

APPENDIX H

NOISE STUDY REPORT

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NOISE STUDY REPORT

***P1 Parking Structure
Port Hueneme, County of Ventura***

June 17, 2026

Prepared for:



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NOISE STUDY REPORT P1 PARKING STRUCTURE

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TABLE OF CONTENTS

TABLE OF CONTENTS	ii
ACRONYMS & ABBREVIATIONS.....	iv
EXECUTIVE SUMMARY	i
1. INTRODUCTION	1
1.1 Purpose of the Noise Study Report.....	1
2. PROJECT DESCRIPTION.....	2
3. FUNDAMENTALS OF NOISE	5
3.1 Sound, Noise, and Acoustics	5
3.2 Frequency and Hertz	5
3.3 Sound Pressure Levels and Decibels.....	5
3.4 Addition of Decibels	5
3.5 A-Weighted Decibels	6
3.6 Human Response to Changes in Noise Levels	6
3.7 Noise Descriptors	7
3.8 Sound Propagation.....	8
4. REGULATORY SETTING	10
4.1 Federal Regulations	10
4.2 State Regulations	10
4.2.1 California Code of Regulations (CCR), Title 24, Interior Noise	10
4.2.2 California Government Code, General Plan Noise Elements.....	10
4.2.3 California Environmental Quality Act of 1970.....	10
4.3 Local Jurisdiction Noise Limits.....	11
4.3.1 Port Hueneme Noise Element.....	11
4.3.2 Port Hueneme Municipal Code	11
4.3.3 Construction Noise Limits	13
5. EXISTING NOISE ENVIRONMENT	14
6. PROJECT IMPACT ANALYSIS	17
6.1 Operational Noise	17
6.1.1 Calculation Limitations, Methodologies, and Procedures.....	17
6.1.2 Future Build Noise Levels	19

6.2	Construction Noise	22
6.2.1	Construction Sequence	22
6.2.2	Construction Noise Impact Assessment	23
7.	MITIGATION MEASURES	28
7.1	Operation Noise	28
7.2	Construction Noise	28
8.	REFERENCES	30

TABLES

Table 3.1	Typical Noise Levels	7
Table 4.1	Noise and Land Use Compatibility Standards	12
Table 4.2	Exterior Noise Limits	13
Table 5.1	Baseline Noise Levels	16
Table 6.1	Year 2046 Noise Levels	19
Table 6.2	Construction Noise Levels	25

FIGURES

Figure 1.1	Project Regional Vicinity Map
Figure 2.1	Site Vicinity Map
Figure 2.2	Project Site Plan
Figure 5.1	Baseline Noise Monitoring Locations
Figure 6.1	3-D Modeling Visualization of the Proposed Parking Structure Operation
Figure 6.2	Year 2046 Project Build Port Operation Noise Contours

APPENDICES

Appendix A	Baseline Noise Monitoring Form & Data Analysis
Appendix B	Instrumentation Certification

ACRONYMS & ABBREVIATIONS

AVAS	Acoustic Vehicle Alerting Systems
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNEL	Community Noise Equivalent Level
dB	Decibels
dBA	A-weighted decibels
EV	Electric Vehicles
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
Hz	Hertz
L _{dn}	Day-Night Level
L _{eq}	Equivalent Sound Level
L _{eq(h)}	Equivalent Sound Level over one hour
L _{max}	Maximum Sound Level
L _n	Percentile-Exceeded Sound Level
L _{ref}	Reference Sound Level
μPa	micro-Pascals
MEP	Mechanical, Electrical, and Plumbing
NSR	Noise Study Report
OPR	Office of Planning and Research
Port	the Port of Hueneme
PHMC	Port Hueneme Municipal Code
Sf	Square Feet
SPL	Sound pressure level
TNM	Traffic Noise Model

EXECUTIVE SUMMARY

The Oxnard Harbor District proposes the construction and operation of the P1 Hueneme Parking Structure at the Port of Hueneme. The project involves an 18.8-acre site featuring a six-level, approximately 456,000-square-foot parking structure with a maximum height up to 75 feet.

This Noise Study Report (NSR) reviews significance regulatory criteria, presents collected baseline noise monitoring data, analyzes proposed operational and construction noise levels, and provides mitigation measures to reduce and minimize noise impacts.

Baseline noise monitoring was conducted in March 2026 at two primary residential locations: Port Harbor Homes and 147 Clara Street. Measured noise levels ranged from 57 to 58 dBA CNEL that were within the City's "Normally Acceptable" exterior noise standards of 60 dBA CNEL for single-family and 65 dBA CNEL for multi-family residential uses. Baseline noise sources include local roadway traffic, motorcycles, and existing Port operations (cargo handling and truck idling). However, Port operational activities, although producing steady noise emission throughout the day, appear to have a less pronounced influence on overall average noise levels. Based on field observations and recorded audio clips, port-related sources are estimated to contribute a minor component of the overall ambient noise environment, likely on the order of several decibels lower than the total measured baseline levels.

The study evaluated both operational and construction-related noise under CEQA significance thresholds:

- **Operational Noise (Less Than Significant):** Future project-related noise is predicted to range from 52 to 55 dBA L_{eq} at the nearest receptors. When combined with existing ambient conditions, cumulative noise levels would remain approximately 58 dBA CNEL, representing a change of less than 3 dBA—a level generally not perceptible to the human ear.
- **Construction Noise (Potentially Significant):** Construction activities associated with the proposed project would result in temporary but significant increases in ambient noise levels, particularly during high-noise phases such as pile driving. These impacts would occur even when construction is conducted within the allowable hours established by the Port Hueneme Municipal Code.

Due to the intensity and proximity of certain activities, impacts may remain significant and unavoidable even with implementing construction noise mitigation measures.

1. INTRODUCTION

1.1 Purpose of the Noise Study Report

The Oxnard Harbor District is proposing the construction and operation of the P1 Hueneme Parking Structure Project (proposed project or project) at the Port of Hueneme (Port) in the City of Port Hueneme (City), at 333 Ponomo Street, in Ventura County (County) (Figure 1.1, Project Regional Vicinity Map).

This Noise Study Report (NSR) analyzes the potential noise impacts associated with the proposed project. The P1 Hueneme Parking Structure Project is a major planned multi-story parking facility for imported cars at the Port of Hueneme, intended to increase the Port's capacity to process vehicles arriving by cargo ships.



Figure 1.1 Project Regional Vicinity Map

2. PROJECT DESCRIPTION

The approximately 18.8-acre project site is located east of the Port entrance channel and north of the commercial harbor. The project site currently consists of a warehouse structure and an asphalt concrete parking lot used to stage vehicles once they are offloaded from roll on/roll off transport ships. The project site is bounded to the north by Naval Base Ventura County (NBVC) Port Hueneme and single-family residences, to the east by single- and multi-family residences, to the south by active Port facilities and the commercial harbor, and to the west by additional NBVC Port Hueneme property and the Port entrance channel, with the Pacific Ocean located further west and south (Figure 2.1, Site Vicinity Map).

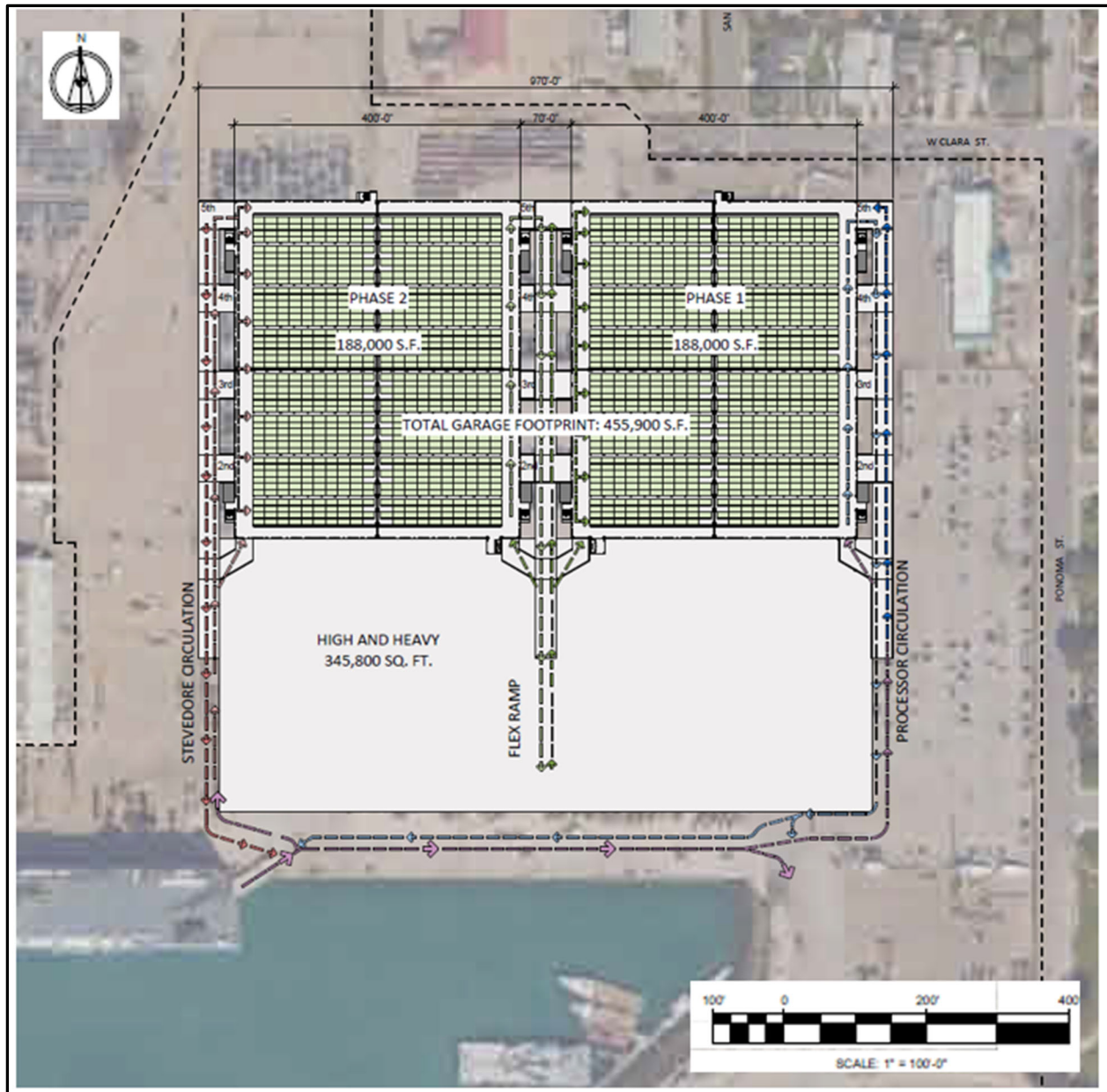


Figure 2.1 Site Vicinity Map

The proposed project would include an approximately 456,000-square-foot (sf), six-level parking structure to support the Port's ongoing vehicle processing operations. The proposed parking garage with a maximum height of 75 feet and would provide approximately 8,500 net new vehicle parking spaces. The parking structure would likely consist of reinforced concrete and would be designed to accommodate large quantities of vehicles and continuous operational use. The structure would incorporate open-sided design elements to provide natural ventilation, as well as safety features such as guardrails, controlled access points, and fire sprinklers. Sustainable features would include solar panels covering the top level of the parking structures, as well as a vegetated vertical façade along the eastern side of the structure.

