Appendix 5.8

Noise Study

ENTRADA & VALENCIA COMMERCE CENTER

COMMUNITY NOISE ASSESSMENT

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A. EXECUTIVE SUMMARY

The Entrada & Valencia Commerce Center Community Noise Assessment (Noise Report) provides the County of Los Angeles (County) with an evaluation of potential noise impacts associated with the Entrada & Valencia Commerce Center Project (Modified Project) compared to the noise impacts of the 2017 Approved Project as set forth in the State-certified EIR. This Noise Report describes the existing environment in the Modified Project area and estimates future noise levels at surrounding land uses resulting from construction and operation of the Modified Project. The study discusses applicable federal, State, and local noise regulations; monitoring data; applicable noise thresholds; the methodology used to analyze potential noise impacts; and computer modeling of the Modified Project's potential community noise impacts. The findings of the analyses are summarized at a high-level as follows, with additional discussion in the body of the analysis:

- Construction: The State-certified EIR determined that the 2017 Approved Project would result in less than significant impacts and would be consistent with the County's noise standards with implementation of mitigation measures. This analysis assesses whether the Modified Project would result in any new significant construction impacts compared to the 2017 Approved Project and evaluates whether the Modified Project's construction activities would cause an exceedance of County noise standards at offsite sensitive receptors. Construction activities for the Modified Project would be substantially similar to the activities associated with the 2017 Approved Project. The Modified Project's construction noise impacts would not exceed applicable standards with implementation of mitigation measures. Thus, the Modified Project with implementation of mitigation measures would not result in any new significant noise impacts based on the County of Los Angeles' (County) mobile and stationary construction noise standards compared to the 2017 Approved Project.
- Operations: The State-certified EIR determined that the 2017 Approved Project would result in less than significant noise impacts and would be consistent with the County's noise standards with implementation of mitigation measures. This analysis assessed whether the Modified Project would result in any new significant offsite noise impacts compared to the 2017 Approved Project. Roadway trips associated with the Modified Project operations would not increase roadway noise levels above the County's established significance thresholds and impacts to off-site receptors due to the operation of on-site noise sources would also be less than significant. Thus, noise impacts associated with Modified Project operations would not result in any new significant noise impacts compared to 2017 Approved Project.

B. INTRODUCTION

This Noise Report presents the findings of a community noise assessment conducted to support the Supplemental Environmental Impact Report (EIR) prepared for the Modified Project, located within unincorporated Los Angeles County in the Santa Clarita Valley.

The Modified Project would be located within the planning boundary of the previously approved Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP), which was approved in 2017 and was the subject of an EIR previously certified by the California Department of Fish and Wildlife (CDFW) (SCH No. 2000011025; hereafter referred to as the State-certified EIR). In the State-certified EIR, the development area covered by this report is identified as the "Entrada Planning Area" and the "Valencia Commerce Center Planning Area." Figure 1: Modified Project Location Map illustrates the location of the Entrada Planning Area and the Valencia Commerce Center Planning Area.

Under the California Environmental Quality Act (CEQA), when evaluating project changes relative to a previously certified EIR, the additional CEQA analysis shall focus solely on the incremental changes in the project, changes in circumstances, or new information since the certification of the prior EIR.[1] For purposes of this discussion, the "2017 Approved Project" refers to the resource management activities and development footprint approved by CDFW in 2017 for the Entrada and Valencia Commerce Center Planning Areas as part of its RMDP/SCP approval.

The Modified Project as currently proposed reflects minor changes and refinements related to the development of the Entrada and Valencia Commerce Center Planning Areas, as compared to the proposed development evaluated in the State-certified EIR.

This report analyzes the potential community noise impacts of the Modified Project based generally on the incremental differences between the 2017 Approved Project and the currently proposed Modified Project. This report has been prepared pursuant to the requirements of the County of Los Angeles and CEQA.

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1 See, e.g., Friends of the College of San Mateo Gardens v. San Mateo County Community College District (2016) 1 Cal.4th 937, 949; Benton v. Board of Supervisors (1991) 226 Cal.App.3d 1467, 1482.

SOURCE: Stantec, 2021

FIGURE **1**

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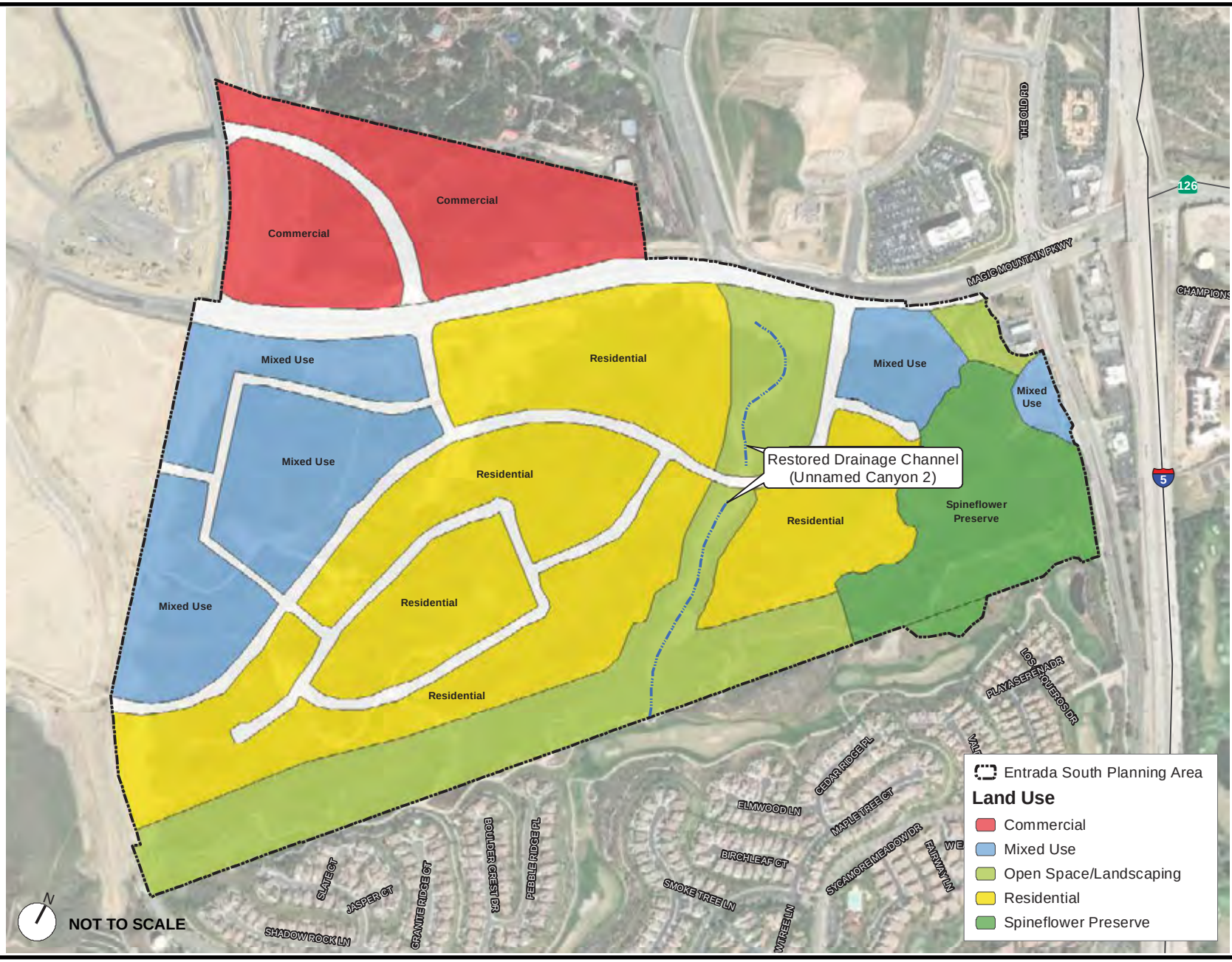
Modified Project Location Map

338-001-21

C. MODIFIED PROJECT DESCRIPTION

The Modified Project consists of a mixed-use residential/commercial component and a commercial-only component to be developed, respectively, within the Entrada Planning Area and the Valencia Commerce Center Planning Area. See Figure 2: Conceptual Land Use Plan - Entrada for an illustration of the Entrada Planning Area and Figure 3: Conceptual Land Use Plan - Valencia Commerce Center for an illustration of the Valencia Commerce Center Planning Area



SOURCE: Harris & Associates, 2021

FIGURE **2**

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Conceptual Land Use Plan – Entrada South

338-001-21

SOURCE: Harris & Associates, 2021

FIGURE **3**

Meridian Consultants

Conceptual Land Use Plan – Valencia Commerce Center

338-001-21

The Entrada Planning Area of the Modified Project, located along a newly constructed extension of Magic Mountain Parkway, would include a mixed-use master-planned community consisting of 1,574 multi-family condominium units and/or townhome units, approximately 730,000 square feet of nonresidential development, and one elementary school. Additional Modified Project features include approximately five acres of public parks and recreation centers to serve residents. The Entrada Planning Area is located just west of Interstate 5 (I-5) and The Old Road, north of the existing Westridge community, and directly east of the approved Mission Village development located within the Newhall Ranch Specific Plan. Access to the Entrada Planning Area will be provided by Magic Mountain Parkway, Westridge Parkway, and Commerce Center Drive.

The Valencia Commerce Center Planning Area of the Modified Project, located along Commerce Center Drive, would consist of 3,400,000 square feet of industrial/business park uses. This Planning Area is located within the business and industrial park development area, just north of State Route 126 (SR 126) and just west of the I-5 freeway. SR 126 provides regional access to the site with an interchange at Commerce Center Drive, and also access by way of I-5 with an interchange at Hasley Canyon Road. Local access to the Modified Project site would be from Commerce Center Drive, Franklin Parkway, Hancock Parkway, and The Old Road. The Valencia Commerce Center Planning Area is located within previously developed portions of the Valencia Commerce Center and across I-5 from the previously developed Valencia Industrial Center, an established industrial/business park.

Table 1: State-Certified EIR and Modified Project Land Use Comparison compares the amount of development evaluated in the State-certified EIR for the Entrada and Valencia Commerce Center Planning Areas to the amount of development proposed under the Modified Project.

TABLE 1
STATE-CERTIFIED EIR AND MODIFIED PROJECT LAND USE COMPARISON

	Units	Amount of Development		Difference in Amount of Development
		State-Certified EIR (2017 Approved Project)	Modified Project	
Entrada Planning Area				
Residential	DU	1,725	1,574	-151
Non-Residential	SF	450,000	730,000	280,000
Valencia Commerce Center Planning Area				
Non-Residential	SF	3,400,000	3,400,000	0

D. SUMMARY OF STATE-CERTIFIED EIR ANALYSIS OF NOISE AND MITIGATION

1. Summary of State-Certified EIR Analysis of Noise

Section 4.9, Noise, of the State-certified EIR analyzed the noise impacts resulting from development of the Entrada and Valencia Commerce Center Planning Areas. A variety of impact types were addressed, including temporary construction-related noise and vibration impacts, long-term noise impacts associated with both on-site operations and off-site sources (i.e., vehicular traffic), as well as impacts affecting both on- and off-site sensitive receptors.

a. Entrada Planning Area

Construction and build-out of the Modified Project site would last approximately eight years. The State-certified EIR concluded the following impacts would be reduced to less than significant with mitigation:

- exposure of people to noise levels in excess of locally adopted standards;
- exposure of people to excessive ground-borne noise levels or vibration;
- a substantial permanent increase in ambient noise levels in the vicinity;
- a substantial temporary or periodic increase in ambient noise levels in the 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, causing a peak particle velocity (PPV) above 0.01 inch/second (in/sec) at a sensitive receptor and/or between 0.2 and 2.0 in/sec at nearby structures;
- 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 or exposure of residences located within mixed use/commercial areas (i.e., residences with no backyards or parks as an exterior frequent use area) to interior noise levels above 45 A-weighted decibels (dBA);
- exposure of Project occupants to noise levels originating on- or off-site that are above the County Noise Ordinance standards; exposure of off-site sensitive receptors to an increase of 5 dBA or greater

in noise level from Project-related activities, even if levels remain within the same land use compatibility classification (e.g., noise levels remain within the normally acceptable range);

- exposure of off-site sensitive receptors to an increase of 3 dBA or greater in noise level from Project-related activities, which results in a change in land use compatibility classification (e.g., noise levels change from normally acceptable to conditionally acceptable); and
- exposure of off-site sensitive receptors to an increase in noise levels greater than one dBA where existing noise levels are already considered unacceptable.[2]
- Since the Entrada Planning Area is not located within an airport land use plan or within 2 miles of a public or private airport or airstrip, the 2017 Approved Project would not expose people residing or working in the Project area to excessive noise levels associated with airport-related uses.[3]
- 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 and VCC Planning Areas).

b. Valencia Commerce Center Planning Area

The State-certified EIR concluded the following impacts would be less than significant with mitigation:

- exposure of people to noise levels in excess of locally adopted standards;
- a substantial permanent increase in ambient noise levels in the vicinity;
- a substantial temporary or periodic increase in ambient noise levels in the vicinity;
- 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 or exposure of

2 See State-certified EIR, pages 4.9-81-84.

3 See State-certified EIR, page 4.9-27.

residences located within mixed use/commercial areas (i.e., residences with no backyards or parks as an exterior frequent use area) to interior noise levels above 45 dBA;

- exposure of Project occupants to noise levels originating on- or off-site that are above the County Noise Ordinance standards;
- exposure of off-site sensitive receptors to an increase of 5 dBA or greater in noise level from Project-related activities, even if levels remain within the same land use compatibility classification (e.g., noise levels remain within the normally acceptable range);
- exposure of off-site sensitive receptors to an increase of 3 dBA or greater in noise level from Project-related activities, which results in a change in land use compatibility classification (e.g., noise levels change from normally acceptable to conditionally acceptable); and
- exposure of off-site sensitive receptors to an increase in noise levels greater than one dBA where existing noise levels are already considered unacceptable.

Less than significant impacts were found for the following:

- exposure of people to excessive ground-borne noise levels or vibration; 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; and
- construction activity, including vibratory and impact pile driving, causing a PPV above 0.01 in/sec at a sensitive receptor and/or between 0.2 and 2.0 in/sec at nearby structures.[4]

Since the Valencia Commerce Center Planning Area is not located within an airport land use plan or within 2 miles of a public or private airport or airstrip, the 2017 Approved Project would not expose people residing or working in the Project area to excessive noise levels associated with airport-related uses.[5]

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 and Valencia Commerce Center Planning Areas).

2. State-Certified EIR Noise Mitigation Measures

The State-certified EIR describes noise-related mitigation measures relevant to the State-certified EIR's noise impact analysis, including mitigation measures applicable to development within the Newhall Ranch Specific Plan (e.g., Mitigation Measures SP-4.9-1 through SP-4.9-17 and SP-5.0-38 through SP-5.0-40). 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 the 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

4 See State-certified EIR, pages 4.9-81-84.

5 See State-certified EIR, page 4.9-27.

the Specific Plan, 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 equivalent mitigation measures were developed and applied to the Modified Project. The State-certified EIR identifies Mitigation Measures VCC-NOI-1 through VCC-NOI-10 from the adopted Valencia Commerce Center EIR, which are applicable to the Valencia Commerce Center Planning Area.

E. INITIAL STUDY NOISE ASSESSMENT

The Modified Project's Initial Study[6] provided analysis with regard to the following three questions related to noise from Appendix G of the CEQA Guidelines:

Would the Project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the County General Plan or noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08), or applicable standards of other agencies?

b) Generation of excessive groundborne vibration or groundborne noise levels?

c) 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?

With regard to Question a), the generation of a substantial temporary or permanent increase in ambient noise levels, the Initial Study determined that the "Modified Project's potential noise impacts associated with this topic will be evaluated further in the Supplemental EIR." This Noise Report provides the requisite analysis.

With regard to Question b), the generation of groundborne vibration or groundborne noise levels, the Initial Study determined the following:

> Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. Groundborne vibration and noise impacts associated with the 2017 Approved Project were related to the use of pile driving construction.[7] As no pile driving would be required to construct the Modified Project, no groundborne vibration or noise would be generated from such activities. While the use of other construction equipment under the Modified Project could generate some level of groundborne vibration and noise, such impacts would be the same or less than those associated with the 2017 Approved Project. Furthermore, groundborne vibration decreases rapidly with distance, and the nearest off-site sensitive (residential) receptors within the Westridge community would be located approximately 350 feet from construction activity within the Entrada Planning Area due to the intervening Southern California Edison electric transmission corridor along the southern boundary of the site. In addition, the nearest future buildings within the Mission Village project to the west would be approximately 40 feet to the closest Modified Project construction area. Although residential uses in the Live Oak community are located directly adjacent to the Valencia Commerce Center northern boundary, most

6 Entrada South and Valencia Commerce Center Project Initial Study, County of Los Angeles, October 7, 2021.

7 See State-certified EIR, pages 4.9-34-38.

of the northern site area is planned as open space (generally associated with Castaic Creek and Hasley Creek) and thus little construction work would occur in close proximity to any off-site sensitive receptors. Based on reference vibration levels from typical heavy construction equipment operations that would be used during Modified Project construction, which range from 0.003 inch per second peak particle velocity (PPV) for a small bulldozer to 0.210 inch per second PPV for a vibratory roller at 25 feet from the equipment, the anticipated vibration values would be well below those typically associated with pile driving (0.644 and 1.518 inch per second PPV at 25 feet). [8,9] Therefore, the Modified Project would not result in new or more severe significant impacts, and no further analysis of this issue is required. Mitigation Measure RMDP/SCP-NOI-1 would not apply, as pile driving would not occur.

Based on the Initial Study determination, no further analysis of groundborne vibration or groundborne noise levels is required as part of this Noise Report.

With regard to Question c), project location in relation to the vicinity of an airport, the Initial Study determined the following:

> No Impact. As previously discussed, the Entrada and Valencia Commerce Center Planning Areas are not located within an airport land use plan or within 2 miles of a public or private airport or airstrip or a public use airport. Since Modified Project development within the Entrada and Valencia Commerce Center Planning Areas would fall within the same disturbance footprints analyzed in the State-certified EIR, no impacts related to aircraft or airport noise would occur.[10] The Modified Project would not result in new or more severe significant impacts, and this topic will not be further evaluated in the Supplemental EIR.

Based on the Initial Study determination, no further analysis of issues related to proximity to an airport is required as part of this Noise Report.

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8 Reference vibration levels excerpted from FTA, Transit Noise and Vibration Impact Assessment, Table 12-2, 2006.

9 Pile driving vibration levels from Table 4.9-10 in Section 4.9, Noise, of the State-certified EIR.

10 See State-certified EIR, page 4.9-27.

F. BACKGROUND INFORMATION REGARDING NOISE

1. 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 Report are for outdoor conditions, unless otherwise stated specifically to be interior noise levels.

A-Weighted Sound Pressure Level (dBA): The decibel (dB) is a unit used to describe sound pressure level. When expressed in dBA, the sound has been filtered to reduce the effect of very low and very high frequency sounds, much as the human ear filters sound frequencies. Without this filtering, calculated and measured sound levels would include events that the human ear cannot hear (e.g., dog whistles and low-frequency sounds, such as the groaning sounds emanating from large buildings with changes in temperature and wind). With A-weighting, calculations and sound-monitoring equipment approximate the sensitivity of the human ear to sounds of different frequencies.

Maximum Noise Level (Lmax): Lmax is the maximum or peak sound level during a noise event. The metric accounts only for the instantaneous peak intensity of the sound, and not for the duration of the event. As a vehicle passes by an observer, the sound level increases to a maximum level and then decreases. Some sound level meters measure and record the maximum or Lmax level.

Sound Exposure Level (SEL): SEL, expressed in dBA, is a time-integrated measure, expressed in decibels, of the sound energy of a single noise event at a reference duration of 1 second. The sound level is integrated over the period that the level exceeds a threshold. Therefore, SEL accounts for both the maximum sound level and the duration of the sound. The standardization of discrete noise events into a 1-second duration allows calculation of the cumulative noise exposure of a series of noise events that occur over a period of time.

Equivalent Continuous Noise Level (Leq): Leq 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. Unlike SEL, Leq is the average sound level for a specified time period (e.g., 24 hours, 8 hours, 1 hour). Leq 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. Leq can be expressed for any time interval; for example, the Leq representing an averaged level over an 8-hour period would be expressed as Leq(8).

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 AM to 7:00 PM), evening (7:00 PM to 10:00 PM), and nighttime (10:00 PM to 7:00 AM) noise exposure. CNEL includes penalties applied to noise events occurring after 7:00 PM and before 7:00 AM, 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. 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.[11]

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 (DNL).

2. Effects of Noise on Humans

Human response to sound is highly individualized. Annoyance is the most common issue associated with community noise levels. 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, nonacoustical 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. (Los Angeles World Airports [LAWA] 2012). Although nighttime awakenings occur

[11] State of California, General Plan Guidelines, ~~2003~~ 2017, http://calaverascap.com/wp-content/uploads/2017/08/OPR_COMPLETE_7.31.17.pdf, accessed September 25, 2017.

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, nonoccupational sources may also be a factor.

Some common sounds on the dBA scale, relative to ordinary conversation, are provided in Table 2: Common Sounds on the A-Weighted Decibel Scale. As shown, the relative perceived loudness of sound doubles for each increase of 10 dBA, although a 10 dBA change corresponds to a factor of 10 in relative sound energy. Generally, sounds with differences of 3 dBA or less are not perceived to be noticeably different by most listeners.

TABLE 2 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	

Source: U.S. Department of Housing and Urban Development, Aircraft Noise Impact – Planning Guidelines for Local Agencies, 1972

Notes:

[1] Continuous exposure above 85 dB is likely to degrade the hearing of most people (hearing protection recommended).

[2] Range of Speech: 50 – 70 dB

G. REGULATORY SETTING

1. Federal Regulations

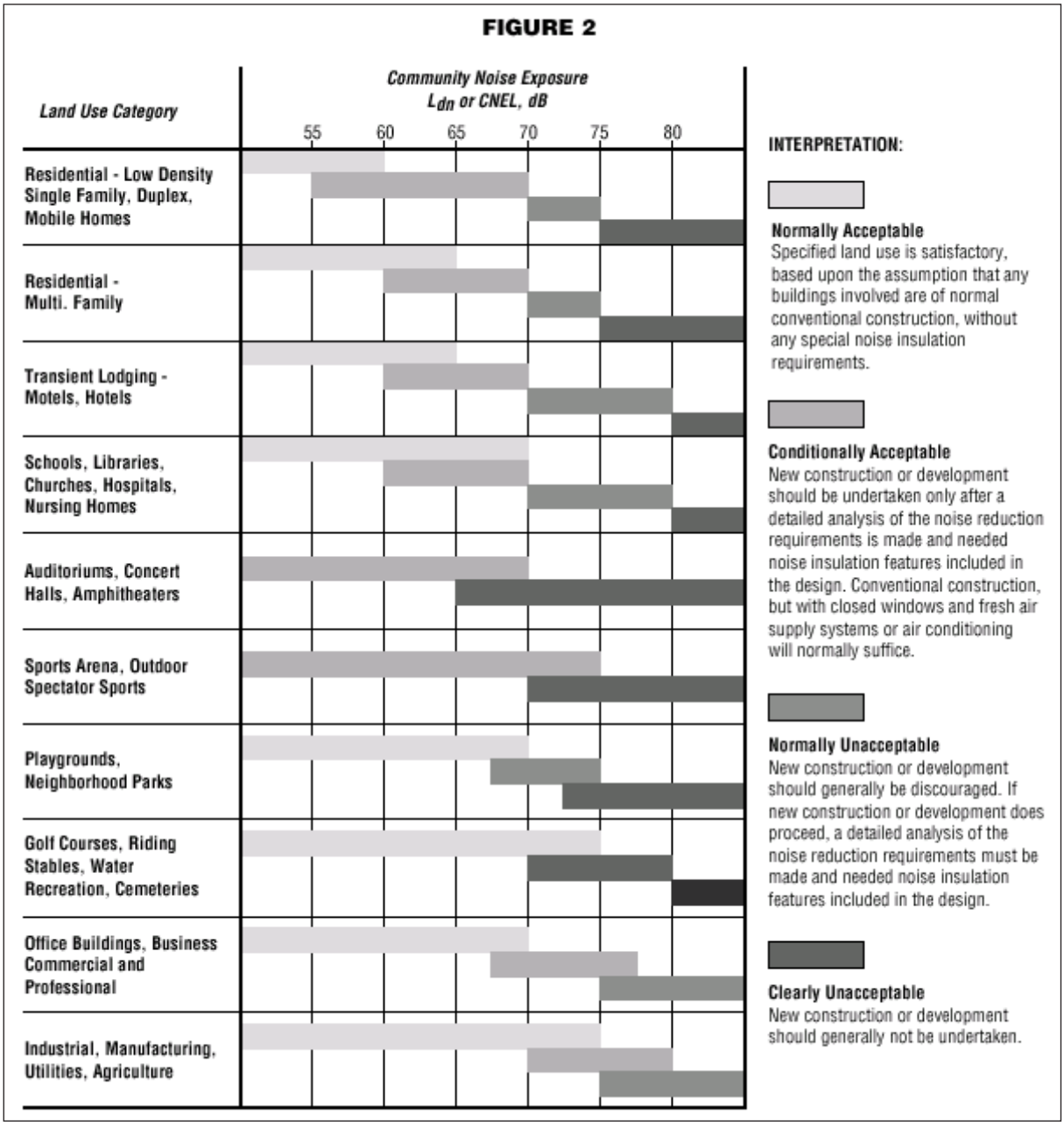
Under the authority of the Noise Control Act of 1972, the United States Environmental Protection Agency (USEPA) has established noise emission criteria and testing methods, as published in Parts 201 through 205 of Title 40 of the Code of Federal Regulations, that apply to some transportation equipment (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 (Ldn) of 55 dBA; and an indoor Ldn of 45 dBA. 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.

2. State Regulations

a. State Noise Guidelines

The State of California has adopted noise compatibility guidelines for general land use planning as shown in Figure 4: State Criteria for Noise Compatible Land Use. 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* guidance document, which is published and updated by the Governor's Office of Planning Research.[12] The level of acceptability of the noise environment is dependent on the activity associated with the particular land use.

12 Governor's Office of Planning and Research, State of California General Plan Guidelines (2017), http://www.opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf.



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

FIGURE **4**

Meridian Consultants

State Criteria for Noise Compatible 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 dB(A) CNEL. According to the State Noise Guidelines, an exterior noise level of 65 dB(A) 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 80 dB(A) CNEL are typically considered "normally acceptable" for industrial and manufacturing utility uses without any special noise insulation requirements. Between these values and 80 dB(A) 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 no windows open to the noise source, and/or installing noise barriers such as berms and/or solid walls.

b. Vehicle Noise Standards

The State of California establishes noise limits for vehicles licensed to operate on public roads.[13] For heavy trucks, the State pass-by standard is consistent with the federal limit of 80 dBA. The State pass-by standard for light trucks and passenger cars (less than 4.8 tons, gross vehicle rating) is also 80 dBA at 50 feet (approximately 15 meters) from the centerline. These standards are implemented through controls on vehicle manufacturers and by legal sanction of vehicle operators by State and local law enforcement officials.

c. California Building Code Noise Insulation Requirements

The California Building Coode 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

13 2009 California Vehicle Code - Section 27200-27207: Article 2.5. Noise Limits

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.

d. Assembly Bill (AB) 1307

On September 7, 2023, Governor Gavin Newsom signed AB 1307, which provides that noise generated by occupants of residential projects is not a significant effect on the environment under CEQA. AB 1307 also eliminates the requirements that public universities consider alternatives to the location of housing projects when the project is located on a site no bigger than five acres in an urban use setting.

2. Local Regulations

a. Los Angeles County General Plan

The Noise Element of the County of Los Angeles General Plan (General Plan) was adopted by the Board of Supervisors on October 6, 2015. The General Plan was established as a planning tool to develop strategies and action programs that address the multitude of noise sources and issues throughout the County. The Noise Element quantifies the community noise environment by establishing noise exposure contours for both near- and long-term levels of growth and noise-generating activity. The noise guidelines used by the County are based on the community noise compatibility guidelines established by the State of California Department of Health Services as shown in Figure 4.

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

The Santa Clarita Valley Area Plan (SCVAP 2012) is a component of the Los Angeles County General Plan which is intended to provide focused goals, policies, and maps to guide the regulation of development within the unincorporated portions of the Santa Clarita Valley. The Noise Element of the SCVAP 2012 was established to provide a tool in achieving and maintaining land uses that are compatible with existing and future environmental noise levels. The SCVAP 2012 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 Modified 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, 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 policies of the general plan noise element, the County of Los Angeles also regulates noise through enforcement of the County Noise Ordinance. The standards set forth therein generally relate to noisy activities (e.g., construction) and stationary noise sources and facilities (e.g., HVAC units and industrial activities). Generally, federal and state laws

preempt local agencies from establishing noise standards for transportation-related noise sources, such as aircraft, ships, trains, and motor vehicles.

Exterior Noise Standards

Chapter 12.08, Noise Control, of the Los Angeles County Code (the Noise Ordinance) establishes noise standards for four noise zones based on land use type and are shown in Table 3: County of Los Angeles Exterior Noise Standards by Noise Zones. These noise levels are meant to be further applied as noise standards 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 1-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 (Lmax) during that time period.

TABLE 3
COUNTY OF LOS ANGELES EXTERIOR NOISE STANDARDS BY NOISE ZONES

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 PM to 7:00 AM (nighttime)	45
		7:00 AM to 10:00 PM (daytime)	50
III	Commercial properties	10:00 PM to 7:00 AM (nighttime)	55
		7:00 AM to 10:00 PM (daytime)	60
IV	Industrial properties	Anytime	70
Source: County of Los Angeles Code, Section 12.08.390.A.			

The following noise standards should be applied to the exterior noise levels provided in Table 3:

- 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 3; or, if the ambient L50 exceeds the forgoing level, then the ambient L50 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 3 plus 5 dBA; or, if the ambient L25 exceeds the forgoing level, then the ambient L25 becomes the exterior noise level for Standard No. 2.
- 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 3 plus 10 dBA; or, if the ambient L8.3 exceeds the forgoing level, then the ambient L8.3 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 3 plus 15 dBA; or, if the ambient L1.7 exceeds the forgoing level, then the ambient L1.7 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 3 plus 20 dBA; or, if the ambient L0 or Lmax exceeds the forgoing level, then the ambient L0 or Lmax becomes the exterior noise level for Standard No. 5.

These operational standards are not applicable to emergency activities, warning devices (e.g. police, figure, 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).

Construction Noise Standards

Section 12.08.440 establishes limitations on construction noise levels such that a noise disturbance across a residential or commercial real property line would not occur. The only exceptions would be emergency work or public safety projects[14] or by variance issued by the health officer. 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 4: County of Los Angeles Construction Noise Standards. In addition, 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.

14 Section 12.08.570.H, Public Health and Safety Activities exemption.

TABLE 4 COUNTY OF LOS ANGELES CONSTRUCTION NOISE STANDARDS			
Equipment Type	**Receptor Type**	**Daytime (7:00 AM to 8:00 PM)[c]**	**Nighttime (8:00 PM to 7:00 AM)[d]**
Mobile[a]	Single-family Residential	75	60
	Multi-family Residential	80	64
	Semiresidential/Commercial	85	70
	Business Structures	85	85
Stationary[b]	Single-family Residential	60	50
	Multi-family Residential	65	55
	Semiresidential/Commercial	70	60

Source: County of Los Angeles Code, Section 12.08.440

[a] Represents maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days).

[b] Represents maximum noise level for repetitively scheduled and relatively long-term operation (periods of 10 days or more).

[c] Exception for Sundays and legal holidays.

[d] Includes all day Sunday and legal holidays.

H. 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.

1. Modified Project Site

The Entrada 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 Planning Area is generally undeveloped. The existing noise environment in the vicinity of the Entrada 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 which is located immediately north of the Entrada Planning Area. There are no sensitive noise receptors currently located on-site.

The Valencia Commerce Center Planning Area consists of approximately 328 acres of an undeveloped portion of the partially completed Valencia Commerce Center industrial business park center located west of I-5 and north of Henry Mayo Drive (SR-126). The existing noise environment in the vicinity of the Valencia Commerce Center 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

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 and outdoor recreation areas in multi-family complexes.

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

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

3. Existing Ambient Noise Measurements

To establish baseline noise conditions, long-term noise levels (refer to Appendix A) were monitored at seven (7) representative receptor locations (identified as Receptors 1 to 7) in the vicinity of the Entrada and the Valencia Commerce Center Planning Areas (refer to Figure 5: Noise Monitoring Locations). Table 5: Existing Noise Measurements in Modified Project Vicinity provides a summary of the noise level measurements conducted at the 7 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 the Six Flags Magic Mountain amusement park.

SOURCE: Google Earth - 2023

FIGURE **5**

Meridian Consultants

Noise Monitoring Locations

338-001-21

TABLE 5
EXISTING NOISE MEASUREMENTS IN MODIFIED PROJECT VICINITY

Measurement Site	Location Description	Distance to the Closest Location Within the Modified Project Site	Existing Land Use	Monitored Date	24-hour CNEL	Daytime Average	Nighttime Average	Noise Exposure Compatibility Category
					(dB[A])			
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	Residential (Multiple Family)	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 within the commercial complex 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

Note: As discussed above, these receptor sites are considered representative of noise levels of locations in their proximity.
*Source: Refer to **Appendix A** for noise monitoring worksheets*

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 within the commercial complex located along Henry Mayo Drive, west of The Old Road, which includes the Higher Vision Church (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. 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 single-family residential uses are dominant along Magic Mountain Parkway and Commerce Center Drive (Receptor 3); 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 within close proximity to the I-5 Freeway and SR-126 Freeway (Receptor 7).
- Clearly Unacceptable: None.

4. 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. As shown in Table 15, 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. For the land uses that are present around the locations shown in Table 15 (e.g., residential, commercial, etc.), all of the land uses have a Noise Exposure Compatibility Category of "normally 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".

I. METHODOLOGY

1. Construction

Construction within both the Entrada and Valencia Commerce Center Planning Areas would occur over approximately eight (8) years with a total of nine (9) phases based on information provided by the Applicant. Construction activities that compose the nine (9) phases include the following: grading, infrastructure improvements (e.g., 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.

a. On-Site Construction Equipment

Construction activities typically generate noise from the operation of equipment within each Planning Area that is required for the construction of various facilities. Noise impacts from 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 Approved 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 Approved Project, and the amount of vertical construction is not expected to change substantially relative to 2017 Approved Project. Within the Entrada 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).[15,16] These modifications would result in approximately the same overall floor area ratio (FAR) as that assumed in the 2017 Approved Project. Because these land use types and the FAR for the Modified Project are consistent with the 2017 Approved Project, construction activities associated with the Modified Project would be substantially similar to construction activities for the 2017

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

[16] The 2017 Approved Project included an estimated 3,685,100 square feet of development area within the Entrada 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 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 Planning Area when compared to the 2017 Approved Project.

