

Revised Draft SEIR Sections

5.8 Noise



5.0 ENVIRONMENTAL IMPACT ANALYSIS

8. NOISE

1. INTRODUCTION

This section of the Supplemental Environmental Impact Report (SEIR) analyzes the Modified Project's potential noise impacts resulting from development of the Entrada South and Valencia Commerce Center (VCC) Planning Areas. The Modified Project reflects minor changes compared to the 2017 Project, as described in **Section 3.0**, Project Description, of the SEIR. Thus, this analysis focuses on the incremental change in noise impacts associated with the Modified Project as compared to the impacts disclosed in the State-certified EIR. The analysis is based on the *Entrada South & Valencia Commerce Center Community Noise Assessment* (Noise Study) and the associated noise calculation worksheets prepared by Meridian Consultants in November 2023, which are included in **Appendix 5.8** of the SEIR.

2. ENVIRONMENTAL SETTING

a. Background Information Regarding Noise

(1) Fundamentals of Sound and Environmental Noise

Noise is commonly defined as sound that is undesirable because it interferes with speech communication and hearing, causes sleep disturbances, or is otherwise annoying (unwanted sound). The decibel (dB) is a conventional unit for measuring the amplitude of sound because it accounts for the large variations in sound pressure amplitude and reflects the way people perceive changes in sound amplitude. The human hearing system is not equally sensitive to sound at all frequencies. Therefore, to approximate this human frequency-dependent response, the A-weighted system is used to adjust measured sound levels (dBA). The term "A-weighted" refers to filtering the noise signal in a manner that corresponds to the way the human ear perceives sound.

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. Because the dB scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather logarithmically.

For example, if two noise sources produce identical noise levels of 50 dBA, their combined sound level would be 53 dBA, not 100 dBA. However, where ambient noise levels are high in comparison to a new noise source, there will be a small change in noise levels. For example, when an ambient noise level of 70 dBA is combined with a noise source generating 60 dBA, the resulting noise level equals 70.4 dBA.

People commonly judge the relative magnitude of sound sensation using subjective terms such as “loudness” or “noisiness.” A change in sound level of 3 dBA is considered barely perceptible, a change in sound level of 5 dBA is considered readily perceptible, and an upward change of 10 dBA is recognized as twice as loud.¹

(2) Outdoor Sound Propagation

In an outdoor environment, sound levels attenuate through the air as a function of distance. Such attenuation is called “distance loss” or “geometric spreading” and is based on the type of source configuration (i.e., a point source or line source). The rate of sound attenuation for a point source, such as a piece of equipment (e.g., air conditioner, electrical transformer or bulldozer), is 6 dBA per doubling of distance from the noise source. For example, an outdoor condenser fan that generates a sound level of 60 dBA at a distance of 5 feet would attenuate to 54 dBA at a distance of 10 feet. The rate of sound attenuation for a line source, such as a constant flow of traffic on a roadway, is 3 dBA per doubling of distance.² In addition to attenuation due to distance, an excess ground attenuation value of 1.5 dBA (per doubling distance) is normally assumed for soft sites (e.g. soft dirt, grass, or scattered bushes).

Structures (e.g., buildings and solid walls) and natural topography (e.g., hills) that obstruct the line-of-sight between a noise source and a receptor further reduce the noise level if the receptor is located within the “shadow” of the obstruction, such as behind a sound wall. This type of sound attenuation is known as “barrier insertion loss.” If a receptor is located behind the wall but still has a view of the source (i.e., line-of-sight is not fully blocked), some barrier insertion loss would still occur, but to a lesser extent. A receptor located on the same side of the wall as a noise source may actually experience an increase in the perceived noise level as the wall reflects noise back to the receptor, thereby compounding the noise. Noise barriers can provide noise level reductions ranging from

¹ *Engineering Noise Control*, Bies & Hansen, 1988. See also, U.S. Department of Transportation, Federal Highway Administration, “Highway Traffic Noise Analysis and Abatement Policy and Guidance,” www.fhwa.dot.gov/environment/noise/regulations_and_guidance/polguide/polguide02.cfm, accessed on February 29, 2024.

² *Caltrans, Technical Noise Supplement (TeNS)*, 1998.

approximately 5 dBA (where the barrier just breaks the line-of-sight between the source and receiver) to an upper range of 20 dBA with a more substantial barrier.³

(3) Environmental Noise Descriptors

Noise levels are measured using a variety of scientific metrics. As a result of extensive research into the characteristics of noise and human response, standard noise descriptors have been developed for noise exposure analyses. All noise levels provided in this Noise Study represent outdoor conditions, unless otherwise stated specifically to be interior noise levels. The most frequently used noise descriptors, including those used by the County of Los Angeles, are summarized below. All noise descriptors used in this noise analysis are based on the A-weighted sound pressure levels, dBA.

Maximum Noise Level (L_{\max}): L_{\max} is the maximum or peak sound level during a noise event. The metric accounts only for the instantaneous peak intensity of the sound, not for the duration of the event. For example, as a vehicle passes by an observer, the sound level increases to a maximum level and then decreases.

Equivalent Continuous Noise Level (L_{eq}): L_{eq} is the sound level, expressed in dBA, of a steady sound that has the same A-weighted sound energy as the time-varying sound over the averaging period. L_{eq} is the average sound level for a specified time period (e.g., 24 hours, 8 hours, 1 hour). L_{eq} is calculated by integrating the sound energy from all noise events over a given time period and applying a factor for the number of events. L_{eq} can be expressed for any time interval; for example, the L_{eq} representing an averaged level over a 1-hour period would be expressed as $L_{\text{eq 1-hour}}$.

Community Noise Equivalent Level (CNEL): CNEL, expressed in dBA, is a rating of community noise exposure to all sources of sound that differentiates between daytime (7:00 A.M. to 7:00 P.M.), evening (7:00 P.M. to 10:00 P.M.), and nighttime (10:00 P.M. to 7:00 A.M.) noise exposure. CNEL includes penalties applied to noise events occurring after 7:00 P.M. and before 7:00 A.M., when noise is considered more intrusive. The penalized time period is further subdivided into an evening period with an addition of 5 dBA to measured or forecasted noise levels and a nighttime period with an addition of 10 dB to measured or forecasted noise levels. The evening weighting is the only difference between CNEL and day-night average sound level (L_{dn}). CNEL has been adopted by the State of California to define the community noise environment in preparing the community noise element of a General Plan.⁴

³ *Ibid.*

⁴ *State of California, General Plan Guidelines, 2017.*

Day-Night Average Sound Level (L_{dn}): The day-night average sound level is the average noise level over a 24-hour period. The noise level measurements between the hours of 10:00 pm and 7:00 am are artificially increased by 10 dBA before averaging. Nighttime noise is weighted to take into account a decrease in community background noise of 10 dBA during this period. The evening weighting is the only difference between CNEL and day-night average sound level (L_{dn}).

(4) Effects of Noise on Humans

Human response to sound is highly individualized. Many factors influence the response to noise including the character of the noise, the variability of the sound level, the presence of tones or impulses, and the time of day of the occurrence. Additionally, non-acoustical factors, such as an individual's opinion of the noise source, the ability to adapt to the noise, the attitude towards the source and those associated with it, and the predictability of the noise, all influence the response to noise. These factors result in the reaction to noise being highly subjective, with the perceived effect of a particular noise varying widely among individuals in a community. The effects of noise can be grouped into three general categories:

- Subjective effects of annoyance, nuisance, dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as starting hearing loss.

Annoyance can be defined as the expression of negative feelings resulting from interference with activities, as well as the disruption of one's peace of mind and the enjoyment of one's environment. The consequences of noise-induced annoyance are privately held dissatisfaction, publicly expressed complaints to authorities, and potential adverse health effects, as discussed previously.

Noise can mask important sounds and disrupt communication between individuals in a variety of settings. This process can cause anything from a slight irritation to a serious safety hazard, depending on the circumstance. Noise can disrupt face-to-face communication and telephone communication, and the enjoyment of music and television in the home. Interference with communication has proved to be one of the most important components of noise-related annoyance.

Noise can potentially affect sleep. Noise can make it difficult to fall asleep, can create momentary disturbances of natural sleep patterns by causing shifts from deep to lighter stages, and can cause awakening.⁵ Although nighttime awakenings occur independent of noise, Fidell, et al., provided the following summary of night awakenings: “Depending on the definition adopted for ‘awakening,’ people may awaken for reasons having nothing to do with noise many times per night, at moments which may or may not closely coincide in time with the occurrence of noise events.” According to Basner et al., “people exhibit an average of 21 electro physiologically detectable arousals per hour of sleep, or about 144 spontaneous arousals per night.” Counting both shifts from deeper to lighter sleep states and momentary awakenings, Ollerhead et al., reported about 45 “awakenings or arousals” per night, of which only 40 percent were thought to represent even momentary awakenings. People commonly attain full waking consciousness two or three times per night for reasons having nothing to do with noise exposure.

Health effects from noise have been studied around the world for nearly 30 years. Scientists have attempted to determine if high noise levels can adversely affect human health apart from auditory damage. In a review of 30 studies conducted worldwide between 1993 and 1998, a team of international researchers concluded that, while some findings suggest that noise can affect health, improved research concepts and methods are needed to verify or discredit such a relationship. The team of international researchers called for more study of the numerous environmental and behavioral factors than can confound, mediate, or moderate survey findings. Until science refines the research process, a direct link between a single source noise exposure and non-auditory health effects remains to be demonstrated (LAWA 2012).

Noise-induced hearing loss usually takes years to develop. Hearing loss is one of the most obvious and easily quantifiable effects of excessive exposure to noise. While the loss may be temporary at first, it can become permanent after continued exposure. When combined with hearing loss associated with aging, the amount of hearing loss directly due to the environment is difficult to quantify. Although the major cause of noise induced hearing loss is occupational, non-occupational sources may also be a factor.

Some common sources, and their sound level on the dBA scale, are provided in **Table 5.8-1**, Common Sounds on the A-Weighted Decibel Scale, on page 5.8-6. Ordinary conversation, which has a moderate sound level of 60 dBA at 3 feet way, provides a reference for relative comparison. As shown, the relative perceived loudness of sound

⁵ *Los Angeles World Airports, Los Angeles International Airport, LAX Specific Plan Amendment Study Draft EIR, July 2012, pp. 4-787, 788, and 808.*

Table 5.8-1
Common Sounds on the A-Weighted Decibel Scale

| Sound | Sound Level (dBA) | Subjective Evaluations |
|--|-------------------|------------------------|
| Near Jet Engine | 140 | Deafening |
| Threshold of Pain | 130 | |
| Rock music, with amplifier | 120 | |
| Thunder, snowmobile (operator) | 110 | Very Loud |
| Boiler shop, power mower | 100 | |
| Orchestral crescendo at 25 feet, noisy kitchen | 90 | |
| Busy street | 80 | Loud |
| Interior of department store | 70 | |
| Ordinary conversation, 3 feet away | 60 | Moderate |
| Quiet automobiles at low speed | 50 | |
| Average office | 40 | Faint |
| City residence | 30 | |
| Quiet country residence | 20 | Very Faint |
| Rustle of leaves | 10 | |
| Threshold of hearing | 0 | |
| <hr/> <i>dBA = A-weighted decibels</i> | | |
| <i>^a Continuous exposure above 85 dB is likely to degrade the hearing of most people (hearing protection recommended).</i> | | |
| <i>^b Range of Speech: 50–70 dB</i> | | |
| <i>Source: U.S. Department of Housing and Urban Development, Aircraft Noise Impact – Planning Guidelines for Local Agencies, 1972.</i> | | |

doubles for each increase of 10 dBA, although a 10 dBA change corresponds to a factor of 10 in relative sound energy. That is, the decibel scale is logarithmic. Generally, sounds with differences of 3 dBA or less are not perceived to be noticeably different by most listeners.

b. Regulatory Setting

An overview of the regulatory setting is provided in **Table 5.8-2**, Noise Regulatory Overview, beginning on page 5.8-7 and a detailed discussion is provided below.

**Table 5.8-2
Noise Regulatory Overview**

| Issue Area and Relevant Legislation | Applicable Agency |
|---|-----------------------|
| Federal Regulations | |
| <p>United States Environmental Protection Agency Guidelines</p> <p>Under the authority of the Noise Control Act of 1972, the United States Environmental Protection Agency (USEPA) has established noise emission criteria and testing methods, as published in Parts 201 through 205 of Title 40 of the Code of Federal Regulations, that apply to some transportation equipment (e.g., interstate rail carriers, medium trucks, and heavy trucks) and construction equipment. In 1974, the USEPA issued the following guidance levels for the protection of public health and welfare in residential land use areas: an outdoor day/night (24 hour) average sound level (L_{dn}) of 55 dBA; and an indoor L_{dn} of 45 dBA.^a However, these guidance levels are not considered standards or regulations and were developed without consideration of technical or economic feasibility. There are no federal noise standards that directly regulate environmental noise related to the construction or operation of a project.</p> | USEPA |
| State Regulations | |
| <p>State Noise Guidelines</p> <p>The State of California has adopted noise compatibility guidelines for general land use planning. The types of land uses addressed by the State and the acceptable noise categories for each land use are included in the <i>State of California General Plan Guidelines, Appendix D: Noise Element Guidelines</i> (State Noise Guidelines), which is published and updated by the Governor's Office of Planning Research.^b The level of acceptability of the noise environment is dependent on the activity associated with each particular land use. In addition, the California Department of Health Services' (DHS) has established guidelines to provide communities with noise environments that it deems to be generally acceptable based on a variety of land use categories. These guidelines serve as a primary tool for a city to use to assess the compatibility between land uses and outdoor noise.</p> | DHS |
| <p>California Building Code Noise Insulation Requirements</p> <p>The California Building Code (CBC) includes requirements for sound transmission between adjacent dwelling or sleeping units, and between public areas and dwelling units or sleeping units. Per Section 1206.4 of the CBC, allowable interior noise levels attributed to external sound sources must not exceed 45 dB CNEL (or L_{dn}). Section 1206.5 directs the reader to the California Green Building Standards Code, Chapter 5, Division 5.5 for additional sound transmission requirements (as they relate to non-residential land uses).</p> <p>Title 24, Part 11, Section 5.507 specifies environmental comfort with regard to noise exposure for non-residential buildings. Except buildings having few or no occupants, or where occupants are not likely to be affected by exterior noise, the subsections therein provide means of acoustical controls through which building assembly and component requirements are used to assess exterior noise issues.</p> | County of Los Angeles |
| <p>Assembly Bill (AB) 1307</p> <p>On September 7, 2023, Governor Gavin Newsom signed AB 1307, which added Public Resources Code section 21085 and establishes that noise</p> | County of Los Angeles |

