

**APPENDIX 7**

# **HOTEL MURRIETA NOISE IMPACT ANALYSIS**

City of Murrieta

September 19, 2019



Traffic Engineering • Transportation Planning • Parking • Noise & Vibration  
Air Quality • Global Climate Change • Health Risk Assessment

# HOTEL MURRIETA NOISE IMPACT ANALYSIS

City of Murrieta

September 19, 2019

*prepared by*  
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18-0074

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## EXECUTIVE SUMMARY

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The purpose of this report is to provide an assessment of the noise impacts resulting from development of the proposed project and to identify mitigation measures that may be necessary to reduce those impacts. The noise issues related to the proposed project have been evaluated in light of applicable federal, state, and local policies including those of the City of Murrieta.

Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to noise analysis, a list of acronyms and a glossary of terms have been provided in Appendix A and Appendix B of this report, respectively.

### PROJECT LOCATION

The project is generally located between Monroe Avenue and the I-15 Freeway/I-215 Freeway interchange and north of Fig Street in the City of Murrieta. A vicinity map showing the project location is provided on Figure 1.

### PROJECT DESCRIPTION

The proposed project involves developing the site with a 257-room hotel and a parking lot with 461 parking spaces. The proposed hotel would also include banquet facilities, restaurant with indoor and outdoor dining, rooftop lounge, bar with interior and exterior seating, resort style pool complex with spa and children's activity fountain. As a project design feature, Newton Azrak Street will be extended from its current eastern terminus to Monroe Avenue, Monroe Avenue will be constructed from the south project driveway to Guava Street, and Guava Street will be extended from its current eastern terminus to Monroe Avenue. Figure 2 illustrates the project site plan.

### PROJECT IMPACTS

#### Construction Impacts

Construction noise will have a temporary or periodic increase in the ambient noise levels above the existing within the project vicinity; however, construction is anticipated to occur during the permissible hours according to the City's Municipal Code. In addition, construction is not anticipated to exceed the City's specified maximum construction noise levels. Therefore, construction-related noise impacts are considered to be less than significant.

#### Noise Impacts to Off-Site Receptors Due to Project Generated Trips

Existing and Existing Plus Project noise levels along Monroe Avenue and other affected nearby roadway segments were modeled utilizing the FHWA Traffic Noise Prediction Model FHWA-RD-77-108 in order to quantify the proposed project's contribution to increases in ambient noise levels. Per the modeling, all of the modeled roadway segments are anticipated to change the noise a nominal amount (approximately 0.01 to 1.07 dBA CNEL). Therefore, a change in noise level would not be audible and would be considered less than significant.

#### Transportation Noise Impacts to the Proposed Project

Per Table 3, the Land Use Compatibility Matrix that City planners use as a guide for land use planning activities, hotel land uses are considered to be normally acceptable in environments where the ambient noise level is not expected to exceed 65 dBA CNEL and conditionally acceptable where exterior noise levels may reach up to 70 dBA CNEL. New construction or development in environments where noise levels exceed 70 dBA CNEL is allowed as long as 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. Outdoor environment will seem noisy and mitigation for outdoor use areas may be necessary.

The I-15 Freeway, I-215 Freeway, and Monroe Avenue are the primary noise sources that affect the project site. The SoundPLAN noise model was utilized to model the future noise environment. As shown on Figure 6 and Figure 7, future traffic noise is expected to range between 52 and 75 dBA CNEL at the project site. Exterior noise levels at the proposed pool area are expected to reach up to 58 dBA CNEL and, therefore, per the City's Land Use Compatibility Matrix, would be considered normally acceptable. Upgraded windows will be required to ensure that interior noise levels do not exceed 45 dBA CNEL. With incorporation of upgraded construction materials, impacts would be considered less than significant.

#### Groundborne Vibration Impacts

Construction equipment is anticipated to be located at a distance of at least 330 feet or more from any receptor; therefore, temporary vibration levels associated with project construction would be less than significant. Furthermore, annoyance-related impacts would be short-term and would only occur during site grading and construction activities.

### **MITIGATION MEASURES**

In addition to adherence to the City of Murrieta's Municipal Code which limits the construction hours of operation, and requires mobile or stationary internal combustion engine powered equipment or machinery shall be equipped with suitable exhaust and air-intake silencers in proper working order, the following measures are recommended to reduce construction noise and vibrations, emanating from the proposed project:

1. The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.
2. Equipment shall be shut off and not left to idle when not in use.
3. The contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the project site during all project construction.
4. Jackhammers, pneumatic equipment and all other portable stationary noise sources shall be shielded and noise shall be directed away from sensitive receptors.
5. The project proponent shall mandate that the construction contractor prohibit the use of music or sound amplification on the project site during construction.
6. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment.

To ensure interior noise levels that do not exceed 45 dBA CNEL, hotel roof and window/wall assemblies will need to provide an exterior to interior noise reduction of 7-30 dBA CNEL, depending on the location of the units. Required STC ratings are presented below:

Floor Level	Building Location (see Receivers at Buildings on Figure 5)							
	1	2	3	4	5	6	7	8
1	10	12	14	17	16	17	18	14
2	13	15	18	20	22	23	22	19
3	15	17	21	23	24	26	22	21
4	16	18	24	25	25	28	22	23
5	17	19	25	27	26	30	22	23
6	17	19	27	27	27	30	21	24
7	17	19	28	28	27	31	21	24
8	17	19	28	29	27	32	21	24
9	17	19	29	29	28	33	20	25



# 1. INTRODUCTION

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This section describes the purpose of this noise impact analysis, project location, proposed development, and study area. Figure 1 shows the project location map and Figure 2 illustrates the project site plan.

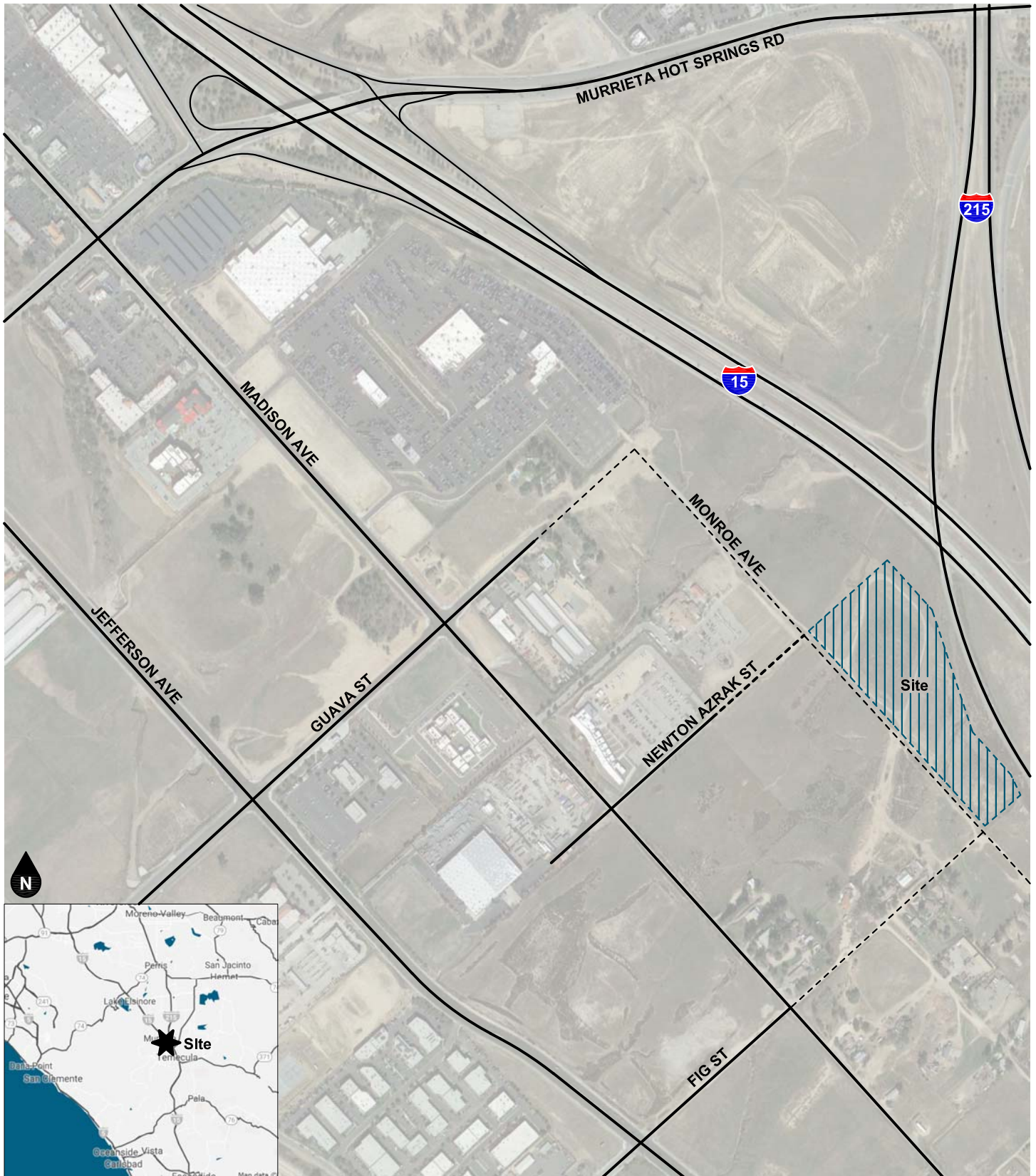
## PURPOSE AND OBJECTIVES

The purpose of this report is to provide an assessment of the noise impacts resulting from development of the proposed project and to identify mitigation measures that may be necessary to reduce those impacts. The noise issues related to the proposed land use and development have been evaluated in light of applicable federal, state, and local policies including those of the City of Murrieta.

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**Figure 1**  
**Project Location Map**



MONROE AVENUE



**Figure 2**  
**Site Plan**



## 2. NOISE AND VIBRATION FUNDAMENTALS

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### NOISE FUNDAMENTALS

Sound is a pressure wave created by a moving or vibrating source that travels through an elastic medium such as air. Noise is defined as unwanted or objectionable sound. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and in extreme circumstances, hearing impairment.

Commonly used noise terms are presented in Appendix B. The unit of measurement used to describe a noise level is the decibel (dB). The human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, the “A-weighted” noise scale, which weights the frequencies to which humans are sensitive, is used for measurements. Noise levels using A-weighted measurements are written dB(A) or dBA.

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source as well as ground absorption, atmospheric effects and refraction, and shielding by natural and manmade features. Sound from point sources, such as air conditioning condensers, radiates uniformly outward as it travels away from the source in a spherical pattern. The noise drop-off rate associated with this geometric spreading is 6 dBA per each doubling of the distance (dBA/DD). Transportation noise sources such as roadways are typically analyzed as line sources, since at any given moment the receiver may be impacted by noise from multiple vehicles at various locations along the roadway. Because of the geometry of a line source, the noise drop-off rate associated with the geometric spreading of a line source is 3 dBA/DD.

Decibels are measured on a logarithmic scale, which quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Thus, a doubling of the energy of a noise source, such as a doubled traffic volume, would increase the noise levels by 3 dBA; halving of the energy would result in a 3 dBA decrease. Figure 3 shows the relationship of various noise levels to commonly experienced noise events.

Average noise levels over a period of minutes or hours are usually expressed as dBA  $L_{eq}$ , or the equivalent noise level for that period of time. For example,  $L_{eq(3)}$  would represent a 3-hour average. When no period is specified, a one-hour average is assumed.

Noise standards for land use compatibility are stated in terms of the Community Noise Equivalent Level (CNEL) and the Day-Night Average Noise Level (DNL). CNEL is a 24-hour weighted average measure of community noise. CNEL is obtained by adding five decibels to sound levels in the evening (7:00 PM to 10:00 PM), and by adding ten decibels to sound levels at night (10:00 PM to 7:00 AM). This weighting accounts for the increased human sensitivity to noise during the evening and nighttime hours. DNL is a very similar 24-hour average measure that weights only the nighttime hours.

It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA; that a change of 5 dBA is readily perceptible, and that an increase (decrease) of 10 dBA sounds twice (half) as loud. This definition is recommended by the California Department of Transportation’s Technical Noise Supplement to the Traffic Noise Analysis Protocol (2013).

### VIBRATION FUNDAMENTALS

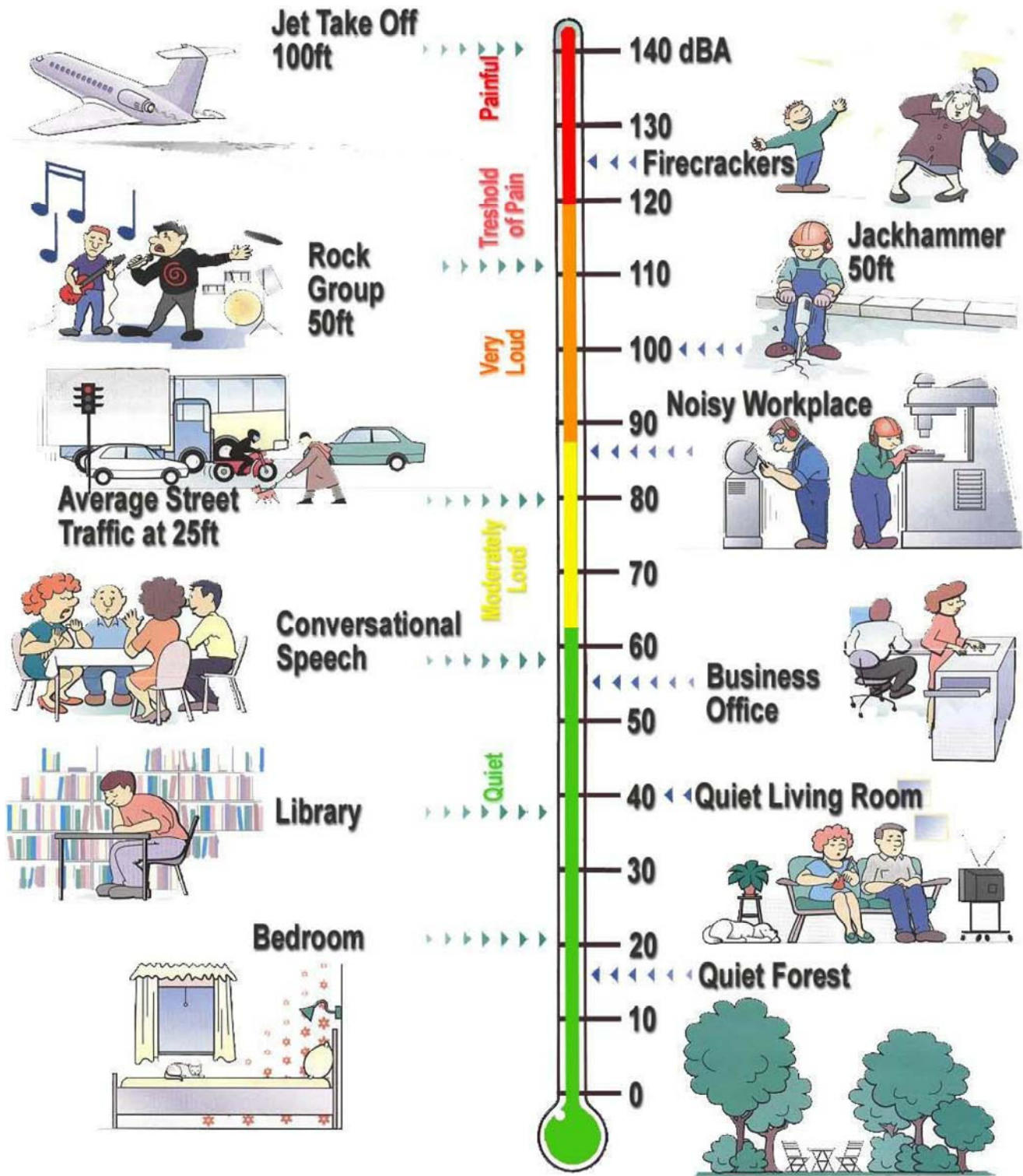
The way in which vibration is transmitted through the earth is called propagation. Propagation of earthborn vibrations is complicated and difficult to predict because of the endless variations in the soil through which waves travel. There are three main types of vibration propagation: surface, compression and shear waves. Surface waves, or Raleigh waves, travel along the ground’s surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water.

Compression waves, or P-waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a “push-pull” fashion). P-waves are analogous to airborne sound waves. Shear waves, or S-waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse or “side-to-side and perpendicular to the direction of propagation”.

As vibration waves propagate from a source, the energy is spread over an ever-increasing area such that the energy level striking a given point is reduced with the distance from the energy source. This geometric spreading loss is inversely proportional to the square of the distance. Wave energy is also reduced with distance as a result of material damping in the form of internal friction, soil layering, and void spaces. The amount of attenuation provided by material damping varies with soil type and condition as well as the frequency of the wave.

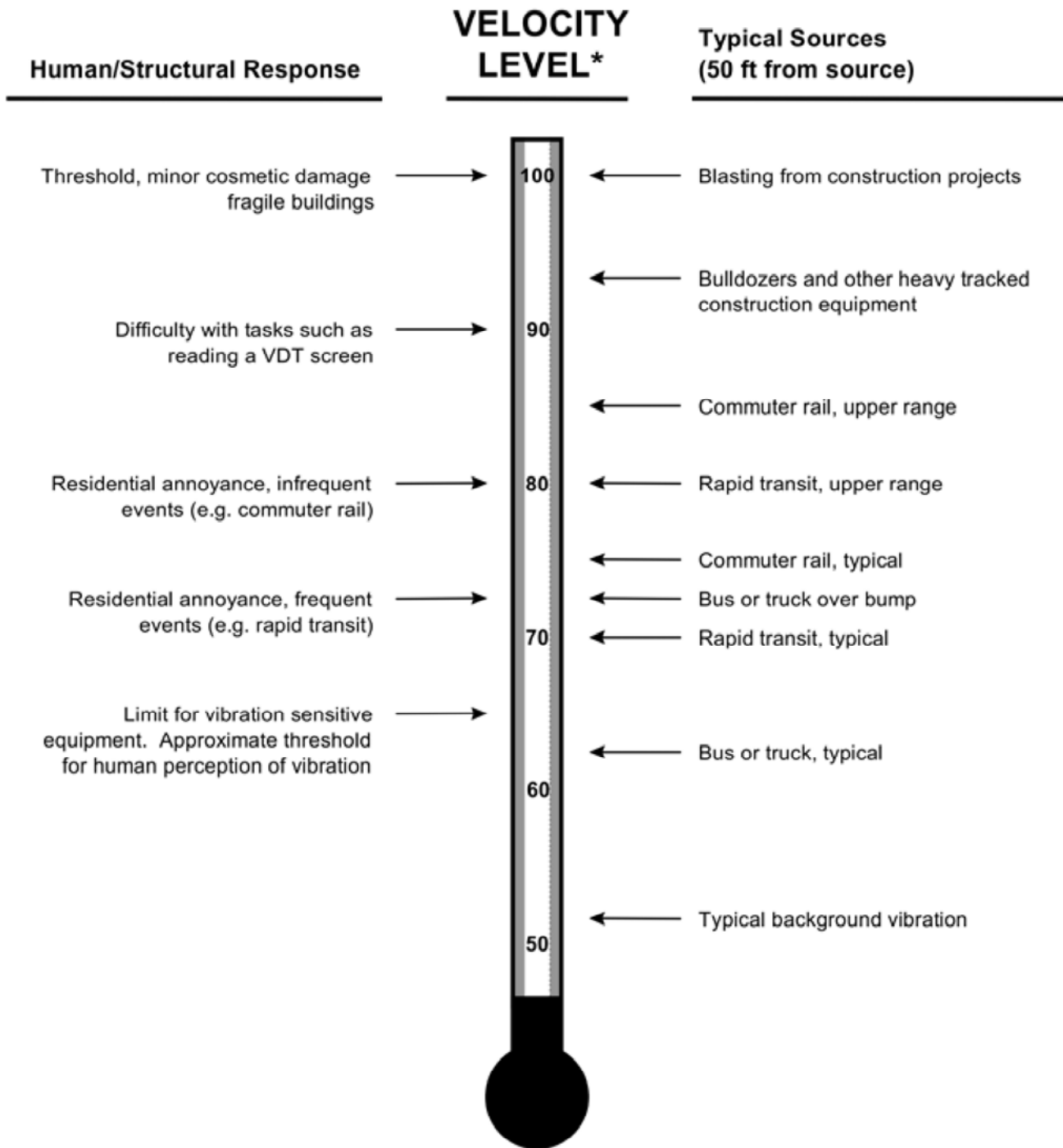
Vibration amplitudes are usually expressed as either peak particle velocity (PPV) or the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous peak of the vibration signal in inches per second. The RMS of a signal is the average of the squared amplitude of the signal in vibration decibels (VdB), ref one micro-inch per second. The Federal Railroad Administration uses the abbreviation “VdB” for vibration decibels to reduce the potential for confusion with sound decibel.

