

3.8.1 Introduction

This section identifies and evaluates potential noise impacts related to the Proposed Project. Noise modeling was not performed for the Proposed Project or either of its alternatives. The existing setting and impacts for the Proposed Project are qualitatively described and are consistent with the operation of heavy equipment at the nearby Gordon Sand Company. Where appropriate, mitigation measures are identified.

The information in this section is based on the 1982 Final Environmental Impact Report (EIR), associated studies, information provided by the Dunes Center and the City of Santa Maria, and regional information available in previous environmental impact reports prepared by the County.

3.8.1.1 Fundamentals of Noise

Noise may be defined as unwanted sound. It is usually objectionable because it is disturbing or annoying. The objectionable nature of noise can be caused by its *pitch* or its *loudness*. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (*frequency*) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is the amplitude of sound waves combined with the reception characteristics of the ear. Commonly used technical acoustical terms are defined in Table 3.8-1.

Decibels and Frequency

In addition to the concepts of pitch and loudness, several noise measurement scales are used to describe noise. The decibel (*dB*) is a unit of measurement that indicates the relative amplitude of a sound. Zero on the decibel scale is based on the lowest sound pressure that a healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 dB represents a tenfold increase in acoustic energy, while 20 dB is 100 times more intense, 30 dB is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its level. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness over a wide range of amplitudes. Because decibels are logarithmic units, sound pressure levels are not added arithmetically. When two sounds of equal sound pressure level are added, the result is a sound pressure level that is 3 dB higher. For example, if the sound level is 80 dB when one generator is operating, then it would be 83 dB when two generators are operating at the same distance from the observer. Doubling the amount of energy would result in a 3 dB increase to the sound level. Noise levels do not change much when a quieter noise source is added to relatively louder ambient noise levels. For example, if a 60 dB noise source is added to 70 dB ambient noise levels, the resulting noise level is equal to 70.4 dB at the location of the new noise source.

Frequency relates to the number of pressure oscillations per second, or Hertz (*Hz*). The range of sound frequencies that can be heard by healthy human ears is from about 20 Hz at the low-frequency end to 20,000 Hz (20 kilohertz [kHz]) at the high-frequency end.

Table 3.8-1. Definitions of Acoustical Terms

Term	Definition
Decibel (dB)	A unit describing the amplitude of sound equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micropascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micropascals (or micronewtons per square meter), where 1 pascal is the pressure resulting from a force of 1 newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micropascals in air). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency (Hertz [Hz])	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 and 20,000 Hz. Infrasonic sounds are below 20 Hz, and ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level (dBA)	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low- and very high-frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level (L_{eq})	The average A-weighted noise level during the measurement period. The hourly L_{eq} used for this report is denoted as dBA $L_{eq}[h]$.
Community Noise Equivalent Level (CNEL)	The average A-weighted noise level during a 24-hour day obtained after the addition of 5 dB to sound levels in the evening from 7 p.m. to 10 p.m. and after the addition of 10 dB to sound levels in the night between 10 p.m. and 7 a.m.
Day/Night Noise Level (L_{dn})	The average A-weighted noise level during a 24-hour day obtained after the addition of 10 dB to levels measured in the night between 10 p.m. and 7 a.m.
Minimum noise level (L_{min})	The minimum noise level measured during the measurement period
Maximum sound level (L_{max})	The maximum noise level measured during the measurement period.
$L_1, L_{10}, L_{50}, L_{90}$	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	Noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence, and tonal or informational content as well as the prevailing ambient noise level.

There are several methods for characterizing sound. The most common is the *dBA*. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Studies have shown that the *dBA* is closely correlated with annoyance to traffic noise. Other frequency weighting networks, such as *C-weighting*, or *dB(C)*, have been devised to describe noise levels for specific types of noise (e.g., explosives). Table 3.8-2 shows typical A-weighted noise levels that occur in human environments.