Additionally, high-and-heavy vehicles, which may include oversized vehicles or specialized equipment, would be accommodated in a new 345,800-sf concrete pad designed to support their operational requirements, including appropriate turning radii and structural support. As shown on Figure 2.2, Project Site Plan, high-and-heavy staging areas would be located to maximize efficient unloading and minimize travel distances from vessel berths. These areas would be configured to avoid conflicts with primary vehicle staging and circulation routes to the extent feasible.

The parking structure would function as an intermediate staging and transfer point between ocean-going vessels at berth and ground transportation modes, including rail and truck, used to transport automobiles from the Port to dealerships or other destinations. Upon implementation, the proposed project is anticipated to facilitate approximately 35,000 additional automobiles annually and would support the Port's role as a regional hub for automobile import and export activities.



3. FUNDAMENTALS OF NOISE

The following is a brief discussion of fundamental environmental noise concepts.

3.1 Sound, Noise, and Acoustics

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receptor determines the sound level and characteristics of the noise perceived by the receptor. The field of acoustics deals primarily with the propagation and control of sound.

3.2 Frequency and Hertz

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

3.3 Sound Pressure Levels and Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (μPa). One μPa is approximately one hundred billionths (0.0000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 μPa . Because of this huge range of values, sound is rarely expressed in terms of μPa . Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of decibels (dB). The threshold of hearing for young people is about 0 dB, which corresponds to 20 μPa .

3.4 Addition of Decibels

Because decibels are logarithmic units, SPL cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one automobile produces an SPL of 70 dB when it passes an observer,

two cars passing simultaneously would not produce 140 dB - rather, they would combine to produce 73 dB, a difference of 3 dB. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dB louder than one source.

3.5 A-Weighted Decibels

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz, and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an “A-weighted” sound level (expressed in units of dBA) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When judgments are made of the relative loudness or annoyance of a sound, these judgments correlate well with the A-weighted levels of those sounds. Other weighting networks have been devised to address high noise levels or other special problems (e.g., B-, C-, and D-scales), but these scales are rarely used in conjunction with environmental noise. Noise levels for traffic noise reports are typically reported in terms of A-weighted decibels or dBA. Table 3-1 describes typical A-weighted noise levels for various noise sources.

3.6 Human Response to Changes in Noise Levels

As discussed above, doubling sound energy results in a 3 dB increase in sound. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different than what is measured.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1-dB changes in sound levels, when exposed to steady, single-frequency (“pure-tone”) signals in the mid-frequency (1,000 Hz–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5 dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is

generally perceived as a doubling of loudness. Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3 dB increase in sound, would generally be perceived as barely detectable by the average person.

Table 3.1 – Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock band
Jet flyover at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawnmower, 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban daytime	50	Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcast/recording studio
	10	
	0	

Source: Caltrans, 2013

3.7 Noise Descriptors

Noise in our daily environment fluctuates over time. Some fluctuations are minor, but some are substantial. Some noise levels occur in regular patterns, but others are random. Some noise levels fluctuate rapidly, but others slowly. Some noise levels vary widely, but others are relatively constant. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors most commonly used in traffic noise analysis:

- **Equivalent Sound Level (L_{eq}):** L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour A-weighted equivalent sound level ($L_{eq[h]}$) is the energy average of A-weighted sound levels occurring during a one-hour period, and is generally accepted as a basis for assessing environmental noise.

- Percentile-Exceeded Sound Level (L_n): L_n represents the sound level exceeded for a given percentage of a specified period (e.g., L_{10} is the sound level exceeded 10% of the time, and L_{90} is the sound level exceeded 90% of the time).
- Maximum Sound Level (L_{max}): L_{max} is the highest instantaneous sound level measured during a specified period.
- Day-Night Level (L_{dn}): L_{dn} is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10 p.m. and 7 a.m.
- Community Noise Equivalent Level (CNEL): Similar to L_{dn} , CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during the nighttime hours between 10 p.m. and 7 a.m., and a 5 dB penalty applied to the A-weighted sound levels occurring during evening hours between 7 p.m. and 10 p.m.

3.8 Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on the following factors.

- Geometric Spreading: Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path, and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source.
- Ground Absorption: The propagation path of noise from a highway to a receptor is usually very close to the ground. Noise attenuation from ground absorption and reflective-wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 feet. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water,), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receptor, such as soft dirt, grass, or scattered bushes and trees), an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance.
- Atmospheric Effects: Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than

500 feet) from the highway due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects.

- **Shielding by Natural or Human-Made Features:** A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receptor specifically to reduce noise. A barrier that breaks the line of sight between a source and a receptor will typically result in at least 5 dB of noise reduction. Taller barriers provide increased noise reduction. Vegetation between the highway and receptor is rarely effective in reducing noise because it does not create a solid barrier.

4. REGULATORY SETTING

4.1 Federal Regulations

The US Environmental Protection Agency (EPA) offers guidelines for community noise exposure in the Noise Effects Handbook – A Desk Reference to Health and Welfare Effects of Noise (EPA 1981). These guidelines consider occupational noise exposure as well as noise exposure in homes. The EPA recognizes an exterior noise level of 55 decibels day-night level (dB L_{dn}) as a general goal to protect the public from hearing loss, activity interference, sleep disturbance, and annoyance. The EPA and other federal agencies have adopted suggested land use compatibility guidelines which indicate that residential noise exposures of 55 to 65 dB L_{dn} are acceptable. However, the EPA notes that these levels are not regulatory goals, but are levels defined by a negotiated scientific consensus, without concern for economic and technological feasibility or the needs and desires of any particular community.

4.2 State Regulations

4.2.1 California Code of Regulations (CCR), Title 24, Interior Noise

Title 24 of the California Administrative Code requires that residential structures, other than detached single-family dwellings, be designed to prevent the intrusion of exterior noise so that the interior CNEL with windows closed and attributable to exterior sources does not exceed 45 dBA CNEL in any habitable room. This requirement is applicable to new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings. This standard is implemented by the California State Building Code Section 1208A.8.2 by stating that “interior noise levels attributable to exterior sources shall not exceed 45 dBA CNEL in any habitable room.”

4.2.2 California Government Code, General Plan Noise Elements

California does not promulgate statewide standards for environmental noise, but the California State Government Code Section 65302 (f) requires each local jurisdiction to draft a Noise Element for their General Plan to establish acceptable noise limits for various land uses.

4.2.3 California Environmental Quality Act of 1970

CEQA, Public Resources Code 21100 et seq., requires lead agencies to evaluate the environmental impact associated with a project. CEQA requires lead agencies to prepare an environmental impact report on any project it proposes to approve that may have a significant effect on the environment. Technical reports such as this noise report are used to develop noise sections of EIRs. CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15064.7) provides thresholds of significance for noise.

4.3 Local Jurisdiction Noise Limits

City policies, ordinances, and significance thresholds with respect to noise are included in the Noise Element of the City's General Plan (City of Port Hueneme, 2022) and the City's Municipal Code Noise Ordinance (City of Port Hueneme, 2025).

4.3.1 City of Port Hueneme Noise Element

The current Noise Element includes noise/land use compatibility guidelines, which are used when the City makes environmental and development decisions in order to identify and avoid noise/land use conflicts to the greatest extent practicable (see Table 4.1). These criteria identify the ambient noise levels that are considered clearly compatible, normally compatible, normally incompatible, and clearly incompatible for a variety of land uses.

4.3.2 City of Port Hueneme Municipal Code

Article III, Chapter 5 of the Port Hueneme Municipal Code (PHMC) contains the City's Noise Control Ordinance, including provisions aimed at limiting excessive noise from specific sources. PHMC Section 3427 prohibits unnecessary, excessive, or annoying noise in the City. The PHMC have assigned noise zones and impose applicable exterior noise limits.

According to PHMC Section 3431, unless otherwise provided in this Article, no person shall operate or cause to be operated any source of sound at any location within the City, or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes the noise level when measured on any receiving property to exceed the following Noise Level Limits or more restrictive standards established elsewhere in this Code:

- (a) The Exterior Noise Levels for that land use, as specified in Section 3430, for a total period of more than thirty minutes in any consecutive sixty minutes; or
- (b) The Exterior Noise Levels plus 5 dB for a total period of more than fifteen minutes in any consecutive sixty minutes; or
- (c) The Exterior Noise Levels plus 10 dB for a total period of more than five minutes in any consecutive sixty minutes; or
- (d) The Exterior Noise Levels plus 15 dB for a total period of more than one minute in any consecutive sixty minutes; or
- (e) The Exterior Noise Levels plus 20 dB for any period of time.