Approved 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.

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 (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 (storm drains, sewers, water, and streets), paving, building construction, and architectural coating]. Some of these nine construction phases overlap.

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 average noise levels. Typical noise levels for each type of construction equipment were obtained from the FHWA Roadway Construction Noise Model.[17]

An inventory of construction equipment, including the number and types of equipment, which would be operating simultaneously within both the Entrada and Valencia Commerce Center Planning Areas, was identified for each phase/component of construction, and shown in **Table 6:** Modified **Project Anticipated Construction Equipment by Phase – Entrada** and **Table 7:** Modified **Project Anticipated Construction Equipment by Phase – Valencia Commerce Center**. It is unlikely that all pieces of construction equipment identified in **Table 6** and **Table 7** would operate simultaneously in any single location during construction because equipment is generally operated 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

17 U.S. Department of Transportation, FHWA Roadway Construction Noise Model Final Report, January 2006, accessed December 2021, https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf

the Project construction equipment is mobile and will move around the site and the analysis evaluates noise occurring over a one-hour period (Leq), 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. Therefore, this modeling provides a reasonably conservative calculation of the maximum noise levels generated during construction. **Table 8: Modified Project Construction Schedule Assumptions** provides information regarding the Modified Project's construction schedule assumptions.

TABLE 6 MODIFIED PROJECT ANTICIPATED CONSTRUCTION EQUIPMENT BY PHASE - ENTRADA SOUTH					
Construction Phase	Equipment Type	Quantity	Usage Hours (per day)	Noise Level at 50 feet (dBA Leq-1hour)	Calculated Maximum Noise Level (dBA Leq-1hour)
Grading - Indirect	Crawler Tractors	3	10	84.8	84.5
	Excavators	2	10	79.7	
	Graders	2	10	84.0	
	Water Trucks (Other Material Handling Equipment)	4	10	88.0	
	Off-Highway Trucks	2	10	74.0	
	Rubber Tired Dozers	2	10	80.7	
	Scrapers	6	10	87.4	
Improvements - Storm Drains	Cranes	3	10	77.4	81.7
	Excavators	3	10	81.5	
	Graders	3	10	85.8	
	Rollers	3	10	77.8	
	Rubber Tired Loaders	3	10	79.9	
Improvements - Sewers	Bore/Drill Rigs	3	10	82.1	80.1
	Cranes	3	10	77.4	
	Excavators	3	10	81.5	
	Rollers	3	10	77.8	
	Rubber Tired Loaders	3	10	79.9	
Improvements - Water	Cranes	3	10	77.4	79.5
	Excavators	3	10	81.5	
	Rollers	3	10	77.8	
	Rubber Tired Loaders	3	10	79.9	
Improvements - Streets	Graders	3	10	85.8	83.0
	Pavers	3	10	79.0	
	Rollers	3	10	77.8	
	Scrapers	3	10	84.4	
Paving	Pavers	1	8	74.2	80.8
	Paving Equipment	2	7	85.5	
	Rollers	2	5	76.0	
	Cement and Mortar Mixers	2	7	77.8	
Building Construction	Cranes	2	4	75.6	82.4
	Forklifts	3	8	86.8	
	Generator Sets	2	5	80.6	
	Tractors/Loaders/Backhoes	2	9	83.0	
	Welders	3	8	74.8	
Architectural Coating	Air Compressors	1	9	73.7	73.7
Note: Construction noise levels do not include implementation of Mitigation Measures.					

TABLE 7 MODIFIED PROJECT ANTICIPATED CONSTRUCTION EQUIPMENT BY PHASE - VALENCIA COMMERCE CENTER					
Construction Phase	Equipment Type	Quantity	Usage Hours (per day)	Noise Level at 50 feet (dBA Leq-1hour)	Calculated Maximum Noise Level (dBA Leq-1hour)
Grading - Direct	Crawler Tractors	2	13	83.0	81.7
	Excavators	1	13	76.7	
	Graders	2	13	84.0	
	Water Trucks (Other Material Handling Equipment)	2	13	85.0	
	Off-Highway Trucks	1	13	71.0	
	Rollers	2	13	76.0	
	Rubber Tired Dozers	1	13	77.7	
	Rubber Tired Loaders	1	13	75.1	
	Scrapers	4	13	87.4	
Grading - Indirect	Crawler Tractors	2	13	83.0	82.1
	Excavators	1	13	76.7	
	Graders	1	13	81.0	
	Water Trucks (Other Material Handling Equipment)	2	13	85.06	
	Off-Highway Trucks	1	13	71.0	
	Rubber Tired Dozers	1	13	77.7	
	Scrapers	4	13	85.67	
Improvements - Storm Drains	Cranes	1	13	72.6	76.9
	Excavators	1	13	76.7	
	Graders	1	13	81.0	
	Rollers	1	13	73.0	
	Rubber Tired Loaders	1	13	75.1	
Improvements - Sewers	Bore/Drill Rigs	1	13	77.4	76.4
	Cranes	1	13	72.6	
	Excavators	2	13	79.7	
	Rollers	1	13	73.0	
	Rubber Tired Loaders	1	13	75.1	
Improvements - Water	Cranes	1	13	72.6	76.7
	Excavators	1	13	76.7	
	Rollers	1	13	75.1	
	Scrapers	1	13	79.6	
Improvements - Streets	Graders	1	13	81.0	78.2
	Pavers	1	13	74.2	
	Rollers	1	13	73.0	
	Scrapers	1	13	79.6	
Paving	Pavers	1	8	74.2	81.5
	Paving Equipment	2	6	85.5	
	Rollers	2	6	76.0	
Building Construction	Cranes	1	7	72.6	82.4
	Forklifts	2	8	86.8	
	Generator Sets	1	8	77.6	
	Tractors/Loaders/Backhoes	2	7	84.8	
	Welders	1	8	70.0	
Architectural Coating	Air Compressors	1	6	73.7	73.7
Note: Construction noise levels do not include implementation of Mitigation Measures.					

TABLE 8 MODIFIED PROJECT CONSTRUCTION SCHEDULE ASSUMPTIONS		
Construction Phase	Start Date	End Date
Entrada South Planning Area		
Grading - Indirect	12/2/2024	4/3/2026
Improvements - Storm Drains	4/6/2026	8/21/2026
Improvements - Sewers	6/1/2026	4/2/2027
Improvements - Water	8/24/2026	4/2/2027
Improvements - Streets (Year 1)	4/5/2027	4/30/2027
Improvements - Streets (Year 2)	4/3/2028	4/28/2028
Paving	5/3/2027	4/28/2028
Building Construction	5/1/2027	12/31/2032
Architectural Coating	9/4/2027	12/31/2032
Valencia Commerce Center Planning Area		
Grading - Direct	12/2/2024	6/27/2025
Grading - Indirect	12/2/2024	3/20/2026
Improvements - Storm Drains	5/26/2025	9/19/2025
Improvements - Sewers	9/22/2025	5/1/2026
Improvements - Water	5/4/2026	9/18/2026
Improvements - Streets	9/21/2026	10/16/2026
Paving	10/5/2026	2/26/2027
Building Construction	10/6/2025	12/31/2032
Architectural Coating	2/2/2026	12/31/2032

The calculated maximum noise levels provided in both Table 6 and Table 7 were inputted into the noise model SoundPLAN,[18] 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.

Nearly all of the Modified Project construction equipment is classified as mobile construction equipment and would be moving around the entirety of the Entrada and Valencia Commerce Center Planning Areas within which construction would occur. As the construction noise analysis evaluates noise occurring over a one-hour period (Leq), the analysis is based on the construction noise levels from all equipment that would be operating concurrently within each respective Planning Area. One-hour construction noise levels (Leq 1-hour) at each analyzed off-site receptor were calculated in accordance with the County 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 the seven analyzed representative receptors as follows: (1) construction noise levels generated during each of the eight construction phases, (2)

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

construction noise levels during those periods when the eight construction phases could potentially occur concurrently within each Planning Area, and (3) construction noise levels when construction within the Entrada and Valencia Commerce Center Planning Areas potentially could be occurring at the same time (i.e., combined Entrada and Valencia Commerce Center construction noise levels at each analyzed receptor).

Noise levels generated by on-site construction equipment can be reduced via specific noise control measures including the following: (1) muffler requirements; (2) equipment modifications that reduce noise levels; and (3) maintenance and operational requirements. These noise control measures can be used separately or in combination in order to reduce the noise levels generated by on-site construction equipment.

Most on-site construction-related noise originates from equipment powered by either gasoline or diesel engines. A large part of the noise emitted is due to the intake and exhaust portions of the engine cycle. Reducing noise from this source can be achieved via muffler systems. This noise control strategy would include the replacement of worn mufflers and retrofitting on-site construction equipment where mufflers are not in use. Using optimal muffler systems on on-site construction equipment reduces construction noise levels by 10 dBA or more.[19] Further, Section 12.08.440.C. of the Los Angeles County Code states that all mobile or stationary internal-combustion engine powered construction equipment or machinery must be equipped with suitable exhaust and air-intake silencers in proper working order.

Another effective method of diminishing noise levels associated with individual pieces of construction equipment is by modifying the equipment. Modifications such as the dampening of metal surfaces is effective in reducing on-site construction equipment noise levels. These modifications are typically done by the manufacturer or with factory assistance. Noise reductions of up to 5 dBA are achieved using dampening materials.[20]

Additionally, faulty or damaged mufflers, loose engine parts, rattling screws, bolts, or metal plates all contribute to increasing the noise level of on-site construction equipment. By regularly inspecting on-site construction equipment for these conditions and making adjustments to the equipment as necessary can also reduce noise levels generated by on-site construction equipment.

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 with the 2017 Approved Project, the primary noise sources associated with off-site

19 FHWA, Special Report—Measurement, Prediction, and Mitigation, updated June 2017, https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm, Accessed December 2021.

20 FHWA, Special Report—Measurement, Prediction, and Mitigation, updated June 2017, accessed December 2021, https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm.

construction traffic would be delivery trucks. As with the 2017 Approved Project, 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 offsite disposal during construction would be limited to standard waste disposal activity.

2. Operations

a. Off-site Roadway Noise

The operational roadway analysis focuses on how daily community noise levels would change based on the motor vehicle travel patterns that are forecasted to occur under the Modified Project compared to what would occur under the 2017 Approved 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 the receptors (e.g., residential or commercial locations), and most importantly the number of vehicles traveling on the roadway.

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

A total of 35 roadway segments that are analyzed in the Modified Project's Transportation Analysis are the subject of the analysis of roadway noise to determine the potential effect of the Modified Project's motor vehicle travel on community noise levels. These 35 locations were selected as they represent those locations the Modified Project's transportation engineer has determined to have the greatest potential to be affected by Modified Project development. Modified Project ADT volumes are first compared to the corresponding volumes under the 2017 Approved Project. In those cases, in which the Modified Project's ADT volumes are equal to or less than those of the 2017 Approved Project no increase in daily community noise levels attributable to motor vehicle travel would occur with the 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 is required. For those roadway segments where ADT volumes increase under the Modified Project (compared to the 2017 Approved Project), detailed modeling of community noise levels has been conducted. 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[21] and road parameter data obtained from Google Earth were inputted into the SoundPLAN noise model, which implements the Federal Highway Administration (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 Leq 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.

The modeling of motor vehicle travel has been calculated based on the actual forecasted ADT volumes provided by the Modified Project's transportation engineer.

The vehicle mix/distribution data used in the TNM calculations are shown in Table 9: Vehicle Mix for Traffic Noise Model (TNM). In recognition of the differences in the vehicle mix associated with the development proposed within the Entrada and the Valencia Commerce Center Planning Areas, different vehicle mix and distribution data has been developed for the following two portions of the study area: (1) vehicle travel along SR-126 and the roadways north of SR-126, and (2) vehicle travel for the roadways south of SR-126. 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 as vehicle travel in this area is influenced to a greater degree by the land uses proposed within the Valencia Commerce Center Planning Area. The vehicle mix and distribution data for vehicle travel along the roadways south of SR-126 reflects that typically found in areas that contain the mix of land uses proposed within the Entrada Planning Area as well as the off-site land uses found in the area near the Entrada Planning Area. To calculate 24-hour CNEL levels, hourly Leq levels were calculated during daytime hours (7:00 AM to 7:00 PM), evening hours (7:00 PM to 10:00 PM), and nighttime hours (10:00 PM to 7:00 AM).

21 Stantec Consulting Services Inc., Entrada South & Valencia Commerce Center ADT Volume Summary, October 27, 2023. This document is provided in Appendix F to this report.

TABLE 9 VEHICLE MIX FOR TRAFFIC NOISE MODEL (TNM)				
Vehicle Type	Daytime Hours (7 AM - 7 PM)	Evening Hours (7 PM - 10 PM)	Nighttime Hours (10 PM - 7 AM)	Total Percent of ADT per Vehicle Type
	Roadway Segments Along SR-126 and North of SR-126			
Automobile	70.20	10.80	9.00	90.00
Medium Truck[a]	6.16	0.80	1.04	8.00
Heavy Truck[b]	1.50	0.14	0.36	2.00
Total	**77.86**	**11.74**	**10.40**	**100.00**
	Roadway Segments South of SR-126			
Automobile	77.60	9.70	9.70	97.00
Medium Truck[a]	1.60	0.20	0.20	2.00
Heavy Truck[b]	0.80	0.10	0.10	1.00
Total	**80.00**	**10.00**	**10.00**	**100.00**

[a] *Medium Truck is a truck with 2 axles.*

[a] *Heavy Truck is a truck with 3 or more axles.*

Source: Stantec, 2021

b. On-site Noise Sources

As with the 2017 Approved Project, development within the Entrada and Valencia Commerce Center Planning Areas include the following outdoor stationary noise sources: (1) 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 would 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 are evaluated based on the spatial relationship between the on-site sources and the off-site sensitive noise receptors. This includes consideration of the distance between the on-site sources and the off-site sensitive noise receptors as well as the presence of 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 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 operational roadway noise presented below is conservatively based on all motor vehicle travel associated with the entirety of the Modified Project, including all of the motor vehicle travel attributable to development within the Entrada Planning Area.

J. REGULATORY REQUIREMENTS AND PROJECT DESIGN FEATURES

Based on the applicable County regulations and requirements previously discussed, the following regulatory compliance measures will be implemented as part of the Modified Project.

- All Modified Project construction activity will adhere to the requirements of the "County of Los Angeles Construction Equipment Noise Standards, "County of Los Angeles Code Section 12.08.440 as identified in Table 4.
- 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.
- Limit all Modified Project construction activities near occupied residences to between the hours of 6:30 AM and 8:00 PM and exclude all Sundays and legal holidays pursuant to County Department of Public Works, Construction Division standards.
- All residential air conditioning equipment installed within the Entrada and Valencia Commerce Center Planning Areas will adhere to the requirements of the County of Los Angeles Residential Air Conditioning and Refrigeration Noise Standards, County of Los Angeles Code Section 12.08.530.
- All stationary and point sources of noise occurring within the Entrada and Valencia Commerce Center Planning Areas will adhere to the requirements of County of Los Angeles Code Section 12.08.390 as identified in Table 3.
- Loading, unloading, opening, closing, or other handling of boxes, crates, containers, building materials, garbage cans or similar objects between the hours of 10:00 PM and 6:00 AM in such a manner as to cause a noise disturbance is prohibited in accordance with the provisions set forth in County of Los Angeles Code Section 12.08.460.
- Loading zones and trash receptacles in commercial and Business Park 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 County of Los Angeles Code Section 12.08.460.

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).

In addition, the following project design features address post-construction on-site noise conditions:

- For single family residential lots located within the 60 dB(A) CNEL or greater noise contour, an acoustic analysis will be submitted prior to the applicable building permit. The acoustic analysis will show that exterior noise in outdoor living areas (e.g., back yards, patios, etc.) will be reduced to 60 dB(A) CNEL or less.

- For multi-family residential lots located within the 65 dB(A) CNEL or greater noise contour, an acoustic analysis will be submitted prior to the applicable building permit. The acoustic analysis will show that exterior noise in outdoor living areas (e.g., back yards, patios, etc.) will be reduced to 65 dB(A) CNEL or less.

- For school sites located within the 70 dB(A) CNEL or greater noise contour, an acoustic analysis will be submitted prior to the applicable building permit. The acoustic analysis will show that noise at exterior play areas will be reduced to 70 dB(A) CNEL or less.

K. SIGNIFICANCE THRESHOLDS

1. Identification of Significance Thresholds

The Modified Project's Initial Study (see Appendix 1A of the Modified Project Supplemental EIR) identified and addressed the following three noise thresholds of significance from Appendix G of the CEQA Guidelines to determine whether the Modified Project would have a significant effect on the environment. The thresholds of significance addressed in this Noise Report are as follows:

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

Threshold b): Generation of excessive groundborne vibration or groundborne noise levels?

Threshold c): 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?

2. Determining the Significance of Noise Impacts

a. Construction Noise

The State-certified EIR determined that the 2017 Approved Project would result in less than significant impacts and would be consistent with the County's noise standards with implementation of mitigation measures. This analysis assesses whether the Modified Project would result in any new significant construction impacts compared to the 2017 Approved Project and evaluates whether the Modified Project's construction activities would cause an exceedance of County noise standards at sensitive receptors located off-site (see County's Noise Ordinance standards identified in Table 4 above). Construction within both the Entrada and Valencia Commerce Center Planning Areas would occur over nine (9) phases.

The County Noise Ordinance specifies construction noise limit standards for both mobile and stationary equipment. The standards for mobile equipment apply to nonscheduled, intermittent, and short-term operation (less than 10 days) of mobile equipment. The applicable mobile equipment standards include a 75 dBA threshold for single-family residences, 80 dBA threshold for multi-family residences, and an 85 dBA threshold for semi-residential/commercial and business structures between the hours of 7:00 AM to 8:00 PM, every day, except Sundays and legal holidays. The standards for stationary equipment apply to repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment. The applicable stationary equipment standards include a 60 dBA threshold for single-family residences, 65 dBA threshold for multi-family residences and a 70 dBA threshold for semi-

residential/commercial uses, and an 85 dBA threshold for business structures between the hours of 7:00 AM to 8:00 PM, every day, except Sundays and legal holidays. Modified Project construction is not anticipated to occur during the nighttime period of 8:00 PM to 7:00 AM.

As the Modified Project includes both stationary and mobile construction equipment, the Modified Project's construction noise levels are evaluated using both the County's mobile and stationary noise limits.

b. Operational Noise

Modified Project-related noise impacts to off-site noise-sensitive uses have been determined based on the standards set forth in Section 12.08.390 of the County Noise Ordinance (see Table 3: County of Los Angeles Exterior Noise Standards by Noise Zones), the State Noise Guidelines (see Figure 4: State Criteria for Noise Compatible Land Use) used by the County, and specific data regarding human responses to changes in noise levels. A change in a noise level of less than 3 dBA is not perceptible by the human ear in the context of the community noise environment. A change of 3 to 5 dBA may be perceptible to some individuals who are extremely sensitive to changes in noise. A 5 dBA increase is readily perceptible. Based on this information, significant off-site noise impacts would occur if Modified Project-related operational activities result in increased noise levels that trigger any of the following:

- An increase in 2017 Approved Project noise levels of 5.0 dBA CNEL or greater at a noise-sensitive use results from Modified Project-related activities and the resulting level remains within the "normally acceptable" or "conditionally acceptable" land use compatibility classification from the State Noise Guidelines; or
- An increase in 2017 Approved Project noise levels of 3.0 dBA CNEL or greater results from Modified Project-related activities and the resulting noise level falls within the "normally unacceptable" or "clearly unacceptable" land use compatibility classification from the State Noise Guidelines; or
- An increase in 2017 Approved Project noise levels resulting in a change from a "normally acceptable" or "conditionally acceptable" land use compatibility classification to a "normally unacceptable" or "clearly unacceptable" land use compatibility classification; or
- Noise levels from Modified Project-related stationary sources are greater than the County Noise Ordinance standards identified in Table 3, above.

L. MODIFIED PROJECT IMPACTS

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 that would be heard both on and off the Modified Project site. Each construction phase involves 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. As discussed above, construction activities for the Modified Project would be substantially similar to the activities associated with the State-certified EIR and the 2017 Approved Project.

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 Approved 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 Approved Project. Construction activities for the Modified Project would be substantially similar to the activities associated with the 2017 Approved 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 Approved 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 Approved Project. Accordingly, because the Modified Project's construction activities would be substantially similar to the 2017 Approved Project's construction activities, the Modified Project would not result in new significant noise standards compared to the 2017 Approved Project.

Although no new significant impacts are expected given the substantial similarities in construction activities between the Modified Project and the 2017 Approved Project, 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.

The construction equipment reference noise levels provided in Table 6 and Table 7 above, are based on measured noise data compiled by the FHWA and would occur when equipment is operating under full power conditions. However, equipment used on construction sites typically operate at less than full

power. The acoustical usage factor is the percentage of time that each type of construction equipment is anticipated to be in full power operation during a typical construction day. These values are estimates and will vary based on the actual construction process and schedule.

Construction equipment operates at its noisiest levels for certain percentages of time during operation. As such, equipment would operate at different percentages over the course of an hour.[22] During a construction day, the highest noise levels would be generated when multiple pieces of construction equipment are operated concurrently.

To characterize construction-period noise levels, the (hourly Leq) noise level associated with each construction stage was calculated based on the quantity, type, and usage factors for each type of equipment that would be used during each construction stage. These noise levels are typically associated with multiple pieces of equipment operating simultaneously.

The estimated construction noise levels were calculated for each of the seven analyzed receptors during each of the eight construction phases in which construction equipment was assumed to be operating simultaneously, given the physical size of the Modified Project site and logistical limitations, and with the noise equipment located at the construction area nearest to the affected receptors collectively serve to result in a conservative impact analysis. This is considered a conservative evaluation because construction of the Modified Project would typically use fewer pieces of equipment simultaneously at any given time as well as operating throughout the construction site (i.e., most of the time construction equipment would be operating at distances further away from the off-site receptors than that assumed in the forecasting of Modified Project construction noise levels). As such, Modified Project construction would often generate lower noise levels than reported herein. Additionally, estimated construction noise levels at each receptor were calculated during periods when the eight construction phases could potentially occur concurrently within each Planning Area and when construction within both Planning Areas (i.e., combined Entrada and Valencia Commerce Center) could potentially occur at the same time. As construction activities for the Modified Project would be substantially similar to the activities associated with the 2017 Approved Project, construction equipment usage and noise levels associated with equipment usage are not anticipated to change materially between the Modified Project and the 2017 Approved Project.

Construction Noise by Planning Area

Entrada

Construction within the Entrada Planning Area would include the following construction phases: grading, infrastructure improvements (e.g., street construction and the installation of sewers, storm drains, and water lines), building construction, and the application of architectural coatings. Based on the Modified

22 Federal Highway Administration, Traffic Noise Model (2006).

Project's construction schedule, there is also a potential for these construction phases to occur concurrently.

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. 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. Table 10: Entrada South Forecasted Noise Impacts Associated With On-Site Construction Activities presents the noise impacts that are forecasted to occur at each of the seven receptor sites.

TABLE 10
ENTRADA SOUTH
FORECASTED NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES

Location	Calculated Noise Level	County Noise Standard		Potentially Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Exceed County Noise Standard?	
		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	78.18	85	70	No	Yes	65.18	No	No
Receptor 4: Travel Village	57.43	85	70	No	No	44.43	No	No
Receptor 5: School/Residential North of Valencia Commerce Center 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

Source: Refer to Appendix C for construction noise worksheets.

As shown in Table 10, construction noise levels would range from a low of 48.48 dBA (Leq-1hour) at Receptor 6 (residential area along Hasley Canyon Road, west of The Old Road) to a high of 78.18 dBA (Leq-1hour) at Receptor 3 (Mission Village). 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 (Leq-1hour) above the applicable significance threshold without the implementation of mitigation measures. As a result, a less than significant construction noise impact would occur based on the mobile construction equipment significance threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment significance threshold at Receptors 1, 2, and 3.

Mitigation Measure MM N-1 requires the use of optimal muffler systems on all equipment which would achieve a reduction of 10 dBA or more. This mitigation measure implements and ensures compliance with the requirements set forth in County Code Section 12.08.440.C. This analysis assumes a reduction of 10 dBA for the use of optimal muffler systems on all equipment. Mitigation Measure MM N-1 would also require the following: (1) ensure all construction equipment is properly maintained such that no additional noise due to worn or improperly maintained parts is generated; and (2) ensure all construction equipment incorporates features that dampen metal surfaces and minimize metal-to-metal contact such that a noise reduction of up to 5 dBA is achieved.[23] Conservatively, this analysis assumes a reduction of 3 dBA for the use of modified equipment. These combined measures would reduce construction noise levels by a minimum of 13 dBA. In addition, implementation of Mitigation Measure MM N-2 would also result in additional reductions that have conservatively not been quantified for the purposes of this analysis. Mitigation Measure MM N-2 specifically would require the following: (1) implement appropriate noise reduction measures when construction operations occur adjacent to off-site occupied residential areas; (2) locate staging areas on-site to maximize the distance between staging areas and off-site occupied residential uses; (3) implement feasible noise attenuation measures around stationary construction noise sources; and (4) use electric air compressors and similar power tools when feasible. Thus, to provide a conservative analysis, a 13 dBA reduction in construction noise levels is used in this analysis and serves as a conservative forecast of the reduction in construction noise levels that would occur with implementation of the Modified Project's construction noise mitigation measures.

As shown in Table 10, implementation of Mitigation Measure MM N-1 would result in construction noise levels to range from a low of 35.48 dBA (Leq-1hour) at Receptor 6 to a high of 65.18 dBA (Leq-1hour) at Receptor 3. Construction noise levels with the implementation of Mitigation Measure MM N-1 would not

23 FHWA, Special Report—Measurement, Prediction, and Mitigation, updated June 2017, accessed December 2021, https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm.

exceed the applicable significance thresholds for both mobile and stationary construction equipment. As a result, a less than significant construction noise impact would occur with the implementation of Mitigation Measure MM N-1. In addition, forecasted construction noise levels would be further reduced with implementation of Mitigation Measures MM N-2 and MM N-4. Thus, the Modified Project with the implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 would reduce construction-related impacts to a less than significant level, consistent with the State-certified EIR, which concluded that construction noise impacts associated with the 2017 Approved Project would be less than significant with mitigation.

An analysis of construction noise levels at each of the seven receptor sites during each construction phase as well as during potential concurrent construction phases within the Entrada Planning Area is provided in Appendix D to this report.

Valencia Commerce Center

Construction within the Valencia Commerce Center Planning Area would include the following construction phases: grading, infrastructure improvements (e.g., street construction and the installation of sewers, storm drains, and water lines), building construction, and the application of architectural coatings. Based on the Modified Project's construction schedule, there is also a potential for these construction phases to occur concurrently.

Table 11: Valencia Commerce Center Forecasted Noise Impacts Associated With On-Site Construction Activities presents the noise impacts that are forecasted to occur at each of the seven receptor sites. As shown in Table 11, construction noise levels would range from a low of 43.56 dBA (Leq-1hour) at Receptor 2 (Westridge School) to a high of 74.10 dBA (Leq-1hour) at Receptor 5 (School/Residential North of Valencia Commerce Center Planning Area).

TABLE 11
VALENCIA COMMERCE CENTER
FORECASTED NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES

Location	Calculated Noise Level	County Noise Standard		Potentially Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Exceed County Noise Standard?	
		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	52.82	85	70	No	No	39.82	No	No
Receptor 4: Travel Village	66.86	85	70	No	Yes	53.86	No	No
Receptor 5: School/Residential North of Valencia Commerce Center 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

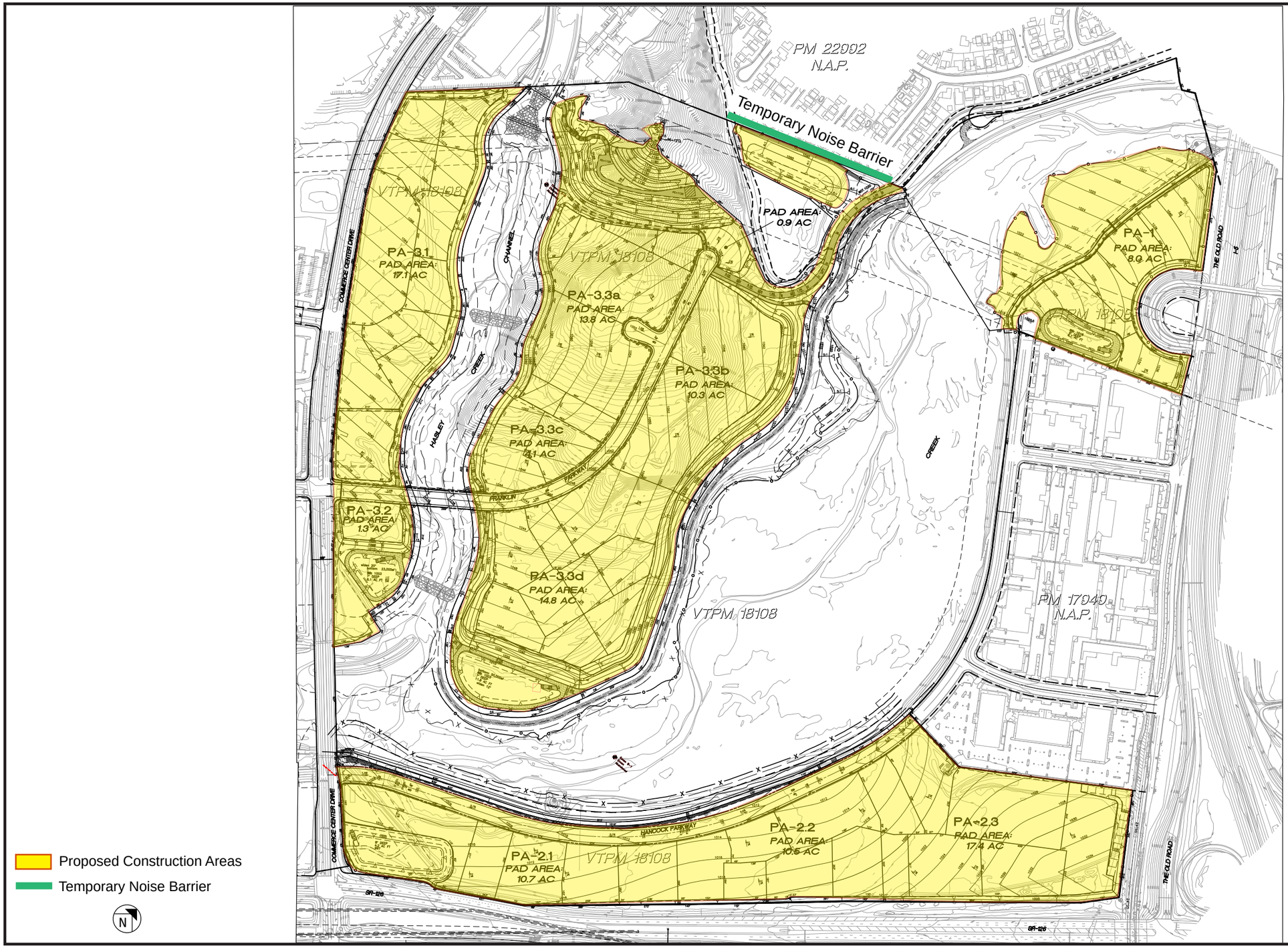
Source: Refer to Appendix C for construction noise worksheets.

The grading plan for the Valencia Commerce Center Planning Area includes the construction of a berm on the north side of the 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). The proposed berm slopes upward away from these residences and initially reaches a height that is eight feet above the existing grade of the residences. Thereafter, the berm increases in height, reaching a maximum height of approximately 28 feet above the existing grade of the residences at a distance of approximately 200 feet from the residences. Overall, the berm is approximately 600 feet in length and is included in the Valencia Commerce Center Planning Area grading plan to reduce noise levels associated with Valencia Commerce Center construction and operations for these residences. The forecasted construction noise levels during all construction phases, other than the grading – direct construction phase, incorporates the noise reduction that would be provided by this berm.

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 without the implementation of mitigation measures as follows: (1) Receptor 5 by a maximum of 14.10 dBA (Leq-1hour) and (2) Receptor 6 by a maximum of 0.45 dBA (Leq-1hour). A potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment significance threshold at Receptors 5 and 6.

As explained above, construction noise levels would be reduced by 13 dBA with implementation of Mitigation Measure MM N-1. Mitigation Measure MM N-3 is also proposed to further reduce construction noise levels at Receptor 5 during the construction of the berm described above. Specifically, Mitigation Measure MM N-3 requires the installation of a temporary noise barrier between the berm construction site and the residences described above. The location of this temporary noise barrier is shown in Figure 6: Location of Temporary Noise Barrier Required Pursuant to Mitigation Measure MM N-3. Once construction of the berm is complete, the temporary noise barrier can be removed as the noise reduction that is provided by the temporary noise barrier would be provided by the berm itself. The temporary noise barrier pursuant to Mitigation Measure MM N-3 would reduce construction noise levels during construction of the berm by 3.14 dBA at the residences with a direct line of sight to the construction area. As a result, for the identified residences at Receptor 5, Mitigation Measures MM N-1 and MM N-3 combined would reduce construction noise levels at Receptor 5 by 16.14 dBA (Leq-1hour) during the period of time when the berm is being constructed. In addition, the forecasted construction noise levels during all other concurrent construction phases, other than those that include the grading – direct construction phase, incorporate the noise reduction that would be provided by this berm and would realize a 13 dBA noise reduction due to the implementation of Mitigation Measure MM N-1. It is important to note that due to elevation differences, the reduction from the temporary noise barrier would not be achieved at the other off-site sensitive uses to the north such as the residences along Hasley Canyon west of The Old Road (Receptor 6). More specifically, elevations north of Hasley Canyon Road increase

by a minimum of 25 feet when compared to the residences located at the end of the Diablo Place, Rangewood Road, and Quincy Street cul-de-sacs. Thus, due to the increased distance from the construction site and the rise in elevation, the direct line of sight from the residences north of Hasley Canyon Road to the construction site would not be affected.