Table 5.8-2 (Continued)
Noise Regulatory Overview

| Issue Area and Relevant Legislation | Applicable Agency |
|---|---------------------------------|
| generated by occupants of residential projects is not a significant effect on the environment under CEQA. | |
| County Regulations | |
| <p>County of Los Angeles General Plan</p> <p>The Los Angeles County General Plan 2035 (General Plan) directs future growth and development in the County's unincorporated areas and establishes goals, policies, and objectives that pertain to the entire County. The General Plan includes a Noise Element that addresses land use compatibility as it relates to noise levels, noise abatement to achieve acceptable noise levels as defined by the County's Exterior Noise Standards, and cumulative noise impacts. The noise guidelines used by the County are based on the community noise compatibility guidelines established by the State of California, described above. Specific regulations that implement these guidelines are set forth in the Los Angeles County Code (County Code), discussed below. Relevant policies in the Noise Element focus on minimizing transportation-related noise and promoting public awareness of noise effects. A detailed list of goals and policies that pertain to noise is provided below.</p> | Department of Regional Planning |
| <p>Santa Clarita Valley Area Plan: One Valley One Vision 2012</p> <p>The Santa Clarita Valley Area Plan (Area Plan) is a component of the Los Angeles County General Plan that provides focused goals, policies, and maps to guide the regulation of development within the unincorporated portions of the Santa Clarita Valley. The Area Plan Noise Element is a comprehensive program to incorporate noise management into the planning process in order to help achieve and maintain land uses that are compatible with existing and future environmental noise levels. The Area Plan identifies noise-sensitive land uses and noise sources and defines areas of noise impact for the purpose of developing programs to ensure residents are protected from excessive noise intrusion. A detailed list of the goals, objectives, and policies that pertain to noise are provided below.</p> | Department of Regional Planning |
| <p>County of Los Angeles Noise Standards</p> <p><u>Exterior Noise Standards</u></p> <p>County Code Chapter 12.08, Noise Control, establishes noise standards for four noise zones based on land use type. These noise standards are based on the duration of the noise. The Noise Ordinance uses a number of noise metrics to define the permissible noise levels based upon a one-hour timeframe which indicates exceedances of 50 percent (L_{50}), 25 percent (L_{25}), 8.3 percent ($L_{8.3}$), and 1.7 percent ($L_{1.7}$) of the time, plus the maximum sound level (L_{max}) during that time period.</p> | County of Los Angeles |
| <p><u>Construction Noise Standards</u></p> <p>County Code Section 12.08.440 prohibits construction activities between the hours of 7:00 P.M. and 7:00 A.M. and at any time on Sundays or holidays that create a noise disturbance across a residential or commercial real property line. The only exceptions are emergency work, public safety projects, or by a variance issued by the health officer.^c Both the working hours and maximum level of noise allowed from both mobile and stationary construction equipment and activity in the County are defined by land use type. All mobile</p> | County of Los Angeles |

Table 5.8-2 (Continued)
Noise Regulatory Overview

| Issue Area and Relevant Legislation | Applicable Agency |
|--|-------------------|
| <p>and stationary internal-combustion-powered equipment and machinery are also required to be equipped with suitable exhaust and air-intake silencers in proper working order. In addition, Section 12.12.030 of the County Noise Ordinance provides that at any time between the hours of 8:00 P.M. and 6:30 A.M. the following day and on Sundays, a person shall not perform construction or repair work of any kind upon any building or structure, or perform any earth excavating, filling, or moving involving the use of air compressors; jackhammers; power-driven drill; riveting machine; excavator, diesel-powered truck, tractor or other earth moving equipment; hand hammers on steel or iron, or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in a dwelling, apartment, hotel, mobile home, or other place of residence.</p> | |
| <p>^a <i>United States Environmental Protection Agency, EPA Identifies Noise Levels Affecting Health and Welfare, April 1974.</i></p> <p>^b <i>Governor's Office of Planning and Research, State of California General Plan Guidelines (2017), www.opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf.</i></p> <p>^c <i>Los Angeles County Code Section 12.08.0570, Part 5, Exemption H, Public Health and Safety Activities.</i></p> <p>Source: Eyestone Environmental, 2024.</p> | |

(1) Federal Regulations

(a) United States Environmental Protection Agency Guidelines

Under the authority of the Noise Control Act of 1972, the United States Environmental Protection Agency (USEPA) has established noise emission criteria and testing methods, as published in Parts 201 through 205 of Title 40 of the Code of Federal Regulations, that apply to some transportation equipment (e.g., interstate rail carriers, medium trucks, and heavy trucks) and construction equipment. In 1974, the USEPA issued the following guidance levels for the protection of public health and welfare in residential land use areas: an outdoor day/night (24 hour) average sound level (L_{dn}) of 55 dBA; and an indoor L_{dn} of 45 dBA.⁶ However, these guidance levels are not considered standards or regulations and were developed without consideration of technical or economic feasibility. There are no federal noise standards that directly regulate environmental noise related to the construction or operation of a project.

⁶ *United States Environmental Protection Agency, EPA Identifies Noise Levels Affecting Health and Welfare, April 1974.*

(2) State Regulations

(a) State Noise Guidelines

The State of California has adopted noise compatibility guidelines for general land use planning, as shown in **Table 5.8-3**, State Criteria for Noise Compatible Land Use, on page 5.8-11. The types of land uses addressed by the State and the acceptable noise categories for each land use are included in the *State of California General Plan Guidelines, Appendix D: Noise Element Guidelines* (State Noise Guidelines), which is published and updated by the Governor's Office of Planning Research.⁷ The level of acceptability of the noise environment is dependent on the activity associated with each particular land use.

In addition, Section 65302(f) of the California Government Code requires each county and city in the State to prepare and adopt a comprehensive long-range general plan for its physical development, with Section 65302(g) requiring a noise element to be included in the general plan. The noise element must: (1) identify and appraise noise problems in the community; (2) recognize Office of Noise Control guidelines; and (3) analyze and quantify current and projected noise levels.


The California Department of Health Services' (DHS) has established guidelines to provide communities with noise environments that it deems to be generally acceptable based on a variety of land use categories. These guidelines serve as a primary tool for a city to use to assess the compatibility between land uses and outdoor noise. The State Noise Guidelines indicate that commercial and industrial land uses generally should be located in areas where outdoor ambient noise levels do not exceed 70 to 75 dBA CNEL. According to the State Noise Guidelines, an exterior noise level of 70 dBA CNEL is considered "normally acceptable" for office buildings, business commercial, and professional uses involving normal, conventional construction without any special noise insulation requirements. Exterior noise levels up to 75 dBA CNEL are typically considered "normally acceptable" for industrial and manufacturing utility uses without any special noise insulation requirements. Between these values and 80 dBA CNEL, exterior noise levels are typically considered "conditionally acceptable," and commercial and industrial construction should only occur after a detailed analysis of the noise reduction requirements and needed noise attenuation features have been included in the project design. Exterior noise attenuation features include, but are not limited to, requiring setbacks to place structures outside the conditionally acceptable noise contour, orienting structures so that windows do not open to the noise source, and/or installing noise barriers such as berms and/or solid walls.


⁷ *State of California, General Plan Guidelines, 2017.*


Table 5.8-3
State Criteria for Noise Compatible Land Use

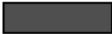
| Land Use Category | Community Noise Exposure <i>L_{dn}</i> or <i>CNEL</i> , dB | | | | | |
|---|---|----|----|----|----|----|
| | 55 | 60 | 65 | 70 | 75 | 80 |
| Residential - Low Density Single Family, Duplex, Mobile Homes | | | | | | |
| Residential - Multi-Family | | | | | | |
| Transient Lodging - Motels, Hotels | | | | | | |
| Schools, Libraries, Churches, Hospitals, Nursing Homes | | | | | | |
| Auditoriums, Concert Halls, Amphitheaters | | | | | | |
| Sports Arena, Outdoor Spectator Sports | | | | | | |
| Playgrounds, Neighborhood Parks | | | | | | |
| Golf Courses, Riding Stables, Water Recreation, Cemeteries | | | | | | |
| Office Buildings, Business Commercial and Professional | | | | | | |
| Industrial, Manufacturing, Utilities, Agriculture | | | | | | |

INTERPRETATION:

 **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 generally 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.

Source: California Office of Noise Control, Department of Health Services, Appendix D: Noise Element Guidelines.

(b) California Building Code Noise Insulation Requirements

The California Building Code (CBC) includes requirements for sound transmission between adjacent dwelling or sleeping units, and between public areas and dwelling units

or sleeping units. (See Part 2, Volume 1, Chapter 12, Section 1206 of the 2019 CBC (CBC 2019). Per Section 1206.4 of the CBC, allowable interior noise levels attributed to external sound sources must not exceed 45 dB CNEL (or Ldn). Section 1206.5 directs the reader to the California Green Building Standards Code, Chapter 5, Division 5.5 for additional sound transmission requirements (as they relate to non-residential land uses).

Title 24, Part 11, Section 5.507 specifies environmental comfort with regard to noise exposure for non-residential buildings. Except buildings having few or no occupants, or where occupants are not likely to be affected by exterior noise, the subsections therein provide means of acoustical controls through which building assembly and component requirements are used to assess exterior noise issues. Section 5.507.4 stipulates two compliance approaches. The prescriptive method is utilized when occupied structures are planned with a 65 dBA CNEL contour of an airport, railroad, highway traffic, or industrial noise source. In this case, the wall and roof-ceiling assemblies are required to achieve a composite sound transmission class (STC) rating of at least 50, or a composite outdoor-indoor transmission class (OITC) rating of not less than 40. Additionally, exterior windows are required to be rated with a minimum STC of 40, or OITC of 30. The performance method does not require specific STC and OITC ratings; however, it requires that the interior noise environment attributable to outdoor noise sources not exceed 50 dBA Leq (1 hour). This noise level can be achieved by means of building envelope construction and/or exterior features such as noise walls or berms. The performance method requires an acoustical analysis documenting compliance with the interior sound level limits.

(c) Assembly Bill (AB) 1307

On September 7, 2023, Governor Gavin Newsom signed AB 1307, which added Public Resources Code section 21085 and establishes that noise generated by occupants of residential projects is not a significant effect on the environment under CEQA.

(3) County Regulations

(a) County of Los Angeles General Plan

The Los Angeles County General Plan 2035 (General Plan) directs future growth and development in the County's unincorporated areas and establishes goals, policies, and objectives that pertain to the entire County. The General Plan includes a Noise Element that addresses land use compatibility as it relates to noise levels, noise abatement to achieve acceptable noise levels as defined by the County's Exterior Noise Standards, and cumulative noise impacts. The noise guidelines used by the County are based on the community noise compatibility guidelines established by the State of California, described above. Specific regulations that implement these guidelines are set forth in the Los Angeles County Code (County Code), discussed below. Relevant policies in the Noise

Element focus on minimizing transportation-related noise and promoting public awareness of noise effects.

The following goals and policies that pertain to noise are applicable to the Modified Project:

Goal N 1: The reduction of excessive noise impacts.

Policy N 1.1: Utilize land uses to buffer noise-sensitive uses from sources of adverse noise impacts.

Policy N 1.2: Reduce exposure to noise impacts by promoting land use compatibility.

Policy N 1.3: Minimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering controls through Best Available Technologies (BAT).

Policy N 1.5: Ensure compliance with the jurisdictions of State Noise Insulation Standards (Title 24, California Code of Regulations and Chapter 35 of the Uniform Building Code), such as noise insulation of new multifamily dwellings constructed within the 60 dB (CNEL or Ldn) noise exposure contours.

Policy N 1.6: Ensure cumulative impacts related to noise do not exceed health-based safety margins.

Policy N 1.9: Require construction of suitable noise attenuation barriers on noise sensitive uses that would be exposed to exterior noise levels of 65 dBA CNEL and above, when unavoidable impacts are identified.

Policy N 1.10: Orient residential units away from major noise sources (in conjunction with applicable building codes).

Policy N 1.11: Maximize buffer distances and design and orient sensitive receptor structures (hospitals, residential, etc.) to prevent noise and vibration transfer from commercial/light industrial uses.

Policy N 1.12: Decisions on land adjacent to transportation facilities, such as the airports, freeways and other major highways, must consider both existing and future noise levels of these transportation facilities to assure the compatibility of proposed uses.

(b) Santa Clarita Valley Area Plan: One Valley One Vision 2012

The Santa Clarita Valley Area Plan (Area Plan) is a component of the Los Angeles County General Plan that provides focused goals, policies, and maps to guide the regulation of development within the unincorporated portions of the Santa Clarita Valley. The Area Plan Noise Element is a comprehensive program to incorporate noise management into the planning process in order to help achieve and maintain land uses that are compatible with existing and future environmental noise levels. The Area Plan identifies noise-sensitive land uses and noise sources and defines areas of noise impact for the purpose of developing programs to ensure residents are protected from excessive noise intrusion.

The following goals, objectives, and policies that pertain to noise are applicable to the Project:

Goal N-1: A healthy and safe noise environment for Santa Clarita Valley residents, employees, and visitors.

Objective N-1.1: Protect the health and safety of the residents of the Santa Clarita Valley by the elimination, mitigation, and prevention of significant existing and future noise levels.

Policy N-1.1.1: Use the Noise and Land Use Compatibility Guidelines contained in Figure N-8 (i.e., **Table 5.8-3**, State Criteria for Noise Compatible Land Use, herein), which are consistent with State guidelines, as a policy basis for decisions on land use and development proposals related to noise.

Policy N-1.1.2: Continue to implement the adopted Noise Ordinance and other applicable code provisions, consistent with State and federal standards, which establish noise impact thresholds for noise abatement and attenuation, in order to reduce potential health hazards associated with high noise levels.

Policy N-1.1.3: Include consideration of potential noise impacts in land use planning and development review decisions.

Policy N-1.1.4: Control noise sources adjacent to residential, recreational, and community facilities and those land uses classified as noise sensitive.

Goal N-2: Protect residents and sensitive receptors from traffic-generated noise.

Objective N-2.1: Prevent and mitigate adverse effects of noise generated from traffic on arterial streets and highways through implementing noise reduction standards and programs.

Policy N-2.1.1: Encourage owners of existing noise-sensitive uses, and require owners of proposed noise sensitive land uses, to construct sound barriers to protect users from significant noise levels, where feasible and appropriate.

Policy N-2.1.2: Encourage the use of noise absorbing barriers, where appropriate.

Policy N-2.1.4: Reduce significant noise levels related to through-traffic in residential areas by promoting subdivision circulation designs to contain a hierarchy of streets which efficiently direct traffic to highways.

