Noise Technical Report

Midway Rising Project

March 2025

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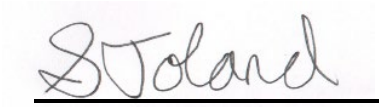

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Acronyms and Abbreviations

2008 General Plan	2008 City of San Diego General Plan
2018 Community Plan	2018 Midway-Pacific Highway Community Plan
ACLUP	Airport Comprehensive Land Use Plan
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
APN	Assessor's Parcel Number
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
City	City of San Diego
CNEL	Community Noise Equivalent Level
dB	decibel
dBA	A-weighted decibel
FAA	Federal Aviation Administration
FTA	Federal Transit Administration
HVAC	heating, ventilation, and air conditioning
I-	Interstate
in/sec	inches per second
Ldn	day-night noise level
Leq	equivalent energy level
Lmax	maximum noise level
Lmin	minimum noise level
Midway-Pacific Highway CPU PEIR	Midway-Pacific Highway Community Plan Update Revised Final Program Environmental Impact Report
N/A	not applicable
NSLU	noise-sensitive land use
PPV	peak particle velocity
Project	Midway Rising Project
RCNM	Roadway Construction Noise Model
rms	root mean square
ROW	right-of-way
SDCRAA	San Diego County Regional Airport Authority
SDIA	San Diego International Airport
SDMC	San Diego Municipal Code
Specific Plan	Midway Rising Specific Plan
USEPA	U.S. Environmental Protection Agency
VdB	vibration decibel

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Executive Summary

This report assesses and evaluates potential noise and vibration impacts associated with implementation of the proposed Midway Rising Project (Project). It also identifies mitigation measures where necessary and feasible to address significant noise impacts. This report was prepared in support of a Subsequent Environmental Impact Report for the Project that evaluates the potential for the Project to trigger new significant impacts and/or more severe impacts than those identified in the Midway-Pacific Highway Community Plan Update Revised Final Program Environmental Impact Report (Midway-Pacific Highway CPU PEIR), San Diego, California, SCH #2015111013, dated May 2018. This analysis tiers from the analysis of noise impacts in the Midway-Pacific Highway CPU PEIR.

Operation of the Project would not result in a significant increase to ambient traffic noise levels in the Project vicinity. Operation of the Project would not result in noise levels that exceed San Diego Municipal Code (SDMC) Noise Abatement and Control Ordinance Standards, with the exception of outdoor event noise. Mitigation Measure **NOI-1** would require implementation of best management practices to minimize event noise, but this impact would remain **Significant and Unavoidable**.

Construction noise levels would have the potential to exceed the SDMC limit of 75 A-weighted decibels (dBA) at existing off-site and future on-site residential development. Mitigation Measure **NOI-2**, adapted from Midway-Pacific Highway CPU PEIR Mitigation Measure **NOISE 5.5-2**, would reduce impacts related to construction noise levels to a **Less than Significant** level. Mitigation Measure **NOI-3**, adapted from Midway-Pacific Highway CPU PEIR Mitigation Measure **NOISE 5.5-3**, would reduce construction vibration impacts to nearby vibration-sensitive medical uses to a **Less than Significant** level. Impacts related to on-site transportation noise exposure and aircraft noise would be **Less than Significant** due to Project compliance with existing regulatory processes, specifically compliance with Title 24 interior noise requirements.

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Section 1 Project Description

1.1 Purpose of the Report

This report was prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) (California Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 et seq.). The redevelopment of the Project site was included in the evaluation of impacts in the Midway-Pacific Highway Community Plan Update Revised Final Program Environmental Impact Report (Midway-Pacific Highway CPU PEIR). Subsequently, revisions have been proposed to the redevelopment plan for the Project site; therefore, a Subsequent Environmental Impact Report is being prepared that evaluates the potential for the Project to trigger new significant impacts and/or more severe impacts than those identified in the Midway-Pacific Highway CPU PEIR. This analysis tiers from the analysis of noise impacts in the Midway-Pacific Highway CPU PEIR and the City's CEQA Significance Determination Thresholds addressed in this report are the same as those addressed in the Midway-Pacific Highway CPU PEIR (City of San Diego 2016).

This report evaluates if any potentially significant noise or vibration impacts would occur due to the type and scale of the proposed Project development that would exceed the impacts identified for the Project site in the Midway-Pacific Highway CPU PEIR.

1.2 Project Location and Description

1.2.1 Project Location

The Project site is in the northernmost section of the Midway-Pacific Highway Community in San Diego, California. The Project site is south of Mission Bay; west of Mission Valley, Old Town, and Mission Hills; north of Liberty Station and the San Diego International Airport (SDIA); and east of Ocean Beach and Point Loma. The Project site encompasses 52.08 acres of developed land and is generally bounded by Kurtz Street to the north, Sports Arena Boulevard to the south, Hancock Street to the northwest, and commercial properties to the west and east, east of Greenwood Street. The Project site includes the City of San Diego (City)-owned San Diego International Sports Arena site (a portion of Assessor's Parcel Number [APN] 441-590-04) and three privately owned parcels along Kurtz Street (APNs 441-330-01, 441-330-11, and 441-330-12). Street addresses on the Project site include 3220, 3240, 3250, 3350, and 3500 Sports Arena Boulevard and 3467, 3487, and 3495 Kurtz Street. Regional transit corridors include Interstate (I)) 8 to the north, I-5 to the east, and the Old Town Transit Center offering bus and rail service (COASTER, Amtrak, and San Diego Metropolitan Transit System trolley) approximately 0.7 to 1 mile northeast of the Project. Refer to Figure 1, Regional Location, and Figure 2, Project Site Location.

The Project site is currently developed with the San Diego International Sports Arena, SOMA San Diego music venue, asphalt surface parking lots, a gasoline service station, restaurants, a lumber and home store, thrift store, and various commercial/retail businesses (Figure 3, Existing Site Uses).

1.2.2 Previous Environmental Analysis

In 2018, the Midway-Pacific Highway CPU PEIR was certified. The Midway-Pacific Highway CPU PEIR analyzed environmental impacts associated with the 2018 Midway-Pacific Highway Community Plan (2018 Community Plan), including policies and recommendations related to a range of topics included in each section of the 2018 Community Plan, such as land use, multimodal mobility, urban design, environmental conservation, recreation opportunities, neighborhood character, and historic preservation, in accordance with the general goals stated in the 2008 City of San Diego General Plan (2008 General Plan). The Midway-Pacific Highway CPU PEIR analyzed the redevelopment of the City-owned portion of the Project site with commercial retail, office, and residential uses. The privately owned parcels were identified for higher density residential and commercial mixed use.

This report was prepared in support of a Subsequent EIR for the Project that evaluates the potential for the Project to trigger new significant impacts and/or more severe impacts than those identified in the Midway-Pacific Highway CPU PEIR. This analysis tiers from the analysis of noise impacts in the Midway-Pacific Highway CPU PEIR (City of San Diego 2018a; AECOM 2017). Tiering refers to using the analysis of general matters contained in a broader EIR with later EIRs on narrower projects, incorporating by reference the general discussions from the broader EIR, and concentrating the later EIR solely on the issues specific to the later project.

1.2.3 Project Description

The Project proposes to redevelop the site with a mix of uses including entertainment, retail, restaurant, residential, recreational, public, and park uses. Flexible zoning would allow for construction of a new on-site entertainment center or retention of the existing arena in its current location.

The Project includes the approval and implementation of the Midway Rising Specific Plan (Specific Plan), which provides guidance and direction on land use, development standards, site planning, building design, and landscape design, and centers on five key elements: housing, public space, entertainment, retail, and mobility. The Specific Plan would satisfy and incorporate the 2018 Community Plan's Supplemental Development Regulations to ensure that it furthers the 2018 Community Plan's vision for the site.

The Project would include up to 4,627 housing units, including affordable units, to provide a variety of housing opportunities and contribute toward improving housing affordability in the City. A central organizing element would be a network of park and public spaces consisting of approximately 15 acres that connects all the key land uses with each other and to the surrounding community. It is anticipated that outdoor events could be held in the park and public space areas

on the Project site. Figure 4, Site Concept Illustrative Map, shows an example for illustrative purposes only of how the park and public space network could be developed.

Land uses in the Specific Plan would be zoned Residential (RMX-2) and designated as Community Village, and development would be divided into two phases. Phase 1 would be located east of the planned roadway Frontier Drive (between Sports Arena Boulevard and Kurtz Street) and Phase 2 would be located west of Frontier Drive.

The Specific Plan allows for entertainment uses across the entire Specific Plan Area and for the development of a multipurpose entertainment center that may host a range of activities. Consistent with the Project-specific transportation analysis prepared by Kimley-Horn Associates (2024a), the noise analysis assumes that a new 380,550 square-foot, 16,0000-seat entertainment center could be constructed offering over 166 events per year, including but not limited to performing arts such as concerts, family shows, sporting events, motor sports, comedy, and musical and artistic entertainment productions. In addition, the privately owned parcels within the Specific Plan may include a theater along Kurtz Street that would host a series of events each year. It is assumed that the maximum capacity for this venue would be 3,500 spectators. The maximum event capacity for the Project site would be approximately 20,000 attendees, which could involve of combination of Project indoor and public space venues.

Mobility within the Project site would be improved with the Project's construction of a multimodal circulation network of new and modified roadways, sidewalks, promenades, multi-use urban paths, and bicycle and pedestrian facilities. The Project would include on- and off-site mobility improvements to provide connections to the surrounding community and transit. The Specific Plan includes design standards for circulation, parking, buildings, and landscape to ensure that future development projects are implemented consistent with applicable design goals.

Sustainability would be an integral part of the Project. The Project would focus on sustainable design and Smart Growth to meet the City's 2022 Climate Action Plan goals. The Project would be in a geographic center of the City near and connected to transportation, jobs, housing, and regional park and public space.

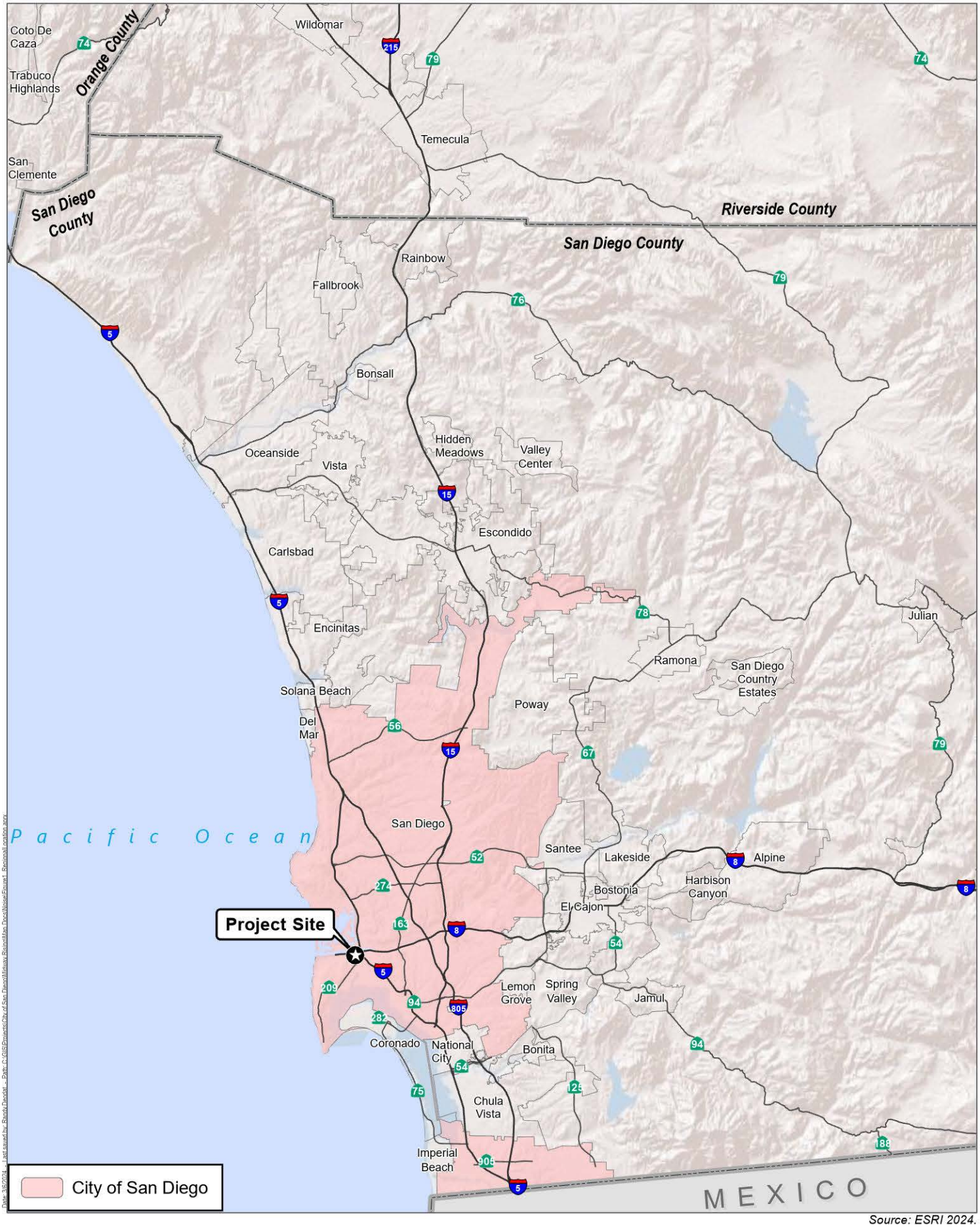
The Project would include infrastructure improvements on the Project site and in surrounding off-site areas, including extensions and/or upgrades of existing water, sewer, storm drain, drainage, roadways, bike facilities, transit, and pedestrian facilities. Heating, ventilation, and air conditioning (HVAC) equipment is anticipated to be located in a mechanical yard on the northern side of the proposed entertainment center and would include approximately four air source heat pumps and three cooling towers, surrounded by a 22-foot solid wall (Gensler 2023). Transportation improvements would be required within the Sports Arena Boulevard and Kurtz Street public right-of-way (ROW) for new multi-use urban paths, and off site on the following roadway intersections:

- **Kurtz Street/Hancock Street Intersection:** Demolition and repaving for the construction of a new single-lane roundabout.
- **Sports Arena Boulevard/Midway Drive/West Point Loma Boulevard Intersection:** All channelized right-turn lanes would be removed at the intersection of Sports Arena

Boulevard and Midway Drive and West Point Loma Boulevard per the 2018 Community Plan. The southbound approach would be reconfigured to separate the existing southbound shared through/left-turn lane to include two left-turn lanes, one through lane, and one shared through/right-turn lane. The northbound approach would also be reconfigured to separate the existing shared through/left-turn lane to include two left-turn lanes, one through lane, and one shared through/right-turn lane. An eastbound through lane would be added with widening. Finally, the northbound and southbound signal timing would be modified to protected left-turn phasing. These improvements would require a traffic signal modification.

- **Hancock Street/Sports Arena Boulevard Intersection:** Sports Arena Boulevard would be re-striped to extent the left-turn storage from 160 feet to 350 feet.
- **Camino Del Rio/Sports Arena Boulevard/Rosecrans Street Intersection:** Roadways would be re-striped within the existing roadway ROW to modify the eastbound approach to include one left-turn lane, one shared through/left-turn lane, one slight right-turn lane, and one right-turn lane. These modifications would require a traffic signal modification.
- **Rosecrans Street/Lytton Street Intersection:** Lytton Street would be re-striped within the existing roadway ROW to include second eastbound left-turn lane.
- **West Drive/Future Frontier Drive/Sports Arena Boulevard Intersection:** Signal timing optimization.
- **Camino Del Rio West/Hancock Street Intersection:** Signal timing optimization.
- **Rosecrans Street/Midway Drive Intersection:** Signal timing optimization.
- **Barnett Avenue/Midway Drive Intersection:** Signal timing optimization.

Construction of the Project is anticipated to occur from approximately January 2026 through December 2035 and would occur in two phases. Phase 1, proposed to occur from January 2026 to December 2029, assumes Project site development of the planned Frontier Drive roadway and within the area located east of planned Frontier Drive, including the entertainment center, approximately 1,242 residential units, approximately 100,888 square feet of commercial development, and park and public spaces, including The Square. The existing San Diego International Sports Arena would remain operational and be demolished following construction of the new entertainment center. Phase 2, proposed to occur from approximately October 2028 to December 2035, assumes the construction of the remaining 3,385 residential units and approximately 39,112 square feet of commercial development, park and public space development west of the proposed Frontier Drive, and the construction of Kemper Street between Sports Arena Boulevard and Kurtz Street and the planned roundabout. Both phases would include demolition of existing development, earthwork, installation of paving and building foundations, exterior building construction, and interior construction and application of architectural coatings. Excavated soil would be stockpiled and reused on site to the extent feasible; however, truck trips would be required in each phase for demolition export, soil import and export, and building material import. A rock crusher would be used during Phase 2 to reuse some demolished material on site.



Source: ESRI 2024.

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Figure 1
Regional Location
Midway Rising

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Source: Maxar Imagery 2022.

N

0 350 700

Feet

Figure 2

Project Site Location

Midway Rising

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Source: Maxar Imagery 2022.

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Figure 3

Existing Site Uses

Midway Rising

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Source: CityThinkers 2024.

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Feet

Figure 4

Site Concept Illustrative Map

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Section 2 Existing Conditions

This section describes applicable noise metrics, effects, and regulations.

2.1 Noise Basics

The following outlines the noise metrics and effects referenced in this report.

2.1.1 Quantification of Noise

The California Department of Transportation (Caltrans) defines noise as sound that is loud, unpleasant, unexpected, or undesired. Further, for this noise analysis, noise only exists if a source, path, and receiver are present. Sound pressure waves must be produced by a source and transmitted through a medium, such as air. The sound must be perceived by, registered by, or affect a receptor, such as an ear or noise monitoring device (Caltrans 2013).

Sound pressure levels are quantified using a logarithmic ratio of actual sound pressures to a reference pressure squared, called "bels." A bel is typically divided into tenths, or decibels (dB). Sound pressure alone is not a reliable indicator of loudness because frequency (or pitch) also affects how receptors respond to the sound. To account for the pitch of sounds and the corresponding sensitivity of human hearing to those sounds, the raw sound pressure level is adjusted with a frequency-dependent A-weighting scale that is stated in units of decibels (dBA) (Caltrans 2013). Typical A-weighted noise levels are listed in Table 1, Typical A-Weighted Noise Levels.

Table 1. Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet flyover at 1,000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 miles per hour		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	**— 70 —**	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	**— 60 —**	
		Large business office

Table 1. Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Quiet urban daytime	**— 50 —**	Dishwasher in next room
Quiet urban nighttime	**— 40 —**	Theater or large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	**— 0 —**	Lowest threshold of human hearing

Source: Caltrans 2013.

Notes: dBA = A-weighted decibel

A receptor's response to a given noise may vary depending on the sound level, duration of exposure, character of the noise sources, time of day during which the noise is experienced, and activity affected by the noise. Activities most affected by noise include rest, relaxation, recreation, study, and communications. In consideration of these factors, different measures of noise exposure have been developed to quantify the extent of the effects from a variety of noise levels. For example, some measures consider the 24-hour noise environment of a location by using a weighted average that penalizes noise levels during normal relaxation and sleeping hours. Other measures consider an average noise level over a period of time that includes ambient noise and a steady-state noise source for a given period of time within the averaging period (Caltrans 2013). The indices for measuring community noise levels used in this analysis are defined below:

Lmax, maximum noise level, is the highest instantaneous noise level during a specified time period.

Lmin, minimum noise level, is the lowest instantaneous noise level during a specified time period.

Leq, equivalent energy level, provides an average acoustical or sound energy content of noise measured during a prescribed period such as 1 minute, 15 minutes, 1 hour, or 8 hours. The sound level may not be constant over the measured time period, but the average dB sound level, given as dBA Leq, contains an equal amount of energy as the fluctuating sound level.

Ldn, day-night noise level, is a 24-hour weighted average with a 10 dBA penalty applied to the nighttime hours of 10:00 p.m. to 7:00 a.m. This penalty attempts to account for the fact that nighttime noise levels are potentially more disturbing than equal daytime noise levels.

CNEL, community noise equivalent level, is a 24-hour average that applies weights to noise levels during evening and nighttime hours to compensate for the increased disturbance response of people at those times (when relaxation and sleep typically occur). A +5 dBA weighting is applied to sound occurring between 7:00 p.m. and 10:00 p.m., and a +10 dBA weighting is applied to sound occurring between 10:00 p.m. and 7:00 a.m. Ldn and CNEL are typically within 1 dBA of each other and, for most intents and purposes, are interchangeable.

The dB level of a sound decreases (or attenuates) as the distance from the source of that sound increases. For a single point source such as a piece of mechanical equipment, the sound level normally decreases by approximately 6 dBA for each doubling of distance from the source. Sound that originates from a linear, or "line," source, such as vehicular traffic, attenuates by approximately 3 dBA per doubling of distance. Other contributing factors that affect sound reception include ground absorption, topography that provides a natural barrier, meteorological conditions, or the presence of human-made obstacles such as buildings and sound barriers (Caltrans 2013).

2.1.2 Noise Effects

Reaction to a given sound varies depending on acoustical characteristics of the source and the environment of the receptor. The A-scale de-emphasizes low-frequency sounds because humans are more sensitive to high-frequency sounds, and high-frequency sounds are more likely to cause hearing damage. People tend to compare an intruding noise with existing background noise levels. If a new noise is considerably louder or more noticeable than existing noise levels, it is generally considered objectionable. The activity that the receptor is engaged in also affects response. For example, the same noise source, such as constant freeway traffic, may be more objectionable to people sleeping than to workers in a factory. A 3 dBA change is the smallest increment that is perceivable by most receivers, and a 5 dBA change in community noise levels is noticeable. Generally, 1 to 2 dBA changes are not detectable except under controlled laboratory conditions. A sound that is 10 dBA greater than the reference sound is typically perceived as twice as loud (Caltrans 2013).

Although the reaction to noise may vary, it is clear that noise is a significant component of the environment, and excessively noisy conditions can affect an individual's health and well-being. The effects of noise are often only transitory, but adverse effects can be cumulative with prolonged or repeated exposure. The effects of noise on a community can be organized into six broad categories: sleep disturbance, permanent hearing loss, human performance and behavior, social interaction or communication, extra-auditory health effects, and general annoyance.

2.2 Environmental Vibration

Vibration is defined as dynamic excitation of an elastic system, such as the ground or a structure, which results in oscillatory movement of the system (Caltrans 2020). Typical human-made causes of earthborne vibration include trains and construction activities such as blasting, pile driving, and operation of heavy earthmoving equipment (FTA 2018). The resulting waves transmitted through solid material are referred to as "structureborne vibration" or "groundborne vibration." Vibration energy spreads out as it travels through the ground, causing the vibration amplitude to decrease as distance from the noise source increases. The vibration levels inside a building depend on the vibration energy that reaches the building foundation and the characteristics of the building that affect propagation of the vibration through the building. A heavier building will typically experience lower vibration levels. The most common impact associated with vibration in buildings is annoyance resulting from the effects of vibration such as building movement, rattling of windows, shaking of items on shelves or walls, and rumbling sounds. In more extreme cases, building damage may occur. Because the effects of vibration elicit a greater response than the vibration itself, vibration is typically only perceptible to people inside buildings (FTA 2018).

Vibration levels are typically expressed in terms of the peak particle velocity (PPV) and root mean square (rms) amplitude, both in inches per second. PPV is most appropriate for evaluating building damage potential. Caltrans estimates that continuous vibration levels of less than 0.08 PPV and single-event vibration levels of less than 0.12 PPV do not result in damage to even the most fragile historic buildings (Caltrans 2020).

Section 3 Regulatory Framework

This section summarizes noise regulations applicable to this analysis.

3.1 Federal

The following federal regulations are relevant to this analysis.

3.1.1 Federal Aviation Administration Standards

Enforced by the Federal Aviation Administration (FAA), the Code of Federal Regulations, Title 14, Part 150, prescribes the procedures, standards, and methods governing the development, submission, and review of airport noise exposure maps and airport noise compatibility programs, including the process for evaluating and approving or disapproving these programs. Code of Federal Regulations, Title 14, also identifies land uses that are typically compatible with various levels of noise exposure by individuals. The FAA considers residential land uses to be compatible with exterior noise levels at or less than 65 dBA CNEL.

3.1.2 Noise Control Act

The Noise Control Act of 1972 identifies uncontrolled noise as a danger to health and welfare, particularly for people in urban areas. Responsibility for noise control remains primarily a state and local issue. However, the act established a means for effective coordination of federal research and noise control activities. The Noise Control Act includes a directive to the U.S. Environmental Protection Agency (USEPA) to develop and publish information on noise levels to protect public health and welfare with an adequate margin of safety. In 1974, the USEPA published Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. The document identifies an interior noise level of 45 dBA Ldn in residential areas as adequate to protect indoor activity from interference and annoyance. An exterior noise level of 55 dBA Ldn was identified as the maximum noise level to avoid interference and annoyance in residential areas and other areas in which quiet is a basis for use. A maximum 24-hour average outdoor noise level of 70 dBA Leq is recommended to prevent hearing loss (USEPA 1974).

3.2 State

The following state regulations are relevant to this analysis.

3.2.1 California Noise Control Act

The California Noise Control Act of 1973 (provided as Sections 46000 through 46080 of the California Health and Safety Code) finds that excessive noise is a serious hazard to public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. The act declares that the State of California has a responsibility to protect the health and welfare of its citizens through the control, prevention, and abatement of noise. It is the policy of the state to provide

Californians with an environment free from noise that jeopardizes their health or welfare. Section 46050.1 of the act mandates development guidelines for the preparation and content of noise elements.

3.2.2 California Noise Insulation Standards (California Code of Regulations, Title 24)

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for hotels, motels, dormitories, and multi-family residential uses. These standards are contained in the California Building Standards Code (Title 24). Title 24 requires that residential structures be designed to prevent the intrusion of exterior noise so that the interior noise, with windows closed, attributable to exterior sources shall not exceed 45 dBA CNEL in any habitable room. The regulations also specify that acoustical studies must be prepared whenever a multi-family residential building or structure may be exposed to exterior noise levels of 60 dBA CNEL or greater. Such acoustical analysis must demonstrate that the residences have been designed to limit intruding noise to a maximum interior noise level of 45 dBA CNEL.

3.3 Local

The following local regulations are applicable to this analysis.

3.3.1 City of San Diego 2008 General Plan

The Noise Element of the 2008 General Plan includes policies intended to minimize noise through standards, site planning, and noise mitigation. The 2008 General Plan policies include the separation of excessive noise-generating uses from residential and other noise-sensitive land uses (NSLUs) (Policy NE-A.1), the limitation of future residential and other noise-sensitive land uses in areas exposed to high levels of noise (Policy NE-A.3), and an acoustical study requirement (Policy NE-A.4) (City of San Diego 2008):

- **NE-A.1:** Separate excessive noise-generating uses from residential and other noise-sensitive land uses with a sufficient spatial buffer of less sensitive uses.
- **NE-A.3:** Limit future residential and other noise-sensitive land uses in areas exposed to high levels of noise.
- **NE-A.4:** Require an acoustical study consistent with Acoustical Study Guidelines (Table NE-4) for proposed developments in areas where the existing or future noise level exceeds or would exceed the "compatible" noise level thresholds as indicated on the Land Use - Noise Compatibility Guidelines (Table NE-3 [provided as Table 2)], so that noise mitigation measures can be included in the project design to meet the noise guidelines.

As referenced in Policy NE-A.4, the Noise Element includes the Land Use – Noise Compatibility Guidelines (2008 General Plan Table NE-3), which identify the limits for acceptable noise levels for different land use categories, as illustrated in Table 2, City of San Diego Land Use – Noise Compatibility Guidelines (2008 General Plan Table NE-3). The City conditionally allows multi-unit and mixed-use residential uses exposed to exterior

noise levels of up to the 70 dBA CNEL in areas affected primarily by motor vehicle noises with existing residential uses even though they are not generally considered compatible (City of San Diego 2015).

Recent amendments to the 2008 General Plan, including the Noise Element, were adopted in July 2024 as a part of a refresh to the General Plan (Blueprint SD). The amendment to the Noise Element was adopted after the issuance of the Notice of Preparation for the Project (December 2023) and is noted for information only.

Table 2. City of San Diego Land Use – Noise Compatibility Guidelines (2008 General Plan Table NE-3)

Land Use Category	Exterior Noise Exposure (dBA CNEL)				
	<60	60–65	65–70	70–75	75+
Parks and Recreational					
Parks; Active and Passive Recreation					
Outdoor Spectator Sports; Golf Courses; Water Recreational Facilities; Indoor Recreation Facilities					
Agricultural					
Crop Raising and Farming; Community Gardens; Aquaculture; Dairies; Horticulture Nurseries and Greenhouses; Animal Raising; Maintenance and Keeping; Commercial Stables					
Residential					
Single Dwelling Units; Mobile Homes		45			
Multiple Dwelling Units		45	45		
Institutional					
Hospitals; Nursing Facilities; Intermediate Care Facilities; K–12 Educational Facilities; Libraries; Museums; Childcare Facilities		45			
Other Educational Facilities (including Vocational/ Trade Schools and Colleges and Universities)		45	45		
Cemeteries					
Retail Sales					
Building Supplies/Equipment; Groceries; Pets and Pet Supplies; Sundries, Pharmaceutical, and Convenience Sales; Apparel and Accessories			50	50	
Commercial Services					
Building Services; Business Support; Eating and Drinking; Financial Institutions; Maintenance and Repair; Personal Services; Assembly and Entertainment (includes Public and Religious Assembly); Radio and Television Studios; Golf Course Support			50	50	
Visitor Accommodations		45	45	45	

Table 2. City of San Diego Land Use – Noise Compatibility Guidelines (2008 General Plan Table NE-3)

Land Use Category	Exterior Noise Exposure (dBA CNEL)				
	<60	60–65	65–70	70–75	75+
Offices					
Business and Professional; Government; Medical, Dental, and Health Practitioner; Regional and Corporate Headquarters			50	50	
Vehicle and Vehicular Equipment Sales and Services Use					
Vehicle Repair and Maintenance; Vehicle Sales and Rentals; Vehicle Equipment and Supplies Sales and Rentals; Vehicle Parking					
Wholesale, Distribution, and Storage Use					
Equipment and Materials Storage Yards; Moving and Storage Facilities; Warehouse; Wholesale Distribution					
Industrial					
Heavy Manufacturing; Light Manufacturing; Marine Industry; Trucking and Transportation Terminals; Mining and Extractive Industries					
Research and Development				50	

Compatibility Key:

	Compatible	Indoor Uses	Standard construction methods should attenuate exterior noise to an acceptable indoor noise level.
		Outdoor Uses	Activities associated with the land use may be carried out.
45, 50	Conditionally Compatible	Indoor Uses	Building structure must attenuate exterior noise to the indoor noise level indicated by the number (45 or 50) for occupied areas.
		Outdoor Uses	Feasible noise mitigation techniques should be analyzed and incorporated to make the outdoor activities acceptable.
	Incompatible	Indoor Uses	New construction should not be undertaken.
		Outdoor Uses	Severe noise interference makes outdoor activities unacceptable.

Sources: City of San Diego 2015.
Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel
Compatible noise levels and land use definitions reflect amendments to the 2008 General Plan Noise Element approved in 2015.

3.3.2 2018 Midway-Pacific Highway Community Plan

The Noise Element of the 2018 Community Plan incorporates the noise compatibility guidelines of the 2008 General Plan and provides site planning recommendations for mixed or multiple use

developments to address commercial, industrial, and transportation noise. Applicable policies include the following (City of San Diego 2018b):

- **NE-1.3:** Include noise attenuation measures in new development to ensure an interior noise level of 45 dBA for sensitive receptor uses near noise-generating activities.
- **NE-1.6:** Utilize site design to create physical separation between noise sensitive uses and noise-generating activities where possible.
    a. Consider using building setbacks along streets with high noise levels to increase distance between the street and residential buildings, as well as to enhance the urban realm and pedestrian environment.
    b. Consider siting non-residential uses or buildings closer to noise-generating uses or transportation facilities to shield residential buildings from noise, and separate or shield residential uses from delivery areas for non-residential uses for mixed-use and multiple-use developments on larger sites.
- **NE-1.7:** Utilize appropriate operational measures to reduce noise for conditionally permitted commercial uses in areas where eating, drinking, entertainment, and assembly establishments are adjacent to residential uses.
    a. Consider appropriate window open/close hours for eating and drinking establishments.
    b. Consider lowering the volume of amplified music during the last hour of service.
    c. Encourage the use of evening security staff to control crowds as well as loitering after hours.
    d. Provide noise attenuation measures to reduce the noise levels generated from the establishment, to the degree possible, within their premises with special attention to "open air" concept establishments (such as beer gardens or large outdoor eating and drinking venues).
    e. Encourage bars that serve food to keep their kitchens open after alcohol has stopped being served to encourage a slower flow of people leaving the establishment.
- **NE-1.8:** Incorporate sound attenuation measures such as sound absorbent wall/ceiling materials, sound walls, and dense, drought-tolerant landscaping where commercial uses such as restaurants and bars are permitted, especially adjacent to residential areas.
- **NE-1.10:** Encourage truck deliveries for businesses to occur on commercial streets during day-time hours with designated commercial loading zones.
- **NE-1.13:** Apply standard noise controls to reduce construction noise levels emanating from new construction to minimize disruption and annoyance to adjacent residential or other noise sensitive uses.
    a. Limit construction activity hours.
    b. Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition, and appropriate for the equipment.
    c. Locate stationery noise-generating equipment (e.g., compressors) as far as possible from adjacent residential receivers.

d. Acoustically shield stationary equipment located near residential receivers with temporary noise barriers.
e. Utilize "quiet" air compressors, and other stationary noise sources where technology exists.
f. Encourage construction contractors to prepare a detailed construction plan identifying the schedule for major noise generating construction activities that includes coordination with adjacent residents so that construction activities can be scheduled to minimize noise disturbance.
g. Encourage construction contractors to designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise.