If the ambient noise level exceeds that permissible for any of the Noise Level Limits, the Noise Level Limit shall be increased in 5 dB increments as appropriate to encompass or reflect said ambient noise level.

Table 4.1 – Noise and Land Use Compatibility Standards

Land Use	Community Noise Exposure (L_{dn} or CNEL)					
	55	60	65	70	75	80
Residential – Low Density Single Family, Duplex, Mobile Homes	Light Gray	Medium Gray	Dark Gray	Very Dark Gray	Black	Black
Residential – Multiple-Family	Light Gray	Medium Gray	Dark Gray	Very Dark Gray	Black	Black
Transient Lodging - Motels, Hotels ¹	Light Gray	Medium Gray	Dark Gray	Very Dark Gray	Black	Black
Schools, Libraries, Churches, Hospitals, Nursing Homes	Light Gray	Medium Gray	Dark Gray	Very Dark Gray	Black	Black
Auditoriums, Concert Halls, Amphitheaters	Light Gray	Medium Gray	Dark Gray	Very Dark Gray	Black	Black
Sports Arena, Outdoor Spectator Sports	Light Gray	Medium Gray	Dark Gray	Very Dark Gray	Black	Black
Playgrounds, Neighborhood Parks	Light Gray	Medium Gray	Dark Gray	Very Dark Gray	Black	Black
Golf Courses, Riding Stables, Water Recreation, Cemeteries	Light Gray	Medium Gray	Dark Gray	Very Dark Gray	Black	Black
Office Buildings, Business Commercial and Professional	Light Gray	Medium Gray	Dark Gray	Very Dark Gray	Black	Black
Industrial, Manufacturing, Utilities, Agriculture	Light Gray	Medium Gray	Dark Gray	Very Dark Gray	Black	Black
Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements. Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. Clearly Unacceptable: New construction or development should generally not be undertaken.						

L_{dn} = Day-Night Noise Level; CNEL = Community Noise Exposure Level

¹Transient lodging generally consists of hotels, motels, inns, hostels, or other short-term living accommodations.

Source: City of Port Hueneme General Plan Noise Element (2022) Table N-2

Table 4.2 – Exterior Noise Limits

Designated Zone	Time Intervals	Exterior Noise Levels, dBA
Zone I Noise Sensitive Properties	7 a.m. – 10 p.m.	50
	10 p.m. – 7 a.m.	55
Zone II Residential Properties	7 a.m. – 10 p.m.	55
	10 p.m. – 7 a.m.	50
Zone III Commercial Properties	Anytime	65
Zone IV Industrial Properties	Anytime	75

Source :

See PHMC Section 3430 for the designated noise zones

4.3.3 Construction Noise Limits

The current Noise Element and Municipal Code does not include specific noise level limits on construction noise, which limits the City’s ability to regulate construction noise and to evaluate the significance of construction noise impacts under the California Environmental Quality Act. The General Plan does state noise goals and policies in construction and as follows:

“Minimize exposure of sensitive receivers to construction noise and vibration through methods such as restricting construction to daytime hours, use of sound barriers and/or other methods to dampen noise from construction equipment, and public notification prior to construction activities.”

In PHMC Section 3439, allowable construction hours are stated in the following: “between the hours of seven p.m. of one day and seven a.m. of the next, Monday through Saturday, and no earlier than 9 a.m. or later than 6 p.m. on Sunday and federal holidays, no person adjacent to or within any residential zone in the city shall operate power construction equipment or tools or perform any outside construction or repair work on buildings or structures, or operate any pile driver, steam shovel, pneumatic hammer, steam or electric hoist, or other construction device so as to create any noise which exceeds the noise level limits of this Article. The performance of emergency work is exempt from the provisions of this Section.”

5. EXISTING NOISE ENVIRONMENT

The land uses surrounding the project site consist of a mix of residential, recreational, and commercial developments. The noise-sensitive receptors located in closest proximity to the proposed construction area include single- and multi-family residences. The proposed project would occupy a maximum footprint of approximately 18.8 acres.

The nearest sensitive receptors are situated along Ponoma Street, San Pedro Street, and Clara Street. Due to their immediate proximity to the project site, these receptors are anticipated to experience the highest potential for project-related noise exposure and were therefore selected as representative noise sensitive receptor locations for baseline noise monitoring.

The existing ambient noise environment in the project vicinity is characterized by a combination of local sources and Port operations. Primary contributors include local roadway traffic, motor bike pass-bys, periodic aircraft overflights, emergency vehicle sirens, and backup alarms. In addition, ongoing Port operations contribute to ambient noise levels through activities such as cargo handling, vehicle unloading and processing from the cargo ships, commercial truck idling and circulation, and crane operation.

As described in Figure 5.1, baseline noise measurements were conducted by Kroner Environmental using two long-term monitoring stations. One station, M1, was located adjacent to Port Harbor Homes to represent receptors along Ponoma Street, while the second station, M2, was placed at 147 Clara Street to represent receptors along Clara Street and San Pedro Street. Continuous monitoring was conducted from 3:00 PM on March 9, 2026, through 12:00 PM on March 17, 2026, encompassing both weekday and weekend conditions.

No cargo unloading activities occurred on March 16, 2026. On March 9, 2026 when the baseline noise monitoring started, cargo unloading activities also occurred; however, the vehicles went to the Navy side away from residential areas. Even when the cargo unloading did not occur, routine Port-related activities, including personnel access and commercial truck movements, were observed during these periods and are reflected in the baseline noise levels measured. From March 10 through March 15, normal cargo unloading operations resumed, with vehicles unloaded from cargo ships and parked in their typical locations closer to the Ponoma Street side. Accordingly, the baseline noise measurements captured noise associated with typical Port operations.

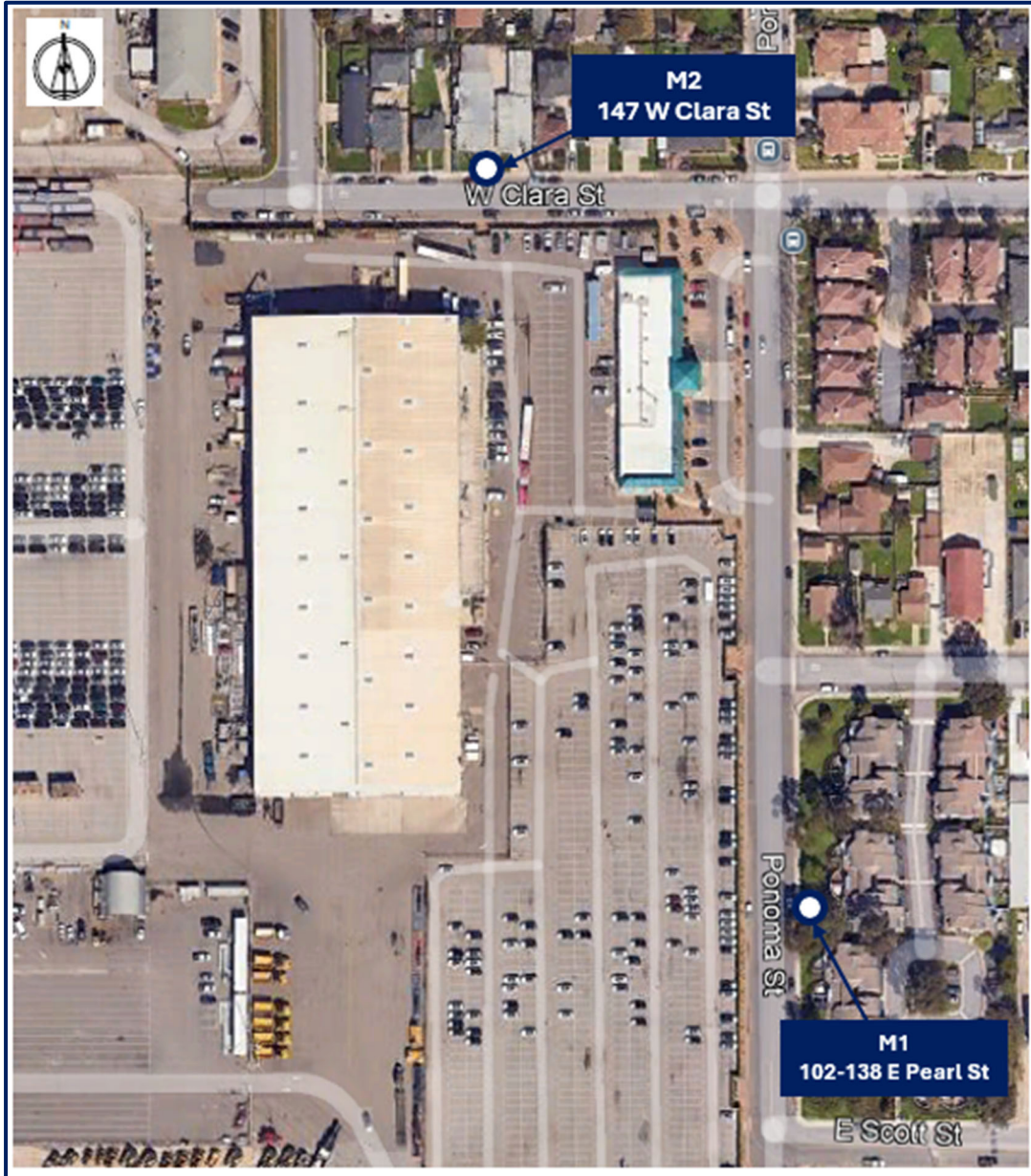


Figure 5.1 – Baseline Noise Monitoring Locations

Table 5.1 summarizes the monitored noise levels at M1 and M2. As discussed further in Section 7, the measured data were categorized into three temporal groupings: (1) weekly average, (2) weekday (Monday through Friday), and (3) weekend (Saturday through Sunday) conditions.