SOURCE: Meridian Consultants - March 2022

FIGURE **6**

Location of Temporary Noise Barrier Required Pursuant to Mitigation Measure MM N-3

As shown in Table 11, implementation of Mitigation Measures MM N-1 and MM N-3 would result in construction noise levels to range from a low of 33.14 dBA (Leq-1hour) at Receptor 2 to a high of 58.62 dBA (Leq-1hour) at Receptor 5. Construction noise levels with the implementation of Mitigation Measures MM N-1 and MM N-3 would not exceed the applicable significance thresholds for both mobile and stationary construction equipment. As a result, a less than significant construction noise impact would occur with the implementation of Mitigation Measures MM N-1 and MM N-3. In addition, forecasted construction noise levels would be further reduced with the implementation of Mitigation Measures MM N-2 and MM N-4. Thus, the Modified Project with the implementation of Mitigation Measures MM N-1 through MM N-4 would reduce construction-related impacts to a less than significant level, consistent with the State-certified EIR, which concluded that construction noise impacts associated with the 2017 Approved Project would be less than significant with mitigation.

An analysis of construction noise levels at each of the seven receptor sites during each construction phase as well as during potential concurrent construction phases within the Valencia Commerce Center Planning Area is provided in Appendix D to this report.

Entrada and Valencia Commerce Center

Construction within both the Entrada and Valencia Commerce Center Planning Areas could potentially be occurring at the same time. 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 and Valencia Commerce Center 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 within the Entrada and Valencia Commerce Center Planning Areas would be negligible and do not change the conclusions regarding the significance of the Modified Project's impacts that are presented above. Thus, the Modified Project with the implementation of Mitigation Measures MM N-1 through MM N-4 is not expected to result in a new significant impact compared to the 2017 Approved Project.

An analysis of construction noise levels at each of the seven receptor sites during potential concurrent construction within the Entrada and Valencia Commerce Center Planning Areas is provided in Appendix D to this report.

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 and Valencia Commerce Center Planning Areas during construction, as was the case in the State-certified EIR. The primary noise sources associated with off-site construction traffic would be delivery trucks, as was the case in the State-certified EIR. The Modified Project would not involve any external haul truck trips as grading would be balanced on-site (i.e., soil export would not be necessary) except for disposal activities associated with construction. Delivery trucks are expected to access Entrada via Magic Mountain Parkway from I-5 to the east and access Valencia Commerce Center via Commerce Center Drive from the SR-126 Freeway. There are no noise-sensitive receptors along these routes. Moreover, the Modified Project is not expected to

significantly increase offsite construction traffic relative to the 2017 Approved Project since the types and intensity of construction activities would generally be substantially the same. Therefore, off-site construction traffic generated by the Modified Project along these roadways is not expected to result in a new significant impact compared to the State-certified EIR for the 2017 Approved Project.

2. Operational Roadway Noise

a. Off-Site Roadway Noise

(1) Introduction

The following assessment of operational roadway noise levels implements the Supplemental EIR requirement which calls for the analysis to focus on the change in impact between the approved project and the proposed project, which in this case is the difference between the impact of the Modified Project and the 2017 Approved 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 the receptors (e.g., residential or commercial locations), and most importantly the number of vehicles traveling on the roadway.

The assessment of operational roadway noise starts with a comparison of the daily traffic volumes that are forecasted to occur at buildout of the Modified Project in 2030. If daily traffic volumes of the Modified Project are equal to or less than those of the 2017 Approved Project, the Modified Project would not result in an incremental increase in operational roadway noise levels when compared to those that would occur under the 2017 Approved Project. As a result, the Modified Project would have no incremental increases in operational roadway noise impacts. However, additional analysis is required if the forecasted daily traffic volumes of the Modified Project are greater than the forecasted daily traffic volumes of the 2017 Approved Project.

The following describes the analysis that has been completed for those roadway segments in which the forecasted daily traffic volumes of the Modified Project are greater than those of the 2017 Approved Project. The analysis starts with an identification of the roadway segments along which the Modified Project would generate higher ADT volumes than that forecasted to occur under the 2017 Approved Project. The resultant incremental increases in operational roadway noise levels are evaluated to determine if the Modified Project would result in an increase in operational roadway noise levels that would be discernible in the context of the community noise environment. This analysis is followed by an evaluation of the incremental increase in operational roadway noise levels of the 2017 Approved Project and the Modified Project in terms of the established significance thresholds. Specifically, where the 2017 Approved Project's land use compatibility classification is "normally acceptable" or "conditionally acceptable" and the Modified Project's land use compatibility classification is also "normally acceptable" or "conditionally acceptable," the Modified Project's roadway noise impact is considered significant if the Modified Project's increase in roadway noise levels above the 2017 Approved Project is 5 dBA or more. Further, where the 2017 Approved Project's land use compatibility classification is "normally

unacceptable" or "clearly unacceptable" and the Modified Project's land use compatibility classification is also "normally unacceptable" or "clearly unacceptable," the Modified Project's roadway noise impact is considered significant if the Modified Project's increase in roadway noise levels above the 2017 Approved Project is 3 dBA or more. In addition, 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 Approved Project from "normally acceptable" or "conditionally acceptable" to "conditionally unacceptable" or "clearly unacceptable."

The above analyses were completed for the 13 roadway segments for which the Modified Project would result in an incremental increase in daily roadway traffic volumes when compared to the 2017 Approved Project.

(2) Comparison of 2017 Approved Project and Modified Project Average Daily Trip Volumes

Table 12: 2017 Approved Project and Modified Project Average Daily Trip Volumes presents the ADT volumes for a total of 35 roadway segments along 11 different roadways located in the area of the Modified Project under both 2017 Approved Project and Modified Project conditions. Based on this analysis, ADT volumes would not increase under the Modified Project compared to the 2017 Approved Project along 22 of the 35 roadway segments. As a result, roadway noise levels along these 22 roadway segments would not increase under the Modified Project compared to the 2017 Approved Project and thus, further analysis of roadway noise levels along these 22 roadway segments is not required. The remaining 13 roadway segments would experience an increase in ADT volumes that range from 2 to 276 ADT under the Modified Project compared to that forecasted to occur under the 2017 Approved Project. Thus, computer modeling of roadway noise levels was completed for these 13 roadway segments. Two of the 13 roadway segments are located north of SR-126 along Hasley Canyon Road and Franklin Parkway, which are in the area of the proposed Valencia Commerce Center development. The remaining 11 roadway segments for which detailed modeling was conducted are located south of SR-126 with most of these roadway segments occurring along The Old Road and Valencia Boulevard.

TABLE 12 2017 APPROVED PROJECT AND MODIFIED PROJECT AVERAGE DAILY TRIP VOLUMES				
Roadway Segment	ADT Volumes		Change in ADT Volumes	Further Analysis Required (see Tables 12 and 13)?
	2017 Approved Project	Modified Project		
Commerce Center Drive				
-- South of Industry Drive	21,675	21,002	-673	No
-- South of Franklin Parkway	33,818	31,650	-2,168	No
-- North of SR-126	37,499	34,317	-3,182	No
-- South of Henry Mayo Drive	29,214	28,311	-903	No
-- North of Magic Mountain Parkway	25,171	23,940	-1,231	No
Franklin Parkway				
-- West of Commerce Center Drive	11,371	11,439	68	Yes
Hancock Parkway				
-- East of Commerce Center Drive	11,228	10,130	-1,098	No
Hasley Canyon Road				
-- West of The Old Road	25,223	25,499	276	Yes
-- West of Commerce Center Drive	11,077	11,075	-2	No
Henry Mayo Drive				
-- West of The Old Road	8,354	8,356	2	Yes
Magic Mountain Parkway				
-- West of Westridge Parkway	32,781	32,991	210	Yes
-- West of Commerce Center Drive	38,840	37,525	-1,315	No
-- East of Commerce Center Drive	40,721	39,297	-1,424	No
-- West of The Old Road	69,827	65,436	-4,391	No
-- East of The Old Road	70,829	68,711	-2,118	No
-- East of I-5	47,499	46,347	-1,152	No
State Route 126				
-- West of Commerce Center Drive	54,263	53,344	-919	No
-- East of Commerce Center Drive	71,103	69,191	-1,912	No
The Old Road				
-- North of Hasley Canyon Road	18,384	18,437	53	Yes
-- North of Biscailuz Drive	10,168	10,160	-8	No
-- North of Turnberry Lane	10,552	10,599	47	Yes
-- South of Henry Mayo Drive	12,014	11,013	-1,001	No
-- North of Rye Canyon Road	40,467	39,500	-967	No
-- North of Magic Mountain Parkway	42,403	41,351	-1,052	No
-- South of Magic Mountain Parkway	22,765	22,579	-186	No
-- South of Valencia Boulevard	26,499	26,659	160	Yes

TABLE 12
2017 APPROVED PROJECT AND MODIFIED PROJECT AVERAGE DAILY TRIP VOLUMES

Roadway Segment	ADT Volumes		Change in ADT Volumes	Further Analysis Required (see Tables 12 and 13)?
	2017 Approved Project	Modified Project		
Tourney Road				
-- North of Valencia Boulevard	5,496	5,520	24	Yes
Valencia Boulevard				
-- East of Poe Parkway	28,050	28,058	8	Yes
-- West of Westridge Parkway	30,474	30,599	125	Yes
-- East of Westridge Parkway	53,180	52,499	-681	No
-- East of The Old Road	49,695	49,690	-5	No
-- East of I-5 Northbound Ramps	53,121	53,234	113	Yes
-- East of Tourney Road	64,746	64,819	73	Yes
Westridge Parkway				
-- South of Magic Mountain Parkway	17,358	17,378	20	Yes
-- North of Valencia Boulevard	13,816	13,182	-634	No

Source: Stantec and Meridian Consultants, 2021

(3) **Analysis of the Modified Project's Increase in Roadway Noise Levels** Compared to the 2017 Approved Project

Table 13: Calculated Traffic Noise Levels presents the calculated noise levels for each land use type along all 13 roadway segments for which an increase in roadway volumes has been forecasted under the Modified Project compared to the 2017 Approved Project. The types of land use (e.g., single-family residential, commercial, etc.) and their location relative to each analyzed roadway segment have been identified based on a review of Google Earth data and confirmed via field surveys.

The maximum noise increase under the Modified Project compared to the 2017 Approved Project would be 0.08 dBA CNEL for the single-family residential uses located along Hasley Canyon Road, west of The Old Road. While this location would experience the largest forecasted increase in roadway noise levels, forecasted roadway noise levels at these single-family residences are below 60 dBA CNEL under both Modified Project and 2017 Approved Project 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 roadway. Land uses along all of the other analyzed roadway segments would experience noise level increases of 0.04 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 Approved Project. Overall, these noise level increases are relatively small and would not be discernible in the context of the community noise environment.

TABLE 13
CALCULATED TRAFFIC NOISE LEVELS

Roadway Segment	Adjacent Land Uses	Calculated Traffic Noise Levels, CNEL		Increase in Noise Levels with Modified Project, CNEL	Increase Discernible in Community Noise Environment?
		2017 Approved Project	Modified Project		
Franklin Parkway					
-- West of Commerce Center Drive	Commercial Open Space	64.23	64.26	0.03	No
Hasley Canyon Road					
-- West of The Old Road	Commercial	70.42	70.46	0.04	No
	Residential (Single Family)	59.39	59.43	0.04	No
Henry Mayo Drive					
-- West of The Old Road	Commercial Open Space	65.63	65.63	0.00	No
	Transient Lodging	65.63	65.63	0.00	No
Magic Mountain Parkway					
-- West of Westridge Parkway	Residential (Multiple Family)	67.33	67.35	0.02	No
The Old Road					
-- North of Hasley Canyon Road	Commercial	71.52	71.53	0.01	No
	Residential (Single Family)	44.36	44.38	0.02	No
-- North of Turnberry Lane	Commercial	69.11	69.13	0.02	No
-- South of Valencia Boulevard	Golf Course	59.50	59.53	0.03	No
	Residential (Single Family)	55.80	55.83	0.03	No
	Commercial	61.98	62.01	0.03	No
Tourney Road					
-- North of Valencia Boulevard	Commercial	62.60	62.62	0.02	No
	Golf Course	51.46	51.48	0.02	No
	Residential (Single Family)	49.16	49.17	0.01	No
Valencia Boulevard					
-- East of Poe Parkway	Commercial	69.74	69.74	0.00	No
	Residential (Multiple Family)	69.74	69.74	0.00	No
-- West of Westridge Parkway	School	58.84	58.86	0.02	No
	Church	41.52	41.53	0.01	No
	Residential (Single Family)	48.39	48.40	0.01	No

TABLE 13
CALCULATED TRAFFIC NOISE LEVELS

Roadway Segment	Adjacent Land Uses	Calculated Traffic Noise Levels, CNEL		Increase in Noise Levels with Modified Project, CNEL	Increase Discernible in Community Noise Environment?
		2017 Approved Project	Modified Project		
-- East of I-5 Northbound Ramps	Commercial	59.00	59.01	0.01	No
-- East of Tourney Road	School	51.58	51.59	0.01	No
	Residential (Single Family)	45.54	45.54	0.00	No
Westridge Parkway					
-- South of Magic Mountain Parkway	Recreation Center	64.57	64.57	0.00	No
	Residential (Multiple Family)	64.57	64.57	0.00	No
	Residential (Single Family)	42.13	42.14	0.01	No

Source: Refer to Appendix B for roadway noise worksheets.

Table 14: 2030 Roadway Traffic Noise Impacts provides forecasted CNELs for the following three scenarios: (1) 2030 Without Project conditions (without the development of either the 2017 Approved Project or the Modified Project), (2) 2030 with the development of the 2017 Approved Project, and (3) 2030 with the development of the Modified Project. Each of these forecasted CNELs were compared with the County's land use compatibility criteria. The analysis is structured in this way to allow for a determination of whether the development of the Modified Project would change the land use compatibility classification at each analyzed land use and if the increase in CNEL under the Modified Project would exceed the established significance thresholds.

Table 14 indicates that the land use compatibility classification at each analyzed land use under 2030 Without Project conditions would not change with the development of either the 2017 Approved Project or Modified Project. For example, the land use compatibility classification for the single-family residential uses located along Hasley Canyon Road, west of The Old Road under 2030 Without Project conditions would be classified as "normally acceptable" and would remain classified as "normally acceptable" under both 2030 with 2017 Approved Project and 2030 with Modified Project conditions. 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 Approved Project conditions. Further, the maximum increase of 0.04 dBA CNEL under the Modified Project compared to the 2017 Approved Project along the Hasley Canyon Road, west of The Old Road roadway segment, as shown in Table 14, would be less than the established significance thresholds. Thus, the Modified

Project's potential roadway noise impacts would be less than significant.[24] The State-certified EIR concluded that roadway noise impacts associated with the 2017 Approved Project would be less than significant with mitigation. Consistent with the State-certified EIR, the Modified Project's potential roadway offsite 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 offsite roadway noise levels compared to the 2017 Approved Project would be very small and would not be discernible to receptors in the context of the community noise environment. Therefore, the Modified Project's off-site traffic noise would not result in a new or substantial increase in the severity of a significant impact compared to the State-certified EIR and the 2017 Approved Project.

[24] Per the State Noise Guidelines (see Figure 4: State Criteria for Noise Compatible Land Use), "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." Thus, pursuant to the State Noise Guidelines, it is appropriate to conclude that this impact is less than significant.

TABLE 14
2030 ROADWAY TRAFFIC NOISE IMPACTS

Roadway Segment	Adjacent Land Uses	2030 Without Project Conditions		2030 With 2017 Approved Project Conditions		2030 With Modified Project Conditions		Increase in Noise Levels, CNEL			Exceedance of County Noise Standards for the Modified Project?
		Noise Level	Noise Exposure Compatibility Category	Noise Level	Noise Exposure Compatibility Category	Noise Level	Noise Exposure Compatibility Category	2017 Approved Project above 2030 Without Project Conditions	Modified Project above 2030 Without Project Conditions	Modified Project above 2017 Approved 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	0.00	No
	Transient Lodging	66.02	Conditionally Acceptable	65.63	Conditionally Acceptable	65.63	Conditionally Acceptable	-0.39	-0.39	0.00	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

TABLE 14
2030 ROADWAY TRAFFIC NOISE IMPACTS

Roadway Segment	Adjacent Land Uses	2030 Without Project Conditions		2030 With 2017 Approved Project Conditions		2030 With Modified Project Conditions		Increase in Noise Levels, CNEL			Exceedance of County Noise Standards for the Modified Project?
		Noise Level	Noise Exposure Compatibility Category	Noise Level	Noise Exposure Compatibility Category	Noise Level	Noise Exposure Compatibility Category	2017 Approved Project above 2030 Without Project Conditions	Modified Project above 2030 Without Project Conditions	Modified Project above 2017 Approved Project	
	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
Valencia Boulevard											
-- East of Poe Parkway	Commercial	69.72	Conditionally Acceptable	69.74	Conditionally Acceptable	69.74	Conditionally Acceptable	0.02	0.02	0.00	No
	Residential (Multiple Family)	69.72	Normally Unacceptable	69.74	Normally Unacceptable	69.74	Normally Unacceptable	0.02	0.02	0.00	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	0.00	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	0.00	No
	Residential (Multiple Family)	64.02	Normally Acceptable	64.57	Normally Acceptable	64.57	Normally Acceptable	0.55	0.55	0.00	No
	Residential (Single Family)	41.59	Normally Acceptable	42.13	Normally Acceptable	42.14	Normally Acceptable	0.54	0.55	0.01	No

Source: Refer to Appendix B for the roadway noise worksheets.

b. On-Site Noise Sources Potentially Impacting Off-Site Receptors

Proposed development within the Entrada 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). Air conditioning equipment within the Entrada and Valencia Commerce Center 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 Entrada and Valencia Commerce Center 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 and Valencia Commerce Center Planning Areas would be less than significant.

Other on-site noise sources that are associated with the proposed commercial uses within the Entrada and Valencia Commerce Center Planning Areas include parking areas (i.e., vehicle movement, doors closing, human voices, and intermittent car alarms) and loading/trash collection. However, within the Entrada Planning Area, nearly all surface and structured parking associated with the commercial development would be located behind the associated office and commercial buildings, which would provide shielding to the off-site sensitive uses proximate to the Entrada Planning Area. Specifically, within the Entrada Planning Area the proposed commercial uses are a minimum of 1,200 feet from the off-site sensitive uses within the Westridge and approved Mission Village communities and would be further shielded by other intervening buildings. In addition, other commercial areas within the Entrada Planning Area would also be separated from off-site residential uses by hillsides that would shield noise from parking areas. With regard to the Valencia Commerce Center Planning Area, the off-site sensitive uses would be located a minimum of 600 feet from the nearest off-site residential use and 1,400 feet from Live Oak Elementary School. In addition, noise from parking areas for the buildings located further away from these off-site sensitive uses would also be further shielded by the buildings within the Valencia Commerce Center Planning Area that are located closest to the off-site sensitive use. In addition, loading and unloading activities would comply with the County Noise Ordinance, which limits loading activities during the nighttime hours of 10:00 PM to 6:00 AM 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 Approved 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 Approved Project. As a result, off-site noise impacts due to stationary noise sources associated with the proposed commercial development within the Entrada and Valencia Commerce Center Planning Areas would be less than significant.

In addition, based on the analysis presented above, on-site noise sources are not anticipated to increase the noise levels forecasted to occur from off-site roadway noise sources (see Table 13). As such, the conclusion of less than significant impacts with regard to the State's land use compatibility criteria based on off-site roadway noise levels also applies to forecasted community noise conditions with the addition of on-site noise sources. Further, pursuant to the provisions of AB 1307, as development within the Entrada 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.

Therefore, Modified Project noise impacts from on-site sources are not expected to result in a new significant impact compared to the 2017 Approved Project.

M. 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 Modified Project area. The results of this analysis are compared to the cumulative impacts of the 2017 Approved 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, as well as both 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.

1. Construction Noise

Noise, by definition, is a localized phenomenon and drastically reduces as distance from the source increases. As a result, only related projects, and growth in the general area of the Modified Project site (within 500 feet) would contribute to cumulative noise impacts. Cumulative construction-noise impacts have the potential to occur when multiple construction projects in the local area generate noise within the same time frame and contribute to the local ambient noise environment. It is expected that, as with the Modified Project, the related projects would implement noise reduction techniques such as optimal mufflers and dampening equipment to minimize metal-to-metal impacts which would minimize any construction-related noise. In addition, distance attenuation and intervening structures would further reduce construction noise levels and not result in noticeable increases in community noise levels. Based on a review of the related project information presented in the Modified Project's Transportation Impact Analysis,[25] 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 site. Further, the Modified Project's construction activities would be substantially similar to the 2017 Approved Project's construction activities; therefore, the Modified Project would not substantially increase the potential for cumulative construction noise impacts compared to the 2017 Approved 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 a new or more severe cumulative construction noise impact as compared to the 2017 Approved Project.

25 Entrada South & Valencia Commerce Center Transportation Impact Analysis, Stantec Consulting Services Inc., 2021 (see Appendix _ of the Modified project's Supplemental EIR).

2. Operational Noise

a. Roadway Noise

(1) Introduction

The 2017 Approved 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 Approved Project as well as the Modified Project.

Cumulative noise impacts due to off-site traffic attributable to the Modified Project were calculated and compared to the cumulative with 2017 Approved Project off-site traffic noise levels in order to identify the Modified Project's incremental increase. As further described below, significant impacts were identified 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.

As the analysis of cumulative roadway noise is based on changes in future roadway volumes compared to existing conditions, the cumulative roadway noise analysis focuses on the following roadway segments consistent with the Modified Project's transportation analysis:[26] (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.

(2) Analysis of Cumulative Off-Site Roadway Noise Levels

Table 15: 2030 Cumulative Calculated Traffic Noise Levels presents the calculated noise levels for each land use type along the analyzed roadway segments. The maximum cumulative roadway noise level increase under Modified Project cumulative conditions compared to 2017 Approved Project cumulative conditions would be 0.08 dBA CNEL for the single-family residential 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 Approved Project cumulative conditions, forecasted roadway noise levels at these single-family residences are below 60 dBA CNEL under both Modified Project and 2017 Approved Project cumulative conditions. These roadway noise levels reflect the condition wherein these single-family residences are located below the existing

[26] Entrada South & Valencia Commerce Center Transportation Impact Analysis, Stantec Consulting Services Inc., 2021.

grade of Hasley Canyon Road along with a sound wall being located between these single-family residences and the Hasley Canyon Road roadway. Land uses along all of the other analyzed roadway segments would experience roadway noise level increases under Modified Project cumulative conditions compared to 2017 Approved Project cumulative conditions of 0.04 dBA CNEL or less. Overall, these noise level increases would not be discernible in the context of the community noise environment.

TABLE 15
2030 CUMULATIVE CALCULATED TRAFFIC NOISE LEVELS

Roadway Segment	Adjacent Land Uses	Calculated Traffic Noise Levels, CNEL			Increase in Noise Levels, CNEL			
		Existing	2030 Cumulative with 2017 Approved Project Conditions	2030 Cumulative with Modified Project Conditions	2030 Cumulative with 2017 Approved Project Compared to Existing Conditions	2030 Cumulative with Modified Project Conditions Compared to Existing Conditions	2030 Cumulative Noise Levels with Modified Project Compared to 2017 Approved Project	
							Increase in Noise Levels	Increase Discernible in Community Noise Environment?
Franklin Parkway								
-- West of Commerce Center Drive	Commercial Open Space	61.56	64.23	64.26	2.67	2.70	0.03	No
Hasley Canyon Road								
-- West of The Old Road	Commercial	68.78	70.42	70.46	1.64	1.68	0.04	No
	Residential (Single Family)	57.75	59.39	59.43	1.64	1.68	0.04	No
The Old Road								
-- North of Hasley Canyon Road	Commercial	70.86	71.52	71.53	0.66	0.67	0.01	No
	Residential (Single Family)	43.71	44.36	44.38	0.65	0.67	0.02	No
-- North of Turnberry Lane	Commercial	69.03	69.11	69.13	0.08	0.10	0.02	No
-- South of Valencia Boulevard	Golf Course	58.73	59.50	59.53	0.77	0.80	0.03	No
	Residential (Single Family)	55.06	55.80	55.83	0.77	0.80	0.03	No
	Commercial	61.23	61.98	62.01	0.78	0.81	0.03	No
Valencia Boulevard								
-- East of I-5 Northbound Ramps	Commercial	57.61	59.00	59.01	1.39	1.40	0.01	No

Source: Refer to Appendix B for the roadway noise worksheets.

Table 16: 2030 Cumulative Roadway Traffic Noise Impacts provides forecasted CNELs for the following three scenarios: (1) existing conditions, (2) 2030 cumulative conditions with the development of the 2017 Approved Project, and (3) 2030 cumulative conditions with the development of the Modified Project. Each of these forecasted CNELs were compared with the County's land use compatibility criteria. The analysis is structured in this way to allow for a determination of whether the development of the Modified Project would change the land use compatibility classification at each analyzed land use and if the increase in CNEL under the Modified Project compared to the 2017 Approved Project would exceed the established significance thresholds.

Table 16 indicates that the land use compatibility classification at each analyzed land use under existing conditions would not change with the development of either 2017 Approved Project or Modified Project cumulative conditions, with the exception for the commercial uses along the Hasley Canyon Road, west of The Old Road roadway segment where the land use compatibility classification of "normally acceptable" under existing conditions would be "conditionally acceptable" under 2017 Approved Project and Modified Project cumulative conditions. Further, the maximum increase in CNEL under Modified Project cumulative conditions, as described above, is 0.04 dBA CNEL under Modified Project cumulative conditions compared to 2017 Approved Project cumulative conditions would be less than the established significance thresholds.

The State-certified EIR identified significant cumulative and unavoidable operational traffic noise impacts along 11 roadway segments based on full buildout of the 2017 Approved Project (including, but not limited to, the Entrada 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 Approved 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 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 Approved Project.

TABLE 16
2030 CUMULATIVE ROADWAY TRAFFIC NOISE IMPACTS

Roadway Segment	Adjacent Land Uses	Calculated Traffic Noise Levels CNEL						Increase in Noise Levels, CNEL			
		Existing Conditions		2030 Cumulative With 2017 Approved Project Conditions		2030 Cumulative With Modified Project Conditions		2030 Cumulative with 2017 Approved Project Compared to Existing Conditions	2030 Cumulative with Modified Project Conditions Compared to Existing Conditions	2030 Cumulative Noise Levels with Modified Project Compared to 2017 Approved Project	
		Noise Level	Noise Exposure Compatibility Category	Noise Level	Noise Exposure Compatibility Category	Noise Level	Noise Exposure Compatibility Category			Increase in Noise Levels	Exceed 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	2.70	0.03	No
Hasley Canyon Road											
-- West of The Old Road	Commercial	68.78	Normally Acceptable	70.42	Conditionally Acceptable	70.46	Conditionally Acceptable	1.80	1.84	0.04	No
	Residential (Single Family)	57.75	Normally Acceptable	59.39	Normally Acceptable	59.43	Normally Acceptable	1.80	1.84	0.08	No
The Old Road											
-- North of Hasley Canyon Road	Commercial	70.86	Conditionally Acceptable	71.52	Conditionally Acceptable	71.53	Conditionally Acceptable	0.66	0.67	0.01	No
	Residential (Single Family)	43.71	Normally Acceptable	44.36	Normally Acceptable	44.38	Normally Acceptable	0.65	0.67	0.02	No
-- North of Turnberry Lane	Commercial	69.03	Normally Acceptable	69.11	Normally Acceptable	69.13	Normally Acceptable	0.08	0.10	0.02	No
-- South of Valencia Boulevard	Golf Course	58.73	Normally Acceptable	59.50	Normally Acceptable	59.53	Normally Acceptable	0.77	0.80	0.03	No
	Residential (Single Family)	55.06	Normally Acceptable	55.80	Normally Acceptable	55.83	Normally Acceptable	0.74	0.77	0.02	No
	Commercial	61.23	Normally Acceptable	61.98	Normally Acceptable	62.01	Normally Acceptable	0.75	0.78	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	1.40	0.01	No

Source: Refer to Appendix B for the roadway noise worksheets.

b. 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 local ambient noise environment. 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 500 feet 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 Approved Project. Further, pursuant to the provisions of AB 1307, as development within the Entrada 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 Approved Project; therefore, the Modified Project would not substantially increase on-site noise levels relative to the 2017 Approved Project. Therefore, the Modified Project would not result in a new cumulative noise impact from on-site noise sources to off-site receptors. Thus, related project development would not cumulatively increase the Modified Project's noise impacts to off-site uses beyond those that are attributable to the Modified Project by itself. Therefore, as the Modified Project's noise impacts to off-site uses from on-site noise sources would be less than significant, the Modified Project's cumulative noise impacts to off-site uses from on-site noise sources would also be less than significant.

In addition, based on the analysis presented above, cumulative on-site noise sources are not anticipated to increase the cumulative noise levels forecasted to occur from off-site roadway noise sources (see Table 15). As such, the conclusion of less than significant cumulative impacts with regard to the State's land use compatibility criteria based on off-site roadway noise levels also applies to forecasted cumulative community noise conditions with the addition of on-site noise sources.

Therefore, the Modified Project's cumulative noise impacts from on-site noise sources are not expected to result in a new significant impact compared to the 2017 Approved Project.

N. MITIGATION MEASURES

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).

MM N-1: For all construction-related activities, the Applicant shall implement the following:

- The Applicant shall utilize construction equipment equipped with 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 incorporate features that dampen metal surfaces and minimize metal-to-metal contact consistent with FHWA guidance.

MM N-2: When construction operations occur adjacent to off-site occupied residential areas, the contractor(s) shall: (1) locate staging areas and stationary noise sources as far from those nearby receptors as possible; (2) prohibit idling 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.

MM N-3: During construction of the proposed berm on the north side of the Valencia Commerce Center Planning Area, the Applicant shall install a temporary noise barrier that achieves a noise reduction level of 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 6: Location of Temporary Noise Barrier Required Pursuant to Mitigation Measure MM N-3.

MM N-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.

O. LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measures MM N-1 through MM N-4 would reduce all Modified Project-specific and cumulative noise impacts to a less than significant level. As a result, Modified Project development is not expected to result in a new significant impact compared to the 2017 Approved Project.

P. CONCLUSIONS

Modified Project mitigation measures have been recommended to limit construction noise levels to below the County's construction exterior standards. Mitigation Measure MM N-1 would require the following: (1) use of muffler systems on all equipment to achieve a noise reduction of 10 dBA or more, but for purposes of providing a conservative analysis it is assumed that this element of Mitigation Measure MM N-1 would reduce construction equipment noise by 10 dBA[27]; (2) ensure all equipment is properly maintained such that no additional noise is generated due to worn or improperly maintained parts; and (3) ensure all construction equipment incorporates features that dampen metal surfaces and minimizes metal-to-metal impacts such that a noise reduction of up to 5 dBA is achieved, but for purposes of providing a conservative analysis it is assumed that this would reduce construction equipment noise by 3 dBA[28].In addition, Mitigation Measure MM N-2 requires the following of the Applicant: (1)implement appropriate noise reduction measures when construction operations occur adjacent to off-site occupied residential areas; (2) locate staging areas on-site to maximize the distance between staging areas and occupied residential uses; (3) implement feasible noise attenuation measures around stationary construction noise sources; and (4) use electric air compressors and similar power tools when feasible. Further, Mitigation Measure MM N-2 requires the Applicant to post construction site information, including the phone number of the construction superintendent number which allows surrounding owners to contact the construction superintendent.

The implementation of Mitigation Measure MM N-1 would conservatively achieve noise reductions of 13 dBA.

Construction within the Entrada Planning Area would occur over eight phases. These phases could also potentially occur concurrently to provide the most efficient construction schedule. As shown in Table 10, construction noise levels would not exceed the County's construction exterior standards with the implementation of Mitigation Measure MM N-1. As a result, with implementation of Mitigation Measure MM N-1, a less than significant construction noise impact would occur. In addition, forecasted construction noise levels would be further reduced with the implementation of Mitigation Measures MM N-2 and MM N-4.

Construction within the Valencia Commerce Center would also occur over eight phases. These phases could also potentially occur concurrently to provide the most efficient construction schedule. As shown in Table 11 construction noise levels would not exceed the County's construction exterior standards with the implementation of Mitigation Measure MM N-1 at receptor sites 1 through 4, 6, and 7. With the addition of Mitigation Measure MM N-3, construction noise levels would not exceed the County's construction exterior standards at receptor site 5. As a result, with implementation of Mitigation

27 FHWA, Special Report—Measurement, Prediction, and Mitigation, updated June 2017, accessed December 2021, https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm.

28 Ibid.

Measures MM N-1 and MM N-3, a less than significant construction noise impact would occur. In addition, forecasted construction noise levels would be further reduced with the implementation of Mitigation Measures MM N-2 and MM N-4.

Construction within both of the Entrada and Valencia Commerce Center Planning Areas would be occurring at the same time. When this occurs, increases in noise levels at the individual receptor sites due to concurrent construction within the Entrada and Valencia Commerce Center Planning Areas would be minimal and do not change the conclusions regarding the significance of the Modified Project's impacts that are presented above.

In conclusion, with the implementation of Mitigation Measures MM N-1 through MM N-4, Modified Project impacts are not expected to result in a new significant impact compared to the 2017 Approved Project.

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, no new or more severe significant impacts relating to these noise issues have been identified, as compared to those identified for the State-certified EIR and associated Final Additional Environmental Analysis for the 2017 Approved Project.

Q. CERTIFICATION

The contents of this noise study represent an accurate depiction of the noise environment and impacts associated with the proposed Entrada & Valencia Commerce Center Project. The information contained in this noise study is based on the best available information at the time of preparation.