3.3.3 City of San Diego Municipal Code

Applicable sections of the SDMC are described below.

3.3.3.1 Special Events Ordinance

SDMC Chapter 2, Article 2, Division 40: Special Events, of the SDMC establishes a process for permitting special events in public spaces. Special events requiring a permit include organized activities including 75 or more people, such as concerts, festivals, block parties, or community events. The Special Event Permit must include details of the event including location and hours of operation, location of assembly areas, the number of bands or other musical units and the nature of any equipment to be used to produce sounds or noise, limitations on music or other components that may produce noise to provide noise abatement, and the number of persons proposed or required to monitor or facilitate the special event and provide spectator or participant control.

3.3.3.2 Noise Ordinance

Chapter 5, Article 9.5, Noise Abatement and Control, of the SDMC declares that the making, creation, or continuance of excessive noises is detrimental to the public health, comfort, convenience, safety, welfare, and prosperity of the City's residents. Section 59.5.0401 establishes sound level limits. The exterior noise limits for each land use classification are summarized in Table 3, City of San Diego Table of Applicable Noise Limits. One-hour average sound levels are not to exceed the applicable limit. The noise subject to these limits is defined as that part of the total noise at the specified location that is due solely to the action of said person.

Table 3. City of San Diego Table of Applicable Noise Limits

Land Use	Time of Day	1-Hour Average Sound Level (dBA)
Single-Family Residential	7:00 a.m. to 7:00 p.m.	50
	7:00 p.m. to 10:00 p.m.	45
	10:00 p.m. to 7:00 a.m.	40
Multi-Family Residential (up to a maximum density of 1/2,000)	7:00 a.m. to 7:00 p.m.	55
	7:00 p.m. to 10:00 p.m.	50
	10:00 p.m. to 7:00 a.m.	45
All Other Residential	7:00 a.m. to 7:00 p.m.	60
	7:00 p.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50
Commercial	7:00 a.m. to 7:00 p.m.	65
	7:00 p.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	60
Industrial or Agricultural	Anytime	75

Source: City of San Diego 2019.
Notes: dBA = A-weighted decibel

Additionally, SDMC Section 59.5.0404 sets forth limitations related to construction noise (City of San Diego 2019):

A. It shall be unlawful for any person, between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with the exception of Columbus Day and Washington's Birthday, or on Sundays, to erect, construct, demolish, excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise unless a permit has been applied for and granted beforehand by the Noise Abatement and Control Administrator. In granting such permit, the Administrator shall consider whether the construction noise in the vicinity of the proposed work site would be less objectionable at night than during the daytime because of different population densities or different neighboring activities; whether obstruction and interference with traffic particularly on streets of major importance would be less objectionable at night than during the daytime; whether the type of work to be performed emits noises at such a low level as to not cause significant disturbances in the vicinity of the work site; the character and nature of the neighborhood of the proposed work site; whether great economic hardship would occur if the work were spread over a longer time; whether proposed night work is in the general public interest; and he shall prescribe such conditions, working times, types of construction equipment to be used, and permissible noise levels as he deems to be required in the public interest.

B. Except as provided in subsection C. hereof, it shall be unlawful for any person, including the City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12–hour period from 7:00 a.m. to 7:00 p.m.

C. The provisions of subsection B. of this section shall not apply to construction equipment used in connection with emergency work, provided the Administrator is notified within 48 hours after commencement of work.

3.3.4 San Diego County Regional Airport Authority San Diego International Airport Land Use Compatibility Plan

The SDIA Airport Land Use Compatibility Plan (ALUCP) was adopted on April 3, 2014, and amended on May 1, 2014. The ALUCP contains policies and criteria for guiding new developments and redevelopments within the Airport Influence Area to address land use compatibilities concerning noise and safety aspects of airport operations and land uses, heights of buildings, residential densities and intensities, and the disclosure of aircraft overflight. The Project site is within the designated Airport Influence Area of the SDIA. Specifically, the southern half of the site is within Review Area 1, while the northern half of the site is within Review Area 2 (Figure 5, San Diego International Airport Land Use Compatibility Plan). Review Area 1 is defined by the combination of the 60 dB CNEL noise contour, the outer boundary of all safety zones, and the airspace threshold siting surfaces. Review Area 2 is defined by the combination of the airspace protection and overflight boundaries beyond Review Area 1; only airspace protection and overflight policies and standards apply within Review Area 2. The Project is also within the FAA Part 77 Noticing Area Overlay Zone requiring notification for structures taller than 200 feet above ground level. The SDIA ALUCP provides policies and criteria for the City to implement and for the Airport Land Use Commission (ALUC) to use when reviewing development proposals (SDCRAA 2014).

3.3.5 North Island Air Station Airport Land Use Compatibility Plan

The Project site is 2.8 miles north of the Naval Air Station North Island within the Naval Air Station North Island Airport Influence Area, including the Airspace Protection Boundary. Projects within the Airspace Protection Boundary must determine if they are required to file a Notice of Proposed Construction or Alteration (FAA Form 7460-1) (SDCRAA 2020).

Section 4 Existing Noise Environment

The Project site is in the Midway-Pacific Highway Community planning area, an urban community with a mix of land uses and major transportation facilities. The community experiences ambient noise levels on the higher end of noise compatibility standards for NSLUs. Noise levels are higher compared to typical residential-only neighborhoods due to ambient noise from commercial and industrial land uses, freeways, major streets, aircraft operations, and rail operations (City of San Diego 2018a). The Specific Plan Area is currently developed with commercial, restaurant, and entertainment land uses. Existing noise sources that affect the Project site are described below.

4.1 Existing Noise-Sensitive Land Uses

NSLUs are land uses that may be subject to stress or interference from excessive noise. The 2008 General Plan, as amended, defines NSLUs as residential uses, hospitals, nursing facilities, intermediate care facilities, child educational facilities, libraries, museums, places of worship, childcare facilities, and certain types of passive recreational parks and open space (City of San Diego 2008). Industrial and commercial land uses are generally not considered sensitive to noise, and the City does not consider hotels and motels NSLUs. Currently, no NSLUs are on the Project site. The nearest NSLU to the Project site is The Orchard Senior Living facility west of the Project site at 4040 Hancock Street. Other NSLUs within the Project vicinity include residential developments south of Sports Arena Boulevard, including Pointe Lux Apartment Homes at 3889 Midway Drive, and Villa Marbella apartments at 3142 Midway Drive (refer to Figure 6, Noise Measurement and Receptor Locations). The apartment complexes are generally separated from the Project site by commercial development along the Sports Arena Boulevard frontage.

4.2 Existing Vibration-Sensitive Land Uses

Land uses in which groundborne vibration could potentially interfere with operations or equipment, such as research, manufacturing, hospitals, and university research operations, are considered vibration sensitive (FTA 2018). The degree of sensitivity depends on the specific equipment that would be affected by the groundborne vibration. Excessive levels of groundborne vibration of either a regular or an intermittent nature can result in annoyance to residential uses. The nearest potentially vibration-sensitive land uses to the Project site are medical offices, including veterinary clinics (San Diego Bay Animal Hospital and Petco) across from the Project site on Sports Arena Boulevard and a dental office (Lighthouse Dental) approximately 400 feet south of the site on Kemper Street (refer to Figure 6).

4.3 Existing Noise Levels

Ambient sound level surveys were conducted in November 2023 and December 2023 to quantify the noise environment within the Project boundary and the surrounding vicinity. Four short-term

(1-hour) and two long-term (48-hour) measurements were taken on the Project site and at nearby sensitive receptors. Two short-term measurements were taken at The Orchard Senior Living facility (4040 Hancock Street) to compare noise levels at the existing San Diego International Sports Arena on a day with a concert event to a non-event day. Additional short-term measurements were taken at existing commercial development north of the site and at residences southeast of the Project site, including The Orchard Senior Living facility west of the Project site at 4040 Hancock Street, Villa Marbella apartments at 3142 Midway Drive, and commercial development at 3460 Hancock Street. Two 48-hour measurements were conducted at the San Diego International Sports Arena property line with offices to the west. Measurements were conducted during consecutive event and non-event days to compare ambient noise levels. Monitored events included a San Diego Gulls game on November 29, 2023, and Depeche Mode concerts on December 6 and December 8. A second 48-hour measurement was conducted due to intermittent rain during the first measurement period.

A Larson Davis SoundExpert LxT Type I Integrating Sound Level Meter and Larson Davis calibrated with a Larson Davis CAL200 calibrator was used to record ambient sound levels. Weather conditions during the measurements were calm, with a mild temperature and partly cloudy skies, with the exception of intermittent rain during the 48-hour measurement from November 29, 2023, to December 1, 2023. Monitoring results during rainy conditions were generally consistent with the measurements conducted during clear conditions; therefore, results from both are provided below. Table 4, Ambient Sound Level Measurements (dBA) – Short-Term Locations, summarizes the measured Leq and noise sources for each short-term monitoring location. Table 5, Ambient Sound Level Measurements – Long-Term Monitoring (1-Hour Leq dBA), provides the measured hourly Leq for the long-term measurements, and Table 6, Long-Term Monitoring Results Summary, summarizes the results. Figure 6 shows the monitoring locations.

Table 4. Ambient Sound Level Measurements (dBA) – Short-Term Locations

Site	Location	Observed Noise Sources	Date/Time	Leq	Lmax	Lmin
1	The Orchard Senior Living facility west of Project site (4040 Hancock Street) – No event at San Diego International Sports Arena	Consistent traffic on Hancock Street, passerby chatter	November 29, 2023 3:28 p.m.	64.2	79.3	55.7
	The Orchard Senior Living facility west of Project site (4040 Hancock Street) – Event at San Diego International Sports Arena (Depeche Mode concert)	Consistent traffic on Hancock Street, passerby chatter; concert not audible	December 6, 2023 10:23 p.m.	58.9	77.9	49.3
2	Villa Marbella apartments near Ross shopping center on Sports Arena Boulevard (3142 Midway Drive)	Consistent traffic from Sports Arena Boulevard, parking lot traffic, dogs barking, idling truck	December 6, 2023 2:43 p.m.	61.6	79.4	49.6
3	Commercial development north of Project site (3460 Hancock St)	Constant heavy truck traffic	December 14, 2023 12:06 p.m.	69.7	102.8	50.5

Source: See Appendix A for detailed monitoring results.

Notes: dBA = A-weighted decibel; Leq = equivalent energy level; Lmax = maximum noise level; Lmin = minimum noise level
Ambient measurements were 60 minutes in duration.

Table 5. Ambient Sound Level Measurements – Long-Term Monitoring (1-Hour Leq dBA)

Hour	11/29/23	11/30/23	12/01/23	12/06/23	12/07/23	12/08/23	12/09/23
12:00 a.m.	—	47.8	53.9	—	51.1	50.5	58.6
1:00 a.m.	—	45.9	49.1	—	46.9	50.8	54.8
2:00 a.m.	—	46.5	50	—	44.1	51.2	54.7
3:00 a.m.	—	46.8	50.3	—	47.6	51.8	54.7
4:00 a.m.	—	52.3	53.7	—	51.6	53.1	59.4
5:00 a.m.	—	55.9	56	—	53.3	56.5	61.3
6:00 a.m.	—	62.4	62.5	—	61.2	64.8	62.9
7:00 a.m.	—	61	60.9	—	59.5	61.2	60.3
8:00 a.m.	—	60.8	61.8	—	59.6	58.7	60.8
9:00 a.m.	—	59.8	64	—	59.5	58.1	56.7

Table 5. Ambient Sound Level Measurements – Long-Term Monitoring (1-Hour Leq dBA)

Hour	11/29/23	11/30/23	12/01/23	12/06/23	12/07/23	12/08/23	12/09/23
10:00 a.m.	—	59.1	59.9	—	61.1	58.3	—
11:00 a.m.	—	58.3	58	—	57.3	58.8	—
12:00 p.m.	—	59.9	59.9	—	61.5	59.1	—
1:00 p.m.	—	57.8	59.4	—	60.6	57.8	—
2:00 p.m.	—	60.3	59.7	—	59.2	59.3	—
3:00 p.m.	58	58.2	—	—	57.8	60.7	—
4:00 p.m.	56.9	56.9	—	54.8	55.7	59.8	—
5:00 p.m.	57.6	56	—	57.7	58.2	58.1	—
6:00 p.m.	57.7 – Event Doors Open	58.6	—	55.2 – Event Doors Open	58.9	58.8 – Event Doors Open	—
7:00 p.m.	58.4 – Event Start Time	58.7	—	57.3 – Event Start Time (7:30 p.m.)	59.9	60.2 – Event Start Time (7:30 p.m.)	—
8:00 p.m.	57.3	56.6	—	49.4	58.8	58.1	—
9:00 p.m.	57.6	55.9	—	49.1	59.2	58.4	—
10:00 p.m.	56.5	57.9	—	59.6	57.5	60	—
11:00 p.m.	52.8	50	—	57.1	56.6	59.1	—

Source: See Appendix A for detailed monitoring results.

Notes: dBA = A-weighted decibel; L_{eq} = equivalent energy level; L_{max} = maximum noise level; L_{min} = minimum noise level

See Figure 6 for measurement location.

Table 6. Long-Term Monitoring Results Summary

	Event Day Scenario	Non-Event Day Scenario
Average Daytime Noise Level (7:00 a.m. to 7:00 p.m.)	56–59 dBA Leq	59–60 dBA Leq
Average Evening Noise Level (7:00 p.m. to 10:00 p.m.)	54–59 dBA Leq	57–59 dBA Leq
Average Nighttime Noise Level (10:00 p.m. to 7:00 a.m.)	55–59 dBA Leq	56–58 dBA Leq
CNEL (Monitoring start time [3:00/4:00 p.m.] to same time the next day)	63 dBA CNEL	64–65 dBA CNEL

Source: See Appendix A for detailed monitoring results.

Notes: CNEL = Community Noise Equivalent Level; dBA = A-weighted decibel; Leq = equivalent energy level; Lmax = maximum noise level; Lmin = minimum noise level

The results of the ambient noise survey reflect daytime noise levels that range between 56 and 70 dBA Leq on the Project site and in the surrounding area. Average evening and nighttime noise

levels did not exceed 59 dBA Leq. Daytime, evening, and nighttime measured noise levels exceeded the City's hourly noise standards. The measured daytime noise level was the highest north of Project site, closer to the I-8 and I-5 interchange. As described in Table 2, normally acceptable ambient community noise levels up to 5 dBA CNEL are considered compatible with commercial uses. Ambient community noise levels were measured to be compatible with existing commercial uses. Measured event noise at San Diego International Sports Arena did not show an increase in ambient noise levels on event days and indicated that arena events are not a major contributor to the ambient noise environment. The primary noise source within the vicinity of the Project site is traffic noise. Differences in noise levels on event and non-event days were below a perceptible change of 3 dBA and likely due to fluctuations in vehicle noise. Measured noise levels were consistent with the community's location within published roadway and airport noise contours, as described below.

4.4 Transportation Noise Sources

4.4.1 Aviation

The nearest airports to the Project site are the SDIA, approximately 1.8 miles south of the Project site, and Naval Air Station North Island, 2.8 miles south of the site. Aircraft noise can affect people living and working in the Midway-Pacific Highway Community planning area to varying degrees, depending on a person's level of sensitivity. The Project site is subject to aircraft overflight from the SDIA, which prohibits most late-night takeoffs to limit noise impacts (City of San Diego 2018a). However, the southern half of the Project site is within the SDIA 60–65 dBA CNEL contour (refer to Figure 5). The Project site is not within the 65–70 dBA CNEL noise contour of the SDIA, which extends to approximately Midway Drive southwest of the Project site (SDCRAA 2014). As such, the Project site has the potential to be exposed to aircraft noise levels from SDIA between 60 and 65 dBA CNEL but is generally not exposed to aircraft noise levels that exceed 65 dBA CNEL. The Project site is within the Airport Influence Zone for Naval Air Station North Island but is not within a noise contour for Naval Air Station North Island and is outside the identified overflight area (SDCRAA 2020).

4.4.2 Rail Lines

Sources of railroad noise in the Midway-Pacific Highway Community planning area include freight trains, intercity rail (Amtrak), commuter rail (COASTER), and light-rail transit (San Diego Metropolitan Transit System trolley). The rail line is approximately 0.4 mile east of the Project site, generally adjacent to I-5. These sources can generate high, relatively brief, intermittent noise events within the vicinity of at-grade rail crossings where horns and crossing bells are sounded. Federal regulations require trains to sound their horns at all roadway-rail at-grade crossings unless a quiet zone has been established. Horns, whistles, and bells on the moving trolley vehicles and horns from freight trains combined with stationary bells at at-grade rail crossings can generate excessive noise levels that can affect NSLUs. The Midway-Pacific Highway CPU PEIR determined that combined railroad noise would have the potential to exceed 60 dBA CNEL up to 282 feet from the center rail alignment.

Due to distance from the center rail alignment, the Project site is not within the projected 60 dBA CNEL noise contour for railroad noise (City of San Diego 2018a).

4.4.3 Roadways

Major roadways, including I-8, I-5, Rosecrans Street, Camino Del Rio West, Pacific Highway, Midway Drive, Kurtz Street, and Sports Arena Boulevard, are the primary sources of motor vehicle noise on the Project site. Noise from trucks driving or parked and idling along roads can also be a source of annoyance for NSLUs (City of San Diego 2018a). The Project site is bounded by Hancock Street to the northwest, Kurtz Street to the northeast, and Sports Arena Boulevard to the southwest. Hancock Street is adjacent to existing multi-family residential and office development west of the site and commercial uses north of the site. Kurtz Street is developed with commercial uses north of the site. Sports Arena Boulevard is primarily developed with commercial uses, including shopping centers, restaurants, and visitor accommodations. The western portion of the Project site is within the projected 65–75 dBA CNEL noise contours for roadway noise, primarily from I-8, as shown on Midway-Pacific Highway CPU PEIR Figure 5.5-3, Future (2035) Traffic Noise Contours (City of San Diego 2018a), provided as Figure 7, Future (2035) Traffic Noise Contours.

Table 7, Existing Roadway Noise Levels, shows the existing noise levels generated by average traffic on the roadways surrounding the Project site on days when events were held at San Diego International Sports Arena and on non-event days. Existing noise levels were calculated using the methods described in Section 5.1.1, Noise Levels. As shown in Table 7, existing noise levels from Sports Arena Boulevard exceed the normally acceptable noise compatibility standard of 60 dBA CNEL for multi-family residential development. Consistent with measured noise levels on the Project site and surrounding area, noise levels do not exceed the maximum conditionally acceptable standard of 75 dBA CNEL for multi-family residential development. That is, noise levels may be considered compatible with residential development, provided that adequate building attenuation is provided to reduce interior noise levels to 45 dBA CNEL or below. Noise levels are not noticeably higher (more than a perceptible change of 3 dBA) on event days. Sports Arena Boulevard noise levels also exceed the normally acceptable noise compatibility standard of 65 dBA CNEL for office and commercial uses.

Table 7. Existing Roadway Noise Levels

Roadway	Segment	Noise Level at 50 Feet from Roadway Centerline (dBA CNEL) – Non-Event Day	Noise Level at 50 Feet from Roadway Centerline (dBA CNEL) – Event Day
Sports Arena Boulevard	I-8 Westbound Off-Ramp to I-8 Eastbound On-Ramp	67.1	67.7
	I-8 Eastbound On-Ramp to West Point Loma Boulevard	70.2	70.7
	West Point Loma Boulevard to Hancock Street	68.8	69.4
	Hancock Street to Kemper Street	68.	69.4
	Kemper Street to (planned) Frontier Drive	67.4	68
	Rosecrans Street to Pacific Highway	55.6	56.2
Kurtz Street	Hancock Street to Frontier Drive	57.9	58.6
	Frontier Drive to Sherman Street	57.9	58.6
	Sherman Street to Camino Del Rio West	59.7	60.7
Hancock Street	Sports Arena Boulevard to Channel Way	58.4	59.0
	Channel Way to Kurtz Street	58.6	59.0
	Kurtz Street to Greenwood Street	59.5	59.9
	Greenwood Street to Camino Del Rio West	59.6	60.0

Source: Kimley-Horn 2024a (traffic data). See Appendix B for noise model assumptions and output.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel

4.5 Operational Noise Sources

The Project site is in the Midway-Pacific Highway Community planning area, an urban community with a mix of land uses and major transportation facilities. The Project site is developed with a mix of commercial and entertainment land uses. Currently, special events occur on the Project site at the San Diego International Sports Arena and SOMA San Diego music venue, both of which are indoor event venues. The surrounding commercial developments on all sides of the Project site experience high levels of human activity, resulting in intermittent noise, such as car alarms in parking lots. Office and residential uses are not typical sources of substantial noise, but commercial, office, and multi-family residential developments may include mechanical equipment such as HVAC systems that contribute to the noise environment.

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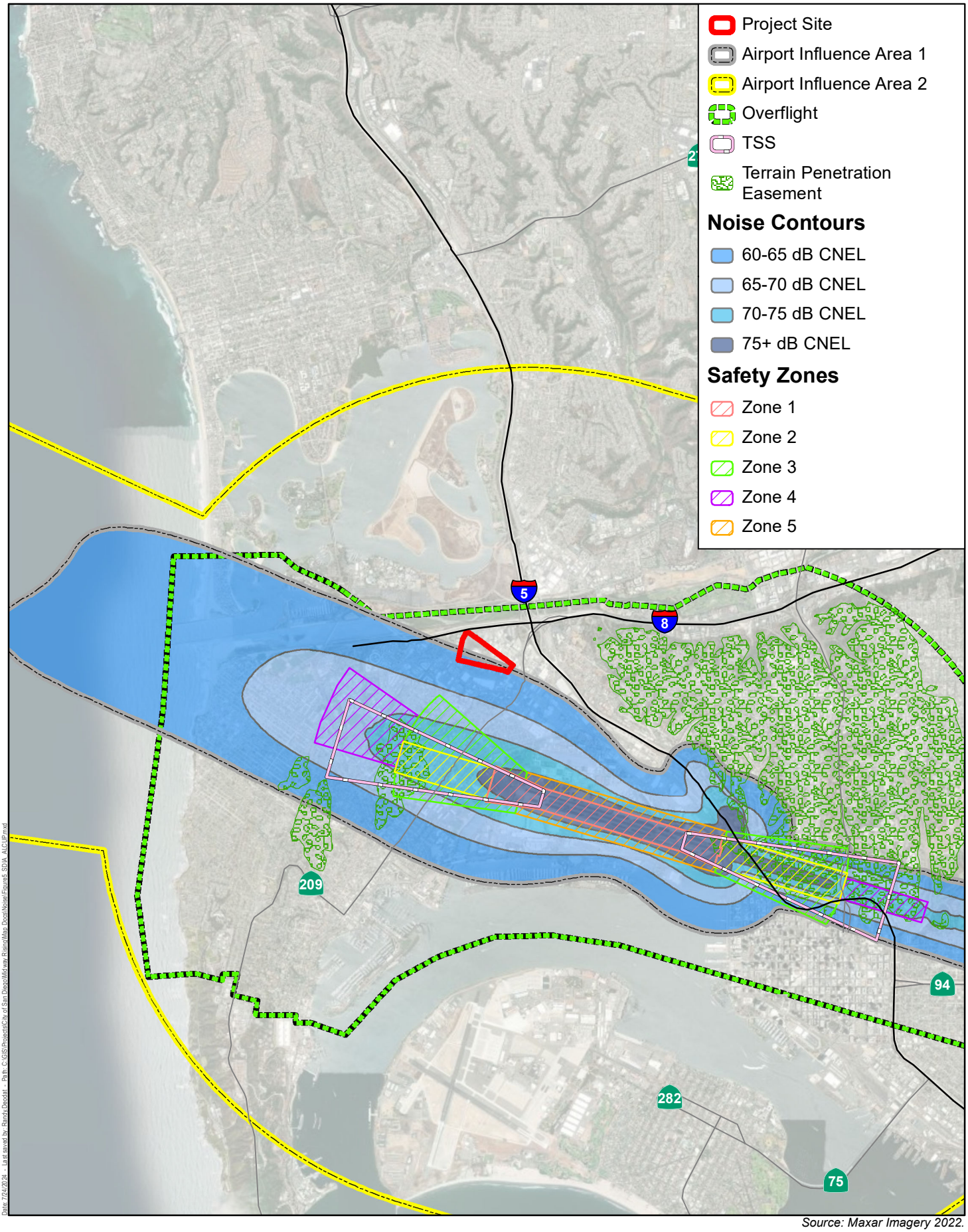

Source: Maxar Imagery 2022.

Figure 5

San Diego International Airport
Land Use Compatibility Plan

Midway Rising

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Source: Maxar Imagery 2022.

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Feet

Figure 6

Noise Measurement and Receptor Locations

Midway Rising

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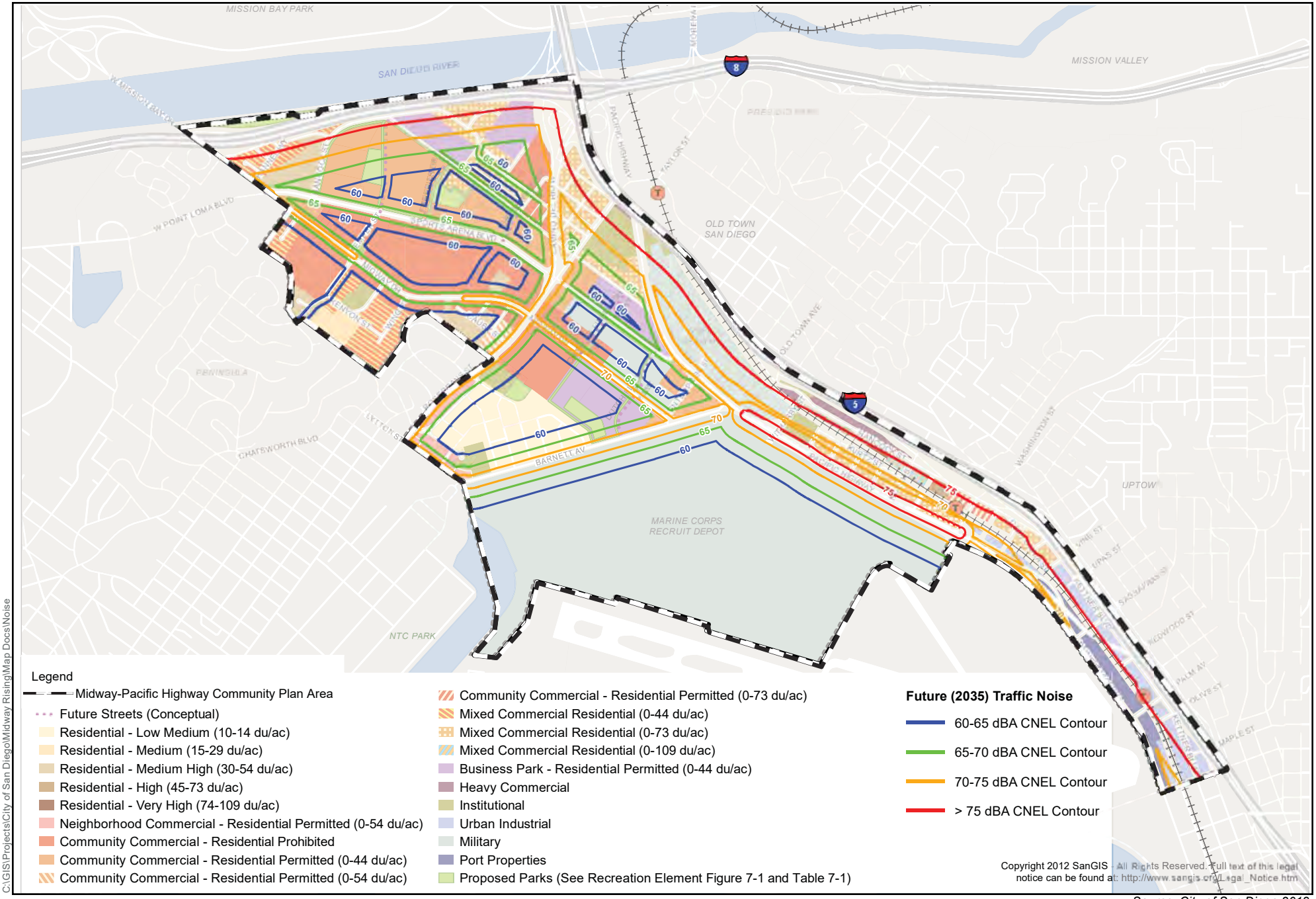

Source: City of San Diego 2018.

Figure 7

Future (2035) Traffic Noise Contours

Midway Rising

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Section 5 Methods and Significance Criteria

The methods and significance criteria applicable to noise and vibration impacts are described below. This analysis tiers from the analysis of noise impacts in the Midway-Pacific Highway CPU PEIR. As such, the City of San Diego CEQA Significance Determination Thresholds addressed in this report are the same as those addressed in the Midway-Pacific Highway CPU PEIR (City of San Diego 2016). This report follows methodology similar to the Midway-Pacific Highway CPU PEIR but provides a more detailed Project-specific analysis.

5.1 Methods

The following section describes the methods used for each issue topic.

5.1.1 Noise Levels

The potential for the Project to permanently increase ambient noise levels from increased traffic was assessed using standard noise modeling equations adapted from the Federal Highway Administration noise prediction model. The modeling calculations consider the posted vehicle speed, average daily traffic volume, and estimated vehicle mix. The Midway-Pacific Plan CPU PEIR analysis separated each roadway's ADT volume into daytime, evening, and nighttime periods representative of 80 percent, 5 percent, and 15 percent of the total ADT respectively, and applied a CNEL adjustment factor of 4.2 to predicted noise levels to convert peak hour Leq to CNEL. The 4.2 adjustment factor applies when peak hour traffic volumes are approximately 11 percent of total daily volume (Caltrans 2013). The Federal Highway Administration (FHWA) equations are based on total daily volume. Therefore, distribution of daily traffic was adjusted based on daytime and nighttime proportions recommended by Caltrans based on peak hour proportion, rather than a CNEL adjustment. For an 11 percent peak hour volume, Caltrans estimates approximately 83 percent of trips occur during daytime, and 17 percent during evening and nighttime. The noise prediction model assumes that roadways would experience a decrease of approximately 3 dBA for every doubling of distance from the roadway.

Traffic data is provided in the Local Mobility Analysis prepared by Kimley-Horn (2024a). Modeling includes the two new roadway segments that would be constructed by the Project, and the 13 segments within the study area where the Project would contribute the greatest percent increase compared to existing traffic volumes. Noise modeling for future operation assumes implementation of the proposed Specific Plan roadway improvements, including the construction of planned Frontier Drive (between Sports Arena Boulevard and Kurtz Street) and the extension of Kemper Street (between Sports Arena Boulevard and Kurtz Street), as well as regional transportation improvements assumed for Midway-Pacific Highway buildout. Traffic volumes conservatively assume buildout of the privately owned parcels, consistent with the traffic analysis volumes, with the exception of one segment: Sports Arena Boulevard from West Point Loma Boulevard to Hancock

Street. The privately owned parcels would no longer be developed under the Project and therefore traffic volumes would be reduced compared the Local Mobility Analysis volumes used in this analysis (Kimley-Horm 2024b). However, due to the proximity of sensitive receptors to this major roadway, buildout (Year 2035) traffic volumes for the segment of Sports Arena Boulevard from West Point Loma Boulevard to Hancock Street were calculated without the privately owned parcel traffic volumes to better reflect the Project's potential impact (Appendix F, Sports Arena Boulevard Traffic Volumes Memorandum).

