

4.5 Noise

The noise analysis provided in this section is summarized from the technical report titled *Noise Impact Analysis for Calxico 111 Mixed Use Project* (Giroux & Associates, September 3, 2008). The noise study is provided in Technical Appendices - Volume II of II, Appendix D1 of this EIR.

4.5.1 Existing Conditions

The following discussion provides background noise information, the regulatory noise framework and ambient noise levels for traffic, construction and geothermal operations.

4.5.1.1 Existing Noise Definitions

Sound is the mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is generally defined as unwanted sound. Sound is characterized by various parameters, which describe the rate of oscillation of sound waves, the distance between successive troughs or crests, the speed of propagation, and the pressure level or energy content of a given sound wave. In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. The unit of sound pressure expressed as a logarithmic ratio to the faintest sound detectable by a keen human ear is called a decibel (dB).

Because sound or noise can vary in intensity by over one million times within the range of human hearing, a logarithmic loudness scale similar to the Richter scale used for earthquake magnitude is used to keep sound intensity numbers at a convenient and manageable level. Since the human ear is not equally sensitive to all sound frequencies within the entire spectrum, noise levels at maximum human sensitivity are factored more heavily into sound descriptions in a process called "A-weighting," written as "dBA." Any further reference to decibels in this report written as "dB" should be understood to be A-weighted values.

Time variations in noise exposure are typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called Leq), or, alternately, as a statistical description of the sound pressure level that is exceeded over some fraction of a given observation period. Finally, because community receptors are much more sensitive to unwanted noise intrusion during the evening and at night, State law requires that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL).

An interior CNEL of 45 dBA is mandated by the State of California Noise Insulation Standards (CCR, Title 24, Part 6, Section T25-28) for multiple family dwellings and hotel and motel rooms. In 1988, the State Building Standards Commission expanded that standard to include all habitable rooms in residential use, including single-family dwelling units. Since normal noise attenuation within residential structures with closed windows is about 20 dB, an exterior noise exposure of 65 dBA CNEL allows the interior standard to be met without any specialized structural attenuation (dual paned windows, etc.). A noise exposure of 65 dBA CNEL is typically the exterior noise-land use compatibility guideline for usable space (yards, patios, spas, etc., for new residential dwellings in California and for transient lodging (motels and hotels). Because commercial

or industrial uses are not occupied on a 24-hour basis, the exterior noise exposure standard for less sensitive land uses generally is less stringent.

4.5.1.2 Noise Regulations

The project site is located within the City of Calexico of Imperial County. Therefore, noise requirements for the City of Calexico are applicable for this project. Table 4.5-1 shows the recommended State of California noise/land use compatibility guidelines that have been adopted by the City of Calexico. Hotels are considered "normally acceptable" with exposures up to 65 dB CNEL and "conditionally acceptable" with exposures up to 70 dB CNEL. Commercial uses are considered "normally acceptable" with exposures of up to 70 dB CNEL, and "conditionally acceptable" with exposures of up to 77 dB CNEL. Conditionally acceptable requires that a detailed noise analysis be performed and that needed noise insulation features be included in the design.

CNEL-based standards apply to noise sources whose noise generation is preempted from local control, such as on-road vehicles, trains, airplanes, etc. Because local jurisdictions cannot regulate the noise generator, they exercise land use planning authority on the receiving property. Uses that are amenable to local control are generally considered "stationary sources." Local jurisdictions typically do regulate the level of noise that one use may impose upon another for those sources not pre-empted from local control.

The City of Calexico has adopted noise standards for "stationary" sources in Section 8.46 of the Municipal Code and are shown in Table 4.5-2 for various zoning uses. If the measurement location is on a boundary between two different zones, the noise level limit applicable to the lower noise zone plus five dB shall apply. Nocturnal hours have a lower permissible noise threshold than daytime hours. For residential uses, allowable noise standards are much lower than for commercial or industrial land uses. In order to allow for short-term transient noises, the ordinance allows some deviation from the average with larger deviations allowed for progressively shorter periods (Table 4.5-3).