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APPENDIX A

Ambient Noise Measurements

Monitoring Location: Site 1
Date: September 11, 2021 **Time: 12 AM - 12 AM**

	Monitoring Period		Monitored Leq	Logarithmic Equivalent	Evening/Night Adjustments 10 dB	5 dB
Midnight		0 / 24	42.1	16353	163532	51714
am	1:00	100	34.9	3082	30820	9746
	2:00	200	36.2	4197	41966	13271
	3:00	300	35.8	3821	38206	12082
	4:00	400	34.5	2845	28447	8996
	5:00	500	40.1	10199	101988	32251
	6:00	600	40.9	12334	123340	39003
	7:00	700	43.0	20079	200791	63496
	8:00	800	51.6	145058	1450584	458715
	9:00	900	48.9	78321	783210	247673
	10:00	1000	46.7	47048	470478	148778
	11:00	1100	40.0	10039	100392	31747
	12:00	1200	45.0	31584	315840	99877
pm	1:00	1300	53.5	222189	2221887	702622
	2:00	1400	45.3	33715	337151	106617
	3:00	1500	45.4	34450	344500	108940
	4:00	1600	44.8	30145	301449	95327
	5:00	1700	44.3	26890	268901	85034
	6:00	1800	42.9	19392	193922	61324
	7:00	1900	46.1	40591	405907	128359
	8:00	2000	50.4	110236	1102359	348596
	9:00	2100	46.5	44749	447495	141510
	10:00	2200	44.9	31111	311109	98381
pm	11:00	2300	46.0	39361	393606	124469

Leq Morning Peak Hour 7:00-10:00 a.m.
49 dBA

Leq Evening Peak Hour 4:00-8:00 p.m.
45 dBA

Leq Nighttime 10:00 pm-7:00 a.m. (not adjusted)
41.4 dBA

Leq Daytime 7:00 am-10:00 p.m.
47.8 dBA

Leq 24-Hour
46 dBA

Ldn: 10 dB adjustment between 10:00 p.m. & 7:00 a.m.
49 dBA

CNEL: 5 dB adjustment between 7:00p.m. & 10:00 p.m., & 10 dB
50.3 dBA **adjustment between 10:00 p.m. & 7:00 a.m.**

Difference between CNEL and Ldn
CNEL - Ldn 0.78736962

Monitoring Location: Site 1
Date: September 12, 2021 **Time: 12 AM - 12 AM**

Monitoring Period			Monitored Leq	Logarithmic Equivalent	Evening/Night Adjustments 10 dB	5 dB
Midnight		0 / 24	43.9	24390	243897	77127
am	1:00	100	37.5	5645	56448	17850
	2:00	200	36.3	4276	42758	13521
	3:00	300	37.1	5178	51777	16373
	4:00	400	36.4	4363	43633	13798
	5:00	500	40.7	11845	118451	37457
	6:00	600	41.1	12991	129910	41081
	7:00	700	42.1	16168	161681	51128
	8:00	800	41.9	15497	154973	49007
	9:00	900	46.8	47469	474694	150112
	10:00	1000	36.9	4877	48769	15422
	11:00	1100	38.8	7564	75642	23920
	12:00	1200	40.4	10843	108432	34289
pm	1:00	1300	44.6	28699	286990	90754
	2:00	1400	44.7	29768	297682	94135
	3:00	1500	45.8	37922	379219	119920
	4:00	1600	42.1	16090	160901	50882
	5:00	1700	40.6	11496	114963	36355
	6:00	1800	40.0	9912	99121	31345
	7:00	1900	41.6	14299	142985	45216
	8:00	2000	43.8	24108	241075	76235
	9:00	2100	48.3	68257	682567	215846
	10:00	2200	40.4	11033	110335	34891
pm	11:00	2300	40.4	11053	110529	34952

Leq Morning Peak Hour 7:00-10:00 a.m.
44 dBA

Leq Evening Peak Hour 4:00-8:00 p.m.
41 dBA

Leq Nighttime 10:00 pm-7:00 a.m. (not adjusted)
40.0 dBA

Leq Daytime 7:00 am-10:00 p.m.
43.6 dBA

Leq 24-Hour
43 dBA

Ldn: 10 dB adjustment between 10:00 p.m. & 7:00 a.m.
47 dBA

CNEL: 5 dB adjustment between 7:00p.m. & 10:00 p.m., & 10 dB
47.9 dBA **adjustment between 10:00 p.m. & 7:00 a.m.**

Difference between CNEL and Ldn
CNEL - Ldn 0.73499637

Monitoring Location: Site 2
Date: September 8 - September 9, 2021

Time: Start 8 AM - 8 AM

Monitoring Period			Monitored Leq	Logarithmic Equivalent	Evening/Night Adjustments 10 dB	5 dB
Midnight		0 / 24	52.1	160897	1608970	508801
am	1:00	100	49.9	98212	982116	310573
	2:00	200	48.0	63557	635569	200985
	3:00	300	50.0	99149	991492	313537
	4:00	400	54.0	252036	2520357	797007
	5:00	500	60.2	1036191	10361914	3276725
	6:00	600	67.2	5307610	53076100	16784136
	7:00	700	69.8	9549684	95496840	30198752
	8:00	800	69.0	7878436	78784358	24913802
	9:00	900	66.7	4671055	46710552	14771174
	10:00	1000	61.5	1406339	14063389	4447234
	11:00	1100	61.9	1554651	15546513	4916239
	12:00	1200	64.3	2679643	26796434	8473776
pm	1:00	1300	66.2	4172977	41729771	13196112
	2:00	1400	67.2	5227271	52272708	16530082
	3:00	1500	66.5	4493492	44934923	14209670
	4:00	1600	66.8	4762983	47629827	15061874
	5:00	1700	62.6	1814809	18148093	5738931
	6:00	1800	62.8	1910095	19100951	6040251
	7:00	1900	60.6	1158156	11581558	3662410
	8:00	2000	58.9	767743	7677432	2427817
	9:00	2100	62.9	1952985	19529854	6175882
	10:00	2200	59.0	786680	7866798	2487700
pm	11:00	2300	51.3	133954	1339541	423600

Leq Morning Peak Hour 7:00-10:00 a.m.
69 dBA

Leq Evening Peak Hour 4:00-8:00 p.m.
64 dBA

Leq Nighttime 10:00 pm-7:00 a.m. (not adjusted)
59.5 dBA

Leq Daytime 7:00 am-10:00 p.m.
65.6 dBA

Leq 24-Hour
64 dBA

Ldn: 10 dB adjustment between 10:00 p.m. & 7:00 a.m.
67 dBA

CNEL: 5 dB adjustment between 7:00p.m. & 10:00 p.m., & 10 dB
67.7 dBA **adjustment between 10:00 p.m. & 7:00 a.m.**

Difference between CNEL and Ldn
CNEL - Ldn = 0.2648451

Monitoring Location: Site 3
Date: September 11, 2021 **Time: 12 AM - 12 AM**

Monitoring Period			Monitored Leq	Logarithmic Equivalent	Evening/Night Adjustments 10 dB	5 dB
Midnight		0 / 24	45.5	35481	354813	112202
am	1:00	100	44.6	28840	288403	91201
	2:00	200	45.5	35481	354813	112202
	3:00	300	47.8	60256	602560	190546
	4:00	400	50.3	107152	1071519	338844
	5:00	500	55.6	363078	3630781	1148154
	6:00	600	60.5	1122018	11220185	3548134
	7:00	700	61.3	1348963	13489629	4265795
	8:00	800	59.4	870964	8709636	2754229
	9:00	900	57.3	537032	5370318	1698244
	10:00	1000	59.6	912011	9120108	2884032
	11:00	1100	57.2	524807	5248075	1659587
	12:00	1200	55.6	363078	3630781	1148154
pm	1:00	1300	58.9	776247	7762471	2454709
	2:00	1400	57.5	562341	5623413	1778279
	3:00	1500	57.5	562341	5623413	1778279
	4:00	1600	57.7	588844	5888437	1862087
	5:00	1700	52.2	165959	1659587	524807
	6:00	1800	50.9	123027	1230269	389045
	7:00	1900	52.6	181970	1819701	575440
	8:00	2000	55.8	380189	3801894	1202264
	9:00	2100	53.5	223872	2238721	707946
	10:00	2200	57.7	588844	5888437	1862087
pm	11:00	2300	59.9	977237	9772372	3090295

Leq Morning Peak Hour 7:00-10:00 a.m.
60 dBA

Leq Evening Peak Hour 4:00-8:00 p.m.
54 dBA

Leq Nighttime 10:00 pm-7:00 a.m. (not adjusted)
55.7 dBA

Leq Daytime 7:00 am-10:00 p.m.
57.3 dBA

Leq 24-Hour
57 dBA

Ldn: 10 dB adjustment between 10:00 p.m. & 7:00 a.m.
62 dBA

CNEL: 5 dB adjustment between 7:00p.m. & 10:00 p.m., & 10 dB
62.5 dBA **adjustment between 10:00 p.m. & 7:00 a.m.**

Difference between CNEL and Ldn
CNEL - Ldn = 0.1751225

Monitoring Location: Site 3
Date: September 12, 2021 **Time: 12 AM - 12 AM**

	Monitoring Period		Monitored Leq	Logarithmic Equivalent	Evening/Night Adjustments 10 dB	5 dB
Midnight		0 / 24	61.6	1445440	14454398	4570882
am	1:00	100	54.3	269153	2691535	851138
	2:00	200	48.2	66069	660693	208930
	3:00	300	48.1	64565	645654	204174
	4:00	400	48.4	69183	691831	218776
	5:00	500	51.6	144544	1445440	457088
	6:00	600	51.7	147911	1479108	467735
	7:00	700	60.0	1000000	10000000	3162278
	8:00	800	51.1	128825	1288250	407380
	9:00	900	52.6	181970	1819701	575440
	10:00	1000	52.6	181970	1819701	575440
	11:00	1100	53.2	208930	2089296	660693
	12:00	1200	52.2	165959	1659587	524807
pm	1:00	1300	54.3	269153	2691535	851138
	2:00	1400	53.8	239883	2398833	758578
	3:00	1500	50.8	120226	1202264	380189
	4:00	1600	51.2	131826	1318257	416869
	5:00	1700	49.2	83176	831764	263027
	6:00	1800	49.8	95499	954993	301995
	7:00	1900	50.4	109648	1096478	346737
	8:00	2000	51.7	147911	1479108	467735
	9:00	2100	53.9	245471	2454709	776247
	10:00	2200	58.7	741310	7413102	2344229
pm	11:00	2300	52.9	194984	1949845	616595

Leq Morning Peak Hour 7:00-10:00 a.m.
56 dBA

Leq Evening Peak Hour 4:00-8:00 p.m.
50 dBA

Leq Nighttime 10:00 pm-7:00 a.m. (not adjusted)
55.4 dBA

Leq Daytime 7:00 am-10:00 p.m.
53.4 dBA

Leq 24-Hour
54 dBA

Ldn: 10 dB adjustment between 10:00 p.m. & 7:00 a.m.
62 dBA

CNEL: 5 dB adjustment between 7:00p.m. & 10:00 p.m., & 10 dB
61.7 dBA **adjustment between 10:00 p.m. & 7:00 a.m.**

Difference between CNEL and Ldn
CNEL - Ldn = 0.1338821

Monitoring Location: Site 4
Date: September 8 - 9, 2021 **Time: 8 AM - 8 AM**

	Monitoring Period		Monitored Leq	Logarithmic Equivalent	Evening/Night Adjustments 10 dB	5 dB
Midnight		0 / 24	52.9	194984	1949845	616595
am	1:00	100	50.7	117490	1174898	371535
	2:00	200	51.5	141254	1412538	446684
	3:00	300	51.2	131826	1318257	416869
	4:00	400	55.6	363078	3630781	1148154
	5:00	500	57.2	524807	5248075	1659587
	6:00	600	57.2	524807	5248075	1659587
	7:00	700	56.3	426580	4265795	1348963
	8:00	800	60.0	1000000	10000000	3162278
	9:00	900	54.4	275423	2754229	870964
	10:00	1000	57.1	512861	5128614	1621810
	11:00	1100	55.6	363078	3630781	1148154
	12:00	1200	56.4	436516	4365158	1380384
pm	1:00	1300	55.2	331131	3311311	1047129
	2:00	1400	57.5	562341	5623413	1778279
	3:00	1500	58.8	758578	7585776	2398833
	4:00	1600	57.6	575440	5754399	1819701
	5:00	1700	56.5	446684	4466836	1412538
	6:00	1800	55.4	346737	3467369	1096478
	7:00	1900	55.4	346737	3467369	1096478
	8:00	2000	54.9	309030	3090295	977237
	9:00	2100	54.6	288403	2884032	912011
	10:00	2200	53.4	218776	2187762	691831
pm	11:00	2300	52.9	194984	1949845	616595

Leq Morning Peak Hour 7:00-10:00 a.m.
58 dBA

Leq Evening Peak Hour 4:00-8:00 p.m.
56 dBA

Leq Nighttime 10:00 pm-7:00 a.m. (not adjusted)
54.3 dBA

Leq Daytime 7:00 am-10:00 p.m.
56.7 dBA

Leq 24-Hour
56 dBA

Ldn: 10 dB adjustment between 10:00 p.m. & 7:00 a.m.
61 dBA

CNEL: 5 dB adjustment between 7:00p.m. & 10:00 p.m., & 10 dB
61.4 dBA **adjustment between 10:00 p.m. & 7:00 a.m.**

Difference between CNEL and Ldn
CNEL - Ldn = 0.2761285

Monitoring Location: Site 5
Date: September 9 - 10, 2021

Time: 9 AM - 9 AM

Monitoring Period			Monitored Leq	Logarithmic Equivalent	Evening/Night Adjustments 10 dB	5 dB
Midnight		0 / 24	52.9	194041	1940412	613612
am	1:00	100	55.2	331453	3314530	1048147
	2:00	200	53.2	209655	2096549	662987
	3:00	300	51.5	141091	1410912	446170
	4:00	400	57.5	565835	5658353	1789328
	5:00	500	57.6	576650	5766496	1823526
	6:00	600	56.3	424994	4249942	1343950
	7:00	700	61.0	1261787	12617869	3990120
	8:00	800	58.5	713638	7136381	2256722
	9:00	900	57.8	599029	5990292	1894297
	10:00	1000	58.1	644874	6448742	2039271
	11:00	1100	53.5	222431	2224308	703388
	12:00	1200	52.5	178093	1780935	563181
pm	1:00	1300	58.6	726057	7260575	2295995
	2:00	1400	59.4	877179	8771785	2773882
	3:00	1500	62.6	1821092	18210925	5758800
	4:00	1600	56.9	484717	4847167	1532809
	5:00	1700	55.8	377509	3775087	1193787
	6:00	1800	54.6	287460	2874604	909030
	7:00	1900	54.6	289463	2894630	915362
	8:00	2000	55.1	322721	3227208	1020533
	9:00	2100	55.4	344945	3449451	1090812
	10:00	2200	51.6	144158	1441584	455869
pm	11:00	2300	51.2	132665	1326652	419524

Leq Morning Peak Hour 7:00-10:00 a.m.
59 dBA

Leq Evening Peak Hour 4:00-8:00 p.m.
56 dBA

Leq Nighttime 10:00 pm-7:00 a.m. (not adjusted)
54.8 dBA

Leq Daytime 7:00 am-10:00 p.m.
57.9 dBA

Leq 24-Hour
57 dBA

Ldn: 10 dB adjustment between 10:00 p.m. & 7:00 a.m.
62 dBA

CNEL: 5 dB adjustment between 7:00p.m. & 10:00 p.m., & 10 dB
62.0 dBA **adjustment between 10:00 p.m. & 7:00 a.m.**

Difference between CNEL and Ldn
CNEL - Ldn = 0.2404405

Monitoring Location: Site 6
Date: September 9 - 10, 2021 **Time: 9 AM - 9 AM**

	Monitoring Period		Monitored Leq	Logarithmic Equivalent	Evening/Night Adjustments 10 dB	5 dB
Midnight		0 / 24	56.7	467735	4677351	1479108
am	1:00	100	54.4	275423	2754229	870964
	2:00	200	52.6	181970	1819701	575440
	3:00	300	53.9	245471	2454709	776247
	4:00	400	57.8	602560	6025596	1905461
	5:00	500	60.9	1230269	12302688	3890451
	6:00	600	63.0	1995262	19952623	6309573
	7:00	700	64.7	2951209	29512092	9332543
	8:00	800	65.5	3548134	35481339	11220185
	9:00	900	63.3	2137962	21379621	6760830
	10:00	1000	67.8	6025596	60255959	19054607
	11:00	1100	67.5	5623413	56234133	17782794
	12:00	1200	64.7	2951209	29512092	9332543
pm	1:00	1300	66.2	4168694	41686938	13182567
	2:00	1400	66.4	4365158	43651583	13803843
	3:00	1500	68.8	7585776	75857758	23988329
	4:00	1600	64.5	2818383	28183829	8912509
	5:00	1700	65.4	3467369	34673685	10964782
	6:00	1800	65.2	3311311	33113112	10471285
	7:00	1900	62.9	1949845	19498446	6165950
	8:00	2000	64.5	2818383	28183829	8912509
	9:00	2100	61.0	1258925	12589254	3981072
	10:00	2200	59.6	912011	9120108	2884032
pm	11:00	2300	56.4	436516	4365158	1380384

Leq Morning Peak Hour 7:00-10:00 a.m.
65 dBA

Leq Evening Peak Hour 4:00-8:00 p.m.
65 dBA

Leq Nighttime 10:00 pm-7:00 a.m. (not adjusted)
58.5 dBA

Leq Daytime 7:00 am-10:00 p.m.
65.6 dBA

Leq 24-Hour
64 dBA

Ldn: 10 dB adjustment between 10:00 p.m. & 7:00 a.m.
67 dBA

CNEL: 5 dB adjustment between 7:00p.m. & 10:00 p.m., & 10 dB
67.4 dBA **adjustment between 10:00 p.m. & 7:00 a.m.**

Difference between CNEL and Ldn
CNEL - Ldn = 0.453312

Monitoring Location: Site 7
Date: September 13 - 14, 2021 **Time: 11 AM - 11 AM**

Monitoring Period			Monitored Leq	Logarithmic Equivalent	Evening/Night Adjustments 10 dB	5 dB
Midnight		0 / 24	64.5	2828102	28281016	8943242
am	1:00	100	61.8	1506472	15064718	4763882
	2:00	200	61.8	1498939	14989391	4740062
	3:00	300	64.2	2648390	26483904	8374946
	4:00	400	67.2	5266232	52662321	16653288
	5:00	500	72.7	18425658	184256577	58267046
	6:00	600	72.1	16110796	161107961	50946810
	7:00	700	71.5	14107303	141073032	44611210
	8:00	800	71.9	15469918	154699176	48920175
	9:00	900	70.4	10975972	109759722	34709072
	10:00	1000	69.7	9405351	94053508	29742331
	11:00	1100	70.9	12284599	122845994	38847314
	12:00	1200	71.5	14098763	140987627	44584202
pm	1:00	1300	71.8	15157968	151579685	47933705
	2:00	1400	71.9	15343732	153437318	48521140
	3:00	1500	73.8	23829723	238297233	75356202
	4:00	1600	73.2	20954534	209545337	66264054
	5:00	1700	72.2	16775520	167755203	53048853
	6:00	1800	70.9	12413693	124136930	39255544
	7:00	1900	69.7	9288680	92886800	29373385
	8:00	2000	68.1	6422631	64226314	20310144
	9:00	2100	69.2	8326836	83268358	26331767
	10:00	2200	68.7	7352872	73528719	23251823
pm	11:00	2300	64.6	2873585	28735847	9087073

Leq Morning Peak Hour 7:00-10:00 a.m.
71 dBA

Leq Evening Peak Hour 4:00-8:00 p.m.
72 dBA

Leq Nighttime 10:00 pm-7:00 a.m. (not adjusted)
68.1 dBA

Leq Daytime 7:00 am-10:00 p.m.
71.4 dBA

Leq 24-Hour
70 dBA

Ldn: 10 dB adjustment between 10:00 p.m. & 7:00 a.m.
75 dBA

CNEL: 5 dB adjustment between 7:00p.m. & 10:00 p.m., & 10 dB
75.5 dBA **adjustment between 10:00 p.m. & 7:00 a.m.**

Difference between CNEL and Ldn
CNEL - Ldn = 0.2767438

APPENDIX B

Roadway Noise Worksheets

Existing Conditions

Traffic Distrubtion as % of ADT

SR 126 and North of SR 126

Vehicle Type	Daytime Hours (7 AM - 7 PM)	Evening Hours (7 PM - 10 PM)	Nighttime Hours (10 PM - 7 AM)	Total Percent of ADT Per Vehicle Type
Auto	70.20	10.80	9.00	90.00
Medium	6.16	0.80	1.04	8.00
Heavy	1.50	0.14	0.36	2.00
Total	77.86	11.74	10.40	100.00

South of SR 126

Vehicle Type	Daytime Hours (7 AM - 7 PM)	Evening Hours (7 PM - 10 PM)	Nighttime Hours (10 PM - 7 AM)	Total Percent of ADT Per Vehicle Type
Auto	77.80	9.70	9.70	97.00
Medium	1.60	0.20	0.20	2.00
Heavy	0.80	0.10	0.10	1.00
Total	80.00	10.00	10.00	100.00

Roadway Segment	Distance to left emission line m	Distance to right emission line m	Left lane width m	Right lane width m	Veh./h (d) 1/h	Automobiles/h (d) 1/h	Medium trucks/h (d) 1/h	Heavy trucks/h (d) 1/h	Speed veh. #1 km/h	Commercial	dBA CNEL Residential Single-Family	Residential Multiple Family	Transient Lodging	Golf Course	Recreation Center	School	Church
Franklin Parkway w/o Commerce Center	1.88	1.88	3.75	3.75	255.92	230.33	20.47	5.12	56.33	61.56							
Hasley Canyon Road w/o Old Road	0.00	0.00	3.75	3.75	721.13	649.02	57.69	14.42	72.42	68.78	57.75						
The Old Road n/o Hasley Canyon Road	0.00	0.00	3.75	3.75	658.42	592.58	52.67	13.17	88.51	70.86	43.71						
The Old Road n/o Turnberry	0.00	0.00	3.75	3.75	432.21	388.99	34.58	8.64	88.50	69.03							
The Old Road s/o Valencia	0.00	0.00	3.75	3.75	929.75	901.86	18.60	9.30	80.47	61.23	55.06			58.73			
Valencia Boulevard e/o I-5 NB Ramps	0.00	0.00	3.75	3.75	1607.88	1559.64	32.16	16.08	80.47	57.61							

Roadway network imported from Google Earth Maps via SoundPLAN

2030 No Project Conditions

Traffic Distrubtion as % of ADT

SR 126 and North of SR 126

Vehicle Type	Daytime Hours (7 AM - 7 PM)	Evening Hours (7 PM - 10 PM)	Nighttime Hours (10 PM - 7 AM)	Total Percent of ADT Per Vehicle Type
Auto	70.20	10.80	9.00	90.00
Medium	6.16	0.80	1.04	8.00
Heavy	1.50	0.14	0.36	2.00
Total	77.86	11.74	10.40	100.00

South of SR 126

Vehicle Type	Daytime Hours (7 AM - 7 PM)	Evening Hours (7 PM - 10 PM)	Nighttime Hours (10 PM - 7 AM)	Total Percent of ADT Per Vehicle Type
Auto	77.60	9.70	9.70	97.00
Medium	1.60	0.20	0.20	2.00
Heavy	0.80	0.10	0.10	1.00
Total	80.00	10.00	10.00	100.00

Roadway Segment	Distance to left emission line m	Distance to right emission line m	Left lane width m	Right lane width m	Veh./h (d) 1/h	Automobiles/h (d) 1/h	Medium trucks/h (d) 1/h	Heavy trucks/h (d) 1/h	Speed veh. #1 km/h	dBA CNEL Commercial	Residential Single-Family	Residential Multiple Family	Transient Lodging	Golf Course	Recreation I School	Church
Franklin Parkway w/o Commerce Center	1.88	1.88	3.75	3.75	320.08	288.07	25.61	6.40	56.33	62.53						
Hasley Canyon Road w/o Commerce Center	1.88	1.88	3.75	3.75	445.21	400.69	35.62	8.90	72.42	70.25	59.22					
Henry Mayo Drive w/o Old Road	1.88	1.88	3.75	3.75	380.71	342.64	30.46	7.61	72.42	66.02			66.02			
Magic Mountain w/o Westridge	1.88	1.88	3.75	3.75	1326.96	1194.26	106.16	26.54	56.33			67.2				
The Old Road n/o Hasley Canyon Road	1.88	1.88	3.75	3.75	698.40	628.56	55.87	13.97	88.50	71.12	43.96					
The Old Road n/o Turnberry	0.00	0.00	3.75	3.75	442.42	398.18	35.39	8.85	88.50	69.1						
The Old Road s/o Valencia	0.00	0.00	3.75	3.75	1062.42	1030.55	21.25	10.62	80.47	61.81	55.63			59.31		
Tourney Road n/o Valencia	1.88	1.88	3.75	3.75	208.33	187.50	16.67	4.17	64.37	62.60	49.16			51.46		
Valencia Boulevard e/o I-5 NB Ramps	0.00	0.00	3.75	3.75	2202.13	2136.07	44.04	22.02	80.47	58.98						
Valencia Boulevard e/o Poe	0.00	0.00	3.75	3.75	1161.50	1126.70	23.20	11.60	72.42	69.72		69.72				
Valencia Boulevard e/o Tourney Road	0.00	0.00	3.75	3.75	2685.54	2604.97	53.71	26.86	80.47		45.52				51.52	
Valencia Boulevard w/o Westridge	0.00	0.00	3.75	3.75	1241.25	1117.13	99.30	24.83	80.47		48.29				58.74	41.42
Westridge s/o Magic Mountain	1.88	1.88	3.75	3.75	637.46	618.34	12.75	6.37	56.33		41.59	64.02		64.02		

Roadway network imported from Google Earth Maps via SoundPLAN

2030 Approved Project Conditions

Traffic Distrubtion as % of ADT

SR 126 and North of SR 126

Vehicle Type	Daytime Hours (7 AM - 7 PM)	Evening Hours (7 PM - 10 PM)	Nighttime Hours (10 PM - 7 AM)	Total Percent of ADT Per Vehicle Type
Auto	70.20	10.80	9.00	90.00
Medium	6.16	0.80	1.04	8.00
Heavy	1.50	0.14	0.36	2.00
Total	77.86	11.74	10.40	100.00

South of SR 126

Vehicle Type	Daytime Hours (7 AM - 7 PM)	Evening Hours (7 PM - 10 PM)	Nighttime Hours (10 PM - 7 AM)	Total Percent of ADT Per Vehicle Type
Auto	77.60	9.70	9.70	97.00
Medium	1.60	0.20	0.20	2.00
Heavy	0.80	0.10	0.10	1.00
Total	80.00	10.00	10.00	100.00

Roadway Segment	Distance to left emission line	Distance to right emission lin	Left lane width	Right lane width	Veh./h (d)	Automobiles/h (d)	Medium trucks/h (d)	Heavy trucks/h (d)	Speed veh. #1	dBA CNEL						
	m	m	m	m	1/h	1/h	1/h	1/h	km/h	Commercial	Residential Single-Family	Residential Multiple Family	Transient Lodging	Golf Course	Recreation Center	School	Church
Franklin Parkway w/o Commerce Center	1.88	1.88	3.75	3.75	473.79	426.41	37.90	9.48	56.33	64.23							
Hasley Canyon Road w/o The Old Road	1.88	1.88	3.75	3.75	1051.00	945.90	84.10	21.00	72.42	70.42	59.39						
Henry Mayo Drive w/o Old Road	1.88	1.88	3.75	3.75	348.08	313.27	27.85	6.96	72.42	65.63			65.63				
Magic Mountain w/o Westridge	1.88	1.88	3.75	3.75	1365.88	1324.90	27.32	13.66	56.33			67.33					
The Old Road n/o Hasley Canyon Road	0.00	0.00	3.75	3.75	766.00	689.40	61.28	15.32	88.51	71.52	44.36						
The Old Road n/o Turnberry	0.00	0.00	3.75	3.75	439.67	395.70	35.17	8.79	88.50	69.11							
The Old Road s/o Valencia	0.00	0.00	3.75	3.75	1104.10	1071.00	22.10	11.00	80.47	61.98	55.80			59.50			
Tourney Road n/o Valencia	1.88	1.88	3.75	3.75	229.00	206.10	18.32	4.58	64.37	62.60	49.16			51.46			
Valencia Boulevard e/o I-5 NB Ramps	0.00	0.00	3.75	3.75	2213.38	2146.98	44.27	22.13	80.47	59.00							
Valencia Boulevard e/o Poe	0.00	0.00	3.75	3.75	1168.80	1133.70	23.40	11.70	72.42	69.74		69.74					
Valencia Boulevard e/o Tourney Road	0.00	0.00	3.75	3.75	2697.75	2616.82	53.96	26.98	80.47		45.54					51.58	
Valencia Boulevard w/o Westridge	0.00	0.00	3.75	3.75	1269.75	1231.66	25.40	12.70	80.47		48.39					58.84	41.52
Westridge s/o Magic Mountain	1.88	1.88	3.75	3.75	723.25	701.55	14.47	7.23	56.33		42.13	64.57			64.57		

Roadway network imported from Google Earth Maps via SoundPLAN

2030 with Modified Project Conditions

Traffic Distrubtion as % of ADT

SR 126 and North of SR 126

Vehicle Type	Daytime Hours (7 AM - 7 PM)	Evening Hours (7 PM - 10 PM)	Nighttime Hours (10 PM - 7 AM)	Total Percent of ADT Per Vehicle Type
Auto	70.20	10.80	9.00	90.00
Medium	6.16	0.80	1.04	8.00
Heavy	1.50	0.14	0.36	2.00
Total	77.86	11.74	10.40	100.00

South of SR 126

Vehicle Type	Daytime Hours (7 AM - 7 PM)	Evening Hours (7 PM - 10 PM)	Nighttime Hours (10 PM - 7 AM)	Total Percent of ADT Per Vehicle Type
Auto	77.60	9.70	9.70	97.00
Medium	1.60	0.20	0.20	2.00
Heavy	0.80	0.10	0.10	1.00
Total	80.00	10.00	10.00	100.00

Roadway Segment	Distance to left emission line m	Distance to right emission lin m	Left lane width m	Right lane width m	Veh./h (d) 1/h	Automobiles/h (d) 1/h	Medium trucks/h (d) 1/h	Heavy trucks/h (d) 1/h	Speed veh. #1 km/h	dBA CNEL Commercial	Residential Single-Family	Residential Multiple Family	Transient Lodging	Golf Course	Recreation Center	School	Church
Franklin Parkway w/o Commerce Center	1.88	1.88	3.75	3.75	476.63	428.97	38.13	9.53	56.33	64.26							
Hasley Canyon Road w/o The Old Road	1.88	1.88	3.75	3.75	1062.50	956.20	85.00	21.20	72.42	70.46	59.43						
Henry Mayo Drive w/o Old Road	1.88	1.88	3.75	3.75	348.17	313.35	27.85	6.96	72.42	65.63			65.63				
Magic Mountain w/o Westridge	1.88	1.88	3.75	3.75	1374.63	1333.39	27.49	13.75	56.33			67.35					
The Old Road n/o Hasley Canyon Road	0.00	0.00	3.75	3.75	768.21	691.39	61.46	15.36	88.51	71.53	44.38						
The Old Road n/o Turnberry	0.00	0.00	3.75	3.75	441.63	397.47	35.33	8.83	88.50	69.13							
The Old Road s/o Valencia	0.00	0.00	3.75	3.75	1110.80	1077.50	22.20	11.10	80.47	62.01	55.83			59.53			
Tourney Road n/o Valencia	1.88	1.88	3.75	3.75	230.00	207.00	18.40	4.60	64.37	62.62	49.17			51.48			
Valencia Boulevard e/o I-5 NB Ramps	0.00	0.00	3.75	3.75	2218.08	2151.54	44.36	22.18	80.47	59.01							
Valencia Boulevard e/o Poe	0.00	0.00	3.75	3.75	1169.10	1134.00	23.40	11.70	72.42	69.74		69.74					
Valencia Boulevard e/o Tourney Road	0.00	0.00	3.75	3.75	2700.79	2619.77	54.02	27.01	80.47		45.54					51.59	
Valencia Boulevard w/o Westridge	0.00	0.00	3.75	3.75	1269.75	1231.66	25.40	12.70	80.47		48.40					58.86	41.53
Westridge s/o Magic Mountain	1.88	1.88	3.75	3.75	724.08	702.36	14.48	7.24	56.33		42.14	64.57			64.57		

Roadway network imported from Google Earth Maps via SoundPLAN

APPENDIX C

Construction Noise Worksheets

ES Grading (Indirect)

Receiver	Hourly/dB(A)
Westridge School (Site 2)	65.62
Mission Village (Site 3)	78.18
School/Residential - VCC (Site 5)	51.54
Residential - Hasley Canyon (Site 6)	48.48
Higher Vision Church (Site 7)	57.65
Travel Village (Site 4)	57.43
Westridge Residential (Site 1)	70.69

	Quantity	50 feet Leq 1-hour
Tractors (Crawler)	3	84.8
Excavators	2	79.7
Graders	2	84
Water Trucks (Other Material Handling Equ	4	88
Off-Highway Trucks	2	74
Rubber Tired Dozers	2	80.7
Scrapers	6	87.4

Lmax = 83.0

Maximum Concurrent Equipment Noise Level	84.5

Note: Based on information provided by the Applicant, the ES Grading (Indirect) construction phase would occur between 12/2/2024 and 4/3/2026.

ES Improvements (Storm Drains)

Receiver	Hourly/dB(A)
Westridge School (Site 2)	62.82
Mission Village (Site 3)	75.38
School/Residential - VCC (Site 5)	48.74
Residential - Hasley Canyon (Site 6)	45.68
Higher Vision Church (Site 7)	54.85
Travel Village (Site 4)	54.63
Westridge Residential (Site 1)	67.87

	Quantity	50 feet Leq 1-hour	
Crane	3	77.4	
Excavators	3	81.5	
Graders	3	85.8	
Rollers	3	77.8	
Rubber Tired Loaders	3	79.9	

Lmax = 81.6

Maximum Concurrent Equipment Noise Level	81.7

Note: Based on information provided by the Applicant, the ES Improvements (Storm Drains) construction phase would occur between 4/6/2026 and 8/21/2026.

ES Improvements (Sewers)

Receiver	Hourly/dB(A)
Westridge School (Site 2)	61.22
Mission Village (Site 3)	73.78
School/Residential - VCC (Site 5)	47.14
Residential - Hasley Canyon (Site 6)	44.08
Higher Vision Church (Site 7)	53.25
Travel Village (Site 4)	53.03
Westridge Residential (Site 1)	66.27

	Quantity	50 feet Leq 1-hour	
Bore/Drill Rigs	3	82.1	
Cranes	3	77.4	
Excavators	3	81.5	
Rollers	3	77.8	
Rubber Tired Loaders	3	79.9	

Lmax = 81.4

Maximum Concurrent Equipment Noise Level	80.1

Note: Based on information provided by the Applicant, the ES Improvements (Sewers) construction phase would occur between 6/1/2026 and 4/2/2027.