Modeled future traffic volumes reflect that vehicle trips generated by the Project would primarily be personal vehicle trips and would likely result in a net decrease in heavy-duty truck traffic compared to existing conditions due to removal of existing truck-generating commercial uses. Six additional daily heavy-duty truck trips are assumed on all segments with Project implementation on non-event days to account for pre- and post-event setup and takedown. No net increase in trucks is anticipated on event days (Appendix E, Truck Traffic Volumes Memorandum). The proportion of truck trips attributable to medium duty trucks is conservatively assumed to be the same as existing conditions. That is, the proportion of traffic trips attributable to medium duty truck trips is assumed to be the same as the estimated proportion for existing traffic volumes (1 percent of total traffic), which likely overestimates medium duty truck traffic for the Project. Consistent with the Local Mobility Analysis (Kimley-Horn 2024a), the noise analysis evaluates the following scenarios:

- **Existing (2023):** Represents the traffic conditions of the existing street network, lane geometry, signal timing, and traffic volumes observed in 2023. This scenario establishes the existing baseline noise conditions on the Project site (Table 7) and is used to evaluate direct and cumulative impacts.
- **Project Phase 1 (2030):** Represents the interim Project scenario with Phase 1 in operation and Phase 2 in construction. This scenario includes traffic on the existing street network anticipated to be in place in Year 2030, including an increase in traffic volumes attributable to annual regional growth. The "with Project" scenario assumes operation of Project Phase 1 trips and roadway network, including the entertainment center, construction of Frontier Drive, 1,242 residential units, 100,888 square feet of commercial space, and other transportation improvements. This scenario represents short-term transportation effects from the Project at the first year that the Project would potentially result in direct noise impacts to the traffic network.
- **Project Buildout Phase 2 (2035):** Represents the traffic volumes on the existing street network anticipated to be in place in Year 2035, including an increase in traffic volumes attributable to annual regional growth. The "with Project" scenario includes buildout of the Project (Phases 1 and 2 in operation), including the construction of Kemper Street, and represents the Project's long-term direct impact on ambient traffic noise.

Consistent with the Local Mobility Analysis (Kimley-Horn 2024a), within each Project Phase 1 and Project buildout Phase 2 scenario, three different conditions are considered: non-event, 14,500-

spectator event, and 20,000-spectator event. Non-event conditions represent a day when no event occurs on the Project site. The 14,500 spectator event conditions represent a typical event at the entertainment center. The 20,000-spectator event conditions represent maximum spectator attendance assuming multiple events across the Project site. Because the 20,000-spectator event would include additional off-site parking options and event shuttles, volumes on some segments are reduced under 20,000-spectator event conditions compared to the 14,500-spectator event. The worst-case scenario is included in the noise analysis below. Noise levels for both event scenarios are available in Appendix B, Permanent Vehicle Noise Worksheet.

The compatibility of the proposed Project land uses with ambient noise levels is based on a comparison of the results of the ambient noise survey and existing traffic noise calculations to the 2008 General Plan Land Use – Noise Compatibility Guidelines.

Impacts related to potential exposure to excessive noise levels from operation of the Project have been assessed based on a comparison of noise levels anticipated to be generated by the Project land uses to the applicable City noise standards for existing off-site receptors and future on-site receptors. Estimated noise levels are based on various sources, including conceptual calculations provided by the Project applicant (i.e., Midway Rising, LLC) (OJB 2023). Noise levels at a particular receptor from a stationary noise source are based on an attenuation rate of 6 dBA for every doubling of distance.

Impacts related to temporary increases in ambient noise levels from construction of the Project were assessed using estimates of sound levels from typical construction equipment provided by the Federal Highway Administration in the Roadway Construction Noise Model (RCNM) (FHWA 2008) based on detailed construction phases and equipment information for the Project, including a rock crusher potentially required for material reuse on site during Phase 2 (AECOM 2023a). Consistent with the Midway-Pacific Highway CPU PEIR methodology, construction equipment predictions followed the Federal Transit Administration (FTA) “general assessment” technique, which focuses on predicting noise emissions from the two loudest potential pieces of construction equipment from a given construction phase. Noise levels at surrounding receptors assume an attenuation rate of 6 dBA per doubling of distance from the source.

Impacts related to changes in ambient traffic noise attributable to Project construction traffic were calculated using standard noise modeling equations adapted from the Federal Highway Administration noise prediction model, consistent with the operational traffic analysis. Construction traffic data was provided by the Project applicant (AECOM 2024). The analysis assumes the worst-case maximum scenario of 1,524 daily worker vehicle trips and 228 truck trips in 1 day. Modeling conservatively assumes that all worker trip traffic occurs on all study area segments. In reality, workers would arrive to the site from different directions; therefore, individual segments would not be expected to carry 100 percent of the trips. Truck trips would occur on identified truck route segments. All truck traffic would enter and exit the site from Sports Arena Boulevard and would

travel on Sports Area Boulevard to or from I-8 (AECOM 2023b). Modeling takes into account the increase in the percentage of trucks as part of total traffic compared to existing conditions on truck route segments. Construction truck trips are assumed to occur during daytime hours, consistent with allowable construction hours. Two scenarios are included in the construction traffic analysis:

- **Existing Plus Construction Scenario:** Includes traffic on the existing street network observed in 2023 plus worst-case estimated Project construction traffic.
- **Interim Construction Scenario (Year 2030 to 2035):** Represents the interim condition with Phase 1 in operation and Phase 2 in construction. Includes Project Phase 1 trips and roadway network, including the entertainment center, 1,242 residential units, and 100,888 square feet of commercial space; cumulative growth through Year 2030, and worst-case estimated Phase 2 construction traffic.

5.1.2 Groundborne Vibration

Consistent with the methodology in the Midway-Pacific Highway CPU PEIR, groundborne vibration from Project construction was evaluated for the potential to result in building damage or annoyance. Consistent with the Midway-Pacific Highway CPU PEIR, groundborne vibration impacts are assessed based on the vibration impact criteria from Caltrans listed in Table 8, Maximum Vibration Levels for Construction Equipment for Potential Damage and Annoyance (PPV in/sec), and typical vibration source levels provided by the FTA (2018). The FTA threshold of 65 vibration decibels (VdB) for buildings where low ambient vibration is essential for interior operation is also used to evaluate impacts to vibration-sensitive receptors. VdB is a metric that represents vibration velocity level in dB scale.

Table 8. Maximum Vibration Levels for Construction Equipment for Potential Damage and Annoyance (PPV in/sec)

	Potential Damage Thresholds		"Strongly Perceptible" Annoyance Criteria	
Structure Type	**Transient Sources**	**Continuous/Frequent Intermittent Sources**	**Transient Sources**	**Continuous/Frequent Intermittent Sources**
Historic and some old buildings	0.5	0.25	0.9	0.1
Older residential structures	0.5	0.3		
New residential structures	1	0.5		
Modern industrial and commercial buildings	2	0.5		

Source: Caltrans 2020.

Note: in/sec = inches per second; PPV = peak particle velocity

Transient sources generate a single vibratory event, such as blasting. Continuous/frequent sources include pile driving equipment and other construction activities generating multiple vibration-intensive events across a given period.

The Midway-Pacific Highway CPU PEIR qualitative operational vibration analysis is incorporated for the Project.

5.2 Significance Criteria

The thresholds used to evaluate potential noise impacts are generally based on the City's CEQA Significance Determination Thresholds (City of San Diego 2016) to be consistent with the Midway-Pacific Highway CPU PEIR. A significant impact on noise could occur if implementation of the Project would:

- **Threshold 1:** Result or create a significant increase in the existing ambient noise levels.
- **Threshold 2:** Result in an exposure of people to current or future transportation noise levels which exceed guidelines established in the Noise Element of the 2008 General Plan.
- **Threshold 3:** Result in land uses which are not compatible with aircraft noise levels as defined by an adopted Airport Comprehensive Land Use Plan (ACLUP).
- **Threshold 4:** Result in the exposure of people to noise levels which exceed property line limits established in the Noise Abatement and Control Ordinance of the San Diego Municipal Code.
- **Threshold 5:** Result in the exposure of people to significant temporary construction noise.
- **Threshold 6:** Result in the exposure of people to significant vibration.

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Section 6 Impacts and Mitigation

The Project's potential noise impacts are compared to those identified in the Midway-Pacific Highway CPU PEIR in the following sections. For each issue, the conclusion of the Midway-Pacific Highway CPU PEIR is summarized and followed by an evaluation and comparison of Project-specific impacts. Where applicable, mitigation measures identified in the Midway-Pacific Highway CPU PEIR are identified for the Project.

6.1 Threshold 1: Increases in Ambient Vehicle Noise Levels

6.1.1 Impact Analysis

The potential for the Project to result in a permanent increase in ambient noise levels as a result of Project-generated traffic is addressed below. Other operational sources that would contribute to the ambient noise environment, such as mechanical equipment and special events, are addressed under Threshold 4, Noise Ordinance Compliance. A substantial permanent increase in ambient noise would occur if implementation of the proposed Project would result in traffic volumes that cause an ambient noise level that exceeds 65 dBA CNEL for residential properties and NSLU, or an increase of 3 dBA or greater if the roadway would exceed 65 dBA CNEL without Project implementation.

The Midway-Pacific Highway CPU PEIR also considered an increase of 5 dBA or greater compared to conditions without the Project if the roadway would not exceed 65 dBA CNEL. This increase is typically perceptible in a community (Caltrans 2013). However, as outlined in the Midway-Pacific Highway Community Plan Update Errata, the 5 dBA CNEL standard is not part of the City of San Diego's adopted CEQA Significance Determination Thresholds. References to this standard were removed from the Revised Final Midway-Pacific Highway CPU PEIR (City of San Diego 2018c). As such, the Project is evaluated against this criterion for informational purposes only for potentially noticeable changes in community noise level to provide a similar level of analysis compared to the Midway-Pacific Highway CPU PEIR.

6.1.1.1 Midway-Pacific Highway CPU PEIR Impact Summary

The Midway-Pacific Highway CPU PEIR determined that the 2018 Community Plan would result in an audible (up to 11 dBA) increase in ambient vehicle traffic noise, but impacts would not exceed City of San Diego significance criteria. As outlined in the Midway-Pacific Highway Community Plan Update Errata, the Midway-Pacific Highway CPU PEIR determined that significant and unavoidable impacts to existing sensitive receptors would occur as a result of increased noise levels that exceed 5 dBA CNEL. However, this 5 dBA CNEL standard is not part of the City of San Diego's adopted CEQA Significance Determination Thresholds. References to this standard were removed from the Revised Final Midway-Pacific Highway CPU PEIR (City of San Diego 2018b), and impacts to existing receptors was determined to be less than significant.

For new discretionary development, submission and approval of a required Title 24 Compliance Report would ensure future projects implemented in accordance with the 2018 Community Plan would not be exposed to ambient noise levels in excess of the compatibility levels in the 2008 General Plan. Thus, noise impacts to new discretionary projects would be less than significant. However, in the case of ministerial projects, no similar procedure exists to ensure that exterior noise would be adequately attenuated. Midway-Pacific Highway CPU PEIR Mitigation Measure **5.5-1**, which would require acoustical studies for new ministerial development within projected freeway and heavily traveled roadway noise contours, was determined to be infeasible because no procedure exists to ensure adequate implementation. Therefore, exterior noise impacts for ministerial projects in areas that exceed the applicable land use and noise compatibility level were determined to be **Significant and Unavoidable** in the Midway-Pacific Highway CPU PEIR.

6.1.1.2 Project-Specific Impact Analysis

As described in Section 4.3, Existing Noise Levels, the results of the existing noise measurement survey indicate that ambient community noise levels currently exceed the normally compatible noise level of 60 dBA CNEL for residential development. Noise levels are within the conditionally compatible standards (60–70 dBA CNEL) for NSLUs. That is, adequate building attenuation must be demonstrated to provide compatible interior noise levels (45 dBA CNEL or below), but it is generally accepted that these interior noise levels can be achieved with available building practices at these levels of exterior noise. Traffic is the primary source of ambient traffic noise on the Project site. Consistent with the Midway-Pacific Highway CPU PEIR, because operational noise levels would be subject to SDMC Article 11, which adopts Title 24 building regulations, and 2008 General Plan Policy NE-A.4, the analysis of the Project's potential to result in ambient noise level increases is focused on its contribution to traffic noise levels. Stationary operational noise levels are addressed in Threshold 4, Noise Ordinance Compliance.

Project Phase 1 (Year 2030) Scenario

Table 9, Project Phase 1 (Year 2030) Traffic Noise Levels (dBA CNEL), provides expected future increases in traffic with and without the Project, including on the segments of the planned Frontier Drive and the extension of Kemper Street from Sports Arena Boulevard to Kurtz Street that would be developed as part of the Project. As shown in Table 9, without implementation of the Project, five of the 13 existing roadway segments would be expected to generate noise levels that exceed the 65 dBA CNEL threshold. The Project would not be expected to result in a 3 dBA CNEL increase in noise level on these roadways; therefore, it would not be expected to exacerbate this existing condition. The Project would not be expected to cause any of the remaining segments to exceed 65 dBA CNEL. Therefore, impacts to ambient vehicle noise under the Project Phase 1 (Year 2030) scenario would be **Less than Significant**.

Project Buildout Phase 2 (Year 2035) Scenario

Table 10, Project Buildout Phase 2 (Year 2035) Traffic Noise Levels (dBA CNEL), includes expected Project Buildout Phase 2 (Year 2035) traffic noise levels with and without the Project. As shown in Table 10, five of the 13 roadway segments that currently exist would be expected to exceed 65 dBA CNEL without Project traffic. In the Buildout (Year 2035) scenario, Project-related traffic would not be expected to exceed the 3 dBA CNEL threshold for any segment that is already operating above the 65 dBA CNEL threshold. The Project would not be expected to cause any of the remaining existing segments to exceed 65 dBA CNEL. Therefore, impacts to ambient vehicle noise under the Project Phase 2 (Year 2035) scenario would be **Less than Significant**.

The Project would be expected to cause a greater than 5 dBA CNEL increase on one segment of Kurtz Street (Hancock Street to Frontier Drive) and two segments of Hancock Street (Sports Arena Boulevard to Channel Way and Channel Way to Kurtz Street) that would not be expected to exceed 65 dBA with Project implementation. The increase would occur under event and non-event conditions. Therefore, the Project would have the potential to result in readily perceptible increases in ambient noise levels to receptors within the vicinity of three roadway segments: Kurtz Street from Hancock Street to Frontier Drive, Hancock Street from Sports Arena Boulevard to Channel Way, and Hancock Street from Channel Way to Kurtz Street. As described previously under Midway-Pacific Highway CPU PEIR Impact Summary for this issue, this potentially clearly noticeable increase in noise level is not a potentially significant impact. However, although not a CEQA impact, the potential for readily perceptible increases is further evaluated following Table 9 for informational purposes to provide a similar level of detail to the Midway-Pacific Highway CPU PEIR.

Table 9. Project Phase 1 (Year 2030) Traffic Noise Levels (dBA CNEL)

Roadway	Segment	Applicable Threshold	Non-Event Scenario		Event Scenario		Significant Impact? (Maximum Project Increase in Noise Level)
			No Project	With Project	No Project	Worst-Case Event	
Sports Arena Boulevard	I-8 Westbound Off-Ramp to I-8 Eastbound On-Ramp	65	67.4	68.2	68.0	68.9	No (0.9)
	I-8 Eastbound On-Ramp to West Point Loma Boulevard	65	70.4	71.0	70.9	71.7	No (0.8)
	West Point Loma Boulevard to Hancock Street	65	69.1	70.5	69.7	71.3	No (1.6)
	Hancock Street to Kemper Street	65	69.7	69.6	69.7	70.3	No (0.)
	Kemper Street to (planned) Frontier Drive	65	67.7	68.4	68.3	69.	No (0.9)
	Rosecrans Street to Pacific Highway	65	56.7	57.0	57.2	61.4	No (4.2)

Table 9. Project Phase 1 (Year 2030) Traffic Noise Levels (dBA CNEL)

Roadway	Segment	Applicable Threshold	Non-Event Scenario		Event Scenario		Significant Impact? (Maximum Project Increase in Noise Level)
			No Project	With Project	No Project	Worst-Case Event	
Kurtz Street	Hancock Street to Frontier Drive	65	58.0	62.3	58.8	63.0	No (4.3)
	Frontier Drive to Sherman Street	65	58.0	61.1	58.8	62.0	No (3.)
	Sherman Street to Camino Del Rio West	65	59.8	61.5	60.8	62.4	No (1.7)
Hancock Street	Sports Arena Boulevard to Channel Way	65	58.9	62.3	59.4	63.3	No (3.9)
	Channel Way to Kurtz Street	65	59.2	62.7	59.6	63.3	No (3.)
	Kurtz Street to Greenwood Street	65	59.8	61.3	60.2	61.	No (1.6)
	Greenwood Street to Camino Del Rio West	65	59.8	61.	60.2	61.7	No (1.6)

Table 9. Project Phase 1 (Year 2030) Traffic Noise Levels (dBA CNEL)

Roadway	Segment	Applicable Threshold	Non-Event Scenario		Event Scenario		Significant Impact? (Maximum Project Increase in Noise Level)
			No Project	With Project	No Project	Worst-Case Event	
Frontier Drive[1]	Sports Arena Boulevard to Kurtz Street	65	—	60.5	—	62.4	No (N/A)
Kemper Street[1]	Sports Arena Boulevard to Kurtz Street	65	—	57.4	—	58.3	No (N/A)

Notes: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; I- Interstate; N/A = not applicable

[1] Existing noise levels are not available for these segments because they would be developed under the Project.

Noise levels are calculated at 50 feet from roadway centerline.

Noise levels are based on traffic projections provided by Kimley-Horn & Associates, Inc. (2024a). See Appendix B for datasheets, including traffic volumes.

Table 10. Project Buildout Phase 2 (Year 2035) Traffic Noise Levels (dBA CNEL)

Roadway	Segment	Applicable Threshold	Non-Event Day Scenario		Event Day Scenario		Significant Impact? (Maximum Project Increase in Noise Level)
			No Project	With Project	No Project	Project Full Capacity Event	
Sports Arena Boulevard	I-8 Westbound Off-Ramp to I-8 Eastbound On-Ramp	65	67.7	69.3	68.2	69.8	No (1.)
	I-8 Eastbound On-Ramp to West Point Loma Boulevard	65	70.6	71.9	71.0	72.3	No (1.3)
	West Point Loma Boulevard to Hancock Street	65	69.	72.1	69.9	72.5	No (2.)
	Hancock Street to Kemper Street	65	69.3	70.8	69.9	71.3	No (1.5)
	Kemper Street to (planned) Frontier Drive	65	67.9	69.6	68.5	70.1	No (1.7)
	Rosecrans Street to Pacific Highway	65	57.6	57.8	58.0	62.0	No (4.0)

Table 10. Project Buildout Phase 2 (Year 2035) Traffic Noise Levels (dBA CNEL)

Roadway	Segment	Applicable Threshold	Non-Event Day Scenario		Event Day Scenario		Significant Impact? (Maximum Project Increase in Noise Level)
			No Project	With Project	No Project	Project Full Capacity Event	
Kurtz Street	Hancock Street to Frontier Drive	65	58.2	64.5	58.9	64.8	No (6.3)[1]
Kurtz Street	Frontier Drive to Sherman Street	65	58.2	62.7	58.9	63.3	No (4.5)
	Sherman Street to Camino Del Rio West	65	60.0	62.6	60.9	63.4	No (2.6)
Hancock Street	Sports Arena Boulevard to Channel Way	65	59.0	64.8	59.5	65.3	No (5.8)[1]
	Channel Way to Kurtz Street	65	59.4	65.1	59.7	65.3	No (5.7)[1]
	Kurtz Street to Greenwood Street	65	59.9	62.0	60.3	62.	No (2.1)
	Greenwood Street to Camino Del Rio West	65	59.9	62.0	60.3	62.3	No (2.1)

Table 10. Project Buildout Phase 2 (Year 2035) Traffic Noise Levels (dBA CNEL)

Roadway	Segment	Applicable Threshold	Non-Event Day Scenario		Event Day Scenario		Significant Impact? (Maximum Project Increase in Noise Level)
			No Project	With Project	No Project	Project Full Capacity Event	
Frontier Drive[2]	Sports Arena Boulevard to Kurtz Street	65	—	60.7	—	61.6	No (N/A)
Kemper Street[2]	Sports Arena Boulevard to Kurtz Street	65	—	62.9	—	63.1	No (N/A)

Notes: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; I- Interstate; N/A = not applicable

[1] The Project would result in a readily perceptible increase in noise on these segments; however, as described below, noise levels would continue to be compatible with surrounding development and this impact would be less than significant.

[2] Existing noise levels are not available for these segments because they would be developed under the Project.

Noise levels are calculated at 50 feet from roadway centerline.

Noise levels are based on traffic projections provided by Kimley-Horn & Associates, Inc. (2024a). See Appendix B for datasheets, including traffic volumes.

Bold = Exceeds applicable threshold

Noise Levels at Affected Noise-Sensitive Land Uses (Residences)

As shown in Table 10, the Project would have the potential to result in a clearly noticeable increase in ambient noise levels to NSLUs (residences) within the vicinity of three roadway segments:

- Kurtz Street from Hancock Street to Frontier Drive (Buildout [Year 2035])
- Hancock Street from Sports Arena Boulevard to Channel Way (Buildout [Year 2035])
- Hancock Street from Channel Way to Kurtz Street (Buildout [Year 2035])

Noise levels on these segments are further addressed in the following paragraphs for informational purposes to determine if this increase in noise level would likely be readily perceptible compared to ambient freeway noise, and if noise levels would be compatible with existing NSLU.

With Project implementation, noise levels on Kurtz Street from Hancock Street to Frontier Drive would continue to be compatible with existing commercial uses. The northern frontage of this segment could be developed with new residences consistent with the Midway-Pacific Highway CPU PEIR. Residential Project development on the southern frontage of this segment is addressed below under Threshold 2. Consistent with the findings of the Midway-Pacific Highway CPU PEIR, the Project would result in a readily perceptible increase in noise level on this segment, but no NSLUs currently exist along the segment. Noise levels would remain compatible with existing uses and with future NSLU because noise levels are anticipated to be below 65 dBA CNEL.

The segment of Hancock Street from Channel Way to Kurtz Street is currently developed with office and commercial uses, and the segment from Sports Arena Boulevard to Channel Way is adjacent to The Orchard Senior Living facility, an NSLU. With Project implementation, noise levels from both segments of Hancock Street would continue to be compatible with existing and future NSLUs, including residential development. Additionally, when ambient freeway noise is considered, the increase in noise level of these segments is not anticipated to be clearly noticeable (5 dBA or more) compared to total ambient noise levels. The segment of Hancock Street from Channel Way to Kurtz Street is located in the 75+ dBA CNEL contour for noise levels from I-8 (refer to Figure 7). Combined noise level exposure from this segment of Hancock Street with Project implementation (63.9 dBA CNEL) and projected freeway noise levels (75 dBA CNEL) would result in noise levels of approximately 75.3 dBA CNEL at adjacent receptors. Without the Project, combined noise levels from Hancock Street (58.3 dBA CNEL) and freeway noise (75 dBA CNEL) would be approximately 75.1 dBA CNEL. Therefore, due the dominance of freeway noise in the area, the total ambient vehicle noise exposure at receptors adjacent to Hancock Street from Channel Way to Kurtz Street with Project implementation would be approximately 0.2 dBA CNEL higher than noise levels without the Project. Consistent with the findings of the Midway-Pacific Highway CPU PEIR, when combined with I-8 traffic noise levels, the change in noise level with Project implementation on this segment of Hancock Street would not be readily perceptible on this segment of Hancock Street.

Similarly, combined noise level exposure on Hancock Street from Sports Arena Boulevard to Channel Street with Project implementation (63.2 dBA CNEL) and projected freeway noise levels (65 dBA CNEL) would be approximately 67.2 dBA CNEL. Without the Project, combined noise levels from Hancock Street (57.8 dBA CNEL) and freeway noise (65 dBA CNEL) would be approximately 65.8 dBA CNEL. Therefore, due the dominance of freeway noise in the area, the increase in total ambient traffic noise levels contributed by Project implementation would be 1.4 dBA CNEL higher than noise levels without Project implementation and would not be readily perceptible compared to conditions without the Project.

Summary

The Project would not be expected to result in a 3 dBA CNEL increase in noise level on any roadway segment that would exceed 65 dBA CNEL without the Project under the Project Phase 1 (Year 2030) scenario or the Project Phase 2 (Year 2035) scenario. Additionally, the Project would not be expected to cause any of the remaining segments to exceed 65 dBA CNEL under either scenario. Impacts would be **Less than Significant**

6.1.2 Mitigation Measures

No mitigation measures are required.

6.1.3 Significance after Mitigation

Impacts would be **Less than Significant** without mitigation.

6.1.4 Cumulative Impacts

A cumulative ambient noise impact would occur if development associated with cumulative regional land use projects would result in an increase in ambient noise that would exceed the City's noise standards. Buildout of the Project, along with future regional growth, would result in increases in traffic that would cumulatively increase traffic noise. The potential noise impacts that would result from cumulative projects and regional growth are included in the Project Buildout Phase 2 (Year 2035) scenario. Table 11, Cumulative Traffic Noise Impacts (dBA CNEL), compares Project Buildout Phase 2 (Year 2035) traffic noise levels with existing conditions under worst-case event day conditions. As shown in Table 11, a **Significant Cumulative Impact** would occur a **Significant Cumulative Impact** would occur on one existing roadway segment that exceeds 65 dBA CNEL under existing conditions: Sports Arena Boulevard from West Point Loma Boulevard to Hancock Street. The Project's contribution to the cumulative noise impact is based on the increase in traffic noise attributable to the proposed Project under the Project Buildout Phase 2 (Year 2035) scenario. However, the Project's contribution to noise levels on this segment would not exceed 3 dBA CNEL and the Project's contribution to this impact would be **Less than Cumulatively Considerable**.

The Project, combined with cumulative development, would not exceed a 3 dBA increase on any other segment Sports Arena Boulevard that would exceed the compatibility standard of 65 dBA CNEL without Project implementation. Based on buildout noise modeling using information from the Local Mobility Analysis (Kimley-Horn 2024a), future growth from cumulative development would result in a readily perceptible (more than 5 dBA CNEL) increase on four remaining segments (Sports Arena Boulevard from Rosecrans Street to Pacific Highway; Kurtz Street from Hancock Street to Frontier Drive; Hancock Street from Sports Arena Boulevard to Channel Way; and Hancock Street from Channel Way to Kurtz Street). However, noise levels on these four segments with implementation of cumulative development and the Project would continue to be compatible with existing development because noise levels would not exceed the compatibility threshold of 65 dBA CNEL. The impact to these segments with cumulative development and Project implementation would be **Less than Cumulatively Considerable**. **Considerable.**

Table 11. Cumulative Traffic Noise Impacts (dBA CNEL)

Roadway	Segment	Applicable Threshold	Existing	Buildout (Year 2035)	Increase in Noise Level	Significant Cumulative Impact?	Increase Attributable to Proposed Project[1]	Cumulatively Considerable Contribution?
Sports Arena Boulevard	I-8 Westbound Off-Ramp to I-8 Eastbound On-Ramp	65	67.7	69.8	2.1	No	1.6	No
	I-8 Eastbound On-Ramp to West Point Loma Boulevard	65	70.7	72.3	1.6	No	1.3	No
	West Point Loma Boulevard to Hancock Street	65	69.4	72.5	3.1	Yes	2.8	No
	Hancock Street to Kemper Street	65	69.4	71.3	1.9	No	1.5	No
	Kember Street to Frontier Drive	65	68	70.1	2.1	No	1.7	No
	Rosecrans Street to Pacific Highway	65	56.2	62	5.8	No[2]	4	No

Table 11. Cumulative Traffic Noise Impacts (dBA CNEL)

Roadway	Segment	Applicable Threshold	Existing	Buildout (Year 2035)	Increase in Noise Level	Significant Cumulative Impact?	Increase Attributable to Proposed Project[1]	Cumulatively Considerable Contribution?
Kurtz Street	Hancock Street to Frontier Drive	65	58.6	64.8	6.2	No[2]	6.3	No[2]
	Frontier Drive to Sherman Street	65	58.6	63.3	4.7	No	4.5	No
	Sherman Street to Camino Del Rio West	65	60.7	63.4	2.7	No	2.6	No
Hancock Street	Sports Arena Boulevard to Channel Way	65	59	65.3	6.3	No[2]	5.8	No[2]
	Channel Way to Kurtz Street	65	59	65.3	6.3	No[2]	5.7	No[2]
	Kurtz Street to Greenwood Street	65	59.9	62.4	2.5	No	2.1	No
	Greenwood Street to Camino Del Rio West	65	60	62.3	2.3	No	2.1	No

Notes: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; I- Interstate

[1] See Table 10. Worst-case noise level increase exceeds increase from existing on some segments because the worst-case increase attributable to the Project occurs under non-event day conditions.

[2] Cumulative development and the Project would result in a readily perceptible increase in noise level on these segments. However, as described above, noise levels would continue to be compatible with surrounding development or change is noise level would not be readily perceptible with consideration of ambient freeway noise. Impact would be less than cumulatively considerable.

Noise levels are calculated at 50 feet from roadway centerline.

Noise levels are based on traffic data provided by Kimley-Horn (2024a).

See Appendix B for datasheets, including traffic volumes.

6.2 Threshold 2: Transportation Noise

6.2.1 Impact Analysis

CEQA is intended to protect the existing environment from impacts that would result from the proposed Project. Generally, CEQA does not consider impacts of the existing environment on a proposed land used to be significant (see Section 15126.2 of the CEQA Guidelines). However, the 2008 General Plan Noise Element states that new NSLUs should be evaluated to determine if receptors would be exposed to noise levels that exceed the noise levels considered compatible as identified in Table 2. Therefore, consistent with the Midway-Pacific Highway CPU PEIR, the potential exposure of Project NSLUs to transportation noise are addressed below. Impacts to existing NSLUs from traffic noise are addressed under Threshold 1, Increases in Ambient Vehicle Noise.

6.2.1.1 Midway-Pacific Highway CPU PEIR Impact Summary

The Midway-Pacific Highway CPU PEIR determined that the 2018 Community Plan would result in a **Significant and Unavoidable** impact related to exposure of NSLUs developed under the 2018 Community Plan to transportation noise. In the Midway-Pacific Highway Community planning area, noise levels for all land uses would be incompatible (i.e., greater than 75 dBA CNEL) closest to the freeways and specific segments of Pacific Highway. The streets generating the greatest noise levels within the proposed 2018 Community Planning area were determined to be Camino Del Rio West, Midway Drive, Sports Arena Boulevard, Rosecrans Street, Pacific Highway, and Laurel Street. Compliance with existing 2008 General Plan policies for noise attenuation in new residences would reduce impacts to new discretionary development to a **Less than Significant** level. However, similar to Threshold 1, in the case of ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Midway-Pacific Highway CPU PEIR Mitigation Measure **NOISE 5.5-1** was identified but determined to be infeasible as described under Threshold 1. Therefore, exterior noise impacts for ministerial projects located in areas that exceed the applicable land use and noise compatibility level were determined to be **Significant and Unavoidable** in the Midway-Pacific Highway CPU PEIR.

The Midway-Pacific Highway CPU PEIR determined that Amtrak, COASTER, and freight train noise levels would exceed 60 dBA Ldn. However, all sensitive receptors located within the applicable noise contour would be exposed to existing and future traffic noise levels in excess of 70 dBA CNEL. Thus, impacts specifically from rail noise were determined to be **Less than Significant** in the Midway-Pacific Highway CPU PEIR.

6.2.1.2 Project-Specific Impact Analysis

Freeway and Roadway Noise

A significant impact would occur if implementation of the Project would result in an exposure of sensitive receivers to high levels of noise from current or future motor vehicle traffic noise that exceeds standards established in the Noise Element of the 2008 General Plan, presented in Table 2. Consistent with the Midway-Pacific Highway CPU PEIR, and 2008 General Plan Policies NE-A.1, NE-A.3, and NE-A.4, the applicable noise standards for proposed Project development are as follows:

- Multi-family residential and mixed uses are compatible up to 60 CNEL and conditionally compatible up to 70 CNEL. Additionally, as stated in Section B of the City's Noise Element, although not generally considered compatible, the City conditionally allows multi-family and mixed-use residential uses in areas experiencing up to 75 dBA CNEL from motor vehicle traffic noise with existing residential uses. Conditions are placed on projects during the permitting process such that any future residential use exposed to noise levels up to 75 dBA CNEL must include attenuation measures to ensure an interior noise level of 45 dBA CNEL and be in an area where a community plan allows multi-family and mixed-use residential uses.
- Sales, commercial services, and office uses are compatible up to 65 dBA CNEL and conditionally compatible up to 75 dBA CNEL.
- Neighborhood parks are compatible up to 70 dBA CNEL and conditionally compatible up to 75 dBA CNEL.