PPV is appropriate for evaluating the potential of building damage and VdB is commonly used to evaluate human response. Decibel notation acts to compress the range of numbers required in measuring vibration. Similar to the noise descriptors,  $L_{eq}$  and  $L_{max}$  can be used to describe the average vibration and the maximum vibration level observed during a single vibration measurement interval. Figure 4 illustrates common vibration sources and the human and structural responses to ground-borne vibration. As shown on Figure 4, the threshold of perception for human response is approximately 65 VdB; however, human response to vibration is not usually substantial unless the vibration exceeds 70 VdB. Vibration tolerance limits for sensitive instruments such as magnetic resonance imaging (MRI) or electron microscopes could be much lower than the human vibration perception threshold.



**Figure 3**  
**Weighted Sound Levels and Human Response**

Source: Bruel & Kjaer 2001



\* RMS Vibration Velocity Level in dB relative to  $10^{-6}$  inches/second

Source: FRA, 2012. Federal Railroad Administration High-Speed Ground Transportation Noise and Vibration Impact Assessment. Office of Railroad Policy Development, Washington, D.C. DOT/FRA/ORD-12/15. September.

**Figure 4**  
**Typical Levels of Groundborne Vibration**

### 3. EXISTING NOISE ENVIRONMENT

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#### EXISTING LAND USES AND SENSITIVE RECEPTORS

The project site is bounded by vacant land and the I-15 Freeway to the north, vacant land and the I-215 Freeway to the east, vacant land and Monroe Avenue to the south, and Monroe Avenue to the west.

The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, single and multiple-family residential, including transient lodging, motels and hotel uses make up the majority of these areas.

Sensitive land uses that may be affected by project construction noise include single-family detached residential dwelling units located approximately 335 feet southwest of the project site, a preschool located approximately 460 feet northwest of the project site, and single-family detached residential units located approximately 1,120 feet to the northwest of the project site. These sensitive receptors are shown on Figure 5.

#### AMBIENT NOISE MEASUREMENTS

An American National Standards Institute (ANSI Section S14 1979, Type 1) Larson Davis model LxT sound level meter was used to document existing ambient noise levels. In order to document existing ambient noise levels in the project area, two (2) 10-minute daytime noise measurements were taken between 4:14 PM and 4:55 PM on May 14, 2018. In addition, one (1) long-term 24-hour noise measurement was also taken from May 14, 2018 to May 15, 2018. Field worksheets and noise measurement output data are included in Appendix C.

As shown on Figure 5, the noise measurements were taken near the single-family detached residential dwelling unit located to the southwest (STNM2), at the Preschool/Church use to the northwest (STNM1), and at the project site (LTNM1). Table 1 provides a summary of the short-term ambient noise data. Table 2 provides hourly interval ambient noise data from the long-term noise measurement. Short-term ambient noise levels were measured between 50.9 and 54.1 dBA  $L_{eq}$ . Long-term hourly noise measurement ambient noise levels ranged from 56.9 to 66.5 dBA  $L_{eq}$ . The measured CNEL at the project site was 69. The dominant noise sources were from vehicles traveling along the I-215 Freeway and I-15 Freeway, vehicles entering/leaving the parking lot, bird song, wind, and children playing on the nearby school grounds.



**Table 1**  
**Short-Term Noise Measurement Summary (dBA)<sup>1,2</sup>**

Daytime								
Site Location	Time Started	Leq	Lmax	Lmin	L(2)	L(8)	L(25)	L(50)
STNM1	4:14 PM	54.1	64.3	47.4	59.6	57.6	55.5	52.1
STNM2	4:45 PM	50.9	58.6	47.7	53.8	52.4	51.5	50.7

Notes:

- (1) See Figure 5 for noise measurement locations. Each noise measurement was performed over a 10-minute duration.
- (2) Noise measurements performed on May 14, 2018.


**Table 2**  
**Long-Term Noise Measurement Summary (dBA)<sup>1,2</sup>**

24-Hour Ambient Noise								
Hourly Measurements	Time Started	Leq	Lmax	Lmin	L(2)	L(8)	L(25)	L(50)
Overall Summary	6:00 PM	63.2	83.2	38.8	68.5	66.6	64.3	62.0
1	6:00 PM	63.0	73.8	55.5	66.9	65.0	63.6	62.6
2	7:00 PM	63.6	77.1	56.4	67.5	65.6	64.2	63.0
3	8:00 PM	62.6	77.8	54.3	67.6	65.3	63.2	61.6
4	9:00 PM	62.2	75.0	54.3	66.4	64.4	62.9	61.5
5	10:00 PM	61.9	77.3	53.1	66.7	64.3	62.5	61.0
6	11:00 PM	59.2	69.4	48.7	65.1	62.5	59.9	57.8
7	12:00 AM	58.8	70.5	46.7	65.3	62.0	59.3	57.3
8	1:00 AM	56.9	69.2	42.9	64.5	60.4	56.8	54.7
9	2:00 AM	57.5	71.6	38.8	65.1	61.4	57.6	55.0
10	3:00 AM	60.5	74.3	45.8	66.7	64.0	61.1	59.1
11	4:00 AM	65.7	80.0	54.7	70.0	68.5	66.8	64.9
12	5:00 AM	59.7	73.1	50.8	65.3	62.9	60.7	58.3
13	6:00 AM	66.5	82.1	56.9	70.5	68.8	67.3	66.1
14	7:00 AM	65.9	73.5	60.8	69.2	67.9	66.6	65.6
15	8:00 AM	65.7	83.2	59.7	68.9	67.2	66.0	65.1
16	9:00 AM	64.9	74.5	57.5	69.3	67.2	65.7	64.3
17	10:00 AM	65.3	76.4	56.5	69.7	67.9	66.1	64.5
18	11:00 AM	63.7	75.9	53.4	68.4	66.6	64.6	62.9
19	12:00 PM	63.9	74.4	53.8	68.5	66.7	64.6	63.1
20	1:00 PM	63.4	77.0	51.4	68.2	66.3	64.4	62.6
21	2:00 PM	62.8	76.0	52.3	67.5	65.5	63.5	61.9
22	3:00 PM	61.5	71.9	54.0	66.3	64.1	62.1	60.6
23	4:00 PM	62.3	72.8	55.6	66.3	64.5	62.9	61.7
24	5:00 PM	62.3	73.9	54.1	66.9	64.6	62.8	61.5

Notes:

- (1) See Figure 5 for noise measurement locations. Noise measurement was performed over a 24-hour duration.
- (2) Noise measurement performed from May 14, 2018 to May 15, 2018.



**Legend**  
 Noise Measurement Location  
**NM 1**

**Figure 5**  
**Sensitive Noise Locations and Noise Measurement Location Map**

## 4. REGULATORY SETTING

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### FEDERAL REGULATION

#### Federal Noise Control Act of 1972

The U.S. Environmental Protection Agency (EPA) Office of Noise Abatement and Control was originally established to coordinate federal noise control activities. After its inception, EPA's Office of Noise Abatement and Control issued the Federal Noise Control Act of 1972, establishing programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. In response, the EPA published Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (Levels of Environmental Noise). The Levels of Environmental Noise recommended that the Ldn should not exceed 55 dBA outdoors or 45 dBA indoors to prevent significant activity interference and annoyance in noise-sensitive areas.

In addition, the Levels of Environmental Noise identified five (5) dBA as an "adequate margin of safety" for a noise level increase relative to a baseline noise exposure level of 55 dBA Ldn (i.e., there would not be a noticeable increase in adverse community reaction with an increase of five dBA or less from this baseline level). The EPA did not promote these findings as universal standards or regulatory goals with mandatory applicability to all communities, but rather as advisory exposure levels below which there would be no risk to a community from any health or welfare effect of noise.

In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at lower levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to State and local governments. However, noise control guidelines and regulations contained in EPA rulings in prior years remain in place by designated Federal agencies, allowing more individualized control for specific issues by designated Federal, State, and local government agencies.

### STATE REGULATIONS

#### State of California General Plan Guidelines 2017

Though not adopted by law, the State of California General Plan Guidelines 2017, published by the California Governor's Office of Planning and Research (OPR) (OPR Guidelines), provide guidance for the compatibility of projects within areas of specific noise exposure. The OPR Guidelines identify the suitability of various types of construction relative to a range of outdoor noise levels and provide each local community some flexibility in setting local noise standards that allow for the variability in community preferences. Findings presented in the Levels of Environmental Noise Document (EPA 1974) influenced the recommendations of the OPR Guidelines, most importantly in the choice of noise exposure metrics (i.e., Ldn or CNEL) and in the upper limits for the Normally Acceptable outdoor exposure of noise-sensitive uses. The OPR Guidelines include a Noise and Land Use Compatibility Matrix identifies acceptable and unacceptable community noise exposure limits for various land use categories. The City of Murrieta uses their own version of the Land Use Compatibility Matrix (see Table 3).

#### California Environmental Quality Act

The California Environmental Quality Act Guidelines (Appendix G) establishes thresholds for noise impact analysis. Two of these standards apply to what is referred to as a "substantial increase" in ambient noise levels. The California Environmental Quality Act does not recognize an official numerical increase as a "substantial increase." Industry-accepted standards for what is considered to be a "substantial increase" range from 3 dB to 12 dB. It should be noted that a change of 3 dB is considered to be "barely audible" to a trained ear and that a change of 5 dB is considered to be a readily audible change.

In cumulative noise exposure assessments, the City considers increases in the ambient noise level associated with project generated noise as “generally not significant” if no noise-sensitive sites are located within the project vicinity, or if permanent increases in community noise levels associated with implementation of the project would not exceed +3 dB at noise-sensitive locations in the project vicinity. However, the City recognizes that a limitation in using a single value to evaluate an impact related to a noise level increase would be the failure to account for the preexisting ambient noise environment to which a person has become accustomed. Keeping this in mind, the City of Murrieta has established two criterion to determine whether or not a project would result in a substantial increase (City of Murrieta 2011). These criterion are presented in Table 4. If the existing ambient noise level is less than 60 dBA CNEL and the project causes an increase of 5 dBA or more; or if the existing ambient noise level is greater than 60 dBA CNEL and the project causes an increase of 3 dB or more, then the project would result in a substantial increase in ambient noise levels.

#### State of California Building Code

The State of California’s noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, California Building Code. These noise standards are applied to new construction in California for the purpose of interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

#### California Department of Transportation (Caltrans)

The California Department of Transportation (Caltrans) has published one of the seminal works for the analysis of ground-borne noise and vibration relating to transportation- and construction-induced vibrations and although the project is not subject to these regulations, it serves as useful tools to evaluate vibration impacts. These guidelines recommend that a standard of 0.2 inches per second (in/sec) PPV not be exceeded for the protection of normal residential buildings (Caltrans 2002). This is the appropriate threshold for construction related ground-borne vibration impacts.

### **LOCAL REGULATIONS**

#### City of Murrieta General Plan 2035

The City of Murrieta adopted their General Plan 2035 in 2011. The General Plan sets the long-term goals and policies that decision makers use to guide the growth and development in the City; and the Noise Element establishes the goals and policies associated with noise exposure within the City. Goals and policies that are applicable to implementation of the proposed project are presented below.

Goal N-1	Noise sensitive land uses are properly and effectively protected from excessive noise generators.
N-1.1:	Comply with the Land Use Compatibility for Community Noise Environments.
N-1.2:	Protect schools, hospitals, libraries, churches, convalescent homes, and other noise sensitive uses from excessive noise levels by incorporating site planning and project design techniques to minimize noise impacts. The use of noise barriers shall be considered after all practical design-related noise measures have been integrated into the project. In cases where sound walls are

necessary, they should help create an attractive setting with features such as setbacks, changes in alignment, detail and texture, murals, pedestrian access (if appropriate), and landscaping.

Goal N-2	A comprehensive and effective land use planning and development review process that ensures noise impacts are adequately addressed.
N-2.2:	Integrate noise considerations into land use planning decisions to prevent new noise/land use conflicts.
N-2.3:	Consider the compatibility of proposed land uses with the noise environment when preparing, revising, or reviewing development proposals.
N-2.4:	Encourage proper site planning and architecture to reduce noise impacts.
N-2.5:	Permit only those new development or redevelopment projects that have incorporated mitigation measures, so that standards contained in the Noise Element and Noise Ordinance are met.
N-2.6:	Incorporate noise reduction features for items such as, but not limited to, parking and loading areas, ingress/egress point, HVAC units, and refuse collection areas, during site planning to mitigate anticipated noise impacts on affected noise sensitive land uses.
Goal N-3	Noise from mobile noise sources is minimized.
N-3.3:	Encourage the construction of noise barriers and maintenance of existing noise barriers for sensitive receptors located along the I-15 and I-215 Freeways.
Goal N-4	Reduced noise levels from construction activities.
N-4.1:	Regulate construction activities to ensure construction noise complies with the City's Noise Ordinance.
N-4.2:	Limit the hours of construction activity in residential areas to reduce intrusive noise in early morning and evening hours and on Sundays and holidays.
N-4.3:	Employ construction noise reduction methods to the maximum extent feasible. These measures may include, but not limited to, shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied sensitive receptor areas, and use of electric air compressors and similar power tools, rather than diesel equipment.
N-4.6:	Ensure acceptable noise levels are maintained near schools, hospitals, convalescent homes, churches, and other noise-sensitive areas.



**16.30.090 Exterior Noise Standards.**

All ambient noise measurements shall commence at the base ambient noise levels in decibels within the respective times and zones as follows:

- A. Standards for Noise Zones. The noise levels in Table 5 shall apply to all receptor properties within a designated noise zone.
- B. Noise Standards. 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 a person that causes the noise level, when measured on any other property to exceed the following exterior noise standards:
  - 1. Standard No. 1 shall be the exterior noise level which shall not be exceeded for a cumulative period of more than thirty (30) minutes in any hour. Standard No. 1 may be the applicable noise level from Table 5 above.
  - 2. Standard No. 2 shall be the exterior noise level which shall not be exceeded for a cumulative period of more than fifteen (15) minutes in any hour. Standard No. 2 shall be the applicable noise level from Table 5 above, plus five dB.
  - 3. Standard No. 3 shall be the exterior noise level which shall not be exceeded for a cumulative period of more than five minutes in any hour. Standard No. 3 shall be the applicable noise level from Table 5 above plus ten dB.
  - 4. Standard No. 4 shall be the exterior noise level which shall not be exceeded for a cumulative period of more than one minute in any hour. Standard No. 4 shall be the applicable noise level from Table 5 above plus fifteen (15) dB.
  - 5. Standard No. 5 shall be the exterior noise level which shall not be exceeded for any period of time. Standard No. 5 shall be the applicable noise level from Table 5 above plus twenty (20) dB.
- C. Noise at Zone Boundaries. If the measurement location is on a boundary property between two different zoning districts, the exterior noise level utilized in subsection B of this chapter to determine the exterior standard shall be the arithmetic mean of the exterior noise levels as specified in Table 5, of the subject zones.

**16.30.130 Acts Deemed Violations of Chapter.**

- A. Construction Noise
  - 1. Operating or causing the operation of tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7:00 PM and 7:00 AM, or at any time on Sundays or holidays so that the sound creates a noise disturbance across a residential or commercial property line, except for emergency work of public service utilities.
  - 2. Construction activities shall be conducted in a manner that the maximum noise levels at the affected structures will not exceed those listed in Table 6. Noise associated with mobile equipment at the property line of single-family residential land uses is not allowed to exceed 75 dBA Leq between the hours of 7:00 AM and 8:00 PM or exceed 60 dBA Leq between the hours of 8:00 PM and 7:00 AM. Noise associated with stationary equipment at the property line of single-family residential land uses

is not allowed to exceed 60 dBA Leq between the hours of 7:00 AM and 8:00 PM or exceed 50 dBA Leq between the hours of 8:00 PM and 7:00 AM.

Noise associated with mobile equipment at the property line of commercial land uses is not allowed to exceed 85 dBA Leq between the hours of 7:00 AM and 8:00 PM or exceed 70 dBA Leq between the hours of 8:00 PM and 7:00 AM. Noise levels associated with stationary equipment at the property line of commercial land uses is not allowed to exceed 70 dBA Leq between the hours of 7:00 AM and 8:00 PM or exceed 60 dBA Leq between the hours of 8:00 PM and 7:00 AM.

3. All mobile or stationary internal combustion engine powered equipment or machinery shall be equipped with suitable exhaust and air-intake silencers in proper working order.
- B. Loading and Unloading Operations. Loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans or similar objects between the hours of 10:00 PM and 6:00 AM, in a manner to cause a noise disturbance is prohibited.
- C. Noise Disturbances in Noise-Sensitive Zones. Creating or causing the creation of a noise disturbance within a noise-sensitive zone is prohibited, provided that conspicuous signs are displayed indicating the presence of the zone Noise -sensitive zones shall be indicated by the display of conspicuous signs in at least three separate locations within five hundred (500) feet of the institution or facility (e.g., health care facility).
- G. Refuse Collection Vehicles
1. Operating or permitting the operation of the compacting mechanism of any motor vehicle that compacts refuse and that creates, during the compacting cycle, a sound level in excess of eighty-six (86) dBA when measured at fifty (50) feet from any point of the vehicle is prohibited.
  2. Collecting refuse, or operating or permitting the operation of the compacting mechanism of any motor vehicle that compacts refuse between the hours of 10:00 PM and 6:00 AM the following day in a residential area or noise-sensitive zone is prohibited.
- H. Sweepers and Associated Equipment. Operating or permitting the operation of sweepers or associated sweeping equipment (i.e., blowers) between the hours of 10:00 PM and 6:00 AM the following day in, or adjacent to, a residential area or noise-sensitive area is prohibited.
- K. Vibration. Operating or permitting the operation of any device that creates vibration that is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property, or at one hundred fifty (150) feet from the source if on a public space or public right-of-way is prohibited. The perception threshold shall be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hertz.



**Table 3**  
**City of Murrieta Land Use Compatibility for Community Noise Environments<sup>1</sup>**

Land Use Category	Community Noise Exposure (CNEL)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential- Low Density, Single-Family, Duplex, Mobile Homes	50 - 60	55 - 70	70 - 75	75 - 85
Residential- Multiple Family	50 - 65	60 - 70	70 - 75	70 - 85
Transient Lodging- Motel, Hotels	50 - 65	60 - 70	70 - 80	80 - 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	80 - 85
Auditoriums, Concert Halls, Amphitheatres	NA	50 - 70	NA	65 - 85
Sports Arena, Outdoor Spectator Sports	NA	50 - 75	NA	70 - 85
Playgrounds, Neighborhood Parks	50 - 70	NA	67.5 - 75	72.5 - 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 70	NA	70 - 80	80 - 85
Office Buildings, Business Commercial and Professional	50 - 70	67.5 - 77.5	75 - 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	75 - 85	NA

Notes:

<sup>1</sup>Source: City of Murrieta General Plan 2035 Noise Element Table 11-2, 2011.

CNEL = Community Noise Equivalent Level; NA= not applicable

Normally Acceptable:

Specified land use is satisfactory, based up 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 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 reduction features included in the design.

Clearly Unacceptable:

New construction or development should generally not be undertaken.