Policy N-2.1.5: Encourage employers to develop van pool and other travel demand management programs to reduce vehicle trip-generated noise in the planning area.

Policy N-2.1.6: Work with the City of Santa Clarita Transit to improve and expand current public transit services and routes to reduce vehicle trips and resulting noise levels.

Goal N-3: *Protect residential neighborhoods from excessive noise.*

Objective N-3.1: Prevent and mitigate significant noise levels in residential neighborhoods.

Policy N-3.1.1: Require that developers of new single-family and multi-family residential neighborhoods in areas where the ambient noise levels exceed 60 CNEL provide mitigation measures for the new residences to reduce interior noise levels to 45 CNEL, based on future traffic and railroad noise levels.

Policy N-3.1.2: Require that developers of new single-family and multi-family residential neighborhoods in areas where the projected noise levels exceed 65 CNEL provide mitigation measures (which may include noise barriers, setbacks, and site design) for new residences to reduce outdoor noise levels to 65 CNEL, based on future traffic conditions. This requirement would apply to rear yard areas for single-family developments, and to private open space and common recreational and open space areas for multi-family developments.

Policy N-3.1.3: Through enforcement of the applicable Noise Ordinance, protect residential neighborhoods from noise generated by machinery or activities that produce significant discernable noise exceeding recommended levels for residential uses.

Policy N-3.1.4: Require that those responsible for construction activities develop techniques to mitigate or minimize the noise impacts on residences and adopt standards that regulate noise from construction activities that occur in or near residential neighborhoods.

Policy N-3.1.6: Ensure that new residential buildings shall not be located within 150 feet of the centerline for Interstate 5.

Policy N-3.1.7: Ensure that design of parks, recreational facilities, and schools minimize noise impacts to residential neighborhoods.

Policy N-3.1.9: Implement a buyer and renter notification program for new residential developments where appropriate, to educate and inform potential buyers and renters of the sources of noise in the area and/or new sources of noise that may occur in the future. As determined by the reviewing authority, notification may be appropriate in the following areas:

- a. Within one mile of Six Flags Magic Mountain theme park, potential buyers and renters should receive notice that noise may occasionally be generated from this facility and that the frequency and loudness of noise events may change over time.
- b. Within 1,000 feet of the railroad, potential buyers and renters should receive notice that noise may occasionally be generated from this facility and that the frequency and loudness of noise events may change over time.
- c. Within 200 feet of commercial uses in mixed-use developments, potential buyers and renters should receive notice that the commercial uses within the mixed-use developments may generate noise in excess of levels typically found in residential areas, that the commercial uses may change over time, and the associated noise levels and frequency of noise events may change along with the use.
- d. Within 1,000 feet of the Saugus Speedway, in the event speedway operations are resumed in the future.

Goal N-4: *Protection of sensitive uses from commercial and industrial noise generators.*

Objective N-4.1: Prevent, mitigate, and minimize noise spillover from commercial and industrial uses into adjacent residential neighborhoods and other noise sensitive uses.

Policy N-4.1.1: Implement and enforce the applicable Noise Ordinance to control noise from commercial and industrial sources that may adversely impact adjacent residential neighborhoods and other sensitive uses.

Policy N-4.1.2: Require appropriate noise buffering between commercial or industrial uses and residential neighborhoods and other sensitive uses.

(c) County of Los Angeles Noise Standards

In addition to regulating noise through implementation of the General Plan Noise Element policies, the County of Los Angeles regulates noise through enforcement of the County Noise Ordinance. The standards set forth therein generally relate to noise-producing activities (e.g., construction) and stationary noise sources and facilities (e.g., HVAC units and industrial activities).

(i) Exterior Noise Standards

County Code Chapter 12.08, Noise Control, establishes noise standards for four noise zones based on land use type, as shown in **Table 5.8-4**, County of Los Angeles Exterior Noise Standards by Noise Zone, on page 5.8-18. These noise standards are based on the duration of the noise. The Noise Ordinance uses a number of noise metrics to define the permissible noise levels based upon a one-hour timeframe which indicates exceedances of 50 percent (L_{50}), 25 percent (L_{25}), 8.3 percent ($L_{8.3}$), and 1.7 percent ($L_{1.7}$) of the time, plus the maximum sound level (L_{max}) during that time period.

The following noise standards should be applied to the exterior noise levels provided in **Table 5.8-4**, County of Los Angeles Exterior Noise Standards by Noise Zone:

- Standard No. 1 shall be the exterior noise level that may not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 shall be the applicable noise level from **Table 5.8-4**, County of Los Angeles Exterior Noise Standards by Noise Zone; or, if the ambient L_{50} exceeds the forgoing level, then the ambient L_{50} becomes the exterior noise level for Standard No. 1.
- Standard No. 2 shall be the exterior noise level that may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable noise level from **Table 5.8-4**, County of Los Angeles Exterior Noise Standards by Noise Zone, plus 5 dBA; or, if the ambient L_{25} exceeds the forgoing level, then the ambient L_{25} becomes the exterior noise level for Standard No. 2.

Table 5.8-4
County of Los Angeles Exterior Noise Standards by Noise Zone

| Noise Zone | Designated Noise Zone Land Use (Receptor Property) | Time Interval | Exterior Noise Level (dBA) |
|--|--|-------------------------------------|----------------------------|
| I | Noise-Sensitive Areas | Anytime | 45 |
| II | Residential Properties | 10:00 P.M. to 7:00 A.M. (nighttime) | 45 |
| | | 7:00 A.M. to 10:00 P.M. (daytime) | 50 |
| III | Commercial Properties | 10:00 P.M. to 7:00 A.M. (nighttime) | 55 |
| | | 7:00 A.M. to 10:00 P.M. (daytime) | 60 |
| IV | Industrial Properties | Anytime | 70 |
| <i>Source: County of Los Angeles Ordinance No. 11743, Section 12.08.390.</i> | | | |

- Standard No. 3 shall be the exterior noise level that may not be exceeded for a cumulative period of more than 5 minutes in any hour. Standard No. 3 shall be the applicable noise level from **Table 5.8-4**, County of Los Angeles Exterior Noise Standards by Noise Zone, plus 10 dBA; or, if the ambient $L_{8.3}$ exceeds the forgoing level, then the ambient $L_{8.3}$ becomes the exterior noise level for Standard No. 3.
- Standard No. 4 shall be the exterior noise level that may not be exceeded for a cumulative period of more than one minute in any hour. Standard No. 4 shall be the applicable noise level from **Table 5.8-4**, County of Los Angeles Exterior Noise Standards by Noise Zone, plus 15 dBA; or, if the ambient $L_{1.7}$ exceeds the forgoing level, then the ambient $L_{1.7}$ becomes the exterior noise level for Standard No. 4.
- Standard No. 5 shall be the exterior noise level that may not be exceeded for any period of time. Standard No. 5 shall be the applicable noise level from **Table 5.8-4**, County of Los Angeles Exterior Noise Standards by Noise Zone, plus 20 dBA; or, if the ambient L_0 or L_{max} exceeds the forgoing level, then the ambient L_0 or L_{max} becomes the exterior noise level for Standard No. 5.

These operational standards are not applicable to emergency activities, warning devices (e.g. police, fire, ambulance sirens), outdoor activities conducted on public playgrounds or private school grounds, including school athletic and entertainment events, construction work, stationary nonemergency signaling devices, emergency signaling devices, refuse collection, residential air-conditioning or refrigeration equipment, forced-air blowers, motion picture production, railroad activities, federal or state preempted activities (e.g. airports), public health and safety activities, motor vehicles activities, seismic surveys,

agricultural operations, minor maintenance of residential poverties, and operation of oil and gas wells. (County Code Chapter Section 12.08.570.)

(ii) Construction Noise Standards

County Code Section 12.08.440 prohibits construction activities between the hours of 7:00 P.M. and 7:00 A.M. and at any time on Sundays or holidays that create a noise disturbance across a residential or commercial real property line. The only exceptions are emergency work, public safety projects, or by a variance issued by the health officer.⁸ Both the working hours and maximum level of noise allowed from both mobile and stationary construction equipment and activity in the County are defined by land use type as shown in **Table 5.8-5**, County of Los Angeles Construction Noise Standards, on page 5.8-20. All mobile and stationary internal-combustion-powered equipment and machinery are also required to be equipped with suitable exhaust and air-intake silencers in proper working order. In addition, Section 12.12.030 of the County Noise Ordinance provides that at any time between the hours of 8:00 P.M. and 6:30 A.M. the following day and on Sundays, a person shall not perform construction or repair work of any kind upon any building or structure, or perform any earth excavating, filling, or moving involving the use of air compressors; jackhammers; power-driven drill; riveting machine; excavator, diesel-powered truck, tractor or other earth moving equipment; hand hammers on steel or iron, or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in a dwelling, apartment, hotel, mobile home, or other place of residence.

c. Existing Conditions

The noise environment surrounding the Modified Project Site is defined by a variety of noise sources. Mobile sources, such as automobiles and trucks, are the most common and significant sources of noise in the Modified Project area. In addition, commercial, industrial, and institutional land uses (i.e., schools, fire stations, utilities) throughout the County generate stationary-source noise.

Some land uses are considered more sensitive to intrusive noise than others based on the types of activities typically involved at the receptor location. Uses that are sensitive to noise include residences, schools, hospitals, places of worship, and senior citizen facilities. . Frequent use areas include the backyards of single-family residences, outdoor recreation areas in multi-family complexes, active or passive recreational areas in parks, and play areas at schools.

⁸ Los Angeles County Code Section 12.08.0570, Part 5, Exemption H, Public Health and Safety Activities.

**Table 5.8-5
County of Los Angeles Construction Noise Standards**

| Equipment Type | Receptor Type | Daytime (7:00 A.M. to 8:00 P.M.)^a | Nighttime (8:00 P.M. to 7:00 A.M.)^b |
|--|-----------------------------|---|---|
| Mobile^c | Single-Family Residential | 75 | 60 |
| | Multi-Family Residential | 80 | 64 |
| | Semi-Residential/Commercial | 85 | 70 |
| | Business Structures | 85 | 85 |
| Stationary^d | Single-Family Residential | 60 | 50 |
| | Multi-Family Residential | 65 | 55 |
| | Semi-Residential/Commercial | 70 | 60 |
| | Business Structures | 85 | 85 |
| <p>^a Exception for Sundays and legal holidays.</p> <p>^b Includes all day Sunday and legal holidays.</p> <p>^c Represents maximum noise levels for non-scheduled, intermittent, short-term operation (less than 10 days).</p> <p>^d Represents maximum noise level for repetitively scheduled and relatively long-term operation (periods of 10 days or more).</p> <p>Source: County of Los Angeles Ordinance No. 11743, Los Angeles County Code Section 12.08.440.</p> | | | |

The seven representative noise sensitive receptor locations (identified as Sites 1 to 7) in the vicinity of the Entrada South and the VCC Planning areas are shown in **Figure 5.8-1**.

(1) Modified Project Site

The Entrada South Planning Area consists of approximately 382 acres located west of I-5 and The Old Road and predominantly south of the Six Flags Magic Mountain theme park (Six Flags Magic Mountain). The Entrada South Planning Area is generally undeveloped. The existing noise environment in the vicinity of the Entrada South Planning Area is primarily comprised of automobile traffic on nearby roadways, including I-5, The Old Road, and Magic Mountain Parkway, as well as operation of Six Flags Magic Mountain located to the immediate north. There are no sensitive noise receptors currently located on-site.

The VCC Planning Area consists of approximately 328 acres of an undeveloped portion of the partially completed VCC non-residential (industrial/business/office park) center located west of I-5 and north of Henry Mayo Drive (SR-126). The existing noise environment in the vicinity of the VCC Planning Area is primarily comprised of automobile

traffic on nearby roadways, including I-5, The Old Road, Commerce Center Drive, and Hasley Canyon Road. There are no sensitive noise receptors currently located on-site.

(2) Sensitive Receptors in the Surrounding Area

The nearest existing noise-sensitive receptors to the Entrada South Planning Area are residential uses within the Westridge community located directly to the south (refer to Receptor 1 in **Figure 5.8-1**), Oak Hills Elementary School (refer to Receptor 2 in **Figure 5.8-1**), the approved Mission Village community currently under construction (refer to Receptor 3 in **Figure 5.8-1**). Additionally, the nearest existing noise-sensitive receptors to the VCC Planning Area is the Travel Village RV Park (refer to Receptor 4 in **Figure 5.8-1**), residential uses and the Live Oak Elementary School (refer to Receptor 5 in **Figure 5.8-1**), residential uses along Hasley Canyon Road (refer to Receptor 6 in **Figure 5.8-1**) and the Higher Vision Church (refer to Receptor 7 in **Figure 5.8-1**).

Other noise-sensitive receptors include the Hilton Garden Inn, located on The Old Road, approximately 1,000 feet northeast of the Entrada South Planning Area; and the Best Western Inn and Holiday Inn Express, located east of I-5, approximately 700 feet to the east.

(3) Existing Ambient Noise Levels

(a) Ambient Noise Measurements

To establish baseline noise conditions, long-term noise levels were monitored at seven representative receptor locations (identified as Receptor 1 through 7) in the vicinity of the Entrada South and VCC Planning Areas, as shown in **Figure 5.8-1**, Noise Measurement Locations, on page 5.8-22. **Table 5.8-6**, Existing Noise Measurements in the Modified Project Vicinity, on page 5.8-23 provides a summary of the noise level measurements conducted at the seven selected noise receptor locations over a 24-hour period. Based on field observations, the ambient noise at the measurement locations is dominated by vehicular traffic and Six Flags Magic Mountain.