Table 3.8-2. Typical Noise Levels in the Environment

Noise Level dBA	Extremes	Home Appliances	Speech at 3 Feet	Motor Vehicles at 50 Feet	General Type of Community Environment
120	Jet aircraft at 500 feet				
110					
100		Chain saw			
90		Power lawnmower		Diesel truck (not muffled)	
80		Shop tools	Shout	Diesel truck (muffled)	
70		Blender	Loud voice	Automobile at 70 mph	Major metropolis
60		Dishwasher	Normal voice	Automobile at 40 mph	Urban (daytime)
50		Air-conditioner	Normal voice (back to listener)	Automobile at 20 mph	Suburban (daytime)
40		Refrigerator			Rural (daytime)
30					
20					
10	Threshold of hearing				

Source: Miller & Hanson, Inc. 2003.

3.8.1.2 Noise Descriptors

Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations is utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called L_{eq} . A common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration. The ambient noise measurements reported in Section 3.8.2.2 are averaged over 10 minutes (L_{eq} 10-min). The scientific instrument used to measure noise is the sound level meter, which can accurately measure environmental noise levels to within approximately plus or minus 1 dBA. Two metrics are commonly used to describe the 24-hour average, L_{dn} and Community Noise Equivalent Level (CNEL). Both include penalties for noise during the nighttime hours (10 p.m. to 7 a.m.). CNEL also penalizes noise during the evening hours (7 p.m. to 10 p.m.). CNEL and L_{dn} , which are normally within 1 dBA of each other, are used interchangeably in this section.

3.8.1.3 Human Response to Noise

Noise-sensitive receptors are generally defined as locations where people reside or where the presence of unwanted sound may adversely affect the use of the land. Noise-sensitive receptors typically include residences, hospitals, schools, guest lodging, libraries, and certain types of passive recreational uses. Sensitive land uses in the Project Site include:

- Existing residences.
- Existing recreational land uses.
- Planned recreational land uses.

Studies have shown that under controlled conditions in an acoustics laboratory, a healthy human ear is able to discern changes in sound levels of 1 dBA. In the normal environment, changes in noise level of 3 dBA are considered just noticeable to most people. A change of 5 dBA is readily perceptible, and a change of 10 dBA is perceived as being twice as loud.

Noise and Health

A number of studies have linked increases in noise with health effects, including hearing impairment, sleep disturbance, cardiovascular effects, psychophysiological effects, and potential impacts on fetal development (Babisch 2005). Potential health effects appear to be caused by both short- and long-term exposure to very loud noises and long-term exposure to lower levels of sound. Acute sounds (i.e., L_{AF}^1 greater than 120 dB) can cause mechanical damage to hair cells of the cochlea (the auditory portion of the inner ear) and hearing impairment (Babisch 2005). An L_{AF} greater than 120 dB is equivalent to a rock concert or an airplane flying overhead at 984 feet.

The World Health Organization and the U.S. Environmental Protection Agency (EPA) consider an L_{eq} equal to 70 dBA to be a safe daily average noise level for the ear. However, even this “ear-safe” level can cause disturbance to sleep and concentration and may be linked to chronic health impacts such as hypertension and heart disease (Babisch 2006).

A number of studies have looked at the potential health effects of chronic lower noise levels, such as traffic, especially as these noise levels affect children. In a study of school children in Germany, blood pressure was significantly higher in a group of students exposed to road traffic noise from high-traffic transit routes (Babisch 2006). A study by Kwanda (2004) showed that exposure to airplane noise was found to be associated with decreased fetal body weight in pregnant women.

Noise Annoyance

People’s response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to stress and annoyance. When community noise interferes with human activities or contributes to stress, public annoyance with the noise source increases. Annoyance may occur at noise levels well below levels known to cause direct physiological harm.

Unwanted noise interferes with human activities by distracting attention and by making activities more difficult to perform, especially when concentration is needed. Interference from noise can even make some activities (such as communication or sleep) virtually impossible. However, except in the

¹ L_{AF} = sound level with “A” frequency weighting and fast-time weighting.

case of interference with verbal communication, the degree of interference is difficult to quantify or to relate to the level of noise exposure (EPA 1979).