**Table 4**  
**Significance of Changes in Cumulative Noise Exposure**

Ambient Noise Levels (Ldn or CNEL)	Significant Impact Assumed to Occur if the Ambient Noise Level is Increased by:
<60 dBA	5.0 dBA or more
> 60 dBA	3.0 dBA or more

Notes:

(1) Source: City of Beaumont, General Plan Safety Element, March 2007.

**Table 5**  
**City of Murrieta Exterior Noise Standards**

Noise Zone	Designated Noise Zone Land Use (Receptor Property)	Time Interval	Allowed Exterior Noise Level (dB)
I	Noise-sensitive area	Anytime	45
II	Residential Properties Residential Properties within five hundred (500) feet of a kennel(s)	10:00 PM to 7:00 AM (nighttime)	45
		7:00 AM to 10:00 PM (daytime)	50
		7:00 AM to 10:00 PM	70
III	Commercial properties	10:00 PM to 7:00 AM (nighttime)	55
		7:00 AM to 10:00 PM (daytime)	60
IV	Industrial properties	Anytime	70

Notes:

(1) Source: City of Murrieta Municipal Code 16.30.090, Table 3-6.

**Table 6**  
**City of Murrieta Construction Noise Standards**

	Single-Family Residential	Multi-Family Residential	Commercial
Mobile Equipment			
Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM	75 dBA	80 dBA	85 dBA
Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays	60 dBA	64 dBA	70 dBA
Stationary Equipment			
Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM	60 dBA	65 dBA	70 dBA
Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays	50 dBA	55 dBA	60 dBA

Notes:

(1) City of Murrieta, Development Code Section 16.30.130.

## 5. ANALYTICAL METHODOLOGY AND MODEL PARAMETERS

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This section discusses the analysis methodologies used to assess noise impacts.

### NOISE MODELING AND INPUT

#### Road Construction Model

A worst-case construction noise scenario was modeled using a version of the Federal Highway Administration's Roadway Construction Noise Model (RCNM). RCNM utilizes standard noise emission levels for many different types of equipment and includes utilization percentage, impact, and shielding parameters. Noise modeling input parameters and output are provided in Appendix D.

#### Federal Highway Administration (FHWA) Traffic Noise Prediction Model

Existing, Existing Plus Project noise levels along Monroe Avenue and other affected nearby roadway segments were modeled utilizing the FHWA Traffic Noise Prediction Model FHWA-RD-77-108 in order to quantify the proposed project's contribution to increases in ambient noise levels.

The FHWA Traffic Noise Prediction Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). Adjustments are then made to the REMEL to account for: total average daily traffic volumes, roadway classification, width, speed and truck mix, roadway grade and site conditions (hard or soft ground surface). Surfaces adjacent to all modeled roadways were assumed to have a "hard site" to predict worst-case, conservative noise levels. A hard site, such as pavement, is highly reflective and does not attenuate noise as quickly as grass or other soft sites. Possible reductions in noise levels due to intervening topography and buildings were not accounted for in this analysis.

Existing and Existing Plus Project vehicle mix were obtained from the project's Hotel Murrieta Traffic Impact Analysis (Ganddini Group, Inc., 2019). Vehicle/truck mixes and D/E/N splits for use in acoustical studies published by the Riverside County Department of Industrial Hygiene were utilized for noise modeling. Existing Plus Project vehicle mixes were calculated by adding the proposed project trips to existing conditions. FHWA spreadsheets are included in Appendix E.

#### SoundPLAN

The SoundPLAN model was utilized to model traffic noise associated with the I-215 Freeway, I-15 Freeway, and Monroe Avenue. It is a three-dimensional noise modeling software that takes into account the shielding and reflective effects associated with intervening topography and nearby buildings.

Roadway parameters utilized in the noise model include location, traffic volume, speed and vehicle mix (autos, medium trucks, and heavy trucks). It is important to evaluate potential impacts of the noisiest possible future conditions. These conditions occur when the maximum amount of vehicles pass at the greatest speed. This scenario usually corresponds to Level of Service C (LOS C) Conditions, or about 75% of buildout capacity. The City of Murrieta General Plan 2035 classifies Monroe Avenue as a Major roadway. Per Table 5-2 of the City's General Plan Circulation Element, a Major roadway has a Level of Service C daily roadway capacity of 27,300 vehicles. However, per the Traffic Impact Analysis prepared for the proposed project, the project includes a General Plan Amendment to change the classification of Monroe Avenue from a Major Roadway to an Industrial Collector. Per Table 5-2 of the City's General Plan Circulation Element, a Collector roadway has a Level of Service C daily roadway capacity of 10,400 vehicles. Therefore, for modeling purposes, Monroe Avenue was modeled as an Industrial Collector. Speed was modeled as posted and day/night/evening mixes and truck mixes, as recommended by the County of Riverside Department of Industrial Hygiene were utilized for modeling purposes.

Vehicle mix (92.8% autos, 4.7% medium trucks, and 2.5% heavy trucks for the I-215 Freeway and 94.5% autos, 2.5% medium trucks, and 3.0% heavy trucks for the I-15 Freeway) found in data provided by the California Department of Transportation (<http://traffic-counts.dot.ca.gov/>) was utilized to model future noise levels associated with the I-15 Freeway and the I-215 Freeway. SoundPLAN input and output data is provided in Appendix F.

## 6. IMPACT ANALYSIS

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This impact discussion analyzes the potential for noise impacts to cause the exposure of a person to, or generation of, noise levels in excess of established City of Murrieta standards related to: construction noise and transportation noise related impacts to, or from, the proposed project.

### CONSTRUCTION NOISE

Sensitive land uses that may be affected by project construction noise include single-family detached residential dwelling units located approximately 335 feet southwest of the project site, a preschool located approximately 460 feet northwest of the project site, and single-family detached residential units located approximately 1,120 feet to the northwest of the project site. These sensitive receptors are shown on Figure 5.

Construction noise varies depending on the construction process, type of equipment involved, location of the construction site with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week) and the duration of the construction work. Typical noise sources and noise levels associated with construction are shown in Table 7. Site grading will produce the highest sustained construction noise levels. This type of equipment is typically operated at full power for one-two minutes, and then at a lower power for three-four minutes.

A likely worst-case construction noise scenario was calculated using the Federal Highway Administration's Roadway Construction Noise Model (RCNM) (see Appendix D). The analysis assumed the use of an excavator, a grader, a dozer, a tractor, a loader and a backhoe all operating simultaneously at a at the property line. Assuming a use factor of 40 percent for each piece of equipment, unmitigated noise levels could reach 69 dBA  $L_{eq}$  and 69 dBA  $L_{max}$  at the single-family detached residential dwelling units located approximately 335 feet southwest of the project site; 67 dBA  $L_{eq}$  and 66 dBA  $L_{max}$  at the preschool located approximately 460 feet northwest of the project site and; 59 dBA  $L_{eq}$  and 58 dBA  $L_{max}$  at the single-family detached residential dwelling units located approximately 1,120 feet northwest of the project site.

Per the City of Murrieta Municipal Code, noise associated with mobile equipment at the property line of commercial land uses is not allowed to exceed 85 dBA  $L_{eq}$  between the hours of 7:00 AM and 8:00 PM or exceed 70 dBA  $L_{eq}$  between the hours of 8:00 PM and 7:00 AM. Noise associated with mobile equipment at the property line of single-family residential land uses is not allowed to exceed 75 dBA  $L_{eq}$  between the hours of 7:00 AM and 8:00 PM or exceed 60 dBA  $L_{eq}$  between the hours of 8:00 PM and 7:00 AM.

Although construction noise will have a temporary or periodic increase in the ambient noise levels above the existing within the project vicinity, it is anticipated to occur during the permissible hours according to the City's Municipal Code. Therefore, construction-related noise impacts are considered to be less than significant. Measures to minimize construction noise, including those required by the City's Municipal Code are provided in Section VII of this report.

### NOISE IMPACTS TO OFF-SITE RECEPTORS DUE TO PROJECT GENERATED TRIPS

During operation, the proposed project is expected to generate approximately 2,149 average daily trips with 121 trips during the AM peak hour and 155 trips during the PM peak hour. A worst-case project generated traffic noise level was modeled utilizing the FHWA Traffic Noise Prediction Model - FHWA-RD-77-108. Traffic noise levels were calculated at the right of way from the centerline of the analyzed roadway as well as at the nearest sensitive noise location. The modeling is theoretical and does not take into account any existing barriers, structures, and/or topographical features that may further reduce noise levels. Therefore, the levels are shown for comparative purposes only to show the difference in with and without project conditions. Roadway input parameters including average daily traffic volumes (ADTs), speeds, and vehicle distribution

data is shown in Table 8. The potential off-site noise impacts caused by an increase of traffic volumes from operation of the proposed project on the nearby roadways were calculated for the following scenarios:

*Existing Year (without Project):* This scenario refers to existing year traffic noise conditions and is demonstrated in Table 8.

*Existing Year (Plus Project):* This scenario refers to existing year plus project traffic noise conditions and is demonstrated in Table 8.

Table 9 compares the Existing and the Existing Plus Project scenario and shows the change in traffic noise levels as a result of the proposed project. As stated previously, the proposed project would result in a substantial increase in ambient noise levels if the existing ambient noise level at a sensitive noise location is less than 60 dBA CNEL and the project causes an increase of 5 dBA or more; or if the existing ambient noise level at a sensitive noise location is greater than 60 dBA CNEL and the project causes an increase of 3 dB or more.

For roadway segments that currently carry very little traffic volumes, and/or where the dominant noise source is not that particular roadway segment, the measured ambient noise measurement was utilized to calibrate the FHWA analysis for a more accurate comparison of existing and existing plus project. The two roadway segments that used the measured ambient noise in order to calibrate the FHWA analysis included Guava Street east of Madison Avenue and Newton Azrak Street east of Madison Avenue.

As shown in Table 9, modeled Existing traffic noise levels range between 57.9-78.1 dBA CNEL and the modeled Existing Plus Project traffic noise levels range between 58.9-78.1 dBA CNEL at the right-of-way of each modeled roadway segment. In addition, at the nearest noise sensitive location to each modeled roadway segment the modeled Existing traffic noise levels range between 54.1-67.8 dBA CNEL and the modeled Existing Plus Project traffic noise levels range between 54.2-68.4 dBA CNEL.

Table 9 shows that all modeled roadway segments are anticipated to change the noise a nominal amount (between approximately 0.01 to 1.07 dBA CNEL). Therefore, a change in noise level would not be audible and would be considered less than significant. No mitigation is required.

## **TRANSPORTATION NOISE IMPACTS TO THE PROPOSED PROJECT**

The I-15 Freeway, I-215 Freeway, and Monroe Avenue are the primary noise sources that affect the project site. Monroe Avenue is classified as a Major roadway in the City of Murrieta General Plan 2035 Circulation Element; however, as stated previously, the proposed project includes a General Plan Amendment to change Monroe Avenue from a Major roadway to an Industrial Collector. Per Table 5-2 of the City's General Plan Circulation Element, a Collector roadway has a Level of Service C daily roadway capacity of 10,400 vehicles. As described previously, the SoundPLAN noise model was utilized to model the future noise environment, taking each of these roadways into account. The noise model also takes into consideration the existing earthen berm and change in elevation between the I-15 Freeway and the project site.

As shown on Figure 6 and Figure 7, future traffic noise is expected to range between 52 and 75 dBA CNEL at the project site. Per Table 3, the Land Use Compatibility Matrix that City planners use as a guide for land use planning activities, hotel land uses are considered to be normally acceptable in environments where the ambient noise level is not expected to exceed 65 dBA CNEL and conditionally acceptable where exterior noise levels may reach up to 70 dBA CNEL. New construction or development in environments where noise levels exceed 70 dBA CNEL is allowed as long as 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. Outdoor environment will seem noisy and mitigation for outdoor use areas may be necessary.



If interior noise levels of 45 dBA CNEL are to be achieved the hotel roof and window/wall assemblies will need to provide an exterior to interior noise reduction of 7-30 dBA CNEL depending on the location of the units. Required STC ratings are shown in Table 10. With incorporation of upgraded construction materials, interior noise levels are not expected to exceed 45 dBA CNEL. Exterior noise levels at the proposed pool area are expected to reach up to 58 dBA CNEL and would be considered normally acceptable. No mitigation is required for outdoor use areas.

## VIBRATION IMPACTS

Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. Typically, particle velocity or acceleration (measured in gravities) is used to describe vibration in context of potential structural damage.

Table 11 shows the peak particle velocities (PPV) of some common construction equipment and Table 12 shows typical human reactions to various levels of PPV as well as the effect of PPV on buildings.

The nearest existing structure to the project site is located approximately 330 feet southeast of the project site. As shown in Table 12, the threshold at which there may be a risk of architectural damage to normal houses with plastered walls and ceilings is 0.20 PPV in/second. Primary sources of vibration during construction would be from vibratory rollers or bulldozers.

A vibratory roller could produce 0.21 PPV at 25 feet or a large bulldozer could produce up to 0.089 PPV at 25 feet. At a distance of 330 feet, a vibratory roller would yield a worst-case 0.0044 PPV (in/sec) and a large bulldozer would yield a worst-case 0.0019 PPV (in/sec), both of which are well below the threshold for any risk of architectural damage or annoyance to nearby sensitive receptors.

Construction equipment is anticipated to be located at a distance of at least 330 feet or more from any receptor. Temporary vibration levels associated with project construction would be less than significant. Annoyance-related impacts would be short-term and would only occur during site grading and construction activities. Therefore, impacts associated with construction activities would be less than significant. No mitigation is required.

**Table 7**  
**Typical Construction Equipment Noise Levels**

Type of Equipment	Range of Maximum Sound Levels Measured (dBA at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)
Rock Drills	83-99	96
Jack Hammers	75-85	82
Pneumatic Tools	78-88	85
Pumps	74-84	80
Dozers	77-90	85
Scrapers	83-91	87
Haul Trucks	83-94	88
Cranes	79-86	82
Portable Generators	71-87	80
Rollers	75-82	80
Tractors	77-82	80
Front-End Loaders	77-90	86
Hydraulic Excavators	81-90	86
Graders	79-89	86
Air Compressors	76-89	86
Trucks	81-87	86

Notes:

(1) Source: Bolt, Beranek & Newman; Noise Control for Buildings and Manufacturing Plants, 1987.

**Table 8**  
**Project Average Daily Traffic Volumes and Roadway Parameters**

Roadway	Segment	Average Daily Traffic Volume <sup>1</sup>		Posted Travel Speeds (MPH)	Site Conditions
		Existing	Existing Plus Project		
Murrieta Hot Springs Road	West of Madison Avenue	20,800	20,900	45	Hard
	Madison Avenue to I-15 Freeway	39,100	40,500	45	Hard
	East of I-15 Freeway	49,600	49,900	45	Hard
Guava Street	West of Madison Avenue	3,500	3,600	35	Hard
	East of Madison Avenue	100	700	35	Hard
Newton Azrak Street	East of Madison Avenue	200	1,700	25	Hard
Madison Avenue	North of Murrieta Hot Springs Road	17,700	17,900	45	Hard
	Murrieta Hot Springs Road to Guava Street	6,800	8,500	35	Hard
	Guava Street to Newton Azrak Street	2,800	4,000	35	Hard
	Newton Azrak Street to Fig Street	2,100	2,400	35	Hard

Vehicle Distribution (Light Mix) <sup>2</sup>			
Motor-Vehicle Type	Daytime % (7 AM - 7 PM)	Evening % (7 PM - 10 PM)	Night % (10 PM - 7 AM)
Automobiles	75.56	13.96	10.49
Medium Trucks	48.91	2.17	48.91
Heavy Trucks	47.30	5.41	47.30

Vehicle Distribution (Heavy Mix) <sup>2</sup>			
Motor-Vehicle Type	Daytime % (7 AM - 7 PM)	Evening % (7 PM - 10 PM)	Night % (10 PM - 7 AM)
Automobiles	75.54	14.02	10.43
Medium Trucks	48.00	2.00	50.00
Heavy Trucks	48.00	2.00	50.00

Notes:

- (1) Average daily traffic volumes obtained from the Hotel Murrieta Traffic Impact Analysis, Ganddini Group, Inc. (August 30, 2019).
- (2) Existing vehicle percentages are based on the Riverside County Industrial Hygiene Letter for Traffic Noise.

**Table 9**  
**Change in Existing Noise Levels Along Roadways as a Result of Project (dBA CNEL)**

Roadway	Segment	Distance from roadway centerline to right-of-way (feet) <sup>2</sup>	Modeled Noise Levels (dBA CNEL) <sup>1</sup>							
			Existing Without Project at ROW	Existing Plus Project at ROW	Change in Noise Level	Existing Without Project at Nearest Noise Sensitive Location	Existing Plus Project at Nearest Noise Sensitive Location	Change in Noise Level	Exceeds Standards <sup>3</sup>	Increase of 3 dB or More
Murrieta Hot Springs Road	West of Madison Avenue	67	74.82	74.83	0.01	N/A	N/A	N/A	Yes	No
	Madison Avenue to I-15 Freeway	67	77.56	77.63	0.07	N/A	N/A	N/A	Yes	No
	East of I-15 Freeway	75	78.10	78.11	0.01	67.76	67.77	0.01	Yes	No
Guava Street	West of Madison Avenue	44	62.89	63.01	0.12	54.07	54.19	0.12	Yes	No
	East of Madison Avenue	915 <sup>4</sup>	57.81	57.93	0.12	68.29	68.40	0.11	Yes	No
Newton Azrak Street	East of Madison Avenue	388 <sup>4</sup>	58.57	58.86	0.29	57.81	57.93	0.12	Yes	No
Madison Avenue	North of Murrieta Hot Springs Road	50	75.39	75.41	0.02	N/A	N/A	N/A	Yes	No
	Murrieta Hot Springs Road to Guava Street	50	69.70	70.08	0.38	67.55	67.93	0.38	Yes	No
	Guava Street to Newton Azrak Street	50	65.85	66.47	0.62	59.13	59.75	0.62	Yes	No
	Newton Azrak Street to Fig Street	50	64.60	64.82	0.22	64.43	65.50	1.07	Yes	No

Notes:

- (1) Exterior noise levels calculated 5-feet above pad elevation, perpendicular to subject roadway.
- (2) Right of way per the City of Murrieta General Plan 2035 Circulation Map (July 2011).
- (3) Per the City of Murrieta Residential - Single-Family "Normally Acceptable" land use compatibility standard of 60 CNEL (see Table 5).
- (4) Estimated distance from roadway centerline to the nearest noise measurement location instead of the roadway right-of-way as the measured ambient noise level was used to calibrate the analysis due to very little existing traffic on the roadway segment.
- (5) N/A = Not applicable. There are no noise sensitive locations along the roadway segment.

**Table 10**  
**Required Window STC Ratings**

Floor Level	Building Location (see Receivers at Buildings on Figure 6)							
	1	2	3	4	5	6	7	8
1	10	12	14	17	16	17	18	14
2	13	15	18	20	22	23	22	19
3	15	17	21	23	24	26	22	21
4	16	18	24	25	25	28	22	23
5	17	19	25	27	26	30	22	23
6	17	19	27	27	27	30	21	24
7	17	19	28	28	27	31	21	24
8	17	19	28	29	27	32	21	24
9	17	19	29	29	28	33	20	25

**Table 11**  
**Construction Equipment Vibration Source Levels**

Equipment	Peak Partical Velocity in inches per second <sup>2</sup>		
	at 25 feet	at 50 feet	at 100 feet
Clam Shovel Drop (slurry wall)	<b>0.202</b>	0.071	0.025
Vibratory Roller	<b>0.210</b>	0.074	0.026
Hoe Ram	<b>0.089</b>	0.031	0.011
Large Bulldozer	<b>0.089</b>	0.031	0.011
Caisson Drilling	<b>0.089</b>	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Jackhammer	0.035	0.012	0.004
Small Bulldozer	0.003	0.001	0.0004

Notes:

(1) Source: Federal Transit Administration: Transit Noise and Vibration Impact Assessment, 2006.

(2) Bold values are considered annoying to people.