(b) Existing Roadway Noise Levels

Existing roadway noise levels have been forecasted based on existing roadway traffic volumes provided by the Modified Project's transportation engineer. Forecasted existing roadway noise levels range from a low of 43.71 dBA CNEL for the single-family residential uses located on the east side of Hasley Canyon Road, west of The Old Road to a high of 70.86 dBA CNEL for the commercial uses located on the west side of Hasley Canyon Road, west of The Old Road (see Table 16 of the Noise Study, **Appendix 5.8**). For the land uses that are present around these locations (e.g., residential, commercial, etc.), all of the land uses have a Noise Exposure Compatibility Category of "normally

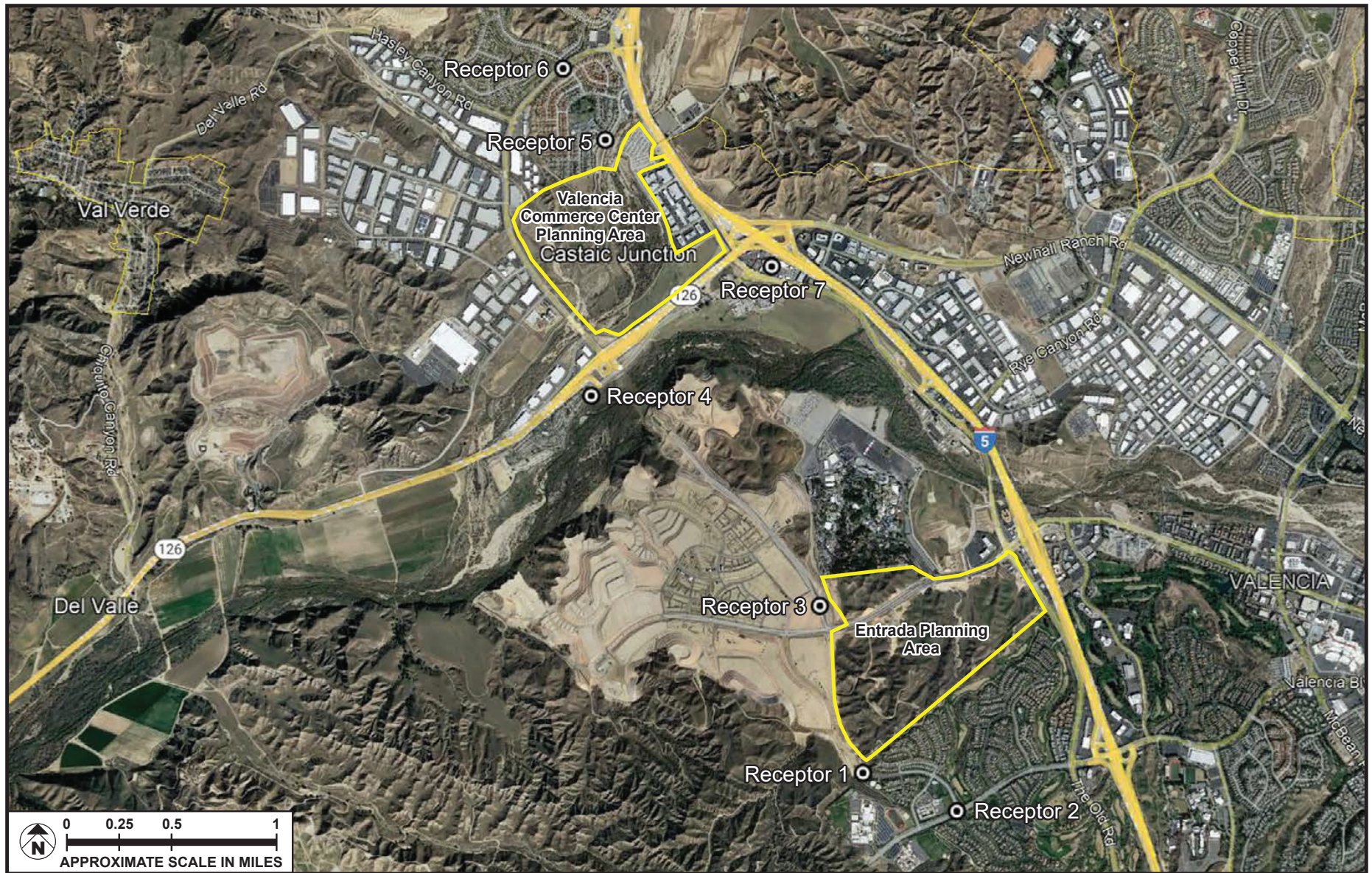


Figure 5.8-1
Noise Monitoring Locations

**Table 5.8-6
Existing Noise Measurements in the Modified Project Vicinity**

| Measurement Location | Location Description | Distance to the Closest Location Within the Modified Project Site | Existing Land Use | Monitored Date | 24-hour CNEL (dB[A]) | Daytime Average (dB[A]) | Nighttime Average (dB[A]) | Noise Exposure Compatibility Category |
|--|---|---|-------------------------------------|-----------------------|----------------------|-------------------------|---------------------------|---|
| Receptor 1 | Westridge Parkway Terminus at the Southern Boundary of the Mission Village Site | 670 | Residential (Single Family) | September 11, 2021 | 50.3 | 43.6 | 40.0 | Normally Acceptable |
| | | | | September 12, 2021 | 47.9 | 48.9 | 42.3 | |
| Receptor 2 | Corner of Westridge Parkway and Valencia Boulevard | 2,165 | School | September 8 – 9, 2021 | 67.7 | 65.6 | 59.5 | Normally Acceptable |
| Receptor 3 | Security Post at the Mission Village Site | 130 | Mixed-Use | September 11, 2021 | 62.5 | 57.3 | 55.7 | Conditionally Acceptable |
| | | | | September 12, 2021 | 61.7 | 53.4 | 55.4 | |
| Receptor 4 | Travel Village at Henry Mayo Drive | 1,055 | Lodging | September 8–9, 2021 | 61.4 | 56.7 | 54.3 | Normally Acceptable |
| Receptor 5 | Corner of Live Oak Road and Rangewood Road/Hidden Trail Road | 720 | School/ Residential (Single Family) | September 9–10, 2021 | 62.0 | 57.9 | 54.8 | Normally Acceptable/ Conditionally Acceptable |
| Receptor 6 | Corner of Hasley Canyon Road and Cambridge Road | 2,540 | Commercial | September 9–10, 2021 | 67.4 | 65.6 | 58.5 | Normally Acceptable |
| Receptor 7 | Located at Henry Mayo Drive and The Old Road | 1,165 | Place of Worship | September 13–14, 2021 | 75.5 | 71.4 | 68.1 | Normally Unacceptable |
| <p><i>As discussed above, these receptor sites are considered representative of noise levels of locations in their proximity.</i></p> <p><i>Source: Refer to Appendix 5.8 (Sub-Appendix A) for noise monitoring worksheets.</i></p> | | | | | | | | |

acceptable,” except for the commercial uses on the west side of Hasley Canyon Road, west of The Old Road which has a Noise Exposure Compatibility Category of “conditionally acceptable.”

As shown, the existing 24-hour noise level (dBA CNEL) at the monitoring locations ranged from a low of 47.9 dBA CNEL at the Westridge Parkway terminus at the southern boundary of the Mission Village site (Receptor 1) to a high of 75.5 dBA CNEL at the commercial uses located along Henry Mayo Drive, west of The Old Road (Receptor 7). In terms of the County’s land use noise compatibility categories, noise levels at the monitoring locations range from normally acceptable to normally unacceptable. No monitoring locations measured noise levels within the clearly unacceptable category. Specifically, the noise exposure compatibility categories are summarized below:

- **Normally Acceptable:** Locations where single-family residential uses are dominant such as Westridge Parkway (Receptor 1); where school uses are dominant along Valencia Boulevard (Receptor 2) and Saddleridge Way (Receptor 5); where commercial uses are dominant along Hasley Canyon (Receptor 6); and where transient lodging uses are dominant along Henry Mayo Drive (Receptor 4)
- **Conditionally Acceptable:** Locations where residential uses are dominant along Magic Mountain Parkway and Commerce Center Drive; and where single-family residential uses are dominant near other school uses along Live Oak Road (Receptor 5).
- **Normally Unacceptable:** Locations where land uses are located in close proximity to I-5 and SR-126 (Receptor 7).

3. SUMMARY OF IMPACTS FOR THE 2017 PROJECT

Entrada South Planning Area

Construction and buildout of the specific plan was assumed to last 20 years in the State certified EIR, with construction of the Modified Project locations lasting up to eight years. The State-certified EIR concluded the following impacts would be reduced to less than significant with implementation of mitigation similar to that identified for the Newhall Ranch Specific Plan (Mitigation Measures SP-4.9-1 through SP-4.9-17): exposure of people to noise levels in excess of standards established in the local general plan or noise ordinance, or other applicable standards of other agencies; exposure of people to excessive ground-borne noise levels or vibration; a substantial permanent increase in ambient noise levels in the Project vicinity; a substantial temporary or periodic increase in ambient noise levels in the Project vicinity; exposure of on- or off-site occupants to Project-related construction noise levels in excess of the Los Angeles County Noise Ordinance

standards for construction noise; construction activity, including vibratory and impact pile driving; exposure of on-site exterior frequent use areas at noise-sensitive receptors to noise levels above the normally acceptable levels identified in the State Land Use Compatibility Guidelines utilized by Los Angeles County (i.e., 60 dBA CNEL for single-family, 65 dBA CNEL for multi-family, and 70 dBA CNEL for schools and public parks; exposure of Project occupants to noise levels originating on- or off-site that are above the Los Angeles County Noise Ordinance standards; and exposure of off-site sensitive receptors to a significant increase in noise level from Project-related activities.

Since the Entrada South Planning Area is not located within an airport land use plan or within two miles of a public or private airport or airstrip, the 2017 Project would not expose people residing or working in the Project area to excessive noise levels associated with airport-related uses.

In addition, the State-certified EIR identified significant and unavoidable cumulative operational traffic noise impacts along 11 roadway segments based on the full development analyzed in the State-certified EIR (not limited to the Entrada South and VCC Planning Areas).

VCC Planning Area

The State-certified EIR concluded the following impacts would be reduced to less than significant with implementation of mitigation similar to that identified for the Newhall Ranch Specific Plan (Mitigation Measures SP-4.9-1 through SP-4.9-17), as well as measures VCC-NOI-1 through VCC-NOI-10 previously adopted by the County for the VCC Planning Area: exposure of people to noise levels in excess of standards established in the local general plan or noise ordinance, or other applicable standards of other agencies; a substantial permanent increase in ambient noise levels in the Project vicinity; a substantial temporary or periodic increase in ambient noise levels in the Project vicinity; exposure of on-site exterior frequent use areas at noise-sensitive receptors to noise levels above normally acceptable levels identified in the State Land Use Compatibility Guidelines utilized by the County (i.e., 60 dBA CNEL for single family, 65 dBA CNEL for multi-family, and 70 dBA CNEL for schools and public parks; exposure of Project occupants to noise levels originating on- or off-site that are above the Los Angeles County Noise Ordinance standards; and exposure of off-site sensitive receptors to a significant increase in noise level from Project-related activities. Less than significant impacts were found for the following: exposure of people to excessive ground-borne noise levels or vibration, including vibratory and impact pile driving during construction activity; and exposure of on- or off-site occupants to Project-related construction noise levels in excess of the Los Angeles County Noise Ordinance standards for construction noise. Since the VCC Planning Area is not located within an airport land use plan or within two miles of a public

or private airport or airstrip, the 2017 Project would not expose people residing or working in the Project area to excessive noise levels associated with airport-related uses.

In addition, the State-certified EIR identified significant and unavoidable cumulative operational traffic noise impacts along 11 roadway segments based on full buildout of the 2017 Project (not limited to the Entrada South and VCC Planning Areas).

4. REGULATORY REQUIREMENTS AND PROJECT DESIGN FEATURES

The Modified Project shall comply with the following regulatory requirements, as applicable:

- All construction activity occurring on the Modified Project Site shall adhere to the requirements set forth in Section 12.08.440(A) of the County Noise Ordinance.
- All mobile or stationary internal combustion engine-powered construction equipment or machinery shall be equipped with suitable exhaust and air-intake silencers in proper working order as set forth in Section 12.08.440(C) of the County Noise Ordinance.
- All construction activities near occupied residences shall be restricted to between the hours of 6:30 A.M. and 8:00 P.M. on weekdays and Saturday and shall be prohibited all Sundays and legal holidays pursuant to Section 12.12.030 of the County Noise Ordinance.
- All residential air conditioning equipment installed within the Modified Project Site shall adhere to the requirements of Section 12.08.530 of the County Noise Ordinance.
- All stationary and point sources of noise occurring on the Project Site shall adhere to the requirements of Section 12.08.390 of the County Noise Ordinance.
- Loading, unloading, opening, closing, or other handling of boxes, crates, containers, building materials, garbage cans or similar objects between the hours of 10:00 P.M. and 6:00 A.M. in such a manner as to cause a noise disturbance will be prohibited in accordance with Section 12.08.460 of the County Noise Ordinance.
- Loading zones and trash receptacles in commercial areas shall be located away from adjacent residential areas or provide attenuation so that noise levels at residential uses do not exceed the standards identified in Sections 12.08.460 and 12.08.520 of the County Noise Ordinance.

In addition, the following project design feature will provide noise attenuation for the existing residential community located north of the VCC Planning Area:

- Noise attenuation will be provided by the final grades shown on the grading plan including the proposed berm on the north side of the VCC Planning Area, across from the residences that are located at the end of the Diablo Place, Rangewood Road, and Quincy Street cul-de-sacs, which are all located west of the current terminus of Live Oak Road (Receptor 5).

5. THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the CEQA Guidelines and other relevant criteria, the Los Angeles County Department of Regional Planning has determined that a project would have a significant impact related to noise based on the following criteria:

Threshold 5.8-1: Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in County General Plan or noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08), or applicable standards of other agencies?

Threshold 5.8-2: Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?

Threshold 5.8-3: 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?

As evaluated in the Initial Study (see **Appendix 1** of the SEIR), the Modified Project would not result in new or substantially more severe significant impacts than the 2017 Project with respect to groundborne vibration and groundborne noise levels (Threshold 5.8-2), and aircraft or airport noise (Threshold 5.8-3). Accordingly, the Initial Study analysis concluded no further analysis of these topics is required.

6. ENVIRONMENTAL IMPACTS OF THE MODIFIED PROJECT

a. Methodology

The following sections summarize the methodology and assumptions of the noise technical analysis prepared by Meridian Consultants. Refer to **Appendix 5.8** for detailed analysis assumptions and modeling input and output.

(1) Construction

(a) Construction Schedule

Construction within both the Entrada South and VCC Planning Areas is anticipated to occur over approximately eight years with a total of nine phases, including grading, infrastructure improvements (including separate phases for street construction and the installation of sewers, storm drains, and water lines), paving, building construction, and the application of architectural coatings. The construction phases are assumed to overlap. Detailed construction schedule assumptions are provided in **Appendix 5.8**.

(b) On-Site Construction Equipment

Construction activities typically generate noise from the operation of equipment required for the construction of various facilities. Noise impacts from the Modified Project's on-site construction equipment as well as the on-site staging of construction trucks were evaluated by applying a conservative, two-step approach.