The CNEL values at M1 and M2 are 57 dBA and 58 dBA, respectively. These levels are below the City's "Normally Acceptable" exterior noise compatibility standard of 60 dBA CNEL for low-density residential land uses (e.g., single-family residences, duplexes, and mobile homes) as identified in the Noise Element. For multi-family residential uses, the "Normally Acceptable" standard is 65 dBA CNEL; therefore, measured noise levels are well within applicable compatibility thresholds.

Table 5.1 – Baseline Noise Levels

Rec	Address	Monitored Date	Monitoring Period	Day ¹	Evening ¹	Night ¹	CNEL
				dBA			
M1	102 - 138 E Pearl St. Port Harbor Homes	03/09/26 to 03/17/26	Weekly	57	53	46	57
			Mon - Fri	57	53	47	58
			Sat - Sun	57	53	46	57
M2	147 Clara Street	03/09/26 to 03/17/26	Weekly	56	54	48	58
			Mon - Fri	57	55	48	59
			Sat - Sun	54	53	48	58

Note:

1 — Day: 7:00 AM to 7:00 PM; Evening: 7:00 PM to 10:00 PM; Night: 10:00 PM to 7:00 AM

2 — Weekly average baseline noise levels are in bold font and used for the impact analysis.

Noise levels measured during weekdays and weekends were generally consistent at both monitoring locations. A minor variation of approximately 3 dBA was observed in daytime noise levels at M2 between weekday and weekend conditions; however, this difference is not typically perceptible to the human ear and is not considered acoustically significant. Additional weekend sampling would likely reduce this minor variation.

The relatively consistent noise levels observed across monitoring periods are attributed primarily to steady local noise sources, such as vehicular traffic and loud motor bike pass-bys on adjacent roadways, which tend to dominate the ambient noise environment over time. In comparison, Port operational activities, although producing steady noise emission throughout the day, appear to have a less pronounced influence on overall average noise levels. Based on field observations and recorded audio clips, Port-related sources are estimated to contribute a minor component of the overall ambient noise environment, likely on the order of several decibels lower than the total measured baseline levels.

6. PROJECT IMPACT ANALYSIS

This section addresses project-related noise impacts that would occur during project operation and construction.

6.1 Operational Noise

6.1.1 Calculation Limitations, Methodologies, and Procedures

Operational noise levels associated with the proposed project were evaluated using a combination of reference sound levels and logarithmic energy summation techniques consistent with standard acoustical engineering practice.

Conventional traffic noise models, such as the FHWA Traffic Noise Model (TNM), are not well suited to simulate the project's operational characteristics due to:

- Low-speed vehicle movements;
- A high proportion of electric vehicles (EVs), which exhibit reduced propulsion noise relative to internal combustion engine vehicles;
- Intermittent and non-uniform "platoon-style" unloading operations from cargo vessels; and
- Complex sound propagation within and around multi-level parking structures.

To address these limitations, a reference sound level (L_{ref}) representative of low-speed vehicle pass-by events was applied. A value of 56 dBA at a reference distance of 50 feet was conservatively selected based on available literature and federal minimum sound requirements for EVs, including Acoustic Vehicle Alerting Systems (AVAS), as defined in 49 CFR §571.141.

The equivalent hourly sound level (L_{eq}) at a receptor was calculated using the following relationship:

Where:
$$L_{eq} = L_{ref} + 10\log_{10}(N)$$

- L_{eq} = equivalent hourly noise level (dBA)
- L_{ref} = reference sound level for a single pass-by event (dBA at 50 feet)
- N = number of vehicle pass-by events per hour

Projected vehicle volumes were based on a conservative estimate of 701,672 vehicles annually, corresponding to approximately:

- 2,249 vehicles per day (based on 26 operational days per month), and
- 281 vehicles per hour (based on an 8-hour operational period)

To account for internal circulation within the Port (i.e., inbound and outbound movements, staging, and relocation), vehicle activity levels were conservatively adjusted to represent worst-case hourly conditions.

Sound propagation effects, including distance attenuation, shielding from structures, and site geometry, were modeled using SoundPLAN software. The proposed parking structure is expected to provide partial acoustic shielding, reducing direct line-of-sight noise transmission to nearby receptors.

Given uncertainties associated with modeling sound within structured parking environments (e.g., reflections, ramp geometry, and tire-pavement interaction), a conservative adjustment factor of up to 3 dBA was applied where appropriate to ensure that predicted noise levels represent a reasonable worst-case condition. Figure 6.1 illustrates 3-D modeling space to simulate cargo unloading and vehicle movements into the proposed parking structure and out for the processing facilities in Year 2046.

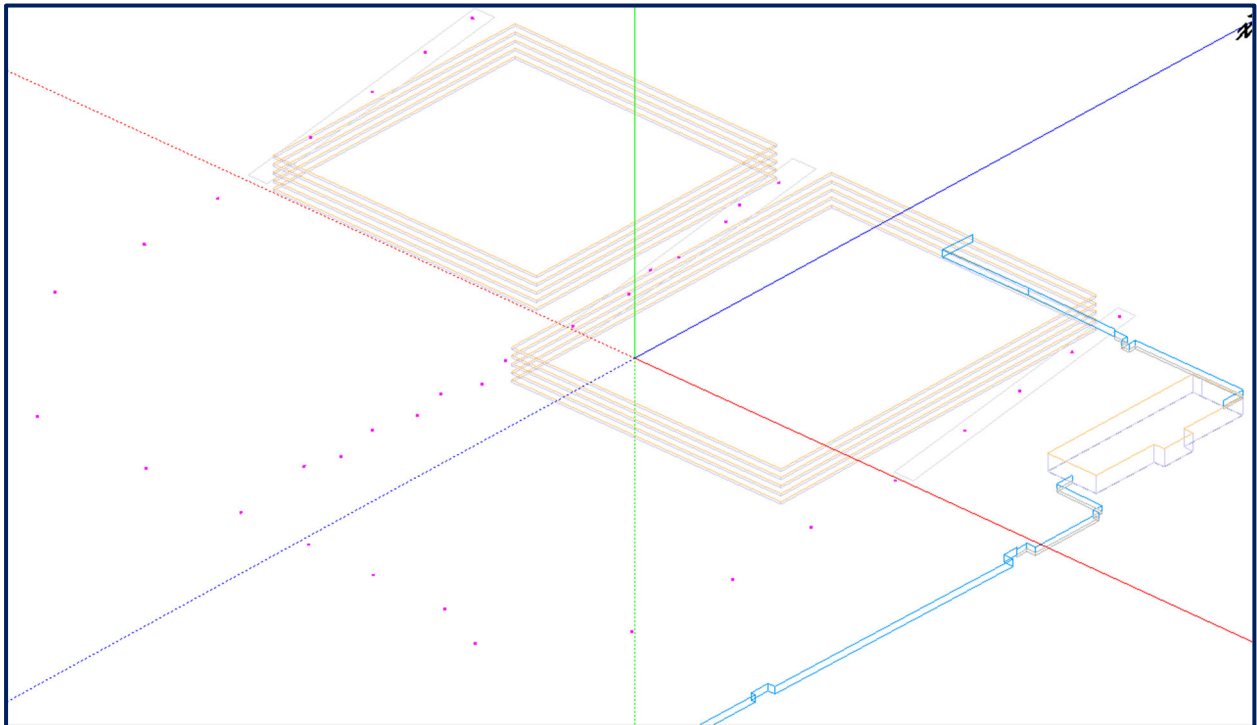


Figure 6.1 – 3-D Modeling Visualization of the Proposed Parking Structure Operation

6.1.2 Future Build Noise Levels

Noise Levels from Vehicle Movements Within the Project Site

The significance of operational noise impacts is evaluated consistent with guidance under the California Environmental Quality Act, which considers whether a project would result in a substantial permanent increase in ambient noise levels at noise-sensitive receptors.

Based on the modeling results presented in Table 6.1 and Figure 6.2, project-related operational noise levels would range from approximately 52 to 55 dBA L_{eq} at the nearest sensitive receptors. When compared to existing baseline daytime noise levels (56 to 57 dBA L_{eq}) which reflect a combination of existing Port operations and local noise sources (primarily influenced by roadway traffic and intermittent motorcycle pass-bys), the project operation noise alone would still be lower by 2 to 5 dBA even with the projected increase of vehicle import volumes.

When project-related noise is combined with existing ambient conditions using logarithmic addition, the resulting cumulative noise levels would remain approximately 58 dBA CNEL, which is consistent with existing measured conditions and remains below the City's "Normally Acceptable" threshold of 60 dBA CNEL for residential land uses.

A change in noise level of less than 3 dBA is generally not perceptible to the human ear under typical environmental conditions and does not constitute a substantial increase in ambient noise. Therefore, the project would not result in a substantial permanent increase in ambient noise levels at nearby sensitive receptors. In addition, project-related noise would be acoustically masked by dominant existing noise sources, particularly roadway traffic, which governs the overall ambient noise environment in the project vicinity.

Accordingly, operational noise impacts would be less than significant.

Table 6.1 – Year 2046 Noise Levels

Rec	Address/ Community Name	Type ¹	Baseline ² Daytime L _{eq}	Project ³ Daytime L _{eq}	CNEL Baseline	CNEL Cumulative	Impact
			dBA				
R1	147 Clara Street	SFR	56	52	58	58	No
R2	Harbor Walk Community	SFR	57	52	57	58	No
R3	Port Harbor Homes	MFR	57	55	57	58	No
R4	Seaview Apartments	MFR	57	53	57	58	No

Notes :

1 – SFR : Single-family residence, MFR: Multi-family residence.

2 – Baseline noise levels as of 2026 include noise sources from local activities and port operations

3 – Modeled noise level from port operations only

Noise Levels from Additional Vehicles to the Surface Streets

Based on the trip generation summary (Source), and assuming an average increase in auto imports of approximately 5 percent through Year 2046, the project would generate approximately 112 additional average daily vehicle trips annually (MBI, 2026). This represents approximately 9 percent of the AM peak-hour traffic volume and 8 percent of the PM peak-hour traffic volume on Port Hueneme Road.