Vehicle traffic is the dominant noise source affecting the proposed Midway-Pacific Highway Community planning area, including the Project site. The western portion of the Project site is located within the projected 65–75 dBA CNEL noise contours for roadway noise, primarily from I-8 (refer to Figure 7). As described in Section 4.3, existing noise levels from Sports Arena Boulevard currently exceed the normally acceptable noise compatibility standard of 60 dBA CNEL for multi-family residences and other NSLUs but not the compatibility standards of 65 dBA CNEL for commercial and office uses or the 70 dBA CNEL standard for parks. Consistent with measured noise levels on the Project site and surrounding area, existing noise levels do not exceed the maximum conditionally acceptable standard of 75 dBA CNEL for multi-family residential development.

Consistent with the methodology for the Midway-Pacific Highway CPU PEIR, future noise contours are also calculated for the Project study area roadways, based on the modeled worst-case noise levels presented in Table 10, above. Study area roadway contours are provided in Table 12 and Figure 8, Project Buildout Phase 2 (Year 2035) Traffic Noise Contours. Distances to the roadway noise contours are based on an assumed hard, flat site, with no intervening barriers or obstructions.

Table 12. Project Buildout Phase 2 (Year 2035) Traffic Noise Contours

Roadway	Segment	Worst-Case Noise Level (dBA CNEL)	Contour Distance from Centerline (feet)			
			≤60 dBA CNEL	≤65 dBA CNEL	≤70 dBA CNEL	≤75 dBA CNEL
Sports Arena Boulevard	I-8 Westbound Off-Ramp to I-8 Eastbound On-Ramp	69.8	477	151	48	15
	I-8 Eastbound On-Ramp to West Point Loma Boulevard	72.3	859	272	86	27
	West Point Loma Boulevard to Hancock Street	72.8	901	285	90	28
	Hancock Street to Kemper Street	71.3	676	214	68	21
	Kemper Street to (planned) Frontier Drive	70.1	512	162	51	16
	Rosecrans Street to Pacific Highway	62	79	25	8	2
Kurtz Street	Hancock Street to Frontier Drive	64.8	151	48	15	5
	Frontier Drive to Sherman Street	63.3	108	34	11	3
	Sherman Street to Camino Del Rio West	63.4	108	34	11	3
Hancock Street	Sports Arena Boulevard to Channel Way	65.3	168	53	17	5
	Channel Way to Kurtz Street	65.3	169	53	7	5
	Kurtz Stret to Greenwood Street	62.4	87	27	9	3
	Greenwood Street to Camino Del Rio West	62.3	86	27	9	3
Frontier Drive	Sports Arena Boulevard to Kurtz Street	61.7	74	23	7	2
Kemper Street	Sports Arena Boulevard to Kurtz Street	63.1	103	33	10	3

Notes: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; I- Interstate

Noise levels are calculated at 50 feet from roadway centerline.
Noise levels are based on traffic projections provided by Kimley-Horn 2024a.
See Appendix B for datasheets, including traffic volumes.

At any specific noise receptor location, the actual existing noise levels would depend on not only the source noise level but also the nature of the sound path from the source to the sensitive receptor. In many cases, structures, terrain, dense vegetation, and other obstacles occlude the direct line-of-sight from the receptor to the traffic noise sources, which could significantly reduce noise levels received at the receptor locations. As an example, the building side adjacent to the street frontage would reduce traffic noise levels at units on the far side of the building. First row buildings provide noise attenuation of 3 to 5 dBA CNEL to subsequent rows depending on the building-to-gap ratio (City of San Diego 2018a). Large continuous structures such as the block buildings proposed under the Project provide an even greater attenuation of traffic noise to receptors in subsequent building rows.

As shown in Table 12, noise levels from surrounding roadways would not exceed 75 dBA CNEL beyond approximately 30 feet of the roadway centerline, which would be within the roadway ROW based on Section 5.3.1, Public Streets, of the Specific Plan. Noise levels would exceed the 2008 General Plan Noise Element compatibility level of 60 dBA CNEL for residential uses. Residences adjacent to street frontages may experience exterior noise levels up to 72.8 dBA CNEL along Sports Arena Boulevard. Noise levels would not exceed 65 dBA CNEL more than 50 feet from the centerline along the remaining roadways. The northwestern area of the Project site is with the 65–75 dBA CNEL I-8 noise contour. However, noise levels up to a maximum of 75 dBA CNEL from traffic noise for multi-family residential are considered conditionally compatible, since interior noise levels can be reduced to 45 dBA CNEL through feasible means, such as closing/sealing windows and providing mechanical ventilation. As described above under Threshold 1, all new residential development on the Project site would be subject to existing state, City, and 2018 Community Plan Policy NE-1.3 requirements to demonstrate that interior noise levels of 45 dBA CNEL would be achieved in areas potentially exposed to traffic noise above compatible noise levels. This requirement is implemented through submission of a Title 24 Compliance Report to demonstrate interior noise levels of 45 dBA CNEL. With this existing framework, exterior traffic noise impacts associated with development of new residences on the Project site would be **Less than Significant**.

Noise levels would generally be compatible with neighborhood park and commercial uses (65 dBA CNEL) due to setbacks and building attenuation provided by residential development along Sports Arena Boulevard. Promenades would be public spaces along street frontages that may be exposed to noise levels above the normally compatible noise level of 65 dBA CNEL for parks along Sports Arena Boulevard. However, noise levels would be within the conditionally compatible 70 dBA CNEL contour, which extends up to approximately 68 feet from the roadway centerline, as shown in Table 12. Noise levels on Sports Arena Boulevard adjacent to the Project site would be reduced to below the incompatible standard of 75 dBA CNEL within 28 feet of centerline and would not extend into promenade areas. Promenade parks are proposed to provide park-like multimodal connections

between proposed land uses. As such, these parks would be active facilities that are less sensitive to noise because users are moving from place to place, so noise exposure in a specific location would be temporary, and a quiet noise environment is not essential to its function. By comparison, passive parks are subject to more stringent standards because these spaces are assumed to serve as gathering spaces where ambient noise levels that do not exceed conversation levels is essential. As such, the promenades would be an appropriate use in areas exposed to the conditionally compatible level of 75 dBA CNEL. Impacts would be **Less than Significant.**

Rail Noise

As described in Section 4.4, Transportation Noise Sources, sources of railroad noise in the Midway-Pacific Highway Community include freight trains, intercity rail (Amtrak), commuter rail (COASTER), and light-rail transit (San Diego Metropolitan Transit System trolley). The projected 60 dBA CNEL rail noise contour was calculated to be 282 feet from rail center alignment in the Midway-Pacific Highway CPU PEIR (PEIR Table 5.5-5, Existing Predicted Railway Noise Levels) (City of San Diego 2018a). The Project site is not within 282 feet of the rail center alignment, and future on-site development would not be subject to incompatible noise levels from rail operation. Additionally, the Project would not result in any changes to rail operation that would result in a change in exposure of off-site NSLUs to rail noise. This impact would be **Less than Significant**.

6.2.2 Mitigation Measures

No mitigation measures are required.

6.2.3 Significance after Mitigation

Impacts would be **Less than Significant** without mitigation.

6.2.4 Cumulative Impacts

The analysis provided above for transportation noise exposure on the Project site is cumulative in nature because the analysis considers noise associated with regional growth in determining future noise exposure, including the Project, County-wide growth that increases background traffic levels, and the Naval Information Warfare Systems Command revitalization project (Kimley-Horn 2024a). Exposure of future NSLUs to incompatible noise levels would be site specific, and similar to the Project, future NSLU development would be subject to the applicable policies, noise ordinance requirements, and Title 24 standards discussed in this document that reduce noise impacts. Thus, cumulative noise impacts related to transportation noise exposure would be **Less than Cumulatively Considerable**. The Project's cumulative contribution to future increases in ambient noise levels and impacts to existing NSLUs is addressed under Threshold 1.

6.3 Threshold 3: Airport Compatibility

The potential for the Project to result in land uses that are not compatible with aircraft noise levels as defined by an adopted ALUCP is addressed below.

6.3.1 Impact Analysis

6.3.1.1 Midway-Pacific Highway CPU PEIR Impact Summary

The Midway-Pacific Highway CPU PEIR determined that the Midway-Pacific Highway CPU would not result in a significant impact related to airport noise. Even though there are sensitive receptors in the proposed Midway-Pacific Highway Community planning area located where noise levels exceed 60 dBA CNEL due to aircraft operations, future development must include interior noise attenuation consistent with the Noise Element of the 2008 General Plan and the SDIA ALUCP, including Title 24 requirements and ALUC Consistency Determination Review. No mitigation measures were required.

6.3.1.2 Project-Specific Impact Analysis

As discussed in Section 4.4, the nearest airport to the Project site is the SDIA, approximately 1.8 miles southeast of the Project site. Naval Air Station North Island is 2.8 miles south of the site. The site is within the Airport Influence Area for Naval Air Station North Island but is not located within any noise contour for the airport. According to the SDIA ALUCP, the Project site is within the overflight area and the southern portion of the site is within the airport's 60-65 dBA CNEL contour (refer to Figure 5). The Project site is not within the 65 dBA CNEL or above noise contour of the SDIA, which extends to approximately Midway Drive southwest of the Project site (SDCRAA 2014). As detailed in the Midway-Pacific Highway CPU PEIR, San Diego County Regional Airport Authority (SDCRAA) determined that the Midway-Pacific Highway CPU is conditionally consistent with the ALUCP for SDIA. Future projects under the Midway-Pacific Highway CPU, including the Project, are required to submit project-level consistency determination applications until such time as the ALUC determines that the City has incorporated the noise policies and standards of the ALUCP into the SDMC. Prior to issuance of any building permit, buildings developed under the Project would be required to submit project-level consistency determinations to demonstrate compliance with the interior noise compatibility guidelines of the 2008 General Plan for new residences in areas where exterior noise levels exceed 60 dBA CNEL. This requirement would be implemented for the Project through submittal of a Title 24 Compliance Report and an ALUC Consistency Determination Application, both of which would require demonstration of interior noise levels of 45 dBA CNEL. With this existing framework, aircraft noise exposure would be **Less than Significant**.

6.3.2 Mitigation Measures

No mitigation measures are required.

6.3.3 Significance after Mitigation

Impacts would be **Less than Significant** without mitigation.

6.3.4 Cumulative Impacts

As described above, the SDCRAA determined that cumulative development across the Midway-Pacific Highway Community planning area would be conditionally consistent with the ALUCP for the SDIA. The Project would comply with existing regulatory processes to ensure that building design would attenuate exterior aircraft noise to compatible interior noise levels at future NSLUs. Based on those processes, the Project would not result in new NSLUs that are exposed to incompatible noise levels from aircraft, as defined by the ALUCP adopted for the SDIA. Additionally, no additional aviation uses are planned to be introduced within the immediate vicinity of the Project site, and the Project does not propose any new air traffic. No existing or future off-site NSLUs would be exposed to excessive noise levels from aviation as a result of the Project. Impacts related to nuisance noise from overflights are site specific and are not cumulative in nature. Therefore, a cumulative impact related to land use compatibility with adopted ALUCPs would be less than significant. The Project's contribution would **Not be Cumulatively Considerable.**

6.4 Threshold 4: Noise Ordinance Compliance

6.4.1 Impact Analysis

A significant impact would occur if implementation of the Project would result in the exposure of people to noise levels that exceed property line limits established in the Noise Abatement and Control Ordinance of the SDMC, as shown in Table 3, above. The applicable noise level limits for existing development include the All Other Residential and Commercial use categories. Where ambient conditions exceed the SDMC standards, the threshold is assumed to be a perceptible increase (3 dBA CNEL or more) above ambient noise levels.

6.4.1.1 Midway-Pacific Highway CPU PEIR Impact Summary

The Midway-Pacific Highway CPU PEIR determined that the 2018 Community Plan would not result in a significant impact related to noise ordinance compliance. Mixed-use sites and areas where residential uses are located in proximity to commercial sites would potentially expose sensitive receptors to noise. However, City policies and regulations would control noise and reduce noise impacts between various land uses. In addition, enforcement of state noise regulations in Title 24 of the California Code of Regulations would control impacts. With implementation of these policies and enforcement of the Noise Abatement and Control Ordinance of the SDMC, impacts would be **Less than Significant**. No mitigation measures were required.

6.4.1.2 Project-Specific Impact Analysis

The Project would provide a mix of residential, commercial, and entertainment uses, and parks and public spaces that encourage an active urban environment, consistent with the land use types and vision identified in the 2018 Community Plan, as addressed in the Midway-Pacific Highway CPU PEIR. Consistent with 2018 Community Plan NE-1.8, Project design includes a variety of open and public space amenities to create separation between uses and existing roadway noise sources. However, the Project would generate typical sources of noise in mixed-use developments, including loading docks, mechanical equipment (such as generators and HVAC units), truck deliveries, trash-hauling activities, and customer and employee use of commercial facilities. Outdoor activity areas including those that would host special events would also result in noise from human activity and amplified noise.

Noise from new development consistent with the 2018 Community Plan, specifically high-density residential development, commercial operations (including mechanical equipment and deliveries), parking lots, landscaping, trash collection, and increased human activity, was addressed in Section 5.5, Noise, of the Midway-Pacific Highway CPU PEIR. Additionally, redevelopment of San Diego International Sports Arena with a new event facility was addressed in Alternative 1 and Alternative 2 in Chapter 8.0, Alternatives. Both analyses determined that significant noise impacts would not occur from development consistent with the 2018 Community Plan with continued implementation of City noise-related regulations. The Project would accommodate land uses consistent with those analyzed under the 2018 Community Plan. The Project uses and applicable City regulations are further described below.

Commercial Development

Proposed commercial development would include retail and restaurant uses. Potential operational noise sources associated with commercial development on the Project site would include HVAC equipment, commercial truck deliveries at loading docks, and human activity associated with live entertainment or outdoor patios.

The exact specifications and locations of the HVAC systems that would be installed at commercial or mixed-use buildings are unknown at this time, given the Project is a Specific Plan and the buildings have not been designed. For the purposes of this analysis, it is assumed that the HVAC systems of a mixed-use commercial and residential Project would be typical of a community-serving retail building, based on reference noise levels available from a mixed-use project in the region (City of Santee 2020). HVAC units not installed within an enclosure would have the potential to generate noise levels up to 79 dBA Leq at the unit (approximately 3 feet from the source). Without proper attenuation, HVAC units could result in noise levels that exceed SDMC limits. However, consistent with the Midway-Pacific Highway CPU PEIR, new mechanical equipment would be required to demonstrate consistency with the SDMC during the building permit approval process. The City's CEQA Significance Determination Thresholds note that non-residential stationary equipment located

adjacent to residential development may result in a significant impact if noise levels exceed 65 dBA CNEL, even if hourly noise levels are consistent with the SDMC limits (City of San Diego 2022). Commercial uses would be located within mixed-use buildings with residential uses. However, as part of the building permit process, design considerations submitted by the Project applicant would be required to demonstrate that Title 24 interior noise standards would be achieved at adjacent residences, including noise from proposed commercial uses. Per SDMC, future building design would incorporate adequate shielding for mechanical equipment to achieve interior and exterior noise standards for on-site residential and commercial uses. The nearest sensitive receptors to proposed buildings that may include commercial uses are the Via Marbella and The Orchard Senior Living facility, both located approximately 750 feet from the nearest potential Project building location. At this distance, based on a standard noise attenuation rate of 6 dBA per doubling of distance, noise levels from an individual residential HVAC unit would be reduced to below 40 dBA without attenuation (Caltrans 2013). Additionally, existing intervening commercial buildings provide additional attenuation to existing residences, and this area is already within the 60-70 dBA CNEL noise contours for freeway noise. Project equipment would be designed to achieve SDMC noise standards on site, as required to obtain a building permit. Due to distance, intervening structures, existing ambient noise, and on-site attenuation, significant impacts to off-site receptors would not occur. This impact would be **Less than Significant.**

In addition to HVAC systems, commercial land uses also have the potential to generate noise from truck deliveries, such as engines idling and beeping from backing warning signals at commercial loading docks. Truck deliveries to the Project site would involve deliveries of supplies and products to commercial uses. State law (California Code of Regulations, Title 13, Section 2485) currently prohibits heavy-duty diesel delivery trucks from idling more than 5 minutes. Therefore, noise from truck idling would be limited to 5 minutes during truck deliveries. Because of the intermittent and short duration of noise from truck deliveries in each location, truck deliveries would not be a source of excessive ambient noise. Consistent with 2018 Community Plan Policy 1.10, deliveries would also be encouraged to occur during daytime hours. Therefore, truck activities would not exceed SDMC hourly noise standards, and impacts related to truck deliveries and loading would be **Less than Significant**.

Commercial establishments such as restaurants and bars on the Project site may generate intermittent noise from live entertainment or lively crowds. However, operation would be subject to SDMC requirements. The Project proposes to change the existing Commercial Community (CC-3-6 and CC-3-8) zones to Residential-Mixed Use (RMX-2). Following Project approval, the RMX zoning regulations would be the applicable zoning requirements for the site. RMX zoning regulations limit operational hours for eating and drinking establishments adjacent to residences to between 6:00 a.m. and 12:00 a.m. 2018 Community Plan Policies NE-1.7 and NE-1.8 requires the incorporation of sound attenuation measures, such as lowering the volume of amplified music and installing sound absorbent wall/ceiling materials, where commercial uses, such as restaurants and bars, are permitted or conditionally permitted, especially adjacent to residential areas. With enforcement of

2018 Community Plan policies and SDMC requirements, impacts to on-site NSLUs would be **Less than Significant**.

The nearest sensitive receptors to proposed buildings that may include commercial uses are the Villa Marbella apartments and The Orchard Senior Living facility (approximately 750 feet west and southeast of the Project site, respectively), separated from the Project site by existing commercial development. Due to distance, intervening structures, existing ambient noise, and on-site attenuation, noise from human activity would not be expected to be audible at the nearest existing NSLUs or exceed SDMC noise level limits. Nuisance impacts to off-site NSLUs would be **Less than Significant**.

Residential Development

Residential development would be located throughout the Project site in mixed-use buildings with multi-family residential and commercial uses. Mixed-use buildings would require HVAC systems as described above for commercial development. The analysis of the HVAC systems above applies to on-site commercial and residential development. Remaining noise generated from residential uses is generally described as "nuisance noise." Nuisance noise is defined as intermittent or temporary neighborhood noise from sources such as amplified music and barking dogs that may be disturbing to other residents. Section 59.5.0501 of the SDMC prohibits disturbing, excessive, or offensive noise which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. The San Diego Police Department enforces the nuisance noise provisions of the Noise Ordinance. Additionally, nuisance noises would be different from each other in kind, duration, and location. The overall effects would be separate and, in most cases, would not affect the same receptors at the same time. Therefore, nuisance noise in residential neighborhoods would not result in noise levels that would exceed the SDMC hourly noise level limits and would not result in a significant impact. This impact would be **Less than Significant.**

Parking Areas

On-site parking would consist almost entirely of parking structures, with some on-street parking planned along private drives, Kemper Street, and Frontier Drive. Larger entertainment events may require use of off-site parking lots for overflow parking either within walking distance of the Project site or requiring shuttle service. No specific overflow parking lot locations are identified at this time. These lots would be identified as leases are signed. Noise sources from parking areas include car alarms, door slams, radios, and tire squeals. Based on reference noise levels from a similar mixed-use project in the region, these sources typically range from approximately 51 to 66 dBA at a distance of 10 feet (City of Santee 2020) and are generally short term and intermittent. Parking areas have the potential to generate noise levels that exceed 65 dBA depending on the location of the source; however, noise sources from the parking areas would be different from each other in kind, duration, and location. Therefore, the overall effects would be separate and, in most cases, would not affect noise-sensitive receptors at the same time. Additionally, most proposed on-site parking

would be located within structures that are wrapped by residential units, which would shield surrounding uses from parking area noise. Parking in overflow lots would be similar to existing use of the lots. Nuisance noise in these lots would be concentrated in the periods before and after events. However, as a condition of approval, these lots would be managed, and traffic control would reduce intermittent noises, such as honking. Therefore, noise generated from parking areas would not exceed SDMC hourly noise level limits and would be **Less than Significant**.

Permanent Indoor Event Facilities – Event Noise

The Project would allow for the development of a new 16,000-seat entertainment center. The existing San Diego International Sports Arena would remain operational until the new entertainment center is constructed. Event noise from the existing San Diego International Sports Arena would be the same as existing conditions during the interim period of operation while the San Diego International Sports Arena is still in operation. As described in Section 4.3, measured sound levels at existing receptors showed no increase in noise levels on event days at the existing 16,000-seat San Diego International Sports Arena from operation of the entertainment center for events. Changes to ambient noise as a result of event-associated traffic are addressed under Threshold 1. Event noise at the existing San Diego International Sports Arena was not audible over existing vehicle noise levels. The construction of a new entertainment center would meet current building standards that would provide additional noise attenuation compared to the existing San Diego International Sports Arena building. For example, the existing San Diego International Sports Area, constructed in 1966, predates the California Building Code, first adopted in 1978 to consolidate various building regulations into a uniform reference. Over time, building envelope requirements have become increasingly stringent, such as Title 24 insulation standards, that also reduce average building noise transmission (Build Smart Group 2016). As such, noise levels from operation of a new entertainment center would not be a noticeable contributor to the ambient noise environment, similar to the existing San Diego International Sports Arena. Moreover, operation of a new entertainment center would be subject to SDMC ordinances that limit nuisance impacts associated with operation, such as SDMC Article 3, Division 15, Regulations for Entertainment Uses, that require the establishment and enforcement of orderly dispersal after events. Consistent with the findings of the Midway-Pacific Highway CPU PEIR, continued operation of an entertainment center on the Project site would not result in noise levels that exceed property line limits established in the Noise Abatement and Control Ordinance of the SDMC.

An optional, new 3,500-seat indoor theater may be developed on the northern side of the Project site in the privately owned area of the Specific Plan Area (Figure 4). The theater would be allowed under the "Theaters that are Outdoor or Over 5,000 Square Feet in Size" land use category, which would be a permitted use under the proposed Specific Plan. Similar to a future entertainment center, an indoor theater would include building attenuation such that events would not result in significant exterior noise levels. Design of an indoor theater would be subject to review by the City prior to building permit approval to confirm consistency with SDMC requirements, including the

Noise Abatement and Control Ordinance Standards. As such, a new indoor theater would not exceed SDMC noise level limits, and the resulting impacts would be **Less than Significant**. Special events accommodated by new outdoor spaces are addressed below.

Permanent Indoor Event Facilities – Mechanical Equipment

The Project would allow for the development of a new 16,000-seat entertainment center. Mechanical equipment for this type of facility would be larger than typical HVAC units described above for commercial and multi-family residential development. HVAC equipment is anticipated to be located in a mechanical yard on the northern side of the proposed entertainment center and would include approximately four air source heat pumps and three cooling towers (Gensler 2023). Based on conceptual equipment specifications provided by the Project applicant for similar facilities (Gensler 2023), unattenuated noise levels from mechanical equipment would range from 59 dBA to 65 dBA at 200 feet, with a combined noise level of approximately 74 dBA at 200 feet. The conceptual Project information presumes the mechanical yard would be surrounded by a solid 22-foot-high wall that would reduce noise levels to approximately 65 dBA at 200 feet. The nearest existing NSLU to the proposed entertainment center is the Villa Marbella apartment complex located behind commercial development southeast of the Sports Arena Boulevard and East Drive intersection, approximately 530 feet south of the proposed entertainment center. Noise levels from entertainment center mechanical equipment would be reduced by distance to approximately 57 dBA at the Villa Marbella apartments, which exceeds the SDMC daytime and nighttime noise level limits. However, in addition to distance, mechanical equipment would be further attenuated by the entertainment center building and existing commercial development south of Sports Arena Boulevard. Similarly, existing commercial development and proposed site development would provide attenuation to residences at The Orchard Senior Living facility approximately 2,600 feet west of the entertainment center. These areas are also subject to higher levels of ambient freeway noise due to proximity to I-8 and I-5. Calculated noise levels from the proposed entertainment center mechanical yard would generally not be audible over existing ambient roadway noise at these locations. Prior to issuance of building permits, final barrier design of the mechanical yard wall would be required to demonstrate consistency with the SDMC noise level limits at the Project site boundary.

As noted previously, stationary source impacts may still be considered significant if noise levels would exceed 65 dBA CNEL at residential uses. If mechanical equipment would run continuously, it would result in noise exposure of 64 dBA CNEL at the nearest existing NSLU (the Villa Marbella apartments), assuming attenuation from distance only. Therefore, due to the distance to the nearest existing receptors and equipment shielding, residential uses would be outside the 65 dBA CNEL screening distance for impacts from mechanical equipment. Attenuation from intervening structures and existing ambient noise sources would further reduce noise exposure. Project mechanical equipment would not result in noise level exposure in excess of 65 dBA CNEL at surrounding residential receptors.

Emergency generators would be located within the entertainment center mechanical yard, but operation would be limited to monthly daytime testing. Due to the limited duration of testing (typically 30 minutes once per month), the proposed 22-foot-high mechanical yard wall, and existing ambient noise levels primarily from traffic, monthly emergency generator testing is not anticipated to be noticeable at on- or off-site receptors. Consistent with the findings of the Midway-Pacific Highway CPU PEIR, because operation of mechanical equipment would be required to demonstrate consistency with SDMC noise level standards at the Project property line, operation would not exceed SDMC noise levels limits at nearby receptors. Due to the short-term duration of testing, generators would not result in noise levels that exceed 65 dBA CNEL. This impact would be **Less than Significant**.

Outdoor Human Activity and Recreational Facilities

The Project site is currently a source of human activity noise from the movement of people and vehicles associated with existing commercial and event spaces and from the outdoor Kobey's Swap Meet. However, the increased residential density proposed on site and new park and public space amenities would have the potential to increase daily activity on the site. The Project would provide a variety of public spaces areas for recreational and gathering opportunities (see Figure 4). The Green would be a centrally located gathering hub for the on-site residential community, while The Square would be outside the proposed entertainment center as an activated yard supporting the outdoor venue. These two outdoor areas would be linked by The Plaza, a linear space envisioned to be lined by retail and dining establishments. Proposed paseo greens and greenways would intersect with these public spaces to provide active transportation corridors. Wide, meandering, tree-lined promenades would provide a park-like setting in the public ROWs throughout and adjacent to the Project site.

The proposed public spaces would support the implementation of 2018 Community Plan Policy UD-2.2 by activating public spaces, including streets, sidewalks, and parks with City-permitted special events and park uses that provide cultural enrichment, promote economic vitality, enhance community identity and pride, and provide fundraising opportunities for the community's nonprofit agencies. Daily anticipated activities in The Green and The Square could include small yoga classes, board and lawn games, art classes and similar group activities that would generally result in noise levels similar to normal conversation. Similarly, daily use of The Plaza, paseo greens, greenways, and promenades for mobility or recreation would generally not result in noise levels beyond normal conversation (65 dBA at 3 feet from the source [Caltrans 2013]). Additionally, the Project site is subject to ambient traffic noise levels, including freeway noise from I-8. Noise from general human activity on site would generally not be audible at off-site uses, including residences, above ambient roadway noise. Noise levels from general activity on the Project site would not exceed SDMC hourly noise level limits and would not result in a significant impact.

Other fitness classes, happy hour events, food truck events or small musical performances may also occur throughout a typical week and result in higher noise levels from amplified music or larger

gatherings. Events may also include noise sources such as fireworks displays or use of generators. Based on information provided by the Project applicant for similar facilities (OJB 2023), noise levels from daily use would typically be normal conversation levels, while large events in the public spaces throughout the Project site could generate noise levels of 95 dBA or more adjacent to the source. Larger events would take place primarily in The Green and The Plaza, where proposed development would provide noise attenuation to existing off-site receptors, including NSLUs, and The Square, which would be located on the eastern side of the Project site near a primarily commercial area, which is not an NSLU.

The nearest existing NSLU to The Square is the Villa Marbella apartments located approximately 700 feet southwest of The Square. The nearest NSLU to The Green would be The Orchard Senior Living facility west of the Project site across Hancock Street, approximately 1,200 feet west of The Green. Noise levels from future events would vary, and the specifications for future event size, type, and required equipment are currently unknown. As such, the estimated typical large event noise level of 95 dBA (OBJ 2023) provides a screening level for potential impacts. At these distances, assuming a worst-case distance in which the location of the noise sources is at the edge of the nearest public space area, noise from an event generating noise levels of 95 dBA at the source would attenuate to 58 dBA at the nearest southern NSLU, and 53 dBA at the nearest western NSLU. As such, events would have the potential to exceed evening (7:00 p.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 p.m.) residential noise standards. The estimated noise level is within acceptable daytime residential noise levels. However, because the specifications for future events are currently unknown, as a worst-case assumption, it is assumed that an event would potentially exceed 95 dBA at the source and potentially exceed the daytime standard of 60 dBA at these receptors.

In addition to the proposed Project buildings, existing commercial development would provide noise attenuation to existing residences west and southeast of the site. Additionally, the Project site is separated from nearby residences by existing noise-generating roadways, and anticipated event noise levels are generally consistent with existing measured evening and nighttime ambient noise levels (primarily traffic noise), as shown in Table 6 (54–59 dBA). Therefore, although outdoor events within on-site parks and public space areas would have the potential to result in noise levels that exceed the noise level limits in Table 3, building attenuation and existing ambient noise levels would reduce the potential for outdoor events to result in a significant nuisance. However, because specifications for future events are currently unknown and would have the potential to exceed SDMC limits, individual events could result in a **Potentially Significant** impact to NSLUs.

Surrounding existing commercial uses would also have the potential to be exposed to crowd and amplified music noise from use of the public spaces. Based on the screening noise level of 95 dBA at 10 feet, event noise would attenuate to below the daytime commercial standard of 65 dBA at 350 feet, and below the evening and nighttime standard of 60 dBA at approximately 575 feet. Surrounding commercial and office uses are generally closed during nighttime hours, although some may operate

during evening or nighttime hours, such as fitness centers or casual restaurants. Existing commercial and office uses are located within 575 feet of proposed green spaces on all sides of the Project site. Proposed on-site development would provide building noise attenuation to most existing development from events in The Green and The Square, with the exception of first row commercial development located north (approximately 50 feet across Kurtz Street) and south (approximately 150 feet across Sports Arena Drive) of The Square. At these distances, assuming worst-case location of noise sources at the edge of The Square, noise from an event generating noise levels of 95 dBA at the source would attenuate to 81 dBA and 72 dBA, respectively. Therefore, event noise may exceed SDMC standards at the commercial uses closest to The Square during daytime, evening, or nighttime hours. This impact would be **Potentially Significant.** The impact would be lessened by existing ambient traffic noise, especially for the commercial uses to the south separated from the Project site by Sports Arena Boulevard, and through compliance with SDMC requirements as detailed below.

As described above, new activities and special events on the Project site would have the potential to exceed Noise Abatement and Control Ordinance limits for residential and commercial uses, including on- and off-site receptors. Commercial activities or events operating in public spaces with 75 or more participants, such as large group fitness classes and special events like concerts, would be required to obtain Special Event Permits to operate, including limits on hours of operation or use of amplified equipment. Such events would be governed by the terms and conditions of the Special Event Permits. The Project site would be designated an Entertainment Center District and, thus, a Special Event Venue (Midway Rising Entertainment Center District Overlay), which would streamline the special event permitting process and provide additional regulation for large outdoor events on the Project site. As a Special Event Venue, events in the district would be subject to one or more Special Event Permits for the site pursuant to Chapter 2, Article 2, Division 40 of the SDMC. Although the specifics of the permits are currently unknown, at a minimum, a permit would outline types of events and activities allowed and not allowed on the site, and establish performance standards, including noise mitigation. Individual events would need to demonstrate consistency with permit requirements prior to event approval. If the Midway Rising Entertainment Center District Overlay is not applied, or a district-wide Special Event Permit does not apply to an individual event, events would be required to obtain their own Special Event Permit. Requirements to obtain a Special Event Permit include detailing anticipated noise sources and applicable noise abatement as required by the City, also pursuant to Chapter 2, Article 2, Division 40 of the SDMC. Permit compliance would reduce excessive and unnecessary noise related to events but would not necessarily reduce noise levels to below SDMC hourly noise levels limits.