First, the Modified Project's on-site construction activities were qualitatively compared to the 2017 Project's on-site construction activities to determine whether the modifications associated with the Modified Project would be expected to substantially increase construction noise impacts as compared to the State-certified EIR. Construction activities for the Modified Project would be substantially similar to the activities associated with the analysis in the State-certified EIR. The Modified Project does not introduce new land uses or product type that would substantially change the scope of construction activities or the anticipated construction equipment mix. Specifically, the Modified Project footprint for horizontal construction (e.g., site preparation, grading, demolition, and utilities installation) has not changed substantially from the 2017 Project, and the amount of vertical construction is not expected to change substantially relative to 2017 Project. Within the Entrada South Planning Area, the land use mix associated with the Modified Project involves an increase in commercial square footage (from 450,000 square feet to 730,000 square feet) and a reduction in residential development (from 1,725 units to 1,574 units or from approximately 3,235,100 square feet to 2,951,913 square feet).^{9,10} These

⁹ The residential floor area totals are based on an average unit size of 1,875 square feet.

¹⁰ The 2017 Project included an estimated 3,685,100 square feet of development area within the Entrada South Planning Area (450,000 square feet of commercial development and 3,235,100 square feet of residential development). The Modified Project would include an estimated 3,681,913 square feet of development area within the Entrada South Planning Area (730,000 square feet of commercial development and 2,951,913 square feet of residential development). As such, the Modified Project would result in an estimated reduction of 3,187 square feet of development within the Entrada South Planning Area when compared to the 2017 Project.

modifications would result in approximately the same overall floor area ratio (FAR) as that assumed in the 2017 Project. Because these land use types and the FAR for the Modified Project are consistent with the 2017 Project, construction activities associated with the Modified Project would be substantially similar to construction activities for the 2017 Project.

Second, to provide additional context whether the Modified Project could result in an exceedance of the County's applicable noise thresholds, noise impacts from the Modified Project's on-site construction equipment as well as the on-site staging of construction trucks were estimated and evaluated by determining the noise levels generated by different types of construction activity and calculating the construction-related noise level at nearby noise-sensitive receptor locations. Actual construction noise levels would vary, depending upon the equipment type, model, the type of work activity being performed, and the condition of the equipment. Typical noise levels for each type of construction equipment were obtained from the Federal Highway Administration (FHWA) Roadway Construction Noise Model.¹¹

The construction noise analysis is based on a total construction period of approximately eight years during which time both the Entrada South and VCC Planning Areas would be under concurrent construction.

The Entrada South construction period consists of eight construction phases (i.e., grading, infrastructure improvements [i.e., storm drains, sewers, water, and streets], paving, building construction, and architectural coating). Some of these eight construction phases overlap.

The VCC construction period consists of nine construction phases (i.e., grading [direct and indirect], infrastructure improvements [i.e., storm drains, sewers, water, and streets], paving, building construction, and architectural coating). Some of these nine construction phases overlap. See Appendix 5.8, Table 8, for additional information about the construction phasing assumptions.

In order to calculate construction noise levels, hourly activity or utilization factors (i.e., the percentage of normal construction activity that would occur, or construction equipment that would be active, during each hour of the day) are estimated based on the temporal characteristics of other previous and current construction projects. The hourly activity factors express the percentage of time that construction activities would emit

¹¹ U.S. Department of Transportation, *FHWA Roadway Construction Noise Model Final Report*, January 2006.

average noise levels. Typical noise levels for each type of construction equipment were obtained from the FHWA Roadway Construction Noise Model.¹²

An inventory of construction equipment, including the number and types of equipment, that would be operating within the Entrada South and VCC Planning Areas was identified for each phase/component of construction. Refer to **Appendix 5.8** for the equipment inventory. It is unlikely that all identified pieces of construction equipment would operate simultaneously in any single location during construction because equipment is generally used only when needed, and space constraints limit the equipment that can be used at any one time in a specific location. As nearly all of the Project construction equipment is mobile and will move around the site, and since the analysis evaluates noise occurring over a 1-hour period (L_{eq}), the modeling accounted for the anticipated construction phases and overlapping conditions of those phases and conservatively assumed that all of the construction equipment operating on-site during each construction phase (including overlapping phases) would be located at the location closest to the applicable sensitive receptor. This modeling provides a reasonably conservative calculation of the maximum anticipated noise levels generated during construction.

The calculated average noise levels from all construction phases were input into the noise model SoundPLAN,¹³ which generates computer simulations of noise propagation from sources such as construction noise. SoundPLAN forecasts noise levels at specific receptors using sound power data and three-dimensional topographical data. One-hour construction noise levels ($L_{eq\ 1\text{-hour}}$) at each analyzed off-site receptor were calculated in accordance with the County's exterior noise standards by placing the resulting construction noise levels at the location that is closest to each analyzed off-site receptor, taking into account overlapping construction phases.

Construction noise levels have been calculated at each of seven analyzed representative receptors as follows: (1) construction noise levels generated during each of the nine construction phases; (2) construction noise levels during those periods when the nine construction phases overlap within each planning area; and (3) construction noise levels when construction within the Entrada South and VCC Planning Areas are occurring at the same time (i.e., combined Entrada South and VCC construction noise levels at each analyzed receptor).

¹² U.S. Department of Transportation, FHWA Roadway Construction Noise Model Final Report, January 2006.

¹³ SoundPLAN model is in compliance with ISO 9613-2 standards for assessing attenuation of sound propagating outdoors and general calculation method.

(c) Off-Site Construction Traffic

In addition to on-site construction noise sources, delivery, concrete mixer, and haul trucks, as well as construction worker vehicles, would require access to the Entrada South and VCC Planning Areas during construction. The primary noise sources associated with off-site construction traffic would be delivery trucks. The Modified Project would be balanced on-site (i.e., soil export would not be necessary and therefore would not involve any external haul truck trips to grade the site) and off-site disposal during construction would be limited to standard waste disposal activity.

(2) Operation**(a) Off-Site Roadway Noise**

The assessment of operational roadway noise levels focuses on how daily community noise levels would change based on the number of vehicular trips and the motor vehicle travel patterns that are forecasted to occur under the Modified Project compared to what would occur under the 2017 Project.

Operational roadway noise is determined by a number of variables including the types of motor vehicles traveling on a roadway (e.g., cars and trucks), the speed those vehicles are traveling, the width of the roadway, the presence of natural and man-made features (e.g., slopes and walls) that reduce roadway noise levels at nearby sensitive receptors (e.g., residential locations), and most importantly, the number of vehicles traveling on the roadway.

The assessment of operational roadway noise started with a comparison of the average daily traffic (ADT) volumes forecasted to occur under the 2017 Project and the Modified Project. Community noise levels from motor vehicle travel is directly related to ADT volumes. In other words, if ADT volumes increase under the Modified Project compared to the 2017 Project, there is a potential for an increase in community noise levels attributable to motor vehicle travel under the Modified Project compared to the 2017 Project. On the other hand, if ADT volumes remain the same or decrease under the Modified Project compared to the 2017 Project, there would not be an increase in community noise levels attributable to motor vehicle travel under the Modified Project compared to the 2017 Project.

The roadway segments analyzed in the Modified Project's Transportation Analysis were assessed to determine the potential effect of the Modified Project's motor vehicle travel on community noise levels. Modified Project ADT volumes were compared to the corresponding volumes under the 2017 Project. In those cases in which the Modified Project's ADT volumes would be equal to or less than those of the 2017 Project, no

increase in daily community noise levels attributable to motor vehicle travel would occur with development of the Modified Project. In these cases, no further analysis of daily community noise levels attributable to motor vehicle travel under the Modified Project was required. The ADT comparison is provided in Table 12 in **Appendix 5.8**. Based on this analysis, ADT volumes would not increase under the Modified Project compared to the 2017 Project along 22 of the 35 roadway segments. Computer modeling of roadway noise levels was completed for the remaining 13 roadway segments where the Modified Project could result in a noise level increase. To assess the potential for cumulative impacts, existing ADT volumes, when available, were also modeled. The results of this modeling were compared to the established significance thresholds to assess the extent of potential impacts under the Modified Project.

Traffic volume data provided by the Modified Project's transportation engineer and road parameter data obtained from Google Earth were input into the SoundPLAN noise model, which implements the FHWA TNM 2.5 Noise Model (TNM). The TNM is the current Caltrans standard computer noise model for traffic noise studies. The SoundPLAN model calculates the hourly L_{eq} noise levels based on specific information including roadway configurations, hourly traffic volume, vehicle mix, vehicle speed, and the location of adjacent land uses, which for this analysis is based on Google Earth data which incorporates topography.

Detailed vehicle mix/distribution data used in the TNM calculations are provided in **Appendix 5.8**. The modeling takes into account the differences in the vehicle mix associated with the development proposed within the Entrada South and VCC Planning Areas, as well as a different vehicle mix and distribution for vehicle travel along SR-126 and the roadways north and south of SR-126. Specifically, the vehicle mix and distribution data for vehicle travel along SR-126 and the roadways north of SR-126 reflects a higher percentage of trucks compared to roadways to the south, as vehicle travel in this area would be influenced to a greater degree by the industrial/business park land uses proposed within VCC. To calculate 24-hour CNEL levels, hourly L_{eq} levels were calculated during daytime hours (7:00 A.M. to 7:00 P.M.), evening hours (7:00 P.M. to 10:00 P.M.), and nighttime hours (10:00 P.M. to 7:00 A.M.).

(b) On-Site Noise Sources

Development within the Entrada South and VCC Planning Areas would include the following outdoor stationary noise sources: outdoor mechanical equipment (e.g., HVAC and air conditioning equipment), parking areas, and loading docks/trash collection (for commercial and industrial uses). Noise generated by outdoor mechanical equipment is assumed to comply with the requirements set forth in Sections 12.08.530 and 12.08.390 of the County Noise Ordinance. Noise generated by parking areas and loading docks/trash collection areas were evaluated based on the spatial relationship between the on-site

sources and the off-site sensitive noise receptors. This included consideration of the distance between the on-site sources and the off-site sensitive noise receptors, as well as the presence of any elements that serve as noise barriers (e.g., topography and the presence of buildings between the noise source and the receptor). Further, pursuant to the provisions of AB 1307, as development within the Entrada South Planning Area is approximately two-thirds residential, the effects of noise generated by project occupants and their guests on human beings is not a significant effect on the environment. Notwithstanding, the analysis of on-site noise sources presented below is conservatively based on all on-site noise sources associated with the entirety of the Modified Project, including all on-site noise sources attributable to development within the Entrada South Planning Area.

b. Project Impacts

Threshold 5.8-1: Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in County General Plan or noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08), or applicable standards of other agencies?

(1) Construction

(a) On-Site Construction Equipment

Construction activities for the Modified Project are anticipated to last approximately eight years. Noise from Modified Project construction activities would be affected by the amount of construction equipment, the location of this equipment, the timing and duration of construction activities, and the relative distance to noise-sensitive receptors. Construction activities that would occur during the construction phases would generate both steady-state and episodic noise. Each construction phase would involve the use of different types of construction equipment and, therefore, has its own distinct noise characteristics. The Modified Project would be constructed using typical construction techniques; no blasting or impact pile driving would be required. Construction activities for the Modified Project would be substantially similar to the activities associated with the State-certified EIR and the 2017 Project. The Modified Project would not result in any new or substantially more severe significant impacts related to construction activities as compared to the State-certified EIR.

As described above, the construction noise analysis followed a conservative, two-step approach. First, the Modified Project's on-site construction activities were qualitatively compared to the 2017 Project's on-site construction activities to determine whether the modifications associated with the Modified Project would be expected to result in new significant noise impacts to off-site receptors as compared to the 2017 Project.

Construction activities for the Modified Project would be substantially similar to the activities associated with the 2017 Project. The Modified Project does not introduce new land uses or product type that would substantially change the scope of construction activities or the anticipated construction equipment mix. The Modified Project footprint for horizontal construction (e.g., site preparation, grading, demolition, and utilities installation) has not substantially changed from the 2017 Project. Furthermore, while the Modified Project would result in a change in building uses compared to what was assumed in the State-certified EIR, the amount of vertical construction would not substantially change relative to the 2017 Project. Accordingly, because the Modified Project's construction activities would be substantially similar to the 2017 Project's construction activities, the Modified Project would not result in any new or substantially more severe significant impacts related to construction activities as analyzed in the State-certified EIR.

Supplemental noise modeling was performed to provide additional context for whether the Modified Project could result in an exceedance of the County's applicable noise thresholds. The modeling accounts for the Modified Project's on-site construction equipment as well as the on-site staging of construction trucks. Construction equipment reference noise levels are based on measured noise data compiled by the FHWA. Average hourly estimated construction noise levels were conservatively calculated for each of the seven representative receptors during each of the nine construction phases, assuming the noise equipment would be located at the construction area nearest to the affected receptors. Construction of the Modified Project would typically use fewer pieces of equipment simultaneously at any given time compared to the modeled scenarios and, as such, would likely generate lower noise levels than reported herein. Estimated construction noise levels at each receptor were calculated for each construction phase, during periods when the nine construction phases would overlap within each planning area, and when construction within both planning areas (i.e., combined Entrada South and VCC) would occur at the same time. These three scenarios are addressed separately below.

Based on the construction noise limits set forth in the Los Angeles County Code, the construction significance threshold for single-family residential uses and schools (Receptors 1, 2, 5, and 6) is 75 dBA for mobile construction equipment and 60 dBA for stationary construction equipment. For semi-residential/commercial uses (Receptors 3, 4, and 7), the construction significance threshold is 85 dBA for mobile construction equipment and 70 dBA for stationary construction equipment.

(i) Entrada South Planning Area

Table 5.8-7, Entrada South Forecasted Noise Impacts Associated with On-Site Construction Activities (Unmitigated), on page 5.8-35, presents the maximum noise impacts that are forecasted to occur at each of the seven receptor sites (and proximity thereto) compared to the applicable significance thresholds during construction in the

Table 5.8-7
Entrada South Forecasted Noise Impacts Associated with On-Site Construction Activities (Unmitigated)

| Receptor Location and Use | Calculated Noise Level (Unmitigated) | County Noise Standard | | Exceedance of Significance Threshold (Unmitigated)? |
|---|--------------------------------------|-----------------------|------------|---|
| | | Mobile | Stationary | |
| Receptor 1: Westridge Residential | 70.69 | 75 | 60 | Yes—Stationary |
| Receptor 2: Westridge School | 65.62 | 75 | 60 | Yes—Stationary |
| Receptor 3: Mission Village Mixed-Use | 78.18 | 85 | 70 | Yes—Stationary |
| Receptor 4: Travel Village Mixed-Use | 57.43 | 85 | 70 | No |
| Receptor 5: School/Residential North of VCC Planning Area | 51.54 | 75 | 60 | No |
| Receptor 6: Residential Along Hasley Canyon Road, West of The Old Road | 48.48 | 75 | 60 | No |
| Receptor 7: Place of Worship | 57.65 | 85 | 70 | No |
| <p>Source: Refer to Appendix 5.8 (Sub-Appendix C) for construction noise worksheets.</p> | | | | |

Entrada South Planning Area. Locations located further away would have project-related noise levels which are reduced in comparison to those disclosed at the individual sensitive receptor locations because noise attenuates with distance. As shown in Table 5.8-6, construction noise levels would range from a low of 48.48 dBA (L_{eq} 1-hour) at Receptor 6 (residential area along Hasley Canyon Road, west of The Old Road) to a high of 78.18 dBA (L_{eq} 1-hour) at Receptor 3 (Mission Village, currently under construction). Forecasted construction noise levels at all seven receptor sites would not exceed the mobile construction equipment significance threshold. As a result, impacts related to mobile construction equipment would be less than significant at all receptors.