Traffic noise increases are typically evaluated using the logarithmic relationship between traffic volume and noise levels. Under a conservative scenario in which traffic volumes were to double on the roadway (with all other factors such as roadway geometry, vehicle mix, and speed remaining constant), the corresponding increase in noise levels would be approximately 3 dBA.

Given that the project-related increase in traffic represents a fraction of existing roadway volumes, the resulting incremental change in roadway noise levels would be well below this conservative doubling scenario. Therefore, noise impacts associated with project-generated vehicle trips on surrounding surface streets would be less than significant.

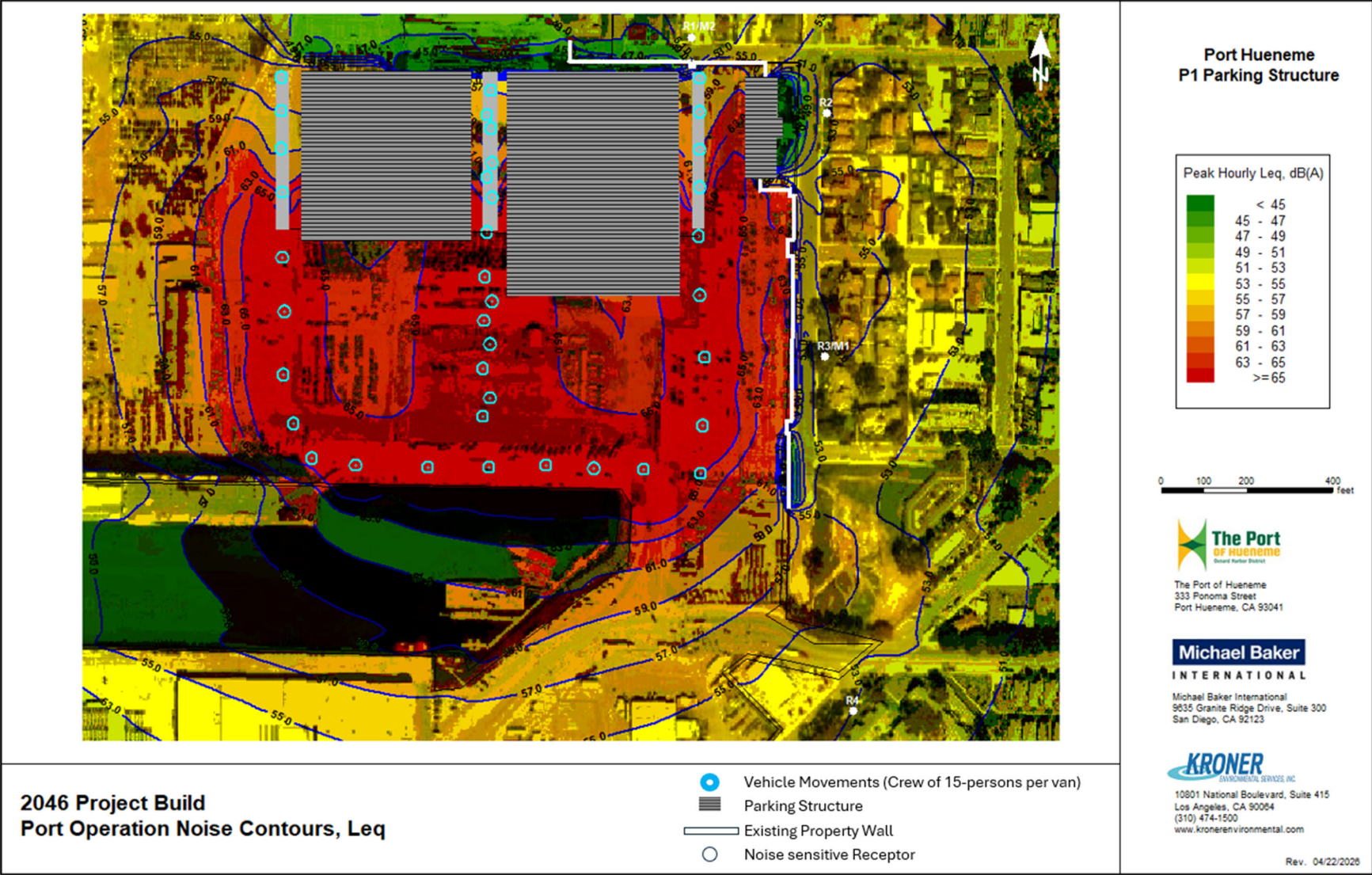


Figure 6.2 – Year 2046 Project Build Port Operation Noise Contours

6.2 Construction Noise

This section discusses short-term noise impacts during construction phase for the proposed project.

6.2.1 Construction Sequence

The construction sequences and equipment lists discussed in this NSR are preliminary. While the final design-build phases will dictate the exact equipment inventory and scheduling, noise impacts can be accurately assessed using generally accepted construction parameters for multi-level parking structures. These assumptions provide a representative "worst-case" scenario for acoustic modeling.

Construction of the Port parking structure is categorized into three primary functional phases. The noise intensity of each phase is governed by the specific machinery required:

- **Phase 1: Demolition:** The removal of the existing steel-frame and corrugated-shell warehouse is a prerequisite for site development. This phase utilizes an excavator equipped with hydraulic grapple shears to dismantle the structural frame. Debris will be managed by a dozer and loaded onto heavy-duty haul trucks via excavator for off-site disposal. This phase is characterized by sharp increase in noise from structural collapse and metal-on-metal contact.
- **Phase 2: Grading:** This activity involves clearing the site and achieving required surface elevations. Primary noise sources include an excavator with a hydraulic hoe-ram attachment used to break existing asphalt and concrete surfaces. While subsequent grading (via dozers and graders) is necessary, the breaking of concrete represents the peak noise event for this phase.
- **Phase 3: Building Construction, Paving, and Architectural Coating:** This phase of construction represents the longest duration of construction activities and is expected to continue through project completion and commencement of operations in 2029. Construction will be implemented in two stages, referred to as Phase 1 and Phase 2. The Phase 1 parking structure, located closest to the noise-sensitive receptors along Pomona Street, would be constructed first. From a noise emissions perspective, this phase will vary considerably due to the use of different types of construction equipment and activity levels, and can therefore be further divided into the following four subcategories:
 - Foundation preparation: Due to the presence of silty, poorly graded sand and a shallow groundwater table, impact pile driving of soldier piles is assumed for this analysis. While vibratory pile drivers offer a reduction in noise levels, they often extend the overall duration of the noise impact. To ensure a conservative noise prediction, this report evaluates the higher-intensity impulsive noise associated with a standard impact pile driver.
 - Structure shell construction: This work sequence involves the erection of the parking frame and subsequent concrete placement. Key equipment includes

cranes for hoisting steel reinforcement and formwork, followed by truck-mounted concrete boom pumps. Noise emissions during this phase are more persistent, characterized by the steady mechanical hum of pump engines and the movement of concrete mix trucks.

- Paving: This sequence includes paving the surrounding areas of the parking structures to provide vehicular access. The work is typically performed using an asphalt paver and drum rollers to achieve proper compaction and surface finish.
- Architectural coating, and mechanical, electrical, and plumbing (MEP): This sequence includes the application and installation of architectural quoting, conduits, lighting, drainage, and electrical systems. Noise sources are localized and typically lower in intensity, consisting of manlifts, forklifts, and pneumatic hand tools.

6.2.2 Construction Noise Impact Assessment

Based on construction sequence and highest noise-generating equipment described in Section 6.2.1, construction noise levels for the adjacent sensitive receptors during five construction phases are calculated based on the following formulas and summarized in Table 6.2.

Hour construction noise level, L_{eq} , was calculated according to the methodology recommended by the US Department of Transportation, Federal Highway Administration Special Report Highway Construction Noise. Maximum equipment noise levels, L_{max} , and acoustical usage factors were based on the values in Table 1 of FHWA Roadway Construction Noise Model User's Guide (FHWA, 2006) and KES's similar project experience in the past.

First, the construction one-hour L_{eq} was calculated at each noise receptor for each item of noise-generating equipment using the following equation:

$$L_{eq, equipment} = L_{max} - 20 \log_{10} (D/50) + 10 \log_{10} (UF/100)$$

Where:

L_{max} = Maximum equipment noise level at 50 feet, in dBA.

D = Distance from the equipment to property-line location, in feet.

UF= "Usage factor," expressed as the percent of time that the equipment is operated at full power while onsite. This factor was estimated based on past operational experience by the acoustical engineer.

Then, the individual contributions of each piece of equipment have been combined to obtain the overall construction one-hour L_{eq} at each monitoring location as follows:

$$L_{eq, total} = 10 \log_{10} \sum_{i=1}^n 10^{L_{eq, equipment, i} / 10}$$

Construction activities would result in a temporary and limited increase in vehicle traffic on local roadways serving the Port. During peak construction periods, up to 156 workers may be present on-site, generating up to approximately 156 passenger vehicle trips during the morning and afternoon peak hours. Average daily construction staffing is expected to be substantially lower, at approximately 47 workers per day.

Construction-related truck activity would be intermittent and occur over an approximate 24-month construction period. Material delivery trucks are anticipated to generate approximately 61 trips per day, and haul truck operations are expected to generate approximately 139 trips per day.

When compared to existing peak-hour traffic volumes on Port Hueneme Road, these construction-related trips represent a relatively small increment in overall roadway activity. In addition, even under a conservative scenario in which traffic volumes are doubled, the corresponding increase in roadway noise would be approximately 3 dBA, which is generally considered the threshold of perceptibility under typical environmental conditions. Because construction-related trips would be dispersed throughout the day rather than concentrated during peak periods, the resulting change in ambient traffic noise levels would be further reduced.

Accordingly, temporary noise increases associated with construction worker trips and construction truck traffic would be less than significant.