**Table 12**  
**Typical Human Reaction and Effect on Buildings Due to Groundborne Vibration**

Vibration Level Peak Particle Velocity (PPV)	Human Reaction	Effect on Buildings
0.006–0.019 in/sec	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08 in/sec	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10 in/sec	Level at which continuous vibration begins to annoy people	Virtually no risk of "architectural" (i.e., not structural) damage to normal buildings
0.20 in/sec	Vibrations annoying to people in buildings	Threshold at which there is a risk to "architectural" damage to normal dwelling – houses with plastered walls and ceilings
0.4–0.6 in/sec	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Notes:

- (1) Source: California Department of Transportation. Transportation and Construction Vibration Guidance Manual, Chapter 6 Tables 5 and 12, September 2013.

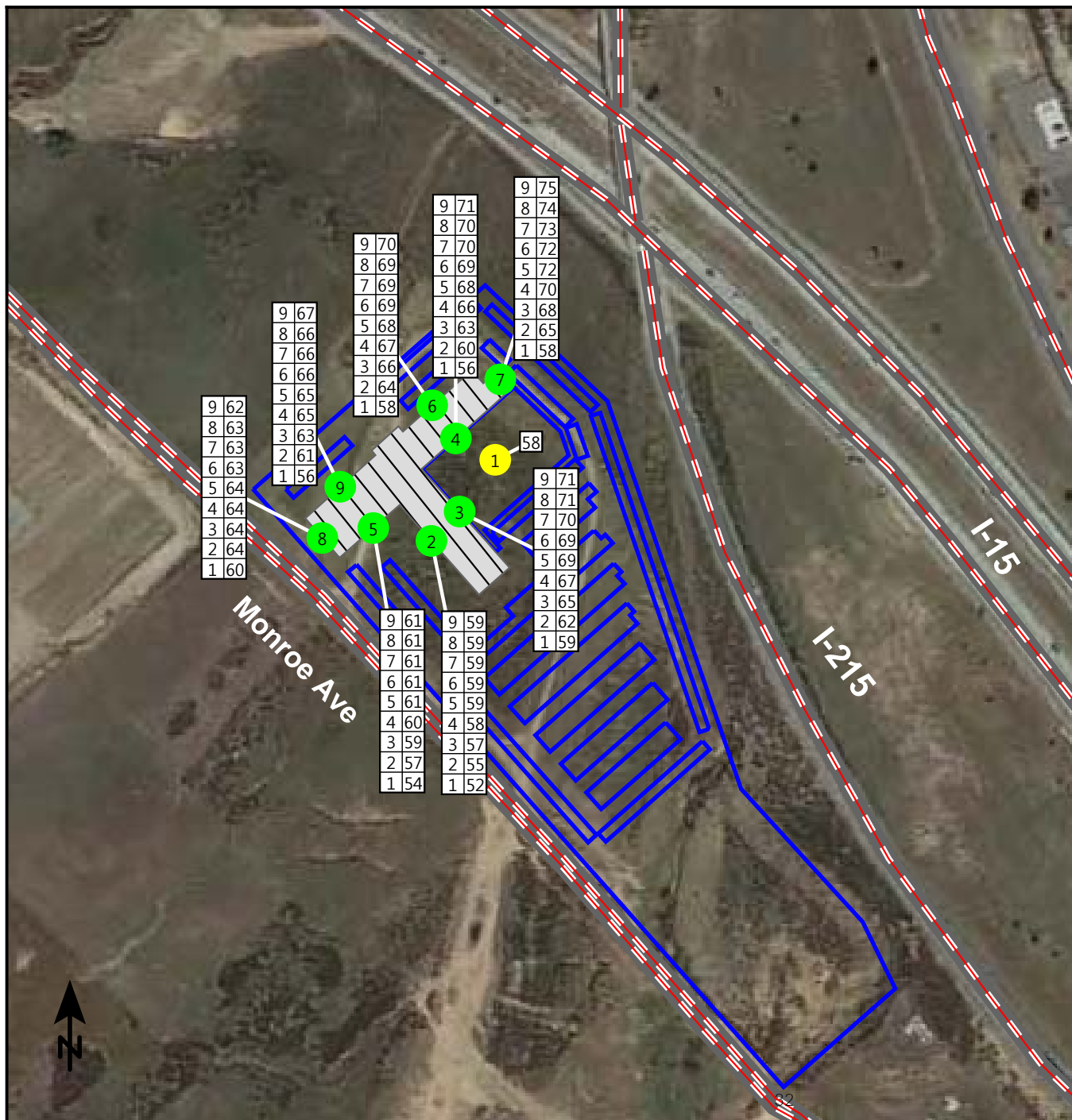


Figure 6

## Future Traffic Noise Levels (CNEL)

### Signs and symbols

- Property Boundary & Parking
- 10- Foot Noise Barrier Facing Northeast & I-15
- 8-Foot Noise Barrier Facing Southeast
- Proposed Building
- Receiver at Pool and Outdoor Dining Area
- Receiver at building
- Road axis
- Roadway

### Level tables

1 62  
2 63  
3 64 Noise Levels (1st-9th Floors)

1 : 250

0 50 100 200 300 400 feet

ganddi



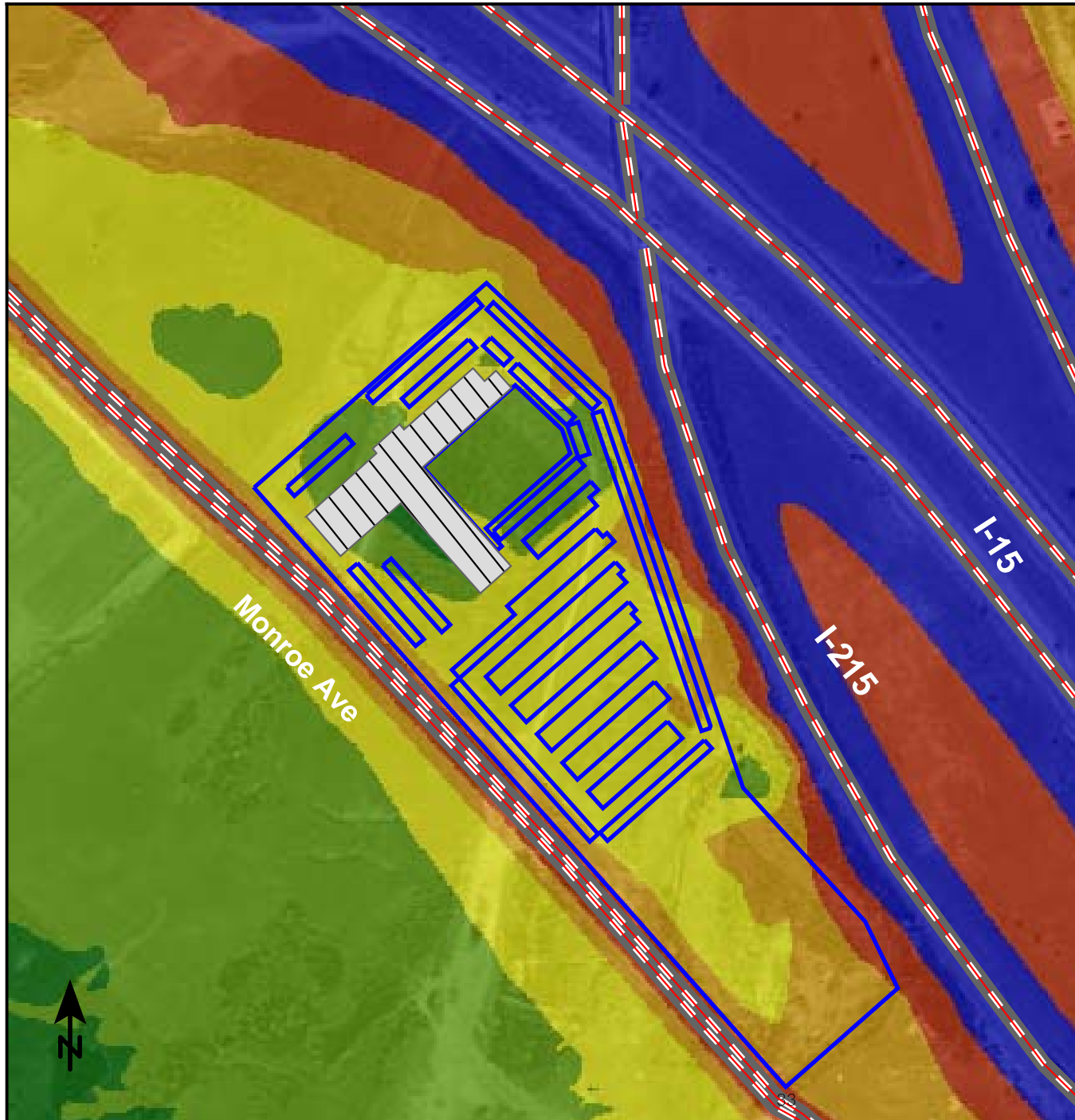


Figure 7

## Future Traffic Noise Level Contours (CNEL)

### Signs and symbols

- Property Boundary & Parking
- 10- Foot Noise Barrier Facing Northeast & I-15
- 8-Foot Noise Barrier Facing Southeast
- Proposed Building
- Road axis
- Roadway

### Levels in dB(A)

	≤ 55
	55 - 60
	60 - 65
	65 - 70
	70 - 75
	> 75

1 : 250

0 50 100 200 300 400 feet

gandini

## 7. MEASURES TO REDUCE IMPACTS

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### CONSTRUCTION NOISE REDUCTION MEASURES

In addition to adherence to the City of Murrieta's Municipal Code which limits the construction hours of operation, and requires mobile or stationary internal combustion engine powered equipment or machinery shall be equipped with suitable exhaust and air-intake silencers in proper working order, the following measures are recommended to reduce construction noise and vibrations, emanating from the proposed project:

1. The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.
2. Equipment shall be shut off and not left to idle when not in use.
3. The contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the project site during all project construction.
4. Jackhammers, pneumatic equipment and all other portable stationary noise sources shall be shielded and noise shall be directed away from sensitive receptors.
5. The project proponent shall mandate that the construction contractor prohibit the use of music or sound amplification on the project site during construction.
6. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment.

### OPERATIONAL MITIGATION MEASURES

Mitigation Measure 1. Window/wall assemblies need to have STC ratings ranging from 10 – 30, depending on the window location. Table 10 lists the required STC ratings.

## 8. REFERENCES

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## APPENDICES

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Appendix A List of Acronyms

Appendix B Definitions of Acoustical Terms

Appendix C Noise Measurement Field Worksheets

Appendix D RCNM Noise Modeling Output

Appendix E Project Generated Traffic FHWA Worksheets

Appendix F SoundPLAN Input and Output

## **APPENDIX A**

### **LIST OF ACRONYMS**

Term	Definition
ADT	Average Daily Traffic
ANSI	American National Standard Institute
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
D/E/N	Day / Evening / Night
dB	Decibel
dBA or dB(A)	Decibel "A-Weighted"
dBA/DD	Decibel per Double Distance
dBA $L_{eq}$	Average Noise Level over a Period of Time
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
$L_{02}, L_{08}, L_{50}, L_{90}$	A-weighted Noise Levels at 2 percent, 8 percent, 50 percent, and 90 percent, respectively, of the time period
DNL	Day-Night Average Noise Level
$L_{eq(x)}$	Equivalent Noise Level for "x" period of time
$L_{eq}$	Equivalent Noise Level
$L_{max}$	Maximum Level of Noise (measured using a sound level meter)
$L_{min}$	Minimum Level of Noise (measured using a sound level meter)
LOS C	Level of Service C
OPR	California Governor's Office of Planning and Research
PPV	Peak Particle Velocities
RCNM	Road Construction Noise Model
REMEL	Reference Energy Mean Emission Level
RMS	Root Mean Square

## **APPENDIX B**

### **DEFINITIONS OF ACOUSTICAL TERMS**

Term	Definition
Ambient Noise Level	The all-encompassing noise environment associated with a given environment, at a specified time, usually a composite of sound from many sources, at many directions, near and far, in which usually no particular sound is dominant.
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. 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.
CNEL	Community Noise Equivalent Level. CNEL is a weighted 24-hour noise level that is obtained by adding five decibels to sound levels in the evening (7:00 PM to 10:00 PM), and by adding ten decibels to sound levels at night (10:00 PM to 7:00 AM). This weighting accounts for the increased human sensitivity to noise during the evening and nighttime hours.
Decibel, dB	A logarithmic unit of noise level measurement that relates the energy of a noise source to that of a constant reference level; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
DNL, Ldn	Day Night Level. The DNL, or Ldn is a weighted 24-hour noise level that is obtained by adding ten decibels to sound levels at night (10:00 PM to 7:00 AM). This weighting accounts for the increased human sensitivity to noise during the nighttime hours.
Equivalent Continuous Noise Level, $L_{eq}$	A level of steady state sound that in a stated time period, and a stated location, has the same A-weighted sound energy as the time-varying sound.
Fast/Slow Meter Response	The fast and slow meter responses are different settings on a sound level meter. The fast response setting takes a measurement every 100 milliseconds, while a slow setting takes one every second.
Frequency, Hertz	In a function periodic in time, the number of times that the quantity repeats itself in one second (i.e., the number of cycles per second).
$L_{02}$ , $L_{08}$ , $L_{50}$ , $L_{90}$	The A-weighted noise levels that are equaled or exceeded by a fluctuating sound level, 2 percent, 8 percent, 50 percent, and 90 percent of a stated time period, respectively.
$L_{max}$ , $L_{min}$	$L_{max}$ is the RMS (root mean squared) maximum level of a noise source or environment measured on a sound level meter, during a designated time interval, using fast meter response. $L_{min}$ is the minimum level.
Offensive/ Offending/ Intrusive Noise	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of sound depends on its amplitude, duration, frequency, and time of occurrence, and tonal information content as well as the prevailing ambient noise level.
Root Mean Square (RMS)	A measure of the magnitude of a varying noise source quantity. The name derives from the calculation of the square root of the mean of the squares of the values. It can be calculated from either a series of lone values or a continuous varying function.



**APPENDIX C**

**NOISE MEASUREMENT FIELD WORKSHEETS**

**Noise Measurement  
Field Data**

**Project Name:** Hotel Murrieta **Date:** May 14, 2018

**Project #:** 7433a

**Noise Measurement #:** STNM1 **Technician:** Ian Gallagher

**Nearest Address or Cross Street:** Promise Lutheran Church Park & Ride

**Site Description (Type of Existing Land Use and any other notable features):** Project site: Open field. Adjacent: Church, children's school and Border Patrol

to the West, 15 and 215 Freeways connecting to the East, ranch style, rural residences to the South.

**Weather:** Sunny, blue skies, haze and small white clouds near horizon. **Settings:** SLOW FAST

**Temperature:** 75 deg F **Wind:** 10-15 mph **Humidity:** 45% **Terrain:** Some gradient, hilly.

**Start Time:** 4:14 PM **End Time:** 4:24 PM **Run Time:** 10 MIN

**Leq:** 54.1 dB **Primary Noise Source:** Vehicles entering or leaving parking lot.

**Lmax** 64.3 dB Children at play within school grounds.

**L2** 59.6 dB **Secondary Noise Sources:** Wind blowing through leaves on trees, bird song.

**L8** 57.6 dB Distant freeway traffic ambiance.

**L25** 55.5 dB

**L50** 52.1 dB

**NOISE METER:** SoundTrack LXT Class 1 **CALIBRATOR:** Larson Davis CAL250

**MAKE:** Larson Davis **MAKE:** Larson Davis

**MODEL:** LXT1 **MODEL:** Cal 250

**SERIAL NUMBER:** 3099 **SERIAL NUMBER:** 2733

**FACTORY CALIBRATION DATE:** 6/23/2017 **FACTORY CALIBRATION DATE:** 6/9/2017

**FIELD CALIBRATION DATE:** 5/14/2018

Noise Measurement  
Field Data

PHOTOS:



JN7433a STNM1 looking West towards Promise Lutheran Church.



JN7433a STNM1 looking NE toward Vineyards and 15 Freeway.

Summary				
File Name on Meter	LxT_Data.033			
File Name on PC	SLM_0003099_LxT_Data_033.02.ldbin			
Serial Number	0003099			
Model	SoundTrack LxT®			
Firmware Version	2.301			
User	Ian Edward Gallagher			
Location	JN7433a STNM1			
Job Description	10 minute noise measurement			
Measurement				
Start	2018-05-14 16:14:29			
Stop	2018-05-14 16:24:29			
Duration	00:10:00.0			
Run Time	00:10:00.0			
Pause	00:00:00.0			
Pre Calibration	2018-05-14 16:12:31			
Post Calibration	None			
Calibration Deviation	---			
Overall Settings				
RMS Weight	A Weighting			
Peak Weight	Z Weighting			
Detector	Slow			
Preamp	PRMLxT1L			
Microphone Correction	Off			
Integration Method	Linear			
OBA Range	Low			
OBA Bandwidth	1/1 and 1/3			
OBA Freq. Weighting	Z Weighting			
OBA Max Spectrum	Bin Max			
Overload	122.7 dB			
Results				
LAeq	54.1 dB			
LAE	81.9 dB			
EA	17.124 µPa²h			
EA8	821.936 µPa²h			
EA40	4.110 mPa²h			
LZpeak (max)	2018-05-14 16:23:52	109.6 dB		
LASmax	2018-05-14 16:20:24	64.3 dB		
LASmin	2018-05-14 16:14:59	47.4 dB		
SEA	-99.9 dB			
			Statistics	
LCeq	68.9 dB	LAS2.00	59.6 dB	
LAeq	54.1 dB	LAS8.00	57.6 dB	
LCeq - LAeq	14.8 dB	LAS25.00	55.5 dB	
LAlaq	57.6 dB	LAS50.00	52.1 dB	
LAeq	54.1 dB	LAS66.60	50.8 dB	
LAlaq - LAeq	3.5 dB	LAS90.00	49.4 dB	
# Overloads	0			

**Noise Measurement  
Field Data**

**Project Name:** Hotel Murrieta **Date:** May 14, 2018

**Project #:** 7433a

**Noise Measurement #:** STNM2 **Technician:** Ian Gallagher

**Nearest Address or Cross Street:** Fig Street & Monroe Avenue

**Site Description (Type of Existing Land Use and any other notable features):** Project site: Open field. Adjacent: Church, children's school and Border Patrol

to the West, 15 and 215 Freeways connecting to the East, ranch style, rural residences to the South.

**Weather:** Sunny, blue skies, haze and small white clouds near horizon. **Settings:** SLOW FAST

**Temperature:** 72 deg F **Wind:** 10-15 mph **Humidity:** 48% **Terrain:** Some gradient, hilly.

**Start Time:** 4:45 PM **End Time:** 4:55 PM **Run Time:** 10 MIN

**Leq:** 50.9 dB **Primary Noise Source:** Wind blowing through leaves on trees, bird song.

**Lmax** 58.6 dB

**L2** 53.8 dB **Secondary Noise Sources:** Distant freeway traffic ambiance.

**L8** 52.4 dB

**L25** 51.5 dB

**L50** 50.7 dB

**NOISE METER:** SoundTrack LXT Class 1 **CALIBRATOR:** Larson Davis CAL250

**MAKE:** Larson Davis **MAKE:** Larson Davis

**MODEL:** LXT1 **MODEL:** Cal 250

**SERIAL NUMBER:** 3099 **SERIAL NUMBER:** 2733

**FACTORY CALIBRATION DATE:** 6/23/2017 **FACTORY CALIBRATION DATE:** 6/9/2017

**FIELD CALIBRATION DATE:** 5/14/2018

**Noise Measurement  
Field Data**

PHOTOS:



JN7433a STNM2 looking South down Fig Street



JN7433a STNM2 looking North towards Monroe Avenue.