The Project site was anticipated to include entertainment uses and active public gathering spaces in the 2018 Community Plan (Section 2.4.1, Sports Arena Community Village; Policy UD-2.2; and Table 7-1, Population-Based Parks And Recreation Facilities Inventory And Recommendations). The Midway-Pacific Highway CPU PEIR determined that an existing regulatory framework is in place to limit noise from human activity and use of recreational facilities on the Project site. With permit approval, events would be subject to permit requirements, rather than the Noise Abatement and Control Standards. A

purpose of the permit is to minimize nuisance noise to surrounding receptors. However, because events are anticipated that have the potential to exceed SDMC hourly noise standards, which provide the screening threshold for impacts to existing receptors, and it cannot be demonstrated at this time that existing regulations or future permitting would reduce predicted noise levels to an acceptable level, this impact would be **Potentially Significant**.

Maximum Event Scenario

Special events such as musical festivals that involve multiple venues across the site, or other special outdoor concerts or performances up to 4,000 people may be accommodated a few times per year, and those events are anticipated to exceed the 95 dBA noise screening level. Up to 166 annual events are estimated to occur at the entertainment center, but most events would not include any outdoor event component. The maximum site event capacity for a multi-venue event is 20,000 attendees. Full-capacity (20,000 attendee) events are anticipated to occur twice per year. Impacts to vehicle noise levels from this maximum event scenario are addressed under Threshold 1.

As discussed above, indoor events at the new entertainment center would not result in exterior noise levels that exceed SDMC standards. Noise levels from a multiple venue event would generally be limited to crowd noise and amplified music in Project public space areas. Crowds of up to 4,000 people could be accommodated in outdoor spaces throughout the Project site, concentrated in The Green, The Square and The Plaza. These larger events may generate noise levels higher than 95 dBA at the source. The specific types of events, location of the site, frequency, and required noise amplifying equipment cannot be determined at this time. As discussed for individual events above, it can be assumed that noise levels would potentially exceed SDMC noise level limits at nearby receptors. Noise attenuation would be outlined in the district's Special Event Permit and SDMC regulations related to crowd management to reduce noise exposure, but it cannot be demonstrated at this time that noise levels would be below SDMC noise level limits. This impact would be **Potentially Significant**.

Other Operational Noise Sources

Other operational noise sources associated with mixed-use development include landscape and maintenance activities and regular trash pickup. These activities currently occur on the Project site. These sources would be subject to applicable SDMC requirements. For example, use of leaf blowers is limited by Section 59.5.0502 of the SDMC to daytime hours, and noise cannot exceed 70 dBA at 50 feet from the equipment. Trash collection is also limited to daytime hours by Section 59.5.0406 of the SDMC. These noise sources would be intermittent, short term, and similar to existing conditions on the Project site and surrounding development. Therefore, landscape maintenance and trash collection would not exceed SDMC Noise Abatement and Control Ordinance Standards hourly noise level limits and would result in a **Less than Significant** impact.

Summary

The Project site is currently a source of noise from human activity and commercial uses. Consistent with development anticipated for the area in the 2018 Community Plan, the Project would result in increased activity on the site, including new noise sources from mechanical equipment, permanent indoor entertainment center spaces that are larger than the existing venues, outdoor gatherings in public space areas, and special events. Consistent with the findings of the Midway-Pacific Highway CPU PEIR, an existing regulatory framework is in place to condition future development to operate in a manner that would not result in noise levels in excess of noise ordinance standards. The City would continue to enforce noise-related regulations of the SDMC, and compliance with 2018 Community Plan policies. Although use of the Project site for public gatherings and events was anticipated in the Midway-Pacific Highway CPU, large special events accommodated in Project outdoor public space areas would have the potential to exceed SDMC hourly noise standards, and compliance with existing regulations cannot demonstrate adequate reduction in noise levels at this time. This impact would be **Potentially Significant**.

6.4.2 Mitigation Measures

Mitigation Measure **NOI-1** outlines specific best management practices for future events in Project outdoor public space areas to reduce noise levels to the extent feasible. However, the details of future events are unknown, and it cannot be demonstrated that noise levels would be reduced to below levels compliant with SDMC Noise Abatement and Control Ordinance Standards.

NOI-1: **Special Events Noise Best Management Practices.** Prior to approval of a sitewide or individual Special Event Venue Permit for all private events, public events, or commercial operations in outdoor spaces on the Project site that require the use of amplified noise, the Owner/Permittee, event organizer, or individual responsible party shall submit a Noise Control Plan, satisfactory to the City of San Diego Special Events & Filming Department. The Noise Control Plan shall:

1. Demonstrate that event acoustics have been planned to minimize their impact on the nearest noise-sensitive receptors.
2. Indicate where stationary noise sources such as generators and speakers will be located. No speakers or other stationary noise sources shall be allowed in areas not indicated in the Noise Control Plan.
3. Demonstrate how speaker arrays would be designed to reduce noise spillage to the surrounding environment. This may include the following:
    a. Directing speakers away from sensitive receptors to the extent feasible.
    b. Using temporary sound barriers for stages and event areas where they would not present a safety hazard or inhibit movement on the site.

c. Incline elevated speakers downward or otherwise design them to reduce noise spillage.
d. Install optimized sub-arrays and optimized speaker arrays for temporary stages, if required. If suitable, employ delay tower speaker systems or circuit speakers rather than banks of speakers on either side of the stage.

4. Establish a contact phone number that is monitored during outdoor events. If complaints are received, or there is reason to suspect that conditions of the Noise Control Plan have not been met, the City of San Diego shall require the Owner/Permittee to conduct noise monitoring of events to confirm noise levels and enforce agreement compliance.

6.4.3 Significance after Mitigation

Mitigation Measure **NOI-1** would reduce noise from special events in Project outdoor park and public space areas. Because specific of future events and required equipment cannot be determined at this time, it cannot be demonstrated that Mitigation Measure **NOI-1** would fully reduce event noise to below a significant level. Impacts would therefore be **Significant and Unavoidable**.

6.4.4 Cumulative Impacts

Approved or planned projects in the Midway-Pacific Highway Community planning area are considered in the cumulative analysis for the proposed Project. As described in the Midway-Pacific Highway CPU PEIR, similar to the proposed Project, future development under the City's jurisdiction within the Midway-Pacific Highway Community planning area that would potentially include new noise sources, such HVAC systems and recreational facilities, would be subject to continued enforcement of SDMC and 2018 Community Plan policies to require noise compatibility between uses. Additionally, the Midway-Pacific Highway Community planning area is currently developed and subject to roadway noise, including freeway noise. Noise sources from other allowable development, such as new HVAC systems, would be mitigated on site and are not anticipated to combine with intermittent special event noise at the Project site to exceed noise ordinance standards. Therefore, no cumulatively considerable impact would occur.

6.5 Threshold 5: Temporary Construction Noise

6.5.1 Impact Analysis

The following analysis addresses the potential for the Project to result in construction-related noise impacts.

6.5.1.1 Midway-Pacific Highway CPU PEIR Impact Summary

The Midway-Pacific Highway CPU PEIR determined that construction noise from implementation of allowable 2018 Community Plan land uses would be **Potentially Significant**. Construction activities

would potentially generate short-term noise levels in excess of 75 dBA Leq at adjacent properties. Due to the highly developed nature of the proposed Midway-Pacific Highway Community planning area with sensitive receivers potentially located near any given construction site, it was determined that construction of future projects would have the potential to expose existing sensitive land uses to noise levels above allowable SDMC standards. Midway-Pacific Highway CPU PEIR Mitigation Measure **NOISE 5.5-2** was identified to reduce this impact to a **Less than Significant** level through implementation of best management practices.

NOISE 5.5-2: At the project level, future discretionary projects will be required to incorporate feasible mitigation measures. Typically, noise can be controlled to comply with City standards when standard construction noise control measures are enforced at the project site and when the duration of the noise-generating construction period is limited to one construction season (typically 1 year) or less.

- Construction activities shall be limited to the hours between 7:00 a.m. and 7:00 p.m. Construction is not allowed on legal holidays as specified in Section 21.04 of the SDMC, with the exception of Columbus Day and Washington's Birthday, or on Sundays (consistent with Section 59.5.0404 of the SDMC).
- Equip all internal combustion engine-driven equipment with appropriately-sized intake and/or exhaust mufflers that are properly operating and maintained consistent with manufacturer's standards.
- Stationary noise-generating equipment (e.g., compressors or generators) shall be located as far as possible from adjacent residential receivers and oriented so that emitted noise is directed away from sensitive receptors, whenever feasible.
- If levels are expected to potentially exceed SDMC thresholds, temporary noise barriers with a minimum height of 8 feet shall be located around pertinent active construction equipment or entire work areas to shield nearby sensitive receivers.
- Utilize "quiet" air compressors, generators, and other stationary noise sources where technology exists.
- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- Designate a "disturbance coordinator" who would be responsible for receiving and responding to any complaints about construction noise or vibration. The disturbance coordinator will determine the cause of the noise complaint and, if identified as a sound generated by construction area activities, will require that reasonable measures be implemented to correct the problem.

6.5.1.2 Project-Specific Impact Analysis

This section discusses construction noise from heavy equipment operation and construction traffic.

Construction Equipment

A significant impact would occur if implementation of the Project would result in the exposure of people to significant temporary construction noise. Construction noise would be considered significant if it would result in 12-hour Leq levels of 75 dBA or higher at a residential receptor between the hours of 7:00 a.m. to 7:00 p.m. or occur during nighttime hours (7:00 p.m. to 7:00 a.m.), on legal holidays, or Sundays (SDMC Section 59.5.0404). The City's CEQA Significance Determination Thresholds note that construction noise consistent with the SDMC noise level limit may still be significant if it would substantially interfere with normal operation. Sensitive receptors adjacent to the Project site consist of residences. The primary concern for disturbance for residences is sleep disturbance. Therefore, limits on the hours of construction and daytime noise level limit provide an adequate threshold for the Project, consistent with the Midway-Pacific Highway CPU PEIR.

Construction of the Project is anticipated to occur from approximately January 2026 through December 2035 and occur in two phases. Phase 1 would occur from January 2026 to December 2030 and would include construction of the planned Frontier Drive between Sports Arena Boulevard and Kurtz Street and development east of the new Frontier Drive segment, including the new entertainment center and mixed-use buildings. Phase 2 would occur from October 2028 to December 2035 and include development of the remaining mixed-use buildings and public space west of Frontier Drive, and construction of Kemper Street between Sports Arena Boulevard and Kurtz Street. All phases would include demolition of existing development, earthwork, installation of paving and building foundations, exterior building construction, and interior construction and application of architectural coatings. Excavated soil would be stockpiled and reused on site to the extent feasible; however, truck trips would be required in each phase for demolition export, soil import and export, and building material import. A rock crusher would be required during Phase 2 to reuse some demolished material on site. This equipment would be stationary; however, the location is currently unknown. As such, noise levels from the rock crusher are considered in determining the worst-case noise level at locations closest to existing sensitive receptors. Transportation improvements, as outlined in Section 1.2.3, are also anticipated to require use of heavy construction equipment. Improvements include construction of new multi-use paths, roadway and intersection improvements, and relocation of installation of new street lights. Restriping would also be required in off-site roadways (Hancock Street and Channel Way), but restriping is not anticipated to require use of heavy construction equipment.

Construction noise typically occurs intermittently and varies depending upon the phase of construction (e.g., demolition/clearing, grading and excavation), type and size of equipment being operated, and duration of construction. Hourly average noise levels vary depending on the duration

of equipment operation, type of equipment, relative location of the construction equipment to the noise-sensitive receptor, and presence of intervening barriers. The construction equipment anticipated for Project construction, and reference noise levels are provided in Table 13, Project Construction Equipment Noise Levels. In addition to equipment typical of a land use development Project, a rock crusher is assumed to be required for material reuse on site, and is included in Table 13. Reference noise levels conservatively assume diesel equipment, although some quieter electric equipment is anticipated to be used for Project construction. Consistent with the 2018 Community Plan methodology, construction equipment predictions followed the FTA "general assessment" technique, which focuses on predicting noise emissions from the loudest potential pieces of construction equipment from a given construction phase. Simultaneous operation of the loudest two pieces of equipment anticipated for construction in the Midway-Pacific Highway Community planning area (concrete saw and hoe ram) were assumed for the 2018 Community Plan. For construction on the Project site, four pieces of equipment are conservatively assumed due to the potential for multiple construction activities to occur on-site on a given day, although at different locations. The analysis of the loudest pieces of equipment provides a conservative maximum noise level at individual receptors, although in practice, different types of equipment would be in operation at multiple and varying distances from an individual receptor throughout the day. At the transportation improvement locations, the number of pieces of equipment operating simultaneously would be limited by the size of the construction area. The construction fleets for demolition and paving are assumed for the off-site improvements areas, although the quantity of equipment and resulting noise would be reduced compared to on-site construction.

Table 13. Project Construction Equipment Noise Levels

Construction Activity	Equipment Type	Quantity	Reference Noise Level (dBA at 50 feet)	Combined Noise Level (dBA at 50 feet)[1]	Screening Distance to 75 dBA (feet)
Grading/ Excavation	Scraper	1	84	84.9	160
	Excavators	3	81		
	Loaders	2	79		
	Water Trucks	1	75		
	Grader	1	85		
Deep Foundations	Drill Rigs	3	80	81.6	110
	Backhoe Loader	2	78		
Demolition	Excavator w/ Breaker[2]	3	90	85.2	165
	Loaders	2	79		

Table 13. Project Construction Equipment Noise Levels

Construction Activity	Equipment Type	Quantity	Reference Noise Level (dBA at 50 feet)	Combined Noise Level (dBA at 50 feet)[1]	Screening Distance to 75 dBA (feet)
	Rock Crusher with Generator[2] (Phase 2 Only)	1	90		
Building Construction	Concrete Placing Booms[2]	3–6	81	85.6	170
	Concrete Trailer Pumps	2	81		
	Concrete Pump Trucks	2	81		
	Tower Cranes	4–5	81		
	Manlifts	8	75		
	Generators	8	81		
	Welder	6	74		
	Forklifts[2]	10	85		
Paving	Paving Machine	1	77	81.2	105
	Vibrating Roller	1	80		
	Plate Vibrator[2]	2	83		

Sources: FWHA 2008 (reference noise levels); AECOM 2023a (construction fleet).

Notes:

[1] Assumes four noisiest pieces of equipment.

[2] Reference Noise level for break ram is assumed for excavator with breaker and rock crusher, crane assumed for concrete placing booms, and compactor assumed for plate vibrator. "All other equipment >5 HP" category assumed for forklifts.

Based on the anticipated construction fleet provided by the Project applicant (AECOM 2023a) and reference noise levels from the RCNM, maximum hourly average noise levels for on-site construction would range from 81.2 dBA to 85.6 dBA at 50 feet. Maximum off-site construction noise levels would range from 81.2 dBA to 85.2 dBA at 50 feet. Construction noise levels would have the potential to exceed 75 dBA up to 170 feet from the active construction area. This screening distance is conservatively assumed for on- and off-site construction. See Appendix C, Roadway Construction Noise Model Outputs, for RCNM output. Therefore, construction noise levels would have the potential to exceed the SDMC construction noise limit of 75 dBA 12-hour Leq average up to 170 feet from active construction areas. As noted in the Midway-Pacific Highway CPU PEIR, evaluating impacts based on a potential hourly maximum is conservative because, if the above equipment is operating for less than the 12 allowable hours of the workday, the average daily impact may be drastically reduced. Figure 9,

Construction Noise Screening Distance, shows the areas surrounding the Project site and transportation improvement locations that are within 170 feet of the anticipated construction areas.

Construction would occur during allowable daytime hours (7:00 a.m. to 7:00 p.m.). There are no existing residentially zoned uses within 170 feet of on-site construction areas. Therefore, on-site construction would not exceed SDMC construction noise limits at existing residential receptors. Existing residences are located within 170 feet of the intersections of Sports Arena Boulevard/Midway Drive/West Point Loma Boulevard, Hancock Street/Sports Arena Boulevard, and Rosecrans Street/Lytton Street. Additionally, following Phase 1 of construction, newly constructed on-site Project residences would have the potential to be exposed to noise from Phase 2 of construction. Therefore, consistent with the conclusions of the Midway-Pacific Highway CPU PEIR, operation of heavy construction equipment would have the potential to expose receptors to 12-hour Leq levels of 75 dBA or higher. This impact would be **Potentially Significant**.

Construction Traffic

Construction of the Project would have the potential to result in temporary noise level increases from increased construction traffic volumes. The analysis of construction traffic assumes the existing traffic volumes provided by the Project applicant (Kimley-Horn 2024a) and worker and truck trip estimates (AECOM 2023a). A substantial temporary increase would occur if construction would result in an ambient noise level that would exceed the applicable exterior land use compatibility criteria or would result in an increase of more than 3 dBA if the roadway already exceeds the standard without the addition of construction traffic. The analysis assumes the worst-case maximum scenario of 1,524 daily worker vehicle trips and 228 truck trips in 1 day. Modeling conservatively assumes all worker trip traffic occurs on all study area segments. In reality, workers would arrive to the site from different directions, so that individual segments would not be expected to carry 100 percent of trips. Truck trips would occur on identified truck route segments. All truck traffic would enter and exit the site from Sports Arena Boulevard, and would travel on Sports Area Boulevard to and from I-8 (AECOM 2023b). Traffic noise modeling on Sports Arena Boulevard considers the increase in truck trips as a percentage of total vehicle traffic during construction.

Table 14, Existing Traffic Noise Levels Plus Construction (dBA CNEL), provides existing noise levels and estimated traffic noise levels with construction of the Project. As shown in Table 14, no significant increase in traffic noise levels would occur during construction activities compared to existing conditions under worst-case conditions, which assumes the maximum trips for both workers and trucks would occur on the same construction day. Temporary impacts would be **Less than Significant** under this scenario.

Interim (Year 2030–2035) Construction Scenario

A portion of the Project (Phase 1) would be operational during construction of Phase 2 of the Project, including the proposed entertainment center, approximately 1,242 residential units and 100,888 square feet of commercial space. The interim construction scenario assumes traffic volumes generated by operation of Phase 1 of the Project to determine if concurrent operation of

Phase 1 plus construction of Phase 2 would result in a significant temporary increase in noise levels. Table 15, Interim (Year 2030–2035) Construction Scenario Noise Levels (dBA CNEL), provides estimated traffic noise levels compared to near-term (2030) noise levels during concurrent Project operation and construction. As shown in Table 15, interim operation and construction traffic noise levels would result in a potentially clearly noticeable increase (more than 5 dBA) on one roadway segment of Sports Arena Boulevard from Rosecrans Street to Pacific Highway and one segment of Kurtz Street from Hancock Street to the planned Frontier Drive. However, the resulting noise level would not exceed 65 dBA CNEL with Project traffic, the additional noise from construction would be temporary, and no NSLUs are currently located adjacent to these segments. Additionally, as previously noted, modeling considers worst-case maximum estimated worker and truck trips. Realistically, the traffic noise impact would be reduced compared to the calculated noise levels in Table 15 because average traffic volumes would be less than modeled for the worst-case scenario. As such, impact would be **Less than Significant.**

Table 14. Existing Traffic Noise Levels Plus Construction (dBA CNEL)

Roadway	Segment	Applicable Threshold	Non-Event Scenario	Event Scenario	Significant Impact? (Maximum Project Increase in Noise Level)	Roadway	Segment
			No Project	With Construction	No Project	With Construction	
Sports Arena Boulevard	I-8 Westbound Off-Ramp to I-8 Eastbound On-Ramp	65	67.1	68.6	67.7	69.1	No (1.5)
	I-8 Eastbound On-Ramp to West Point Loma Boulevard	65	70.2	70.8	70.7	71.3	No (0.6)
	West Point Loma Boulevard to Hancock Street	65	68.8	69.9	69.4	70.4	No (1.1)
	Hancock Street to Kemper Street	65	68.8	69.9	69.4	70.4	No (1.1)
	Kemper Street to (planned) Frontier Drive	65	67.4	68.5	68.0	69.0	No (1.1)
	Rosecrans Street to Pacific Highway	65	55.6	60.3	56.2	60.5	No (4.7)

Table 14. Existing Traffic Noise Levels Plus Construction (dBA CNEL)

Roadway	Segment	Applicable Threshold	Non-Event Scenario	Event Scenario	Significant Impact? (Maximum Project Increase in Noise Level)	Roadway	Segment
			No Project	With Construction	No Project	With Construction	
Kurtz Street	Hancock Street to Frontier Drive	65	57.9	59.8	58.6	60.3	No (1.9)
	Frontier Drive to Sherman Street	65	57.9	59.8	58.6	60.3	No (1.9)
	Sherman Street to Camino Del Rio West	65	59.7	61.1	60.7	61.8	No (1.4)
Hancock Street	Sports Arena Boulevard to Channel Way	65	58.4	60.2	59.0	60.6	No (1.8)
	Channel Way to Kurtz Street	65	58.6	60.4	59.0	60.6	No (1.8)
	Kurtz Street to Greenwood Street	65	59.5	61.1	59.9	61.3	No (1.6)
	Greenwood Street to Camino Del Rio West	65	59.6	61.1	60.0	61.3	No (1.5)

Notes: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; I- Interstate; N/A = not applicable

Noise levels are calculated at 50 feet from roadway centerline.

Noise levels are based on traffic projections provided by Kimley-Horn & Associates, Inc. (2024a).

See Appendix D for datasheets, including traffic volumes.

Table 15. Interim (Year 2030–2035) Construction Scenario Noise Levels (dBA CNEL)

Roadway	Segment	Applicable Threshold	Non-Event Scenario		Event Scenario		Significant Impact? (Maximum Project Increase in Noise Level)
			No Project	Phase 1 + Construction	No Project	Phase 1 20K Event + Construction	
Sports Arena Boulevard	I-8 Westbound Off-Ramp to I-8 Eastbound On-Ramp	65	67.4	69.4	68.0	69.9	No (2.0)
	I-8 Eastbound On-Ramp to West Point Loma Boulevard	65	70.4	71.5	70.9	72.1	No (1.2)
	West Point Loma Boulevard to Hancock Street	65	69.1	71.2	69.7	71.9	No (2.2)
	Hancock Street to Kemper Street	65	69.7	70.5	69.7	71.1	No (1.4)
	Kemper Street to (planned) Frontier Drive	65	67.7	69.3	68.3	69.9	No (1.6)
	Rosecrans Street to Pacific Highway	65	56.7	60.0	57.2	62.5	No (5.3)[1]
Kurtz Street	Hancock Street to Frontier Drive	65	58.0	63.0	58.8	63.6	No (5.0)
	Frontier Drive to Sherman Street	65	58.0	62.0	58.8	62.7	No (4.0)
	Sherman Street to Camino Del Rio West	65	59.8	62.4	60.8	63.1	No (2.6)

Table 15. Interim (Year 2030–2035) Construction Scenario Noise Levels (dBA CNEL)

Roadway	Segment	Applicable Threshold	Non-Event Scenario		Event Scenario		Significant Impact? (Maximum Project Increase in Noise Level)
			No Project	Phase 1 + Construction	No Project	Phase 1 20K Event + Construction	
Hancock Street	Sports Arena Boulevard to Channel Way	65	58.9	63.1	59.4	63.9	No (4.5)
	Channel Way to Kurtz Street	65	59.2	63.4	59.6	63.8	No (4.2)
	Kurtz Street to Greenwood Street	65	59.8	62.2	60.2	62.6	No (2.4)
	Greenwood Street to Camino Del Rio West	65	59.8	62.2	60.2	62.6	No (2.4)
Frontier Drive[2]	Sports Arena Boulevard to Kurtz Street	65	—	61.4	—	62.9	No (N/A)
Kemper Street[2]	Sports Arena Boulevard to Kurtz Street	65	—	59.1	—	59.8	No (N/A)

Notes: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; I- Interstate; N/A = not applicable

[1] The increase in noise level on this segment may be clearly noticeable; however, as described above, noise levels would continue to be compatible with surrounding development and this impact would be less than significant.

[2] Existing noise levels are not available for these segments because they would be developed under the Project.

Noise levels are calculated at 50 feet from roadway centerline.

Noise levels are based on traffic projections provided by Kimley-Horn & Associates, Inc. 2024a.

See Appendices B and C for datasheets, including traffic volumes.

6.5.2 Mitigation Measures

Implementation of the Project would have the potential to result in construction equipment noise levels that exceed 75 dBA. The City would continue to enforce Section 59.5.0404 of the SDMC; however, Midway-Pacific Highway CPU PEIR Mitigation Measure **NOISE 5.5-2**, modified for the Project, is required as Mitigation Measure **NOI-2** to reduce this impact. This mitigation measure incorporates the standard noise controls required in 2018 Community Plan Policy NE-1.13. It includes construction management features to be implemented the extent required to achieve the SDMC standard of 12-hour average noise levels of 75 dBA or less at residential receptors.

NOI-2: **Construction Noise Best Management Practices.** Prior to issuance of a grading permit, the Owner/Permittee shall submit grading plans that demonstrate that Project construction shall achieve a 12-hour average sound level of less than 75 A-weighted decibel, satisfactory to the Chief Building Official. At a minimum, construction noise best management practices shall be applied to all construction activities within 170 feet of existing or future residential development occupied at the time of construction. Best management practices shall be detailed on all Project construction plans and shall include but are not limited to the following:

- Limit construction activities to the hours between 7:00 a.m. and 7:00 p.m. Construction is not allowed on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with the exception of Columbus Day and Washington's Birthday, or on Sundays (consistent with Section 59.5.0404 of the San Diego Municipal Code).
- Equip all internal combustion engine-driven equipment with appropriately sized intake and/or exhaust mufflers that are properly operating and maintained consistent with manufacturer's standards. Stationary noise-generating equipment (e.g., compressors or generators) shall be located as far as possible from adjacent residential receivers and oriented so that emitted noise is directed away from sensitive receptors, whenever feasible.
- If noise levels are expected to potentially exceed San Diego Municipal Code thresholds, locate temporary noise barriers with a minimum height of 8 feet around pertinent active construction equipment or entire work areas to shield nearby sensitive receivers.
- Use "quiet" air compressors, generators, and other stationary noise sources where technology exists.
- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.

- Designate a “disturbance coordinator” responsible for receiving and responding to any complaints about construction noise or vibration. Contact information shall be posted in a conspicuous location near the construction site entrance. The disturbance coordinator shall determine the cause of the noise complaint and, if identified as a sound generated by construction area activities, shall institute modifications to the construction operations, construction equipment, or work plan to ensure compliance with San Diego Municipal Code standards. These modifications shall implement one or more of the following: administrative controls (e.g., reduce equipment operating time and/or prohibit usage of equipment types within certain distances of sensitive receptors); engineering controls (upgraded existing noise controls, such as installing better engine exhaust mufflers or improving existing noise abatement); and installation of temporary barriers, barrier back sound curtains, and/or acoustical panels around working construction equipment and, if necessary, around the construction boundary.
- Recurring disturbances shall be evaluated by a qualified acoustical consultant retained by the Project proponent to ensure compliance with applicable standards.

6.5.3 Significance after Mitigation

Consistent with the conclusion of the Midway-Pacific Highway CPU PEIR, Project construction would be required to incorporate the standard controls outlined in Mitigation Measure **NOI-2**. Implementation to measures would be required to the extent necessary to reduce construction noise levels emanating from the site, limit construction hours, and minimize disruption and annoyance in compliance with the SDMC. This impact would be mitigated to **Less than Significant**.

6.5.4 Cumulative Impacts

Construction noise impacts are localized in nature because they are limited to the site where construction equipment is operating. As discussed previously, sound levels from Project construction would be up to 75 dBA Leq (12-hour average sound level) at 170 feet from the source. Although specific cumulative Project details are not currently available, due to the length of Project construction, it is likely that cumulative construction projects would occur simultaneously elsewhere in the Midway-Pacific Highway Community planning area. Cumulative projects in the area under the City’s jurisdiction and the proposed Project would be subject to the SDMC construction noise limits, Midway-Pacific Highway CPU PEIR Mitigation Measure **NOISE 5.5-2,** and 2018 Community Plan Policy NE-1.13. Individual receptors would be exposed to existing ambient noise levels from multiple sources, including transportation and existing commercial activity. As shown in Table 7, existing traffic noise levels are generally 58 dBA or above. Portions of the Midway-Pacific Highway Community planning area are within 65+ dBA CNEL airport and roadway noise contours. Noise levels of 75 dBA at 50 feet would be reduced to below 58 dBA beyond 350 feet of the construction area. Due to existing noise levels, it is unlikely that construction noise from multiple projects would

be simultaneously noticeable at a given receptor. Cumulative construction noise impacts would be **Less than Significant**.

6.6 Threshold 6: Vibration

6.6.1 Impact Analysis

The following analysis addresses the potential for the Project to result in groundborne vibration impacts.

6.6.1.1 Midway-Pacific Highway CPU PEIR Impact Summary

The Midway-Pacific Highway CPU PEIR determined that the 2018 Community Plan would not result in a significant impact related to vibration during operation because proposed land uses are not a typical source of vibration.

The Midway-Pacific Highway CPU PEIR determined that vibration from typical construction equipment and methods was **Less than Significant**. However, impacts related to pile driving were determined to be **Significant and Unavoidable**, even with implementation of Mitigation Measure **NOISE 5.5-3**:

NOISE 5.5-3: For discretionary projects where construction would include vibration-generating activities, such as pile driving, within the distances of specific structures listed in [Midway-Pacific Highway CPU PEIR] Table 5.5-7,[1] site-specific vibration studies shall be conducted to ensure the development Project would not adversely affect adjacent properties to the satisfaction of the Chief Building Official. Such efforts shall be conducted by a qualified structural engineer and could include:

- Identify sites that would include vibration compaction activities such as pile driving and have the potential to generate groundborne vibration and the sensitivity of nearby structures to groundborne vibration.
- Develop a vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted; set up a vibration monitoring schedule; define structure-specific vibration limits; and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. Construction contingencies would be identified for when vibration levels approach the limits.
- Monitor vibration during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for more or less intensive measurements.
- Designate a "disturbance coordinator" who would be responsible for receiving and responding to any complaints about construction vibration. The disturbance

[1] Building impact distances range from 69 feet from equipment operation for modern buildings to 129 feet for historic buildings. The screening distance for annoyance impacts was 300 feet from equipment operation.

coordinator will determine the cause of the noise complaint and will require that reasonable measures be implemented to correct the problem.

- When vibration levels approach limits, suspend construction and implement contingencies to either lower vibration levels or secure the affected structures.
- Conduct post-activity survey on structures where either monitoring has indicated high levels or complaints of damage have been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.

6.6.1.2 Project-Specific Impact Analysis

This section discusses the Project's potential to result in vibration impacts from Project operation and construction.

Vibration from Project Operation

The proposed Project land uses are consistent with those evaluated in the Midway-Pacific Highway CPU PEIR. The Midway-Pacific Highway CPU PEIR determined that the mixed-use and entertainment land uses accommodated by the Project, including residential, commercial, and event uses, would not result in operational vibration. Operation of the existing and future entertainment center was included in the PEIR and was not identified as an existing of potential future source of vibration. As such, the Project would result in a **Less than Significant** vibration impact from operation.

Vibration from Project Construction

As described in the Midway-Pacific Highway CPU PEIR, construction activities can generate groundborne vibration of varying degrees based on the construction activity and equipment being used. Temporary groundborne vibration associated with construction activities would only occur during groundbreaking activities such as demolition (including rock crushing), drilling for foundations, excavation for underground levels, and use of vibratory equipment during paving. No pile driving or blasting would be required for Project construction.

Reference vibration levels for anticipated Project construction equipment are provided in Table 16, Project Construction Equipment Vibration Levels. The Caltrans Transportation and Construction Vibration Guidance Manual (Caltrans 2020) identifies potential vibration building damage thresholds as measured by PPV, in inches per second. For continuous vibratory construction activities, maximum PPV values range from 0.25 PPV for historic and certain older buildings, to 0.5 PPV for modern industrial/commercial buildings. As shown in Table 16, none of the equipment required for the Project would exceed the most conservative standard of 0.25 PPV at 25 feet from equipment operation. Caltrans also identifies thresholds for potential human vibration annoyance from intermittent and continuous sources. Reports of annoyance will typically occur when vibration levels reach 0.1 PPV, which is the "strongly perceptible" response level. Only operation of vibratory equipment during paving would have the potential to exceed 0.1 PPV at more than 25 feet from

equipment operation. Based on attenuation calculations provided by the FTA, vibration levels would be reduced to below 0.1 PPV at approximately 40 feet. Operation of an individual piece of equipment in one location would only occur for a short period of time, so that exposure of an individual receptor to vibration from vibratory equipment required for paving would be limited. Additionally, existing receptors are generally setback from on- and off-site Project construction areas by more than 40 feet due to existing roadways, landscaping, and parking lots. Existing buildings on the Project site may be within 40 feet of construction equipment operation; however, the existing commercial and entertainment uses are not vibration-sensitive and would be demolished as part of Project implementation. Therefore, temporary nuisance impacts from Project construction would be **Less than Significant**.