The stationary construction equipment significance threshold would not be exceeded at Receptors 4 through 7, but would be exceeded at Receptors 1, 2, and 3 by a maximum of 10.69 dBA (L_{eq} 1-hour). A significant construction noise impact would occur relative to the stationary threshold. However, as discussed in Subsection 8.c below, construction-related impacts would be reduced to a less than significant level with feasible mitigation measures, consistent with the State-certified EIR, which concluded that construction noise impacts associated with the 2017 Project would be less than significant with mitigation. Therefore, the Modified Project would not result in any new or substantially more severe significant impacts related to construction noise as analyzed in the State-certified EIR.

(ii) VCC Planning Area

Table 5.8-8, VCC Forecasted Noise Impacts Associated with On-Site Construction Activities (Unmitigated), on page 5.8-37 presents the maximum noise impacts that are forecasted to occur at each of the seven receptor sites compared to the applicable significance threshold during construction in the VCC Planning Area. As shown therein, construction noise levels would range from a low of 43.56 dBA (L_{eq} 1-hour) at Receptor 2 (Westridge School) to a high of 74.10 dBA (L_{eq} 1-hour) at Receptor 5 (School/Residential North of VCC Planning Area). Construction noise levels for all phases except grading take into account noise attenuation that would be provided by the final grades shown on the grading plan including the proposed berm on the north side of the VCC Planning Area, across from the residences located at the end of the Diablo Place, Rangewood Road, and Quincy Street cul-de-sacs, which are all located west of the current terminus of Live Oak Road (Receptor 5).

The forecasted construction noise levels at all seven receptor sites would not exceed the mobile construction equipment significance threshold. As a result, impacts related to mobile construction equipment would be less than significant at all receptors. The stationary construction equipment significance threshold would not be exceeded at Receptors 1 through 4 and 7, but would be exceeded at Receptor 5 by a maximum of 14.10 dBA (L_{eq} 1-hour), and at Receptor 6 by a maximum of 0.45 dBA (L_{eq} 1-hour). A significant construction noise impact from the exceedance of the County's noise standard would occur

Table 5.8-8
VCC Forecasted Noise Impacts Associated with On-Site Construction Activities (Unmitigated)

| Receptor Location and Use | Calculated Noise Level (Unmitigated) | County Noise Standard | | Exceedance in County Noise Standard (Unmitigated)? |
|--|--------------------------------------|-----------------------|------------|--|
| | | Mobile | Stationary | |
| Receptor 1: Westridge Residential | 45.18 | 75 | 60 | No |
| Receptor 2: Westridge School | 43.56 | 75 | 60 | No |
| Receptor 3: Mission Village Mixed-Use | 52.82 | 85 | 70 | No |
| Receptor 4: Travel Village Mixed-Use | 66.86 | 85 | 70 | No |
| Receptor 5: School/Residential North of VCC Planning Area | 74.10 | 75 | 60 | Yes—Stationary |
| Receptor 6: Residential Along Hasley Canyon Road, West of The Old Road | 60.45 | 75 | 60 | Yes—Stationary |
| Receptor 7: Place of Worship | 62.54 | 85 | 70 | No |
| Source: Refer to Appendix 5.8 (Sub-Appendix C) for construction noise worksheets. | | | | |

relative to the stationary threshold. However, as discussed in Subsection 8.c below, these estimated construction-related impacts could be reduced to a less than significant level with mitigation measures, consistent with the State-certified EIR, which concluded that construction noise impacts associated with the 2017 Project would be less than significant with mitigation. Therefore, the Modified Project would not result in any new or substantially more severe significant impacts related to construction noise as analyzed in the State-certified EIR.

(iii) Concurrent Construction Within Entrada South and VCC Planning Areas

Construction activities within the Entrada South and VCC Planning Areas could occur at the same time. Consistent with the analysis provided above, because the Modified Project's concurrent construction activities would be substantially similar to the 2017 Project's concurrent construction activities, the Modified Project would not result in significant noise increases compared to the 2017 Project related to concurrent construction. The preceding analyses addressed the potential for construction noise impacts to occur at each of the seven receptors based on construction occurring within the Entrada South and VCC Planning Areas individually. The two Planning Areas are geographically separated by 7,870 feet or approximately 1.5 miles. Assuming a standard attenuation rate of 6 dBA, this would result in an attenuation of approximately 32 dBA. As such, increases in noise levels at the seven analyzed receptor sites due to concurrent construction would be negligible and would not change the conclusions regarding the significance of the Modified Project's impacts presented above. Construction noise levels at each of the seven receptor sites during potential concurrent construction within the Entrada South and VCC Planning Areas are provided in **Appendix 5.8** (see Sub-Appendix D, Tables D-15 through D-21). Therefore, the Modified Project would not result in any new or substantially more severe significant impacts related to simultaneous construction as analyzed in the State-certified EIR.

(b) Off-Site Construction Traffic

In addition to on-site construction noise sources, delivery, concrete mixer, and haul trucks, as well as construction worker vehicles, would require access to the Entrada South and VCC Planning Areas during construction, as was the case in the State-certified EIR. The major noise sources associated with off-site construction traffic would be delivery trucks, as was the case in the State-certified EIR. Delivery trucks are expected to access Entrada South via Magic Mountain Parkway from I-5 to the east and VCC via Commerce Center Drive from the SR-126 Freeway. There are no noise-sensitive receptors along these routes. Additionally, the Modified Project would not significantly increase off-site construction traffic relative to the 2017 Project since the types and intensity of construction activities would be substantially the same. Therefore, the Modified Project would not result

in any new or substantially more severe significant impacts related to off-site construction traffic noise as analyzed in the State-certified EIR

(2) Operational Noise Impacts

As the Modified Project is built out, on- and off-site noise levels would be generated by traffic and from commercial, office, industrial, residential, (potential) school, and park-related activities on the Modified Project Site itself. These potential noise impacts are discussed separately below.

(a) Off-Site Roadway Noise Assessment

The following assessment of operational roadway noise levels focuses on the difference between the impacts of the Modified Project and the 2017 Project. As previously described, the analysis addresses the 13 roadway segments in which the forecasted daily traffic volumes of the Modified Project would be greater than those of the 2017 Project.

Any resulting noise increases were evaluated in terms of the following significance thresholds to determine (1) whether the Modified Project would result in a new significant impact; or (2) if the Modified Project would result in a substantial increase of a previously identified significant impact related to operational roadway noise. These impacts are defined as follows:

- Where the 2017 Project and Modified Project land use compatibility classification is “normally acceptable” or “conditionally acceptable,” the Modified Project’s roadway noise impact is considered significant if the Modified Project’s roadway noise levels would be 5 dBA or more above those of the 2017 Project.
- Where the 2017 Project and Modified Project land use compatibility classification is “normally unacceptable” or “clearly unacceptable,” the Modified Project’s roadway noise impact is considered significant if the Modified Project’s roadway noise levels would be 3 dBA or more above those of the 2017 Project.
- The Modified Project’s incremental contribution is also considered significant if the Modified Project causes the noise level to change the land use compatibility classification under the 2017 Project from “normally acceptable” or “conditionally acceptable” to “conditionally unacceptable” or “clearly unacceptable.”

Table 5.8-9, 2030 Roadway Traffic Noise Impacts, on page 5.8-40 provides forecasted CNELs for the following three scenarios: (1) 2030 Without Project conditions (without the development of either the 2017 Project or the Modified Project); (2) 2030 with the development of the 2017 Project; and (3) 2030 with the development of the Modified Project. The maximum noise increase under the Modified Project compared to the 2017

**Table 5.8-9
2030 Roadway Traffic Noise Impacts**

| Roadway Segment | Adjacent Land Uses | 2030 Without Project Conditions | | 2030 With 2017 Project Conditions | | 2030 With Modified Project Conditions | | Increase in Noise Levels, CNEL | | | Exceedance of County Noise Standard for the Modified Project? |
|---------------------------------|-------------------------------|---------------------------------|---------------------------------------|-----------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|--|---|---|
| | | Noise Level | Noise Exposure Compatibility Category | Noise Level | Noise Exposure Compatibility Category | Noise Level | Noise Exposure Compatibility Category | 2017 Project above 2030 Without Project Conditions | Modified Project above 2030 Without Project Conditions | Modified Project Increase in Noise Level Compared to 2017 Project | |
| Franklin Parkway | | | | | | | | | | | |
| – West of Commerce Center Drive | Commercial Open Space | 62.53 | Normally Acceptable | 64.23 | Normally Acceptable | 64.26 | Normally Acceptable | 1.70 | 1.73 | 0.03 | No |
| Hasley Canyon Road | | | | | | | | | | | |
| – West of The Old Road | Commercial | 70.25 | Conditionally Acceptable | 70.42 | Conditionally Acceptable | 70.46 | Conditionally Acceptable | 0.17 | 0.21 | 0.04 | No |
| | Residential (Single Family) | 59.22 | Normally Acceptable | 59.39 | Normally Acceptable | 59.43 | Normally Acceptable | 0.17 | 0.21 | 0.04 | No |
| Henry Mayo Drive | | | | | | | | | | | |
| – West of The Old Road | Commercial Open Space | 66.02 | Normally Acceptable | 65.63 | Normally Acceptable | 65.63 | Normally Acceptable | -0.39 | -0.39 | 0 | No |
| | Transient Lodging | 66.02 | Conditionally Acceptable | 65.63 | Conditionally Acceptable | 65.63 | Conditionally Acceptable | -0.39 | -0.39 | 0 | No |
| Magic Mountain Parkway | | | | | | | | | | | |
| – West of Westridge Parkway | Residential (Multiple Family) | 67.20 | Conditionally Acceptable | 67.33 | Conditionally Acceptable | 67.35 | Conditionally Acceptable | 0.13 | 0.15 | 0.02 | No |
| The Old Road | | | | | | | | | | | |
| – North of Hasley Canyon Road | Commercial | 71.12 | Conditionally Acceptable | 71.52 | Conditionally Acceptable | 71.53 | Conditionally Acceptable | 0.40 | 0.41 | 0.01 | No |
| | Residential (Single Family) | 43.96 | Normally Acceptable | 44.36 | Normally Acceptable | 44.38 | Normally Acceptable | 0.40 | 0.42 | 0.02 | No |
| – North of Turnberry Lane | Commercial | 69.13 | Normally Acceptable | 69.11 | Normally Acceptable | 69.13 | Normally Acceptable | -0.02 | 0.00 | 0.02 | No |
| – South of Valencia Boulevard | Golf Course | 59.31 | Normally Acceptable | 59.50 | Normally Acceptable | 59.53 | Normally Acceptable | 0.19 | 0.22 | 0.03 | No |
| | Residential (Single Family) | 55.63 | Normally Acceptable | 55.80 | Normally Acceptable | 55.83 | Normally Acceptable | 0.17 | 0.20 | 0.03 | No |
| | Commercial | 61.81 | Normally Acceptable | 61.98 | Normally Acceptable | 62.01 | Normally Acceptable | 0.17 | 0.20 | 0.03 | No |
| Tourney Road | | | | | | | | | | | |
| – North of Valencia Boulevard | Commercial | 62.60 | Normally Acceptable | 62.60 | Normally Acceptable | 62.62 | Normally Acceptable | 0.00 | 0.02 | 0.02 | No |
| | Golf Course | 51.46 | Normally Acceptable | 51.46 | Normally Acceptable | 51.48 | Normally Acceptable | 0.00 | 0.02 | 0.02 | No |
| | Residential (Single Family) | 49.16 | Normally Acceptable | 49.16 | Normally Acceptable | 49.17 | Normally Acceptable | 0.00 | 0.01 | 0.01 | No |

Table 5.8-9 (Continued)
2030 Roadway Traffic Noise Impacts

| Roadway Segment | Adjacent Land Uses | 2030 Without Project Conditions | | 2030 With 2017 Project Conditions | | 2030 With Modified Project Conditions | | Increase in Noise Levels, CNEL | | | Exceedance of County Noise Standard for the Modified Project? |
|--|-------------------------------|---------------------------------|---------------------------------------|-----------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|--|---|---|
| | | Noise Level | Noise Exposure Compatibility Category | Noise Level | Noise Exposure Compatibility Category | Noise Level | Noise Exposure Compatibility Category | 2017 Project above 2030 Without Project Conditions | Modified Project above 2030 Without Project Conditions | Modified Project Increase in Noise Level Compared to 2017 Project | |
| Valencia Boulevard | | | | | | | | | | | |
| – East of Poe Parkway | Commercial | 69.72 | Conditionally Acceptable | 69.74 | Conditionally Acceptable | 69.74 | Conditionally Acceptable | 0.02 | 0.02 | 0 | No |
| | Residential (Multiple Family) | 69.72 | Normally Unacceptable | 69.74 | Normally Unacceptable | 69.74 | Normally Unacceptable | 0.02 | 0.02 | 0 | No |
| – West of Westridge Parkway | School | 58.74 | Normally Acceptable | 58.84 | Normally Acceptable | 58.86 | Normally Acceptable | 0.10 | 0.12 | 0.02 | No |
| | Church | 41.42 | Normally Acceptable | 41.52 | Normally Acceptable | 41.53 | Normally Acceptable | 0.10 | 0.11 | 0.01 | No |
| | Residential (Single Family) | 48.29 | Normally Acceptable | 48.39 | Normally Acceptable | 48.40 | Normally Acceptable | 0.10 | 0.11 | 0.01 | No |
| – East of I-5 Northbound Ramps | Commercial | 58.98 | Normally Acceptable | 59.00 | Normally Acceptable | 59.01 | Normally Acceptable | 0.02 | 0.03 | 0.01 | No |
| – East of Tourney Road | School | 51.52 | Normally Acceptable | 51.58 | Normally Acceptable | 51.59 | Normally Acceptable | 0.06 | 0.07 | 0.01 | No |
| | Residential (Single Family) | 45.52 | Normally Acceptable | 45.54 | Normally Acceptable | 45.54 | Normally Acceptable | 0.02 | 0.02 | 0 | No |
| Westridge Parkway | | | | | | | | | | | |
| – South of Magic Mountain Parkway | Recreation Center | 64.02 | Normally Acceptable | 64.57 | Normally Acceptable | 64.57 | Normally Acceptable | 0.55 | 0.55 | 0 | No |
| | Residential (Multiple Family) | 64.02 | Normally Acceptable | 64.57 | Normally Acceptable | 64.57 | Normally Acceptable | 0.55 | 0.55 | 0 | No |
| | Residential (Single Family) | 41.59 | Normally Acceptable | 42.13 | Normally Acceptable | 42.14 | Normally Acceptable | 0.54 | 0.55 | 0.01 | No |
| <div></div> <div>These roadway segments are considered representative of noise levels of locations and sensitive receptors in their proximity. Source: See Appendix 5.8 (Sub-Appendix B).</div> | | | | | | | | | | | |

Project would be 0.04 dBA CNEL for the single-family residential and commercial uses located east and west of Hasley Canyon Road, west of the Old Road, respectively. While these locations would experience the largest forecasted increase in roadway noise levels, forecasted roadway noise levels at these single-family residences would be below 60 dBA CNEL under the Modified Project conditions. These roadway noise levels take into account differences in topography, setbacks, as well as an existing sound wall located between these single-family residences and the Hasley Canyon roadway. For the commercial uses located along Hasley Canyon Road, west of The Old Road, noise levels under the 2017 Project and the Modified Project would be 70.42 and 70.46 dBA CNEL, respectively. Land uses along all of the other analyzed roadway segments would experience noise level increases of 0.03 dBA or less, with some of the land uses not experiencing any increase in CNEL due to the limited increase in roadway volumes that occur under the Modified Project compared to the 2017 Project. Noise levels located further away from these roadways would be further reduced due to distance attenuation. Overall, these noise level increases are relatively very small and would not be discernible to receptors in the context of the community noise environment.