The degree of interference and annoyance depends on noise volume, duration and frequency of occurrence, time of year, time of day or night, accustomed ambient noise levels, previous experiences of intrusive noise, attitude toward the noise source, and noise characteristics (EPA 1979). Noises that can be particularly annoying include: pure tones (e.g., truck back-up beepers), low-frequency noise (e.g., rumbling of heavy equipment), and impulsive noise (e.g., helicopters, pile drivers).

3.8.1.4 Sound Propagation

When sound propagates over a distance, it changes in both level and frequency content. The manner in which noise is reduced with distance depends on the factors discussed below.

Geometric spreading: In the absence of obstructions, sound from a single source (i.e., a “point” source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. Highway noise is not a single stationary point source of sound. The movement of vehicles on a highway makes the source of the sound appear to emanate from a line (i.e., a “line” source) rather than from a point. This results in cylindrical spreading rather than the spherical spreading resulting from a point source. The drop-off in sound level from a line source is 3 dBA per doubling of distance.

Ground absorption: Usually the noise path between the source and the observer is very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation caused by geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is done for simplification only; for distances of less than 200 feet, prediction results based on this scheme are sufficiently accurate. For acoustically “hard” sites (i.e., sites with a reflective surface, such as a parking area or a smooth body of water, between the source and the receptor), no excess ground attenuation is assumed. For acoustically absorptive or “soft” sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dBA per doubling of distance is normally assumed. When added to the geometric spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dBA per doubling of distance for a line source and 7.5 dBA per doubling of distance for a point source.

Atmospheric effects: Research by Caltrans and others has shown that atmospheric conditions can have a major effect on noise levels. Wind has been shown to be the single most important meteorological factor within approximately 500 feet, whereas vertical air temperature gradients are more important over longer distances. Other factors, such as air temperature, humidity, and turbulence, also have major effects. Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lower noise levels. Increased sound levels can also occur because of temperature inversion conditions (i.e., increasing temperature with elevation).

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 this shielding depends on the size of the object, proximity to the noise source and receptor, surface weight, solidity, and the frequency content of the noise source. Natural terrain features (such as hills and dense woods) and human-made features (such as 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. A higher barrier may provide as much as 20 dB of noise reduction.

3.8.2 Environmental Setting

This section discusses existing noise environment at the Rancho Guadalupe Dunes County Park. Information in this section is based on a reconnaissance survey conducted by AMEC with County personnel in 2014.

3.8.2.1 Existing Noise Environment

The Project Site is located approximately 3 miles west of the City of Guadalupe in the Rancho Guadalupe Dunes County Park and is designated as Open Lands and zoned Resource Management, 320-acre minimum parcel size (RES-320). Noise experienced in this rural setting is characteristic of small towns and quiet suburban neighborhoods that typically experience noise between 46 and 52 CNEL² (EPA 1974).



Rancho Guadalupe Dunes County Park generally experiences low noise levels. However, the Gordon Sand Company, which consists of a sand screening and processing facility, access road, and sand collection pits, generates minor industrial noise associated with its sand mining operation. The Gordon Sand Company sand screening and processing facility is near the Upper Area and haul trucks periodically drive along the access road, approximately 240 feet west of Site D. The Gordon Sand Company access road is largely a compact sandy road that branches off from the Gordon Sand Company operation area and continues southwest through Rancho Guadalupe Dunes County Park land. Related equipment operation results in temporary distinct noise events that exceed ambient noise levels.

² The referenced level was expressed as Day-Night Average Noise Level, an older metric that is generally similar to CNEL. Here it is expressed as CNEL for consistency.