Summary			
File Name on Meter	LxT_Data.034		
File Name on PC	SLM_0003099_LxT_Data_034.01.ldbin		
Serial Number	0003099		
Model	SoundTrack LxT®		
Firmware Version	2.301		
User	Ian Edward Gallagher		
Location	JN7433a STNM2		
Job Description	10 minute noise measurement		
Measurement			
Start	2018-05-14 16:45:51		
Stop	2018-05-14 16:55:51		
Duration	00:10:00.0		
Run Time	00:10:00.0		
Pause	00:00:00.0		
Pre Calibration	2018-05-14 16:45:36		
Post Calibration	None		
Calibration Deviation	---		
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	Z Weighting		
Detector	Slow		
Preamp	PRMLxT1L		
Microphone Correction	Off		
Integration Method	Linear		
OBA Range	Low		
OBA Bandwidth	1/1 and 1/3		
OBA Freq. Weighting	Z Weighting		
OBA Max Spectrum	Bin Max		
Overload	122.6 dB		
Results			
LAeq	50.9 dB		
LAE	78.7 dB		
EA	8.212 µPa²h		
EA8	394.176 µPa²h		
EA40	1.971 mPa²h		
LZpeak (max)	2018-05-14 16:48:47	92.8 dB	
LASmax	2018-05-14 16:45:51	58.6 dB	
LASmin	2018-05-14 16:46:35	47.7 dB	
SEA	-99.9 dB		
		Statistics	
LCeq	63.8 dB	LAS2.00	53.8 dB
LAeq	50.9 dB	LAS8.00	52.4 dB
LCeq - LAeq	12.9 dB	LAS25.00	51.5 dB
LAlaq	54.2 dB	LAS50.00	50.7 dB
LAeq	50.9 dB	LAS66.60	50.1 dB
LAlaq - LAeq	3.3 dB	LAS90.00	49.1 dB
# Overloads	0		

# **Noise Measurement Field Data**

**Project Name:** Hotel Murrieta **Date:** May 14 to 15, 2018

**Project #:** 7433a

**Noise Measurement #:** LTNM1 **Technician:** Ian Gallagher

**Nearest Address or Cross Street:** Fig Street & Monroe Avenue

**Site Description (Type of Existing Land Use and any other notable features):** Project site: Open field. Adjacent: Church, children's school and Border Patrol

to the West, 15 and 215 Freeways connecting to the East, ranch style, rural residences to the South.

**Weather:** Clear skies, haze near horizon. **Settings:** SLOW FAST

**Temperature:** 52 to 73 deg F **Wind:** 0-15 mph **Humidity:** 48-60% **Terrain:** Some gradient, hilly.

**Start Time:** 6:00 PM **End Time:** 6:00 PM **Run Time:** 24 Hours ( 24 x 1 hour )

**Leq:** 63.2 dB **Primary Noise Source:** Freeway traffic noise from the 215 and 15 Freeways.

**Lmax** 83.2 dB

**L2** 68.5 dB **Secondary Noise Sources:** Wind blowing through leaves on trees, bird song by day, crickets at night.

**L8** 66.6 dB

**L25** 64.3 dB

**L50** 62.0 dB

**NOISE METER:** SoundTrack LXT Class 1 **CALIBRATOR:** Larson Davis CAL250

**MAKE:** Larson Davis **MAKE:** Larson Davis

**MODEL:** LXT1 **MODEL:** Cal 250

**SERIAL NUMBER:** 3099 **SERIAL NUMBER:** 2733

**FACTORY CALIBRATION DATE:** 6/23/2017 **FACTORY CALIBRATION DATE:** 6/9/2017

**FIELD CALIBRATION DATE:** 5/14/2018



Noise Measurement  
Field Data

PHOTOS:



JN7433a LTNM1 looking South down the 15 & 215 Freeways



JN7433a LTNM1 looking North towards the 215 SD Freeway ramp.

Summary			
File Name on Meter	LxT_Data.035		
File Name on PC	SLM_0003099_LxT_Data_035.01.ldbin		
Serial Number	0003099		
Model	SoundTrack LxT®		
Firmware Version	2.301		
User	Ian Edward Gallagherr		
Location	JN7433a LTNM1		
Job Description	24 hour noise measurement		
Measurement			
Start	2018-05-14 18:00:00		
Stop	2018-05-15 18:00:00		
Duration	24:00:00.0		
Run Time	24:00:00.0		
Pause	00:00:00.0		
Pre Calibration	2018-05-14 17:15:44		
Post Calibration	None		
Calibration Deviation	---		
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamp	PRMLxT1L		
Microphone Correction	Off		
Integration Method	Linear		
OBA Range	Normal		
OBA Bandwidth	1/1 and 1/3		
OBA Freq. Weighting	A Weighting		
OBA Max Spectrum	Bin Max		
Overload	122.5 dB		
Results			
LAeq	63.2 dB		
LAE	112.5 dB		
EA	19.977 mPa²h		
EA8	6.659 mPa²h		
EA40	33.295 mPa²h		
LApeak (max)	2018-05-14 20:48:59	106.1 dB	
LASmax	2018-05-15 08:33:29	83.2 dB	
LASmin	2018-05-15 02:01:18	38.8 dB	
SEA	-99.9 dB		
			Statistics
LCeq	73.2 dB	LAS2.00	68.5 dB
LAeq	63.2 dB	LAS8.00	66.6 dB
LCeq - LAeq	10.1 dB	LAS25.00	64.3 dB
LALeq	64.0 dB	LAS50.00	62.0 dB
LAeq	63.2 dB	LAS90.00	56.0 dB
LALeq - LAeq	0.8 dB	LAS99.00	50.4 dB
# Overloads	0		

Record #	Date	Time	Run Duration	Run Time	Pause	LAeq	LASmin	LASmax	LAS2.00	LAS8.00	LAS25.00	LAS50.00	LAS90.00	LAS99.00
1	2018-05-14	18:00:00	01:00:00.0	01:00:00.0	00:00:00.0	63.0	55.5	73.8	66.9	65.0	63.6	62.6	60.4	57.9
2	2018-05-14	19:00:00	01:00:00.0	01:00:00.0	00:00:00.0	63.6	56.4	77.1	67.5	65.6	64.2	63.0	60.7	58.6
3	2018-05-14	20:00:00	01:00:00.0	01:00:00.0	00:00:00.0	62.6	54.3	77.8	67.6	65.3	63.2	61.6	58.5	56.1
4	2018-05-14	21:00:00	01:00:00.0	01:00:00.0	00:00:00.0	62.2	54.3	75.0	66.4	64.4	62.9	61.5	59.0	56.2
5	2018-05-14	22:00:00	01:00:00.0	01:00:00.0	00:00:00.0	61.9	53.1	77.3	66.7	64.3	62.5	61.0	58.3	55.6
6	2018-05-14	23:00:00	01:00:00.0	01:00:00.0	00:00:00.0	59.2	48.7	69.4	65.1	62.5	59.9	57.8	54.2	51.3
7	2018-05-15	00:00:00	01:00:00.0	01:00:00.0	00:00:00.0	58.8	46.7	70.5	65.3	62.0	59.3	57.3	53.5	49.8
8	2018-05-15	01:00:00	01:00:00.0	01:00:00.0	00:00:00.0	56.9	42.9	69.2	64.5	60.4	56.8	54.7	50.6	47.5
9	2018-05-15	02:00:00	01:00:00.0	01:00:00.0	00:00:00.0	57.5	38.8	71.6	65.1	61.4	57.6	55.0	49.8	43.1
10	2018-05-15	03:00:00	01:00:00.0	01:00:00.0	00:00:00.0	60.5	45.8	74.3	66.7	64.0	61.1	59.1	55.1	51.1
11	2018-05-15	04:00:00	01:00:00.0	01:00:00.0	00:00:00.0	65.7	54.7	80.0	70.0	68.5	66.8	64.9	60.9	56.9
12	2018-05-15	05:00:00	01:00:00.0	01:00:00.0	00:00:00.0	59.7	50.8	73.1	65.3	62.9	60.7	58.3	54.0	51.8
13	2018-05-15	06:00:00	01:00:00.0	01:00:00.0	00:00:00.0	66.5	56.9	82.1	70.5	68.8	67.3	66.1	61.7	58.3
14	2018-05-15	07:00:00	01:00:00.0	01:00:00.0	00:00:00.0	65.9	60.8	73.5	69.2	67.9	66.6	65.6	63.4	62.0
15	2018-05-15	08:00:00	01:00:00.0	01:00:00.0	00:00:00.0	65.7	59.7	83.2	68.9	67.2	66.0	65.1	63.4	61.7
16	2018-05-15	09:00:00	01:00:00.0	01:00:00.0	00:00:00.0	64.9	57.5	74.5	69.3	67.2	65.7	64.3	61.5	59.2
17	2018-05-15	10:00:00	01:00:00.0	01:00:00.0	00:00:00.0	65.3	56.5	76.4	69.7	67.9	66.1	64.5	61.6	58.5
18	2018-05-15	11:00:00	01:00:00.0	01:00:00.0	00:00:00.0	63.7	53.4	75.9	68.4	66.6	64.6	62.9	59.1	55.8
19	2018-05-15	12:00:00	01:00:00.0	01:00:00.0	00:00:00.0	63.9	53.8	74.4	68.5	66.7	64.6	63.1	60.0	57.2
20	2018-05-15	13:00:00	01:00:00.0	01:00:00.0	00:00:00.0	63.4	51.4	77.0	68.2	66.3	64.4	62.6	58.5	54.9
21	2018-05-15	14:00:00	01:00:00.0	01:00:00.0	00:00:00.0	62.8	52.3	76.0	67.5	65.5	63.5	61.9	59.0	56.1
22	2018-05-15	15:00:00	01:00:00.0	01:00:00.0	00:00:00.0	61.5	54.0	71.9	66.3	64.1	62.1	60.6	57.8	55.3
23	2018-05-15	16:00:00	01:00:00.0	01:00:00.0	00:00:00.0	62.3	55.6	72.8	66.3	64.5	62.9	61.7	59.4	57.7
24	2018-05-15	17:00:00	01:00:00.0	01:00:00.0	00:00:00.0	62.3	54.1	73.9	66.9	64.6	62.8	61.5	58.8	56.1

**APPENDIX D**

**RCNM NOISE MODELING OUTPUT**

Roadway Construction Noise Model (RCNM),Version 1.

Report date: 10/26/2018

Case Description: Murrieta Hotel

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
SFR	Residential	65	65	45

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Excavator	No	40		80.7	335	0
Grader	No	40	85		335	0
Dozer	No	40		81.7	335	0
Tractor	No	40	84		335	0
Front End Loader	No	40		79.1	335	0
Backhoe	No	40		77.6	335	0

Calculated (dBA)		Results	
Equipment	*Lmax	Leq	
Excavator	64.2	60.2	
Grader	68.5	64.5	
Dozer	65.1	61.2	
Tractor	67.5	63.5	
Front End Loader	62.6	58.6	
Backhoe	61	57.1	
Total	68.5	69.4	

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Preschool	Commercial	65	65	45

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Excavator	No	40		80.7	460	0
Grader	No	40	85		460	0
Dozer	No	40		81.7	460	0
Tractor	No	40	84		460	0
Front End Loader	No	40		79.1	460	0
Backhoe	No	40		77.6	460	0

Calculated (dBA)		Results	
Equipment	*Lmax	Leq	
Excavator	61.4	57.5	
Grader	65.7	61.7	
Dozer	62.4	58.4	
Tractor	64.7	60.7	
Front End Loader	59.8	55.9	
Backhoe	58.3	54.3	
Total	65.7	66.6	

\*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
SFR	Residential	65	65	45

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Excavator	No	40		80.7	1120	0
Grader	No	40	85		1120	0
Dozer	No	40		81.7	1120	0
Tractor	No	40	84		1120	0
Front End Loader	No	40		79.1	1120	0
Backhoe	No	40		77.6	1120	0

Calculated (dBA)		Results	
Equipment	*Lmax	Leq	
Excavator	53.7	49.7	
Grader	58	54	
Dozer	54.7	50.7	
Tractor	57	53	
Front End Loader	52.1	48.1	
Backhoe	50.6	46.6	
Total	58	58.9	

\*Calculated Lmax is the Loudest value.

**APPENDIX E**

**PROJECT GENERATED TRAFFIC FHWA WORKSHEETS**



## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**  
Road: **Murrieta Hot Springs Road**  
Segment: **West of Madison Avenue**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	20800.00
										SPEED	45.00
										DISTANCE	67.00
INPUT PARAMETERS											
Vehicles per hour	1204.67	24.96	41.60	894.40	4.16	6.93	221.87	34.67	57.78	% A	92
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5
ADJUSTMENTS											
Flow	23.97	7.13	9.35	22.68	-0.65	1.57	16.62	8.56	10.78		
Distance	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	74.82
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	69.52
LEQ	66.97	58.42	65.15	65.68	50.63	57.37	59.63	59.84	66.58	Day hour	89.00
										Absorbitive?	no
	DAY LEQ	69.52		EVENING LEQ	66.40		NIGHT LEQ	68.08		Use hour?	no
										GRADE dB	0.00
		CNEL	74.82								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
Road: **Murrieta Hot Springs Road**  
Segment: **West of Madison Avenue**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	20899.98
										SPEED	45.00
										DISTANCE	67.00
INPUT PARAMETERS											
Vehicles per hour	1210.80	25.03	41.63	898.95	4.17	6.94	223.00	34.77	57.82	% A	92.03
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	2.99
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	4.98
ADJUSTMENTS											
Flow	23.99	7.15	9.36	22.70	-0.63	1.57	16.65	8.57	10.78		
Distance	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	74.83
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	69.53
LEQ	67.00	58.43	65.16	65.70	50.65	57.38	59.65	59.86	66.58	Day hour	89.00
										Absorbative?	no
	DAY LEQ	69.53		EVENING LEQ	66.42		NIGHT LEQ	68.09		Use hour?	no
		CNEL	74.83							GRADE dB	0.00

## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**  
Road: **Murrieta Hot Springs Road**  
Segment: **Madison Avenue to Interstate 15**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	39100.00
										SPEED	45.00
										DISTANCE	67.00
INPUT PARAMETERS											
Vehicles per hour	2264.54	46.92	78.20	1681.30	7.82	13.03	417.07	65.17	108.61	% A	92
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5
ADJUSTMENTS											
Flow	26.71	9.88	12.09	25.42	2.09	4.31	19.36	11.30	13.52		
Distance	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	77.56
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.26
LEQ	69.72	61.16	67.89	68.42	53.38	60.11	62.37	62.58	69.32	Day hour	89.00
										Absorbitive?	no
	DAY LEQ	72.26		EVENING LEQ	69.14		NIGHT LEQ	70.82		Use hour?	no
										GRADE dB	0.00
		CNEL	77.56								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Murrieta Hot Springs Road**  
 Segment: **Madison Avenue to Interstate 15**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	40499.72
										SPEED	45.00
										DISTANCE	67.00
-----											
INPUT PARAMETERS											
Vehicles per hour	2350.38	47.95	78.61	1745.03	7.99	13.10	432.88	66.60	109.19	% A	92.19
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	2.96
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	4.85
ADJUSTMENTS											
Flow	26.87	9.97	12.12	25.58	2.19	4.34	19.53	11.40	13.54		
Distance	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	-1.34	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	77.63
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.37
LEQ	69.88	61.25	67.92	68.58	53.47	60.14	62.53	62.68	69.34	Day hour	89.00
										Absorbative?	no
	DAY LEQ	72.37		EVENING LEQ	69.28		NIGHT LEQ	70.88		Use hour?	no
										GRADE dB	0.00
		<b>CNEL</b>	<b>77.63</b>								

## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**  
Road: **Murrieta Hot Springs Road**  
Segment: **East of Interstate 15**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	49600.00
										SPEED	45.00
										DISTANCE	75.00
INPUT PARAMETERS											
Vehicles per hour	2872.67	59.52	99.20	2132.80	9.92	16.53	529.07	82.67	137.78	% A	92
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5
ADJUSTMENTS											
Flow	27.74	10.91	13.13	26.45	3.13	5.35	20.40	12.34	14.55		
Distance	-1.83	-1.83	-1.83	-1.83	-1.83	-1.83	-1.83	-1.83	-1.83	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	78.10
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.80
LEQ	70.26	61.70	68.44	68.97	53.92	60.66	62.91	63.13	69.86	Day hour	89.00
										Absorbitive?	no
	DAY LEQ	72.80		EVENING LEQ	69.68		NIGHT LEQ	71.37		Use hour?	no
										GRADE dB	0.00
		CNEL	78.10								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Murrieta Hot Springs Road**  
 Segment: **East of Interstate 15**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	49899.94
										SPEED	45.00
										DISTANCE	75.00
INPUT PARAMETERS											
Vehicles per hour	2891.06	59.74	99.29	2146.46	9.96	16.55	532.45	82.97	137.90	% A	92.03
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	2.99
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	4.97
ADJUSTMENTS											
Flow	27.77	10.92	13.13	26.48	3.14	5.35	20.42	12.35	14.56		
Distance	-1.83	-1.83	-1.83	-1.83	-1.83	-1.83	-1.83	-1.83	-1.83	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	78.11
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	72.82
LEQ	70.29	61.72	68.44	68.99	53.93	60.66	62.94	63.14	69.87	Day hour	89.00
										Absorbative?	no
	DAY LEQ	72.82		EVENING LEQ	69.70		NIGHT LEQ	71.38		Use hour?	no
		CNEL	78.11							GRADE dB	0.00

## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Guava Street**  
 Segment: **West of Madison Avenue**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	3500.00
										SPEED	35.00
										DISTANCE	44.00
INPUT PARAMETERS											
Vehicles per hour	214.65	2.62	1.02	158.63	0.47	0.47	39.73	3.50	1.36	% A	97.4
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	1.84
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	0.74
ADJUSTMENTS											
Flow	17.57	-1.56	-5.66	16.26	-9.06	-9.05	10.25	-0.31	-4.41		
Distance	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	62.89
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	59.18
LEQ	58.17	48.76	49.87	56.85	41.25	46.48	50.84	50.01	51.12	Day hour	89.00
										Absorbitive?	no
	DAY LEQ	59.18		EVENING LEQ	57.34		NIGHT LEQ	55.45		Use hour?	no
										GRADE dB	0.00
		CNEL	62.89								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
Road: **Guava Street**  
Segment: **West of Madison Avenue**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	3599.98
										SPEED	35.00
										DISTANCE	44.00
INPUT PARAMETERS											
Vehicles per hour	220.79	2.70	1.05	163.16	0.48	0.48	40.87	3.60	1.40	% A	97.40
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	1.84
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	0.74
ADJUSTMENTS											
Flow	17.69	-1.43	-5.53	16.38	-8.94	-8.93	10.37	-0.18	-4.28		
Distance	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	63.01
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	59.30
LEQ	58.29	48.88	50.00	56.97	41.37	46.60	50.96	50.13	51.25	Day hour	89.00
										Absorbative?	no
	DAY LEQ	59.30		EVENING LEQ	57.46		NIGHT LEQ	55.58		Use hour?	no
										GRADE dB	0.00
		<b>CNEL</b>	<b>63.01</b>								



## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**Road: **Guava Street**Segment: **East of Madison Avenue**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	22620.00
										SPEED	35.00
										DISTANCE	915.00
INPUT PARAMETERS											
Vehicles per hour	1387.27	16.96	6.60	1025.22	3.01	3.02	256.79	22.62	8.80	% A	97.4
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	1.84
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	0.74
ADJUSTMENTS											
Flow	25.68	6.55	2.45	24.36	-0.96	-0.95	18.35	7.80	3.70		
Distance	-12.69	-12.69	-12.69	-12.69	-12.69	-12.69	-12.69	-12.69	-12.69	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	57.81
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	54.10
LEQ	53.09	43.68	44.80	51.78	36.17	41.40	45.76	44.93	46.05	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	54.10		EVENING LEQ	52.27		NIGHT LEQ	50.38		Use hour?	no
										GRADE dB	0.00
		CNEL	57.81								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
Road: **Guava Street**  
Segment: **East of Madison Avenue**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	23219.88
										SPEED	35.00
										DISTANCE	915.00
INPUT PARAMETERS											
Vehicles per hour	1424.07	17.41	6.77	1052.41	3.09	3.10	263.61	23.22	9.03	% A	97.40
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	1.84
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	0.74
ADJUSTMENTS											
Flow	25.79	6.66	2.56	24.48	-0.85	-0.83	18.46	7.91	3.81		
Distance	-12.69	-12.69	-12.69	-12.69	-12.69	-12.69	-12.69	-12.69	-12.69	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	57.93
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	54.22
LEQ	53.20	43.80	44.91	51.89	36.29	41.52	45.88	45.05	46.16	Day hour	89.00
										Absorbative?	no
	DAY LEQ	54.22		EVENING LEQ	52.38		NIGHT LEQ	50.49		Use hour?	no
										GRADE dB	0.00
		<b>CNEL</b>	<b>57.93</b>								

## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Newton Azrak Street**  
 Segment: **East of Madison Avenue**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	21700.00
										SPEED	25.00
										DISTANCE	388.00
INPUT PARAMETERS											
Vehicles per hour	1330.85	16.27	6.33	983.52	2.89	2.90	246.35	21.70	8.44	% A	97.4
Speed in MPH	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	1.84
NOISE CALCULATIONS											
Reference levels	59.44	71.09	77.24	59.44	71.09	77.24	59.44	71.09	77.24	% HT	0.74
ADJUSTMENTS											
Flow	26.96	7.83	3.73	25.64	0.32	0.33	19.63	9.08	4.98		
Distance	-8.97	-8.97	-8.97	-8.97	-8.97	-8.97	-8.97	-8.97	-8.97	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	58.57
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	54.09
LEQ	52.43	44.95	47.00	51.11	37.44	43.60	45.10	46.20	48.25	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	54.09		EVENING LEQ	51.98		NIGHT LEQ	51.49		Use hour?	no
										GRADE dB	0.00
		CNEL	58.57								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Newton Azrak Street**  
 Segment: **East of Madison Avenue**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	23199.70
										SPEED	25.00
										DISTANCE	388.00
INPUT PARAMETERS											
Vehicles per hour	1422.85	17.40	6.77	1051.50	3.09	3.10	263.38	23.20	9.02	% A	97.40
Speed in MPH	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	1.84
NOISE CALCULATIONS											
Reference levels	59.44	71.09	77.24	59.44	71.09	77.24	59.44	71.09	77.24	% HT	0.74
ADJUSTMENTS											
Flow	27.25	8.12	4.02	25.93	0.61	0.62	19.92	9.37	5.27		
Distance	-8.97	-8.97	-8.97	-8.97	-8.97	-8.97	-8.97	-8.97	-8.97	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	58.86
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	54.38
LEQ	52.72	45.24	47.29	51.40	37.73	43.89	45.39	46.49	48.54	Day hour	89.00
										Absorbative?	no
	DAY LEQ	54.38		EVENING LEQ	52.27		NIGHT LEQ	51.78		Use hour?	no
										GRADE dB	0.00
		<b>CNEL</b>	<b>58.86</b>								

## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**  
Road: **Madison Avenue**  
Segment: **North of Murrieta Hot Springs Road**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	17700.00
										SPEED	45.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	1025.13	21.24	35.40	761.10	3.54	5.90	188.80	29.50	49.17	% A	92
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5
ADJUSTMENTS											
Flow	23.27	6.43	8.65	21.98	-1.35	0.87	15.92	7.86	10.08		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	75.39
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	70.09
LEQ	67.54	58.99	65.72	66.25	51.20	57.94	60.20	60.41	67.15	Day hour	89.00
										Absorbitive?	no
	DAY LEQ	70.09		EVENING LEQ	66.97		NIGHT LEQ	68.65		Use hour?	no
										GRADE dB	0.00
		CNEL	75.39								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Madison Avenue**  
 Segment: **North of Murrieta Hot Springs Road**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	17899.96
										SPEED	45.00
										DISTANCE	50.00
-----											
INPUT PARAMETERS											
Vehicles per hour	1037.39	21.39	35.46	770.20	3.56	5.91	191.06	29.70	49.25	% A	92.06
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	2.99
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	4.95
ADJUSTMENTS											
Flow	23.32	6.46	8.66	22.03	-1.32	0.88	15.97	7.89	10.09		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	75.41
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	70.12
LEQ	67.60	59.02	65.73	66.30	51.23	57.95	60.25	60.44	67.16	Day hour	89.00
										Absorbative?	no
	DAY LEQ	70.12		EVENING LEQ	67.01		NIGHT LEQ	68.67		Use hour?	no
										GRADE dB	0.00
		<b>CNEL</b>	<b>75.41</b>								

## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Madison Avenue**  
 Segment: **Murrieta Hot Springs Road to Guava Street**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	6800.00
										SPEED	35.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	393.83	8.16	13.60	292.40	1.36	2.27	72.53	11.33	18.89	% A	92
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	5
ADJUSTMENTS											
Flow	20.21	3.37	5.59	18.91	-4.41	-2.19	12.86	4.80	7.02		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	69.70
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	63.81
LEQ	60.25	53.13	60.56	58.95	45.35	52.78	52.90	54.56	61.99	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	63.81		EVENING LEQ	60.04		NIGHT LEQ	63.14		Use hour?	no
										GRADE dB	0.00
		CNEL	69.70								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Madison Avenue**  
 Segment: **Murrieta Hot Springs Road to Guava Street**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	8499.66
										SPEED	35.00
										DISTANCE	50.00
-----											
INPUT PARAMETERS											
Vehicles per hour	498.07	9.41	14.10	369.79	1.57	2.35	91.73	13.07	19.59	% A	93.08
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	2.77
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	4.15
ADJUSTMENTS											
Flow	21.23	3.99	5.75	19.93	-3.79	-2.03	13.88	5.42	7.17		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	70.08
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	64.40
LEQ	61.27	53.75	60.72	59.97	45.97	52.94	53.92	55.17	62.15	Day hour	89.00
										Absorbative?	no
	DAY LEQ	64.40		EVENING LEQ	60.90		NIGHT LEQ	63.46		Use hour?	no
										GRADE dB	0.00
		<b>CNEL</b>	<b>70.08</b>								



## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Madison Avenue**  
 Segment: **Guava Street to Newton Azrak Street**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	2800.00
										SPEED	35.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	162.17	3.36	5.60	120.40	0.56	0.93	29.87	4.67	7.78	% A	92
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	5
ADJUSTMENTS											
Flow	16.35	-0.48	1.74	15.06	-8.26	-6.05	9.01	0.94	3.16		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	65.85
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	59.95
LEQ	56.39	49.27	56.71	55.10	41.49	48.93	49.05	50.70	58.14	Day hour	89.00
										Absorbative?	no
	DAY LEQ	59.95		EVENING LEQ	56.19		NIGHT LEQ	59.29		Use hour?	no
										GRADE dB	0.00
		CNEL	65.85								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Madison Avenue**  
 Segment: **Guava Street to Newton Azrak Street**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	3999.76
										SPEED	35.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	235.75	4.24	5.96	175.03	0.71	0.99	43.42	5.89	8.27	% A	93.63
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	2.65
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	3.72
ADJUSTMENTS											
Flow	17.98	0.53	2.00	16.68	-7.25	-5.78	10.63	1.96	3.43		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	66.47
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	60.93
LEQ	58.02	50.29	56.98	56.72	42.51	49.20	50.67	51.72	58.41	Day hour	89.00
										Absorbative?	no
	DAY LEQ	60.93		EVENING LEQ	57.57		NIGHT LEQ	59.81		Use hour?	no
		CNEL	66.47							GRADE dB	0.00

## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Madison Avenue**  
 Segment: **Newton Azrak Street to Fig Street**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT SPEED DISTANCE	2100.00 35.00 50.00
INPUT PARAMETERS											
Vehicles per hour	121.63	2.52	4.20	90.30	0.42	0.70	22.40	3.50	5.83	% A	92
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	5
ADJUSTMENTS											
Flow	15.10	-1.73	0.49	13.81	-9.51	-7.30	7.76	-0.31	1.91		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	64.60
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	58.70
LEQ	55.14	48.03	55.46	53.85	40.24	47.68	47.80	49.45	56.89	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	58.70		EVENING LEQ	54.94		NIGHT LEQ	58.04		Use hour?	no
										GRADE dB	0.00
		CNEL	64.60								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
Road: **Madison Avenue**  
Segment: **Newton Azrak Street to Fig Street**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	2399.94
										SPEED	35.00
										DISTANCE	50.00
INPUT PARAMETERS											
Vehicles per hour	140.02	2.74	4.29	103.96	0.46	0.71	25.79	3.81	5.96	% A	92.68
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	2.86
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	4.47
ADJUSTMENTS											
Flow	15.72	-1.37	0.58	14.42	-9.15	-7.20	8.37	0.06	2.00		
Distance	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	64.82
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	59.06
LEQ	55.76	48.39	55.55	54.46	40.61	47.77	48.41	49.82	56.98	Day hour	89.00
										Absorbative?	no
	DAY LEQ	59.06		EVENING LEQ	55.45		NIGHT LEQ	58.22		Use hour?	no
		CNEL	64.82							GRADE dB	0.00

## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**  
Road: **Murrieta Hot Springs Road**  
Segment: **East of Interstate 15**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	49600.00
										SPEED	45.00
										DISTANCE	811.00
INPUT PARAMETERS											
Vehicles per hour	2872.67	59.52	99.20	2132.80	9.92	16.53	529.07	82.67	137.78	% A	92
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	5
ADJUSTMENTS											
Flow	27.74	10.91	13.13	26.45	3.13	5.35	20.40	12.34	14.55		
Distance	-12.17	-12.17	-12.17	-12.17	-12.17	-12.17	-12.17	-12.17	-12.17	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	67.76
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	62.46
LEQ	59.92	51.36	58.10	58.63	43.58	50.32	52.57	52.79	59.52	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	62.46		EVENING LEQ	59.34		NIGHT LEQ	61.03		Use hour?	no
										GRADE dB	0.00
		CNEL	67.76								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Murrieta Hot Springs Road**  
 Segment: **East of Interstate 15**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	49899.94
										SPEED	45.00
										DISTANCE	811.00
INPUT PARAMETERS											
Vehicles per hour	2891.06	59.74	99.29	2146.46	9.96	16.55	532.45	82.97	137.90	% A	92.03
Speed in MPH	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	2.99
NOISE CALCULATIONS											
Reference levels	69.34	77.62	82.14	69.34	77.62	82.14	69.34	77.62	82.14	% HT	4.97
ADJUSTMENTS											
Flow	27.77	10.92	13.13	26.48	3.14	5.35	20.42	12.35	14.56		
Distance	-12.17	-12.17	-12.17	-12.17	-12.17	-12.17	-12.17	-12.17	-12.17	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	67.77
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	62.48
LEQ	59.95	51.38	58.10	58.65	43.59	50.32	52.60	52.80	59.53	Day hour	89.00
										Absorbitive?	no
	DAY LEQ	62.48		EVENING LEQ	59.36		NIGHT LEQ	61.04		Use hour?	no
										GRADE dB	0.00
		<b>CNEL</b>	<b>67.77</b>								

## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Guava Street**  
 Segment: **West of Madison Avenue**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	3500.00
										SPEED	35.00
										DISTANCE	335.00
INPUT PARAMETERS											
Vehicles per hour	214.65	2.62	1.02	158.63	0.47	0.47	39.73	3.50	1.36	% A	97.4
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	1.84
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	0.74
ADJUSTMENTS											
Flow	17.57	-1.56	-5.66	16.26	-9.06	-9.05	10.25	-0.31	-4.41		
Distance	-8.33	-8.33	-8.33	-8.33	-8.33	-8.33	-8.33	-8.33	-8.33	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	54.07
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	50.36
LEQ	49.35	39.94	41.06	48.04	32.43	37.66	42.02	41.19	42.31	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	50.36		EVENING LEQ	48.53		NIGHT LEQ	46.64		Use hour?	no
										GRADE dB	0.00
		<b>CNEL</b>	<b>54.07</b>								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Guava Street**  
 Segment: **West of Madison Avenue**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	3599.98
										SPEED	35.00
										DISTANCE	335.00
INPUT PARAMETERS											
Vehicles per hour	220.79	2.70	1.05	163.16	0.48	0.48	40.87	3.60	1.40	% A	97.40
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	1.84
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	0.74
ADJUSTMENTS											
Flow	17.69	-1.43	-5.53	16.38	-8.94	-8.93	10.37	-0.18	-4.28		
Distance	-8.33	-8.33	-8.33	-8.33	-8.33	-8.33	-8.33	-8.33	-8.33	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	54.19
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	50.49
LEQ	49.47	40.06	41.18	48.16	32.56	37.78	42.15	41.31	42.43	Day hour	89.00
										Absorbative?	no
	DAY LEQ	50.49		EVENING LEQ	48.65		NIGHT LEQ	46.76		Use hour?	no
		CNEL	54.19							GRADE dB	0.00



## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**Road: **Guava Street**Segment: **East of Madison Avenue**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	22620.00
										SPEED	35.00
										DISTANCE	82.00
INPUT PARAMETERS											
Vehicles per hour	1387.27	16.96	6.60	1025.22	3.01	3.02	256.79	22.62	8.80	% A	97.4
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	1.84
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	0.74
ADJUSTMENTS											
Flow	25.68	6.55	2.45	24.36	-0.96	-0.95	18.35	7.80	3.70		
Distance	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	68.29
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	64.58
LEQ	63.57	54.16	55.28	62.25	46.65	51.88	56.24	55.41	56.52	Day hour	89.00
										Absorbative?	no
	DAY LEQ	64.58		EVENING LEQ	62.74		NIGHT LEQ	60.85		Use hour?	no
										GRADE dB	0.00
		CNEL	68.29								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Guava Street**  
 Segment: **East of Madison Avenue**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	23219.88
										SPEED	35.00
										DISTANCE	82.00
INPUT PARAMETERS											
Vehicles per hour	1424.07	17.41	6.77	1052.41	3.09	3.10	263.61	23.22	9.03	% A	97.40
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	1.84
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	0.74
ADJUSTMENTS											
Flow	25.79	6.66	2.56	24.48	-0.85	-0.83	18.46	7.91	3.81		
Distance	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	68.40
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	64.69
LEQ	63.68	54.27	55.39	62.37	46.76	51.99	56.35	55.52	56.64	Day hour	89.00
										Absorbative?	no
	DAY LEQ	64.69		EVENING LEQ	62.86		NIGHT LEQ	60.97		Use hour?	no
										GRADE dB	0.00
		<b>CNEL</b>	<b>68.40</b>								

## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**Road: **Newton Azrak Street**Segment: **East of Madison Avenue**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	10250.00
										SPEED	35.00
										DISTANCE	415.00
INPUT PARAMETERS											
Vehicles per hour	628.63	7.69	2.99	464.57	1.36	1.37	116.36	10.25	3.99	% A	97.4
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	1.84
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	0.74
ADJUSTMENTS											
Flow	22.24	3.11	-0.99	20.92	-4.40	-4.39	14.91	4.36	0.26		
Distance	-9.26	-9.26	-9.26	-9.26	-9.26	-9.26	-9.26	-9.26	-9.26	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	57.81
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	54.10
LEQ	53.09	43.68	44.80	51.77	36.17	41.40	45.76	44.93	46.04	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	54.10		EVENING LEQ	52.26		NIGHT LEQ	50.37		Use hour?	no
										GRADE dB	0.00
		<b>CNEL</b>	<b>57.81</b>								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Newton Azrak Street**  
 Segment: **East of Madison Avenue**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	10549.94
										SPEED	35.00
										DISTANCE	415.00
INPUT PARAMETERS											
Vehicles per hour	647.03	7.91	3.08	478.16	1.40	1.41	119.77	10.55	4.10	% A	97.40
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	1.84
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	0.74
ADJUSTMENTS											
Flow	22.36	3.24	-0.86	21.05	-4.27	-4.26	15.04	4.49	0.38		
Distance	-9.26	-9.26	-9.26	-9.26	-9.26	-9.26	-9.26	-9.26	-9.26	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	57.93
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	54.23
LEQ	53.21	43.80	44.92	51.90	36.29	41.52	45.89	45.05	46.17	Day hour	89.00
										Absorbative?	no
	DAY LEQ	54.23		EVENING LEQ	52.39		NIGHT LEQ	50.50		Use hour?	no
		CNEL	57.93							GRADE dB	0.00

## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Madison Avenue**  
 Segment: **Murrieta Hot Springs Road to Guava Street**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	6800.00
										SPEED	35.00
										DISTANCE	82.00
INPUT PARAMETERS											
Vehicles per hour	393.83	8.16	13.60	292.40	1.36	2.27	72.53	11.33	18.89	% A	92
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	5
ADJUSTMENTS											
Flow	20.21	3.37	5.59	18.91	-4.41	-2.19	12.86	4.80	7.02		
Distance	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	67.55
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	61.66
LEQ	58.10	50.98	58.42	56.80	43.20	50.63	50.75	52.41	59.84	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	61.66		EVENING LEQ	57.89		NIGHT LEQ	60.99		Use hour?	no
										GRADE dB	0.00
		CNEL	67.55								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Madison Avenue**  
 Segment: **Murrieta Hot Springs Road to Guava Street**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	8499.66
										SPEED	35.00
										DISTANCE	82.00
-----											
INPUT PARAMETERS											
Vehicles per hour	498.07	9.41	14.10	369.79	1.57	2.35	91.73	13.07	19.59	% A	93.08
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	2.77
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	4.15
ADJUSTMENTS											
Flow	21.23	3.99	5.75	19.93	-3.79	-2.03	13.88	5.42	7.17		
Distance	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	-2.22	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	67.93
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	62.26
LEQ	59.12	51.60	58.57	57.82	43.82	50.79	51.77	53.03	60.00	Day hour	89.00
										Absorbative?	no
	DAY LEQ	62.26		EVENING LEQ	58.75		NIGHT LEQ	61.31		Use hour?	no
										GRADE dB	0.00
		<b>CNEL</b>	<b>67.93</b>								

## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Madison Avenue**  
 Segment: **Guava Street to Newton Azrak Street**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	2800.00
										SPEED	35.00
										DISTANCE	235.00
INPUT PARAMETERS											
Vehicles per hour	162.17	3.36	5.60	120.40	0.56	0.93	29.87	4.67	7.78	% A	92
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	5
ADJUSTMENTS											
Flow	16.35	-0.48	1.74	15.06	-8.26	-6.05	9.01	0.94	3.16		
Distance	-6.79	-6.79	-6.79	-6.79	-6.79	-6.79	-6.79	-6.79	-6.79	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	59.13
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	53.23
LEQ	49.67	42.55	49.99	48.38	34.77	42.21	42.32	43.98	51.42	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	53.23		EVENING LEQ	49.47		NIGHT LEQ	52.57		Use hour?	no
										GRADE dB	0.00
		CNEL	59.13								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Madison Avenue**  
 Segment: **Guava Street to Newton Azrak Street**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	3999.76
										SPEED	35.00
										DISTANCE	235.00
-----											
INPUT PARAMETERS											
Vehicles per hour	235.75	4.24	5.96	175.03	0.71	0.99	43.42	5.89	8.27	% A	93.63
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	2.65
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	3.72
ADJUSTMENTS											
Flow	17.98	0.53	2.00	16.68	-7.25	-5.78	10.63	1.96	3.43		
Distance	-6.79	-6.79	-6.79	-6.79	-6.79	-6.79	-6.79	-6.79	-6.79	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	59.75
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	54.21
LEQ	51.30	43.57	50.26	50.00	35.79	42.48	43.95	44.99	51.68	Day hour	89.00
										Absorbative?	no
	DAY LEQ	54.21		EVENING LEQ	50.85		NIGHT LEQ	53.09		Use hour?	no
										GRADE dB	0.00
		<b>CNEL</b>	<b>59.75</b>								