The one noise source associated with land use intensification that is exempt from compliance with numerical standards is noise from construction activities. The City of Calexico noise ordinance at Section 8.46.042 restricts construction to the hours of 8 a.m. to 5 p.m. if activity noise disturbs the peace and quiet of any person of normal sensitivity. The Building Department may issue a written early work permit if hot or inclement weather create a need to start earlier than 8 a.m.

4.5.1.3 Existing Exterior Noise Environment

The predominant source of noise that currently affects the project area and vicinity is vehicular traffic. Table 4.5-4 provides the ambient noise levels measured at five locations within the vicinity of the project area. Figure 4.5-1 depicts the location of the five noise measurement locations. Location 1 is at the northwest corner of project site, near the divergence of Jasper Road and Canal (closest location to the Heber Geothermal Plant). Location 2 is at the north side of the project site, south side of Jasper Road, 50 feet to Jasper centerline, east of intersection of north/south dirt road. Location 3 is at the northeast corner of the project site, 50 feet west of Scaroni Road centerline. Location 4 is at the southeast corner of the site, just north of the intersection of Scaroni Road and the east/west dirt road that is at the southern boundary of





TABLE 4.5- 1
Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure							
	Ldn or CNEL, dB							
	50	55	60	65	70	75	80	85
Residential – Low Density Single-Family, Duplex, Mobile Homes	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching
Residential – Multi-Family	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching
Transient Lodging – Motels, Hotels	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching
Schools, Libraries, Churches, Hospitals, Nursing Homes	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching
Auditoriums, Concert Halls, Amphitheaters	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching
Sports Arena, Outdoor Spectator Sports	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching
Playgrounds, Neighborhood Parks	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching
Golf Courses, Riding Stables, Water Recreation, Cemeteries	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching	Diagonal Hatching

TABLE 4.5- 1
 Land Use Compatibility for Community Noise Environments
 (cont'd.)

Land Use Category	Community Noise Exposure Ldn or CNEL, dB							
	50	55	60	65	70	75	80	85
Office Buildings, Business Commercial and Professional					Conditionally Acceptable		Normally Unacceptable	Clearly Unacceptable
Industrial Manufacturing Utilities, Agriculture	Normally Unacceptable	Normally Unacceptable	Normally Unacceptable	Normally Unacceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable

Interpretation:

-  **Normally Acceptable:** Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
-  **Conditionally Acceptable:** New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
-  **Normally Unacceptable:** New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
-  **Clearly Unacceptable:** New construction or development should generally not be undertaken.

Source: State of California Governor's Office of Planning and Research, General Plan Guidelines, 1990.

TABLE 4.5-2
City of Calexico Noise Level Limits –
Fixed and Non-stationary Noise Sources

Zone	Time	Sound Level in Decibels (dB)
Residential Low Density	7 a.m. to 10 p.m.	50
	10 p.m. to 7 a.m.	40
Residential High Density	7 a.m. to 10 p.m.	60
	10 p.m. to 7 a.m.	50
Commercial	7 a.m. to 10 p.m.	60
	10 p.m. to 7 a.m.	50
Industrial	7 a.m. to 10 p.m.	70
	10 p.m. to 7 a.m.	55

Source: Giroux & Associates, 2008.

TABLE 4.5-3
Time Duration Correction Table

Duration of Sound	dB(A)
Up to 30 minutes per hour	+3
Up to 15 minutes per hour	+6
Up to 10 minutes per hour	+8
Up to 5 minutes per hour	+11
Up to 2 minutes per hour	+15
Up to 1 minute per hour	+18
Up to 30 seconds per hour	+21
Up to 15 seconds per hour	+24