3.8.2.2 Sensitive Receptors

Noise- and vibration-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound or vibration could adversely affect the current or planned land uses. Human response to noise varies widely depending on the type of noise, time of day, and sensitivity of the receptor. Certain land uses are particularly sensitive to noise, including schools, hospitals, rest homes, long-term medical and mental care facilities, and parks and recreation areas. Residential areas are also considered noise sensitive, especially during the nighttime hours.

The definition of “sensitive uses” found in the *County of Santa Barbara Environmental Thresholds and Guidelines Manual* includes residences, transient lodging, hospitals, and public or private educational facilities. The nearest sensitive receptors to the Project Site are residents within the City of Guadalupe, approximately 3 miles to the east of the Project Site; however, these areas are sufficiently distant to not experience noise generated at the Project Site. Although there are no residences, schools, hospitals, or places of worship that experience noise generated at the Project Site, wildlife (e.g., sensitive avian species) and general public that may access the site for recreational purposes would be considered sensitive receptors that could be impacted.

3.8.3 Regulatory Setting

3.8.3.1 Local

The *County of Santa Barbara Environmental Thresholds and Guidelines Manual*, Chapter 12, Noise Thresholds (October 2008) and the *Santa Barbara County Comprehensive Plan* (May 2009) include the following guidelines related to noise:

- a. In the planning of land use, a 65 dBA day-night average sound level is regarded as the maximum exterior noise exposure compatible with noise-sensitive uses unless noise mitigation features are included in project designs.
- b. Noise-sensitive land uses are considered to include:
 - i. Residential, including single- and multi-family dwellings, mobile home parks, dormitories, and similar uses.
 - ii. Transient lodging, including hotels, motels, and similar uses.
 - iii. Hospitals, nursing homes, convalescent hospitals, and other facilities for long-term medical care.
 - iv. Public or private educational facilities, libraries, churches, and places of public assembly.
- c. Noise-sensitive uses proposed in areas where the day-night average sound level is 65 dBA or more should be designed so that interior noise levels attributable to exterior sources do not exceed 45 dBA L_{dn} when doors and windows are closed. An analysis of the noise insulation effectiveness of proposed construction should be required, showing that the building design and construction specifications are adequate to meet the prescribed interior noise standard.
- d. Residential uses proposed in areas where the day-night average sound level is 65 dBA or more should be designed so that noise levels in exterior living spaces will be less than 65 dBA L_{dn} . An analysis of Proposed Projects should be required, indicating the feasibility of noise barriers, site design, building orientation, etc., to meet the prescribed exterior noise standard.

- e. The Planning and Development Department, including the Building and Safety Division, and the Public Health Department's Environmental Health Services Division have administrative procedures for determining project compliance with the State Noise Insulation Standards related to interior noise levels.

3.8.4 Environmental Impact Analysis

This section discusses the potential noise impacts associated with the Proposed Project.

3.8.4.1 Thresholds of Significance

CEQA Guidelines

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a project would normally have a significant impact on the environment if it would:

- Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.
- Expose persons to or generate excessive ground-borne vibration or ground-borne noise levels.
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- Be located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels.
- Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels.

County of Santa Barbara Environmental Thresholds and Guidelines Manual

The CEQA Guidelines (Appendix G) criteria are expanded and made more specific in the County's noise thresholds contained in the *County of Santa Barbara Environmental Thresholds and Guidance Manual* (County of Santa Barbara 2008). The County's thresholds are intended to be used with flexibility because each project must be viewed in its specific circumstances. The following noise thresholds will be applied in the impact analysis for determining significance of noise impacts for the Proposed Project:

- a. A proposed development that would generate noise levels in excess of 65 dBA CNEL and could affect sensitive receptors would generally be presumed to have a significant impact.³
- b. Outdoor living areas of noise sensitive uses that are subject to noise levels in excess of 65 dBA CNEL would generally be presumed to be significantly affected by ambient noise. A significant

³ Threshold pertains to long-term operational noise

impact would also generally occur where interior noise levels cannot be reduced to 45 dBA CNEL or less.⁴