ES Improvements (Water)

Receiver	Hourly/dB(A)
Westridge School (Site 2)	60.62
Mission Village (Site 3)	73.18
School/Residential - VCC (Site 5)	46.54
Residential - Hasley Canyon (Site 6)	43.48
Higher Vision Church (Site 7)	52.65
Travel Village (Site 4)	52.43
Westridge Residential (Site 1)	65.67

	Quantity	50 feet Leq 1-hour	
Crane	3	77.4	
Excavators	3	81.5	
Rollers	3	77.8	
Rubber Tired Loaders	3	79.9	
	Lmax = 80.1		
	Maximum Concurrent Equipment Noise Level		79.5

Note: Based on information provided by the Applicant, the ES Improvements (Water) construction phase would occur between 8/24/2026 and 4/2/2027.

ES Improvements (Streets Year 1)

Receiver	Hourly/dB(A)
Westridge School (Site 2)	64.12
Mission Village (Site 3)	76.68
School/Residential - VCC (Site 5)	50.04
Residential - Hasley Canyon (Site 6)	46.98
Higher Vision Church (Site 7)	56.15
Travel Village (Site 4)	55.93
Westridge Residential (Site 1)	69.17

	Quantity	50 feet Leq 1-hour
Graders	3	85.8
Pavers	3	79
Rollers	3	77.8
Scrapers	3	84.4

Lmax 82.4

Maximum Concurrent Equipment Noise Level	83.0

Note: Based on information provided by the Applicant, the ES Improvements (Streets) construction phase would occur between 4/5/2027 and 4/30/2027.

ES Paving

Receiver	Hourly/dB(A)
Westridge School (Site 2)	61.92
Mission Village (Site 3)	74.48
School/Residential - VCC (Site 5)	47.84
Residential - Hasley Canyon (Site 6)	44.78
Higher Vision Church (Site 7)	53.95
Travel Village (Site 4)	53.73
Westridge Residential (Site 1)	66.97

	Quantity	50 feet Leq 1-hour	
Pavers	1	74.2	
Paving Equipment	2	85.5	
Rollers	2	76	
Cement and Mortar Mixers	2	77.8	
	Lmax = 80.0		
	Maximum Concurrent Equipment Noise Level		80.8

Note: Based on information provided by the Applicant, the ES Paving construction phase would occur between 5/3/2027 and 4/28/2028.

ES Building Construction

Receiver	Hourly/dB(A)
Westridge School (Site 2)	63.52
Mission Village (Site 3)	76.08
School/Residential - VCC (Site 5)	49.44
Residential - Hasley Canyon (Site 6)	46.38
Higher Vision Church (Site 7)	55.55
Travel Village (Site 4)	55.33
Westridge Residential (Site 1)	68.57

	Quantity	50 feet Leq 1-hour
Cranes	2	75.6
Forklifts	3	86.8
Generator Sets	2	80.6
Tractors/Loaders/Backhoes	2	83
Welders	3	74.8

Lmax = 82.2

Maximum Concurrent Equipment Noise Level	82.4

Note: Based on information provided by the Applicant, the ES Building Construction phase would occur between 5/1/2027 and 12/31/2032.

ES Building Construction

Receiver	Hourly/dB(A)
Westridge School (Site 2)	54.82
Mission Village (Site 3)	67.38
School/Residential - VCC (Site 5)	40.74
Residential - Hasley Canyon (Site 6)	37.68
Higher Vision Church (Site 7)	46.85
Travel Village (Site 4)	46.63
Westridge Residential (Site 1)	59.87

	Quantity	50 feet Leq 1-hour	
Air Compressor	1	73.7	

Lmax = 77.7

Maximum Concurrent Equipment Noise Level	73.7

Note: Based on information provided by the Applicant, the ES Architectural Coating construction phase would occur between 9/4/2027 and 12/31/2032.

VCC Grading (Direct)

Receiver	Hourly/dB(A)
Westridge School (Site 2)	43.46
Mission Village (Site 3)	52.82
School/Residential - VCC (Site 5)	74.10
Residential - Hasley Canyon (Site 6)	60.45
Higher Vision Church (Site 7)	62.37
Travel Village (Site 4)	66.86
Westridge Residential (Site 1)	45.18

	Quantity	50 feet Leq 1-hour
Tractors (Crawler)	2	83
Excavators	1	76.7
Graders	2	84
Water Trucks (Other Material Handling Equipm	2	85
Rollers	2	76
Off-Highway Trucks	1	71
Rubber Tired Dozers	1	77.7
Rubber Tired Loaders	1	75.1
Scrapers	4	85.6

Lmax = 82.8

Maximum Concurrent Equipment Noise Level	81.7

Note: Based on information provided by the Applicant, the VCC Grading (Direct) construction phase would occur between 12/1/2024 and 6/27/2025.

VCC Grading (Indirect)

Receiver	Hourly/dB(A)
Westridge School (Site 2)	43.56
Mission Village (Site 3)	52.74
School/Residential - VCC (Site 5)	65.14
Residential - Hasley Canyon (Site 6)	59.32
Higher Vision Church (Site 7)	62.54
Travel Village (Site 4)	66.39
Westridge Residential (Site 1)	45.12

	Quantity	50 feet Leq 1-hour	
Tractors (Crawler)	2	83	
Excavators	1	76.7	
Graders	1	81	
Water Trucks (Other Material Handling Equip	2	85	
Off-Highway Trucks	1	71	
Rubber Tired Dozers	1	77.7	
Scrapers	4	85.6	
	Lmax = 83.0		
	Maximum Concurrent Equipment Noise Level		82.1

Note: Based on information provided by the Applicant, the VCC Grading (Indirect) construction phase would occur between 12/2/2024 and 3/20/2026.

VCC Improvements (Storm Drains)

Receiver	Hourly/dB(A)
Westridge School (Site 2)	38.36
Mission Village (Site 3)	47.54
School/Residential - VCC (Site 5)	59.94
Residential - Hasley Canyon (Site 6)	54.12
Higher Vision Church (Site 7)	57.34
Travel Village (Site 4)	61.19
Westridge Residential (Site 1)	39.92

	Quantity	50 feet Leq 1-hour
Crane	1	72.6
Excavators	1	76.7
Graders	1	81
Rollers	1	73
Rubber Tired Loaders	1	75.1

Lmax = 81.6

Maximum Concurrent Equipment Noise Level	76.9

Note: Based on information provided by the Applicant, the VCC Improvements (Storm Drains) construction phase would occur between 5/26/2025 and 9/19/2025.

VCC Improvements (Sewers)

Receiver	Hourly/dB(A)
Westridge School (Site 2)	37.86
Mission Village (Site 3)	47.04
School/Residential - VCC (Site 5)	59.44
Residential - Hasley Canyon (Site 6)	53.62
Higher Vision Church (Site 7)	56.84
Travel Village (Site 4)	60.69
Westridge Residential (Site 1)	39.42

	Quantity	50 feet Leq 1-hour
Bore/Drill Rigs	1	77.4
Cranes	1	72.6
Excavators	2	79.7
Rollers	1	73
Rubber Tired Loaders	1	75.1

Lmax = 81.4

Maximum Concurrent Equipment Noise Level	76.4

Note: Based on information provided by the Applicant, the VCC Improvements (Sewers) construction phase would occur between 9/22/2025 and 5/1/2026.

VCC Improvements (Water)

Receiver	Hourly/dB(A)
Westridge School (Site 2)	38.16
Mission Village (Site 3)	47.34
School/Residential - VCC (Site 5)	59.74
Residential - Hasley Canyon (Site 6)	53.92
Higher Vision Church (Site 7)	57.14
Travel Village (Site 4)	60.99
Westridge Residential (Site 1)	39.72

	Quantity	50 feet Leq 1-hour
Crane	1	72.6
Excavators	1	76.7
Rubber Tired Loaders	1	75.1
Scrapers	1	79.6

Lmax = 81.3

Maximum Concurrent Equipment Noise Level	76.7

Note: Based on information provided by the Applicant, the VCC Improvements (Water) construction phase would occur between 5/4/2026 and 9/18/2026.

VCC Improvements (Streets)

Receiver	Hourly/dB(A)
Westridge School (Site 2)	39.66
Mission Village (Site 3)	48.84
School/Residential - VCC (Site 5)	61.24
Residential - Hasley Canyon (Site 6)	55.42
Higher Vision Church (Site 7)	58.64
Travel Village (Site 4)	62.49
Westridge Residential (Site 1)	41.22

	Quantity	50 feet Leq 1-hour
Graders	1	81
Pavers	1	74.2
Rollers	1	73
Scrapers	1	79.6

Lmax 82.4

Maximum Concurrent Equipment Noise Level	78.2

Note: Based on information provided by the Applicant, the VCC Improvements (Streets) construction phase would occur between 9/21/2026 and 10/16/2026.

VCC Paving

Receiver	Hourly/dB(A)
Westridge School (Site 2)	42.96
Mission Village (Site 3)	52.14
School/Residential - VCC (Site 5)	64.54
Residential - Hasley Canyon (Site 6)	58.72
Higher Vision Church (Site 7)	61.94
Travel Village (Site 4)	65.79
Westridge Residential (Site 1)	44.52

	Quantity	50 feet Leq 1-hour	
Pavers	1	74.2	
Paving Equipment	2	85.5	
Rollers	2	76	
	Lmax = 80.0		
	Maximum Concurrent Equipment Noise Level		81.5

Note: Based on information provided by the Applicant, the VCC Paving construction phase would occur between 10/5/2026 and 2/26/2027.

VCC Building Construction

Receiver	Hourly/dB(A)
Westridge School (Site 2)	42.26
Mission Village (Site 3)	51.44
School/Residential - VCC (Site 5)	63.84
Residential - Hasley Canyon (Site 6)	58.02
Higher Vision Church (Site 7)	61.24
Travel Village (Site 4)	65.09
Westridge Residential (Site 1)	43.82

	Quantity	50 feet Leq 1-hour	
Cranes	1	72.6	
Forklifts	2	85	
Generator Sets	1	77.6	
Tractors/Loaders/Backhoes	2	83	
Welders	1	70.0	
	Lmax = 82.2		
	Maximum Concurrent Equipment Noise Level		80.8

Note: Based on information provided by the Applicant, the VCC Building Construction phase would occur between 10/6/2025 and 12/31/2032.

VCC Architectural Coating

Receiver	Hourly/dB(A)
Westridge School (Site 2)	35.16
Mission Village (Site 3)	44.34
School/Residential - VCC (Site 5)	56.74
Residential - Hasley Canyon (Site 6)	50.92
Higher Vision Church (Site 7)	54.14
Travel Village (Site 4)	57.99
Westridge Residential (Site 1)	36.72

	Quantity	50 feet Leq 1-hour	
Air Compressor	1		73.7

Lmax = 77.7

Maximum Concurrent Equipment Noise Level	73.7

Note: Based on information provided by the Applicant, the VCC Architectural Coating construction phase would occur between 2/2/2026 and 12/31/2032.

APPENDIX D

Analysis of On-Site Construction Equipment -- Individual Receptor Locations

ON-SITE CONSTRUCTION EQUIPMENT NOISE BY PLANNING AREA

Entrada South

Construction within the Entrada South Planning Area would include the following construction phases: grading, infrastructure improvements (e.g., street construction and the installation of sewers, storm drains, and water lines), building construction, and the application of architectural coatings. Based on the Modified Project's construction schedule, there is also a potential for these construction phases to occur concurrently.

Provided below is the analysis of construction noise levels for both the individual construction phases and during the periods when the Entrada South construction phases could potentially occur concurrently.

Receptor 1: Westridge Residential

Table D-1: Noise Impacts Associated with On-Site Construction Activities - Entrada South Receptor 1: Westridge Residential, presents the forecasted construction noise levels at the single-family residential uses along Westridge Parkway at the southern boundary of the Mission Village site. As shown in Table D-1, construction noise levels would range from a low of 59.87 dBA (Leq-1hour) during the architectural coating phase to a high of 70.69 dBA (Leq-1hour) during the grading – indirect phase. Construction noise levels would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment. However, construction noise levels would exceed the single-family residential significance threshold of 60 dBA for stationary construction equipment by a maximum of 10.69 dBA (Leq-1hour) without the implementation of mitigation measures. As a result, a less than significant construction noise impact would occur based on the mobile construction equipment significance threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment significance threshold.

As mentioned previously, there is a potential for the Entrada South construction phases to occur concurrently. As shown in Table D-1, concurrent construction phase noise levels would range from a low of 68.99 dBA (Leq-1hour) during the improvements – sewers and improvements - water construction phases to a high of 71.19 dBA (Leq-1hour) during the paving, building construction, and architectural coating phases. Noise levels during potential concurrent construction phases would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment. However, construction noise levels would exceed the single-family residential significance threshold of 60 dBA for stationary construction equipment by a maximum of 11.19 dBA (Leq-1hour) without the implementation of mitigation measures. As a result, a less than significant construction noise impact would occur based on the mobile construction equipment significance threshold, whereas a potentially significant

construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment significance threshold.

Mitigation Measure MM N-1 requires the use of optimal muffler systems on all equipment which would achieve a reduction of 10 dBA or more. This mitigation measure implements the requirements set forth in County Code Section 12.08.440.C. Conservatively, this analysis assumes a reduction of 10 dBA for the use of optimal muffler systems on all equipment. Mitigation Measure MM N-1 would also require the following: (1) ensure all construction equipment is properly maintained such that no additional noise due to worn or improperly maintained parts is generated; and (2) ensure all construction equipment incorporates features that dampen metal surfaces and minimize metal-to-metal contact such that a noise reduction of up to 5 dBA is achieved.[1] Conservatively, this analysis assumes a reduction of 3 dBA for the use of modified equipment. These combined measures would reduce construction noise levels by a minimum of 13 dBA. In addition, implementation of Mitigation Measure MM N-2 would result in additional reductions in construction noise levels that have conservatively not been quantified for purposes of this analysis. Mitigation Measure MM N-2 specifically would require the following: (1) implement appropriate noise reduction measures when construction operations occur adjacent to off-site occupied residential areas; (2) locate staging areas on-site to maximize the distance between staging areas and off-site occupied residential uses; (3) implement feasible noise attenuation measures around stationary construction noise sources; and (4) use electric air compressors and similar power tools when feasible. Thus, to provide a conservative analysis, a 13 dBA reduction in construction noise levels is used in this analysis and serves as a conservative forecast of the reduction in construction noise levels that would occur with implementation of the Modified Project's construction noise mitigation measures.

As shown in Table D-1, implementation of Mitigation Measure MM N-1 would result in construction noise levels to range from a low of 46.87 dBA (Leq-1hour) during the architectural coating phase to a high of 57.69 dBA (Leq-1hour) during the grading – indirect phase. Additionally, potential concurrent construction phase noise levels would range from a low of 55.99 dBA (Leq-1hour) during the improvements – sewers and improvements - water construction phases to a high of 58.19 dBA (Leq-1hour) during the paving, building construction, and architectural coating phases. Construction noise levels with the implementation of Mitigation Measure MM N-1 would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment and the 60 dBA threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur with the implementation of Mitigation Measure MM N-1. In addition, forecasted construction noise levels would be further reduced with implementation of Mitigation Measures MM N-2 and MM N-4. Thus,

1 FHWA, Special Report—Measurement, Prediction, and Mitigation, updated June 2017, accessed December 2021, https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm.

the Modified Project with the implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-1
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH
RECEPTOR 1: WESTRIDGE RESIDENTIAL

Construction Phase	Calculated Noise Level	Significance Threshold		Potentially Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
Individual Construction Phase								
Grading - Indirect	70.69	75	60	No	Yes	57.69	No	No
Improvements - Sewer	66.27	75	60	No	Yes	53.27	No	No
Improvements - Storm Drains	67.87	75	60	No	Yes	54.87	No	No
Improvements - Water	65.67	75	60	No	Yes	52.67	No	No
Improvements - Streets	69.17	75	60	No	Yes	56.17	No	No
Paving	66.97	75	60	No	Yes	53.97	No	No
Building Construction	68.57	75	60	No	Yes	55.57	No	No
Architectural Coating	59.87	75	60	No	No	46.87	No	No
Potential Concurrent Construction Phases								
1. Improvements - Sewers & Improvements - Storm Drains	70.15	75	60	No	Yes	57.15	No	No
2. Improvements - Sewers & Improvements - Water	68.99	75	60	No	Yes	55.99	No	No
3. Paving & Building Construction	70.85	75	60	No	Yes	57.85	No	No
4. Paving & Building Construction & Architectural Coating	71.19	75	60	No	Yes	58.19	No	No
5. Building Construction & Architectural Coating	69.12	75	60	No	Yes	56.12	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 2: Westridge School

Table D-2: Noise Impacts Associated with On-Site Construction Activities - Entrada South Receptor 2: Westridge School, presents the forecasted construction noise levels at Oak Hills Elementary School located at Old Rock Road and Westridge Parkway. Based on the land use categories set forth in the County's construction noise standards, schools are classified as single-family residential.[2] As shown in Table D-2, construction noise levels would range from a low of 54.82 dBA (Leq-1hour) during the architectural coating phase to a high of 65.62 dBA (Leq-1hour) during the grading – indirect phase. Construction noise levels would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment. However, construction noise levels would exceed the single-family residential significance threshold of 60 dBA for stationary construction equipment by a maximum of 5.62 dBA (Leq-1hour) without the implementation of mitigation measures. As a result, a less than significant construction noise impact would occur based on the mobile construction equipment significance threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment significance threshold.

As mentioned previously, there is a potential for the Entrada South construction phases to occur concurrently. As shown in Table D-2, noise levels during potential concurrent construction phases would range from a low of 63.94 dBA (Leq-1hour) during the improvements – sewers and improvements - water construction phases to a high of 66.14 dBA (Leq-1hour) during the paving, building construction, and architectural coating phases. Noise levels during potential concurrent construction phases would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment. However, construction noise levels would exceed the single-family residential significance threshold of 60 dBA for stationary construction equipment by a maximum of 6.14 dBA (Leq-1hour) without the implementation of mitigation measures. As a result, a less than significant construction noise impact would occur based on the mobile construction equipment significance threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment significance threshold.

2 County of Los Angeles Ordinance No. 11743 Section 12.08.440 (County Noise Ordinance) provides exterior noise standards for four land use types: (1) single-family residential = 60 dBA; (2) multi-family residential = 65 dBA; (3) semi-residential/commercial = 70 dBA; and (4) business structures = 85 dBA. Since the County's Noise Ordinance does not set forth a specific standard for schools, this analysis conservatively assumes the lowest noise standard of 60 dBA for assessing construction noise impacts to schools.

As explained above, construction noise levels would be reduced by 13 dBA with implementation of Mitigation Measure MM N-1. As shown in Table D-2, implementation of this mitigation measure would result in construction noise levels to range from a low of 41.82 dBA (Leq-1hour) during the architectural coating phase to a high of 52.62 dBA (Leq-1hour) during the grading – indirect phase. Additionally, noise levels during potential concurrent construction phases would range from a low of 50.94 dBA (Leq-1hour) during the improvements – sewers and improvements - water construction phases to a high of 53.14 dBA (Leq-1hour) during the paving, building construction, and architectural coating phases. Construction noise levels would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment and the 60 dBA threshold for stationary construction equipment with implementation of Mitigation Measure MM N-1. In addition, forecasted construction noise levels would be further reduced with implementation of Mitigation Measures MM N-2 and MM N-4. As a result, a less than significant construction noise impact would occur. Thus, the Modified Project with the implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-2
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH
RECEPTOR 2: WESTRIDGE SCHOOL

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
Individual Construction Phase								
Grading - Indirect	65.62	75	60	No	Yes	52.62	No	No
Improvements - Sewer	61.22	75	60	No	Yes	48.22	No	No
Improvements - Storm Drains	62.82	75	60	No	Yes	49.82	No	No
Improvements - Water	60.62	75	60	No	Yes	47.62	No	No
Improvements - Streets	64.12	75	60	No	Yes	51.12	No	No
Paving	61.92	75	60	No	Yes	48.92	No	No
Building Construction	63.52	75	60	No	Yes	50.52	No	No
Architectural Coating	54.82	75	60	No	No	41.82	No	No
Potential Concurrent Construction Phases								
1. Improvements - Sewers & Improvements - Storm Drains	65.10	75	60	No	Yes	52.10	No	No
2. Improvements - Sewers & Improvements - Water	63.94	75	60	No	Yes	50.94	No	No
3. Paving & Building Construction	65.80	75	60	No	Yes	52.80	No	No
4. Paving & Building Construction & Architectural Coating	66.14	75	60	No	Yes	53.14	No	No
5. Building Construction & Architectural Coating	64.07	75	60	No	Yes	51.07	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 3: Mission Village

Table D-3: Noise Impacts Associated with On-Site Construction Activities - Entrada South Receptor 3: Mission Village, presents the forecasted construction noise levels at the Mission Village development. As shown in Table D-3, construction noise levels would range from a low of 67.38 dBA (Leq-1hour) during the architectural coating phase to a high of 78.18 dBA (Leq-1hour) during the grading – indirect phase. Construction noise levels would not exceed the semi-residential/commercial significance threshold of 85 dBA for mobile construction equipment. However, construction noise levels would exceed the semi-residential/commercial significance threshold of 70 dBA for stationary construction equipment by a maximum of 8.18 dBA (Leq-1hour) without the implementation of mitigation measures. As a result, a less than significant construction noise impact would occur based on the mobile construction equipment significance threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment significance threshold.

As mentioned previously, there is a potential for the Entrada South construction phases to occur concurrently. As shown in Table D-3, noise levels during potential concurrent construction phases would range from a low of 75.50 dBA (Leq-1hour) during the improvements – sewers and improvements - water construction phases to a high of 78.70 dBA (Leq-1hour) during the paving, building construction and architectural coating phases. Noise levels during potential concurrent construction phases would not exceed the semi-residential/commercial significance threshold of 85 dBA for mobile construction equipment. However, construction noise levels would exceed the semi-residential/commercial significance threshold of 70 dBA for stationary construction equipment by a maximum of 8.70 dBA (Leq-1hour) without the implementation of mitigation measures. As a result, a less than significant construction noise impact would occur based on the mobile construction equipment significance threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment significance threshold.

As explained above, construction noise levels would be reduced by 13 dBA with implementation of Mitigation Measure MM N-1. As shown in Table D-3, implementation of this mitigation measure would result in construction noise levels to range from a low of 54.38 dBA (Leq-1hour) during the architectural coating phase to a high of 65.18 dBA (Leq-1hour) during the grading – indirect phase. Additionally, noise levels during potential concurrent construction phases would range from a low of 63.50 dBA (Leq-1hour) during the improvements – sewers and improvements - water construction phases to a high of 65.70 dBA (Leq-1hour) during the paving, building construction, and architectural coating phases. Construction noise levels would not exceed the semi-residential/commercial significance threshold of 85 dBA for mobile construction equipment and the 70 dBA threshold for stationary construction equipment with implementation of Mitigation Measure MM N-1. In addition, forecasted construction noise levels would

be further reduced with implementation of Mitigation Measures MM N-2 and MM N-4. As a result, a less than significant construction noise impact would occur. Thus, the Modified Project with the implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-3
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH
RECEPTOR 3: MISSION VILLAGE

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
Individual Construction Phase								
Grading - Indirect	78.18	85	70	No	Yes	65.18	No	No
Improvements - Sewer	73.78	85	70	No	Yes	60.78	No	No
Improvements - Storm Drains	75.38	85	70	No	Yes	62.38	No	No
Improvements - Water	73.18	85	70	No	Yes	60.18	No	No
Improvements - Streets	76.68	85	70	No	Yes	63.68	No	No
Paving	74.48	85	70	No	Yes	61.48	No	No
Building Construction	76.08	85	70	No	Yes	63.08	No	No
Architectural Coating	67.38	85	70	No	No	54.38	No	No
Potential Concurrent Construction Phases								
1. Improvements - Sewers & Improvements - Storm Drains	77.66	85	70	No	Yes	64.66	No	No
2. Improvements - Sewers & Improvements - Water	76.50	85	70	No	Yes	63.50	No	No
3. Paving & Building Construction	78.36	85	70	No	Yes	65.36	No	No
4. Paving & Building Construction & Architectural Coating	78.70	85	70	No	Yes	65.70	No	No

TABLE D-3
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH
RECEPTOR 3: MISSION VILLAGE

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
5. Building Construction & Architectural Coating	76.63	85	70	No	Yes	63.63	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 4: Travel Village

Table D-4: Noise Impacts Associated with On-Site Construction Activities - Entrada South Receptor 4: Travel Village, presents the forecasted construction noise levels at the recreational vehicle park known as Travel Village. Based on the land use categories set forth in the County's construction noise standards, Travel Village is classified as semi-residential/commercial.[3] As shown in Table D-4, construction noise levels would range from a low of 46.63 dBA (Leq-1hour) during the architectural coating phase to a high of 57.43 dBA (Leq-1hour) during the grading – indirect phase. Construction noise levels would not exceed the semi-residential/commercial significance threshold of 85 dBA for mobile construction equipment or the 70 dBA threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures.

As mentioned previously, there is a potential for the Entrada South construction phases to occur concurrently. As shown in Table D-4, noise levels during potential concurrent construction phases would range from a low of 55.75 dBA (Leq-1hour) during the improvements – sewers and improvements - water construction phases to a high of 57.95 dBA (Leq-1hour) during the paving, building construction, and architectural coating phases. Noise levels during potential concurrent construction phases would not exceed the semi-residential/commercial significance threshold of 85 dBA for mobile construction equipment or the 70 dBA significance threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures. In addition, implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 would further reduce the less than significant construction noise impacts attributable to development within the Entrada South Planning Area at the Travel Village noise receptor. Thus, the Modified Project is not expected to result in a new significant impact compared to the 2017 Approved Project.

3 County of Los Angeles Ordinance No. 11743 Section 12.08.440 (County Noise Ordinance) provides exterior noise standards for four land use types: (1) single-family residential = 60 dBA; (2) multi-family residential = 65 dBA; (3) semiresidential/commercial = 70 dBA; and (4) business structures = 85 dBA. Since the County's Noise Ordinance does not set forth a specific standard for recreational vehicle parks, this analysis assumes the noise standard of 70 dBA for semi-residential/commercial uses for assessing construction noise impacts to recreational vehicle parks.

TABLE D-4
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH
RECEPTOR 4: TRAVEL VILLAGE

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
Individual Construction Phase								
Grading - Indirect	57.43	85	70	No	No	44.43	No	No
Improvements - Sewer	53.03	85	70	No	No	40.03	No	No
Improvements - Storm Drains	54.63	85	70	No	No	41.63	No	No
Improvements - Water	52.43	85	70	No	No	39.43	No	No
Improvements - Streets	55.93	85	70	No	No	42.93	No	No
Paving	53.73	85	70	No	No	40.73	No	No
Building Construction	55.33	85	70	No	No	42.33	No	No
Architectural Coating	46.63	85	70	No	No	33.63	No	No
Potential Concurrent Construction Phases								
1. Improvements - Sewers & Improvements - Storm Drains	56.91	85	70	No	No	43.91	No	No
2. Improvements - Sewers & Improvements - Water	55.75	85	70	No	No	42.75	No	No
3. Paving & Building Construction	57.61	85	70	No	No	44.61	No	No
4. Paving & Building Construction & Architectural Coating	57.95	85	70	No	No	44.95	No	No
5. Building Construction & Architectural Coating	55.88	85	70	No	No	42.88	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 5: School/Residential North of Valencia Commerce Center Planning Area

Table D-5: Noise Impacts Associated with On-Site Construction Activities - Entrada South Receptor 5: School/Residential North of Valencia Commerce Center Planning Area, presents the forecasted construction noise levels at the Live Oak Elementary School and single-family residential area north of the Valencia Commerce Center Planning Area. Based on the land use categories set forth in the County's construction noise standards, this area is classified as single-family residential. As shown in Table D-5, construction noise levels would range from a low of 40.74 dBA (Leq-1hour) during the architectural coating phase to a high of 51.54 dBA (Leq-1hour) during the grading – indirect phase. Construction noise levels would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment types or the 60 dBA threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures.

As mentioned previously, there is a potential for the Entrada South construction phases to occur concurrently. As shown in Table D-5, noise levels during potential concurrent construction phases would range from a low of 49.86 dBA (Leq-1hour) during the improvements – sewers and improvements - water construction phases to a high of 52.06 dBA (Leq-1hour) during the paving, building construction, and architectural coating phases. Noise levels during potential concurrent construction phases would not exceed the single-family significance threshold of 75 dBA for mobile construction equipment or the 60 dBA significance threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures. In addition, implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 would further reduce the less than significant construction noise impacts attributable to development within the Entrada South Planning Area at this noise receptor. Thus, the Modified Project is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-5
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH
RECEPTOR 5: SCHOOL/RESIDENTIAL NORTH OF VALENCIA COMMERCE CENTER PLANNING AREA

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
Individual Construction Phase								
Grading - Indirect	51.54	75	60	No	No	38.54	No	No
Improvements - Sewer	47.14	75	60	No	No	34.14	No	No
Improvements - Storm Drains	48.74	75	60	No	No	35.74	No	No
Improvements - Water	46.54	75	60	No	No	33.54	No	No
Improvements - Streets	50.04	75	60	No	No	37.04	No	No
Paving	47.84	75	60	No	No	34.84	No	No
Building Construction	49.44	75	60	No	No	36.44	No	No
Architectural Coating	40.74	75	60	No	No	27.74	No	No
Potential Concurrent Construction Phases								
1. Improvements - Sewers & Improvements - Storm Drains	51.02	75	60	No	No	38.02	No	No
2. Improvements - Sewers & Improvements - Water	49.86	75	60	No	No	36.86	No	No
3. Paving & Building Construction	51.72	75	60	No	No	38.72	No	No
4. Paving & Building Construction & Architectural Coating	52.06	75	60	No	No	39.06	No	No
5. Building Construction & Architectural Coating	49.99	75	60	No	No	36.99	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 6: Residential Along Hasley Canyon West of The Old Road

Table D-6: Noise Impacts Associated with On-Site Construction Activities - Entrada South Receptor 6: Residential Along Hasley Canyon West of The Old Road, presents the forecasted construction noise levels at the single-family residential area north of the Valencia Commerce Center Planning Area along Hasley Canyon Road west of The Old Road. As shown in Table D-6, construction noise levels would range from a low of 37.68 dBA (Leq-1hour) during the architectural coating phase to a high of 48.48 dBA (Leq-1hour) during the grading – indirect phase. Construction noise levels would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment or the 60 dBA threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures.

As mentioned previously, there is a potential for the Entrada South construction phases to occur concurrently. As shown in Table D-6, noise levels during potential concurrent construction phases would range from a low of 46.80 dBA (Leq-1hour) during the improvements – sewers and improvements - water construction phases to a high of 49.00 dBA (Leq-1hour) during the paving, building construction, and architectural coating phases. Noise levels during potential concurrent construction phases would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment or the 60 dBA significance threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures. In addition, implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 would further reduce the less than significant construction noise impacts attributable to development within the Entrada South Planning Area at this noise receptor. Thus, the Modified Project is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-6
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH
RECEPTOR 6: RESIDENTIAL ALONG HASLEY CANYON WEST OF THE OLD ROAD

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
Individual Construction Phase								
Grading - Indirect	48.48	75	60	No	No	35.48	No	No
Improvements - Sewer	44.08	75	60	No	No	31.08	No	No
Improvements - Storm Drains	45.68	75	60	No	No	32.68	No	No
Improvements - Water	43.48	75	60	No	No	30.48	No	No
Improvements - Streets	46.98	75	60	No	No	33.98	No	No
Paving	44.78	75	60	No	No	31.78	No	No
Building Construction	46.38	75	60	No	No	33.38	No	No
Architectural Coating	37.68	75	60	No	No	24.68	No	No
Potential Concurrent Construction Phases								
1. Improvements - Sewers & Improvements - Storm Drains	47.96	75	60	No	No	34.96	No	No
2. Improvements - Sewers & Improvements - Water	46.80	75	60	No	No	33.80	No	No
3. Paving & Building Construction	48.66	75	60	No	No	35.66	No	No
4. Paving & Building Construction & Architectural Coating	49.00	75	60	No	No	36.00	No	No
5. Building Construction & Architectural Coating	46.93	75	60	No	No	33.93	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 7: Place of Worship

Table D-7: Noise Impacts Associated with On-Site Construction Activities - Entrada South Receptor 7: Place of Worship, presents the forecasted construction noise levels at the commercial center located at the corner of The Old Road and Henry Mayo Drive which includes the Higher Vision Church. Based on the land use categories set forth in the County's construction noise standards, this commercial center and the Higher Vision Church is classified as semi-residential/commercial. As shown in Table D-7, construction noise levels would range from a low of 46.85 dBA (Leq-1hour) during the architectural coating phase to a high of 57.65 dBA (Leq-1hour) during the grading – indirect phase. Construction noise levels would not exceed the semi-residential/commercial significance threshold of 85 dBA for mobile construction equipment or the 70 dBA threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures.

As mentioned previously, there is a potential for the Entrada South construction phases to occur concurrently. As shown in Table D-7, noise levels during potential concurrent construction phases would range from a low of 55.97 dBA (Leq-1hour) during the improvements – sewers and improvements - water construction phases to a high of 58.17 dBA (Leq-1hour) during the paving, building construction, and architectural coating phases. Noise levels during potential concurrent construction phases would not exceed the semi-residential/commercial significance threshold of 85 dBA for mobile construction equipment or the 70 dBA significance threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures. In addition, implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 would further reduce the less than significant construction noise impacts attributable to development within the Entrada South Planning Area at this noise receptor. Thus, the Modified Project is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-7
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH
RECEPTOR 7: PLACE OF WORSHIP

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
Individual Construction Phase								
Grading - Indirect	57.65	85	70	No	No	44.65	No	No
Improvements - Sewer	53.25	85	70	No	No	40.25	No	No
Improvements - Storm Drains	54.85	85	70	No	No	41.85	No	No
Improvements - Water	52.65	85	70	No	No	39.65	No	No
Improvements - Streets	56.15	85	70	No	No	43.15	No	No
Paving	53.95	85	70	No	No	40.95	No	No
Building Construction	55.55	85	70	No	No	42.55	No	No
Architectural Coating	46.85	85	70	No	No	33.85	No	No
Potential Concurrent Construction Phases								
1. Improvements - Sewers & Improvements - Storm Drains	57.13	85	70	No	No	44.13	No	No
2. Improvements - Sewers & Improvements - Water	55.97	85	70	No	No	42.97	No	No
3. Paving & Building Construction	57.83	85	70	No	No	44.83	No	No
4. Paving & Building Construction & Architectural Coating	58.17	85	70	No	No	45.17	No	No
5. Building Construction & Architectural Coating	56.10	85	70	No	No	43.10	No	No

Source: Refer to Appendix C for construction noise worksheets.