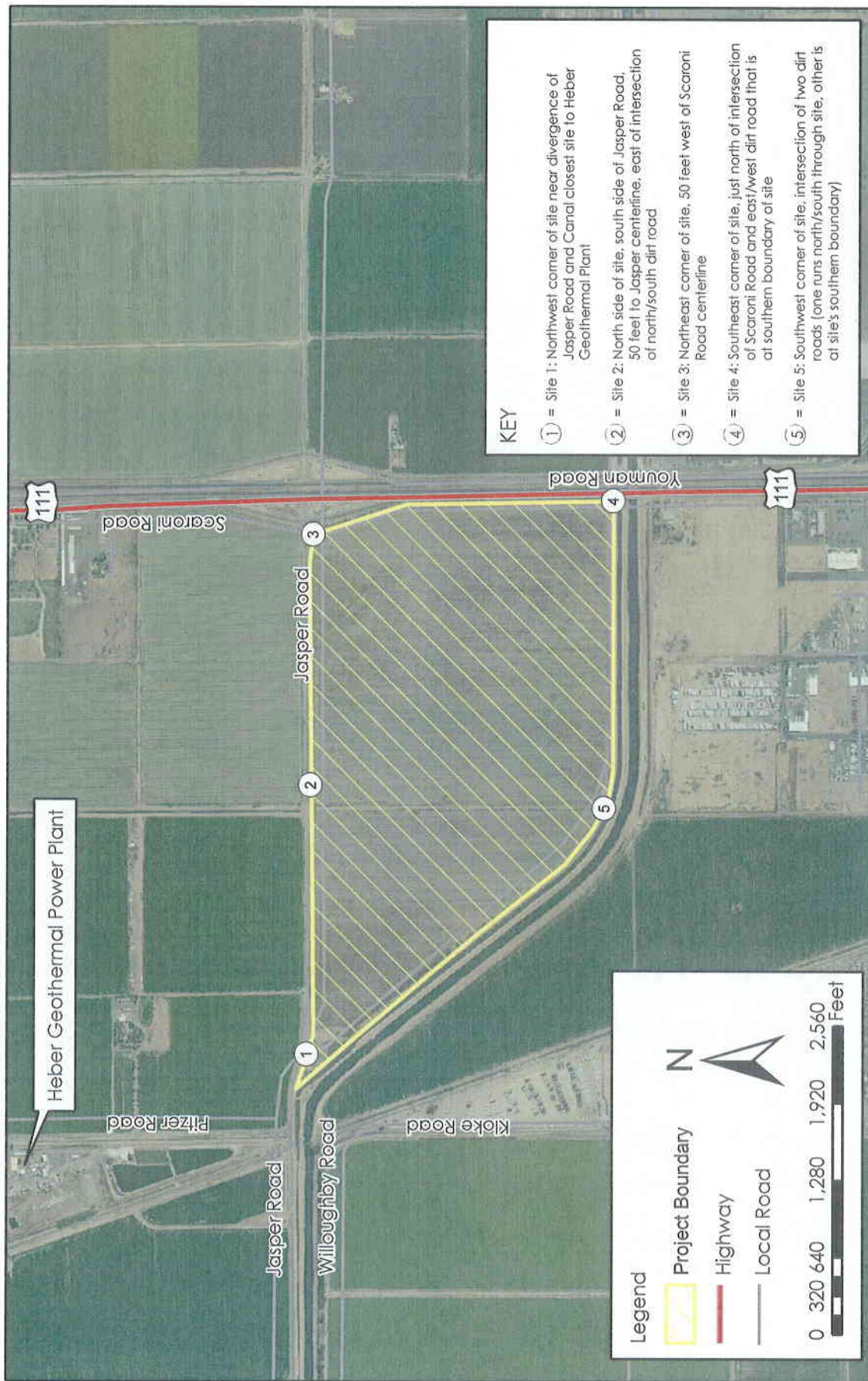
Source: Giroux & Associates, 2008.

TABLE 4.5-4
Short-Term Noise Level Measurements (dB(A))

Monitoring Locations	Leq ¹	Lmax	Lmin
#1 – Northwest corner of site	58.8	78.5	35.5
#2 – North side of site, south side of Jasper Road	55.5	75.5	34.0
#3 – Northeast corner of the site	64.2	74.5	40.0
#4 – Southeast corner of the site	63.9	76.0	40.5
#5 – Southwest corner of the site	37.3	46.5	33.5

Note: ¹CNEL is typically 2-3 dB higher than the Leq readings.

Source: Giroux & Associates, 2008.