## Existing Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Madison Avenue**  
 Segment: **Newton Azrak Street to Fig**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	3640.00
										SPEED	35.00
										DISTANCE	90.00
INPUT PARAMETERS											
Vehicles per hour	210.82	4.37	7.28	156.52	0.73	1.21	38.83	6.07	10.11	% A	92
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	3
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	5
ADJUSTMENTS											
Flow	17.49	0.66	2.87	16.20	-7.13	-4.91	10.14	2.08	4.30		
Distance	-2.62	-2.62	-2.62	-2.62	-2.62	-2.62	-2.62	-2.62	-2.62	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	64.43
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	58.54
LEQ	54.98	47.86	55.30	53.69	40.08	47.52	47.63	49.29	56.72	Day hour	89.00
										Absorbtive?	no
	DAY LEQ	58.54		EVENING LEQ	54.78		NIGHT LEQ	57.88		Use hour?	no
										GRADE dB	0.00
		CNEL	64.43								

## Existing Plus Project Traffic Noise

Project: **18-0074 Hotel Murrieta**  
 Road: **Madison Avenue**  
 Segment: **Newton Azrak Street to Fig**

	AUTOS	DAYTIME M.TRUCKS	H.TRUCKS	AUTOS	EVENING M.TRUCKS	H.TRUCKS	AUTOS	NIGHTTIME M.TRUCKS	H.TRUCKS	ADT	6439.44
										SPEED	35.00
										DISTANCE	90.00
INPUT PARAMETERS											
Vehicles per hour	382.50	6.43	8.11	283.99	1.07	1.35	70.45	8.93	11.26	% A	94.36
Speed in MPH	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00		
Left angle	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00		
Right angle	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	% MT	2.50
NOISE CALCULATIONS											
Reference levels	65.11	74.83	80.05	65.11	74.83	80.05	65.11	74.83	80.05	% HT	3.15
ADJUSTMENTS											
Flow	20.08	2.33	3.34	18.79	-5.45	-4.44	12.73	3.76	4.77		
Distance	-2.62	-2.62	-2.62	-2.62	-2.62	-2.62	-2.62	-2.62	-2.62	LEFT	-90.00
Finite Roadway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	RIGHT	90.00
Barrier	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CNEL	65.50
Constant	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	-25.00	DAY LEQ	60.16
LEQ	57.57	49.54	55.77	56.27	41.76	47.98	50.22	50.97	57.19	Day hour	89.00
										Absorbative?	no
	DAY LEQ	60.16		EVENING LEQ	57.01		NIGHT LEQ	58.77		Use hour?	no
		CNEL	65.50							GRADE dB	0.00

**APPENDIX F**

**SOUNDPLAN INPUT AND OUPUT**

## Noise Emissions of Road Traffic

Station km	ADT Veh/24h	Vehicles type	Traffic values					Control device	Constr Speed km/h	Affect. veh. %	Road surface	Gradient Min / Max %
			Vehicle name	day Veh/h	evening Veh/h	night Veh/h	Speed km/h					
I-15 NB Traffic direction: In entry direction												
0+000	98991	Total	-	6107	4408	1387	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	5889	4372	1084	104					
		Medium trucks	-	99	17	138	104					
		Heavy trucks	-	119	20	165	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+677	98991	Total	-	6107	4408	1387	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	5889	4372	1084	104					
		Medium trucks	-	99	17	138	104					
		Heavy trucks	-	119	20	165	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
1+000	98991	Total	-	6107	4408	1387	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	5889	4372	1084	104					
		Medium trucks	-	99	17	138	104					
		Heavy trucks	-	119	20	165	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
1+594	-	-	-	-	-	-	-	-	-	-		
I-15 SB Traffic direction: In entry direction												
0+000	98991	Total	-	6107	4408	1387	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	5889	4372	1084	104					
		Medium trucks	-	99	17	138	104					
		Heavy trucks	-	119	20	165	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+385	98991	Total	-	6107	4408	1387	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	5889	4372	1084	104					
		Medium trucks	-	99	17	138	104					
		Heavy trucks	-	119	20	165	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+584	98991	Total	-	6107	4408	1387	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	5889	4372	1084	104					
		Medium trucks	-	99	17	138	104					
		Heavy trucks	-	119	20	165	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
1+058	98991	Total	-	6107	4408	1387	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	5889	4372	1084	104					
		Medium trucks	-	99	17	138	104					
		Heavy trucks	-	119	20	165	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
1+574	-	-	-	-	-	-	-	-	-	-		
I-215 SB1 Traffic direction: In entry direction												
0+000	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					

## Noise Emissions of Road Traffic

Station km	ADT Veh/24h	Vehicles type	Traffic values					Control device	Const Speed km/h	Affect. veh. %	Road surface	Gradient Min / Max %
			Vehicle name	day Veh/h	evenin Veh/h	night Veh/h	Speed km/h					
0+148	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+304	-							-	-	-	-	-
I-215 SB3 Traffic direction: In entry direction												
0+000	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+059	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+156	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+245	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+330	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+414	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+458	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					

## Noise Emissions of Road Traffic

Station km	ADT Veh/24h	Vehicles type	Traffic values					Control device	Const Speed km/h	Affect. veh. %	Road surface	Gradient Min / Max %
			Vehicle name	day Veh/h	evenin Veh/h	night Veh/h	Speed km/h					
0+551	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+978	-							-	-	-	-	-
0+000	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
I-215 SB2 Traffic direction: In entry direction												
0+000	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+049	-							-	-	-	-	-
0+000	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
I-215 NB Traffic direction: In entry direction												
0+000	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+121	42496	Total	-	2605	1864	627	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	2483	1843	457	104					
		Medium trucks	-	80	13	111	104					
		Heavy trucks	-	43	7	59	104					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+925	-							-	-	-	-	-
Monroe SB1 Traffic direction: In entry direction												
0+000	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					

## Noise Emissions of Road Traffic

Station km	ADT Veh/24	Vehicles type	Traffic values					Control device	Const Speed km/h	Affect. veh. %	Road surface	Gradient Min / Max %
			Vehicle name	day Veh/h	evening Veh/h	night Veh/h	Speed km/h					
0+090	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+139	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+217	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+277	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+332	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+356	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+405	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+497	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+525	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					

## Noise Emissions of Road Traffic

Station km	ADT Veh/24h	Vehicles type	Traffic values					Control device	Const Speed km/h	Affect. veh. %	Road surface	Gradient Min / Max %
			Vehicle name	day Veh/h	evening Veh/h	night Veh/h	Speed km/h					
0+552	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+567	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+730	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+905	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
1+069	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
1+372	-							-	-	-	-	-
Monroe SB8 Traffic direction: In entry direction												
0+000	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
0+463	5197	Total	-	324	238	66	-	none	-	-	Average (of DGAC and PCC)	0.0
		Automobiles	-	319	237	59	64					
		Medium trucks	-	4	1	5	64					
		Heavy trucks	-	2	0	2	64					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary Vehicle	-	-	-	-	-					
1+217	-							-	-	-	-	-



## Receiver List

No.	Receiver name	Building side	Floor	Limit	Level w/o NP	Level w. NP	Difference	Conflict			
				Lden dB(A)	Lden dB(A)	Lden dB(A)	Lden dB(A)	Day	Evening	Night	Lden dB(A)
1	Pool and Outdoor Dining		1.FI	-	58.1	57.8	-0.3	-	-	-	-
2	Proposed Hotel Building	South w	1.FI	-	51.8	51.7	0.0	-	-	-	-
			2.FI	-	55.3	55.2	0.0	-	-	-	-
			3.FI	-	56.7	56.7	0.0	-	-	-	-
			4.FI	-	58.0	58.0	0.0	-	-	-	-
			5.FI	-	58.6	58.6	0.0	-	-	-	-
			6.FI	-	58.9	58.9	0.0	-	-	-	-
			7.FI	-	59.0	59.1	0.0	-	-	-	-
			8.FI	-	59.1	59.1	0.0	-	-	-	-
			9.FI	-	59.3	59.3	0.0	-	-	-	-
3		North ea	1.FI	-	58.6	58.0	-0.6	-	-	-	-
			2.FI	-	62.0	61.9	0.0	-	-	-	-
			3.FI	-	64.7	64.5	-0.2	-	-	-	-
			4.FI	-	67.2	67.2	0.0	-	-	-	-
			5.FI	-	68.6	68.5	-0.1	-	-	-	-
			6.FI	-	69.4	69.3	-0.1	-	-	-	-
			7.FI	-	70.1	70.1	0.0	-	-	-	-
			8.FI	-	70.5	70.6	0.0	-	-	-	-
			9.FI	-	71.1	71.0	0.0	-	-	-	-
4		South e	1.FI	-	56.2	56.6	0.4	-	-	-	-
			2.FI	-	60.2	60.6	0.4	-	-	-	-
			3.FI	-	63.3	63.4	0.2	-	-	-	-
			4.FI	-	66.4	66.4	-0.1	-	-	-	-
			5.FI	-	67.9	67.9	0.0	-	-	-	-
			6.FI	-	68.9	68.9	0.0	-	-	-	-
			7.FI	-	69.6	69.6	0.0	-	-	-	-
			8.FI	-	70.2	70.2	0.0	-	-	-	-
			9.FI	-	70.7	70.7	0.0	-	-	-	-
5		South e	1.FI	-	54.3	54.3	0.0	-	-	-	-
			2.FI	-	57.5	57.6	0.1	-	-	-	-
			3.FI	-	59.1	59.1	0.0	-	-	-	-
			4.FI	-	60.0	60.0	0.0	-	-	-	-
			5.FI	-	60.5	60.5	0.0	-	-	-	-
			6.FI	-	60.8	60.9	0.0	-	-	-	-
			7.FI	-	61.0	61.0	0.0	-	-	-	-
			8.FI	-	61.1	61.2	0.0	-	-	-	-
			9.FI	-	61.4	61.4	0.0	-	-	-	-
6		North w	1.FI	-	58.4	58.1	-0.3	-	-	-	-
			2.FI	-	63.9	63.7	-0.2	-	-	-	-
			3.FI	-	66.1	65.9	-0.1	-	-	-	-
			4.FI	-	67.2	67.2	0.0	-	-	-	-
			5.FI	-	67.9	68.0	0.0	-	-	-	-
			6.FI	-	68.6	68.6	0.0	-	-	-	-
			7.FI	-	69.0	69.1	0.0	-	-	-	-
			8.FI	-	69.4	69.6	0.2	-	-	-	-
			9.FI	-	70.1	70.2	0.0	-	-	-	-
7		North ea	1.FI	-	58.3	58.4	0.1	-	-	-	-
			2.FI	-	64.8	64.8	0.1	-	-	-	-
			3.FI	-	68.1	68.1	0.0	-	-	-	-
			4.FI	-	70.3	70.3	0.0	-	-	-	-
			5.FI	-	71.7	71.7	0.0	-	-	-	-
			6.FI	-	72.4	72.4	0.0	-	-	-	-
			7.FI	-	73.4	73.4	0.0	-	-	-	-
			8.FI	-	74.3	74.3	-0.1	-	-	-	-
			9.FI	-	75.1	74.9	-0.1	-	-	-	-
8		South w	1.FI	-	60.4	60.4	0.0	-	-	-	-
			2.FI	-	63.7	63.7	0.0	-	-	-	-
			3.FI	-	64.0	64.0	0.0	-	-	-	-
			4.FI	-	64.0	64.0	0.0	-	-	-	-
			5.FI	-	63.6	63.6	0.0	-	-	-	-
			6.FI	-	63.3	63.3	0.0	-	-	-	-
			7.FI	-	62.9	62.9	0.0	-	-	-	-
			8.FI	-	62.6	62.6	0.0	-	-	-	-
			9.FI	-	62.4	62.4	0.0	-	-	-	-
9		North w	1.FI	-	56.3	56.4	0.1	-	-	-	-

Receiver List

No.	Receiver name	Building side	Floor	Limit	Level w/o NP	Level w. NP	Difference	Conflict			Lden
				Lden dB(A)	Lden dB(A)	Lden dB(A)	Lden dB(A)	Day	Evening	Night	
9	Proposed Hotel Building	North w	2.FI	-	61.2	61.2	0.0	-	-	-	-
			3.FI	-	63.2	63.2	0.0	-	-	-	-
			4.FI	-	64.5	64.6	0.1	-	-	-	-
			5.FI	-	65.2	65.2	0.1	-	-	-	-
			6.FI	-	65.8	65.8	0.0	-	-	-	-
			7.FI	-	66.2	66.2	0.0	-	-	-	-
			8.FI	-	66.5	66.5	0.0	-	-	-	-
			9.FI	-	66.8	66.8	0.0	-	-	-	-

## Contribution Levels of the Receivers

Source name	Lane	Level w/o NP Lden dB(A)	Level w. NP Lden dB(A)
Pool and Outdoor Dining	1.F1	58.1	57.8
I-15 NB		52.9	28.6
I-15 SB		53.4	28.8
I-215 NB		47.7	22.7
I-215 SB1		41.3	16.0
I-215 SB2		40.2	13.6
I-215 SB3		51.6	26.0
Monroe SB1		35.0	48.6
Monroe SB8		34.9	48.7
Proposed Hotel Building	1.F1	51.8	51.7
I-15 NB		28.5	41.5
I-15 SB		28.7	43.6
I-215 NB		22.6	24.5
I-215 SB1		16.0	17.4
I-215 SB2		13.8	10.9
I-215 SB3		26.0	45.9
Monroe SB1		48.7	49.9
Monroe SB8		48.7	49.8
Proposed Hotel Building	2.F1	55.3	55.2
I-15 NB		31.4	43.4
I-15 SB		31.8	46.0
I-215 NB		25.2	27.7
I-215 SB1		19.1	19.8
I-215 SB2		16.6	14.8
I-215 SB3		28.7	50.1
Monroe SB1		52.2	52.9
Monroe SB8		52.2	53.2
Proposed Hotel Building	3.F1	56.7	56.7
I-15 NB		33.3	44.8
I-15 SB		33.4	47.2
I-215 NB		27.4	25.9
I-215 SB1		21.9	21.8
I-215 SB2		18.1	15.6
I-215 SB3		30.2	51.0
Monroe SB1		53.3	54.5
Monroe SB8		54.0	55.0
Proposed Hotel Building	4.F1	58.0	58.0
I-15 NB		34.0	46.1
I-15 SB		34.0	48.5
I-215 NB		28.5	27.7
I-215 SB1		22.3	22.5
I-215 SB2		18.2	13.4
I-215 SB3		30.9	52.4
Monroe SB1		54.6	55.3
Monroe SB8		55.3	55.8
Proposed Hotel Building	5.F1	58.6	58.6
I-15 NB		33.7	47.0
I-15 SB		33.8	49.3
I-215 NB		28.2	28.7
I-215 SB1		20.7	22.0
I-215 SB2		18.3	13.6
I-215 SB3		31.0	52.9
Monroe SB1		55.3	55.9
Monroe SB8		55.9	56.2
Proposed Hotel Building	6.F1	58.9	58.9
I-15 NB		34.4	47.8
I-15 SB		34.8	49.9
I-215 NB		28.7	29.2
I-215 SB1		21.9	22.8
I-215 SB2		20.1	16.9

## Contribution Levels of the Receivers

Source name	Lane	Level w/o NP Lden dB(A)	Level w. NP Lden dB(A)
I-215 SB3		32.1	53.3
Monroe SB1		55.7	56.1
Monroe SB8		56.1	56.4
Proposed Hotel Building	7.FI	59.0	59.1
I-15 NB		36.7	48.4
I-15 SB		37.0	50.4
I-215 NB		30.8	31.5
I-215 SB1		25.1	24.7
I-215 SB2		22.2	18.1
I-215 SB3		33.6	54.0
Monroe SB1		55.8	56.1
Monroe SB8		56.1	56.3
Proposed Hotel Building	8.FI	59.1	59.1
I-15 NB		39.2	48.9
I-15 SB		39.4	50.9
I-215 NB		33.4	34.0
I-215 SB1		26.7	27.9
I-215 SB2		24.1	19.8
I-215 SB3		36.1	54.5
Monroe SB1		55.8	56.0
Monroe SB8		56.0	56.2
Proposed Hotel Building	9.FI	59.3	59.3
I-15 NB		43.8	50.1
I-15 SB		43.9	51.7
I-215 NB		38.5	39.4
I-215 SB1		30.8	32.2
I-215 SB2		28.4	25.2
I-215 SB3		41.2	55.2
Monroe SB1		55.8	56.0
Monroe SB8		56.0	56.0
Proposed Hotel Building	1.FI	58.6	58.0
I-15 NB		51.8	51.3
I-15 SB		53.6	52.5
I-215 NB		46.9	46.1
I-215 SB1		25.9	20.0
I-215 SB2		38.8	14.9
I-215 SB3		54.6	50.2
Monroe SB1		12.4	31.5
Monroe SB8		13.3	31.3
Proposed Hotel Building	2.FI	62.0	61.9
I-15 NB		55.7	54.8
I-15 SB		56.9	55.9
I-215 NB		50.6	49.6
I-215 SB1		20.4	22.2
I-215 SB2		42.9	18.1
I-215 SB3		57.7	55.6
Monroe SB1		16.5	33.4
Monroe SB8		16.3	34.7
Proposed Hotel Building	3.FI	64.7	64.5
I-15 NB		59.0	58.4
I-15 SB		59.8	58.6
I-215 NB		54.5	53.3
I-215 SB1		26.7	24.6
I-215 SB2		47.8	18.0
I-215 SB3		59.3	57.6
Monroe SB1		16.6	34.0
Monroe SB8		16.7	33.6
Proposed Hotel Building	4.FI	67.2	67.2
I-15 NB		62.4	61.7
I-15 SB		62.6	61.8

## Contribution Levels of the Receivers

Source name	Lane	Level w/o NP Lden dB(A)	Level w. NP Lden dB(A)
I-215 NB		57.8	57.5
I-215 SB1		26.8	24.0
I-215 SB2		47.8	17.1
I-215 SB3		60.2	58.7
Monroe SB1		16.5	34.3
Monroe SB8		16.7	34.2
Proposed Hotel Building	5.F1	68.6	68.5
I-15 NB		64.0	63.7
I-15 SB		64.1	63.4
I-215 NB		59.1	59.0
I-215 SB1		26.6	24.1
I-215 SB2		50.2	17.5
I-215 SB3		60.9	59.5
Monroe SB1		18.1	34.9
Monroe SB8		17.8	35.0
Proposed Hotel Building	6.F1	69.4	69.3
I-15 NB		64.9	64.7
I-15 SB		64.8	64.5
I-215 NB		59.6	59.5
I-215 SB1		29.1	25.1
I-215 SB2		52.1	21.3
I-215 SB3		61.6	60.1
Monroe SB1		18.4	35.3
Monroe SB8		18.5	35.5
Proposed Hotel Building	7.F1	70.1	70.1
I-15 NB		65.6	65.3
I-15 SB		65.6	65.6
I-215 NB		60.0	59.8
I-215 SB1		30.7	27.8
I-215 SB2		53.1	22.7
I-215 SB3		62.2	60.6
Monroe SB1		20.2	36.0
Monroe SB8		20.4	36.1
Proposed Hotel Building	8.F1	70.5	70.6
I-15 NB		65.9	65.6
I-15 SB		66.3	66.4
I-215 NB		60.2	60.1
I-215 SB1		33.2	30.3
I-215 SB2		53.5	24.6
I-215 SB3		62.8	61.4
Monroe SB1		23.5	36.5
Monroe SB8		23.5	37.0
Proposed Hotel Building	9.F1	71.1	71.0
I-15 NB		66.2	66.0
I-15 SB		66.9	67.2
I-215 NB		60.5	60.4
I-215 SB1		37.6	34.7
I-215 SB2		54.8	28.1
I-215 SB3		63.5	62.0
Monroe SB1		27.1	37.1
Monroe SB8		27.3	37.9
Proposed Hotel Building	1.F1	56.2	56.6
I-15 NB		50.8	51.9
I-15 SB		51.7	52.8
I-215 NB		45.9	46.4
I-215 SB1		20.0	41.5
I-215 SB2		14.9	41.1
I-215 SB3		50.4	53.3
Monroe SB1		30.1	12.3
Monroe SB8		29.5	20.4