Valencia Commerce Center

Construction within the Valencia Commerce Center Planning Area would include the following construction phases: grading, infrastructure improvements (e.g., street construction and the installation of sewers, storm drains, and water lines), building construction, and the application of architectural coatings. Based on the Modified Project's construction schedule, there is also a potential for these construction phases to occur concurrently.

Provided below is the analysis of construction noise levels for both the individual construction phases and during the periods when the Valencia Commerce Center construction phases could potentially occur concurrently.

Receptor 1: Westridge Residential

Table D-8: Noise Impacts Associated with On-Site Construction Activities - Valencia Commerce Center Receptor 1: Westridge Residential, presents the forecasted construction noise levels at the single-family uses along Westridge Parkway at the southern boundary of the Mission Village site. As shown in Table D-8, construction noise levels would range from a low of 36.72 dBA (Leq-1hour) during the architectural coating phase to a high of 45.18 dBA (Leq-1hour) during the grading – direct phase. Construction noise levels would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment or the 60 dBA threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures.

As mentioned previously, there is a potential for the Valencia Commerce Center construction phases to occur concurrently. As shown in Table D-8, noise levels during potential concurrent construction phases would range from a low of 44.59 (Leq-1hour) during the building construction and architectural coating phases to a high of 48.77 dBA (Leq-1hour) during the grading – direct, grading – indirect, and improvements – storm drains phases. Noise levels during potential concurrent construction phases would not exceed the single-family residential threshold of 75 dBA for mobile construction equipment or the 60 dBA threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures. In addition, implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 would further reduce the less than significant construction noise impacts described above at this noise receptor. Thus, the Modified Project is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-8
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - VALENCIA COMMERCE CENTER
RECEPTOR 1: WESTRIDGE RESIDENTIAL

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
Individual Construction Phase								
Grading - Direct	45.18	75	60	No	No	32.18	No	No
Grading - Indirect	45.12	75	60	No	No	32.12	No	No
Improvements - Sewer	39.42	75	60	No	No	26.42	No	No
Improvements - Storm Drains	39.92	75	60	No	No	26.92	No	No
Improvements - Water	39.72	75	60	No	No	26.72	No	No
Improvements - Streets	41.22	75	60	No	No	28.22	No	No
Paving	44.52	75	60	No	No	31.52	No	No
Building Construction	43.82	75	60	No	No	30.82	No	No
Architectural Coating	36.72	75	60	No	No	23.72	No	No
Potential Concurrent Construction Phases								
1. Grading - Direct & Grading - Indirect	48.16	75	60	No	No	35.16	No	No
2. Grading - Direct & Grading - Indirect & Improvements - Storm Drains	48.77	75	60	No	No	35.77	No	No
3. Grading - Indirect & Improvements - Storm Drains	46.27	75	60	No	No	33.27	No	No
4. Grading - Indirect & Improvements - Sewers	46.16	75	60	No	No	33.16	No	No
5. Grading - Indirect & Improvements - Sewers & Building Construction	48.15	75	60	No	No	35.15	No	No
6. Grading - Indirect & Improvements - Sewers & Building Construction & Architectural Coating	48.45	75	60	No	No	35.45	No	No

TABLE D-8
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - VALENCIA COMMERCE CENTER
RECEPTOR 1: WESTRIDGE RESIDENTIAL

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
7. Improvements - Sewers & Building Construction & Architectural Coating	45.75	75	60	No	No	32.75	No	No
8. Improvements - Water & Building Construction & Architectural Coating	45.82	75	60	No	No	32.82	No	No
9. Improvements - Streets & Building Construction & Architectural Coating	46.05	75	60	No	No	33.05	No	No
10. Improvements - Streets & Paving & Building Construction & Architectural Coating	48.47	75	60	No	No	35.47	No	No
11. Paving & Building Construction & Architectural Coating	47.57	75	60	No	No	34.57	No	No
12. Building Construction & Architectural Coating	44.59	75	60	No	No	31.59	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 2: Westridge School

Table D-9: Noise Impacts Associated with On-Site Construction Activities - Valencia Commerce Center Receptor 2: Westridge School, presents the forecasted construction noise levels at the Oak Hills Elementary School located at Old Rock Road and Westridge Parkway. Based on the land use categories set forth in the County's construction noise standards, schools are classified as single-family residential. As shown in Table D-9, construction noise levels would range from a low of 35.16 dBA (Leq-1hour) during the architectural coating phase to a high of 43.56 dBA (Leq-1hour) during the grading – indirect phase. Construction noise levels would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment or the 60 dBA threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures.

As mentioned previously, there is a potential for the Valencia Commerce Center construction phases to occur concurrently. As shown in Table D-9, noise levels during potential concurrent construction phases would range from a low of 43.03 dBA (Leq-1hour) during the building construction and architectural coating phases to a high of 47.14 dBA (Leq-1hour) during the grading – direct, grading – indirect, and improvements – storm drains phases. Noise levels during potential concurrent construction phases would not exceed the single-family residential threshold of 75 dBA for mobile construction equipment or the 60 dBA threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures. In addition, implementation of Mitigation Measures MM N-1, MM N-2 and MM N-4 would further reduce the less than significant construction noise impacts described above at this noise receptor. Thus, the Modified Project is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-9
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - VALENCIA COMMERCE CENTER
RECEPTOR 2: WESTRIDGE SCHOOL

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
Individual Construction Phase								
Grading - Direct	43.46	75	60	No	No	30.46	No	No
Grading - Indirect	43.56	75	60	No	No	30.56	No	No
Improvements - Sewer	37.86	75	60	No	No	24.86	No	No
Improvements - Storm Drains	38.36	75	60	No	No	25.36	No	No
Improvements - Water	38.16	75	60	No	No	25.16	No	No
Improvements - Streets	39.66	75	60	No	No	26.66	No	No
Paving	42.96	75	60	No	No	29.96	No	No
Building Construction	42.26	75	60	No	No	29.26	No	No
Architectural Coating	35.16	75	60	No	No	22.16	No	No
Potential Concurrent Construction Phases								
1. Grading - Direct & Grading - Indirect	46.52	75	60	No	No	33.52	No	No
2. Grading - Direct & Grading - Indirect & Improvements - Storm Drains	47.14	75	60	No	No	34.14	No	No
3. Grading - Indirect & Improvements - Storm Drains	44.71	75	60	No	No	31.71	No	No
4. Grading - Indirect & Improvements - Sewers	44.60	75	60	No	No	31.60	No	No
5. Grading - Indirect & Improvements - Sewers & Building Construction	46.59	75	60	No	No	33.59	No	No
6. Grading - Indirect & Improvements - Sewers & Building Construction & Architectural Coating	46.89	75	60	No	No	33.89	No	No

TABLE D-9
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - VALENCIA COMMERCE CENTER
RECEPTOR 2: WESTRIDGE SCHOOL

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
7. Improvements - Sewers & Building Construction & Architectural Coating	44.19	75	60	No	No	31.19	No	No
8. Improvements - Water & Building Construction & Architectural Coating	44.26	75	60	No	No	31.26	No	No
9. Improvements - Streets & Building Construction & Architectural Coating	44.68	75	60	No	No	31.68	No	No
10. Improvements - Streets & Paving & Building Construction & Architectural Coating	46.91	75	60	No	No	33.91	No	No
11. Paving & Building Construction & Architectural Coating	46.01	75	60	No	No	33.01	No	No
12. Building Construction & Architectural Coating	43.03	75	60	No	No	30.03	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 3: Mission Village

Table D-10: Noise Impacts Associated with On-Site Construction Activities - Valencia Commerce Center Receptor 3: Mission Village, presents the forecasted construction noise levels at Mission Village. As shown in Table D-10, construction noise levels would range from a low of 44.34 dBA (Leq-1hour) during the architectural coating phase to a high of 52.82 dBA (Leq-1hour) during the grading – direct phase. Construction noise levels would not exceed the semi-residential/commercial significance threshold of 85 dBA for mobile construction equipment or the 70 dBA threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures.

As mentioned previously, there is a potential for the Valencia Commerce Center construction phases to occur concurrently. As shown in Table D-10, noise levels during potential concurrent construction phases would range from a low of 52.21 dBA (Leq-1hour) during the building construction and architectural coating phases to a high of 56.40 dBA (Leq-1hour) during the grading – direct, grading – indirect, and improvements – storm drains phases. Noise levels during potential concurrent construction phases would not exceed the semi-residential/commercial threshold of 85 dBA for mobile construction equipment or the 70 dBA threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures. In addition, implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 would further reduce the less than significant construction noise impacts described above at this noise receptor. Thus, the Modified Project is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-10
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - VALENCIA COMMERCE CENTER
RECEPTOR 3: MISSION VILLAGE

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
Individual Construction Phase								
Grading - Direct	52.82	85	70	No	No	39.82	No	No
Grading - Indirect	52.74	85	70	No	No	39.74	No	No
Improvements - Sewer	47.04	85	70	No	No	34.04	No	No
Improvements - Storm Drains	47.54	85	70	No	No	34.54	No	No
Improvements - Water	47.34	85	70	No	No	34.34	No	No
Improvements - Streets	48.84	85	70	No	No	35.84	No	No
Paving	52.14	85	70	No	No	39.14	No	No
Building Construction	51.44	85	70	No	No	38.44	No	No
Architectural Coating	44.34	85	70	No	No	31.34	No	No
Potential Concurrent Construction Phases								
1. Grading - Direct & Grading - Indirect	55.79	85	70	No	No	42.79	No	No
2. Grading - Direct & Grading - Indirect & Improvements - Storm Drains	56.40	85	70	No	No	43.40	No	No
3. Grading - Indirect & Improvements - Storm Drains	53.89	85	70	No	No	40.89	No	No
4. Grading - Indirect & Improvements - Sewers	53.78	85	70	No	No	40.78	No	No
5. Grading - Indirect & Improvements - Sewers & Building Construction	55.77	85	70	No	No	42.77	No	No
6. Grading - Indirect & Improvements - Sewers & Building Construction & Architectural Coating	56.07	85	70	No	No	43.07	No	No

TABLE D-10
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - VALENCIA COMMERCE CENTER
RECEPTOR 3: MISSION VILLAGE

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
7. Improvements - Sewers & Building Construction & Architectural Coating	53.37	85	70	No	No	40.37	No	No
8. Improvements - Water & Building Construction & Architectural Coating	53.44	85	70	No	No	40.44	No	No
9. Improvements - Streets & Building Construction & Architectural Coating	53.86	85	70	No	No	40.86	No	No
10. Improvements - Streets & Paving & Building Construction & Architectural Coating	56.09	85	70	No	No	43.09	No	No
11. Paving & Building Construction & Architectural Coating	55.19	85	70	No	No	42.19	No	No
12. Building Construction & Architectural Coating	52.21	85	70	No	No	39.21	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 4: Travel Village

Table D-11: Noise Impacts Associated with On-Site Construction Activities - Valencia Commerce Center Receptor 4: Travel Village, presents the forecasted construction noise levels at the recreational vehicle park known as Travel Village. Based on the land use categories set forth in the County's construction noise standards, Travel Village is classified as semi-residential/commercial. As shown in Table D-11, construction noise levels would range from a low of 57.99 dBA (Leq-1hour) during the architectural coating phase to a high of 66.86 dBA (Leq-1hour) during the grading – direct phase. Construction noise levels would not exceed the semi-residential/commercial significance threshold of 85 dBA for mobile construction equipment or the 70 dBA threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures.

As mentioned previously, there is a potential for the Valencia Commerce Center construction phases to occur concurrently. As shown in Table D-11, noise levels during potential concurrent construction phases would range from a low of 65.86 dBA (Leq-1hour) during the building construction and architectural coating phases to a high of 70.22 dBA (Leq-1hour) during the grading – direct, grading – indirect, and improvements – storm drains phases. Noise levels during potential concurrent construction phases would not exceed the semi-residential/commercial threshold of 85 dBA for mobile equipment types, but would exceed the semi-residential/commercial of 70 dBA threshold for stationary construction equipment by a maximum of 0.22 dBA (Leq-1hour) without the implementation of mitigation measures during the potential concurrent construction period identified above (i.e., Potential Concurrent Construction Period 2). As a result, during periods of potential concurrent construction within the Valencia Commerce Center Planning Area a less than significant construction noise impact would occur prior to the implementation of mitigation measures based on the mobile construction equipment threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment threshold.

As explained above, construction noise levels would be reduced by 13 dBA with implementation of Mitigation Measure MM N-1. As shown in Table D-11, implementation of this mitigation measure would result in construction noise levels to range from a low of 44.99 dBA (Leq-1hour) during the architectural coating phase to a high of 53.86 dBA (Leq-1hour) during the grading – direct phase. Additionally, noise levels during potential concurrent construction phases would range from a low of 52.86 dBA (Leq-1hour) during the building construction and architectural phases to a high of 57.22 dBA (Leq-1hour) during the grading – direct, grading – indirect, and improvements – storm drains phases. Construction noise levels would not exceed the semi-residential/commercial significance threshold of 85 dBA for mobile construction equipment or the 70 dBA threshold for stationary construction equipment with implementation of Mitigation Measure MM N-1. As a result, a less than significant construction noise impact would occur with the implementation of Mitigation Measure MM N-1. In addition, forecasted

construction noise levels would be further reduced with implementation of Mitigation Measures MM N-2 and MM N-4. Thus, the Modified Project with the implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-11
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - VALENCIA COMMERCE CENTER
RECEPTOR 4: TRAVEL VILLAGE

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
Individual Construction Phase								
Grading - Direct	66.86	85	70	No	No	53.86	No	No
Grading - Indirect	66.39	85	70	No	No	53.39	No	No
Improvements - Sewer	60.69	85	70	No	No	47.69	No	No
Improvements - Storm Drains	61.19	85	70	No	No	48.19	No	No
Improvements - Water	60.99	85	70	No	No	47.99	No	No
Improvements - Streets	62.49	85	70	No	No	49.49	No	No
Paving	65.79	85	70	No	No	52.79	No	No
Building Construction	65.09	85	70	No	No	52.09	No	No
Architectural Coating	57.99	85	70	No	No	44.99	No	No
Potential Concurrent Construction Phases								
1. Grading - Direct & Grading - Indirect	69.64	85	70	No	No	56.64	No	No
2. Grading - Direct & Grading - Indirect & Improvements - Storm Drains	70.22	85	70	No	Yes	57.22	No	No
3. Grading - Indirect & Improvements - Storm Drains	67.54	85	70	No	No	54.54	No	No
4. Grading - Indirect & Improvements - Sewers	67.43	85	70	No	No	54.43	No	No
5. Grading - Indirect & Improvements - Sewers & Building Construction	69.42	85	70	No	No	56.42	No	No
6. Grading - Indirect & Improvements - Sewers & Building Construction & Architectural Coating	69.72	85	70	No	No	56.72	No	No

TABLE D-11
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - VALENCIA COMMERCE CENTER
RECEPTOR 4: TRAVEL VILLAGE

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
7. Improvements - Sewers & Building Construction & Architectural Coating	67.02	85	70	No	Yes	54.02	No	No
8. Improvements - Water & Building Construction & Architectural Coating	67.09	85	70	No	No	54.09	No	No
9. Improvements - Streets & Building Construction & Architectural Coating	67.51	85	70	No	No	54.51	No	No
10. Improvements - Streets & Paving & Building Construction & Architectural Coating	69.74	85	70	No	No	56.74	No	No
11. Paving & Building Construction & Architectural Coating	68.84	85	70	No	No	55.84	No	No
12. Building Construction & Architectural Coating	65.86	85	70	No	No	52.86	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 5: School/Residential North of Valencia Commerce Center Planning Area

Table D-12: Noise Impacts Associated with On-Site Construction Activities - Valencia Commerce Center Receptor 5: School/Residential North of Valencia Commerce Center Planning Area, presents the forecasted construction noise levels at the Live Oak Elementary School and single-family residential area north of the Valencia Commerce Center Planning Area. Based on the land use categories set forth in the County's construction noise standards, this area is classified as single-family residential.

As shown in Table D-12, construction noise levels would range from a low of 56.74 dBA (Leq-1hour) during the architectural coating phase to a high of 74.10 dBA (Leq-1hour) during the grading – direct phase. The forecasted noise levels during the grading – direct phase include the construction of a berm on the north side of the Valencia Commerce Center 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. The proposed berm slopes upward away from these residences and initially reaches a height that is eight feet above the existing grade of the residences. Thereafter, the berm increases in height, reaching a maximum height of approximately 28 feet above the existing grade of the residences at a distance of approximately 200 feet from the residences. Overall, the berm is approximately 600 feet in length and is included in the Valencia Commerce Center Planning Area grading plan to reduce noise levels associated with Valencia Commerce Center construction and operations for these residences. The forecasted construction noise levels during all construction phases, other than the grading – direct phase, incorporates the noise reduction that would be provided by this berm.

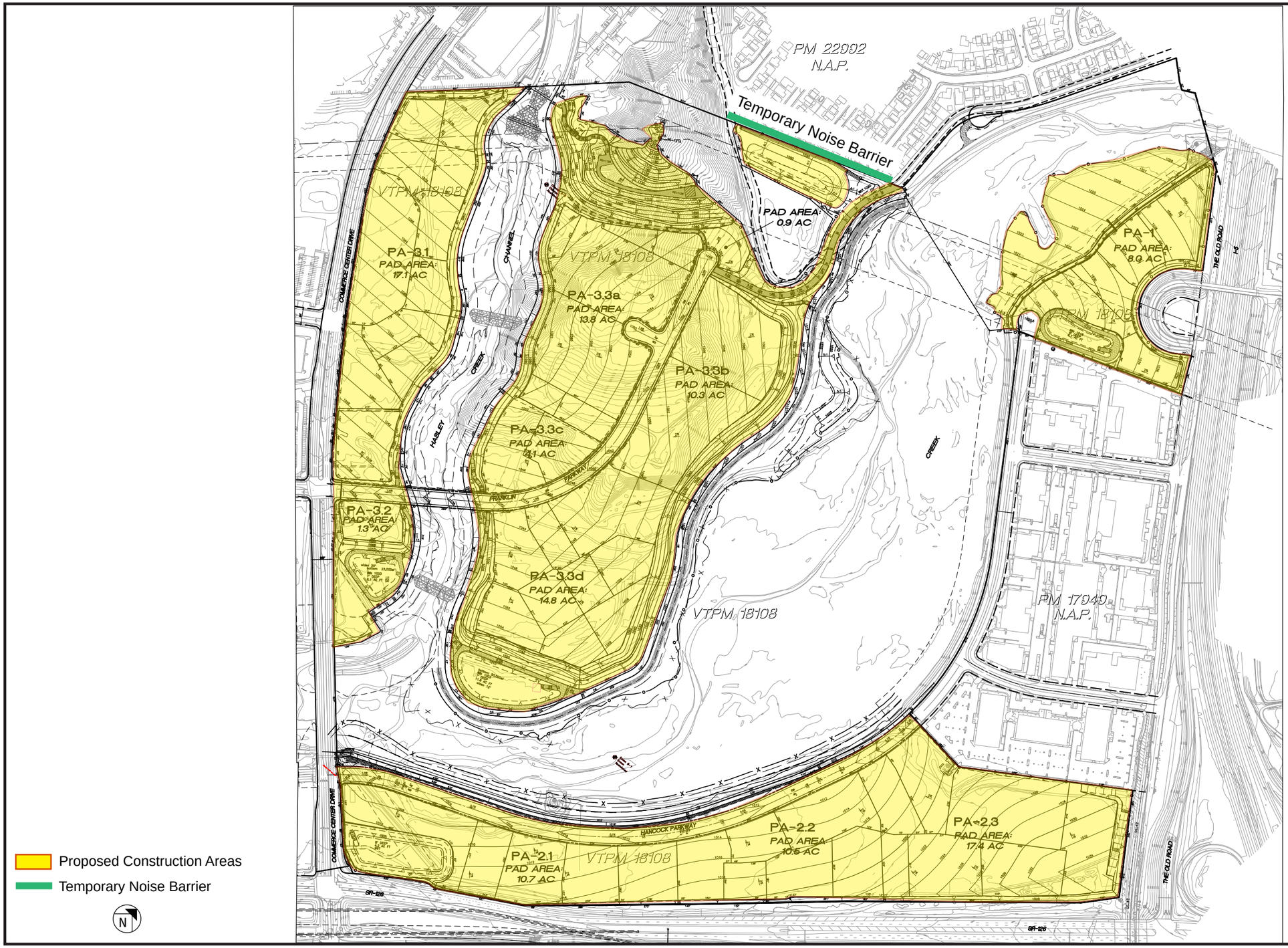
Forecasted construction noise levels would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment but would exceed the single-family residential significance threshold of 60 dBA for stationary construction equipment by a maximum of 14.10 dBA (Leq-1hour) without the implementation of mitigation measures. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures based on the mobile construction equipment threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment threshold.

As mentioned previously, there is a potential for the Valencia Commerce Center construction phases to occur concurrently. As shown in Table D-12, noise levels during potential concurrent construction phases would range from a low of 64.61 dBA (Leq-1hour) during the building construction and architectural coating phases to a high of 74.76 dBA (Leq-1hour) during the grading – direct, grading – indirect, and improvements – storm drains phases. Noise levels during potential concurrent construction phases would not exceed the single-family significance threshold of 75 dBA for mobile construction equipment, but would exceed the 60 dBA threshold for stationary construction equipment by a maximum of 14.76 dBA (Leq-1hour) without the implementation of mitigation measures. As a result, during periods of potential concurrent construction within the Valencia Commerce Center Planning Area a less than significant construction noise impact would occur prior to the implementation of mitigation measures based on the mobile construction equipment threshold, whereas a potentially significant construction noise impact

would occur prior to the implementation of mitigation measures based on the stationary construction equipment threshold.

As explained above, construction noise levels would be reduced by 13 dBA with implementation of Mitigation Measure MM N-1. Mitigation Measure MM N-3 is also proposed to further reduce construction noise levels during the construction of the berm described above that would be constructed during the grading – direct construction phase. Mitigation Measure MM N-3 requires the installation of a temporary noise barrier between the berm construction site and the residences discussed above. The location of this temporary noise barrier is shown in Figure D-1: Location of Temporary Noise Barrier Required Pursuant to Mitigation Measure MM N-3. Once construction of the berm is complete, the temporary noise barrier can be removed as the noise reduction that is provided by the temporary noise barrier would be provided by the berm itself. The temporary noise barrier pursuant to Mitigation Measure MM N-3 would reduce construction noise levels during construction of the berm by 3.14 dBA (Leq-1hour) at the residences with a direct line of sight to the construction area. As a result, for the identified residences, Mitigation Measures MM N-1 and MM N-3 combined would reduce construction noise levels by 16.14 dBA (Leq-1hour) during the period of time when the berm is being constructed. In addition, the forecasted construction noise levels during all other concurrent construction phases, other than those that include the grading – direct construction phase, incorporate the noise reduction that would be provided by this berm and would realize the 13 dBA noise reduction due to the implementation of Mitigation Measure MM N-1. It is important to note that due to elevation differences, the reduction from the temporary noise barrier would not be achieved at the other off-site sensitive uses to the north such as the residences along Hasley Canyon west of The Old Road (Receptor 6). More specifically, elevations north of Hasley Canyon Road increase by a minimum of 25 feet when compared to the residences located at the end of the Diablo Place, Rangewood Road, and Quincy Street cul-de-sacs. Thus, due to the increased distance from the construction site and the rise in elevation, the direct line of sight from the residences north of Hasley Canyon road to the construction site would not be affected.

As shown in Table D-12, implementation of these mitigation measure would result in construction noise levels to range from a low of 43.74 dBA (Leq-1hour) during the architectural coating phase to a high of 57.96 dBA (Leq-1hour) during the grading – direct phase. Additionally, noise levels during potential concurrent construction phases would range from a low of 51.61 dBA (Leq-1hour) during the building construction and architectural phases to a high of 58.62 dBA (Leq-1hour) during the grading – direct, grading – indirect, and improvements – storm drains phases. Construction noise levels would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment and the 60 dBA threshold for stationary construction equipment with implementation of the Mitigation Measures MM N-1 and MM N-3. As a result, a less than significant construction noise impact would occur with the implementation of Mitigation Measures MM N-1 and MM N-3. In addition, forecasted construction noise levels would be further reduced with implementation of Mitigation Measures MM N-2 and MM N-4. Thus, the Modified Project with the implementation of Mitigation Measures MM N-1 through MM N-4 is not expected to result in a new significant impact compared to the 2017 Approved Project.



SOURCE: Meridian Consultants - March 2022

FIGURE **D-1**

Meridian Consultants

Location of Temporary Noise Barrier Required Pursuant to Mitigation Measure MM N-3

338-001-21

TABLE D-12
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - VALENCIA COMMERCE CENTER
RECEPTOR 5: SCHOOL/RESIDENTIAL NORTH OF VALENCIA COMMERCE CENTER PLANNING AREA

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
Individual Construction Phase								
Grading - Direct	74.10	75	60	No	Yes	57.96	No	No
Grading - Indirect	65.14	75	60	No	Yes	52.14	No	No
Improvements - Sewer	59.44	75	60	No	No	46.44	No	No
Improvements - Storm Drains	59.94	75	60	No	No	46.94	No	No
Improvements - Water	59.74	75	60	No	No	46.74	No	No
Improvements - Streets	61.24	75	60	No	Yes	48.24	No	No
Paving	64.54	75	60	No	Yes	51.54	No	No
Building Construction	63.84	75	60	No	Yes	50.84	No	No
Architectural Coating	56.74	75	60	No	No	43.74	No	No
Potential Concurrent Construction Phases								
1. Grading - Direct & Grading - Indirect	74.62	75	60	No	Yes	58.48	No	No
2. Grading - Direct & Grading - Indirect & Improvements - Storm Drains	74.76	75	60	No	Yes	58.62	No	No
3. Grading - Indirect & Improvements - Storm Drains	66.29	75	60	No	Yes	53.29	No	No
4. Grading - Indirect & Improvements - Sewers	66.18	75	60	No	Yes	53.18	No	No
5. Grading - Indirect & Improvements - Sewers & Building Construction	68.17	75	60	No	Yes	55.17	No	No
6. Grading - Indirect & Improvements - Sewers & Building Construction & Architectural Coating	68.47	75	60	No	Yes	55.47	No	No

TABLE D-12
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - VALENCIA COMMERCE CENTER
RECEPTOR 5: SCHOOL/RESIDENTIAL NORTH OF VALENCIA COMMERCE CENTER PLANNING AREA

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
7. Improvements - Sewers & Building Construction & Architectural Coating	65.77	75	60	No	Yes	52.77	No	No
8. Improvements - Water & Building Construction & Architectural Coating	65.84	75	60	No	Yes	52.84	No	No
9. Improvements - Streets & Building Construction & Architectural Coating	66.26	75	60	No	Yes	53.26	No	No
10. Improvements - Streets & Paving & Building Construction & Architectural Coating	68.49	75	60	No	Yes	55.49	No	No
11. Paving & Building Construction & Architectural Coating	67.59	75	60	No	Yes	54.59	No	No
12. Building Construction & Architectural Coating	64.61	75	60	No	Yes	51.61	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 6: Residential Along Hasley Canyon West of The Old Road

Table D-13: Noise Impacts Associated with On-Site Construction Activities - Valencia Commerce Center Receptor 6: Residential Along Hasley Canyon West of The Old Road, presents the forecasted construction noise levels at the single-family residential area north of the Valencia Commerce Center Planning Area along Hasley Canyon Road west of The Old Road. As shown in Table D-13, construction noise levels would range from a low of 50.92 dBA (Leq-1hour) during the architectural coating phase to a high of 60.45 dBA (Leq-1hour) during the grading – direct phase. Construction noise levels would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment but would exceed the single-family residential significance threshold of 60 dBA for stationary construction equipment by a maximum of 0.45 dBA (Leq-1hour) without the implementation of mitigation measures. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures based on the mobile construction equipment threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment threshold.

As mentioned previously, there is a potential for the Valencia Commerce Center construction phases to occur concurrently. As shown in Table D-13, noise levels during potential concurrent construction phases would range from a low of 58.79 dBA (Leq-1hour) during the building construction and architectural coating phases to a high of 63.47 dBA (Leq-1hour) during the grading – direct, grading – indirect, and improvements – storm drains phases. Noise levels during potential concurrent construction phases would not exceed the single-family residential threshold of 75 dBA for mobile construction equipment, but would exceed the 60 dBA threshold for stationary construction equipment by a maximum of 3.47 dBA (Leq-1hour) without the implementation of mitigation measures. As a result, during periods of potential concurrent construction within the Valencia Commerce Center Planning Area a less than significant construction noise impact would occur prior to the implementation of mitigation measures based on the mobile construction equipment threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment threshold.

As explained above, construction noise levels would be reduced by 13 dBA with implementation of Mitigation Measure MM N-1. As shown in Table D-13, implementation of this mitigation measure would result in construction noise levels to range from a low of 37.92 dBA (Leq-1hour) during the architectural coating phase to a high of 47.45 dBA (Leq-1hour) during the grading – direct phase. Additionally, noise levels during potential concurrent construction phases would range from a low of 45.79 dBA (Leq-1hour) during the building construction and architectural phases to a high of 50.47 dBA (Leq-1hour) during the grading – direct, grading – indirect, and improvements – storm drains phases. Construction noise levels would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment types or the 60 dBA threshold for stationary construction equipment with implementation of

the Mitigation Measure MM N-1. As a result, a less than significant construction noise impact would occur with the implementation of Mitigation Measure MM N-1. In addition, forecasted construction noise levels would be further reduced with implementation of Mitigation Measures MM N-2 and MM N-4. Thus, the Modified Project with the implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-13
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - VALENCIA COMMERCE CENTER
RECEPTOR 6: RESIDENTIAL ALONG HASLEY CANYON WEST OF THE OLD ROAD

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
Individual Construction Phase								
Grading - Direct	60.45	75	60	No	Yes	47.45	No	No
Grading - Indirect	59.32	75	60	No	No	46.32	No	No
Improvements - Sewer	53.62	75	60	No	No	40.62	No	No
Improvements - Storm Drains	54.12	75	60	No	No	41.12	No	No
Improvements - Water	53.92	75	60	No	No	40.92	No	No
Improvements - Streets	55.42	75	60	No	No	42.42	No	No
Paving	58.72	75	60	No	No	45.72	No	No
Building Construction	58.02	75	60	No	No	45.02	No	No
Architectural Coating	50.92	75	60	No	No	37.92	No	No
Potential Concurrent Construction Phases								
1. Grading - Direct & Grading - Indirect	62.93	75	60	No	Yes	49.93	No	No
2. Grading - Direct & Grading - Indirect & Improvements - Storm Drains	63.47	75	60	No	Yes	50.47	No	No
3. Grading - Indirect & Improvements - Storm Drains	60.47	75	60	No	Yes	47.47	No	No
4. Grading - Indirect & Improvements - Sewers	60.36	75	60	No	Yes	47.36	No	No
5. Grading - Indirect & Improvements - Sewers & Building Construction	62.35	75	60	No	Yes	49.35	No	No
6. Grading - Indirect & Improvements - Sewers & Building Construction & Architectural Coating	62.65	75	60	No	Yes	49.65	No	No

TABLE D-13
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - VALENCIA COMMERCE CENTER
RECEPTOR 6: RESIDENTIAL ALONG HASLEY CANYON WEST OF THE OLD ROAD

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
7. Improvements - Sewers & Building Construction & Architectural Coating	59.95	75	60	No	No	46.95	No	No
8. Improvements - Water & Building Construction & Architectural Coating	60.02	75	60	No	Yes	47.02	No	No
9. Improvements - Streets & Building Construction & Architectural Coating	60.44	75	60	No	Yes	47.44	No	No
10. Improvements - Streets & Paving & Building Construction & Architectural Coating	62.67	75	60	No	Yes	49.67	No	No
11. Paving & Building Construction & Architectural Coating	61.77	75	60	No	Yes	48.77	No	No
12. Building Construction & Architectural Coating	58.79	75	60	No	No	45.79	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 7: Place of Worship

Table D-14: Noise Impacts Associated with On-Site Construction Activities - Valencia Commerce Center Receptor 7: Place of Worship, presents the forecasted construction noise levels at the business structures located at the corner of The Old Road and Henry Mayo Drive which includes the Higher Vision Church. As mentioned previously, for purposes of this analysis and based on the land use categories set forth in the County's construction noise standards, this commercial center, which includes the Higher Vision Church, is classified as semi-residential/commercial. As shown in Table D-14, construction noise levels would range from a low of 54.14 dBA (Leq-1hour) during the architectural coating phase to a high of 62.54 dBA (Leq-1hour) during the grading – indirect phase. Construction noise levels would not exceed the semi-residential/commercial threshold of 85 dBA for mobile construction equipment or the 70 dBA threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures.

As mentioned previously, there is a potential for the Valencia Commerce Center construction phases to occur concurrently. As shown in Table D-14, noise levels during potential concurrent construction phases would range from a low of 62.01 dBA (Leq-1hour) during the building construction and architectural coating phases to a high of 66.09 dBA (Leq-1hour) during the grading – direct, grading – indirect, and improvements – storm drains phases. Noise levels during potential concurrent construction phases would not exceed the semi-residential/commercial threshold of 85 dBA for mobile construction equipment or the 70 dBA threshold for stationary construction equipment. As a result, a less than significant construction noise impact would occur prior to the implementation of mitigation measures. In addition, implementation of Mitigation Measures MM N-1, MM N-2 and MM N-4 would further reduce the less than significant construction noise impacts described above at this noise receptor. Thus, the Modified Project is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-14
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - VALENCIA COMMERCE CENTER
RECEPTOR 7: PLACE OF WORSHIP

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
Individual Construction Phase								
Grading - Direct	62.37	85	70	No	No	49.37	No	No
Grading - Indirect	62.54	85	70	No	No	49.54	No	No
Improvements - Sewer	56.84	85	70	No	No	43.84	No	No
Improvements - Storm Drains	57.34	85	70	No	No	44.34	No	No
Improvements - Water	57.14	85	70	No	No	44.14	No	No
Improvements - Streets	58.64	85	70	No	No	45.64	No	No
Paving	61.94	85	70	No	No	48.94	No	No
Building Construction	61.24	85	70	No	No	48.24	No	No
Architectural Coating	54.14	85	70	No	No	41.14	No	No
Potential Concurrent Construction Phases								
1. Grading - Direct & Grading - Indirect	65.47	85	70	No	No	52.47	No	No
2. Grading - Direct & Grading - Indirect & Improvements - Storm Drains	66.09	85	70	No	No	53.09	No	No
3. Grading - Indirect & Improvements - Storm Drains	63.69	85	70	No	No	50.69	No	No
4. Grading - Indirect & Improvements - Sewers	63.58	85	70	No	No	50.58	No	No
5. Grading - Indirect & Improvements - Sewers & Building Construction	65.57	85	70	No	No	52.57	No	No
6. Grading - Indirect & Improvements - Sewers & Building Construction & Architectural Coating	65.87	85	70	No	No	52.87	No	No

TABLE D-14
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - VALENCIA COMMERCE CENTER
RECEPTOR 7: PLACE OF WORSHIP

Construction Phase	Calculated Noise Level	Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)	Significant Impact Modified Project with Mitigation Measures?	
		Mobile	Stationary	Mobile	Stationary		Mobile	Stationary
7. Improvements - Sewers & Building Construction & Architectural Coating	63.17	85	70	No	No	50.17	No	No
8. Improvements - Water & Building Construction & Architectural Coating	63.24	85	70	No	No	50.24	No	No
9. Improvements - Streets & Building Construction & Architectural Coating	63.66	85	70	No	No	50.66	No	No
10. Improvements - Streets & Paving & Building Construction & Architectural Coating	65.89	85	70	No	No	52.89	No	No
11. Paving & Building Construction & Architectural Coating	64.99	85	70	No	No	51.99	No	No
12. Building Construction & Architectural Coating	62.01	85	70	No	No	49.01	No	No

Source: Refer to Appendix C for construction noise worksheets.