SOURCE: USDA, 2005; BRG Consulting, Inc., 2008

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Noise Measurement Locations

FIGURE

4.5-1



the project site. Location 5 is at the southwest corner of the site, the intersection of two dirt roads (one runs north/south through site and the other is at the project site's southern boundary). Measurements taken at these five locations were obtained for a period of 10 to 20 minutes. Measurements were conducted on Friday afternoon, March 16, 2007.

Except in close proximity to SR-111, noise levels at the project site are low. Proposed project land uses adjacent to this intersection are commercial such that traffic noise will not provide a significant noise constraint. On-site noise from Heber Geothermal Plant is minimal as measured noise at the northwest corner of the site is 59 dB Leq. The Heber Geothermal Plan does not present a significant noise constraint.

Monitoring experience has shown that 24-hour weighted CNEL's are typically two to three dB higher than the mid-morning Leq readings as shown in Table 4.5-4. As identified in Table 4.5-4, the onsite ambient noise levels are in the 38 to 64 dB Leq range, which translates into CNEL's of 40 to 67 dBA.

4.5.1.4 Sensitive Receptors

Uses that are typically considered noise sensitive include residencies, schools, hospitals, parks, and wildlife habitat. The proposed project site is currently undeveloped. The project site is surrounded by industrial, commercial, agricultural uses, and undeveloped land. Therefore, no sensitive receptors are located in close proximity to the project site.

4.5.2 Impact Thresholds

As defined in Appendix G (XI) of the CEQA Guidelines, project impacts from noise are considered significant if any of the following occur:

- *Exposure of persons to or generations of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;*
- *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;*
- *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;*
- *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;*
- *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; and/or,*
- *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.*

In addition to the thresholds identified in the CEQA Guidelines, an impact is also considered significant if it "substantially" worsens an existing unacceptable noise environment.

“Substantially” is not defined in any guidelines. The accuracy of sound level meters and of sound propagation computer models is no better than ± 1 dB. This is also the human loudness difference discrimination level under ideal laboratory conditions. Most people cannot distinguish a change in the noise environment that differs by less than 3 dB between the pre- and post-project exposure if the change occurs under ambient conditions (Giroux & Associates, 2008). For the purposes of this analysis, an increase of 3 dB that creates or worsens an area of noise/land use incompatibility would be considered a significant degradation of noise quality.

4.5.3 Impact Analysis

4.5.3.1 Temporary Construction Noise (Short-term)

Construction activities, especially from heavy equipment, may create a substantial short-term noise increase near the project site. Construction noise levels in the vicinity of the project area will fluctuate depending on the particular type, number, and duration of use of various pieces of construction equipment. The earth-moving sources are the noisiest with equipment noise ranging up to about 90 dB(A) at 50 feet from the source. Figure 4.5-2 provides the noise generation levels for typical construction equipment.