Table 16. Project Construction Equipment Vibration Levels

Construction Activity	Equipment Type[1]	PPV at 25 Feet	VdB at 25 Feet
Grading/excavation	Scraper, Excavator, Loaders, Grader	0.089	87
	Water Trucks	0.076	86
Deep foundations	Drill Rigs, Backhoe Loader	0.089	87
Demolition	Excavator w/ Breaker, Loaders, Rock Crusher	0.089	87
Building construction	Concrete Placing Booms, Concrete Trailer Pumps, Tower Cranes, Manlifts, Generators, Welder, Forklifts	0.089	87
	Concrete Pump Trucks	0.076	86
Paving	Paving machine	0.089	87
	Vibrating roller	0.210	94
	Plate Vibrator	0.210	94

Sources: FTA 2018 (reference vibration levels); AECOM 2023a (construction fleet).

Notes:

[1] Reference vibration level for large bulldozer (0.089 PPV at 25 feet) assumed for general construction equipment where a specific reference level is not available. Reference vibration level for vibrating roller also assumed for plate vibrator.

The Midway-Pacific Highway CPU PEIR does not specifically address impact related to the potential for vibration to interfere with operation of vibration-sensitive equipment in the Midway-Pacific Highway Community planning area. However, the FTA identifies a threshold of 65 VdB for buildings where vibration would interfere with interior operations, such as operation of medical equipment. Project construction equipment would have the potential to exceed 65 VdB up to 230 feet from operation of vibrating equipment (roller and plate compactor) and 140 feet from operation of other construction equipment. Veterinary clinics (San Diego Bay Animal Hospital and Petco) are located across the Project site on Sports Arena Boulevard, approximately 100 feet from construction areas, and are assumed to require the use of vibration-sensitive equipment. The next closest vibration-sensitive receptors, the dental office approximately 400 feet south of the site on Kemper Street,

would be outside the vibration impact area. Therefore, impacts to uses requiring vibration-sensitive equipment on Sports Arena Boulevard would potentially occur as a result of Project construction.

6.6.2 Mitigation Measures

Project construction would have the potential to result in a significant impact related to vibration at receptors that use vibration-sensitive equipment. Midway-Pacific Highway CPU PEIR Mitigation Measure **NOISE 5.5-3**, modified for the Project, is required as Mitigation Measure **NOI-3** to reduce this impact.

NOI-3: **Vibration Management Strategies.** Prior to construction activities near vibration-sensitive land uses (within 230 feet from operating vibrating equipment [roller and plate compactor] or 140 feet from other operating construction equipment), vibration sensitive uses shall be identified on construction plans, and the Owner/Permittee shall submit the site-specific vibration studies that documents that Project construction would not adversely affect adjacent properties, satisfactory to the City Engineer. Surrounding vibration-sensitive uses include veterinary clinics on Sports Arena Boulevard where the operation of construction equipment could exceed 65 vibration decibels and interfere with interior operations that use vibration-sensitive equipment, such as medical equipment. Such efforts shall be conducted by a vibration expert and shall include the following:

- Develop a Vibration Monitoring and Construction Contingency Plan to identify structures where monitoring would be conducted; set up a vibration monitoring schedule; define structure-specific vibration limits; and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. Construction contingencies would be identified for when vibration levels exceed the limits.
- Monitor vibration during initial construction activities and during activities that require use of vibratory equipment. Monitoring results may indicate the need for modifications to the Vibration Monitoring and Construction Contingency Plan to include more or less intensive measurements.
- Designate a “disturbance coordinator” who would be responsible for receiving and responding to any complaints about construction vibration. The disturbance coordinator will determine the cause of the noise complaint and will require that reasonable measures be implemented to correct the problem.
- When vibration levels exceed limits, suspend construction and implement contingencies to either lower vibration levels or secure the affected structures.
- Conduct post-activity survey on structures where either monitoring has indicated high levels or complaints of damage have been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.

6.6.3 Significance after Mitigation

Project construction would also be required to implement vibration management strategies consistent with Mitigation Measure **NOI-3**. The Project would be able to comply with Mitigation Measure **NOI-3** requirements; therefore, this **Significant and Unavoidable** programmatic impact identified in the Midway-Pacific Highway CPU PEIR would be reduced to **Less than Significant** at the Project level. With the implementation of these control measures, the substantial temporary increase in ambient noise and vibration levels during construction would be reduced to a **Less than Significant** level.

6.6.4 Cumulative Impacts

Similar to noise, construction vibration impacts are localized in nature because they are limited to the site where construction equipment is operating. Due to the length of Project construction, it is likely that cumulative construction projects would occur simultaneously elsewhere in the Midway-Pacific Highway Community planning area. Vibration is reduced to below building damage or disturbance levels at short distances from equipment operation. A maximum screening level of 300 feet was identified for vibration impacts in the Midway-Pacific Highway CPU PEIR, and a maximum impact distance of 230 is identified above for the Project. The location cumulative construction equipment at a given time is currently unknown; however, given the size of the community planning area and the Project site, equipment from multiple projects would generally not be expected to be operating within the screening distances of each other. Therefore, vibration generated simultaneously by Project construction and other cumulative projects would not combine to generate cumulative vibration impacts. Cumulative construction vibration impacts would be **Less than Significant**.

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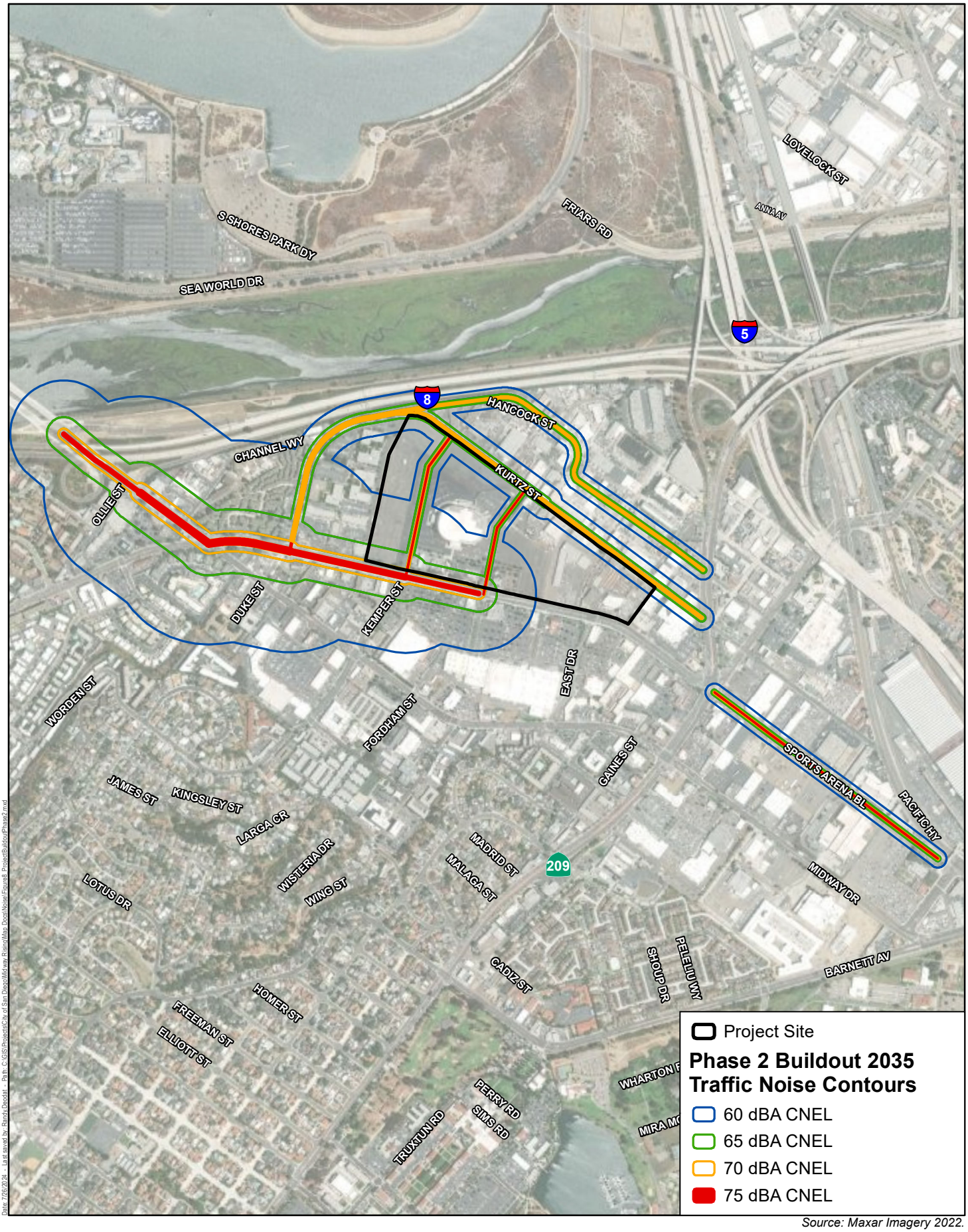

Source: Maxar Imagery 2022.

N

0 600 1,200

Feet

Figure 8

Project Buildout Phase 2 (Year 2035) Traffic Noise Contours

Midway Rising

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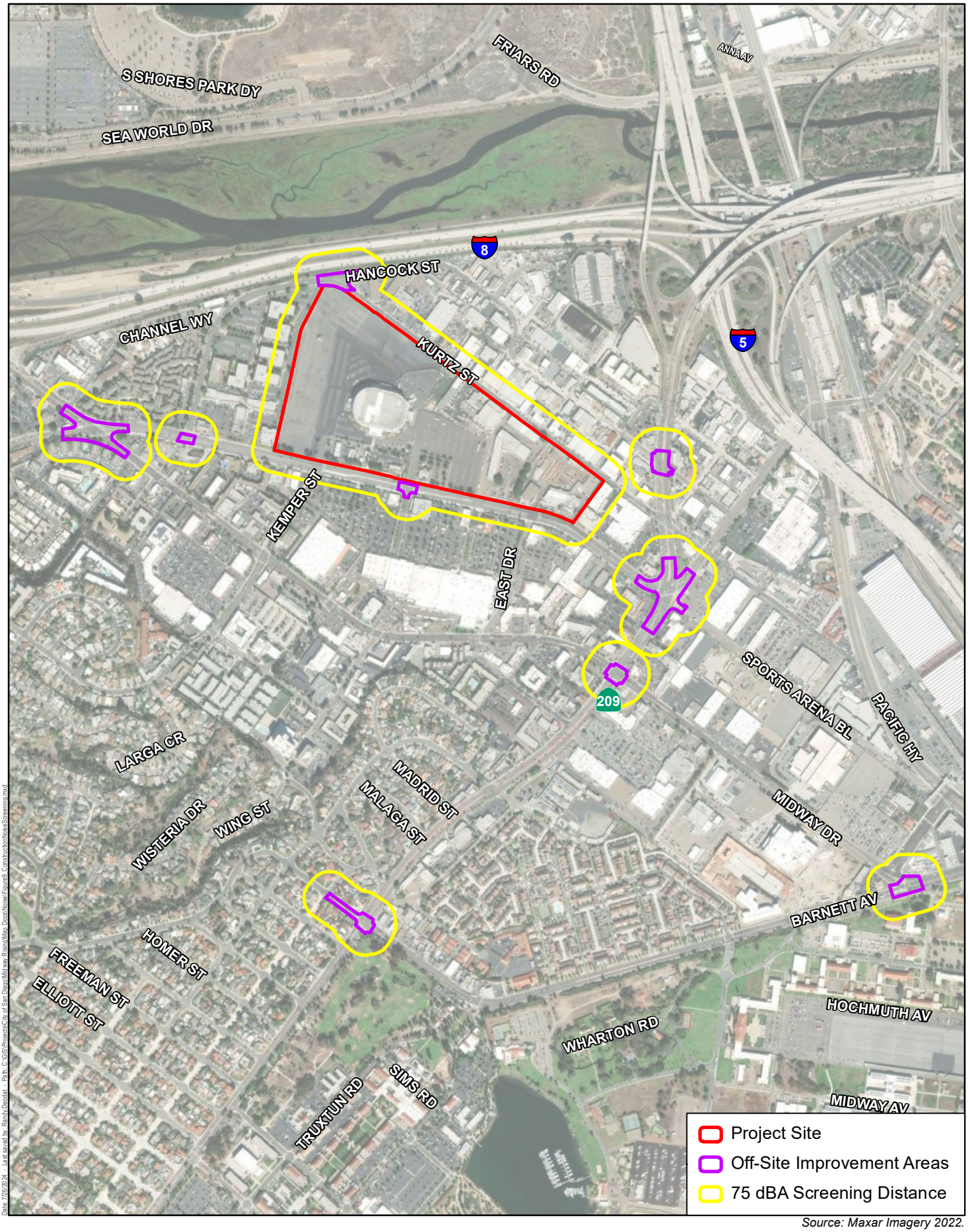

Source: Maxar Imagery 2022.

N

0 500 1,000

Feet

Figure 9

Construction Noise Screening Distance

Midway Rising

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Section 7 Conclusion

Impacts related to transportation noise would be **Less than Significant** due to existing regulatory processes, specifically compliance with Title 24 interior noise requirements.

Operation of the Project would not result in a significant increase to ambient noise levels in the study area and this impact would be **Less than Significant**.

Impacts related to aircraft noise would be **Less than Significant** due to distance from nearby airports.

Operation of the Project site would not result in noise levels that exceed SDMC Noise Abatement and Control Ordinance Standards, with the exception of outdoor special event noise. Mitigation Measure **NOI-1** would require implementation of best management practices to minimize event noise, but this impact would remain **Significant and Unavoidable**.

Construction noise levels would have the potential to exceed the SDMC limit of 75 dBA at existing and future residential development. Mitigation Measure **NOI-2** would reduce impacts related to construction noise levels to a **Less than Significant** level. Mitigation Measure **NOI-3** would reduce construction vibration impacts to vibration-sensitive medical uses to a **Less than Significant** level.

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Appendix A. Noise Monitoring Survey Results

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Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	OVLD
1	Run	2023-11-29	15:28:56				
2		2023-11-29	15:28:56	63.6	75.5	55.7	No
3		2023-11-29	15:58:56	64.7	79.3	56.7	No
4	Stop	2023-11-29	16:28:56				

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	OVLD
1	Run	2023-12-06	14:43:52				
2		2023-12-06	14:43:52	62.0	79.4	49.6	No
3		2023-12-06	15:13:52	61.1	75.8	49.9	No
4	Stop	2023-12-06	15:43:52				

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	OVLD
1	Run	2023-12-06	20:23:10				
2		2023-12-06	20:23:10	57.5	69.6	49.3	No
3		2023-12-06	20:53:10	59.9	77.9	49.8	No
4	Stop	2023-12-06	21:23:10				

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	OVLD	Marker
1	Run	2023-11-29	15:14:29					
2		2023-11-29	15:14:29	58.0	73.4	47.4	No	
3		2023-11-29	16:14:29	56.9	73.8	46.3	No	
4		2023-11-29	17:14:29	57.6	73.1	45.8	No	
5		2023-11-29	18:14:29	57.7	72.2	46.3	No	
6		2023-11-29	19:14:29	58.4	72.5	45.7	No	
7		2023-11-29	20:14:29	57.3	72.5	47.8	No	
8		2023-11-29	21:14:29	57.6	70.6	47.1	No	
9		2023-11-29	22:14:29	56.5	81.7	46.8	No	
10		2023-11-29	23:14:29	52.8	68.4	45.9	No	
11		2023-11-30	0:14:29	47.8	65.3	40.2	No	
12		2023-11-30	1:14:29	45.9	56.8	40.9	No	
13		2023-11-30	2:14:29	46.5	63.7	39.1	No	
14		2023-11-30	3:14:29	46.8	59.0	40.8	No	
15		2023-11-30	4:14:29	52.3	70.1	47.6	No	
16		2023-11-30	5:14:29	55.9	69.4	47.2	No	
17		2023-11-30	6:14:29	62.4	74.0	54.5	No	
18		2023-11-30	7:14:29	61.0	73.6	53.2	No	
19		2023-11-30	8:14:29	60.8	78.0	49.1	No	
20		2023-11-30	9:14:29	59.8	76.8	47.1	No	
21		2023-11-30	10:14:29	59.1	74.9	47.3	No	
22		2023-11-30	11:14:29	58.3	76.3	47.6	No	
23		2023-11-30	12:14:29	59.9	75.6	46.9	No	
24		2023-11-30	13:14:29	57.8	73.9	46.4	No	
25		2023-11-30	14:14:29	60.3	77.5	47.7	No	
26		2023-11-30	15:14:29	58.2	73.7	47.9	No	
27		2023-11-30	16:14:29	56.9	71.5	46.4	No	
28		2023-11-30	17:14:29	56.0	71.6	46.0	No	
29		2023-11-30	18:14:29	58.6	73.8	47.8	No	
30		2023-11-30	19:14:29	58.7	72.1	47.4	No	
31		2023-11-30	20:14:29	56.6	71.5	45.8	No	
32		2023-11-30	21:14:29	55.9	73.4	45.9	No	
33		2023-11-30	22:14:29	57.9	74.4	45.0	No	
34		2023-11-30	23:14:29	50.0	63.4	44.2	No	
35		2023-12-01	0:14:29	53.9	79.4	43.2	No	
36		2023-12-01	1:14:29	49.1	67.4	42.9	No	
37		2023-12-01	2:14:29	50.0	61.0	41.8	No	
38		2023-12-01	3:14:29	50.3	72.9	41.0	No	
39		2023-12-01	4:14:29	53.7	67.5	45.7	No	
40		2023-12-01	5:14:29	56.0	65.7	50.3	No	

41		2023-12-01	6:14:29	62.5	74.6	56.1	No
42		2023-12-01	7:14:29	60.9	76.0	52.1	No
43		2023-12-01	8:14:29	61.8	78.2	48.3	No
44		2023-12-01	9:14:29	64.0	84.3	49.3	No
45		2023-12-01	10:14:29	59.9	78.5	48.8	No
46		2023-12-01	11:14:29	58.0	75.2	47.1	No
47		2023-12-01	12:14:29	59.9	74.9	49.4	No
48		2023-12-01	13:14:29	59.4	74.0	51.5	No
49		2023-12-01	14:14:29	59.7	72.5	49.7	No
50		2023-12-01	15:14:29	64.8	90.4	50.5	Yes
51	Pause	2023-12-01	15:32:34				
52		2023-12-01	15:14:29	64.8	90.4	50.5	Yes
53	Stop	2023-12-01	15:36:24				

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	OVLD
1	Run	2023-12-06	16:16:26				
2		2023-12-06	16:16:26	54.8	70.6	48.0	No
3		2023-12-06	17:16:26	57.7	72.5	50.2	No
4		2023-12-06	18:16:26	55.2	77.7	47.4	No
5		2023-12-06	19:16:26	57.3	72.0	45.9	No
6		2023-12-06	20:16:26	49.4	67.7	41.9	No
7		2023-12-06	21:16:26	49.1	66.5	42.1	No
8		2023-12-06	22:16:26	59.6	75.1	41.3	No
9		2023-12-06	23:16:26	57.1	75.8	48.2	No
10		2023-12-07	0:16:26	51.1	68.3	43.6	No
11		2023-12-07	1:16:26	46.9	62.1	42.2	No
12		2023-12-07	2:16:26	44.1	58.5	39.6	No
13		2023-12-07	3:16:26	47.6	69.0	42.2	No
14		2023-12-07	4:16:26	51.6	71.8	46.9	No
15		2023-12-07	5:16:26	53.3	67.0	48.0	No
16		2023-12-07	6:16:26	61.2	72.5	52.1	No
17		2023-12-07	7:16:26	59.5	76.0	51.8	No
18		2023-12-07	8:16:26	59.6	80.9	50.3	No
19		2023-12-07	9:16:26	59.5	74.2	47.2	No
20		2023-12-07	10:16:26	61.1	81.8	47.4	No
21		2023-12-07	11:16:26	57.3	74.7	48.1	No
22		2023-12-07	12:16:26	61.5	83.1	48.5	No
23		2023-12-07	13:16:26	60.6	80.8	48.3	No
24		2023-12-07	14:16:26	59.2	74.3	46.8	No
25		2023-12-07	15:16:26	57.8	72.8	46.0	No
26		2023-12-07	16:16:26	55.7	71.1	46.8	No
27		2023-12-07	17:16:26	58.2	78.5	45.7	No
28		2023-12-07	18:16:26	58.9	77.5	51.5	No
29		2023-12-07	19:16:26	59.9	72.6	50.9	No
30		2023-12-07	20:16:26	58.8	72.6	48.7	No
31		2023-12-07	21:16:26	59.2	75.3	48.0	No
32		2023-12-07	22:16:26	57.5	72.1	49.9	No
33		2023-12-07	23:16:26	56.6	79.6	49.4	No
34		2023-12-08	0:16:26	50.5	63.9	44.0	No
35		2023-12-08	1:16:26	50.8	62.0	45.3	No
36		2023-12-08	2:16:26	51.2	57.6	46.5	No
37		2023-12-08	3:16:26	51.8	66.8	46.5	No
38		2023-12-08	4:16:26	53.1	70.8	47.1	No
39		2023-12-08	5:16:26	56.5	73.0	51.1	No
40		2023-12-08	6:16:26	64.8	86.5	56.2	No

41		2023-12-08	7:16:26	61.2	76.7	52.3	No
42		2023-12-08	8:16:26	58.7	74.0	48.0	No
43		2023-12-08	9:16:26	58.1	74.0	47.2	No
44		2023-12-08	10:16:26	58.3	72.9	47.5	No
45		2023-12-08	11:16:26	58.8	75.7	48.5	No
46		2023-12-08	12:16:26	59.1	73.8	48.0	No
47		2023-12-08	13:16:26	57.8	72.4	47.6	No
48		2023-12-08	14:16:26	59.3	75.1	48.7	No
49		2023-12-08	15:16:26	60.7	85.7	49.4	No
50		2023-12-08	16:16:26	59.8	79.1	50.4	No
51		2023-12-08	17:16:26	58.1	71.9	49.8	No
52		2023-12-08	18:16:26	58.8	77.8	51.2	No
53		2023-12-08	19:16:26	60.2	70.3	50.2	No
54		2023-12-08	20:16:26	58.1	70.2	51.6	No
55		2023-12-08	21:16:26	58.4	71.1	52.1	No
56		2023-12-08	22:16:26	60.0	77.9	51.9	No
57		2023-12-08	23:16:26	59.1	74.3	53.2	No
58		2023-12-09	0:16:26	58.6	75.1	51.4	No
59		2023-12-09	1:16:26	54.8	78.2	48.5	No
60		2023-12-09	2:16:26	54.7	74.0	46.4	No
61		2023-12-09	3:16:26	54.7	74.1	47.1	No
62		2023-12-09	4:16:26	59.4	85.5	50.2	No
63		2023-12-09	5:16:26	61.3	87.5	53.9	No
64		2023-12-09	6:16:26	62.9	85.2	56.1	Yes
65		2023-12-09	7:16:26	60.3	73.4	56.1	No
66		2023-12-09	8:16:26	60.8	84.3	54.1	No
67		2023-12-09	9:16:26	56.7	74.8	48.2	No
68		2023-12-09	10:16:26	66.7	92.8	49.0	Yes
69	Pause	2023-12-09	10:30:43				
70		2023-12-09	10:16:26	66.7	92.8	49.0	Yes
71	Stop	2023-12-09	10:31:59				

Record #	Record Type	Date	Time	LAeq	LASmax	LASmin	OVLD
1	Run	2023-12-14	12:06:25				
2		2023-12-14	12:06:25	60.5	77.7	50.5	No
3		2023-12-14	12:36:25	72.4	102.8	50.8	No
4	Stop	2023-12-14	13:06:25				

Appendix B. Permanent Vehicle Noise Worksheet

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TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number:
Project Name: Midway Rising

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes/Roadway Characteristics: Kimley-Horn 2023. Midway-Pacific Highway CPU Update for Vehicle Mix
Community Noise Descriptor: L_{dn}: CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

"-" = contour is located within the roadway right-of-way.
Distance is from the centerline of the roadway segment to the receptor location.

Analysis Condition Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix: Medium Trucks	Vehicle Mix: Heavy Trucks	CNEL at 50 Feet	Distance from Centerline of Roadway: Distance to Contour 75 CNEL	70 CNEL	65 CNEL	60 CNEL	55 CNEL
Sports Arena Boulevard									-				
I-8 WB Off Ramp to I-8 EB On-Ramp, existing No Event	6	15	11,513	35	0.5	1.0%	1.0%	**66.4**	-	-	-	134	288
I-8 WB Off Ramp to I-8 EB On-Ramp, existing w/ Weekday Eve	6	15	13,193	35	0.5	1.0%	1.0%	**67.0**	-	-	68	147	316
I-8 WB Off Ramp to I-8 EB On-Ramp, 2030 Baseline No Event	6	15	12,324	35	0.5	1.0%	1.0%	**66.7**	-	-	65	140	302
I-8 WB Off Ramp to I-8 EB On-Ramp, 2030 Project No Event	6	15	15,677	35	0.5	1.0%	1.0%	**67.8**	-	-	76	164	354
I-8 WB Off Ramp to I-8 EB On-Ramp, 2030 Baseline Event	6	15	14,045	35	0.5	1.0%	1.0%	**67.3**	-	-	71	153	329
I-8 WB Off Ramp to I-8 EB On-Ramp, 2030 Project 14K Event	6	15	18,731	35	0.5	1.0%	1.0%	**68.5**	-	-	86	185	399
I-8 WB Off Ramp to I-8 EB On-Ramp, 2030 Project 20K Event	6	15	19,449	35	0.5	1.0%	1.0%	**68.7**	-	-	88	190	409
I-8 WB Off Ramp to I-8 EB On-Ramp, 2035 Baseline No Event	6	15	12,956	35	0.5	1.0%	1.0%	**66.9**	-	-	67	145	312
I-8 WB Off Ramp to I-8 EB On-Ramp, 2035 Project No Event	6	15	21,997	35	0.5	1.0%	1.0%	**69.2**	-	-	96	206	444
I-8 WB Off Ramp to I-8 EB On-Ramp, 2035 Baseline Event	6	15	14,709	35	0.5	1.0%	1.0%	**67.5**	-	-	73	158	339
I-8 WB Off Ramp to I-8 EB On-Ramp, 2035 Project 14K Event	6	15	24,861	35	0.5	1.0%	1.0%	**69.8**	-	-	104	224	482
I-8 WB Off Ramp to I-8 EB On-Ramp, 2035 Project 20K Event	6	15	24,699	35	0.5	1.0%	1.0%	**69.7**	-	-	103	223	479
Sports Arena Boulevard									-				
I-8 EB On Ramp to W Point Loma Blvd, existing No Event	6	10	24,999	35	0.5	1.0%	1.0%	**69.3**	-	-	96	208	448
I-8 EB On Ramp to W Point Loma Blvd, existing w/ Weekday E\	6	10	27,964	35	0.5	1.0%	1.0%	**69.8**	-	-	104	224	482
I-8 EB On Ramp to W Point Loma Blvd, 2030 Baseline No Ever	6	10	26,337	35	0.5	1.0%	1.0%	**69.5**	-	-	100	215	463
I-8 EB On Ramp to W Point Loma Blvd, 2030 Project No Event	6	10	31,910	35	0.5	1.0%	1.0%	**70.3**	-	-	113	244	527
I-8 EB On Ramp to W Point Loma Blvd, 2030 Baseline Event	6	10	29,387	35	0.5	1.0%	1.0%	**70.0**	-	-	107	231	499
I-8 EB On Ramp to W Point Loma Blvd, 2030 Project 14K Even	6	10	37,251	35	0.5	1.0%	1.0%	**71.0**	-	-	126	271	584
I-8 EB On Ramp to W Point Loma Blvd, 2030 Project 20K Even	6	10	38,330	35	0.5	1.0%	1.0%	**71.1**	-	-	128	276	595
I-8 EB On Ramp to W Point Loma Blvd, 2035 Baseline No Ever	6	10	27,360	35	0.5	1.0%	1.0%	**69.7**	-	-	102	221	475
I-8 EB On Ramp to W Point Loma Blvd, 2035 Project No Event	6	10	42,862	35	0.5	1.0%	1.0%	**71.6**	-	64	138	298	641
I-8 EB On Ramp to W Point Loma Blvd, 2035 Baseline Event	6	10	30,471	35	0.5	1.0%	1.0%	**70.1**	-	-	110	237	511
I-8 EB On Ramp to W Point Loma Blvd, 2035 Project 14K Even	6	10	47,930	35	0.5	1.0%	1.0%	**72.1**	-	69	149	321	691
I-8 EB On Ramp to W Point Loma Blvd, 2035 Project 20K Even	6	10	47,619	35	0.5	1.0%	1.0%	**72.1**	-	69	148	319	688
Sports Arena Boulevard									-				
W Point Loma Blvd to Hancock St, existing No Event	6	20	15,295	35	0.5	1.0%	1.0%	**68.3**	-	-	83	178	384
W Point Loma Blvd to Hancock St, existing w/ Weekday Event	6	20	17,736	35	0.5	1.0%	1.0%	**68.9**	-	-	91	197	424
W Point Loma Blvd to Hancock St, 2030 Baseline No Event	6	20	16,254	35	0.5	1.0%	1.0%	**68.5**	-	-	86	186	400
W Point Loma Blvd to Hancock St, 2030 Project No Event	6	20	24,932	35	0.5	1.0%	1.0%	**70.4**	-	-	115	247	532
W Point Loma Blvd to Hancock St, 2030 Baseline Event	6	20	18,742	35	0.5	1.0%	1.0%	**69.2**	-	-	95	204	440
W Point Loma Blvd to Hancock St, 2030 Project 14K Event	6	20	29,712	35	0.5	1.0%	1.0%	**71.2**	-	-	129	278	598
W Point Loma Blvd to Hancock St, 2030 Project 20K Event	6	20	30,946	35	0.5	1.0%	1.0%	**71.3**	-	-	132	285	614
W Point Loma Blvd to Hancock St, 2035 Baseline No Event	6	20	16,996	35	0.5	1.0%	1.0%	**68.7**	-	-	89	191	412
W Point Loma Blvd to Hancock St, 2035 Project No Event	6	20	42,423	35	0.5	1.0%	1.0%	**72.7**	-	76	163	352	758
W Point Loma Blvd to Hancock St, 2035 Baseline Event	6	20	19,520	35	0.5	1.0%	1.0%	**69.3**	-	-	97	210	452
W Point Loma Blvd to Hancock St, 2035 Project 14K Event	6	20	46,855	35	0.5	1.0%	1.0%	**73.1**	-	81	175	376	810
W Point Loma Blvd to Hancock St, 2035 Project 20K Event	6	20	46,447	35	0.5	1.0%	1.0%	**73.1**	-	81	174	374	805
Sports Arena Boulevard									-				
Hancock Street to Kemper St, existing No Event	6	20	15,295	35	0.5	1.0%	1.0%	**68.3**	-	-	83	178	384
Hancock Street to Kemper St, existing w/ Weekday Event	6	20	17,736	35	0.5	1.0%	1.0%	**68.9**	-	-	91	197	424
Hancock Street to Kemper St, 2030 Baseline No Event	6	20	16,254	35	0.5	1.0%	1.0%	**68.5**	-	-	86	186	400
Hancock Street to Kemper St, 2030 Project No Event	6	20	20,460	35	0.5	1.0%	1.0%	**69.5**	-	-	100	216	466
Hancock Street to Kemper St, 2030 Baseline Event	6	20	18,758	35	0.5	1.0%	1.0%	**69.2**	-	-	95	204	440
Hancock Street to Kemper St, 2030 Project 14K Event	6	20	23,828	35	0.5	1.0%	1.0%	**70.2**	-	-	111	240	516
Hancock Street to Kemper St, 2030 Project 20K Event	6	20	24,082	35	0.5	1.0%	1.0%	**70.3**	-	-	112	241	520
Hancock Street to Kemper St, 2035 Baseline No Event	6	20	16,996	35	0.5	1.0%	1.0%	**68.7**	-	-	89	191	412
Hancock Street to Kemper St, 2035 Project No Event	6	20	32,667	35	0.5	1.0%	1.0%	**71.6**	-	-	137	296	637
Hancock Street to Kemper St, 2035 Baseline Event	6	20	19,547	35	0.5	1.0%	1.0%	**69.3**	-	-	97	210	452
Hancock Street to Kemper St, 2035 Project 14K Event	6	20	36,002	35	0.5	1.0%	1.0%	**72.0**	-	68	146	315	680
Hancock Street to Kemper St, 2035 Project 20K Event	6	20	36,063	35	0.5	1.0%	1.0%	**72.0**	-	68	147	316	680
Kurtz Street									-				
Frontier Dr to Greenwood St, existing No Event	2	0	2,650	30	0.5	1.0%	1.0%	**56.6**	-	-	-	-	64
Frontier Dr to Greenwood St, existing w/ Weekday Event	2	0	3,160	30	0.5	1.0%	1.0%	**57.3**	-	-	-	33	71
Frontier Dr to Greenwood St, 2030 Baseline No Event	2	0	2,754	30	0.5	1.0%	1.0%	**56.7**	-	-	-	-	65
Frontier Dr to Greenwood St, 2030 Project No Event	2	0	9,119	30	0.5	1.0%	1.0%	**61.9**	-	-	-	67	145
Frontier Dr to Greenwood St, 2030 Baseline Event	2	0	3,276	30	0.5	1.0%	1.0%	**57.5**	-	-	-	34	73
Frontier Dr to Greenwood St, 2030 Project 14K Event	2	0	10,622	30	0.5	1.0%	1.0%	**62.6**	-	-	35	74	160
Frontier Dr to Greenwood St, 2030 Project 20K Event	2	0	10,622	30	0.5	1.0%	1.0%	**62.6**	-	-	35	74	160
Frontier Dr to Greenwood St, 2035 Baseline No Event	2	0	2,830	30	0.5	1.0%	1.0%	**56.8**	-	-	-	-	66
Frontier Dr to Greenwood St, 2035 Project No Event	2	0	7,483	30	0.5	1.0%	1.0%	**61.1**	-	-	-	59	127
Frontier Dr to Greenwood St, 2035 Baseline Event	2	0	3,361	30	0.5	1.0%	1.0%	**57.6**	-	-	-	35	74
Frontier Dr to Greenwood St, 2035 Project 14K Event	2	0	8,996	30	0.5	1.0%	1.0%	**61.9**	-	-	-	67	144
Frontier Dr to Greenwood St, 2035 Project 20K Event	2	0	8,996	30	0.5	1.0%	1.0%	**61.9**	-	-	-	67	144

