

APPENDIX I
NOISE ASSESSMENT

1.0 PROJECT LOCATION AND DESCRIPTION

Noise impacts were evaluated in support of an Initial Study/Mitigated Negative Declaration (IS/MND) prepared under the California Environmental Quality Act (CEQA). The IS/MND covers a proposed warehouse facility on Mango Avenue north of Sierra Lakes Parkway, in Fontana, California. Immediately west of the project site is a Les Schwab Tire Center, which is an outlet of a multistate tire retail chain, and across Mango Avenue to the east is the Mid-Valley Sanitary Landfill. To the west, across Sierra Avenue, is a large subdivision of single-family residences.

The proposed project consists of the development of 115,100-square-foot warehouse, located on an approximately 5.8-acre parcel. The warehouse would comprise a 6,000-square-foot office, a 4,000-square-foot office mezzanine and 105,100 square feet of warehouse space. It would have 20 dock doors, 23 trailer stalls, and 90 automobile parking stalls, of which six would be ADA parking spaces.

2.0 NEED AND METHODOLOGY

Under the California Environmental Quality Act (CEQA) and its guidelines, impacts on the human environment from noise and vibration must be addressed for discretionary projects, unless specifically exempted. Any warehouse project has the potential for both short- and long-term noise and vibration impacts.

3.0 EXISTING CONDITIONS

After reviewing local noise regulations and maps of the general project area, UltraSystems identified single-family residences on the west side of Sierra Avenue, about 600 feet from the project site, as the only nearby sensitive noise receivers.

Due to the current pandemic, traffic levels and, consequently, neighborhood noise levels, are lower than under “normal” conditions. Ambient noise levels were therefore not measured for this project. Instead, measurement results from a 2015 noise study in the same general area as the proposed project¹ were used to characterize existing conditions. One of the ambient measurement locations, “L8,” is directly across Sierra Avenue from the Mango Avenue Industrial Project site, and is a few feet from a residence. The average 1-hour noise levels (L_{eq}) at this point were 66.1 dBA in the daytime (7:00 a.m. to 10:00 p.m.) and 64.1 dBA in the nighttime (10:00 p.m. to 7:00 a.m.). The 24-hour weighted community noise equivalent level (CNEL) was 71.3 dBA.

4.0 PROJECT NOISE IMPACTS

4.1 Construction

Noise impacts from construction activities are a function of the noise generated by the operation of construction equipment and onroad delivery and worker commuter vehicles, the location of equipment, and the timing and duration of the noise-generating activities. Using calculation methods published by the Federal Transit Administration (FTA), UltraSystems estimated the average hourly exposures at the aforementioned measurement location L8. The distances used for the calculation were measured from the residences to the approximate center of activity of each construction phase,

1 Sierra Lakes Commerce Center, located approximately 0.18 mile from the Mango Avenue Industrial Warehouse Project site.

since that would be the average location of construction equipment most of the time. For the purpose of this analysis, it was estimated that the construction of the proposed project would begin in November 2020 and end in July 2021.

The types and numbers of pieces of equipment anticipated in each phase of construction and development were estimated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. The CalEEMod equipment mix is based on a construction survey performed by the South Coast Air Quality Management District. Average noise emission levels and “usage factors,” which are estimated percentages of operating time that the equipment would be producing noise at the stated levels, were obtained from the Federal Highway Administration’s Road Construction Noise Model users guide, an equipment noise data compilation published by the County of Ventura and other documented sources. Equipment use was matched to phases of the construction schedule.

The construction noise exposure analysis took into account the fact that noise transmission from construction activities to the receiver would be partially blocked by an existing building immediately west of the project site. An existing soundwall on the west side of Sierra Avenue was not taken into consideration because, as discussed below, the exposures to the residences were already less than significant without the wall.

The noisiest construction phase would be grading, which would result in a maximum hourly L_{eq} of 60.5 dBA across Sierra Avenue from the project site. The City of Fontana Municipal Code does not contain standards with which to compare this result. The increase in total noise level in all construction phases is less than or equal to 1.1 dBA, which would not be perceptible at the residences along Sierra Avenue. Therefore, no mitigation is required. During construction, the maximum 24-hour exposure would be 71.4 dBA CNEL. The increase due to project construction would be 0.1 dBA CNEL, which would be less than the significance criterion of 5 dBA CNEL. Therefore, weighted average daily exposures to construction noise would be less than significant.

4.2 Operations

Long-term noise impacts include project-generated onsite and offsite operational noise sources. Onsite (stationary) noise sources from the operation of the warehouse facility would include the use of mechanical equipment such as air conditioners and landscaping and building maintenance activities. Offsite noise would be attributable to project-induced traffic, which would cause an incremental increase in noise levels within and near the project vicinity.

4.2.1 Noise Generated Onsite

Onsite noise sources from the proposed warehouse facility would include operation of rooftop mechanical equipment such as air conditioners, parking lot activities, and truck deliveries. Noise levels from these sources are generally lower than from the traffic on streets bordering the project site. Furthermore, § 18-63 of the Fontana Development Code limits onsite noise impacts of the operation of any noise-creating blower or power fan or any internal combustion engine other than from the hours of 7:00 a.m. and 6:00 p.m. on a weekday and the hours of 8:00 a.m. and 5:00 p.m. on a Saturday, the operation of which causes noise due to the explosion of operating gases or fluids, unless the noise from such blower or fan is muffled and such engine is equipped with a muffler device sufficient to deaden such noise.

Finally, most of the noise from onsite truck traffic, engine idling, and loading and unloading will be within a recess in the south side of the proposed warehouse; the structure will block the line of sight

to sensitive receivers on the west.² The operational noise levels would be within both the City's daytime and nighttime residential noise standards of 70 dBA and 65 dBA, respectively. Therefore, operational noise would be less than significant.

4.2.2 Roadway Noise

Existing roadway segment average daily traffic (ADT) data were obtained from the aforementioned Sierra Lakes Commerce Center Noise Impact Analysis. ADT on Sierra Avenue south of Summit Avenue, which is where the only sensitive noise receivers near the project are, is 13,100. The project would increase traffic by about 2%. Given the logarithmic nature of the decibel, traffic volume needs to be doubled in order for the noise level to increase by 3 dBA, the minimum level perceived by the average human ear. A doubling is equivalent to a 100% increase. Since the maximum increase in traffic in this road segment would be far below 100%, the increase in roadway noise experienced at sensitive receivers would not be perceptible to the human ear. Therefore, roadway noise associated with project operation would not expose a land use to noise levels that are considered incompatible with or in excess of adopted standards, and impacts would be less than significant.

4.3 Vibration

Vibration levels at sensitive receptors during use of heavy construction equipment and onroad heavy duty truck traffic were estimated by using FTA methods and equipment vibration data. Resulting vibration levels at sensitive receivers were determined to be less than the thresholds for property damage and human annoyance.

² No sensitive receivers are south or east of the project site.