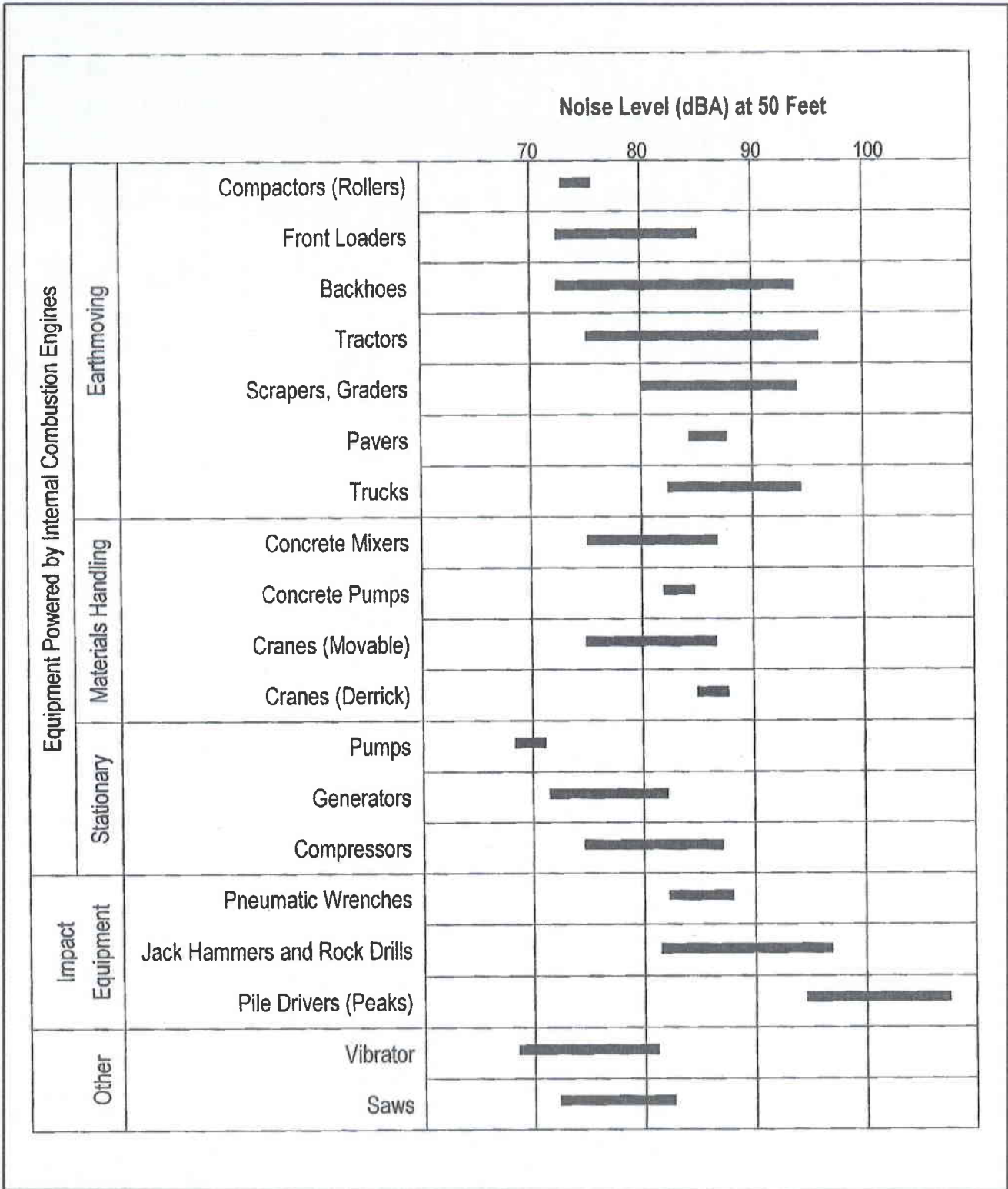
The exposure of persons to the periodic increase in noise levels will be short-term. Construction noise sources are not strictly relatable to a noise standard because they occur only during selected times and the source strength varies with the duration of time. However, in accordance with City of Calexico Municipal Code Section 8.46.042, construction of the project site would be limited to occur between the hours of 8:00 AM and 5:00 PM, Monday through Friday with the exception of legal holidays. The City of Calexico Building Department may issue a written “early work permit” if hot or inclement weather creates a need to start earlier than 8:00 AM. Adherence to this noise standard would ensure short-term noise impact from the construction of the proposed project are less than significant.

In order to further minimize possible construction noise conflict, all off-road construction equipment is required to have a properly operated and maintained muffler. Any project site stockpiling or equipment/vehicle staging should be conducted as far as practicable from occupied dwellings or other nearby noise-sensitive land uses (i.e., residential, schools, hospitals, and parks or wildlife habitat). However, because there are no noise-sensitive land use surrounding the project site, construction noise impacts are not expected to create a significant impact.

Furthermore, adherence with the City of Calexico’s Municipal Code Section 8.46.042 for construction time limitations and the proper operation and staging of construction equipment, would ensure that short-term construction noise impact are less than significant.