Kurtz Street									-					
Greenwood St to Camino Del Rio West, existing No Event	2	0	4,018	30	0.5	1.0%	1.0%	**58.4**	-	-	-	39	84
Greenwood St to Camino Del Rio West, existing w/ Weekday E	2	0	5,031	30	0.5	1.0%	1.0%	**59.3**	-	-	-	45	97
Greenwood St to Camino Del Rio West, 2030 Baseline No Ever	2	0	4,175	30	0.5	1.0%	1.0%	**58.5**	-	-	-	40	86
Greenwood St to Camino Del Rio West, 2030 Project No Event	2	0	6,737	30	0.5	1.0%	1.0%	**60.6**	-	-	-	55	118
Greenwood St to Camino Del Rio West, 2030 Baseline Event	2	0	5,220	30	0.5	1.0%	1.0%	**59.5**	-	-	-	46	100
Greenwood St to Camino Del Rio West, 2030 Project 14K Even	2	0	8,167	30	0.5	1.0%	1.0%	**61.5**	-	-	-	62	135
Greenwood St to Camino Del Rio West, 2030 Project 20K Even	2	0	8,167	30	0.5	1.0%	1.0%	**61.5**	-	-	-	62	135
Greenwood St to Camino Del Rio West, 2035 Baseline No Ever	2	0	4,291	30	0.5	1.0%	1.0%	**58.7**	-	-	-	41	88
Greenwood St to Camino Del Rio West, 2035 Project No Event	2	0	7,264	30	0.5	1.0%	1.0%	**60.9**	-	-	-	58	124
Greenwood St to Camino Del Rio West, 2035 Baseline Event	2	0	5,359	30	0.5	1.0%	1.0%	**59.6**	-	-	-	47	102
Greenwood St to Camino Del Rio West, 2035 Project 14K Even	2	0	8,921	30	0.5	1.0%	1.0%	**61.8**	-	-	-	66	143
Greenwood St to Camino Del Rio West, 2035 Project 20K Even	2	0	8,717	30	0.5	1.0%	1.0%	**61.7**	-	-	-	65	141
Hancock Street									-					
Sports Arena Blvd to Channel Way, existing No Event	2	0	3,010	30	0.5	1.0%	1.0%	**57.1**	-	-	-	32	69
Sports Arena Blvd to Channel Way, existing w/ Weekday Event	2	0	3,452	30	0.5	1.0%	1.0%	**57.7**	-	-	-	35	76
Sports Arena Blvd to Channel Way, 2030 Baseline No Event	2	0	3,128	30	0.5	1.0%	1.0%	**57.3**	-	-	-	33	71
Sports Arena Blvd to Channel Way, 2030 Project No Event	2	0	7,599	30	0.5	1.0%	1.0%	**61.1**	-	-	-	60	128
Sports Arena Blvd to Channel Way, 2030 Baseline Event	2	0	3,571	30	0.5	1.0%	1.0%	**57.9**	-	-	-	36	78
Sports Arena Blvd to Channel Way, 2030 Project 14K Event	2	0	9,933	30	0.5	1.0%	1.0%	**62.3**	-	-	33	71	153
Sports Arena Blvd to Channel Way, 2030 Project 20K Event	2	0	11,330	30	0.5	1.0%	1.0%	**62.9**	-	-	36	78	167
Sports Arena Blvd to Channel Way, 2035 Baseline No Event	2	0	3,215	30	0.5	1.0%	1.0%	**57.4**	-	-	-	34	72
Sports Arena Blvd to Channel Way, 2035 Project No Event	2	0	12,971	30	0.5	1.0%	1.0%	**63.5**	-	-	39	85	183
Sports Arena Blvd to Channel Way, 2035 Baseline Event	2	0	3,659	30	0.5	1.0%	1.0%	**58.0**	-	-	-	37	79
Sports Arena Blvd to Channel Way, 2035 Project 14K Event	2	0	14,874	30	0.5	1.0%	1.0%	**64.1**	-	-	43	93	201
Sports Arena Blvd to Channel Way, 2035 Project 20K Event	2	0	14,071	30	0.5	1.0%	1.0%	**63.8**	-	-	42	90	193
Hancock Street									-					
Channel Way to Kemper Street, existing No Event	2	12	3,085	30	0.5	1.0%	1.0%	**57.4**	-	-	-	-	72
Channel Way to Kemper Street, existing w/ Weekday Event	2	12	3,348	30	0.5	1.0%	1.0%	**57.7**	-	-	-	-	76
Channel Way to Kemper Street, 2030 Baseline No Event	2	12	3,206	30	0.5	1.0%	1.0%	**57.5**	-	-	-	-	74
Channel Way to Kemper Street, 2030 Project No Event	2	12	7,677	30	0.5	1.0%	1.0%	**61.3**	-	-	-	61	132
Channel Way to Kemper Street, 2030 Baseline Event	2	12	3,463	30	0.5	1.0%	1.0%	**57.9**	-	-	-	-	78
Channel Way to Kemper Street, 2030 Project 14K Event	2	12	8,823	30	0.5	1.0%	1.0%	**61.9**	-	-	-	67	145
Channel Way to Kemper Street, 2030 Project 20K Event	2	12	9,316	30	0.5	1.0%	1.0%	**62.2**	-	-	-	70	150
Channel Way to Kemper Street, 2035 Baseline No Event	2	12	3,295	30	0.5	1.0%	1.0%	**57.7**	-	-	-	-	75
Channel Way to Kemper Street, 2035 Project No Event	2	12	13,051	30	0.5	1.0%	1.0%	**63.6**	-	-	41	87	188
Channel Way to Kemper Street, 2035 Baseline Event	2	12	3,548	30	0.5	1.0%	1.0%	**58.0**	-	-	-	-	79
Channel Way to Kemper Street, 2035 Project 14K Event	2	12	14,040	30	0.5	1.0%	1.0%	**63.9**	-	-	43	92	198
Channel Way to Kemper Street, 2035 Project 20K Event	2	12	13,960	30	0.5	1.0%	1.0%	**63.9**	-	-	42	91	197
Hancock Street									-					
Greenwood Street to Camino Del Rio West, existing No Event	3	0	3,903	30	0.5	1.0%	1.0%	**58.4**	-	-	-	39	84
Greenwood Street to Camino Del Rio West, existing w/ Weekda	3	0	4,248	30	0.5	1.0%	1.0%	**58.8**	-	-	-	41	89
Greenwood Street to Camino Del Rio West, 2030 Baseline No E	3	0	4,056	30	0.5	1.0%	1.0%	**58.6**	-	-	-	40	86
Greenwood Street to Camino Del Rio West, 2030 Project No Ev	3	0	6,618	30	0.5	1.0%	1.0%	**60.7**	-	-	-	56	120
Greenwood Street to Camino Del Rio West, 2030 Baseline Eve	3	0	4,406	30	0.5	1.0%	1.0%	**58.9**	-	-	-	42	91
Greenwood Street to Camino Del Rio West, 2030 Project 14K E	3	0	7,549	30	0.5	1.0%	1.0%	**61.3**	-	-	-	61	131
Greenwood Street to Camino Del Rio West, 2030 Project 20K E	3	0	7,686	30	0.5	1.0%	1.0%	**61.3**	-	-	-	61	132
Greenwood Street to Camino Del Rio West, 2035 Baseline No E	3	0	4,169	30	0.5	1.0%	1.0%	**58.7**	-	-	-	41	88
Greenwood Street to Camino Del Rio West, 2035 Project No Ev	3	0	7,141	30	0.5	1.0%	1.0%	**61.0**	-	-	-	58	126
Greenwood Street to Camino Del Rio West, 2035 Baseline Eve	3	0	4,523	30	0.5	1.0%	1.0%	**59.0**	-	-	-	43	93
Greenwood Street to Camino Del Rio West, 2035 Project 14K E	3	0	8,032	30	0.5	1.0%	1.0%	**61.5**	-	-	-	63	136
Greenwood Street to Camino Del Rio West, 2035 Project 20K E	3	0	8,037	30	0.5	1.0%	1.0%	**61.5**	-	-	-	63	136
Frontier Drive									-					
Sports Arena Blvd to Kurtz St, 2030 Project No Event	2	12	3,783	30	0.5	1.0%	1.0%	**58.3**	-	-	-	38	82
Sports Arena Blvd to Kurtz St, 2030 Project 14K Event	2	12	5,780	30	0.5	1.0%	1.0%	**60.1**	-	-	-	51	109
Sports Arena Blvd to Kurtz St, 2030 Project 20K Event	2	12	5,856	30	0.5	1.0%	1.0%	**60.2**	-	-	-	51	110
Sports Arena Blvd to Kurtz St, 2035 Project No Event	2	12	7,027	30	0.5	1.0%	1.0%	**60.9**	-	-	-	58	125
Sports Arena Blvd to Kurtz St, 2035 Project 14K Event	2	12	9,000	30	0.5	1.0%	1.0%	**62.0**	-	-	-	68	147
Sports Arena Blvd to Kurtz St, 2035 Project 20K Event	2	12	9,441	30	0.5	1.0%	1.0%	**62.2**	-	-	-	70	152
Kemper Street									-					
Sports Arena Blvd to Kurtz St, 2030 Project No Event	2	12	7,099	30	0.5	1.0%	1.0%	**61.0**	-	-	-	58	125
Sports Arena Blvd to Kurtz St, 2030 Project 14K Event	2	12	7,655	30	0.5	1.0%	1.0%	**61.3**	-	-	-	61	132
Sports Arena Blvd to Kurtz St, 2030 Project 20K Event	2	12	7,731	30	0.5	1.0%	1.0%	**61.4**	-	-	-	62	133
Sports Arena Blvd to Kurtz St, 2035 Project No Event	2	12	26,445	30	0.5	1.0%	1.0%	**66.7**	-	-	65	140	301
Sports Arena Blvd to Kurtz St, 2035 Project 14K Event	2	12	26,976	30	0.5	1.0%	1.0%	**66.8**	-	-	66	142	305
Sports Arena Blvd to Kurtz St, 2035 Project 20K Event	2	12	27,043	30	0.5	1.0%	1.0%	**66.8**	-	-	66	142	306

Appendix C. Roadway Construction Noise Model Outputs

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Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/29/2024
Case Description: Building Construction

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
General NSLU	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
All Other Equipment > 5 HP	No	50	85.0		50.0	0.0
All Other Equipment > 5 HP	No	50	85.0		50.0	0.0
Concrete Pump Truck	No	20		81.4	50.0	0.0
Crane	No	16		80.6	50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
All Other Equipment > 5 HP	85.0	82.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	85.0	82.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Pump Truck	81.4	74.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.0	85.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/29/2024
Case Description: Demolition

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
General NSLU	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Hydra Break Ram	Yes	10	90.0		50.0	0.0
Hydra Break Ram	Yes	10	90.0		50.0	0.0
Hydra Break Ram	Yes	10	90.0		50.0	0.0
Front End Loader	No	40		79.1	50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Hydra Break Ram	90.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hydra Break Ram	90.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hydra Break Ram	90.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	90.0	85.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/29/2024
Case Description: Deep Foundation

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
General NSLU	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Soil Mix Drill Rig	No	50	80.0		50.0	0.0
Soil Mix Drill Rig	No	50	80.0		50.0	0.0
Backhoe	No	40		77.6	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Soil Mix Drill Rig	80.0	77.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Soil Mix Drill Rig	80.0	77.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.0	81.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/29/2024
Case Description: Grading/Excavation

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
General NSLU	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Scraper	No	40		83.6	50.0	0.0
Excavator	No	40		80.7	50.0	0.0
Excavator	No	40		80.7	50.0	0.0
Grader	No	40	85.0		50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Scraper	83.6	79.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.0	84.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/29/2024
Case Description: Paving

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
General NSLU	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Paver	No	50	77.2	50.0	0.0	
Roller	No	20	80.0	50.0	0.0	
Compactor (ground)	No	20	83.2	50.0	0.0	
Compactor (ground)	No	20	83.2	50.0	0.0	

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	80.0	73.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	83.2	76.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	83.2	76.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	83.2	81.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Appendix D. Construction Vehicle Noise Worksheet

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TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number:
Project Name: Midway Rising

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes/Roadway Characteristics: Kimley-Horn 2023. Midway-Pacific Highway CPU Update for Vehicle Mix
Community Noise Descriptor: L_{dn}: _____ CNEL: X

"-" = contour is located within the roadway right-of-way.
Distance is from the centerline of the roadway segment to the receptor location.

Assumed 24-Hour Traffic Distribution (without Construction):	Day	Evening	Night
Total ADT Volumes	83.00%	7.00%	10.00%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%
Assumed 24-Hour Traffic Distribution (Truck Route With Construction):	**Day**	**Evening**	**Night**
Total ADT Volumes	83.00%	7.00%	10.00%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	93.85%	1.44%	4.09%

Analysis Condition / Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix: Medium Trucks	Vehicle Mix: Heavy Trucks	CNEL at 50 Feet	Distance from Centerline of Roadway to Contour: 75 CNEL	70 CNEL	65 CNEL	60 CNEL	55 CNEL
Sports Arena Boulevard													
I-8 WB Off Ramp to I-8 EB On-Ramp, existing No Event	6	15	11,513	35	0	1.0%	1.0%	**67.1**	-	-	82	259	819
I-8 WB Off Ramp to I-8 EB On-Ramp, existing w/ Weekday Event	6	15	13,193	35	0	1.0%	1.0%	**67.7**	-	-	94	297	939
I-8 WB Off Ramp to I-8 EB On-Ramp, existing No Event + Construction	6	15	13,265	35	0	1.0%	2.7%	**68.6**	-	-	116	366	1,157
I-8 WB Off Ramp to I-8 EB On-Ramp, existing Event + Construction	6	15	14,945	35	0	1.0%	2.5%	**69.1**	-	-	127	402	1,272
I-8 WB Off Ramp to I-8 EB On-Ramp, 2030 Project No Event	6	15	15,217	35	0	1.0%	0.8%	**68.2**	-	-	105	332	1,051
I-8 WB Off Ramp to I-8 EB On-Ramp, 2030 Project No Event + Construction	6	15	16,969	35	0	1.0%	2.1%	**69.4**	-	-	136	431	1,364
I-8 WB Off Ramp to I-8 EB On-Ramp, 2030 Project Worst-Case Event	6	15	18,097	35	0	1.0%	0.8%	**68.9**	-	-	123	390	1,234
I-8 WB Off Ramp to I-8 EB On-Ramp, 2030 Project Worst-Case + Construction	6	15	19,849	35	0	1.0%	1.9%	**69.9**	-	-	154	488	1,543
Sports Arena Boulevard									-				
I-8 EB On Ramp to W Point Loma Blvd, existing No Event	6	10	24,999	35	0	1.0%	1.0%	**70.2**	-	-	165	521	1,648
I-8 EB On Ramp to W Point Loma Blvd, existing w/ Weekday Event	6	10	27,964	35	0	1.0%	1.0%	**70.7**	-	-	184	583	1,843
I-8 EB On Ramp to W Point Loma Blvd, existing No Event + Construction	6	10	26,751	35	0	1.0%	1.9%	**70.8**	-	-	192	608	1,922
I-8 EB On Ramp to W Point Loma Blvd, existing Event + Construction	6	10	29,716	35	0	1.0%	1.8%	**71.3**	-	67	211	667	2,109
I-8 EB On Ramp to W Point Loma Blvd, 2030 Project No Event	6	10	30,990	35	0	1.0%	0.9%	**71.0**	-	63	199	629	1,990
I-8 EB On Ramp to W Point Loma Blvd, Project No Event + Construction	6	10	32,742	35	0	1.0%	1.5%	**71.5**	-	71	224	709	2,241
I-8 EB On Ramp to W Point Loma Blvd, 2030 Project Worst-Case Event	6	10	36,536	35	0	1.0%	0.8%	**71.7**	-	74	233	735	2,326
I-8 EB On Ramp to W Point Loma Blvd, Project Event + Construction	6	10	38,288	35	0	1.0%	1.4%	**72.1**	-	81	257	812	2,568
Sports Arena Boulevard									-				
W Point Loma Blvd to Hancock St, existing No Event	6	20	15,295	35	0	1.0%	1.0%	**68.8**	-	-	120	380	1,200
W Point Loma Blvd to Hancock St, existing w/ Weekday Event	6	20	17,736	35	0	1.0%	1.0%	**69.4**	-	-	139	440	1,392
W Point Loma Blvd to Hancock St, existing No Event + Construction	6	20	17,047	35	0	1.0%	2.3%	**69.9**	-	-	156	493	1,560
W Point Loma Blvd to Hancock St, existing Event + Construction	6	20	19,488	35	0	1.0%	2.2%	**70.4**	-	-	174	551	1,743
W Point Loma Blvd to Hancock St, 2030 Project No Event	6	20	24,011	35	0	1.0%	0.7%	**70.5**	-	-	177	561	1,773
W Point Loma Blvd to Hancock St, Project No Event + Construction	6	20	25,763	35	0	1.0%	1.5%	**71.2**	-	67	211	666	2,105
W Point Loma Blvd to Hancock St, 2030 Project Worst-Case Event	6	20	29,071	35	0	1.0%	0.7%	**71.3**	-	67	213	674	2,133
W Point Loma Blvd to Hancock St, Project Event + Construction	6	20	30,823	35	0	1.0%	1.4%	**71.9**	-	78	246	777	2,457
Sports Arena Boulevard									-				
Hancock Street to Kemper St, existing No Event	6	20	15,295	35	0	1.0%	1.0%	**68.8**	-	-	120	380	1,200
Hancock Street to Kemper St, existing w/ Weekday Event	6	20	17,736	35	0	1.0%	1.0%	**69.4**	-	-	139	440	1,392
Hancock Street to Kemper St, existing No Event + Construction	6	20	17,047	35	0	1.0%	2.3%	**69.9**	-	-	156	493	1,560
Hancock Street to Kemper St, existing Event + Construction	6	20	19,488	35	0	1.0%	2.2%	**70.4**	-	-	174	551	1,743
Hancock Street to Kemper St, 2030 Project No Event	6	20	18,620	35	0	1.0%	0.9%	**69.6**	-	-	143	453	1,434
Hancock Street to Kemper St, Project No Event + Construction	6	20	20,372	35	0	1.0%	1.9%	**70.5**	-	-	177	559	1,767
Hancock Street to Kemper St, 2030 Project Worst-Case Event	6	20	22,578	35	0	1.0%	0.8%	**70.3**	-	-	171	541	1,712
Hancock Street to Kemper St, Project Event + Construction	6	20	24,330	35	0	1.0%	1.7%	**71.1**	-	-	204	645	2,039
Sports Arena Boulevard									-				
Kemper St to Frontier Drive, existing No Event	4	20	15,295	35	0	1.0%	1.0%	**67.4**	-	-	87	275	869
Kemper St to Frontier Drive, existing w/ Weekday Event	4	20	17,736	35	0	1.0%	1.0%	**68.0**	-	-	101	319	1,007
Kemper St to Frontier Drive, existing No Event + Construction	4	20	17,047	35	0	1.0%	2.3%	**68.5**	-	-	113	357	1,129
Kemper St to Frontier Drive, existing Event + Construction	4	20	19,488	35	0	1.0%	2.2%	**69.0**	-	-	126	399	1,262
Kemper St to Frontier Drive, 2030 Project No Event	4	20	19,898	35	0	1.0%	0.8%	**68.4**	-	-	110	347	1,096
Kemper St to Frontier Drive, Project No Event + Construction	4	20	21,650	35	0	1.0%	1.8%	**69.3**	-	-	134	423	1,337
Kemper St to Frontier Drive, 2030 Project Worst-Case Event	4	20	24,174	35	0	1.0%	0.8%	**69.2**	-	-	132	418	1,321
Kemper St to Frontier Drive, Project Event + Construction	4	20	25,926	35	0	1.0%	1.6%	**69.9**	-	-	156	492	1,556
Sports Arena Boulevard									-				
Rosecrans Streeet to Pacific Highway, existing No Event	2	0	1,215	35	0	1.0%	1.0%	**55.6**	-	-	-	-	58
Rosecrans Streeet to Pacific Highway, existing w/ Weekday Event	2	0	1,391	35	0	1.0%	1.0%	**56.2**	-	-	-	-	66
Rosecrans Streeet to Pacific Highway, existing No Event + Construction	2	0	2,739	35	0	1.0%	2.6%	**60.3**	-	-	-	54	170
Rosecrans Streeet to Pacific Highway, existing Event + Construction	2	0	2,915	35	0	1.0%	2.4%	**60.5**	-	-	-	56	176
Rosecrans Streeet to Pacific Highway, 2030 Project No Event	2	0	1,563	35	0	1.0%	1.4%	**57.0**	-	-	-	-	80
Rosecrans Streeet to Pacific Highway, Project No Event + Construction	2	0	3,087	35	0	1.0%	1.4%	**60.0**	-	-	-	50	157
Rosecrans Streeet to Pacific Highway, 2030 Project Worst-Case Event	2	0	5,373	35	0	1.0%	0.3%	**61.4**	-	-	-	70	220
Rosecrans Streeet to Pacific Highway, Project Event + Construction	2	0	6,897	35	0	1.0%	0.3%	**62.5**	-	-	-	89	283
Kurtz Street									-				
Hancock Street to Frontier Dr, existing No Event	2	0	2,650	30	0	1.0%	1.0%	**57.9**	-	-	-	-	97
Hancock Street to Frontier Dr, existing w/ Weekday Event	2	0	3,160	30	0	1.0%	1.0%	**58.6**	-	-	-	36	115
Hancock Street to Frontier Dr, existing No Event + Construction	2	0	4,174	30	0	1.0%	1.0%	**59.8**	-	-	-	48	152
Hancock Street to Frontier Dr, existing Event + Construction	2	0	4,684	30	0	1.0%	1.0%	**60.3**	-	-	-	54	171
Hancock Street to Frontier Dr, 2030 Project No Event	2	0	9,132	30	0	1.0%	0.4%	**62.3**	-	-	-	85	270
Hancock Street to Frontier Dr, Project No Event + Construction	2	0	10,656	30	0	1.0%	0.4%	**63.0**	-	-	-	100	315
Hancock Street to Frontier Dr, 2030 Project Worst-Case Event	2	0	11,254	30	0	1.0%	0.3%	**63.0**	-	-	-	100	317
Hancock Street to Frontier Dr, Project Event + Construction	2	0	12,778	30	0	1.0%	0.3%	**63.6**	-	-	36	114	360

Kurtz Street									-					
Frontier Dr to Sherman St, existing No Event	2	0	2,650	30	0	1.0%	1.0%	**57.9**	-	-	-	-	97	
Frontier Dr to Sherman St, existing w/ Weekday Event	2	0	3,160	30	0	1.0%	1.0%	**58.6**	-	-	-	36	115	
Frontier Dr to Sherman St, existing No Event + Construction	2	0	4,174	30	0	1.0%	1.0%	**59.8**	-	-	-	48	152	
Frontier Dr to Sherman St, existing Event + Construction	2	0	4,684	30	0	1.0%	1.0%	**60.3**	-	-	-	54	171	
Frontier Dr to Sherman, 2030 Project No Event	2	0	6,633	30	0	1.0%	0.5%	**61.1**	-	-	-	64	204	
Frontier Dr to Sherman St, Project No Event + Construction	2	0	8,157	30	0	1.0%	0.5%	**62.0**	-	-	-	79	250	
Frontier Dr to Sherman St, 2030 Project Worst-Case Event	2	0	8,597	30	0	1.0%	0.4%	**62.0**	-	-	-	80	251	
Frontier Dr to Sherman St, Project Event + Construction	2	0	10,121	30	0	1.0%	0.4%	**62.7**	-	-	-	94	296	
Kurtz Street									-					
Sherman St to Camino Del Rio West, existing No Event	2	0	4,018	30	0	1.0%	1.0%	**59.7**	-	-	-	46	147	
Sherman St to Camino Del Rio West, existing w/ Weekday Event	2	0	5,031	30	0	1.0%	1.0%	**60.7**	-	-	-	58	184	
Sherman St to Camino Del Rio West, existing No Event + Construction	2	0	5,542	30	0	1.0%	1.0%	**61.1**	-	-	-	64	202	
Sherman St to Camino Del Rio West, existing Event + Construction	2	0	6,555	30	0	1.0%	1.0%	**61.8**	-	-	-	76	239	
Sherman St to Camino Del Rio West, 2030 Project No Event	2	0	6,784	30	0	1.0%	0.7%	**61.5**	-	-	-	71	224	
Sherman St to Camino Del Rio West, Project No Event + Construction	2	0	8,308	30	0	1.0%	0.7%	**62.4**	-	-	-	87	274	
Sherman St to Camino Del Rio West, 2030 Project Worst-Case Event	2	0	8,536	30	0	1.0%	0.6%	**62.4**	-	-	-	86	273	
Sherman St to Camino Del Rio West, Project Event + Construction	2	0	10,060	30	0	1.0%	0.6%	**63.1**	-	-	32	102	321	
Hancock Street									-					
Sports Arena Blvd to Channel Way, existing No Event	2	0	3,010	30	0	1.0%	1.0%	**58.4**	-	-	-	35	110	
Sports Arena Blvd to Channel Way, existing w/ Weekday Event	2	0	3,452	30	0	1.0%	1.0%	**59.0**	-	-	-	40	126	
Sports Arena Blvd to Channel Way, existing No Event + Construction	2	0	4,534	30	0	1.0%	1.0%	**60.2**	-	-	-	52	166	
Sports Arena Blvd to Channel Way, existing Event + Construction	2	0	4,976	30	0	1.0%	1.0%	**60.6**	-	-	-	57	182	
Sports Arena Blvd to Channel Way, 2030 Project No Event	4	0	8,516	30	0	1.0%	0.4%	**62.3**	-	-	-	86	271	
Sports Arena Blvd to Channel Way, Project No Event + Construction	4	0	10,040	30	0	1.0%	0.4%	**63.1**	-	-	-	101	320	
Sports Arena Blvd to Channel Way, 2030 Project Worst-Case Event	4	0	11,181	30	0	1.0%	0.3%	**63.3**	-	-	-	107	339	
Sports Arena Blvd to Channel Way, Project Event + Construction	4	0	12,705	30	0	1.0%	0.3%	**63.9**	-	-	-	122	386	
Hancock Street									-					
Channel Way to Kurtz Street, existing No Event	2	12	3,085	30	0	1.0%	1.0%	**58.6**	-	-	-	-	115	
Channel Way to Kurtz Street, existing w/ Weekday Event	2	12	3,348	30	0	1.0%	1.0%	**59.0**	-	-	-	40	125	
Channel Way to Kurtz Street, existing No Event + Construction	2	12	4,609	30	0	1.0%	1.0%	**60.4**	-	-	-	54	172	
Channel Way to Kurtz Street, existing Event + Construction	2	12	4,872	30	0	1.0%	1.0%	**60.6**	-	-	-	58	182	
Channel Way to Kurtz Street, 2030 Project No Event	4	12	8,597	30	0	1.0%	0.4%	**62.7**	-	-	-	92	292	
Channel Way to Kurtz Street, Project No Event + Construction	4	12	10,121	30	0	1.0%	0.4%	**63.4**	-	-	-	109	343	
Channel Way to Kurtz Street, 2030 Project Worst-Case Event	4	12	10,173	30	0	1.0%	0.3%	**63.2**	-	-	-	105	331	
Channel Way to Kurtz Street, Project Event + Construction	4	12	11,697	30	0	1.0%	0.3%	**63.8**	-	-	-	120	381	
Hancock Street									-					
Kurtz Street to Greenwood Street, existing No Event	2	0	3,903	30	0	1.0%	1.0%	**59.5**	-	-	-	45	143	
Kurtz Street to Greenwood Street, existing w/ Weekday Event	2	0	4,248	30	0	1.0%	1.0%	**59.9**	-	-	-	49	155	
Kurtz Street to Greenwood Street, existing No Event + Construction	3	0	5,427	30	0	1.0%	1.0%	**61.1**	-	-	-	64	203	
Kurtz Street to Greenwood Street, existing Event + Construction	3	0	5,772	30	0	1.0%	1.0%	**61.3**	-	-	-	68	216	
Kurtz Street to Greenwood Street, 2030 Project No Event	3	0	6,204	30	0	1.0%	0.8%	**61.3**	-	-	-	67	213	
Kurtz Street to Greenwood Street, Project No Event + Construction	3	0	7,728	30	0	1.0%	0.8%	**62.2**	-	-	-	84	265	
Kurtz Street to Greenwood Street, 2030 Project Worst-Case Event	3	0	7,339	30	0	1.0%	0.6%	**61.8**	-	-	-	76	239	
Kurtz Street to Greenwood Street, Project Event + Construction	3	0	8,863	30	0	1.0%	0.6%	**62.6**	-	-	-	91	288	
Hancock Street									-					
Greenwood Street to Camino Del Rio West, existing No Event	3	0	3,903	30	0	1.0%	1.0%	**59.6**	-	-	-	46	146	
Greenwood Street to Camino Del Rio West, existing w/ Weekday Event	3	0	4,248	30	0	1.0%	1.0%	**60.0**	-	-	-	50	159	
Greenwood Street to Camino Del Rio West, existing No Event + Construction	3	0	5,427	30	0	1.0%	1.0%	**61.1**	-	-	-	64	203	
Greenwood Street to Camino Del Rio West, existing Event + Construction	3	0	5,772	30	0	1.0%	1.0%	**61.3**	-	-	-	68	216	
Greenwood Street to Camino Del Rio West, 2030 Project No Event	3	0	6,204	30	0	1.0%	0.8%	**61.3**	-	-	-	67	213	
Greenwood Street to Camino Del Rio West, Project No Event + Construction	3	0	7,728	30	0	1.0%	0.8%	**62.2**	-	-	-	84	265	
Greenwood Street to Camino Del Rio West, 2030 Project Worst-Case Event	3	0	7,239	30	0	1.0%	0.6%	**61.7**	-	-	-	75	236	
Greenwood Street to Camino Del Rio West, Project Event + Construction	3	0	8,763	30	0	1.0%	0.6%	**62.6**	-	-	-	90	286	
Frontier Drive									-					
Sports Arena Blvd to Kurtz St, 2030 Project No Event	2	12	6,750	30	0	1.0%	0.1%	**60.5**	-	-	-	56	178	
Sports Arena Blvd to Kurtz St, Project Event + Construction	2	12	8,274	30	0	1.0%	0.1%	**61.4**	-	-	-	69	218	
Sports Arena Blvd to Kurtz St, 2030 Project Worst-Case Event	2	12	10,684	30	0	1.0%	0.0%	**62.4**	-	-	-	86	272	
Sports Arena Blvd to Kurtz St, 2030 Project Event + Construction	2	12	12,208	30	0	1.0%	0.0%	**62.9**	-	-	-	98	311	
Kemper Street									-					
Sports Arena Blvd to Kurtz St, 2030 Project No Event	2	12	3,155	30	0	1.0%	0.2%	**57.4**	-	-	-	-	87	
Sports Arena Blvd to Kurtz St, Project Event + Construction	2	12	4,679	30	0	1.0%	0.2%	**59.1**	-	-	-	41	129	
Sports Arena Blvd to Kurtz St, 2030 Project Worst-Case Event	2	12	4,367	30	0	1.0%	0.0%	**58.5**	-	-	-	-	112	
Sports Arena Blvd to Kurtz St, 2030 Project Event + Construction	2	12	5,891	30	0	1.0%	0.0%	**59.8**	-	-	-	48	151	

Appendix E. Truck Traffic Volumes Memorandum

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Kimley»Horn

MEMORANDUM

To:	Diane Sandman, Sharon Toland – Harris & Associates
CC:	Greg Shannon – Sedona Pacific Corporation
From:	Jon Collins, P.E., T.E. – Kimley-Horn and Associates, Inc.
Date:	July 26, 2024

Kimley-Horn conducted a review of the noise spreadsheets prepared by Harris & Associates (Harris) for the Midway Rising redevelopment project. The report is well written, however the assumptions pertaining to truck traffic are inconsistent with expectation of truck demand for the existing and proposed site. Existing land uses (e.g., Sports Arena, Dixieline) are supplied through heavy-duty vehicles—the existing Sports Arena will be replaced by an Entertainment Center and the commercial land uses will be replaced by housing and retail.