Entrada South and Valencia Commerce Center

Construction within both the Entrada South and Valencia Commerce Center Planning Areas could potentially be occurring at the same time. 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 Valencia Commerce Center Planning Areas individually. Given the geographic separation between the two Planning Areas, increases in noise levels at the individual receptor sites due to concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas are minimal and do not change the conclusions regarding the significance of the Modified Project's impacts that are presented above.

Provided below is the analysis of construction noise levels for those Entrada South and Valencia Commerce Center construction phases that are forecasted to 0potentially occur concurrently.

Receptor 1: Westridge Residential

As mentioned previously, there is a potential for construction within the Entrada South and Valencia Commerce Center Planning Areas to occur concurrently. Table D-15: Noise Impacts Associated with On-site Construction – Entrada South and Valencia Commerce Center Potential Concurrent Construction Phases Receptor 1: Westridge Residential, presents the forecasted construction noise levels at the single-family family residential uses along Westridge Parkway at the southern boundary of the Mission Village site. As shown in Table D-15, construction noise levels during potential concurrent construction within both the Entrada South and Valencia Commerce Center Planning Areas would range from a low of 67.90 dBA (Leq-1hour) to a high of 71.20 dBA (Leq-1hour). Noise levels during potential concurrent construction phases within the Entrada South and Valencia Commerce Center Planning Areas would not exceed the single-family significance threshold of 75 dBA for mobile construction equipment but would exceed the 60 dBA threshold for stationary construction equipment without the implementation of mitigation measures by a maximum of 11.20 dBA (Leq-1hour). As a result, during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas a less than significant construction noise impact would occur prior to the implementation of mitigation measures based on the mobile construction equipment threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment threshold.

As explained above, construction noise levels would be reduced by 13 dBA with implementation of Mitigation Measure MM N-1. As shown in Table D-15, implementation of this mitigation measures would result in construction noise levels to range from a low of 54.90 dBA (Leq-1hour) to a high of 58.20 dBA (Leq-1hour) during potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas. Construction noise levels during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment or the 60 dBA threshold for stationary construction equipment with implementation of Mitigation Measure MM N-1. As a result, during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas a less than significant construction noise impact would occur with the

implementation of Mitigation Measure MM N-1. In addition, forecasted construction noise levels would be further reduced with implementation of Mitigation Measures MM N-2 and MM N-4. Thus, the Modified Project with the implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-15
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH AND VALENCIA COMMERCE CENTER POTENTIAL CONCURRENT CONSTRUCTION PHASES
RECEPTOR 1: WESTRIDGE RESIDENTIAL

Construction Phase	Calculated Noise Level			Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)			Significant Impact Modified Project with Mitigation Measures	
	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary	Mobile	Stationary	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary
1. *Entrada South*: Grading - Indirect *Valencia Commerce Center:* Grading - Direct and Grading - Indirect	70.69	48.16	70.71	75	60	No	Yes	57.69	35.16	57.71	No	No
2. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Direct, Grading - Indirect and Improvements - Storm Drains	70.69	48.77	70.72	75	60	No	Yes	57.69	35.77	57.72	No	No
3. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect and Improvements - Storm Drains	70.69	46.27	70.71	75	60	No	Yes	57.69	33.27	57.71	No	No
4. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect and Improvements - Sewers	70.69	46.16	70.71	75	60	No	Yes	57.69	33.16	57.71	No	No
5. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect, Improvements - Sewers, and Building Construction	70.69	48.15	70.71	75	60	No	Yes	57.69	35.15	57.71	No	No
6. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect, Improvements - Sewers, Building Construction, and Architectural Coating	70.69	48.45	70.72	75	60	No	Yes	57.69	35.45	57.72	No	No
7. *Entrada South*: Improvements - Storm Drains *Valencia Commerce Center*: Improvements - Sewers, Building Construction, and Architectural Coating	67.87	45.75	67.90	75	60	No	Yes	54.87	32.75	54.90	No	No
8. *Entrada South*: Improvements - Sewers and Improvements - Storm Drains *Valencia Commerce Center*: Improvements - Water, Building Construction, and Architectural Coating	70.15	45.82	70.17	75	60	No	Yes	57.15	32.82	57.17	No	No
9. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Water, Building Construction, and Architectural Coating	68.99	45.82	69.01	75	60	No	Yes	55.99	32.82	56.01	No	No
10. *Entrada South*: Improvements - Sewers and Improvements - Water	68.99	46.05	69.01	75	60	No	Yes	55.99	33.05	56.01	No	No

TABLE D-15
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH AND VALENCIA COMMERCE CENTER POTENTIAL CONCURRENT CONSTRUCTION PHASES
RECEPTOR 1: WESTRIDGE RESIDENTIAL

Construction Phase	Calculated Noise Level			Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)			Significant Impact Modified Project with Mitigation Measures	
	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary	Mobile	Stationary	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary
Valencia Commerce Center: Improvements - Streets, Building Construction, and Architectural Coating												
11. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Streets, Paving, Building Construction, and Architectural Coating	68.99	48.47	69.03	75	60	No	Yes	55.99	35.47	56.03	No	No
12. *Entrada South*: Improvements - Streets *Valencia Commerce Center*: Building Construction and Architectural Coating	69.17	44.59	69.19	75	60	No	Yes	56.17	31.59	56.19	No	No
13. *Entrada South*: Improvements - Sewer and Improvements - Water *Valencia Commerce Center*: Building Construction and Architectural Coating	68.99	44.59	69.01	75	60	No	Yes	55.99	31.59	56.01	No	No
14. *Entrada South*: Paving, and Building Construction *Valencia Commerce Center*: Building Construction and Architectural Coating	70.85	44.59	70.86	75	60	No	Yes	57.85	31.59	57.86	No	No
15. *Entrada South*: Paving, Building Construction and Architectural Coating *Valencia Commerce Center:* Building Construction and Architectural Coating	71.19	44.59	71.20	75	60	No	Yes	58.19	31.59	58.20	No	No
16. *Entrada South*: Building Construction and Architectural Coating *Valencia Commerce Center*: Building Construction and Architectural Coating	69.12	44.59	69.13	75	60	No	Yes	56.12	31.59	56.13	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 2: Westridge School

Table D-16: Noise Impacts Associated with On-site Construction - Entrada South and Valencia Commerce Center Potential Concurrent Construction Phases Receptor 2: Westridge School, presents the forecasted construction noise levels at Oak Hills Elementary School located at Old Rock Road and Westridge Parkway. Based on the land use categories set forth in the County's construction noise standards, schools are classified as single-family residential. As shown in Table D-16, construction noise levels during potential concurrent construction within both the Entrada South and Valencia Commerce Center Planning Areas would range from a low of 62.88 dBA (Leq-1hour) to a high of 66.16 dBA (Leq-1hour). Noise levels during potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas would not exceed the single-family significance threshold of 75 dBA for mobile construction equipment but would exceed the 60 dBA threshold for stationary construction equipment without the implementation of mitigation measures by a maximum of 6.16 dBA (Leq-1hour). As a result, during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas a less than significant construction noise impact would occur prior to the implementation of mitigation measures based on the mobile construction equipment threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment threshold.

As explained above, construction noise levels would be reduced by 13 dBA with implementation of Mitigation Measure MM N-1. As shown in Table D-16, implementation of this mitigation measure would result in construction noise levels to range from a low of 49.88 dBA (Leq 1-hour) to a high of 53.16 dBA (Leq-1hour) during potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas. Construction noise levels would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment or the 60 dBA threshold for stationary construction equipment with implementation of Mitigation Measure MM N-1. As a result, during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas a less than significant construction noise impact would occur with the implementation of Mitigation Measure MM N-1. In addition, forecasted construction noise levels would be further reduced with implementation of Mitigation Measures MM N-2 and MM N-4. Thus, the Modified Project with the implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-16
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH AND VALENCIA COMMERCE CENTER POTENTIAL CONCURRENT CONSTRUCTION PHASES
RECEPTOR 2: WESTRIDGE SCHOOL

Construction Phase	Calculated Noise Level			Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)			Significant Impact Modified Project with Mitigation Measures	
	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary	Mobile	Stationary	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary
1. *Entrada South*: Grading - Indirect *Valencia Commerce Center:* Grading - Direct and Grading - Indirect	65.62	46.52	65.67	75	60	No	Yes	52.62	33.52	52.67	No	No
2. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Direct, Grading - Indirect and Improvements - Storm Drains	65.62	47.14	65.68	75	60	No	Yes	52.62	34.14	52.68	No	No
3. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect and Improvements - Storm Drains	65.62	44.71	65.66	75	60	No	Yes	52.62	31.71	52.66	No	No
4. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect and Improvements - Sewers	65.62	44.60	65.65	75	60	No	Yes	52.62	31.60	52.65	No	No
5. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect, Improvements - Sewers, and Building Construction	65.62	46.59	65.67	75	60	No	Yes	52.62	33.59	52.67	No	No
6. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect, Improvements - Sewers, Building Construction, and Architectural Coating	65.62	46.89	65.68	75	60	No	Yes	52.62	33.89	52.68	No	No
7. *Entrada South*: Improvements - Storm Drains *Valencia Commerce Center*: Improvements - Sewers, Building Construction, and Architectural Coating	62.82	44.19	62.88	75	60	No	Yes	49.82	31.19	49.88	No	No
8. *Entrada South*: Improvements - Sewers and Improvements - Storm Drains *Valencia Commerce Center*: Improvements - Water, Building Construction, and Architectural Coating	65.10	44.26	65.14	75	60	No	Yes	52.10	31.26	52.14	No	No
9. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Water, Building Construction, and Architectural Coating	63.94	44.26	63.99	75	60	No	Yes	50.94	31.26	50.99	No	No
10. *Entrada South*: Improvements - Sewers and Improvements - Water	63.94	44.68	63.99	75	60	No	Yes	50.94	31.68	50.99	No	No

TABLE D-16
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH AND VALENCIA COMMERCE CENTER POTENTIAL CONCURRENT CONSTRUCTION PHASES
RECEPTOR 2: WESTRIDGE SCHOOL

Construction Phase	Calculated Noise Level			Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)			Significant Impact Modified Project with Mitigation Measures	
	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary	Mobile	Stationary	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary
Valencia Commerce Center: Improvements - Streets, Building Construction, and Architectural Coating												
11. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Streets, Paving, Building Construction, and Architectural Coating	63.94	46.91	64.03	75	60	No	Yes	50.94	33.91	51.03	No	No
12. *Entrada South*: Improvements - Streets *Valencia Commerce Center*: Building Construction and Architectural Coating	64.12	43.03	64.15	75	60	No	Yes	51.12	30.03	51.15	No	No
13. *Entrada South*: Improvements - Sewer and Improvements - Water *Valencia Commerce Center*: Building Construction and Architectural Coating	63.94	43.03	63.98	75	60	No	Yes	50.94	30.03	50.98	No	No
14. *Entrada South*: Paving, and Building Construction *Valencia Commerce Center*: Building Construction and Architectural Coating	65.80	43.03	65.83	75	60	No	Yes	52.80	30.03	52.83	No	No
15. *Entrada South*: Paving, Building Construction and Architectural Coating *Valencia Commerce Center:* Building Construction and Architectural Coating	66.14	43.03	66.16	75	60	No	Yes	53.14	30.03	53.16	No	No
16. *Entrada South*: Building Construction and Architectural Coating *Valencia Commerce Center*: Building Construction and Architectural Coating	64.07	43.03	64.10	75	60	No	Yes	51.07	30.03	51.10	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 3: Mission Village

Table D-17: Noise Impacts Associated with On-site Construction - Entrada South and Valencia Commerce Center Potential Concurrent Construction Phases Receptor 3: Mission Village, presents the forecasted construction noise levels at Mission Village. As shown in Table D-17, construction noise levels during potential concurrent construction within both the Entrada South and Valencia Commerce Center Planning Areas would range from a low of 75.39 dBA (Leq-1hour) to a high of 78.71 dBA (Leq-1hour). Noise levels during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas would not exceed the semi-residential/commercial significance threshold of 85 dBA for mobile construction equipment but would exceed the semi-residential/commercial significance threshold of 70 dBA for stationary construction equipment by a maximum of 8.71 dBA (Leq-1hour). As a result, during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas a less than significant construction noise impact would occur prior to the implementation of mitigation measures based on the mobile construction equipment threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment threshold.

As explained above, construction noise levels would be reduced by 13 dBA with implementation of Mitigation Measure MM N-1. As shown in Table D-17, implementation of this mitigation measure would result in construction noise levels to range from a low of 62.39 dBA (Leq-1hour) to a high of 65.71 dBA (Leq-1hour) during potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas. Construction noise levels would not exceed the semi-residential/commercial significance threshold of 85 dBA for mobile construction equipment or the 70 dBA threshold for stationary construction equipment with implementation of Mitigation Measure MM N-1. As a result, during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas a less than significant construction noise impact would occur with the implementation of Mitigation Measure MM N-1. In addition, forecasted construction noise levels would be further reduced with implementation of Mitigation Measures MM N-2 and MM N-4. Thus, the Modified Project with the implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-17
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH AND VALENCIA COMMERCE CENTER POTENTIAL CONCURRENT CONSTRUCTION PHASES
RECEPTOR 3: MISSION VILLAGE

Construction Phase	Calculated Noise Level			Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)			Significant Impact Modified Project with Mitigation Measures	
	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary	Mobile	Stationary	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary
1. *Entrada South*: Grading - Indirect *Valencia Commerce Center:* Grading - Direct and Grading - Indirect	78.18	55.79	78.20	85	70	No	Yes	65.18	42.79	65.20	No	No
2. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Direct, Grading - Indirect and Improvements - Storm Drains	78.18	56.40	78.21	85	70	No	Yes	65.18	43.40	65.21	No	No
3. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect and Improvements - Storm Drains	78.18	53.89	78.20	85	70	No	Yes	65.18	40.89	65.20	No	No
4. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect and Improvements - Sewers	78.18	53.78	78.20	85	70	No	Yes	65.18	40.78	65.20	No	No
5. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect, Improvements - Sewers, and Building Construction	78.18	55.77	78.20	85	70	No	Yes	65.18	42.77	65.20	No	No
6. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect, Improvements - Sewers, Building Construction, and Architectural Coating	78.18	56.07	78.21	85	70	No	Yes	65.18	43.07	65.21	No	No
7. *Entrada South*: Improvements - Storm Drains *Valencia Commerce Center*: Improvements - Sewers, Building Construction, and Architectural Coating	75.35	53.37	78.39	85	70	No	Yes	62.38	40.37	65.39	No	No
8. *Entrada South*: Improvements - Sewers and Improvements - Storm Drains *Valencia Commerce Center*: Improvements - Water, Building Construction, and Architectural Coating	77.67	53.44	77.69	85	70	No	Yes	64.67	40.44	64.69	No	No
9. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Water, Building Construction, and Architectural Coating	76.50	53.44	76.52	85	70	No	Yes	63.50	40.44	63.52	No	No
10. *Entrada South*: Improvements - Sewers and Improvements - Water	76.50	53.86	76.52	85	70	No	Yes	63.50	40.86	63.52	No	No

TABLE D-17
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH AND VALENCIA COMMERCE CENTER POTENTIAL CONCURRENT CONSTRUCTION PHASES
RECEPTOR 3: MISSION VILLAGE

Construction Phase	Calculated Noise Level			Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)			Significant Impact Modified Project with Mitigation Measures	
	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary	Mobile	Stationary	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary
Valencia Commerce Center: Improvements - Streets, Building Construction, and Architectural Coating												
11. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Streets, Paving, Building Construction, and Architectural Coating	76.50	56.09	76.54	85	70	No	Yes	63.50	43.09	63.54	No	No
12. *Entrada South*: Improvements - Streets *Valencia Commerce Center*: Building Construction and Architectural Coating	76.68	52.21	76.70	85	70	No	Yes	63.68	39.21	63.70	No	No
13. *Entrada South*: Improvements - Sewer and Improvements - Water *Valencia Commerce Center*: Building Construction and Architectural Coating	76.50	52.21	76.52	85	70	No	Yes	63.50	39.21	63.52	No	No
14. *Entrada South*: Paving, and Building Construction *Valencia Commerce Center*: Building Construction and Architectural Coating	78.36	52.21	78.37	85	70	No	Yes	65.36	39.21	65.37	No	No
15. *Entrada South*: Paving, Building Construction and Architectural Coating *Valencia Commerce Center:* Building Construction and Architectural Coating	78.70	52.21	78.71	85	70	No	Yes	65.70	39.21	65.71	No	No
16. *Entrada South*: Building Construction and Architectural Coating *Valencia Commerce Center*: Building Construction and Architectural Coating	76.63	52.21	76.65	85	70	No	Yes	63.63	39.21	63.65	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 4: Travel Village

Table D-18: Noise Impacts Associated with On-site Construction - Entrada South and Valencia Commerce Center Potential Concurrent Construction Phases Receptor 4: Travel Village, presents the forecasted construction noise levels at the recreational vehicle park known as Travel Village. As mentioned previously, based on the land use categories set forth in the County's construction noise standards, Travel Village is classified as semi-residential/commercial. As shown in Table D-18, construction noise levels during potential concurrent construction within both the Entrada South and Valencia Commerce Center Planning Areas would range from a low of 66.27 dBA (Leq-1hour) to a high of 70.44 dBA (Leq-1hour). Noise levels during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas would not exceed the semi-residential/commercial residential significance threshold of 85 dBA for mobile construction equipment but would exceed the semi-residential/commercial significance threshold of 70 dBA for stationary construction equipment by a maximum of 0.44 dBA (Leq-1hour) without the implementation of mitigation measures during one of the potential concurrent construction periods within the Entrada South and Valencia Commerce Center Planning Areas (i.e., Potential Concurrent Construction Period 2). As a result, during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas a less than significant construction noise impact would occur prior to the implementation of mitigation measures based on the mobile construction equipment threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment threshold.

As explained above, construction noise levels would be reduced by 13 dBA with implementation of Mitigation Measure MM N-1. As shown in Table D-18, implementation of this mitigation measures would result in construction noise levels to range from a low of 53.27 dBA (Leq-1hour) to a high of 57.44 dBA (Leq-1hour) during potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas. Construction noise levels during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas would not exceed the semi-residential/commercial residential significance threshold of 85 dBA for mobile construction equipment or the 70 dBA threshold for stationary construction equipment with implementation of Mitigation Measure MM N-1. As a result, during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas a less than significant construction noise impact would occur with the implementation of Mitigation Measure MM N-1. In addition, forecasted construction noise levels would be further reduced with implementation of Mitigation Measures MM N-2 and MM N-4. Thus, the Modified Project with the implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-18
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH AND VALENCIA COMMERCE CENTER POTENTIAL CONCURRENT CONSTRUCTION PHASES
RECEPTOR 4: TRAVEL VILLAGE

Construction Phase	Calculated Noise Level			Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated[1])			Significant Impact Modified Project with Mitigation Measures	
	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary	Mobile	Stationary	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary
1. *Entrada South*: Grading - Indirect *Valencia Commerce Center:* Grading - Direct and Grading - Indirect	57.43	69.64	69.90	85	70	No	No	44.43	56.64	56.90	No	No
2. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Direct, Grading - Indirect and Improvements - Storm Drains	57.43	70.22	70.44	85	70	No	Yes	44.43	57.22	57.44	No	No
3. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect and Improvements - Storm Drains	57.43	67.54	67.94	85	70	No	No	44.43	54.54	54.94	No	No
4. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect and Improvements - Sewers	57.43	67.43	67.84	85	70	No	No	44.43	54.43	54.84	No	No
5. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect, Improvements - Sewers, and Building Construction	57.43	69.42	69.69	85	70	No	No	44.43	56.42	56.69	No	No
6. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect, Improvements - Sewers, Building Construction, and Architectural Coating	57.43	69.72	69.97	85	70	No	No	44.43	56.72	56.97	No	No
7. *Entrada South*: Improvements - Storm Drains *Valencia Commerce Center*: Improvements - Sewers, Building Construction, and Architectural Coating	54.63	67.02	67.26	85	70	No	No	41.63	54.02	54.26	No	No
8. *Entrada South*: Improvements - Sewers and Improvements - Storm Drains *Valencia Commerce Center*: Improvements - Water, Building Construction, and Architectural Coating	56.91	67.09	67.49	85	70	No	No	43.91	54.09	54.49	No	No
9. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Water, Building Construction, and Architectural Coating	55.75	67.09	67.40	85	70	No	No	42.75	54.09	54.40	No	No
10. *Entrada South*: Improvements - Sewers and Improvements - Water	55.75	67.51	67.79	85	70	No	No	42.75	54.51	54.79	No	No

TABLE D-18
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH AND VALENCIA COMMERCE CENTER POTENTIAL CONCURRENT CONSTRUCTION PHASES
RECEPTOR 4: TRAVEL VILLAGE

Construction Phase	Calculated Noise Level			Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)[1]			Significant Impact Modified Project with Mitigation Measures	
	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary	Mobile	Stationary	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary
Valencia Commerce Center: Improvements - Streets, Building Construction, and Architectural Coating												
11. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Streets, Paving, Building Construction, and Architectural Coating	55.75	69.74	69.91	85	70	No	No	42.75	56.74	56.91	No	No
12. *Entrada South*: Improvements - Streets *Valencia Commerce Center*: Building Construction and Architectural Coating	55.93	65.86	66.28	85	70	No	No	42.93	52.86	53.28	No	No
13. *Entrada South*: Improvements - Sewer and Improvements - Water *Valencia Commerce Center*: Building Construction and Architectural Coating	55.75	65.86	66.27	85	70	No	No	42.75	52.86	53.27	No	No
14. *Entrada South*: Paving, and Building Construction *Valencia Commerce Center*: Building Construction and Architectural Coating	57.61	65.86	66.47	85	70	No	No	44.61	53.47	53.47	No	No
15. *Entrada South*: Paving, Building Construction and Architectural Coating *Valencia Commerce Center:* Building Construction and Architectural Coating	57.95	65.86	66.47	85	70	No	No	44.95	53.47	53.47	No	No
16. *Entrada South*: Building Construction and Architectural Coating *Valencia Commerce Center*: Building Construction and Architectural Coating	55.88	65.86	66.28	85	70	No	No	42.88	53.28	53.28	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 5: School/Residential North of Valencia Commerce Center Planning Area

Table D-19: Noise Impacts Associated with On-site Construction - Entrada South and Valencia Commerce Center Potential Concurrent Construction Phases Receptor 5: School/Residential North of Valencia Commerce Center Planning Area, presents the forecasted construction noise levels at the Live Oak Elementary School and the single-family residential area north of the Valencia Commerce Center Planning Area. Based on the land use categories set forth in the County's construction noise standards, this area is classified as single-family residential. As shown in Table D-19, construction noise levels during potential concurrent construction within both the Entrada South and Valencia Commerce Center Planning Areas would range from a low of 64.76 dBA (Leq-1hour) to a high of 74.79 dBA (Leq-1hour). Noise levels during potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas would not exceed the single-family significance threshold of 75 dBA for mobile construction equipment but would exceed the 60 dBA threshold for stationary construction equipment without the implementation of mitigation measures by a maximum of 14.79 dBA (Leq-1hour). As a result, during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas a less than significant construction noise impact would occur prior to the implementation of mitigation measures based on the mobile construction equipment threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment threshold.

As explained above, construction noise levels would be reduced by 13 dBA with implementation of Mitigation Measure MM N-1. In addition, implementation of Mitigation Measure MM N-3 would further reduce construction noise levels attributable to the Valencia Commerce Center grading – direct construction phase by an additional 3.14 dBA (Leq-1hour). Thus, those concurrent construction scenarios that include the Valencia Commerce Center grading – direct construction phase would achieve a combined noise reduction of 16.14 dBA (Leq-1hour) with the implementation of Mitigation Measures MM N-1 and MM N-3. Further, the forecasted construction noise levels during all other concurrent construction phases, other than those that include the Valencia Commerce Center grading – direct construction phase, incorporate the noise reduction that would be provided by this berm and would realize the 13 dBA (Leq-1hour) noise reduction due to the implementation of Mitigation Measure MM N-1.

As shown in Table D-19, implementation of these mitigation measures would result in construction noise levels to range from a low of 51.76 dBA (Leq-1hour) to a high of 58.65 dBA (Leq-1hour) during potential concurrent construction within both the Entrada South and Valencia Commerce Center Planning Areas. Construction noise levels during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas would not exceed the single-family significance threshold of 75 dBA for mobile construction equipment or the 60 dBA threshold for stationary construction

equipment with implementation of Mitigation Measures MM N-1 and MM N-3. As a result, during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas a less than significant construction noise impact would occur with the implementation of Mitigation Measures MM N-1 and MM N-3. In addition, forecasted construction noise levels would be further reduced with implementation of Mitigation Measures MM N-2 and MM N-4. Thus, the Modified Project with the implementation of Mitigation Measures MM N-1 through MM N-4 is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-19NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH AND VALENCIA COMMERCE CENTER POTENTIAL CONCURRENT CONSTRUCTION PHASES
RECEPTOR 5: SCHOOL/RESIDENTIAL NORTH OF VALENCIA COMMERCE CENTER PLANNING AREA

Construction Phase	Calculated Noise Level			Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)			Significant Impact Modified Project with Mitigation Measures	
	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary	Mobile	Stationary	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary
1. *Entrada South*: Grading - Indirect *Valencia Commerce Center:* Grading - Direct and Grading - Indirect	51.54	74.62	74.64	75	60	No	Yes	38.54	58.48	58.50	No	No
2. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Direct, Grading - Indirect and Improvements - Storm Drains	51.54	74.76	74.79	75	60	No	Yes	38.54	58.62	58.65	No	No
3. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect and Improvements - Storm Drains	51.54	66.29	66.43	75	60	No	Yes	38.54	53.29	53.43	No	No
4. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect and Improvements - Sewers	51.54	66.18	66.32	75	60	No	Yes	38.54	53.18	53.32	No	No
5. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect, Improvements - Sewers, and Building Construction	51.54	68.17	68.27	75	60	No	Yes	38.54	55.17	55.27	No	No
6. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect, Improvements - Sewers, Building Construction, and Architectural Coating	51.54	68.47	70.89	75	60	No	Yes	38.54	55.47	57.89	No	No
7. *Entrada South*: Improvements - Storm Drains *Valencia Commerce Center*: Improvements - Sewers, Building Construction, and Architectural Coating	48.74	65.77	68.18	75	60	No	Yes	35.74	52.77	55.18	No	No
8. *Entrada South*: Improvements - Sewers and Improvements - Storm Drains *Valencia Commerce Center*: Improvements - Water, Building Construction, and Architectural Coating	51.02	65.84	65.98	75	60	No	Yes	38.02	52.84	52.98	No	No
9. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Water, Building Construction, and Architectural Coating	49.86	65.84	65.95	75	60	No	Yes	36.86	52.84	52.95	No	No
10. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Streets, Building Construction, and Architectural Coating	49.86	66.26	66.36	75	60	No	Yes	36.86	53.26	53.36	No	No

TABLE D-19NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH AND VALENCIA COMMERCE CENTER POTENTIAL CONCURRENT CONSTRUCTION PHASES
RECEPTOR 5: SCHOOL/RESIDENTIAL NORTH OF VALENCIA COMMERCE CENTER PLANNING AREA

Construction Phase	Calculated Noise Level			Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)			Significant Impact Modified Project with Mitigation Measures	
	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary	Mobile	Stationary	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary
11. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Streets, Paving, Building Construction, and Architectural Coating	49.86	68.49	68.55	75	60	No	Yes	36.86	55.49	55.55	No	No
12. *Entrada South*: Improvements - Streets *Valencia Commerce Center*: Building Construction and Architectural Coating	50.04	64.61	64.76	75	60	No	Yes	37.04	51.61	51.76	No	No
13. *Entrada South*: Improvements - Sewer and Improvements - Water *Valencia Commerce Center*: Building Construction and Architectural Coating	49.86	64.61	64.76	75	60	No	Yes	36.86	51.61	51.76	No	No
14. *Entrada South*: Paving, and Building Construction *Valencia Commerce Center*: Building Construction and Architectural Coating	51.72	64.61	64.83	75	60	No	Yes	38.72	51.61	51.83	No	No
15. *Entrada South*: Paving, Building Construction and Architectural Coating *Valencia Commerce Center:* Building Construction and Architectural Coating	52.06	64.61	64.85	75	60	No	Yes	39.06	51.61	51.85	No	No
16. *Entrada South*: Building Construction and Architectural Coating *Valencia Commerce Center*: Building Construction and Architectural Coating	49.99	64.61	64.76	75	60	No	Yes	36.99	51.61	51.76	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 6: Residential Along Hasley Canyon West of The Old Road

Table D-20: Noise Impacts Associated with On-site Construction - Entrada South and Valencia Commerce Center Potential Concurrent Construction Phases Receptor 6: Residential Along Hasley Canyon West of The Old Road, presents the forecasted construction noise levels at the single-family residential use area north of the Valencia Commerce Center Planning Area along Hasley Canyon Road west of The Old Road. As shown in Table D-20, construction noise levels during potential concurrent construction within both the Entrada South and Valencia Commerce Center Planning Areas would range from a low of 59.06 dBA (Leq-1hour) to a high of 63.60 dBA (Leq-1hour). Noise levels during potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas would not exceed the single-family significance threshold of 75 dBA for mobile construction equipment but would exceed the 60 dBA threshold for stationary construction equipment without the implementation of mitigation measures by a maximum of 3.60 dBA (Leq-1hour). As a result, during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas a less than significant construction noise impact would occur prior to the implementation of mitigation measures based on the mobile construction equipment threshold, whereas a potentially significant construction noise impact would occur prior to the implementation of mitigation measures based on the stationary construction equipment threshold.

As explained above, construction noise levels would be reduced by 13 dBA with implementation of Mitigation Measure MM N-1. As shown in Table D-20, implementation of this mitigation measure would result in construction noise levels to range from a low of 46.06 dBA (Leq-1hour) to a high of 50.60 dBA (Leq-1hour) during potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas. Construction noise levels during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas would not exceed the single-family residential significance threshold of 75 dBA for mobile construction equipment or the 60 dBA threshold for stationary construction equipment with implementation of Mitigation Measure MM N-1. As a result, during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas a less than significant construction noise impact would occur with the implementation of Mitigation Measure MM N-1. In addition, forecasted construction noise levels would be further reduced with implementation of Mitigation Measures MM N-2 and MM N-4. Thus, the Modified Project with the implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-20NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH AND VALENCIA COMMERCE CENTER POTENTIAL CONCURRENT CONSTRUCTION PHASES
RECEPTOR 6: RESIDENTIAL ALONG HASLEY CANYON WEST OF THE OLD ROAD

Construction Phase	Calculated Noise Level			Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)			Significant Impact Modified Project with Mitigation Measures	
	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary	Mobile	Stationary	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary
1. *Entrada South*: Grading - Indirect *Valencia Commerce Center:* Grading - Direct and Grading - Indirect	48.48	62.93	63.09	75	60	No	Yes	35.48	49.93	50.09	No	No
2. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Direct, Grading - Indirect and Improvements - Storm Drains	48.48	63.47	63.60	75	60	No	Yes	35.48	50.47	50.60	No	No
3. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect and Improvements - Storm Drains	48.48	60.47	60.73	75	60	No	Yes	35.48	47.47	47.73	No	No
4. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect and Improvements - Sewers	48.48	60.36	60.63	75	60	No	Yes	35.48	47.36	47.63	No	No
5. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect, Improvements - Sewers, and Building Construction	48.48	62.35	62.53	75	60	No	Yes	35.48	49.35	49.53	No	No
6. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect, Improvements - Sewers, Building Construction, and Architectural Coating	48.48	62.65	62.82	75	60	No	Yes	35.48	49.65	49.82	No	No
7. *Entrada South*: Improvements - Storm Drains *Valencia Commerce Center*: Improvements - Sewers, Building Construction, and Architectural Coating	45.68	59.95	60.11	75	60	No	Yes	35.68	46.95	47.11	No	No
8. *Entrada South*: Improvements - Sewers and Improvements - Storm Drains *Valencia Commerce Center*: Improvements - Water, Building Construction, and Architectural Coating	47.96	60.02	60.28	75	60	No	Yes	34.96	47.02	47.28	No	No
9. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Water, Building Construction, and Architectural Coating	46.80	60.02	60.22	75	60	No	Yes	33.80	47.02	47.22	No	No
10. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Streets, Building Construction, and Architectural Coating	46.80	60.44	60.62	75	60	No	Yes	33.80	47.44	47.62	No	No

TABLE D-20NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH AND VALENCIA COMMERCE CENTER POTENTIAL CONCURRENT CONSTRUCTION PHASES
RECEPTOR 6: RESIDENTIAL ALONG HASLEY CANYON WEST OF THE OLD ROAD

Construction Phase	Calculated Noise Level			Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)			Significant Impact Modified Project with Mitigation Measures	
	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary	Mobile	Stationary	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary
11. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Streets, Paving, Building Construction, and Architectural Coating	46.80	62.67	62.78	75	60	No	Yes	33.80	49.67	49.78	No	No
12. *Entrada South*: Improvements - Streets *Valencia Commerce Center*: Building Construction and Architectural Coating	46.98	58.79	59.07	75	60	No	No	33.98	45.79	46.07	No	No
13. *Entrada South*: Improvements - Sewer and Improvements - Water *Valencia Commerce Center*: Building Construction and Architectural Coating	46.80	58.79	59.06	75	60	No	No	33.80	45.79	46.06	No	No
14. *Entrada South*: Paving, and Building Construction *Valencia Commerce Center*: Building Construction and Architectural Coating	48.66	58.79	59.20	75	60	No	No	35.66	45.79	46.20	No	No
15. *Entrada South*: Paving, Building Construction and Architectural Coating *Valencia Commerce Center:* Building Construction and Architectural Coating	49.00	58.79	59.23	75	60	No	No	36.00	45.79	46.23	No	No
16. *Entrada South*: Building Construction and Architectural Coating *Valencia Commerce Center*: Building Construction and Architectural Coating	46.93	58.79	59.07	75	60	No	No	33.93	45.79	46.07	No	No

Source: Refer to Appendix C for construction noise worksheets.