Groundborne Vibration

Groundborne vibration is measured in terms of the velocity of the vibration oscillations. As with noise, a logarithmic scale (VdB) is used to quantify vibration intensity. Groundborne vibration is usually perceived as annoying to building occupants when it exceeds 80 VdB (for fewer than 70 vibration events per day). The



SOURCE: EPA, 1971

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Typical Construction Noise Levels at 50 Feet

FIGURE
4.5-2

degree of annoyance depends on the type of land use, individual sensitivity to vibration, and the frequency of vibration events. Typically, vibration levels must exceed 100 Vdb before building damage.

The primary vibratory source during site clearing and grading activities of construction will be large bulldozers. Based on published data, typical bulldozer activities generate an approximate vibration of 87 VdB at a distance of 25 feet. No residential or other buildings are located in close proximity to the project site that would be impacted by groundborne vibration during temporary site grading and clearing. Therefore, due to the location of the project site and short duration of the activity, the issue of groundborne vibration is considered less than significant.

4.5.3.2 *Operational Noise (Long-term)*

A. Project-Related Vehicular Noise Impacts

Long-term noise concerns from the development of the proposed project are primarily associated with vehicular source traffic noise emissions generated on arterial roadways within the area surrounding the project. These concerns were addressed in the noise impact analysis using the Federal Highway Administration (FHWA) Highway Traffic Noise Model which calculates the LEQ noise level for a particular reference set of input conditions, and then makes a series of adjustments for site-specific traffic volumes, distances, speeds, or noise barriers. A travel speed of 55 miles per hour (mph) was assumed for SR-111, Bowker Road, Heber Road, and Jasper Road. A travel speed of 45 mph was assumed for all other roadways.

Table 4.5-5 summarizes the calculated CNEL at 50 feet from the roadway centerline for seven traffic scenarios at each of the 33 roadway segments analyzed in the project traffic study. A "significant" traffic noise impact would occur if the project-related traffic were to increase noise levels by +3 dB or more. As shown in Table 4.5-5, in the existing timeframe, the project will cause 12 segments that exceed this threshold, though implementation of the Casino Phase alone does not cause a significant impact. However, by 2015 and 2035 this impact is diminished as the project contribution to traffic is diluted by area growth. The segments which exceed the significance thresholds in the existing time frame are provided in Table 4.5-6. The only segment which remains significant in 2015 and 2035 is the Jasper Road segment between SR-111 and Scaroni Road, immediately adjacent to the project site.

Traffic noise from SR-111 will dominate the noise environment surrounding the project site. However, there are no existing or proposed noise sensitive uses proposed to be constructed adjacent to this segment. As such, project related vehicular noise impacts are not significant. Therefore, a less than significant impact is identified for this issue area.

4.5.3.3 *Project Exterior Noise Standard Compliance*

The only noise sensitive land use component of the proposed project is the proposed hotel, adjacent to Scaroni Road. According to vehicular turning movements provided in the *Traffic Study* prepared by Darnell and Associates (Technical Appendices - Volume II of II, Appendix B of this EIR), with an estimated travel

TABLE 4.5-5
Traffic Noise Impact Analysis
 (dBA CNEL at 50 feet from centerline)