The Midway Rising redevelopment is projected to increase traffic volume on the surrounding road network, potentially doubling traffic on specific roadway segments. However, due to the proposed change in land uses (i.e., housing), the anticipated increase in traffic is predominantly passenger and light-duty vehicles. Regarding heavy truck traffic, the redevelopment can reasonably expect the following:

Entertainment Center: A zero to a 6 truck increase in traffic on days preceding events at the Entertainment Center to support "high-production" events—note, this increase would be on "non-event days." (Note existing event days already have truck traffic built into the analysis, this clarification therefore would be in addition to existing event days truck traffic.)

Housing/Retail: A reduction in truck traffic from the removal of commercial land uses (e.g., Dixieline store) and no increase in heavy truck traffic to support the proposed housing and retail.

Upon examination, we found that the noise spreadsheets had the proportion of truck traffic the same for both existing and future scenarios. For example, the analysis shows ~150 trucks along Sports Arena Blvd in the 2035 Baseline vs. ~375 with project no event or ~415 with project and a large event. Heavy-duty truck traffic is *not* expected to increase (and therefore is not expected to more than double) with the proposed project; thus, Harris' assumption regarding heavy trucks in the proposed condition was too high. The following are the heavy truck traffic volumes consistent with the proposed project:

Pre-Event/Post-Event Day: Increase of 6 trucks per day along Sports Arena Boulevard, Hancock Street, Kurtz Streets, and Camino del Rio West. Note, this would be analyzed with non-event day traffic—as event day traffic is focused on event attendees.

All Other Days: No truck increase along Sports Arena Boulevard, Hancock Street, Kurtz Streets, and Camino del Rio West.

Appendix F. Sports Arena Boulevard Traffic Volumes Memorandum

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Kimley»Horn

MEMORANDUM

To:	Sharon Toland, Diane Sandman and Kelsey Hawkins – Harris & Associates
CC:	Greg Shannon – Sedona Pacific Corporation
From:	Jon M. Collins, PE, TE
	Kimley-Horn and Associates, Inc.
Date:	August 7, 2024
Subject:	Trip Reduction on Sports Arena Boulevard due to Removal of the Privately-Owned Parcels from the Midway Rising Site Plan

The purpose of this memorandum is to describe the effects of the removal of the privately-owned parcels from the Midway Rising site plan on daily traffic along Sports Arena Boulevard between West Point Loma Boulevard and Hancock Street. The results of this analysis are summarized below.

Findings

Opening Year (2030) Plus Project Phase 1

The removal of the privately-owned parcels from the Midway Rising site plan has no effect on Opening Year (2030) Plus Project Phase 1 traffic volumes because the development of the privately-owned parcels was not planned until the Opening Year (2035) Plus Project Phase 2 scenario.

Opening Year (2035) Plus Project Phase 2

The removal of the privately-owned parcels from the Midway Rising site plan has the following effects on the trip generation inputs for the Opening Year (2035) Plus Project Phase 2 scenario, shown in **Table 1** below.

Table 1. Trip Generation Inputs Comparison

Trip Generation Input	With Privately-Owned Parcels	Without Privately-Owned Parcels	Difference
Dwelling Units (du)	4,627 du	4,254 du	-373 du
Restaurant – Quality	40 ksf	30 ksf	-10 ksf

After the removal of 373 dwelling units and 10 ksf of quality restaurant from the Midway Rising site plan, the total number of daily trips generated by Midway Rising drops from 69,232 to 66,094 trips on a weekday event day with 14,000 spectators. On a weekday non-event day, which assumes 0 trips generated by the entertainment center land uses, the total number of trips generated by Midway Rising drops from 38,462 to 35,324 trips with the removal of the privately-owned parcels.

Once the difference in total number of trips is distributed throughout the roadway network surrounding Midway Rising, the total number of daily trips modeled along Sports Arena Boulevard between West Point Loma Boulevard and Hancock Street decreases for both weekday event days and weekday non-event days. These changes are described in **Table 2** below.

Table 2. Daily Trips Comparison along Sports Arena Boulevard between West Point Loma Boulevard and Hancock Street

Scenario	With Privately-Owned Parcels	Without Privately-Owned Parcels	Difference
Weekday Event Day	42,489 trips	40,221 trips	-2,268 trips
Weekday Non-Event Day	38,995 trips	36,727 trips	-2,268 trips

Conclusion

The removal of the privately-owned parcels from the Midway Rising site plan reduces the number of trips along Sports Arena Boulevard between West Point Loma Boulevard and Hancock Street by 2,268 trips for both weekday event days and weekday non-event days in the Opening Year (2035) Plus Project Phase 2 scenario. **The final number of daily trips along this segment in the Opening Year (2035) Plus Project Phase 2 Scenario is 40,221 on a weekday event day and 36,727 on a weekday non-event day after the removal of the privately-owned parcels from the Midway Rising site plan.**

Attachments

Attachment A: Trip Generation Results for the Opening Year (2035) Plus Project Phase 2 Scenario Including the Privately-Owned Parcels

Attachment B: Trip Generation Results for the Opening Year (2035) Plus Project Phase 2 Scenario Without the Privately-Owned Parcels

Attachment C: Roadway Segment Analysis for the Opening Year (2035) Plus Project Phase 2 Scenario Including the Privately-Owned Parcels

Attachment D: Roadway Segment Analysis for the Opening Year (2035) Plus Project Phase 2 Scenario Without the Privately Owned Parcels

ATTACHMENT A

Trip Generation Results for the Opening Year (2035) Plus Project Phase 2 Scenario Including the Privately-Owned Parcels

Land Use[1]		Units	Daily Trips	Weekday Event-Day									Weekend Non-Event Day		
				AM Commuter Peak Hour[2]			PM Commuter Peak Hour[3]			Pre-Event PM Peak Hour[4]			Midday Peak Hour[5]		
				Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out
Proposed Raw Rates															
*	Entertainment Center Event - Spectators	14,500 spectators	2.0	0	0	0	0.20	0.20	0.00	0.40	0.40	0.00	0.00	0.00	0
*	Entertainment Center - Employees	885 employees	2.0	0	0	0	0.25	0.25	0	0.00	0.00	0	0	0	0
SD	Multiple Dwelling Unit - Over 20 dwelling units/acre	4,627 d.u.	6.0	8%	2	8	9%	7	3	9%	7	3	8%	2	8
SD	Restaurant - Quality	40.00 ksf	90	1%	6	4	8%	7	3	8%	7	3	8%	7	3
SD	Restaurant - High Turnover (sit-down)	40.00 ksf	104	8%	5	5	8%	6	4	8%	6	4	8%	6	6
SD	Shopping Center - Community (100,000 sq. ft. or more GLA on 10 or more acres)	60.00 ksf	49	3%	6	4	10%	5	5	10%	5	5	10%	5	5
Proposed Raw Trips															
*	Entertainment Center Event - Spectators	14,500 spectators	29,000	-	-	-	2,871	2,871	0	5,829	5,829	0	-	-	-
*	Entertainment Center - Employees	885 employees	1,770	-	-	-	443	443	0	0	0	0	-	-	-
SD	Multiple Dwelling Unit - Over 20 dwelling units/acre	4,627 d.u.	27,762	2,221	444	1,777	2,499	1,749	750	2,174	1,522	652	2,499	1,749	750
SD	Restaurant - Quality	40 ksf	3600	36	22	14	202	141	61	29	20	9	288	202	86
SD	Restaurant - High Turnover (sit-down)	40 ksf	4160	333	167	166	233	140	93	33	20	13	333	200	133
SD	Shopping Center - Community (100,000 sq. ft. or more GLA on 10 or more acres)	60 ksf	2940	88	53	35	206	103	103	29	15	14	294	147	147
	Total Raw Trips		**69,232**	**2,678**	**686**	**1,992**	**6,454**	**5,447**	**1,007**	**8,095**	**7,406**	**689**	**3,414**	**2,298**	**1,116**
Proposed Reductions															
	Entertainment Center Trips (Spectators)	***Adjustments***	29,000	0	0	0	2,871	2,871	0	5,829	5,829	0	0	0	0
	Internal Capture	***1%***	***-290***	***0***	***0***	***0***	***-29***	***-29***	***0***	***-58***	***-58***	***0***	***0***	***0***	***0***
	Entertainment Center Trips w/ Internal Capture		**28,710**	**0**	**0**	**0**	**2,842**	**2,842**	**0**	**5,770**	**5,770**	**0**	**0**	**0**	**0**
	Multimodal Reductions	***25%***	***-7,177***	***0***	***0***	***0***	***-710***	***-710***	***0***	***-1,443***	***-1,443***	***0***	***0***	***0***	***0***
	Entertainment Center Trips (People in Vehicles) w/ Internal Capture & Multimodal Reductions		**21,533**	**0**	**0**	**0**	**2,132**	**2,132**	**0**	**4,327**	**4,327**	**0**	**0**	**0**	**0**
	Entertainment Center Vehicle Trips w/o Second TNC Trip[1]	***3.0 Avg Occupancy per Veh***[6]	***7,178***	***0***	***0***	***0***	***711***	***711***	***0***	***1,442***	***1,442***	***0***	***0***	***0***	***0***
	Second TNC Vehicle Trips	*15%*							*107*			*216*			*0*
	Total Entertainment Center Vehicle Trips		**7,178**	**0**	**0**	**0**	**817**	**711**	**107**	**1,658**	**1,442**	**216**	**0**	**0**	**0**
	Entertainment Center Trips (Employees)	***Adjustments***	1,770	0	0	0	443	443	0	0	0	0	0	0	0
	Internal Capture	***1%***	**-18**	**0**	**0**	**0**	**-4**	**-4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Entertainment Center Trips w/ Internal Capture		**1,752**	**0**	**0**	**0**	**439**	**439**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Multimodal Reductions	***25%***	***-438***	***0***	***0***	***0***	***-110***	***-110***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
	Entertainment Center Trips (People in Vehicles) w/ Internal Capture & Multimodal Reductions		**1,314**	**0**	**0**	**0**	**329**	**329**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Entertainment Center Vehicle Trips w/o Second TNC Trip	***1.0 Avg Occupancy per Veh***[6]	***1,314***	***0***	***0***	***0***	***329***	***329***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
	Second TNC Vehicle Trips	*15%*							*49*			*0*			*0*
	Total Entertainment Center Vehicle Trips (Employees)		**1,314**	**0**	**0**	**0**	**378**	**329**	**49**	**0**	**0**	**0**	**0**	**0**	**0**
	Total Adjusted Entertainment Center Trips (Seats & Employees)		**8,492**	**0**	**0**	**0**	**1,195**	**1,039**	**156**	**1,658**	**1,442**	**216**	**0**	**0**	**0**
	Residential Trips		27,762	2,221	444	1,777	2,499	1,749	750	2,174	1,522	652	2,499	1,749	750
	Internal Capture[7]		*-555*	*-44*	*-9*	*-36*	*-500*	*-350*	*-150*	*-435*	*-304*	*-130*	*-500*	*-350*	*-150*
		2% AM													
		20% PM													
		2% Daily													
			27,207	2,177	435	1,741	1,999	1,399	600	1,739	1,218	522	1,999	1,399	600
	Multimodal Reductions		*-2,721*	*-305*	*-61*	*-244*	*-280*	*-196*	*-84*	*-243*	*-171*	*-73*	*-280*	*-196*	*-84*
		14% AM													
		14% PM													
		10% Daily													
	Total Adjusted Residential Trips		**24,486**	**1,872**	**374**	**1,497**	**1,719**	**1,203**	**516**	**1,496**	**1,047**	**449**	**1,719**	**1,203**	**516**
	Retail Trips		10,700	457	242	215	641	384	257	92	55	37	915	549	366
	Internal Capture[7]		*-107*	*-78*	*-41*	*-37*	*-64*	*-38*	*-26*	*-9*	*-5*	*-4*	*-91*	*-55*	*-37*
	Total Adjusted Retail Trips		**10,593**	**379**	**201**	**178**	**577**	**346**	**231**	**83**	**50**	**33**	**824**	**494**	**329**
	Total Existing Commercial Trips		*-14,181*	*-711*	*-412*	*-299*	*-1,058*	*-627*	*-431*	*-1,280*	*-869*	*-411*	*-1,658*	*-786*	*-872*
	Total Net New Retail Trips		**-3,588**	**-332**	**-211**	**-121**	**-481**	**-281**	**-200**	**-1,197**	**-819**	**-378**	**-834**	**-292**	**-543**
Existing Land Use Trips (Applied to retail)															
	Total Existing Trips		***-21,057***	***-801***	***-489***	***-312***	***-1,436***	***-904***	***-532***	***-1,916***	***-1,433***	***-483***	***-1,658***	***-786***	***-872***
	Net New Trips		**22,514**	**1,450**	**86**	**1,363**	**2,055**	**1,684**	**371**	**1,321**	**1,106**	**215**	**885**	**911**	**-27**

Notes:

[1]Land Uses based on: SD – City of San Diego Trip Generation Manual

[2]AM Commuter Peak Hour = Morning Peak Hour (8-9 AM)

[3]PM Commuter Peak Hour = Evening Commute Peak Hour (5-6 PM)

[4]Pre-Event PM Peak Hour = Arrival Peak Hour prior to event (6-7 PM)

[5]Weekend Midday Peak= Midday peak hour during a non-event day

[6]Average Vehicle Occupancy (AVO) based on FHWA and ITE support material.

[7]Internal Capture: Residential = 2% Daily/2% AM/20% PM; Commercial = 10% Daily/17% am/10% PM.

*Entertainment Center trip generation is based on maximum number of seats and number of employees expected for that peak period. Proposed Raw Trips is not based on a rate but rather using assumptions listed below:

Spectator Arrival - 20% during Commute PM Peak Hour; 40% during Pre-Event PM Peak Hour

Employee Arrival - 25% during PM Peak Hour; 0% during Pre-Event PM Peak Hour

Kimley»Horn

ATTACHMENT B

Trip Generation Results for the Opening Year (2035) Plus Project Phase 2 Scenario Without the Privately-Owned Parcels

Land Use[1]		Units	Daily Trips	Weekday Event-Day									Weekend Non-Event Day		
				AM Commuter Peak Hour[2]			PM Commuter Peak Hour[3]			Pre-Event PM Peak Hour[4]			Midday Peak Hour[5]		
				Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out
Proposed Raw Trips															
*	Entertainment Center Event - Spectators	14,500 spectators	29,000	-	-	-	2,871	2,871	0	5,829	5,829	0	-	-	-
*	Entertainment Center - Employees	885 employees	1,770	-	-	-	443	443	0	0	0	0	-	-	-
SD	Multiple Dwelling Unit - Over 20 dwelling units/acre	4,254 d.u.	25,524	2,042	408	1,634	2,297	1,608	689	1,998	1,399	599	2,297	1,608	689
SD	Restaurant - Quality	30 ksf	2700	27	16	11	151	106	45	22	15	7	216	151	65
SD	Restaurant - High Turnover (sit-down)	40 ksf	4160	333	167	166	233	140	93	33	20	13	333	200	133
SD	Shopping Center - Community (100,000 sq. ft. or more GLA on 10 or more acres)	60 ksf	2940	88	53	35	206	103	103	29	15	14	294	147	147
	Total Raw Trips		**66,094**	**2,490**	**644**	**1,846**	**6,201**	**5,271**	**930**	**7,912**	**7,278**	**634**	**3,140**	**2,106**	**1,034**
Proposed Reductions															
	Entertainment Center Trips (Spectators)	***Adjustments***	29,000	0	0	0	2,871	2,871	0	5,829	5,829	0	0	0	0
	Internal Capture	***1%***	***-290***	***0***	***0***	***0***	***-29***	***-29***	***0***	***-58***	***-58***	***0***	***0***	***0***	***0***
	Entertainment Center Trips w/ Internal Capture		**28,710**	**0**	**0**	**0**	**2,842**	**2,842**	**0**	**5,770**	**5,770**	**0**	**0**	**0**	**0**
	Multimodal Reductions	***25%***	***-7,177***	***0***	***0***	***0***	***-710***	***-710***	***0***	***-1,443***	***-1,443***	***0***	***0***	***0***	***0***
	Entertainment Center Trips (People in Vehicles) w/ Internal Capture & Multimodal Reductions		**21,533**	**0**	**0**	**0**	**2,132**	**2,132**	**0**	**4,327**	**4,327**	**0**	**0**	**0**	**0**
	Entertainment Center Vehicle Trips w/o Second TNC Trip [1]	***3.0 Avg Occupancy per Veh*** [6]	***7,178***	***0***	***0***	***0***	***711***	***711***	***0***	***1,442***	***1,442***	***0***	***0***	***0***	***0***
	Second TNC Vehicle Trips	*15%*							*107*			*216*			*0*
	Total Entertainment Center Vehicle Trips		**7,178**	**0**	**0**	**0**	**817**	**711**	**107**	**1,658**	**1,442**	**216**	**0**	**0**	**0**
	Entertainment Center Trips (Employees)	***Adjustments***	1,770	0	0	0	443	443	0	0	0	0	0	0	0
	Internal Capture	***1%***	**-18**	**0**	**0**	**0**	**-4**	**-4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Entertainment Center Trips w/ Internal Capture		**1,752**	**0**	**0**	**0**	**439**	**439**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Multimodal Reductions	***25%***	***-438***	***0***	***0***	***0***	***-110***	***-110***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
	Entertainment Center Trips (People in Vehicles) w/ Internal Capture & Multimodal Reductions		**1,314**	**0**	**0**	**0**	**329**	**329**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Entertainment Center Vehicle Trips w/o Second TNC Trip	***1.0 Avg Occupancy per Veh*** [6]	***1,314***	***0***	***0***	***0***	***329***	***329***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
	Second TNC Vehicle Trips	*15%*							*49*			*0*			*0*
	Total Entertainment Center Vehicle Trips (Employees)		**1,314**	**0**	**0**	**0**	**378**	**329**	**49**	**0**	**0**	**0**	**0**	**0**	**0**
	Total Adjusted Entertainment Center Trips (Seats & Employees)		**8,492**	**0**	**0**	**0**	**1,195**	**1,039**	**156**	**1,658**	**1,442**	**216**	**0**	**0**	**0**
	Residential Trips		25,524	2,042	408	1,634	2,297	1,608	689	1,998	1,399	599	2,297	1,608	689
	Internal Capture [7]		*-510*	*-41*	*-8*	*-33*	*-459*	*-322*	*-138*	*-400*	*-280*	*-120*	*-459*	*-322*	*-138*
			25,014	2,001	400	1,601	1,838	1,286	551	1,598	1,119	479	1,838	1,286	551
	Multimodal Reductions		*-2,501*	*-280*	*-56*	*-224*	*-257*	*-180*	*-77*	*-224*	*-157*	*-67*	*-257*	*-180*	*-77*
	Total Adjusted Residential Trips		**22,513**	**1,721**	**344**	**1,377**	**1,581**	**1,106**	**474**	**1,374**	**962**	**412**	**1,581**	**1,106**	**474**
	Retail Trips		9,800	448	236	212	590	349	241	84	50	34	843	498	345
	Internal Capture [7]		*-98*	*-76*	*-40*	*-36*	*-59*	*-35*	*-24*	*-8*	*-5*	*-3*	*-84*	*-50*	*-35*
	Total Adjusted Retail Trips		**9,702**	**372**	**196**	**176**	**532**	**314**	**217**	**76**	**45**	**31**	**759**	**448**	**311**
	Total Existing Commercial Trips		*-14,181*	*-711*	*-412*	*-299*	*-1,058*	*-627*	*-431*	*-1,280*	*-869*	*-411*	*-1,658*	*-786*	*-872*
	Total Net New Retail Trips		**-4,479**	**-339**	**-216**	**-123**	**-526**	**-313**	**-214**	**-1,204**	**-824**	**-380**	**-899**	**-338**	**-562**
Existing Land Use Trips (Applied to retail)															
	Total Existing Trips		***-21,057***	***-801***	***-489***	***-312***	***-1,436***	***-904***	***-532***	***-1,916***	***-1,433***	***-483***	***-1,658***	***-786***	***-872***
	Net New Trips		**19,650**	**1,292**	**51**	**1,241**	**1,872**	**1,555**	**315**	**1,192**	**1,016**	**176**	**682**	**768**	**-88**

Notes:

[1]Land Uses based on: SD – City of San Diego Trip Generation Manual

[2]AM Commuter Peak Hour = Morning Peak Hour (8-9 AM)

[3]PM Commuter Peak Hour = Evening Commute Peak Hour (5-6 PM)

[4]Pre-Event PM Peak Hour = Arrival Peak Hour prior to event (6-7 PM)

[5]Weekend Midday Peak= Midday peak hour during a non-event day

[6]Average Vehicle Occupancy (AVO) based on FHWA and ITE support material.

[7]Internal Capture: Residential = 2% Daily/2% AM/20% PM; Commercial = 10% Daily/17% am/10% PM.

*Entertainment Center trip generation is based on maximum number of seats and number of employees expected for that peak period. Proposed Raw Trips is not based on a rate but rather using assumptions listed below:

Spectator Arrival - 20% during Commute PM Peak Hour; 40% during Pre-Event PM Peak Hour

Employee Arrival - 25% during PM Peak Hour; 0% during Pre-Event PM Peak Hour

Kimley»Horn

ATTACHMENT C

Roadway Segment Analysis for the Opening Year (2035) Plus Project Phase 2 Scenario Including the Privately-Owned Parcels

ROADWAY SEGMENT LEVEL OF SERVICE SUMMARY

ID	Roadway Segment	Extents	2035 (14.5k) WP Buildout								
			Weekday Event-Day						Weekday Non Event-Day		
			With Project Classification	LOS E Capacity[2]	NAVWARNT 2050 ALT 2 PROJECT TRIPS	ADT[3]	V/C Ratio[4]	LOS[5]	ADT[3]	V/C Ratio[4]	LOS[5]
Sports Arena Boulevard											
1	Sports Arena Boulevard	N of I-8 EB On Ramp	6 Lane Prime Arterial	60,000	1,560	22,588	0.376	A	20,283	0.338	A
2		I-8 EB On Ramp to W Point Loma Boulevard	5 Lane Major Arterial	45,000	1,560	43,625	0.969	**E**	39,434	0.876	D
3		W Point Loma Boulevard to Hancock Street	5 Lane Collector (with two-way left-turn Lane)	37,500	1,560	42,489	1.133	**F**	38,995	1.040	**F**
4		Hancock Street to Kemper Street	5 Lane Collector (with two-way left-turn Lane)	37,500	1,560	29,012	0.774	D	25,811	0.688	D
5		Kemper Street to Frontier Drive	4 Lane Major Arterial (with 2 flexible lanes)	40,000	1,560	30,559	0.764	D	27,613	0.690	C
6		Frontier Drive to East Drive	4 Lane Major Arterial (with 2 flexible lanes)	40,000	2,080	23,468	0.587	C	24,566	0.614	C
7		East Drive to Camino Del Rio West	4 Lane Major Arterial (with 2 flexible lanes)	40,000	2,600	27,753	0.694	C	30,632	0.766	D
8		Rosecrans Street to Pacific Highway	2 Lane Collector (without two-way left-turn lane)	8,000	1,560	6,044	0.755	D	1,913	0.239	A
Camino Del Rio West											
9	Camino Del Rio West	North of Greenwood Street	6 Lane Prime Arterial	60,000	0	72,101	1.202	**F**	67,144	1.119	**F**
10		Greenwood Street to Hancock Street	6 Lane Prime Arterial	60,000	0	72,221	1.204	**F**	67,144	1.119	**F**
11		Hancock Street to Kurtz Street	6 Lane Prime Arterial	60,000	0	58,630	0.977	**E**	55,747	0.929	**E**
Rosecrans Street											
12	Rosecrans Street	Camino del Rio to Pacific Highway	2 Lane Major (with 2 flexible lanes)	20,000	40	11,080	0.554	C	10,308	0.515	B
13	Rosecrans Street	Sports Arena Boulevard to Midway Drive	6 Lane Major Arterial	50,000	7,270	65,461	1.309	**F**	62,694	1.254	**F**
Midway Drive											
14	Midway Drive	Kemper Street to Rosecrans Street	4 Lane Collector (with two-way left-turn Lane)	30,000	1,040	26,567	0.886	**E**	27,522	0.917	**E**
Kurtz Street											
15	Kurtz Street	Hancock Street to Frontier Drive	2 Lane Collector (without two-way left-turn lane)	8,000	0	17,429	2.179	**F**	16,241	2.030	**F**
16	Kurtz Street	Frontier Drive to Sherman Street	2 Lane Collector (without two-way left-turn lane)	8,000	0	12,157	1.520	**F**	10,383	1.298	**F**
17	Kurtz Street	Sherman Street to Camino del Rio West	2 Lane Collector (one-way)	17,500	0	11,278	0.644	C	9,408	0.538	B
Hancock Street											
18	Hancock Street	Sports Arena Boulevard to Channel Way	4 Lane Collector (without two-way left-turn Lane)	15,000	0	18,264	1.218	**F**	16,399	1.093	**F**
19	Hancock Street	Channel Way to Kurtz St	4 Lane Collector (without two-way left-turn Lane)	15,000	0	17,253	1.150	**F**	16,480	1.099	**F**
20	Hancock Street	Kurtz Street to Greenwood Street	2 Lane Collector (one-way)	17,500	0	8,592	0.491	B	7,571	0.433	B
21	Hancock Street	Greenwood Street to Camino Del Rio West	2 Lane Collector (one-way)	17,500	0	8,495	0.485	B	7,571	0.433	B
Future Roadway Segments											
22	*Frontier Drive (Future Conditions Only)	Sports Arena Boulevard to Kurtz Street	2 Lane Collector (with two-way left-turn Lane)	15,000	0	9,050	0.603	C	7,072	0.471	C
23	*Kemper Street (Future Conditions Only)	Sports Arena Boulevard to Kurtz Street	2 Lane Collector (with two-way left-turn Lane)	15,000	0	12,563	0.838	D	11,753	0.784	D

Notes:

1Functional Classification based on the Midway Pacific Highway Community Plan.

2LOS E Capacity provided by City of San Diego staff.

3ADT - Average Daily Traffic.

4V/C Ratio - Volume-to-capacity ratio.

5LOS - Level of Service.

6Ultimate Classification based on the Midway Pacific Highway Community Plan - Preferred Plan.

7With Project Classification based on roadway classifications proposed by the Midway Rising Project.

Kimley»Horn

ATTACHMENT D

Roadway Segment Analysis for the Opening Year (2035) Plus Project Phase 2 Scenario Without the Privately Owned Parcels

ROADWAY SEGMENT LEVEL OF SERVICE SUMMARY

ID	Roadway Segment	Extents	2035 (14.5k) WP Buildout								
			Weekday Event-Day						Weekday Non Event-Day		
			With Project Classification	LOS E Capacity[2]	NAVWARNT 2050 ALT 2 PROJECT TRIPS	ADT[3]	V/C Ratio[4]	LOS[5]	ADT[3]	V/C Ratio[4]	LOS[5]
Sports Arena Boulevard											
1	Sports Arena Boulevard	N of I-8 EB On Ramp	6 Lane Prime Arterial	60,000	1,560	21,750	0.363	A	19,445	0.324	A
2		I-8 EB On Ramp to W Point Loma Boulevard	5 Lane Major Arterial	45,000	1,560	42,275	0.939	**E**	38,084	0.846	D
3		W Point Loma Boulevard to Hancock Street	5 Lane Collector (with two-way left-turn Lane)	37,500	1,560	40,221	1.073	**F**	36,727	0.979	**E**
4		Hancock Street to Kemper Street	5 Lane Collector (with two-way left-turn Lane)	37,500	1,560	28,302	0.755	D	25,100	0.669	D
5		Kemper Street to Frontier Drive	4 Lane Major Arterial (with 2 flexible lanes)	40,000	1,560	29,491	0.737	C	26,545	0.664	C
6		Frontier Drive to East Drive	4 Lane Major Arterial (with 2 flexible lanes)	40,000	2,080	21,817	0.545	C	22,915	0.573	C
7		East Drive to Camino Del Rio West	4 Lane Major Arterial (with 2 flexible lanes)	40,000	2,600	26,399	0.660	C	29,279	0.732	C
8		Rosecrans Street to Pacific Highway	2 Lane Collector (without two-way left-turn lane)	8,000	1,560	6,044	0.755	D	1,913	0.239	A
Camino Del Rio West											
9	Camino Del Rio West	North of Greenwood Street	6 Lane Prime Arterial	60,000	0	71,005	1.183	**F**	66,048	1.101	**F**
10		Greenwood Street to Hancock Street	6 Lane Prime Arterial	60,000	0	71,125	1.185	**F**	66,048	1.101	**F**
11		Hancock Street to Kurtz Street	6 Lane Prime Arterial	60,000	0	57,786	0.963	**E**	54,903	0.915	D
Rosecrans Street											
12	Rosecrans Street	Camino del Rio to Pacific Highway	2 Lane Major (with 2 flexible lanes)	20,000	40	10,747	0.537	C	9,976	0.499	B
13	Rosecrans Street	Sports Arena Boulevard to Midway Drive	6 Lane Major Arterial	50,000	7,270	64,224	1.284	**F**	61,456	1.229	**F**
Midway Drive											
14	Midway Drive	Kemper Street to Rosecrans Street	4 Lane Collector (with two-way left-turn Lane)	30,000	1,040	26,271	0.876	**E**	27,225	0.908	**E**
Kurtz Street											
15	Kurtz Street	Hancock Street to Frontier Drive	2 Lane Collector (without two-way left-turn lane)	8,000	0	15,605	1.951	**F**	14,417	1.802	**F**
16	Kurtz Street	Frontier Drive to Sherman Street	2 Lane Collector (without two-way left-turn lane)	8,000	0	11,052	1.382	**F**	9,279	1.160	**F**
17	Kurtz Street	Sherman Street to Camino del Rio West	2 Lane Collector (one-way)	17,500	0	10,536	0.602	C	8,665	0.495	B
Hancock Street											
18	Hancock Street	Sports Arena Boulevard to Channel Way	4 Lane Collector (without two-way left-turn Lane)	15,000	0	16,706	1.114	**F**	14,841	0.989	**E**
19	Hancock Street	Channel Way to Kurtz St	4 Lane Collector (without two-way left-turn Lane)	15,000	0	15,695	1.046	**F**	14,922	0.995	**E**
20	Hancock Street	Kurtz Street to Greenwood Street	2 Lane Collector (one-way)	17,500	0	7,987	0.456	B	6,967	0.398	A
21	Hancock Street	Greenwood Street to Camino Del Rio West	2 Lane Collector (one-way)	17,500	0	7,890	0.451	B	6,967	0.398	A
Future Roadway Segments											
22	*Frontier Drive (Future Conditions Only)	Sports Arena Boulevard to Kurtz Street	2 Lane Collector (with two-way left-turn Lane)	15,000	0	7,182	0.479	C	5,204	0.347	B
23	*Kemper Street (Future Conditions Only)	Sports Arena Boulevard to Kurtz Street	2 Lane Collector (with two-way left-turn Lane)	15,000	0	11,616	0.774	D	10,806	0.720	D

Notes:

1Functional Classification based on the Midway Pacific Highway Community Plan.

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