Table 6.2 – Construction Noise Levels

Receptor	Equipment	Qty.	Usage Factor% ¹	L _{max} @ 50ft dBA ¹	Closest Distance to Receptor	Individual Equipment L _{eq}	Construction Noise L _{eq}
				dBA	ft	dBA	
Demolition							
R1	Grapple Shear	1	40	87	150	73	76
	Dozer	1	40	82	150	68	
	Excavator	1	40	81	150	67	
	Haul Truck	2	40	76	150	65	
R2	Pickup Truck	1	40	87	350	66	68
	Flatbed Truck	1	40	82	350	61	
	Front End Loader	1	40	81	350	60	
	Gradall (reach forklift)	2	40	76	350	58	
R3	Pickup Truck	1	40	87	350	66	68
	Flatbed Truck	1	40	82	350	61	
	Front End Loader	1	40	81	350	60	
	Gradall (reach forklift)	2	40	76	350	58	
R4	Pickup Truck	1	40	87	1050	57	59
	Flatbed Truck	1	40	82	1050	52	
	Front End Loader	1	40	81	1050	51	
	Gradall (reach forklift)	2	40	76	1050	49	
Grading							
R1	Hoe Ram	1	20	90	110	76	77
	Dozer	1	40	82	110	71	
R2	Hoe Ram	1	20	90	325	67	68
	Dozer	1	40	82	325	62	
R3	Hoe Ram	1	20	90	325	67	68
	Dozer	1	40	82	325	62	
R4	Hoe Ram	1	20	90	1000	57	58
	Dozer	1	40	82	1000	52	
Building Construction, Paving, and Architectural Coating							
Foundation preparation							
R1	Pile Driver	1	20	101	110	87	87
	Crane	1	16	81	110	66	
	Material Handler	1	40	83	110	72	
R2	Excavator	1	20	101	325	78	78
	Crane	1	16	81	325	57	
	Welder	1	40	83	325	63	
R3	Excavator	1	20	101	325	78	78
	Crane	1	16	81	325	57	
	Welder	1	40	83	325	63	
R4	Excavator	1	20	101	1050	68	68
	Crane	1	16	81	1050	47	
	Welder	1	40	83	1050	53	

Table 6.2 – Construction Noise Levels (Cont'd)

Receptor	Equipment	Qty.	Usage Factor% ¹	L _{max} @ 50ft dBA ¹	Closest Distance to Receptor	Individual Equipment L _{eq}	Construction Noise L _{eq}
				dBA	ft	dBA	
Paving							
R1	Hoe Ram	1	50	77	100	68	71
	Roller	1	20	80	100	67	
R2	Hoe Ram	1	50	77	300	58	61
	Roller	1	20	80	300	57	
R3	Hoe Ram	1	50	77	300	58	61
	Roller	1	20	80	300	57	
R4	Hoe Ram	1	50	77	950	48	51
	Roller	1	20	80	950	47	
Structure shell construction							
R1	Crane	1	16	81	100	67	77
	Concrete Pump Truck	1	20	81	100	68	
	Concrete Mixer Truck	3	40	79	100	74	
	Air Compressor	2	40	78	100	71	
R2	Crane	1	16	81	300	57	67
	Concrete Pump Truck	1	20	81	300	58	
	Concrete Mixer Truck	3	40	79	300	64	
	Air Compressor	2	40	78	300	61	
R3	Crane	1	16	81	300	57	67
	Concrete Pump Truck	1	20	81	300	58	
	Concrete Mixer Truck	3	40	79	300	64	
	Air Compressor	2	40	78	300	61	
R4	Crane	1	16	81	950	47	57
	Concrete Pump Truck	1	20	81	950	48	
	Concrete Mixer Truck	3	40	79	950	54	
	Air Compressor	2	40	78	950	51	
Architectural Coating, and Mechanical, Electrical, and Plumbing (MEP)							
R1	Pneumatic Tools	2	20	85	125	73	75
	Air Compressor	2	40	79	125	70	
	Welder/Torch	1	40	74	125	62	
R2	Pneumatic Tools	2	20	85	375	64	66
	Air Compressor	2	40	79	375	61	
	Welder/Torch	1	40	74	375	53	
R3	Pneumatic Tools	2	20	85	375	64	66
	Air Compressor	2	40	79	375	61	
	Welder/Torch	1	40	74	375	53	
R4	Pneumatic Tools	2	20	85	1100	54	56
	Air Compressor	2	40	79	1100	51	
	Welder/Torch	1	40	74	1100	43	

Notes:

1 - Noise levels and usage factors for equipment are based on FHWA Roadway Construction Noise Model Manual and KES's experiences in similar projects.

Construction activities associated with the project would generate temporary increases in ambient noise levels at nearby noise-sensitive receptors. The highest noise levels would occur during foundation preparation (pile driving) of the building construction phase, which is characterized by high-intensity, intermittent, and impulsive noise. Approximately 4,100 piles would be driven down to a depth of about 85 feet below ground surface to reach stable underlying soils.

Based on the analysis presented in Table 6.2, construction noise levels at the nearest receptors are anticipated to substantially exceed existing ambient noise levels (approximately 56–57 dBA L_{eq}) by more than 10 to 20 dBA during peak construction activities.

According to Appendix G of the CEQA Guidelines, a temporary increase in ambient noise levels of 10 dBA or greater is considered "substantial temporary or periodic increase in ambient noise levels in the project vicinity"; therefore, construction activities, particularly pile driving, would result in a potentially significant impact.

Although construction activities would be temporary and intermittent, and would occur primarily during daytime hours consistent with the PHMC, compliance with allowable construction hours does not preclude a finding of significance under CEQA.

Implementation of standard construction noise control measures (e.g., equipment mufflers, temporary barriers, and operational controls) would reduce noise levels; however, due to the intensity of pile driving and proximity to receptors, noise levels may still exceed thresholds for a substantial temporary increase.

Therefore, construction noise impacts would be significant but temporary. With implementation of Mitigation Measure NOI-1 (Construction Noise Control Plan), impacts would be reduced; however, they may remain significant and unavoidable during short-term peak activities such as pile driving.

7. MITIGATION MEASURES

The noise reduction measures provided below are for the purpose of reducing and minimizing project operation and construction noise.

7.1 Operation Noise

Based on the analysis provided in in Section 6.1, no significant noise impacts are anticipated due to the operation of the proposed project.

7.2 Construction Noise

Construction activities associated with the proposed project would result in temporary but significant increases in ambient noise levels, particularly during high-noise phases such as pile driving. These impacts would occur even when construction is conducted within the allowable hours established by the PHMC.

The following mitigation measure is recommended to reduce construction noise impacts to the extent feasible. However, due to the intensity and proximity of certain activities, impacts may remain significant and unavoidable.

NOI-1: **Construction Noise Control Plan.** A Construction Noise Control Plan shall be prepared prior to construction. The Plan shall include, at a minimum, the following components:

Equipment Maintenance and Mufflers. The construction contractor shall ensure that power construction equipment (including combustion or electric engines), fixed or mobile, shall be equipped with noise shielding and muffling devices (consistent with manufacturers' standards) during the entirety of project construction. The combination of muffling devices and noise shielding shall be capable of reducing noise by at least 5 dBA from non-muffled and shielded noise levels. Prior to initiation of construction, the contractor shall demonstrate to the District that equipment is properly muffled, shielded, and maintained. All equipment shall be properly maintained to ensure that no additional noise, due to worn or improperly maintained parts, would be generated.

Noise Control Best Practices. The Construction Noise Control Plan shall depict the location of construction equipment storage and maintenance areas, and document methods to be employed to minimize noise impacts on adjacent noise-sensitive land uses. All stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers. The Plan shall also identify other methods employed to reduce

construction noise, including but not limited to, shutting off idling equipment, maximizing the distance between construction equipment staging areas and occupied residential areas, and the use of electric air compressors and similar power tools.

Community Noticing. Property owners and occupants located within 1,100 feet of the project construction limits shall be sent a notice, at least 15 days prior to commencement of construction, regarding the project construction schedule. A sign, visible to the public, shall also be posted at the project construction site. All notices and signs shall be reviewed and approved by the District prior to mailing or posting and shall indicate the dates and duration of construction activities, as well as providing a contact name and a telephone number where residents can inquire about the construction process and register complaints.

Noise Coordinator. The construction contractor shall provide evidence that a construction staff member is designated as a Noise Disturbance Coordinator and shall be present on-site during construction activities. The Noise Disturbance Coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the Noise Disturbance Coordinator shall notify the District within 24 hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, bad muffler) and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the District. All notices that are sent to residential units immediately surrounding the construction site and all signs posted at the construction site shall include the contact name and the telephone number for the Noise Disturbance Coordinator.

8. REFERENCES

- Caltrans, 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol.
- CFR §571, 2026. 49 CFR §571.141, Standard No. 141; Minimum Sound Requirements for Hybrid and Electric Vehicles.
- City of Port Hueneme, 2022. Port Hueneme General Plan, 7 Noise.
- City of Port Hueneme, 2025. Code of Ordinance Article III – Public Health and Safety, Chapter 5 – Noise Control.
- EPA, 1981. Noise Effects Handbooks – A Desk Reference to Health and Welfare Effects of Noise.
- FHWA, 2006. FHWA Roadway Construction Noise Model User’s Guide.
- MBI, 2026. P1 Hueneme Parking Structure Project – Vehicle Miles Traveled Assessment.