Roadway	Exist.	Exist. + Casino	Exist. + Casino + Phase I	2015 No Project	2015 + Casino	2015 + Project	2035 No Project	2035 + Project
Dogwood Road								
N of I-8	69.5	69.5	69.7	70.5	70.6	70.8	73.3	73.5
I-8 – McCabe	68.2	68.2	69.7	70.8	71.1	72.1	75.4	75.8
McCabe – SR-86	67.9	67.9	70.1	71.1	71.4	72.8	73.4	74.1
SR-86 – Jasper	66.6	66.6	69.9	70.5	71.0	72.8	71.7	73.1
Jasper – Cole	66.2	66.2	66.2	68.6	68.6	68.6	73.3	73.3
Cole – SR-98	65.1	65.1	66.7	65.2	65.7	67.4	73.8	73.8
SR-111/								
N of I-8	72.4	72.6	73.3	73.9	74.1	74.8	75.9	76.4
I-8 – McCabe	75.9	76.1	76.6	78.0	78.1	78.7	79.3	79.8
McCabe – Heber	75.5	75.7	76.3	77.7	77.8	78.4	79.7	80.2
Heber – Jasper	75.7	76.0	76.5	78.4	78.5	79.1	79.2	79.7
Jasper – Cole	75.7	75.9	76.4	77.2	77.3	77.9	78.1	78.6
Cole – SR-98	75.5	75.7	76.1	76.8	77.0	77.6	78.6	79.1
S of SR-98	77.2	77.4	77.7	78.0	78.1	78.6	77.9	78.3
Bowker Road/								
I-8 – McCabe	57.9	57.9	62.5	69.4	69.5	70.2	69.3	70.1
McCabe – Heber	57.6	57.6	62.4	69.5	69.6	70.3	70.9	71.5
Heber – Jasper	57.4	57.4	62.4	70.1	70.2	70.8	72.9	73.3
Jasper – Cole	57.7	57.7	57.7	68.4	68.4	68.4	73.3	73.3
Cole – SR-98	55.0	55.0	55.0	66.4	66.4	66.4	73.1	73.4
S of SR-98	48.0	48.0	48.0	62.8	62.8	62.8	69.3	70.0
Meadows Road/								
Cole – SR-98	67.9	67.9	69.0	70.9	71.1	71.8	74.1	74.5
S of SR-98	65.8	65.8	67.6	68.6	68.9	70.1	69.4	70.5
Jasper Road/								
Scaroni – SR-111	58.4	58.4	73.6	67.9	69.6	73.4	69.5	73.8
SR-111 – Yourman	64.0	64.0	73.6	73.7	73.9	74.4	75.6	76.0
Yourman – Meadows	54.0	54.0	73.6	71.8	72.0	72.8	74.0	74.6
Meadows – Bowker	53.6	53.6	69.8	70.7	71.0	72.0	72.9	73.6

TABLE 4.5-5 (cont'd.)
 Traffic Noise Impact Analysis
 (dBA CNEL at 50 feet from centerline)

Roadway	Exist.	Exist. + Casino	Exist. + Casino + Phase I	2015 No Project	2015 + Casino	2015 + Project	2035 No Project	2035 + Project
Cole/								
Enterprise – SR-111	69.9	69.9	75.4	71.8	71.9	72.4	73.9	74.8
SR-111 – Yourman	71.1	71.1	75.6	72.4	72.7	73.6	71.0	72.6
Yourman – Meadows	67.9	67.9	75.0	69.8	70.3	71.9	70.2	72.1
Meadows – Bowker	66.6	66.6	72.8	69.7	70.0	70.9	67.8	69.7
SR-98/								
Kloke – SR-111	72.0	72.0	NA	NA	NA	NA	73.3	73.8
SR-111 – Rockwood	72.2	72.2	NA	NA	NA	NA	74.3	74.6
Rockwood – Andrade	72.0	72.0	NA	NA	NA	NA	74.2	74.5
Andrade – Bowker	67.8	67.8	NA	NA	NA	NA	74.1	74.4

Notes: NA = Not Available

Source: Giroux and Associates, 2008

TABLE 4.5-6
Roadway Segments that Exceed Significance Thresholds
with the Proposed Project

Roadway Segment	Current Impact (dB CNEL)	Impact in 2015 (dB CNEL)	Impact in 2035 (dB CNEL)
Dogwood Road/SR-86 – Jasper	+3.3	+2.3	+1.3
Bowker Road/I-8 – McCabe	+4.6	+0.8	+0.8
Bowker Road/McCabe – Heber	+4.8	+0.8	+0.6
Bowker Road/Heber – Jasper	+4.9	+0.7	+0.4
Jasper Road/Scaroni – SR-111	+15.2	+5.6	+4.3
Jasper Road/SR-111 – Yourman	+9.6	+0.7	+0.4
Jasper Road/Yourman – Meadows	+19.6	+1.0	+0.6
Jasper Road/Meadows – Bowker	+16.2	+1.3	+0.7
Cole Road/Enterprise – SR-111	+5.6	+0.6	+0.9
Cole Road/SR-111 – Yourman	+4.5	+1.2	+1.7
Cole Road/Yourman – Meadows	+7.1	+2.0	+1.9
Cole Road/Meadows – Bowker	+6.2	+1.2	+1.9

Source: Giroux & Associates, 2008.

speed of 35 mph, the traffic noise level along Scaroni Road in 2035 is expected to be 67 dB at 50 from the roadway centerline. At 80 feet from the roadway centerline this noise level decreases to 65 dB CNEL. If there are any proposed outdoor uses within 80 feet of Scaroni Road centerline a significant impact associated with exterior noise will occur. However, with the implementation of Mitigation Measures N1 and N2, which require the implementation of noise protection features, this impact would be reduced to a level of less than significant.

