as discussed in Impact N-1, compliance with Section 17.56.020.B. of the Rancho Palos Verdes Municipal Code would require construction activities to adhere to regulations of the City of Rancho Palos Verdes governing allowed hours of construction and would therefore reduce construction impacts to a less than significant level. In addition, as discussed in Impact N-2, construction activities would not occur during recognized sleep hours for residential uses, vibration levels would not affect nearby residences during sensitive nighttime hours, and overall vibration impacts to the residential uses near the project area would be less than significant. No projects on the cumulative projects list (Table 3-1) are close enough to the project area to contribute to a cumulative construction noise or vibration impact. Moreover, because development of the project area would occur over time as individual lots develop, it is unlikely that construction of individual project area homes would coincide with construction of other currently planned and pending developments.

Traffic noise impacts associated with cumulative development in the area would incrementally increase noise levels along roadways and could potentially subject sensitive receptors to noise exceeding City standards. Cumulative development has the potential to increase roadway generated noise throughout the City. However, the analysis under Impact N-3 includes the future cumulative development scenario, which would not result in noise levels exceeding thresholds. Therefore, cumulative traffic-related noise impacts would not be significant.

Cumulative development would result in stationary (non-traffic) long-term operational noise increases in the project vicinity. However, based on the fact that land uses proposed under the project would be consistent with the single family residential character of their surroundings, and the fact that these uses are already regulated by the Rancho Palos Verdes Municipal Code, impacts from the proposed project's operational noise would be less than significant. Additionally, based on the fact that noise dissipates as it travels away from its source, noise impacts from on-site activities and other stationary sources would be limited to the specific development site and vicinity. Thus, cumulative operational (non-traffic) noise impacts from related projects, in conjunction with project-specific noise impacts, would not have the potential to result in cumulatively considerable adverse effects.

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