## Contribution Levels of the Receivers

Source name	Lane	Level w/o NP Lden dB(A)	Level w. NP Lden dB(A)
Proposed Hotel Building	2.F1	60.2	60.6
I-15 NB		54.3	55.6
I-15 SB		55.3	56.5
I-215 NB		49.6	50.2
I-215 SB1		22.2	44.4
I-215 SB2		18.1	42.3
I-215 SB3		55.5	57.8
Monroe SB1		32.0	16.4
Monroe SB8		31.7	16.4
Proposed Hotel Building	3.F1	63.3	63.4
I-15 NB		58.1	59.0
I-15 SB		58.4	59.5
I-215 NB		53.5	54.4
I-215 SB1		24.6	26.8
I-215 SB2		18.0	46.4
I-215 SB3		57.4	59.3
Monroe SB1		33.2	16.6
Monroe SB8		33.4	16.8
Proposed Hotel Building	4.F1	66.4	66.4
I-15 NB		62.0	62.3
I-15 SB		61.9	62.7
I-215 NB		57.4	57.7
I-215 SB1		24.0	26.8
I-215 SB2		17.1	48.3
I-215 SB3		58.6	60.3
Monroe SB1		34.3	16.3
Monroe SB8		34.3	16.6
Proposed Hotel Building	5.F1	67.9	67.9
I-15 NB		63.7	63.9
I-15 SB		63.3	63.9
I-215 NB		59.0	59.1
I-215 SB1		24.1	26.6
I-215 SB2		17.5	50.4
I-215 SB3		59.5	61.0
Monroe SB1		35.0	18.0
Monroe SB8		35.0	17.9
Proposed Hotel Building	6.F1	68.9	68.9
I-15 NB		64.7	64.9
I-15 SB		64.4	64.7
I-215 NB		59.5	59.6
I-215 SB1		25.1	29.1
I-215 SB2		21.3	51.2
I-215 SB3		60.3	61.6
Monroe SB1		35.4	18.2
Monroe SB8		35.4	18.5
Proposed Hotel Building	7.F1	69.6	69.6
I-15 NB		65.3	65.6
I-15 SB		65.4	65.6
I-215 NB		59.8	60.0
I-215 SB1		27.8	30.7
I-215 SB2		22.7	52.9
I-215 SB3		60.9	62.4
Monroe SB1		35.9	20.1
Monroe SB8		36.2	20.4
Proposed Hotel Building	8.F1	70.2	70.2
I-15 NB		65.7	65.9
I-15 SB		66.3	66.3
I-215 NB		60.1	60.2
I-215 SB1		30.3	33.2
I-215 SB2		24.6	53.3

## Contribution Levels of the Receivers

Source name	Lane	Level w/o NP Lden dB(A)	Level w. NP Lden dB(A)
I-215 SB3		61.4	63.0
Monroe SB1		36.3	23.5
Monroe SB8		36.9	23.5
Proposed Hotel Building	9.F1	70.7	70.7
I-15 NB		66.0	66.2
I-15 SB		67.2	66.9
I-215 NB		60.4	60.5
I-215 SB1		34.7	37.6
I-215 SB2		28.1	54.3
I-215 SB3		61.9	63.6
Monroe SB1		37.1	27.1
Monroe SB8		37.9	27.3
Proposed Hotel Building	1.F1	54.3	54.3
I-15 NB		41.5	53.1
I-15 SB		43.6	55.1
I-215 NB		24.5	43.9
I-215 SB1		17.4	46.7
I-215 SB2		10.9	42.3
I-215 SB3		45.9	27.1
Monroe SB1		49.9	42.0
Monroe SB8		49.8	39.8
Proposed Hotel Building	2.F1	57.5	57.6
I-15 NB		43.4	59.4
I-15 SB		46.0	60.4
I-215 NB		27.7	49.0
I-215 SB1		19.9	52.5
I-215 SB2		14.8	48.0
I-215 SB3		49.6	29.1
Monroe SB1		52.9	43.1
Monroe SB8		53.2	42.9
Proposed Hotel Building	3.F1	59.1	59.1
I-15 NB		44.8	61.9
I-15 SB		47.2	62.3
I-215 NB		25.9	50.8
I-215 SB1		21.8	55.5
I-215 SB2		15.6	51.6
I-215 SB3		51.0	30.6
Monroe SB1		54.5	44.5
Monroe SB8		55.0	44.4
Proposed Hotel Building	4.F1	60.0	60.0
I-15 NB		46.1	63.5
I-15 SB		48.5	63.2
I-215 NB		27.7	52.3
I-215 SB1		22.4	56.8
I-215 SB2		13.4	52.9
I-215 SB3		52.3	31.5
Monroe SB1		55.3	45.4
Monroe SB8		55.8	45.7
Proposed Hotel Building	5.F1	60.5	60.5
I-15 NB		47.0	64.3
I-15 SB		49.3	63.8
I-215 NB		28.7	53.2
I-215 SB1		22.0	57.5
I-215 SB2		13.6	54.9
I-215 SB3		52.9	31.9
Monroe SB1		55.8	46.1
Monroe SB8		56.2	46.8
Proposed Hotel Building	6.F1	60.8	60.9
I-15 NB		47.8	64.9
I-15 SB		49.9	64.5

## Contribution Levels of the Receivers

Source name	Lane	Level w/o NP Lden dB(A)	Level w. NP Lden dB(A)
I-215 NB		29.2	53.7
I-215 SB1		22.8	58.1
I-215 SB2		16.9	55.6
I-215 SB3		53.3	32.9
Monroe SB1		56.1	46.7
Monroe SB8		56.4	47.7
Proposed Hotel Building	7.F1	61.0	61.0
I-15 NB		48.4	65.3
I-15 SB		50.4	64.8
I-215 NB		31.5	54.1
I-215 SB1		24.7	58.8
I-215 SB2		18.1	56.9
I-215 SB3		54.0	34.5
Monroe SB1		56.1	47.3
Monroe SB8		56.3	48.3
Proposed Hotel Building	8.F1	61.1	61.2
I-15 NB		48.9	65.7
I-15 SB		50.9	65.5
I-215 NB		34.1	54.3
I-215 SB1		27.9	59.4
I-215 SB2		19.8	57.5
I-215 SB3		54.5	36.7
Monroe SB1		56.0	47.8
Monroe SB8		56.2	48.7
Proposed Hotel Building	9.F1	61.4	61.4
I-15 NB		50.1	66.1
I-15 SB		51.7	66.3
I-215 NB		39.4	54.6
I-215 SB1		32.2	59.9
I-215 SB2		25.2	58.3
I-215 SB3		55.2	42.1
Monroe SB1		56.0	48.2
Monroe SB8		56.0	49.0
Proposed Hotel Building	1.F1	58.4	58.1
I-15 NB		53.0	53.9
I-15 SB		55.9	55.5
I-215 NB		43.9	42.6
I-215 SB1		46.7	45.9
I-215 SB2		42.1	41.4
I-215 SB3		26.8	44.0
Monroe SB1		41.6	22.4
Monroe SB8		39.8	21.1
Proposed Hotel Building	2.F1	63.9	63.7
I-15 NB		59.5	60.6
I-15 SB		60.9	61.7
I-215 NB		48.0	48.6
I-215 SB1		52.5	53.4
I-215 SB2		48.1	47.3
I-215 SB3		28.8	49.6
Monroe SB1		43.1	29.0
Monroe SB8		42.9	28.4
Proposed Hotel Building	3.F1	66.1	65.9
I-15 NB		62.0	64.1
I-15 SB		62.5	64.4
I-215 NB		50.7	55.0
I-215 SB1		55.5	57.2
I-215 SB2		51.6	53.0
I-215 SB3		30.4	50.7
Monroe SB1		44.5	26.5
Monroe SB8		44.4	26.4



## Contribution Levels of the Receivers

Source name	Lane	Level w/o NP Lden dB(A)	Level w. NP Lden dB(A)
Proposed Hotel Building	4.F1	67.2	67.2
I-15 NB		63.5	66.7
I-15 SB		63.2	66.1
I-215 NB		52.3	58.8
I-215 SB1		56.8	58.3
I-215 SB2		53.0	55.3
I-215 SB3		31.3	52.9
Monroe SB1		45.3	16.8
Monroe SB8		45.7	16.6
Proposed Hotel Building	5.F1	67.9	68.0
I-15 NB		64.3	68.1
I-15 SB		63.8	67.5
I-215 NB		53.2	59.7
I-215 SB1		57.5	59.2
I-215 SB2		54.9	57.3
I-215 SB3		31.8	55.6
Monroe SB1		46.0	16.8
Monroe SB8		46.8	16.6
Proposed Hotel Building	6.F1	68.6	68.6
I-15 NB		64.9	68.6
I-15 SB		64.4	68.3
I-215 NB		53.7	60.1
I-215 SB1		58.1	60.1
I-215 SB2		55.5	59.0
I-215 SB3		32.7	57.2
Monroe SB1		46.7	18.3
Monroe SB8		47.7	18.0
Proposed Hotel Building	7.F1	69.0	69.1
I-15 NB		65.2	69.1
I-15 SB		64.8	69.9
I-215 NB		54.0	60.5
I-215 SB1		58.8	60.9
I-215 SB2		57.0	59.8
I-215 SB3		34.3	58.4
Monroe SB1		47.3	20.3
Monroe SB8		48.3	20.2
Proposed Hotel Building	8.F1	69.4	69.6
I-15 NB		65.6	69.6
I-15 SB		65.1	71.2
I-215 NB		54.3	60.8
I-215 SB1		59.4	61.5
I-215 SB2		57.6	60.3
I-215 SB3		36.5	59.2
Monroe SB1		47.8	22.4
Monroe SB8		48.7	22.3
Proposed Hotel Building	9.F1	70.1	70.2
I-15 NB		66.0	70.0
I-15 SB		66.3	72.0
I-215 NB		54.6	61.0
I-215 SB1		59.9	62.0
I-215 SB2		58.1	61.3
I-215 SB3		41.9	60.0
Monroe SB1		48.2	27.2
Monroe SB8		49.0	27.2
Proposed Hotel Building	1.F1	58.3	58.4
I-15 NB		52.8	26.5
I-15 SB		56.0	27.5
I-215 NB		42.5	19.2
I-215 SB1		45.9	16.7
I-215 SB2		41.4	9.9

## Contribution Levels of the Receivers

Source name	Lane	Level w/o NP Lden dB(A)	Level w. NP Lden dB(A)
I-215 SB3		44.4	21.5
Monroe SB1		10.7	57.4
Monroe SB8		11.2	57.4
Proposed Hotel Building	2.FI	64.8	64.8
I-15 NB		60.4	30.2
I-15 SB		61.8	31.0
I-215 NB		48.8	22.7
I-215 SB1		53.4	20.3
I-215 SB2		47.3	12.6
I-215 SB3		47.1	25.4
Monroe SB1		14.5	60.7
Monroe SB8		14.7	60.7
Proposed Hotel Building	3.FI	68.1	68.1
I-15 NB		64.1	32.6
I-15 SB		64.4	33.3
I-215 NB		55.0	25.3
I-215 SB1		57.2	22.7
I-215 SB2		53.0	15.9
I-215 SB3		50.3	27.8
Monroe SB1		16.3	61.1
Monroe SB8		16.4	60.9
Proposed Hotel Building	4.FI	70.3	70.3
I-15 NB		66.7	33.1
I-15 SB		66.0	33.7
I-215 NB		58.9	26.4
I-215 SB1		58.3	23.2
I-215 SB2		55.3	16.1
I-215 SB3		53.5	28.4
Monroe SB1		16.4	61.1
Monroe SB8		16.5	60.8
Proposed Hotel Building	5.FI	71.7	71.7
I-15 NB		68.1	32.2
I-15 SB		67.5	33.3
I-215 NB		59.7	25.9
I-215 SB1		59.2	22.6
I-215 SB2		57.3	13.7
I-215 SB3		55.9	28.5
Monroe SB1		16.4	60.8
Monroe SB8		16.3	60.4
Proposed Hotel Building	6.FI	72.4	72.4
I-15 NB		68.6	32.7
I-15 SB		68.4	34.1
I-215 NB		60.2	25.8
I-215 SB1		60.1	22.8
I-215 SB2		59.0	15.5
I-215 SB3		57.0	29.2
Monroe SB1		17.9	60.4
Monroe SB8		17.8	60.1
Proposed Hotel Building	7.FI	73.4	73.4
I-15 NB		69.1	35.1
I-15 SB		69.8	36.2
I-215 NB		60.5	27.8
I-215 SB1		60.9	24.9
I-215 SB2		59.8	19.2
I-215 SB3		58.1	30.7
Monroe SB1		19.9	60.1
Monroe SB8		20.0	59.7
Proposed Hotel Building	8.FI	74.3	74.3
I-15 NB		69.6	37.8
I-15 SB		71.3	38.6

## Contribution Levels of the Receivers

Source name	Lane	Level w/o NP Lden dB(A)	Level w. NP Lden dB(A)
I-215 NB		60.8	30.5
I-215 SB1		61.5	27.9
I-215 SB2		60.3	21.4
I-215 SB3		59.2	33.0
Monroe SB1		22.0	59.8
Monroe SB8		22.1	59.3
Proposed Hotel Building	9.F1	75.1	74.9
I-15 NB		70.0	42.5
I-15 SB		72.3	43.4
I-215 NB		61.0	35.6
I-215 SB1		62.0	33.0
I-215 SB2		61.3	25.3
I-215 SB3		59.8	37.8
Monroe SB1		26.7	59.4
Monroe SB8		26.9	59.1
Proposed Hotel Building	1.F1	60.4	60.4
I-15 NB		26.6	50.4
I-15 SB		27.2	51.8
I-215 NB		19.3	39.9
I-215 SB1		16.8	44.5
I-215 SB2		9.3	36.1
I-215 SB3		21.6	22.4
Monroe SB1		57.4	48.6
Monroe SB8		57.4	47.9
Proposed Hotel Building	2.F1	63.7	63.7
I-15 NB		30.2	56.2
I-15 SB		30.8	56.9
I-215 NB		22.7	43.6
I-215 SB1		20.3	51.2
I-215 SB2		12.1	36.5
I-215 SB3		25.4	25.0
Monroe SB1		60.7	50.9
Monroe SB8		60.7	51.1
Proposed Hotel Building	3.F1	64.0	64.0
I-15 NB		32.6	58.4
I-15 SB		33.1	58.9
I-215 NB		25.3	46.1
I-215 SB1		22.7	52.7
I-215 SB2		15.8	42.4
I-215 SB3		27.8	26.9
Monroe SB1		61.2	52.5
Monroe SB8		60.9	53.2
Proposed Hotel Building	4.F1	64.0	64.0
I-15 NB		33.1	59.9
I-15 SB		33.5	60.3
I-215 NB		26.4	47.6
I-215 SB1		23.3	53.9
I-215 SB2		16.0	42.5
I-215 SB3		28.5	27.0
Monroe SB1		61.1	53.5
Monroe SB8		60.8	54.0
Proposed Hotel Building	5.F1	63.6	63.6
I-15 NB		32.2	60.8
I-15 SB		33.0	60.8
I-215 NB		25.9	48.5
I-215 SB1		22.5	54.7
I-215 SB2		13.8	44.0
I-215 SB3		28.6	26.9
Monroe SB1		60.8	53.9
Monroe SB8		60.4	54.3

## Contribution Levels of the Receivers

Source name	Lane	Level w/o NP Lden dB(A)	Level w. NP Lden dB(A)
Proposed Hotel Building	6.F1	63.3	63.3
I-15 NB		32.7	61.4
I-15 SB		33.8	61.6
I-215 NB		25.8	49.2
I-215 SB1		22.8	55.2
I-215 SB2		15.6	46.7
I-215 SB3		29.5	28.3
Monroe SB1		60.4	54.1
Monroe SB8		60.1	54.3
Proposed Hotel Building	7.F1	62.9	62.9
I-15 NB		35.1	61.8
I-15 SB		35.9	62.0
I-215 NB		27.8	49.6
I-215 SB1		24.9	55.7
I-215 SB2		19.3	47.4
I-215 SB3		30.9	29.8
Monroe SB1		60.1	54.2
Monroe SB8		59.7	54.2
Proposed Hotel Building	8.F1	62.6	62.6
I-15 NB		37.8	62.1
I-15 SB		38.3	62.4
I-215 NB		30.5	49.9
I-215 SB1		28.0	56.2
I-215 SB2		21.4	47.7
I-215 SB3		33.2	32.2
Monroe SB1		59.8	54.1
Monroe SB8		59.3	54.2
Proposed Hotel Building	9.F1	62.4	62.4
I-15 NB		42.5	62.5
I-15 SB		43.0	62.6
I-215 NB		35.6	50.3
I-215 SB1		33.0	56.6
I-215 SB2		25.3	48.1
I-215 SB3		38.0	37.3
Monroe SB1		59.4	54.0
Monroe SB8		59.1	54.1
Proposed Hotel Building	1.F1	56.3	56.4
I-15 NB		50.5	52.6
I-15 SB		51.5	53.4
I-215 NB		38.8	46.8
I-215 SB1		44.5	40.9
I-215 SB2		36.1	39.0
I-215 SB3		22.3	51.1
Monroe SB1		48.6	33.8
Monroe SB8		47.9	33.4
Proposed Hotel Building	2.F1	61.2	61.2
I-15 NB		56.1	0.0
I-15 SB		56.9	0.0
I-215 NB		43.5	0.0
I-215 SB1		51.2	0.0
I-215 SB2		36.5	0.0
I-215 SB3		24.9	0.0
Monroe SB1		50.9	0.0
Monroe SB8		51.1	0.0
Proposed Hotel Building	3.F1	63.2	63.2
I-15 NB		58.6	0.0
I-15 SB		58.8	0.0
I-215 NB		46.1	0.0
I-215 SB1		52.7	0.0
I-215 SB2		42.4	0.0

## Contribution Levels of the Receivers

Source name	Lane	Level w/o NP Lden dB(A)	Level w. NP Lden dB(A)
I-215 SB3		26.8	0.0
Monroe SB1		52.5	0.0
Monroe SB8		53.2	0.0
Proposed Hotel Building	4.FI	64.5	64.6
I-15 NB		59.9	0.0
I-15 SB		60.2	0.0
I-215 NB		47.5	0.0
I-215 SB1		53.9	0.0
I-215 SB2		42.5	0.0
I-215 SB3		26.9	0.0
Monroe SB1		53.5	0.0
Monroe SB8		54.0	0.0
Proposed Hotel Building	5.FI	65.2	65.2
I-15 NB		60.8	0.0
I-15 SB		60.7	0.0
I-215 NB		48.5	0.0
I-215 SB1		54.7	0.0
I-215 SB2		44.0	0.0
I-215 SB3		26.9	0.0
Monroe SB1		53.9	0.0
Monroe SB8		54.3	0.0
Proposed Hotel Building	6.FI	65.8	65.8
I-15 NB		61.4	0.0
I-15 SB		61.6	0.0
I-215 NB		49.2	0.0
I-215 SB1		55.2	0.0
I-215 SB2		46.7	0.0
I-215 SB3		28.2	0.0
Monroe SB1		54.1	0.0
Monroe SB8		54.3	0.0
Proposed Hotel Building	7.FI	66.2	66.2
I-15 NB		61.8	0.0
I-15 SB		62.0	0.0
I-215 NB		49.6	0.0
I-215 SB1		55.7	0.0
I-215 SB2		47.4	0.0
I-215 SB3		29.7	0.0
Monroe SB1		54.2	0.0
Monroe SB8		54.2	0.0
Proposed Hotel Building	8.FI	66.5	66.5
I-15 NB		62.2	0.0
I-15 SB		62.3	0.0
I-215 NB		49.9	0.0
I-215 SB1		56.2	0.0
I-215 SB2		47.7	0.0
I-215 SB3		32.1	0.0
Monroe SB1		54.1	0.0
Monroe SB8		54.2	0.0
Proposed Hotel Building	9.FI	66.8	66.8
I-15 NB		62.6	0.0
I-15 SB		62.7	0.0
I-215 NB		50.3	0.0
I-215 SB1		56.6	0.0
I-215 SB2		48.1	0.0
I-215 SB3		37.1	0.0
Monroe SB1		54.0	0.0
Monroe SB8		54.0	0.0



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