According to the traffic volumes that will be generated by the proposed project, future noise conditions (2035) with the noise associated with project traffic along SR-111 adjacent to the project site is expected to be almost 79 dB CNEL at 50 feet from the roadway centerline for an assumed 55 mph travel speed. Only restaurant and retail uses are proposed to be located adjacent to SR-111. Therefore, if any outdoor feature is proposed at these uses at 50 feet from the centerline of SR-111 a significant impact associated with exterior noise will occur. However, with the implementation of Mitigation Measures N1 and N2, which require the implementation of noise protection features, this impact would be reduced to a level of less than significant.

4.5.3.4 *Project Interior Noise*

Based on the Noise Impact Analysis prepared for the project the only proposed land use for the project site that has a potential to experience high levels of interior noise is the hotel meeting/assembly area. With the implementation of Mitigation Measure N3, which provides specific design criteria that shall be met for the hotel meeting and assembly areas, a less than significant impact is identified for this issue area.

4.5.3.5 *Airport Noise*

The project site is not located within an airport land use plan or within two miles of a public airport. The project site is located over nine miles southeast of the Calexico International Airport and approximately 11 miles southeast of the El Centro Naval Air Facility. No private airstrips are located in the vicinity of the project site. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise level from a public airport or private airstrip and a less than significant impact has been identified.

4.5.3.6 *Off-Site Noise Standards Compliance*

There are currently no existing or planned sensitive off-site uses adjacent to the project site for which noise mitigation is necessary. Therefore, no impact is identified for this issue area.

4.5.4 Significance of Impact

The proposed project would result in a significant exterior noise impact if outdoor features are proposed at locations on the project site that are adjacent to Scaroni Road and SR-111. In addition, the hotel meeting/assembly areas have the potential to experience high levels of interior noise during certain events, which is considered a significant interior noise impact. With adherence to the City of Calexico's noise regulations during construction, no other noise impacts (i.e., airport noise) were identified with the implementation of the proposed project. Furthermore, the project related off-site noise impact is considered to be less than significant.

4.5.5 Mitigation Measures

The following mitigation measure would fully mitigate the significant noise effects identified above.

- N1** Recreational space for on-site hotel units must either be located 80 feet from the Scaroni Road centerline or must be noise protected (e.g., eight-foot high solid glass walls or block walls around any proposed patio or outside feature) to ensure the exterior 65 dB CNEL threshold is met.
- N2** If during the design process of the proposed project, an outside feature is proposed on the site that is within 80 feet from the roadway centerline of Scaroni Road or within 50 feet from the centerline of SR-111, noise protection features (e.g., eight-foot high solid glass walls or block walls around any proposed patio or outside feature) shall be incorporated into the design of the project. Incorporating noise protection features should achieve a maximum of 70 dB CNEL.
- N3** Hotel building plans shall document that any proposed common wall assemblies ("party walls") have a sound test rating of STC=50 or higher. For multi-story development, the floor/ceiling separation between units shall have a sound test rating of STC=50 or higher, and an impact isolation class (IIC) of 50 or higher as required by the Building Code. Any penetrations of sound-related assemblies shall be sound protected with resilient isolation devices or special acoustic wraps and sealing compounds to maintain the acoustical integrity of the assemblies.

4.5.6 Conclusion

Implementation of Mitigation Measures N1, N2, and N3 would reduce the significant exterior and interior noise related impacts associated with the proposed project to a less than significant level. In addition, with adherence to the City of Calexico's noise regulations during construction, no other noise impacts were identified with the implementation of the proposed project.

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