Receptor 7: Place of Worship

Table D-21: Noise Impacts Associated with On-site Construction - Entrada South and Valencia Commerce Center Potential Concurrent Construction Phases Receptor 7: Place of Worship, presents the forecasted construction noise levels at the commercial center located at the corner of The Old Road and Henry Mayo Drive, which includes the Higher Vision Church. Based on the land use categories set forth in the County's construction noise standards, this commercial center, which includes the Higher Vision Church, is classified as semi-residential/commercial. As shown in Table D-21, construction noise levels during potential concurrent construction within both the Entrada South and Valencia Commerce Center Planning Areas would range from a low of 62.98 dBA (Leq-1hour) to a high of 66.67 dBA (Leq-1hour). Noise levels during potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas would not exceed the semi-residential/commercial significance threshold of 85 dBA for mobile construction equipment or the 70 dBA threshold for stationary construction equipment. As a result, during periods of potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas a less than significant construction noise impact would occur prior to the implementation of mitigation measures. In addition, implementation of Mitigation Measures MM N-1, MM N-2, and MM N-4 would further reduce the less than significant construction noise impacts attributable to potential concurrent construction within the Entrada South and Valencia Commerce Center Planning Areas at this noise receptor. Thus, the Modified Project is not expected to result in a new significant impact compared to the 2017 Approved Project.

TABLE D-21
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH AND VALENCIA COMMERCE CENTER POTENTIAL CONCURRENT CONSTRUCTION PHASES
RECEPTOR 7: PLACE OF WORSHIP

Construction Phase	Calculated Noise Level			Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)			Significant Impact Modified Project with Mitigation Measures	
	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary	Mobile	Stationary	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary
1. *Entrada South*: Grading - Indirect *Valencia Commerce Center:* Grading - Direct and Grading - Indirect	57.65	65.47	66.13	85	70	No	No	44.65	52.47	53.13	No	No
2. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Direct, Grading - Indirect and Improvements - Storm Drains	57.65	66.09	66.67	85	70	No	No	44.65	53.09	53.67	No	No
3. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect and Improvements - Storm Drains	57.65	63.69	64.65	85	70	No	No	44.65	50.69	51.65	No	No
4. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect and Improvements - Sewers	57.65	63.58	64.56	85	70	No	No	44.65	50.58	51.56	No	No
5. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect, Improvements - Sewers, and Building Construction	57.65	65.57	66.22	85	70	No	No	44.65	52.57	53.22	No	No
6. *Entrada South*: Grading - Indirect *Valencia Commerce Center*: Grading - Indirect, Improvements - Sewers, Building Construction, and Architectural Coating	57.65	65.87	66.48	85	70	No	No	44.65	52.87	53.48	No	No
7. *Entrada South*: Improvements - Storm Drains *Valencia Commerce Center*: Improvements - Sewers, Building Construction, and Architectural Coating	54.85	63.17	63.76	85	70	No	No	41.85	50.17	50.76	No	No
8. *Entrada South*: Improvements - Sewers and Improvements - Storm Drains *Valencia Commerce Center*: Improvements - Water, Building Construction, and Architectural Coating	57.13	63.24	64.19	85	70	No	No	44.13	50.24	51.19	No	No
9. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Water, Building Construction, and Architectural Coating	55.97	63.24	63.98	85	70	No	No	42.97	50.24	50.98	No	No
10. *Entrada South*: Improvements - Sewers and Improvements - Water *Valencia Commerce Center*: Improvements - Streets, Building Construction, and Architectural Coating	55.97	63.66	64.34	85	70	No	No	42.97	50.66	51.34	No	No
11. *Entrada South*: Improvements - Sewers and Improvements - Water	55.97	65.89	66.31	85	70	No	No	42.97	52.89	53.31	No	No

TABLE D-21
NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES - ENTRADA SOUTH AND VALENCIA COMMERCE CENTER POTENTIAL CONCURRENT CONSTRUCTION PHASES
RECEPTOR 7: PLACE OF WORSHIP

Construction Phase	Calculated Noise Level			Significance Threshold		Significant Impact Modified Project?		Modified Project Noise Level (Mitigated)			Significant Impact Modified Project with Mitigation Measures	
	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary	Mobile	Stationary	Entrada South	Valencia Commerce Center	Combined Entrada South and Valencia Commerce Center Noise Level	Mobile	Stationary
Valencia Commerce Center: Improvements - Streets, Paving, Building Construction, and Architectural Coating												
12. *Entrada South*: Improvements - Streets *Valencia Commerce Center*: Building Construction and Architectural Coating	56.15	62.01	63.01	85	70	No	No	43.15	49.01	50.01	No	No
13. *Entrada South*: Improvements - Sewer and Improvements - Water *Valencia Commerce Center*: Building Construction and Architectural Coating	55.97	62.01	62.98	85	70	No	No	42.97	49.01	49.98	No	No
14. *Entrada South*: Paving, and Building Construction *Valencia Commerce Center*: Building Construction and Architectural Coating	57.83	62.01	63.42	85	70	No	No	44.83	49.01	50.42	No	No
15. *Entrada South*: Paving, Building Construction and Architectural Coating *Valencia Commerce Center:* Building Construction and Architectural Coating	58.17	62.01	63.51	85	70	No	No	45.17	49.01	50.51	No	No
16. *Entrada South*: Building Construction and Architectural Coating *Valencia Commerce Center*: Building Construction and Architectural Coating	56.10	62.01	63.00	85	70	No	No	43.10	49.01	50.00	No	No

Source: Refer to Appendix C for construction noise worksheets.

APPENDIX E

Applicability of State-certified EIR Mitigation Measures to the Modified Project

APPENDIX E 2017 APPROVED PROJECT MITIGATION MEASURE APPLICABILITY	
2017 Approved Project Mitigation Measures	Applicability to Modified Project
SP-4.9-1: All construction activity occurring on the Newhall Ranch Specific Plan site shall adhere to the requirements of the "County of Los Angeles Construction Equipment Noise Standards, "County of Los Angeles Ordinance No. 11743, § 12.08.440 as identified in Table 4.9-3.	Mitigation Measure SP-4.9-1 explicitly states that this measure applies to all construction activity occurring on the Newhall Ranch Specific Plan site. As the Entrada South and Valencia Commerce Center Planning Areas are not located within the Newhall Ranch Specific Plan site, the requirements set forth in Mitigation Measure SP-4.9-1 do not apply to the Modified Project. Notwithstanding, the Modified Project would comply with the intent of Mitigation Measure SP-4.9-1 via compliance with the provisions set forth in Los Angeles County Code Section 12.08.440 as enforced by the County Department of Public Works as part of their administration of all Modified Project construction related permits. As this measure addresses a Los Angeles County Code requirement, Modified Project compliance with the provisions set forth in Los Angeles County Code Section 12.08.440 is set forth as a "Regulatory Compliance Measure" in this report (see Section K of this report for a listing of all Los Angeles County Code requirements the Modified Project will comply with).
SP-4.9-2: Limit all construction activities near occupied residences to between the hours of 6:30 A.M. and 8:00 P.M. and exclude all Sundays and legal holidays pursuant to County Department of Public Works, Construction Division standards.	Mitigation Measure SP-4.9-2 establishes requirements pursuant to County Department of Public Works, Construction Division standards. As such, these requirements would be implemented as part of the County Department of Public Works' administration of all Modified Project construction related permits. As this measure addresses County Public Works requirements, Modified Project compliance with the County Department of Public Works, Construction Division standards is set forth as a "Regulatory Compliance Measure" in this report (see Section K of this report for a listing of all Los Angeles County Code requirements the Modified Project will comply with).
SP-4.9-3: When construction operations occur adjacent to occupied residential areas, implement appropriate additional noise reduction measures that include changing the location of stationary construction equipment, shutting off idling equipment, notifying adjacent residences in advance of construction work, and installing temporary acoustic barriers around stationary construction noise sources.	The requirements set forth in Mitigation Measure SP-4.9-3 have been incorporated into the Modified Project as a component of Mitigation Measure MM N-2.
SP-4.9-4: Locate construction staging areas on-site to maximize the distance between staging areas and occupied residential areas.	The requirements set forth in Mitigation Measure SP-4.9-4 have been incorporated into the Modified Project as a component of Mitigation Measure MM N-2.
SP-4.9-5: Where new single family residential buildings are to be constructed within an exterior noise contour of 60 dB(A) CNEL or greater, or where any multi-family buildings are to be constructed within an exterior noise contour of 65 dB(A) CNEL or greater, an acoustic analysis shall be completed prior	Mitigation Measure SP-4.9-5 establishes requirements such that interior building noise levels do not exceed 45 dB(A) CNEL. This requirement is also set forth in California Building Code Section 1207.4. As such, compliance with California Building Code Section 1207.4 would also result in meeting the requirements set forth in Mitigation Measure SP-4.9-5. Thus,

2017 Approved Project Mitigation Measures	Applicability to Modified Project
to approval of building permits. The acoustical analysis shall show that the building is designed so that interior noise levels resulting from outside sources will be no greater than 45 dB(A) CNEL.	compliance with the provisions of Mitigation Measure SP-4.9-5 would be achieved as part of the County Department of Public Works' administration of all Modified Project building construction related permits. As such, no further action by the Modified Project is required with regard to the implementation of Mitigation Measure SP-4.9-5.
SP-4.9-6: For single family residential lots located within the 60 dB(A) CNEL or greater noise contour, an acoustic analysis shall be submitted prior to tentative approval of the subdivision. The acoustic analysis shall show that exterior noise in outdoor living areas (e.g., back yards, patios, etc.) will be reduced to 60 dB(A) CNEL or less.	This measure is not applicable to the Modified Project because CEQA does not require the analysis of environmental impacts on the project. Although not required for a noise significance determination, the substantive requirements of this measure shall be applied to the Modified Project as a Project Design Feature to be conservative and to assist with demonstrating consistency with the County Noise Ordinance and County Noise Element, as follows: PDF N-1: For single family residential lots located within the 60 dB(A) CNEL or greater noise contour, an acoustic analysis will be submitted prior to the applicable building permit. The acoustic analysis will show that exterior noise in outdoor living areas (e.g., back yards, patios, etc.) will be reduced to 60 dB(A) CNEL or less.
SP-4.9-7: For multi-family residential lots located within the 65 dB(A) CNEL or greater noise contour, an acoustic analysis shall be submitted prior to tentative approval of the subdivision. The acoustic analysis shall show that exterior noise in outdoor living areas (e.g., back yards, patios, etc.) will be reduced to 65 dB(A) CNEL or less.	This measure is not applicable to the Modified Project because CEQA does not require the analysis of environmental impacts on the project. Although not required for a noise significance determination, the substantive requirements of this measure shall be applied to the Modified Project as a Project Design Feature to be conservative and to assist with demonstrating consistency with the County Noise Ordinance and County Noise Element, as follows: PDF N-2: For multi-family residential lots located within the 65 dB(A) CNEL or greater noise contour, an acoustic analysis will be submitted prior to the applicable building permit. The acoustic analysis will show that exterior noise in outdoor living areas (e.g., back yards, patios, etc.) will be reduced to 65 dB(A) CNEL or less.
SP-4.9-8: For school sites located within the 70 dB(A) CNEL or greater noise contour, an acoustic analysis shall be submitted prior to tentative approval of the subdivision. The acoustic analysis shall show that noise at exterior play areas will be reduced to 70 dB(A) CNEL or less.	This measure is not applicable to the Modified Project because CEQA does not require the analysis of environmental impacts on the project. Although not required for a noise significance determination, the substantive requirements of this measure shall be applied to the Modified Project as a Project Design Feature to be conservative and to assist with demonstrating consistency with the County Noise Ordinance and County Noise Element, as follows:

2017 Approved Project Mitigation Measures	Applicability to Modified Project
	PDF N-3: For school sites located within the 70 dB(A) CNEL or greater noise contour, an acoustic analysis will be submitted prior to the applicable building permit. The acoustic analysis will show that noise at exterior play areas will be reduced to 70 dB(A) CNEL or less.
SP-4.9-9: All residential air conditioning equipment installed within the Newhall Ranch Specific Plan site shall adhere to the requirements of the County of Los Angeles Residential Air Conditioning and Refrigeration Noise Standards, County of Los Angeles Ordinance No. 11743, § 12.08.530.	Mitigation Measure SP-4.9-9 explicitly states that this measure applies to all construction activity occurring on the Newhall Ranch Specific Plan site. As the Entrada South and Valencia Commerce Center Planning Areas are not located within the Newhall Ranch Specific Plan site, the requirements set forth in Mitigation Measure SP-4.9-9 do not apply to the Modified Project. Notwithstanding, the Modified Project would comply with the intent of Mitigation Measure SP-4.9-9 via compliance with the provisions set forth in Los Angeles County Code Section 12.08.390 as enforced by the County Department of Public Works, as part of their administration of all Modified Project construction related permits, and by the County Sheriff's Department during Modified Project operations, as part of their administration of this County Code requirement. As this measure addresses a Los Angeles County Code requirement, Modified Project compliance with the provisions set forth in Los Angeles County Code Section 12.08.530 is set forth as a "Regulatory Compliance Measure" in this report (see Section K of this report for a listing of all Los Angeles County Code requirements the Modified Project will comply with).
SP-4.9-10: All stationary and point sources of noise occurring on the Newhall Ranch Specific Plan site shall adhere to the requirements of the County of Los Angeles Ordinance No. 11743, § 12.08.390 as identified in Table 4.9-2, County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources.	Mitigation Measure SP-4.9-10 explicitly states that this measure applies to all stationary and point sources of noise occurring on the Newhall Ranch Specific Plan site. As the Entrada South and Valencia Commerce Center Planning Areas are not located within the Newhall Ranch Specific Plan site, the requirements set forth in Mitigation Measure SP-4.9-10 do not apply to the Modified Project. Notwithstanding, the Modified Project would comply with the intent of Mitigation Measure SP-4.9-10 via compliance with the provisions set forth in Los Angeles County Code Section 12.08.390 as enforced by the County Department of Public Works, as part of their administration of all Modified Project construction related permits, and by the County Sheriff's Department during Modified Project operations, as part of their administration of this County Code requirement. As this measure addresses a Los Angeles County Code requirement, Modified Project compliance with the provisions set forth in Los Angeles County Code Section 12.08.390 is set forth as a "Regulatory Compliance Measure" in this report (see Section K of this report for a listing of all Los Angeles County Code requirements the Modified Project will comply with).

APPENDIX E 2017 APPROVED PROJECT MITIGATION MEASURE APPLICABILITY	
2017 Approved Project Mitigation Measures	Applicability to Modified Project
SP-4.9-11: 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 is prohibited in accordance with the County of Los Angeles Ordinance No. 11743, § 12.08.460.	Mitigation Measure SP-4.9-11 establishes requirements pursuant to County Code Section 12.08.390. The Modified Project will comply with all County Code requirements, including, but not limited to, those set forth in County Code Section 12.08.390. Compliance with these requirements will be enforced by the County Sheriff's Department as part of their administration of this County Code requirement. As this measure addresses a Los Angeles County Code requirement, Modified Project compliance with the provisions set forth in Los Angeles County Code Section 12.08.460 is set forth as a "Regulatory Compliance Measure" in this report (see Section K of this report for a listing of all Los Angeles County Code requirements the Modified Project will comply with).
SP-4.9-12: Loading zones and trash receptacles in commercial and Business Park 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 § 12.08.460 of the Ordinance No. 11743.	Mitigation Measure SP-4.9-12 establishes requirements pursuant to County Code Section 12.08.460. The Modified Project will comply with all County Code requirements, including, but not limited to, those set forth in County Code Section 12.08.460. Compliance with these requirements will be enforced by the County Department of Public Works, as part of their administration of all Modified Project construction related permits, and by the County Sheriff's Department during Modified Project operations, as part of their administration of this County Code requirement. As this measure addresses a Los Angeles County Code requirement, Modified Project compliance with the provisions set forth in Los Angeles County Code Section 12.08.460 is set forth as a "Regulatory Compliance Measure" in this report (see Section K of this report for a listing of all Los Angeles County Code requirements the Modified Project will comply with).
SP-4.9-13: Where residential lots are located with direct lines of sight to the Magic Mountain Theme Park, an acoustic analysis shall be submitted to show that exterior noise on the residential lots generated by activities at the park do not exceed the standards identified in § 12.08.390 of the Ordinance No. 11743 as identified in Table 4.9-2, County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources.	Mitigation Measure SP-4.9-13 establishes requirements pursuant to the standards set forth in Section 12.08.390, Table 4.9-2, County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources, of the County Noise Ordinance (Ordinance No. 11743). As such, these requirements would be implemented as part of the County Department of Public Works' administration of all Modified Project construction related permits for those residential lots that are located with direct lines of sight to the Magic Mountain Theme Park.
SP-4.9-14: After the time that occupancy of uses on the Newhall Ranch Specific Plan site occurs, and when noise levels at the Travel Village RV Park reach 70 dB(A) CNEL at locations where recreational vehicles are inhabited, the applicant shall construct a noise abatement	Mitigation Measure SP-4.9-14 explicitly states that this measure applies after the time that occupancy of uses on the Newhall Ranch Specific Plan site occurs. As the Entrada South and Valencia Commerce Center Planning Areas are not located within the Newhall Ranch Specific Plan site, the requirements set forth in Mitigation Measure SP-4.9-14 do not apply to the Modified Project.

2017 Approved Project Mitigation Measures	Applicability to Modified Project
barrier to reduce noise levels at the RV Park to 70 dB(A) CNEL or less.	
SP-4.9-15: Despite the absence of a significant impact, applicants for all building permits of Residential, Mixed-Use, Commercial, and Business Park land uses (Project) shall pay to the Santa Clara Elementary School District, prior to issuance of building permits, the project's pro rata share of the cost of a sound wall to be located between SR-126 and the Little Red School House. The project's pro rata share shall be determined by multiplying the estimated cost of the sound wall by the ratio of the project's estimated contribution of average daily trips on SR-126 (ADT) at the Little Red School House (numerator) to the total projected cumulative ADT increase at that location (denominator).[1] The total projected cumulative ADT increase shall be determined by subtracting the existing trips on SR-126[2] from the projected cumulative trips as shown in Table 1 of Topical Response 5 - Traffic Impacts to State and Local Roads in Ventura County after adding the total Newhall Ranch ADT traveling west of the City of Fillmore.	This measure applies to development occurring within the Newhall Ranch Specific Plan area and is not applicable to the Modified Project. No further action is required.
SP-4.9-16: Despite the absence of a significant impact, the applicant for all building permits of Residential, Mixed-Use, Commercial and Business Park land uses (Project) shall participate on a fair-share basis in noise attenuation programs developed and implemented by the City of Moorpark to attenuate vehicular noise on SR-23 just north of Casey Road for the existing single-family homes which front SR-23. The mitigation criteria shall be to reduce noise levels to satisfy State noise compatibility standards. The project's pro rata share shall be determined by multiplying the estimated cost of attenuation by the ratio of the project's estimated contribution of average daily trips on SR-23 (ADT) north of the intersection of SR-23 and Casey Road (numerator) to the total projected cumulative ADT increase at that location	This measure applies to development occurring within the Newhall Ranch Specific Plan area and is not applicable to the Modified Project. No further action is required.

1 Cost of Sound Wall X (Project ADT on SR-126 @ LRSH*/Total Projected Cumulative ADT Increase on SR-126 @ LRSH*) * LRSH = Little Red School House.

2 25,165 ADT using linear extrapolation from Table 1 of [Newhall Ranch Specific Plan EIR] Topical Response 5 - Traffic Impacts to State and Local Roads in Ventura County.

APPENDIX E 2017 APPROVED PROJECT MITIGATION MEASURE APPLICABILITY	
2017 Approved Project Mitigation Measures	Applicability to Modified Project
(denominator).[3] The total projected cumulative ADT increase shall be determined by subtracting the existing trips on SR-23 north of Casey Road[4] from the projected cumulative trips as shown in Topical Response 5 - Traffic Impacts to State and Local Roads in Ventura County after adding the total Newhall Ranch ADT traveling south of the City of Fillmore.	
SP-4.9-17: Prior to the approval of any subdivision map which permits construction within the Specific Plan area, the applicant for that map shall prepare an acoustical analysis assessing project and cumulative development (including an existing plus project analysis, and an existing plus cumulative development analysis including the project). The acoustical analysis shall be based upon State noise land use compatibility criteria and shall be approved by the Los Angeles County Department of Health Services.	Mitigation Measure SP-4.9-17 explicitly states that this measure applies to construction within the Newhall Ranch Specific Plan areas. As the Entrada South and Valencia Commerce Center Planning Areas are not located within the Newhall Ranch Specific Plan area, the requirements set forth in Mitigation Measure SP-4.9-17 do not apply to the Modified Project. Notwithstanding, this report provides an acoustical analysis using the State's noise land use compatibility criteria (see Section L.2 of this report for this analysis). As this report is in support of a Supplemental EIR, the analysis focuses on the incremental impacts of the Modified Project in relation to the impacts of the Approved Project in lieu of the analytic structure referenced in this mitigation measure (i.e., "including an existing plus project analysis, and an existing plus cumulative development analysis including the project").
SP-5.0-38: All construction activity occurring on the water reclamation plant site shall adhere to the requirements of the "County of Los Angeles Construction Equipment Noise Standards," County of Los Angeles Ordinance No. 11743.	Mitigation Measure SP-5.0-38 applies to the construction of the Newhall Ranch Water Reclamation Plant. The Modified Project does not include the construction of this facility. As such, Mitigation Measure SP-5.0-38 does not apply to the Modified Project.
SP-5.0-39: Limit all construction activities occurring near occupied residences to between the hours of 6:30 A.M. and 8:00 P.M., and exclude all Sundays and legal public holidays, pursuant to County Construction Section standards.	Mitigation Measure SP-5.0-39 applies to the construction of the Newhall Ranch Water Reclamation Plant. The Modified Project does not include the construction of this facility. As such, Mitigation Measure SP-5.0-39 does not apply to the Modified Project.
SP-5.0-40: All operational activity occurring on the water reclamation plant site shall adhere to the requirements of the "County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources," pursuant to § 12.08.390 of County of Los Angeles Ordinance No. 11743.	Mitigation Measure SP-5.0-40 applies to the construction of the Newhall Ranch Water Reclamation Plant. The Modified Project does not include the construction of this facility. As such, Mitigation Measure SP-5.0-40 does not apply to the Modified Project.

3 Cost of mitigation x (Project ADT on SR-23 north of Casey Road/Total Projected cumulative ADT Increase on SR-23 north of Casey Road).

4 ADT using linear extrapolation from Table 1 of Topical Response 5 - Traffic Impacts to State and Local Roads in Ventura County.

APPENDIX E 2017 APPROVED PROJECT MITIGATION MEASURE APPLICABILITY	
2017 Approved Project Mitigation Measures	Applicability to Modified Project
VCC-NOI-1: All equipment will be properly maintained and use exhaust mufflers.	The requirements set forth in Mitigation Measure VCC-NOI-1 have been incorporated into the Modified Project as a component of Mitigation Measure MM N-1.
VCC-NOI-2: Construction activity will be limited to the hours of 7 a.m. to 7 p.m. Monday - Saturday.	Los Angeles County Code Section 12.08.440 establishes construction noise limit standards for construction occurring at any time of the day or night. The construction noise analysis presented in this report is based on the standards that apply to the time period of 7:00 A.M. to 8:00 P.M. As shown in Tables D-1 through D-21 in Appendix D of this report, the Modified Project would result in a less significant construction noise impact at all analyzed receptors with the implementation of Mitigation Measure MM N-1. As such, Modified Project construction would be in compliance with the construction noise standards set forth in Los Angeles County Code Section 12.08.440 for construction occurring between the hours of 7:00 A.M. to 8:00 P.M. As a result, the additional limitations on construction hours that are set forth in Mitigation Measure VCC-NOI-2 from the State-certified EIR are not required. Thus, no further action is required with regard to the implementation of this measure as it applies to the Modified Project.
VCC-NOI-3: Backer Road will be realigned to the north a maximum distance of 50' and average distance of 25' to allow for the construction of an 11' combination berm and wall between the homes and the road.	Backer Road has been renamed and is currently known as Hasley Canyon Road. The requirements set forth in Mitigation Measure VCC-NOI-3 have been completed. As such, no further action is required with regard to the implementation of this measure as it applies to the Modified Project.
VCC-NOI-4: A noise study will be conducted subsequent to the completion of Becker Road from Haley Creek to SR-126 to determine whether restrictions to nighttime truck traffic are warranted because of single event noise impacts to residents along Backer Road.	Backer Road has been renamed and is currently known as Hasley Canyon Road. Section L.2.a of this report provides an analysis of motor vehicle travel along the roadway segment of Hasley Canyon Road, west of The Old Road. This analysis shows that the land use compatibility classification for the residential uses located on the east side of Hasley Canyon Road, is forecasted to be Normally Acceptable under both Modified Project and 2017 Approved Project conditions. As such, motor vehicle travel along this roadway segment, which includes travel by both medium- and heavy-duty trucks, would be less than significant. As a result, no further action is required with regard to the implementation of this measure as it applies to the Modified Project.
VCC-NOI-5: The Permittee shall construct a County Engineer Standard D-65 wall along the westerly top of roadway slope within The Old Road right-of-way from Backer Road southerly a distance of approximately 650 feet.	Backer Road has been renamed and is currently known as Hasley Canyon Road. The requirements set forth in Mitigation Measure VCC-NOI-5 have been completed. As such, no further action is required with regard to the implementation of this measure as it applies to the Modified Project.

APPENDIX E 2017 APPROVED PROJECT MITIGATION MEASURE APPLICABILITY	
2017 Approved Project Mitigation Measures	Applicability to Modified Project
VCC-NOI-6: A noise study will be conducted by an independent noise expert mutually agreed upon by the Live Oak Community Association (LOCA), Department of Public Works, and the Permittee. If such an expert cannot be agreed upon, the Department of Public Works shall conduct the study and an independent expert chosen by LOCA will review it. The Permittee will supply the necessary funds for the study and its review. The results of the study shall be implemented to the satisfaction of the Department of Public Works.	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-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.
VCC-NOI-8: The Permittee shall construct, upon the written request of any owner of the residential lots adjacent to the Permittee's project consisting of lots 49 through 57 of Tract 44460, two additional courses of slumpstone block on the top of the existing rear wall to a total height of six feet.	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-9: The Permittee shall remove the existing block wall along Backer Road at the rear of Lots 20 and 21 of Tract 36501 and Lots 72 and 73 of Tract 37224, and replace the block wall with an eleven-foot high wall. The block wall shall be removed and the new wall constructed in its place only if all of the homeowners whose properties abut the wall provide written consent to its construction. In addition, the Permittee shall extend a six-foot high slumpstone wall from Backer Road along both sides of Cambridge Avenue for a distance of approximately 150 feet. These walls shall be erected only if all of the homeowners whose property abut the walls provide written consent to the construction of the walls.	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 1-5 and Hasley Canyon Road between the hours of 8:00 p.m. and 7:00 a.m.	Backer Road has been renamed and is currently known as Hasley Canyon Road.
NOI-1: Pile driving vibration due to the development of the Commerce Center Drive bridge shall be reduced by: • identifying all uses in the vicinity that may be adversely affected by the vibrations, including Travel Village, residences built in earlier phases of Mission Village and	Mitigation Measure NOI-1 applies to the construction of the Commerce Center Drive Bridge. The Modified Project does not include the construction of this facility. As such, no further action is required with regard to the implementation of this measure as it applies to the Modified Project.

2017 Approved Project Mitigation Measures	Applicability to Modified Project
Landmark Village, and nonresidential land uses that may use vibration-sensitive etc.; and • installing seismographs at the aforementioned sensitive locations to ensure that Section 12.08.560 of the County's Noise Ordinance is not exceeded, and/or that the pile driving would not cause structural damage or adversely affect vibration-sensitive equipment; and • adjusting vibration amplitudes of the pile driving on the conditions of the affected structures, the sensitivity of equipment, and/or human tolerance; and/or • To the extent feasible, the Project developer should utilize cast-in-drilled-hole (CIDH) piles in lieu of pile driving.	

APPENDIX F

Stantec Consulting Services -- ADT Volume Summary Memo

Stantec

Memo

To:	Bruce Lackow Meridian	From:	Daryl Zerfass Stantec
Project/File:	2042604600	Date:	October 27, 2023

Reference: Entrada South & Valencia Commerce Center ADT Volume Summary

The attached summary of Average Daily Traffic (ADT) volumes provides the rounded and unrounded volumes prepared as part of the Entrada South & Valencia Commerce Center Transportation Impact Analysis (TIA) (Stantec, March 2023). Table D-1 of the TIA includes a summary of ADT volumes, which presents the ADT volumes rounded to the nearest 1,000. The attached summary table provides both the rounded and the corresponding unrounded ADT volumes for reference.

In addition, based on the traffic volume modeling completed for the Modified Project that demonstrates minimal travel volume increases compared to the 2017 Approved Project, the Modified Project would likely result in similar traffic volumes (i.e., no material increase in traffic volumes compared to the 2017 Approved Project) for those roadway segments in the Project area that are not listed in Appendix D, Table D-1 of the TIA.

Please feel free to contact Daryl if you have any questions or if you would like to discuss the above material.

Sincerely,

STANTEC CONSULTING SERVICES INC.

Daryl Zerfass PE, PTP
Principal, Transportation Planning & Traffic Engineering
Phone: (949) 923-6058
Daryl.Zerfass@stantec.com

Attachment: ADT Volume Summary

ADT VOLUME SUMMARY

ID	Segment	Existing	2030 No Project		2030 with 2017 Approved Project		2030 with Modified Project	
			UnRounded	Rounded	UnRounded	Rounded	UnRounded	Rounded
2	Hasley Cyn w/o Commerce	Not Available	10,685	11,000	11,077	11,000	11,075	11,000
10	Hasley w/o Old Road	17,307	24,267	24,000	25,223	25,000	25,499	25,000
11	Commerce Cnt s/o Industry	7,821	17,297	17,000	21,675	22,000	21,002	21,000
12	Commerce Cnt s/o Franklin	Not Available	21,498	21,000	33,818	34,000	31,650	32,000
13	Commerce Cnt n/o SR-126	16,035	24,428	24,000	37,499	37,000	34,317	34,000
16	Valencia e/o Poe	Not Available	27,876	28,000	28,050	28,000	28,058	28,000
17	Valencia w/o Westridge	Not Available	29,790	30,000	30,474	30,000	30,599	31,000
18	Valencia e/o Westridge	17,718	50,212	50,000	53,180	53,000	52,499	52,000
19	Valencia e/o Old Road	Not Available	48,360	48,000	49,695	50,000	49,690	50,000
20	Magic Mtn w/o Commerce Ctr	Not Available	36,990	37,000	38,840	39,000	37,525	38,000
21	Magic Mtn e/o Commerce Ctr	Not Available	37,845	38,000	40,721	41,000	39,297	39,000
22	Magic Mtn w/o Old Road	3,554	55,313	55,000	69,827	70,000	65,436	65,000
23	Old Road n/o Hasley	15,802	16,761	17,000	18,384	18,000	18,437	18,000
24	Old Road n/o Biscailuz	Not Available	8,936	9,000	10,168	10,000	10,160	10,000
25	Old Road n/o Turnberry	10,157	10,618	11,000	10,552	11,000	10,599	11,000
26	Old Road s/o Henry Mayo	13,519	7,361	7,000	12,014	12,000	11,013	11,000
27	Old Road n/o of Rye Canyon	37,533	36,869	37,000	40,467	40,000	39,500	40,000
28	Old Road n/o Magic Mtn	39,108	37,162	37,000	42,403	42,000	41,351	41,000
29	Old Road s/o Magic Mtn	19,422	21,604	22,000	22,765	23,000	22,579	23,000
30	Old Road s/o Valencia	22,314	25,498	25,000	26,499	26,000	26,659	27,000
48	SR-126 w/o Commerce Center	25,500	50,469	50,000	54,263	54,000	53,344	53,000
49	SR-126 e/o Commerce Center	37,000	62,101	62,000	71,103	71,000	69,191	69,000
59	Franklin Pkwy w/o Commerce	6,142	7,682	8,000	11,371	11,000	11,439	11,000
60	Hancock e/o Commerce Cnt	Not Available	5,000	5,000	11,228	11,000	10,130	10,000
88	Magic Mtn e/o I-5	32,120	44,066	44,000	47,499	47,000	46,347	46,000
93	Tourney n/o Valencia	Not Available	5,499	5,000	5,496	5,000	5,520	6,000
96	Valencia e/o I-5 NB Ramps	38,589	52,851	53,000	53,121	53,000	53,234	53,000
97	Valencia e/o Tourney	Not Available	64,453	64,000	64,746	65,000	64,819	65,000
183	Commerce Cnt s/o Henry Mayo	Not Available	25,376	25,000	29,214	29,000	28,311	28,000
184	Commerce Cnt n/o Magic Mtn	Not Available	21,384	21,000	25,171	25,000	23,940	24,000
186	Magic Mtn w/o Westrdige	Not Available	31,847	32,000	32,781	33,000	32,991	33,000
187	Westridge s/o Magic Mtn	Not Available	15,299	15,000	17,358	17,000	17,378	17,000
188	Westridge n/o Valencia	3,700	10,302	10,000	13,816	14,000	13,182	13,000
192	Henry Mayo w/o The Old Rd	Not Available	9,137	9,000	8,354	8,000	8,356	8,000
247	Magic Mtn e/o The Old Rd	Not Available	62,699	63,000	70,829	71,000	68,711	69,000