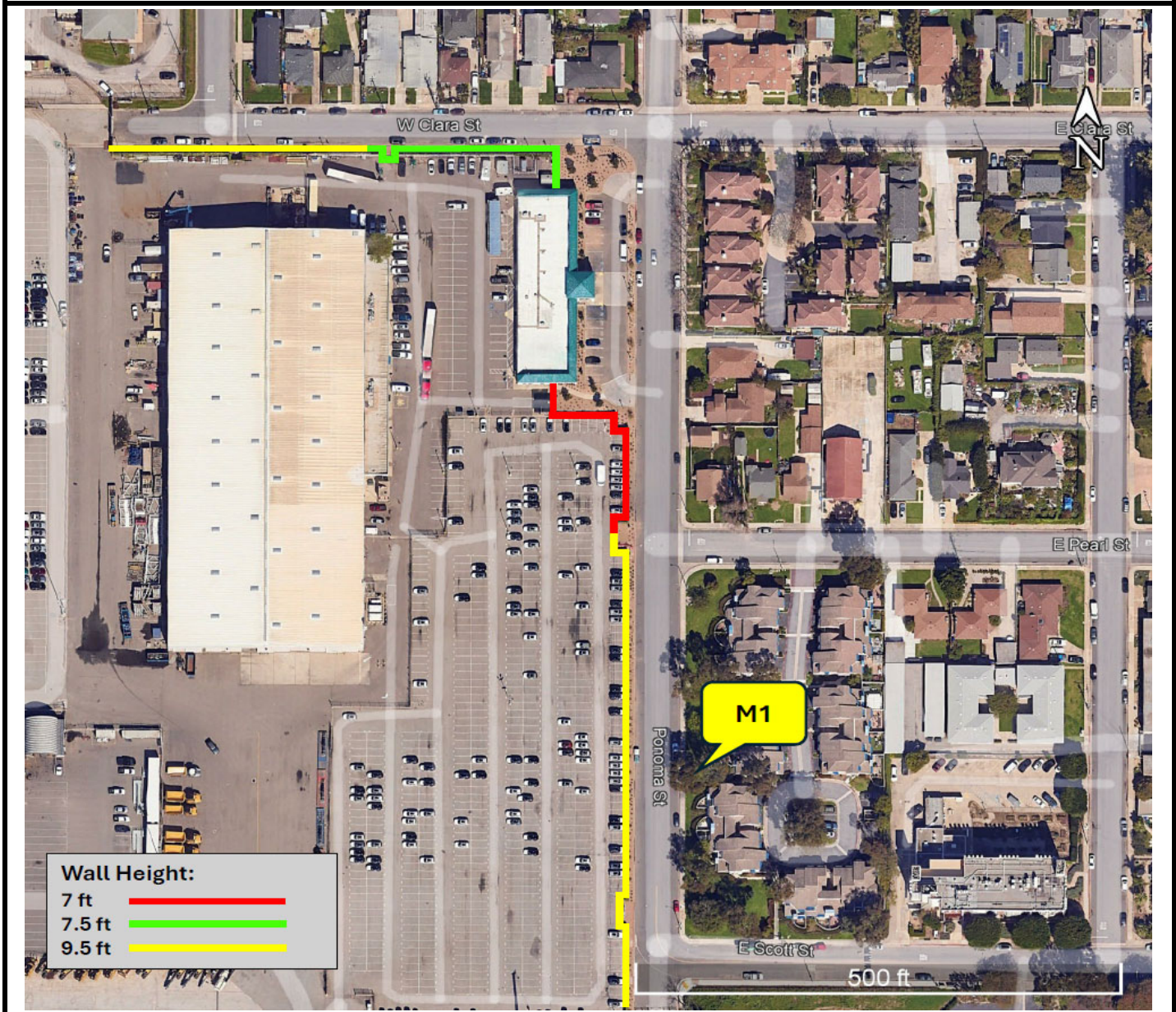
Appendix A
Baseline Noise Monitoring Form & Data Analysis



Noise Measurement Form Port of Hueneme Project



Engineer / Technician: Rubin Cruz	Company: Kroner Environmental Services	Date: 3/9/2026
Monitoring Location Addresses: Port Harbor Homes (102 - 138 E Pearl St.)		Location #: M1
Land Use: Residential		
Meter Setting: A-Weighted Sound Level (Slow), 15-Minute (Leq) Intervals		
Sound Level Meter Model: Sigicom S50	Serial #: 7905	
Duration of Monitoring Measurement: 3:00 PM on March 9, 2026, through 12:00 PM on March 17, 2026		



M1 - Hourly Noise Monitoring Data Summary Table

Time	Mon 03/09/26	Tues 03/10/26	Wed 03/11/26	Thur 03/12/26	Fri 03/13/26	Sat 03/14/26	Sun 03/15/26	Mon 03/16/26	Tue 03/17/26	Weekday Average	Weekend Average	Weekly Average
	Hourly Noise Level Leq, dBA											
0:00		41.0	41.6	47.1	49.5	47.7	46.4	44.6	46.3	45.0	47.0	45.5
1:00		39.3	39.8	46.2	47.3	44.5	41.1	43.0	47.2	43.8	42.8	43.5
2:00		40.1	41.5	46.8	46.4	46.0	43.8	44.0	47.5	44.4	44.9	44.5
3:00		43.3	43.7	48.1	46.9	45.2	38.3	47.0	44.6	45.6	41.7	44.6
4:00		45.2	44.0	51.6	46.8	47.5	39.2	45.2	44.2	46.2	43.3	45.5
5:00		49.2	48.6	49.5	50.4	49.5	42.1	48.9	49.3	49.3	45.8	48.4
6:00		51.1	52.9	54.2	53.1	52.7	49.3	50.8	51.9	52.3	51.0	52.0
7:00		57.4	56.2	59.5	55.5	55.4	51.0	54.2	57.3	56.7	53.2	55.8
8:00		62.8	56.4	58.3	54.9	59.8	51.6	56.7	69.4	59.7	55.7	58.7
9:00		64.1	54.0	55.8	53.9	66.4	50.2	54.7	69.0	58.6	58.3	58.5
10:00		55.4	53.6	61.7	58.4	66.7	52.1	63.3	61.0	58.9	59.4	59.0
11:00		57.0	55.2	59.0	55.7	57.1	53.8	56.6	61.9	57.6	55.4	57.0
12:00		54.6	57.8	58.8	57.6	55.0	53.1	56.5		57.1	54.0	56.2
13:00		54.1	56.2	55.0	58.0	55.6	52.8	64.0		57.4	54.2	56.5
14:00		55.3	53.6	56.1	55.7	59.2	53.2	57.9		55.7	56.2	55.8
15:00	56.3	55.6	57.6	60.5	53.8	58.9	54.2	57.0		56.8	56.6	56.7
16:00	59.4	56.2	56.2	55.8	53.3	55.9	54.1	55.2		56.0	55.0	55.8
17:00	54.9	55.6	64.6	55.4	54.4	61.2	58.7	57.7		57.1	59.9	57.8
18:00	53.0	58.4	53.8	56.4	66.5	61.0	65.5	55.5		57.3	63.3	58.8
19:00	51.8	52.5	56.3	54.7	54.0	56.0	51.9	55.5		54.1	54.0	54.1
20:00	51.5	49.9	51.8	54.1	53.5	57.3	52.0	50.8		51.9	54.6	52.6
21:00	47.4	50.0	60.2	51.5	53.1	49.6	48.5	56.7		53.2	49.0	52.1
22:00	44.1	45.2	47.5	51.7	51.1	48.2	45.1	46.3		47.7	46.7	47.4
23:00	44.3	40.3	44.5	58.3	46.7	47.7	45.8	48.1		47.0	46.7	47.0
Average Daytime										57.4	56.8	57.2
Average Evening Time										53.1	52.5	52.9
Average Nighttime										46.8	45.6	46.5
CNEL										57.7	57.4	57.4



Noise Measurement Form Port of Hueneme Project



Engineer / Technician: Rubin Cruz	Company: Kroner Environmental Services	Date: 3/9/2026
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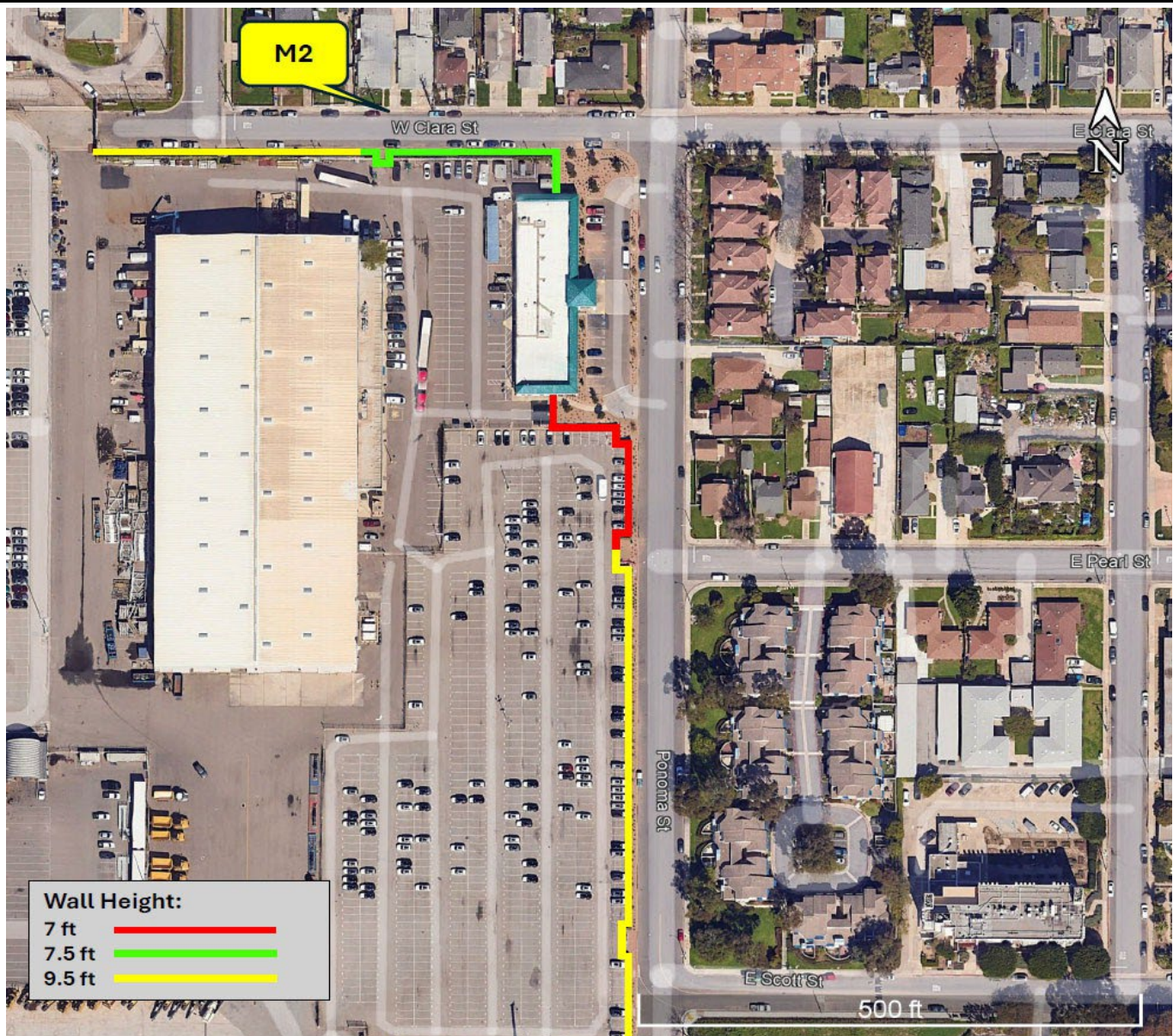
Monitoring Location Addresses: 147 W Clara St.	Location #: M2
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Land Use:
Residential