- c. A project will generally have a significant effect on the environment if it will increase substantially the ambient noise levels for noise-sensitive receptors adjoining areas. Per item a., this may generally be presumed when ambient noise levels affecting sensitive receptors are increased to 65 dBA CNEL or more. However, a significant effect may also occur when ambient noise levels affecting sensitive receptors increase substantially but remain less than 65 dBA CNEL, as determined on a case-by-case level.
- d. Noise from grading and construction activity proposed within 1,600 feet of sensitive receptors, including schools, residential development, commercial lodging facilities, hospitals or care facilities, would generally result in a potentially significant impact. According to EPA guidelines, average construction noise is 95 dBA⁵ at a 50-foot distance from the source. A 6 dB drop occurs with a doubling of the distance from the source. Therefore, locations within 1,600 feet of the construction site would be affected by noise levels over 65 dBA⁵. To mitigate this impact, construction within 1,600 feet of sensitive receptors shall be limited to weekdays between the hours of 8 a.m. to 5 p.m. only. Noise attenuation barriers and muffling of grading equipment may also be required. Construction equipment generating noise levels above 95 dBA may require additional mitigation.

3.8.4.2 Methodology

Long-term operational noise within Rancho Guadalupe Dunes County Park would not change under the Proposed Project or any of its alternatives. The Gordon Sand Company would continue to operate on their lease and operational conditions would be similar to those described in Section 3.8.2.1, *Existing Noise Environment*.

The noise analysis for short-term construction impacts is based on noise estimates for construction equipment, which are provided in the Roadway Construction Noise Model User's Guide (Federal Highway Administration 2006). The discussion below uses these estimates to qualitatively describe potential noise impacts to wildlife and the general public accessing the vicinity for recreational opportunities.

3.8.4.3 Project Impacts

Implementation of the Proposed Project would not result in any change to the baseline noise conditions described in Section 3.8.2.1, *Existing Noise Environment*. Since no potentially significant or unavoidable adverse impacts to noise would result from leaving the gravel in place, no mitigation would be required.

3.8.4.4 Impacts of the No Project Alternative

This section discusses the impacts to noise from the No Project Alternative. Table 3.8-4 below provides a summary of the noise impacts resulting from the Proposed Project and alternatives.

⁴ Interior noise is not separately evaluated, as exceedance of the exterior noise threshold at sensitive receptors is assumed to result in exceedance of the interior threshold.

⁵ These noise levels represent L_{eq} measurements, not CNEL day-night averages.

Impact ALT1-NOI-1. Short-term increase in construction noise from gravel removal.

Removal of gravel under the No Project Alternative would involve sifting the sand to a depth that is clear of the imported gravel. Equipment for the gravel removal would include a flatbed work truck with a small attached hydro-crane lifting unit and a service truck with a 4 to 6 person work crew. Front end loaders with 4.5-cy buckets would be used to pick-up sand and gravel material and put it into a screen/sifter unit. Work would progress from the Site D and back along the access road toward the Gordon Sand Company operations area. The screen/sift unit would initially be set up near Site D. As work is completed in Site D, the sifter unit would be moved back along the access road to accommodate the loaders in minimizing hauling distances. Gravel would be placed in 20-cy rollaway bins that, when full, would be placed on one of two single-trailer trucks for transport to an offsite receiving location.

Table 3.8-3. Maximum Noise Levels Generated by Construction Equipment

Type of Equipment	Acoustical Use Factor (Percentage)	L _{max} at 50 feet (dBA)
Crane	16	81
Dump Truck	40	76
Flat-Bed Truck	40	74
Front-End Loader	40	79
Vibratory Hopper	50	87
Notes: The acoustical use factors are estimates of the fraction of time each piece of construction equipment would operate at full power (i.e., its loudest condition) during a construction operation; The screen/sifter unit that would be used for gravel removal would be assumed to generate noise levels similar to a vibratory hopper. Source: Federal Highway Administration 2006.		