To determine the significance of these incremental changes, each of the forecasted CNELs were compared with the County's land use compatibility criteria in **Table 5.8-3**, State Criteria for Noise Compatible Land Use. **Table 5.8-9**, 2030 Roadway Traffic Noise Impacts, indicates that the Modified Project would not result in any change to land use compatibility classifications. Thus, the Modified Project would not change the land use compatibility classification at any of the analyzed land uses compared to what is forecasted to occur under the 2030 with 2017 Project conditions. Further, the maximum increase in CNEL under the Modified Project, as noted above, would occur along Hasley Canyon Road, west of the Old Road, which would only be 0.04 dBA above the 2017 Project conditions, which would not be discernible to receptors in the context of the community noise environment.

The State-certified EIR concluded that roadway noise impacts associated with the 2017 Project would be less than significant with mitigation. Consistent with the State-certified EIR, the Modified Project's potential roadway off-site noise impacts would be less than significant because the Modified Project would not result in any change to land use compatibility classifications and any increase in off-site roadway noise levels compared to the 2017 Project would be very small and would not be discernible to receptors in the context of the community noise environment. Therefore, the Modified Project would not result in any new or substantially more severe significant impacts related to off-site traffic noise as analyzed in the State-certified EIR.

(b) On-Site Noise Sources Potentially Impacting Off-Site Receptors

The following discussion analyzes whether on-site noise sources can meet applicable requirements with respect to off-site receptors as set forth in the County Noise Ordinance (Section 12.08.530). Proposed development within the Entrada South Planning Area would include various on-site stationary noise sources typical of residential, commercial, school, and park uses that would generate noise. These noise sources typically include: outdoor mechanical equipment (e.g., HVAC and air conditioning equipment), parking areas, and loading docks/trash collection (for commercial uses). As required by existing code, air conditioning equipment within the Entrada South and VCC Planning Areas would be designed to meet applicable requirements set forth in the County Noise Ordinance (Section 12.08.530), which limit noise levels to a maximum of 50 dBA at the adjacent on-site property. Similarly, mechanical equipment associated with the proposed commercial development within the planning areas would be designed so as not to exceed 45 dBA at the nearest off-site residential property or 55 dBA at the nearest commercial property per the County Noise Ordinance (Section 12.08.390). Based on compliance with these requirements, impacts from air conditioning and mechanical equipment affecting off-site sensitive receptors proximate to the Entrada South and VCC Planning Areas would be less than significant.

Other on-site noise sources associated with the proposed commercial uses within the Entrada South and VCC Planning Areas would include parking areas (i.e., vehicle movement, doors closing, human voices, and intermittent car alarms) and loading/trash collection. However, within the Entrada South Planning Area, nearly all surface and structured parking associated with commercial development would be located behind the associated office and commercial buildings, which would provide shielding for the off-site sensitive uses proximate to the Entrada South Planning Area. Moreover, within the planning area the proposed commercial uses would be a minimum of 1,200 feet from the nearest off-site sensitive uses, located within the Westridge and approved Mission Village communities, both of which would be further shielded by other intervening buildings. Other commercial areas within the Entrada South Planning Area would also be separated from on- and off-site residential uses by hillsides that would shield noise from parking areas.

The VCC Planning Area would be located a minimum of 600 feet from the nearest off-site sensitive residential uses and 1,400 feet from Live Oak Elementary School. In addition, the buildings within the VCC Planning Area located closest to off-site sensitive uses would provide shielding from most of the outdoor noise sources within the site. In addition, loading and unloading activities would comply with the County Noise Ordinance, which limits loading activities during the nighttime hours of 10:00 P.M. to 6:00 A.M. so as not to cause a disturbance. Further, the on-site noise sources associated with the Modified Project would be substantially the same as the 2017 Project; therefore, the Modified Project is not expected to result in a substantial increase in on-site noise sources affecting off-site

receptors as compared to the 2017 Project. Further, pursuant to the provisions of AB 1307, as development within the Entrada South Planning Area is approximately two-thirds residential, the effects of noise generated by project occupants and their guests on human beings is not a significant effect on the environment. As a result, the Modified Project would not result in a new significant impact related to off-site noise impacts due to stationary noise sources associated with the proposed commercial uses within the Entrada South and VCC Planning Areas. Therefore, the Modified Project would not result in any new or substantially more severe significant impacts related to off-site noise as analyzed in the State-certified EIR.

7. CUMULATIVE IMPACTS

The analysis of changes to the community noise environment based on cumulative conditions considers development of the Modified Project in combination with ambient growth and other development projects located near the Project area. The results of this analysis are compared to the cumulative impacts of the 2017 Project to determine the Modified Project's cumulative impacts. The potential for cumulative noise impacts is primarily related to the distance between each related project and the Approved or Modified project, the presence of existing structures in the Modified Project area, and the cumulative traffic that the cumulative development would add to the surrounding roadway network.

a. Construction Noise

Noise, by definition, is a localized phenomenon and drastically reduces as distance from the source increases. As a result, only those related projects and other growth or new development located within 500 feet of the Modified Project Site would contribute to cumulative noise impacts. Cumulative construction-noise impacts have the potential to occur when multiple construction projects in close proximity generate noise within the same timeframe and contribute to the same local ambient noise environment. Based on a review of the related project information presented in the Modified Project's Transportation Impact Analysis (**Appendix 5.9a**), none of the 45 identified related projects (other than Mission Village, which was analyzed above) are located within 500 feet of the Modified Project Site or expected to be under construction at the same time as the Modified Project. Therefore, cumulative construction impacts due to the development of these related projects would not exceed the levels forecasted to occur during the construction of the Modified Project. Mission Village is currently under construction and all of the site grading has been completed. There is some potential for vertical construction at Mission Village to occur in the vicinity of Entrada South during the construction of Entrada South, however, the noise from vertical construction would be relatively minor compared to the noise levels caused by grading of the Entrada South Planning Area. Further, the Modified Project's construction activities would be substantially similar to the 2017 Project's construction activities; therefore, the Modified Project would not substantially increase the potential for cumulative

construction noise impacts compared to the 2017 Project. The State-certified EIR determined that cumulative construction noise impacts would be less than significant with mitigation. Consistent with the State-certified EIR, the Modified Project would not result in new or substantially more severe cumulative construction noise impacts as compared to the 2017 Project.

b. Operational Noise

(1) Roadway Noise

The 2017 Project as well as the Modified Project and other related development in the area would produce traffic volumes that would generate roadway noise. Future cumulative conditions include traffic volumes associated with future related projects, other forecasted cumulative growth, and the 2017 Project as well as the Modified Project.

Cumulative noise impacts due to off-site traffic attributable to the Modified Project and related projects were calculated and compared to the cumulative with 2017 Project off-site traffic noise levels in order to identify the Modified Project's incremental increase. As further described below, impacts were determined based on the noise sensitivity of the adjacent land uses, consideration of the resulting land use compatibility classification (i.e., acceptable or unacceptable), and the perceptibility of the noise level increase. The assessment of cumulative noise impacts due to off-site traffic attributable to the Modified Project were evaluated in terms of the same significance thresholds as set forth earlier in this report to determine: (1) whether the Modified Project would result in a new significant impact; or (2) if the Modified Project would result in a substantial increase of a previously identified significant impact related to operational roadway noise.

The cumulative roadway noise analysis focuses on the following roadway segments, consistent with the Modified Project transportation analysis:¹⁴ (1) Franklin Parkway, west of Commerce Center Drive; (2) Hasley Canyon Road, west of the Old Road; (3) The Old Road, north of Hasley Canyon Road; (4) The Old Road, north of Turnberry Lane; (5) The Old Road, south of Valencia Boulevard; and (6) Valencia Boulevard, east of the I-5 northbound ramps.

Table 5.8-10, 2030 Cumulative Roadway Traffic Noise Impacts, on page 5.8-46, provides forecasted CNELs for the following three scenarios: (1) existing conditions; (2) 2030 cumulative conditions with the development of the 2017 Project; and (3) 2030

¹⁴ *Stantec Consulting Services Inc., Entrada South & Valencia Commerce Center Transportation Impact Analysis, 2023. Refer to **Appendix 5.9a** of this SEIR.*

Table 5.8-10
2030 Cumulative Roadway Traffic Noise Impacts

| Roadway Segment ^a | Adjacent Land Uses | Calculated Traffic Noise Levels CNEL | | | | | | Increase in Noise Levels, CNEL | | |
|---------------------------------|-----------------------------|---|---|---|---|---|---|---|---|---------------------------------|
| | | Existing Conditions | | 2030 Cumulative With 2017 Project Conditions | | 2030 Cumulative With Modified Project Conditions | | 2030 Cumulative with 2017 Project Compared to Existing Conditions | 2030 Cumulative Noise Levels with Modified Project Compared to 2017 Project | |
| | | Noise Level | Noise Exposure Compatibility Category | Noise Level | Noise Exposure Compatibility Category | Noise Level | Noise Exposure Compatibility Category | | Increase in Noise Levels | Exceed of Noise Standard? |
| Franklin Parkway | | | | | | | | | | |
| – West of Commerce Center Drive | Commercial Open Space | 61.56 | Normally Acceptable | 64.23 | Normally Acceptable | 64.26 | Normally Acceptable | 2.67 | 0.03 | No |
| Hasley Canyon Road | | | | | | | | | | |
| – West of The Old Road | Commercial | 68.78 | Normally Acceptable | 70.42 | Conditionally Acceptable | 70.46 | Conditionally Acceptable | 1.64 | 0.04 | No |
| | Residential (Single Family) | 57.75 | Normally Acceptable | 59.39 | Normally Acceptable | 59.43 | Normally Acceptable | 1.64 | 0.04 | No |
| The Old Road | | | | | | | | | | |
| – North of Hasley Canyon Road | Commercial | 70.86 | Conditionally Acceptable | 71.52 | Conditionally Acceptable | 71.53 | Conditionally Acceptable | 0.66 | 0.01 | No |
| | Residential (Single Family) | 43.71 | Normally Acceptable | 44.36 | Normally Acceptable | 44.38 | Normally Acceptable | 0.65 | 0.02 | No |
| – North of Turnberry Lane | Commercial | 69.03 | Normally Acceptable | 69.11 | Normally Acceptable | 69.13 | Normally Acceptable | 0.08 | 0.02 | No |
| – South of Valencia Boulevard | Golf Course | 58.73 | Normally Acceptable | 59.50 | Normally Acceptable | 59.53 | Normally Acceptable | 0.77 | 0.03 | No |
| | Residential (Single Family) | 55.06 | Normally Acceptable | 55.80 | Normally Acceptable | 55.83 | Normally Acceptable | 0.74 | 0.03 | No |
| | Commercial | 61.23 | Normally Acceptable | 61.98 | Normally Acceptable | 62.01 | Normally Acceptable | 0.75 | 0.03 | No |
| Valencia Boulevard | | | | | | | | | | |
| – East of I-5 Northbound Ramps | Commercial | 57.61 | Normally Acceptable | 59.00 | Normally Acceptable | 59.01 | Normally Acceptable | 1.39 | 0.01 | No |

^a Cumulative roadway noise impacts are calculated as the difference between existing traffic volumes and 2030 volumes with the 2017 Project and Modified Project, respectively. Based on data presented in Table D-1 of the Entrada South & Valencia Commerce Center Transportation Impact Analysis (see **Appendix 5.9a**), existing traffic volumes are not available for the following seven roadway segments for which analysis is provided with regard to the Approved and Modified Projects (see Table 5.8-8): (a) Henry Mayo Drive west of The Old Road, (b) Magic Mountain Parkway west of Westridge Parkway, (c) Tourney Road north of Valencia Boulevard, (d) Valencia Boulevard, east of Poe Parkway, west of Westridge Parkway, and east of Tourney Road, and (e) Westridge Parkway south of Magic Mountain Parkway. As shown, incremental roadway noise impacts are no more than 0.04 dBA, which is far below the 3.0 dBA increase that becomes discernable to the human ear. Even if the Modified Project were to result in traffic volume increases at the other seven roadway segments, those increases would likely cause a comparable level of incremental noise (e.g., under 0.1 dBA), which would not be discernable and would not cause a new or substantially more severe significant cumulative impact compared to the 2017 Project.

Source: Refer to **Appendix 5.8** for the roadway noise worksheets.

cumulative conditions with the development of the Modified Project. As shown in **Table 5.8-10**, 2030 Cumulative Roadway Traffic Noise Impacts, the maximum cumulative roadway noise level increase under Modified Project cumulative conditions compared to 2017 Project cumulative conditions would be 0.04 dBA CNEL for the single-family residential and commercial uses located along Hasley Canyon Road, west of The Old Road. While this location would experience the largest forecasted increase in roadway noise levels under Modified Project cumulative conditions compared to 2017 Project cumulative conditions, forecasted roadway noise levels at these single-family residences are below 60 dBA CNEL under both Modified Project and 2017 Project cumulative conditions. These roadway noise levels reflect the condition wherein these single-family residences are located below the existing grade of Hasley Canyon Road along with a sound wall being located between these single-family residences and the Hasley Canyon Road roadway. For the commercial uses located along Hasley Canyon Road, west of The Old Road, cumulative noise levels under both the Approved Project and the Modified Project would be 70.42 and 70.46 dBA CNEL, respectively. Land uses along all of the other analyzed roadway segments would experience roadway noise level increases under Modified Project cumulative conditions compared to 2017 Project cumulative conditions of 0.03 dBA CNEL or less. Overall, these noise level increases would not be discernible.