Meter Setting:
A-Weighted Sound Level (Slow), 15-Minute (Leq) Intervals

Sound Level Meter Model: Sigicom S50	Serial #: 12544
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Duration of Monitoring Measurement:
3:00 PM on March 9, 2026, through 12:00 PM on March 17, 2026



M2 - Hourly Noise Monitoring Data Summary Table

Time	Mon 03/09/26	Tues 03/10/26	Wed 03/11/26	Thur 03/12/26	Fri 03/13/26	Sat 03/14/26	Sun 03/15/26	Mon 03/16/26	Tue 03/17/26	Weekday Average	Weekend Average	Weekly Average
	Hourly Noise Level Leq, dBA											
0:00		43.6	46.3	46.6	48.4	51.9	46.8	45.5	47.9	46.4	49.3	47.1
1:00		42.3	43.7	45.8	53.2	49.7	43.0	43.6	47.9	46.1	46.3	46.1
2:00		41.5	47.6	49.0	48.0	46.3	45.6	43.8	48.3	46.4	45.9	46.3
3:00		43.3	48.6	47.9	47.3	46.3	42.5	44.8	47.8	46.6	44.4	46.1
4:00		44.2	48.5	50.2	49.1	46.9	44.3	45.0	47.3	47.4	45.6	46.9
5:00		46.9	50.4	50.2	49.7	49.7	45.1	51.9	54.4	50.6	47.4	49.8
6:00		54.4	54.7	54.8	53.8	51.3	45.3	51.3	53.5	53.8	48.3	52.4
7:00		55.2	56.0	55.5	56.0	54.0	45.6	54.3	56.1	55.5	49.8	54.1
8:00		54.8	62.6	59.5	55.9	53.0	47.1	60.9	55.4	58.2	50.0	56.2
9:00		55.4	59.2	54.7	52.6	71.0	50.8	54.8	55.9	55.4	60.9	56.8
10:00		51.1	66.7	63.0	60.7	55.6	54.2	55.2	53.4	58.4	54.9	57.5
11:00		54.8	53.8	56.7	55.8	50.9	50.3	52.6	56.9	55.1	50.6	54.0
12:00		49.7	53.9	54.8	55.5	51.0	51.3	53.6		53.5	51.2	52.8
13:00		52.0	53.5	54.5	55.7	55.0	53.1	54.4		54.0	54.1	54.0
14:00		57.6	59.1	55.0	55.0	51.5	61.6	59.0		57.1	56.5	57.0
15:00	54.8	61.6	54.9	59.9	54.8	57.6	58.1	55.9		57.0	57.8	57.2
16:00	60.9	55.5	58.7	59.8	55.8	49.6	51.5	63.3		59.0	50.6	56.9
17:00	59.0	65.5	64.6	53.5	58.8	53.5	60.5	62.8		60.7	57.0	59.8
18:00	64.2	55.1	53.3	56.4	53.9	51.0	53.1	58.0		56.8	52.1	55.6
19:00	56.0	54.2	54.1	54.6	60.9	54.6	50.4	66.4		57.7	52.5	56.4
20:00	49.5	55.2	49.8	58.1	61.8	57.5	50.2	51.0		54.2	53.9	54.1
21:00	51.6	48.1	50.1	55.3	59.1	52.9	50.2	50.5		52.4	51.6	52.2
22:00	47.1	45.4	52.9	52.7	51.4	53.4	53.8	49.1		49.8	53.6	50.7
23:00	44.7	43.5	47.4	48.5	50.2	49.0	57.6	49.0		47.2	53.3	48.7
Average Daytime										56.7	53.8	56.0
Average Evening Time										54.8	52.6	54.3
Average Nighttime										48.2	48.3	48.2
CNEL										58.5	57.6	57.9

Port Hueneme

Run info

Baseline

Project info

Project title: Port Hueneme
Project No.:
Project engineer:
Customer:

Description:

Run description

Calculation type: Single Point Sound
Title: Baseline
Calculation group
Run file: RunFile.runx
Result number: 2
Local calculation (ThreadCount=22)
Calculation start: 4/22/2026 11:33:22 AM
Calculation end: 4/22/2026 11:33:23 AM
Calculation time: 00:00:759 [m:s:ms]
No. of points: 4
No. of calculated points: 4
Kernel version: SoundPLANnoise 9.0 (1/16/2024) - 64 bit

Run parameters

Reflection order: 3
Maximum reflection distance to receiver 200 m
Maximum reflection distance to source 50 m
Search radius 5000 m
Weighting: dB(A)
Allowed tolerance (per individual source): 0.100 dB
Create ground effect areas from road surfaces: Yes
Treat roads as terrain following: No

Standards:

Industry: ISO 9613-2: 1996
Air absorption: ISO 9613-1
regular ground effect (chapter 7.3.1), for sources without a spectrum automatically alternative ground effect
Limitation of screening loss:
single/multiple 20.0 dB /25.0 dB
Side diffraction: ISO/TR 17534-3:2015 compliant: no side diffraction if terrain blocks line of sight
Use Eqn (Abar=Dz-Max(Agr,0)) instead of Eqn (12) (Abar=Dz-Agr) for insertion loss
Environment:
Air pressure 1013.3 mbar
rel. humidity 70.0 %
Temperature 10.0 °C
Meteo. corr. C0(7-22h)[dB]=0.0; C0(22-7h)[dB]=0.0;
Ignore Cmet for Lmax industry calculation: No
Parameter for screening: C2=20.0

Kroner Environmental Services 10801 National Blvd #415 Los Angeles, CA
90064

Port Hueneme

Run info

Baseline

Dissection parameters:

Distance to diameter factor	8
Minimal distance	1 m
Max. difference ground effect + diffraction	1.0 dB
Max. number of iterations	4

Attenuation

Foliage:	ISO 9613-2
Built-up area:	ISO 9613-2
Industrial site:	ISO 9613-2

Assessment: Day Night Level LDN
Reflection of "own" facade is suppressed

Geometry data

Port Hueneme.sit	4/12/2026 10:56:20 AM	
- contains:		
Absorption Area.geo	4/8/2026 8:11:54 AM	
Building.geo	4/8/2026 9:45:56 AM	
Calculation Area.geo	4/6/2026 1:54:12 PM	
Geo-File1.geo	4/3/2026 3:35:00 PM	
Imported elevation points1.geo		4/3/2026 3:18:04 PM
Noise Source.geo	4/12/2026 10:35:52 AM	
Residential.geo	4/12/2026 10:56:20 AM	
Walls.geo	4/6/2026 2:32:30 PM	
RDGM0001.dgm	4/7/2026 5:32:54 PM	

Port Hueneme Assessed receiver levels Baseline

2

Receiver	Usage	Leq,d dB(A)	Leq,d,diff dB	
R1/M2	SCR	52.2		
R2	SCR	52.4		
R3/M1	SCR	54.6		
R4	SCR	52.9		

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Appendix B

Instrumentation Certification

CALIBRATION DOCUMENT

Document No:	Print Date:	Location of Calibration:	Page No:
Cal 133544	1/20/2026	Fort Collins, CO, USA	1 / 1

Customer: Kroner Environmental Services, Inc

Device under Test: INFRA S50 Sound Level Meter
SN: **7905**
Software Version: 1.8.1

Date of Calibration: 1/20/2026

Ambient Conditions: 23° C ± 2° C (73.4° F ± 3.6° F)

Method of Measurement: Absolute gain at 94 dBA / 1000 Hz using acoustic calibrator.
Rel. gain between standards and freq. weighting using electrical signals.

Equipment: Acoustic Calibrator: Svantek SV30A #24852
Signal Generator: Keysight 33521B #MY62003500

Traceability: Traceable to national and international standards.

Result of Measurement: Results are within specification limits.

Recommended Interval of Calibration: 12 months.

Calibration performed by: Brett Sharp



Signature

2026-01-20

Date

Brett Sharp

Name

CALIBRATION DOCUMENT

Document No:	Print Date:	Location of Calibration:	Page No:
Cal 134843	3/4/2026	Fort Collins, CO, USA	1 / 1

Customer: Kroner Environmental Services, Inc

Device under Test: INFRA S50 Sound Level Meter
SN: **12544**
Software Version: 1.8.1

Date of Calibration: 3/4/2026

Ambient Conditions: 23° C ± 2° C (73.4° F ± 3.6° F)

Method of Measurement: Absolute gain at 94 dBA / 1000 Hz using acoustic calibrator.
Rel. gain between standards and freq. weighting using electrical signals.

Equipment: Acoustic Calibrator: Svantek SV30A #24852
Signal Generator: Keysight 33521B #MY62003500

Traceability: Traceable to national and international standards.

Result of Measurement: Results are within specification limits.

Recommended Interval of Calibration: 12 months.

Calibration performed by: Brett Sharp



Signature

2026-03-04

Date

Brett Sharp

Name