Gravel removal can be best described as a “mining” type operation similar to a small-scale strip-mine facility; the sand and gravel material would be removed in strips and transported to a process plant, run through a screening system, and the clean sand backfilled into the excavated strip. The process would proceed in a continuous cycle as the gravel is removed from the sand, area by area. Based on previously completed screen tests, throughput of the system is estimated at 130 tons per hour and removal would require approximately 5 to 7 months to complete. During this time it is likely that up to three or more pieces of heavy equipment would be used simultaneously resulting in noise levels periodically between 90 and 100 dBA.

The resulting temporary increase in noise from gravel removal activities could adversely affect wildlife and members of the public accessing the site for recreation activities. However, as previously described in Section 3.8.2.1, *Existing Noise Environment*, the Project Site already experiences small-scale heavy equipment operations from the Gordon Sands Company and associated periodic peaking in noise levels. Additionally, existing public use of the Project Site is limited, with the nearest regular public access to the Rancho Guadalupe Dunes County Park occurring to the along the shoreline at the northwest corner of the Project Site, due to better beach access and more recreational opportunities.

As the gravel removal operations would be temporary, the noise environment would return to ambient following the completion of the No Project Alternative. Further, Condition #21 of 82-CP-75(cz) limits noise levels from major activities during the California least tern breeding season, beginning on April 15. The Guadalupe Dunes also provide breeding habitat for the western snowy

plover. The western snowy plover breeding season begins on March 1. Gravel removal activities within Site D and the western portion of the Road Site would be completed by March 1 to minimally impact sensitive bird species. Consequently, noise-related impacts resulting from the No Project Alternative would be less than significant (Class III).

3.8.4.5 Impacts of the Partial Gravel Removal Alternative

This section discusses the impacts to noise from the Partial Gravel Removal Alternative. Table 3.8-4 below provides a summary of the noise impacts resulting from the Proposed Project and alternatives.

Impact ALT2-NOI-1. Short-term increase in construction noise from gravel removal

The operations included in the Partial Gravel Removal Alternative would be similar to those described for the No Project Alternative and would include the use of heavy equipment included in Table 3.8-3. Similarly, noise levels during gravel removal operations would periodically peak between 90 and 100 dBA. However, under the Partial Gravel Removal Alternative, gravel removal operations would conclude after approximately 2 to 3 months, which would reduce the duration of short-term noise impacts.

As described for the No Project Alternative, the temporary increase in noise from gravel removal activities under the Partial Gravel Removal Alternative could adversely affect wildlife and members of the public accessing the site for recreation activities. However, as previously described in Section 3.8.2.1, *Existing Noise Environment*, the Project Site already experiences small-scale heavy equipment operations from the Gordon Sand Company and associated periodic peaking in noise levels. Additionally, existing public use of the Project Site is limited, with the nearest regular public access located in the northwest portion of the Project Site, due to better access and more shoreline recreational opportunities.

As the gravel removal operations would be temporary, the noise environment would return to ambient following the completion of the Partial Gravel Removal Alternative. Further, Condition #21 of 82-CP-75(cz) limits noise levels from major activities during the California least tern breeding season, beginning on April 15 of each year. The Guadalupe Dunes also provide breeding habitat for the western snowy plover. The western snowy plover breeding season begins on March 1. Gravel removal activities within Site D and the western portion of the Road Site would be completed by March 1 to minimally impact sensitive bird species. Consequently, noise-related impacts resulting from the Partial Gravel Removal Alternative would be less than significant (Class III).

Table 3.8-4. Summary of Noise Impacts

Noise Impacts	Mitigation Measure	Residual Significance
Proposed Project		
No Impact	N/A	N/A
No Project Alternative		
Impact ALT1-NOI-1. Short-term increase in construction noise from gravel removal	No Mitigation Required	Less than Significant (Class III)
Partial Gravel Removal Alternative		
Impact ALT2-NOI-1. Short-term increase in construction noise from gravel removal	No Mitigation Required	Less than Significant (Class III)