As noted above, the State-certified EIR identified significant cumulative and unavoidable operational traffic noise impacts along 11 roadway segments based on full buildout of the 2017 Project (including, but not limited to, the Entrada South and VCC Planning Areas).

The Modified Project would not cause a substantial increase in noise associated with vehicle trips compared to the cumulative noise impacts identified in the State-certified EIR for the 2017 Project.

To determine the significance of these incremental increases in noise level, each of these forecasted CNELs were compared with the County's land use compatibility criteria. **Table 5.8-10**, 2030 Cumulative Roadway Traffic Noise Impacts, indicates that the land use compatibility classification at each analyzed land use under existing conditions would not change with the development of either 2017 Project or Modified Project cumulative conditions, with the exception of the commercial uses along the Hasley Canyon Road, west of The Old Road, where the land use compatibility classification of "normally acceptable" under existing conditions would be "conditionally acceptable" under 2017 Project and Modified Project cumulative conditions. However, the maximum increase in CNEL under Modified Project cumulative conditions, as described above, would be 0.04 dBA CNEL above the 2017 Project cumulative conditions, which would fall below discernable levels in the context of the community noise environment.

The State-certified EIR identified significant cumulative and unavoidable operational traffic noise impacts along 11 roadway segments based on full buildout of the 2017 Project (including, but not limited to, the Entrada South and VCC Planning Areas), however, the Modified Project would not cause a substantial increase in noise associated with vehicle trips compared to the cumulative noise impacts identified in the State-certified EIR for the 2017 Project. For the Modified Project, cumulative noise conditions would be less than the established significance thresholds, and the Modified Project's maximum contribution to cumulative conditions along these 11 roadway segments would be below discernable levels in the context of the community noise environment. Thus, the Modified Project not result in a new or substantially more severe cumulatively considerable contribution to cumulative roadway noise impacts compared to the 2017 Project.

(2) On-Site Noise Sources Potentially Impacting Off-Site Receptors

Cumulative noise impacts from on-site noise sources have the potential to occur when multiple developments in the local area generate noise and contribute to the same local ambient noise environment. Similar to cumulative impacts related to construction, distance attenuation and intervening structures would reduce cumulative noise impacts from on-site noise sources.

Based on a review of the related project information presented in the Modified Project's Transportation Impact Analysis, none of the 45 identified related projects, with the exception of the Mission Village related project, are located within the 500 feet screening distance of the Modified Project Site or are expected to be under construction at the same time as the Modified Project. As the Entrada South Planning Area and the Mission Village related project are located approximately 1.5 miles from the VCC Planning Area, on-site operational noise sources within the VCC Planning Area are too far away to combine with on-site noise sources within the Entrada South Planning Area and the Mission Village related project to result in a cumulative impact. Further, while limited cumulative increases in noise levels from on-site operational noise sources within the Entrada South Planning Area and the Mission Village related project could occur, the extent of these increases in noise levels are not forecasted to change the significance conclusions identified above for the Modified Project and are not expected to substantially increase compared to the 2017 Project. Further, pursuant to the provisions of AB 1307, as development within the Entrada South Planning Area is approximately two-thirds residential, the effects of noise generated by project occupants and their guests on human beings is not a significant effect on the environment.

Accordingly, the Modified Project would have substantially the same on-site noise sources as the 2017 Project; therefore, the Modified Project would not substantially increase on-site noise levels relative to the 2017 Project. Therefore, the Modified Project

would not result in a new or substantially more severe cumulative noise impact from on-site noise sources to off-site receptors as compared to the State-certified EIR.

8. MITIGATION MEASURES

A complete list of mitigation measures adopted as part of the State-certified EIR or the VCC EIR is provided below. Where appropriate, italicized parentheticals are used to provide additional information and clarification regarding the implementation of a particular measure's requirements. Some measures listed below are no longer applicable to the Modified Project because: 1) they have already been completed; 2) they will be implemented in compliance with existing regulatory requirements; or, 3) they have been superseded by other mitigation measures that are still applicable to the Modified Project. Previously adopted mitigation measures that require no further action as part of the Modified Project or are not applicable to the Modified Project are listed in **Appendix 3** of this SEIR.

a. Previously Approved Mitigation from the State-Certified EIR

Mitigation was previously adopted by the County for the VCC Planning Area as part of the County-certified VCC EIR. In general, those mitigation measures either have been superseded by other more stringent mitigation or would be achieved or exceeded through compliance with updated regulatory requirements. Please refer to **Appendix 3** of the SEIR for a list of VCC mitigation measures that are no longer applicable to the Modified Project or that require no further action as part of the Modified Project.

b. Previously Approved Mitigation from the VCC EIR

The following mitigation measures were adopted as part of the VCC EIR to address noise impacts. Where appropriate, italicized parentheticals are used to provide additional information and clarification regarding the applicability of mitigation measures to the Modified Project. Some mitigation measures either have been superseded by other more stringent mitigation or would be achieved or exceeded through compliance with updated regulatory requirements. Please refer to **Appendix 3** of the SEIR for a list of VCC mitigation measures that are no longer applicable to the Modified Project or that require no further action as part of the Modified Project

VCC-NOI-7: The Permittee shall route all heavy construction vehicles for the project, except those for PM 18229, away from the Backer Road/1-5 entrance. (*Backer Road has been renamed and is currently known as Hasley Canyon Road.*)

(This measure applied to the earlier phases of the Valencia Commerce Center business/industrial park and is not applicable to the Modified Project. No further action is required.)

VCC-NOI-10: Trucks weighing more than 7 tons shall be prohibited on Backer Road between I-5 and Hasley Canyon Road between the hours of 8:00 P.M. and 7:00 A.M.

(Backer Road is now named Hasley Canyon Road.)

c. Proposed Mitigation for the Modified Project

The following mitigation measures are proposed to reduce stationary construction noise impacts associated with the Modified Project. As noted above, the State-certified EIR concluded that noise impacts would be reduced to less than significant with implementation of mitigation similar to that identified for the Newhall Ranch Specific Plan (Mitigation Measures SP-4.9-1 through SP-4.9-17). As Specific Plan Mitigation Measures SP-4.9-1 through SP-4.9-17 are not directly applicable to the Modified Project because the Modified Project is not located within the Specific Plan, the following mitigation measures, along with applicable project design measures and regulatory compliance measures, were developed and applied to the Modified Project to provide a similar level of mitigation to the Modified Project (see Appendix 5.8, Sub-Appendix E for further discussion of the applicable Mitigation Measures, along with applicable project design measures and regulatory compliance measures).

ES/VCC-MM-NOI-1: For all construction-related activities, the Applicant shall implement the following:

- The Applicant shall utilize construction equipment equipped with optimal exhaust muffler systems consistent with FHWA guidance to achieve a noise reduction of 10 dBA or more.
- All equipment shall be properly maintained in accordance with /manufacturers' specifications to assure that no additional noise due to worn or improperly maintained parts is generated consistent with FHWA guidance.
- The Applicant shall utilize construction equipment that incorporates features to dampen metal surfaces and minimize metal-to-metal contact, consistent with FHWA guidance.



ES/VCC-MM-NOI-2: When construction operations occur adjacent to off-site occupied residential uses, the construction contractor(s) shall:

- (1) locate stationary construction equipment as far away as feasible from nearby receptors;
- (2) prohibit the idling of construction equipment;
- (3) notify adjacent residences in advance of construction work; and
- (4) install temporary acoustic barriers or noise blankets around

stationary construction noise sources. These barriers shall be made featuring weather-protected, sound-absorptive material on the construction-activity side of the noise barrier and must be installed in a location that completely blocks line-of-sight between the construction noise source and adjacent sensitive receptors.

ES/VCC-MM-NOI-3: During construction of the proposed berm on the north side of the VCC Planning Area, the Applicant shall install a temporary noise barrier that achieves a noise reduction level of at least 3.14 dBA at the residences located at the end of the Diablo Place, Rangewood Road, and Quincy Street cul-de-sacs. This temporary noise barrier shall be removed once construction of the berm is completed. The location of the temporary noise barrier is shown on **Figure 5.8-2**, Location of Temporary Noise Barrier Required Pursuant to Mitigation Measure ES/VCC-MM-NOI-3, on page 5.8-52.

ES/VCC-MM-NOI-4: Prior to the start of construction and maintained for the duration of construction, the Applicant shall clearly post construction hours, allowable workdays, and the phone number of the job superintendent at all construction entrances to allow for surrounding owners to contact the job superintendent. The superintendent shall ensure that all complaints received are logged noting the date, time, complainant's name, nature of the complaint, and any corrective action taken.

 Proposed Construction Areas
 Temporary Noise Barrier



9. LEVEL OF SIGNIFICANCE AFTER MITIGATION

As discussed above, because the Modified Project's construction activities would be substantially similar to the 2017 Project's construction activities, the Modified Project is not expected to result in new significant noise impacts compared to the 2017 Project. Further, implementation of previously approved mitigation measures and proposed Mitigation Measures ES/VCC-MM-NOI-1 through ES/VCC-MM-NOI-4 would reduce the potential for exceeding the County's noise standards. **Table 5.8-11**, Entrada South Forecasted Noise Impacts Associated with Mitigated On-Site Construction Activities, on page 5.8-54 and **Table 5.8-12**, VCC Forecasted Noise Impacts Associated with Mitigated On-Site Construction Activities, on page 5.8-55 provide estimated noise levels with implementation of proposed mitigation measures. In accordance with ES/VCC-MM-NOI-1, the calculated noise reductions assume use of optimal muffler systems consistent with FHWA guidance on all equipment to achieve the minimum required noise reduction of 10 dBA, although muffler systems meeting a higher performance standard may be used. A large part of noise emitted from construction equipment is due to the intake and exhaust portions of the engine cycle. Reducing noise from this source can be achieved via muffler systems. Replacing existing mufflers with optimal mufflers or adding optimal mufflers to equipment with no mufflers can reduce construction noise levels by 10 dBA or more.^{14a} Additionally, the reduction calculations conservatively assume a 3 dBA reduction from modifications to construction equipment such as dampening of metal surfaces, although these modifications can achieve a noise reduction of up to 5 dBA. The anticipated noise reduction benefits of ES/VCC-MM-NOI-2 and ES/VCC-MM-NOI-4 are not taken into account for purposes of this analysis. Therefore, the calculated noise reductions are conservative, and additional noise reductions may be achieved compared to the noise levels in **Table 5.8-11**, Entrada South Forecasted Noise Impacts Associated with Mitigated On-Site Construction Activities, and **Table 5.8-12**, VCC Forecasted Noise Impacts Associated with Mitigated On-Site Construction Activities. As shown, the County's stationary construction noise standards would not be exceeded by the Modified Project with mitigation.

All other noise impacts associated with the Modified Project, including those related to off-site construction traffic, on-site operations, and off-site operational traffic, would be consistent with the determinations set forth in the State-certified EIR. Therefore, the Modified Project would not result in any new or substantially more severe significant impacts related to noise compared to those identified for the State-certified EIR for the 2017 Project.

^{14a} FHWA, *Special Report Measurement, Prediction, and Mitigation*, updated June 2017, www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm, accessed March 28 2025.

Table 5.8-11
Entrada South Forecasted Noise Impacts Associated with Mitigated On-Site Construction Activities

| Location | Calculated Noise Level | Applicable County Standard | | Potentially Exceed County Standard—Modified Project? | | Modified Project Noise Level (Mitigated) | Exceed County Standard with Mitigation Measures? | |
|---|------------------------|----------------------------|------------|--|------------|--|--|------------|
| | | Mobile | Stationary | Mobile | Stationary | | Mobile | Stationary |
| Receptor 1: Westridge Residential | 70.69 | 75 | 60 | No | Yes | 57.69 | No | No |
| Receptor 2: Westridge School | 65.62 | 75 | 60 | No | Yes | 52.62 | No | No |
| Receptor 3: Mission Village Mixed-Use | 78.18 | 85 | 70 | No | Yes | 65.18 | No | No |
| Receptor 4: Travel Village Mixed-Use | 57.43 | 85 | 70 | No | No | 44.43 | No | No |
| Receptor 5: School/Residential North of VCC Planning Area | 51.54 | 75 | 60 | No | No | 38.54 | No | No |
| Receptor 6: Residential Along Hasley Canyon Road, West of The Old Road | 48.48 | 75 | 60 | No | No | 35.48 | No | No |
| Receptor 7: Place of Worship | 57.65 | 85 | 70 | No | No | 44.65 | No | No |
| <p>Source: Refer to Appendix 5.8 (Sub-Appendix C) for construction noise worksheets.</p> | | | | | | | | |

Table 5.8-12
VCC Forecasted Noise Impacts Associated with Mitigated On-Site Construction Activities

| Location | Calculated Noise Level | Applicable County Standard | | Potentially Exceed County Standard—Modified Project? | | Modified Project Noise Level (Mitigated) | Exceed County Standard with Mitigation Measures? | |
|--|------------------------|----------------------------|------------|--|------------|--|--|------------|
| | | Mobile | Stationary | Mobile | Stationary | | Mobile | Stationary |
| Receptor 1: Westridge Residential | 45.18 | 75 | 60 | No | No | 32.18 | No | No |
| Receptor 2: Westridge School | 43.56 | 75 | 60 | No | No | 30.56 | No | No |
| Receptor 3: Mission Village Mixed-Use | 52.82 | 85 | 70 | No | No | 39.82 | No | No |
| Receptor 4: Travel Village Mixed-Use | 66.86 | 85 | 70 | No | Yes | 53.86 | No | No |
| Receptor 5: School/Residential North of VCC Planning Area | 74.10 | 75 | 60 | No | Yes | 57.96 | No | No |
| Receptor 6: Residential Along Hasley Canyon Road, West of The Old Road | 60.45 | 75 | 60 | No | Yes | 47.45 | No | No |
| Receptor 7: Place of Worship | 62.54 | 85 | 70 | No | No | 49.54 | No | No |
| <hr/> Source: Refer to Appendix 5.8 (Sub-Appendix C) for construction noise worksheets. | | | | | | | | |