

4.9 NOISE

4.9.1 Environmental Setting

a. Overview of Noise. Noise is defined as unwanted or objectionable sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Noise level (or volume) is typically measured in decibels using the A-weighted sound pressure level (A-weighted decibels, or dBA). The A-weighting scale is an adjustment of actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Decibels are based on the logarithmic scale, which compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dB higher than another is judged to be twice as loud, a sound 20 dB higher four times as loud, and so forth. Everyday sounds normally range from 30 dB (very quiet) to 100 dB (very loud). In general, a 3 dB change in community noise levels is noticeable, while 1-2 dB changes are generally not perceived. Noise levels typically attenuate at a rate of 6 dBA per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance.

In addition to the actual instantaneous measurement of sound levels, the duration of sound is important because sounds that occur over a long period of time are more likely to be annoying or are more likely to cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers duration as well as sound power level is the equivalent noise level (Leq). The Leq is the average sound level occurring over a specified time period (typically one hour).

Another noise metric used to characterize the variations in sound levels over time is the percentage exceedance level, designated as L_{10} , L_{50} , L_{90} , etc. The subscript notes the percentage of time that the noise level was exceeded during the measurement period. For example, L_{10} is the sound level exceeded 10 percent of the time and is generally taken to be indicative of the highest noise level experienced at a site. The L_{90} is that level exceeded 90 percent of the time and this level is often called the base level of noise at a location. The L_{50} sound level (that level exceeded 50% of the time) is frequently used in noise standards and ordinances.

The time period in which noise occurs is also important because noise that occurs at night tends to be more disturbing than noise occurring during the daytime. One of the most frequently used metrics that accounts for the difference in reaction to noise at different times of day is the Day-Night Level (Ldn). The Ldn is a 24-hour average sound level that recognizes the increased sensitivity of people to nighttime noise by adding 10 dB to noise occurring between 10 PM and 7 AM. The Community Noise Equivalent Level (CNEL) is identical to the Ldn except that it also adds 5 dB to noise occurring between 7 PM and 10 PM.



b. Regulatory Setting. Noise control is regulated through the City of Scotts Valley General Plan Noise Element and the City's Municipal Code. Section 17.44.020.C.3 of the Municipal Code states:

Noise. At the lot line of all uses specified in Chapters 17.20, 17.22, 17.24, 17.26 and 17.28 of this title, the maximum sound generated by any user shall not exceed seventy-five dbA when adjacent users are industrial or wholesale users. When adjacent to offices or retail, the sound level shall be limited to seventy dbA. When users are adjacent or contiguous to residential, park or institutional uses, the maximum sound level shall not exceed sixty dbA. Excluded from these standards are occasional noises which are specifically exempted under Section 5.17.030.

The uses specified in Chapters 17.20, 17.22, 17.24, 17.26 and 17.28 of the Municipal Code include service commercial, shopping center commercial, professional-commercial, light industrial, and public/quasi-public. The noises exempted under Section 5.17.030 include the proper use of a siren or other alarm by a police, fire, or other authorized emergency vehicle, a stationary fire alarm operated by the Fire District of the City, the use of emergency generators by privately owned service facilities (up to a maximum of 75 dBA at the property line), and noise generated by City-permitted construction activities during authorized construction hours.

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hospitals, schools, and libraries are most sensitive to noise intrusion and; therefore, they have more stringent noise exposure targets than manufacturing or agricultural uses that are not subject to impacts such as sleep disturbance.

The Scott's Valley General Plan Noise Element includes objectives, policies, and actions intended to reduce noise impacts to City residents. Action NA-454 states:

- *Exterior noise levels measures at the property line of proposed new residential development shall be limited at or below an average annual day-night level of 60 dBA (NA-454).*

The General Plan also identifies noise increase standards, which are identified in Table 4.9-1. These standards are referenced in General Plan policy NP-442 and action NA-446:

- *New developments which may increase the day-night noise level by more than the levels shown in Table 4.9-1 shall be approved only when proper noise attenuation design measures have been incorporated to the City's satisfaction (NP-442).*
- *New development shall not be approved which may increase the noise levels more than those increases specified in Table 4.9-1 of the General Plan Noise Element (NA-446).*



Table 4.9-1. Maximum Noise Increase (dBA) Standards

| New Use | Existing Use | | | |
|--------------------|--------------|-------------|------------|------------|
| | Sensitive | Residential | Commercial | Industrial |
| Sensitive | | | | |
| Property Line (PL) | 3 | 5 | 5 | 5 |
| 50' from PL | 3 | 3 | - | - |
| Residential | | | | |
| Property Line (PL) | 3 | 5 | 5 | 5 |
| 50' from PL | 3 | 3 | - | - |
| Commercial | | | | |
| Property Line (PL) | 3 | 5 | 5 | 5 |
| 50' from PL | 3 | 3 | - | - |
| Industrial | | | | |
| Property Line (PL) | 3 | 5 | 5 | 7 |
| 50' from PL | 3 | 3 | - | - |

Source: Scotts Valley General Plan Noise Element Table 3.

Other applicable Noise Element objectives, policies, and actions, not specifically discussed above, are listed below.

- *Promote new land uses which have noise generation/sensitivity characteristics that are compatible with neighboring land uses, based on the day-night average A-weighted noise levels (NO-441).*
- *New development shall include noise attenuation measures to reduce the effects of existing noise to an acceptable level (NP-451).*
- *In areas where the annual day-night noise level exceeds 60 dBA, the City shall require an acoustical engineering study for proposed new construction or renovation of structures(s). Each acoustical analysis should recommend methods to reduce the interior day-night annual average noise level to below 45 dBA for private dwellings, motels, hotels, offices and noise sensitive uses (NA-452).*
- *Outdoor recreation areas, especially in residential neighborhoods, should incorporate noise attenuation barriers, such as multiple rows of dense conifers, if the day-night noise levels exceed 60 dBA (NA-461).*

Noise Insulation Standards are also part of the California Administrative Code, Title 25. These apply to all new multi-family dwelling units, including apartment houses, condominium units, hotels, and motels. The standard considers two areas of noise control: insulation of one unit from another and isolation of interior living spaces from exterior noise. The insulation requirement is implemented through the Uniform Building Code, Chapter 35, which specifies minimum design requirements for party walls and floor/ceiling assemblies in terms of Sound Transmission Class (STC) and Impact Insulation Class (IIC). The noise insulation requirement specifies that the interior CNEL attributable to exterior sources shall not exceed 45 dB in any habitable room.

c. Existing Noise Environment. The Noise Element of the Scotts Valley General Plan identifies hospitals, churches, libraries, schools, and retirement homes as noise-sensitive uses. Noise-sensitive uses in the Specific Plan vicinity include: Valley Vineyard Church, located south of the project site on Mt. Hermon Road; a senior center, located north of the project site on



Kings Village Road; and two schools (Scotts Valley Children's Center and KidsArt), both located south of the project site on Mt. Hermon Road. Residential land uses are classified separately from sensitive land uses in the General Plan Noise Element, although standards for residential uses are nonetheless more stringent than commercial or industrial uses. For the purpose of this EIR, residential uses are also considered noise-sensitive. Residences are located east, northeast, south, and northwest of the project site.

The major source of noise in the Specific Plan area is motor vehicle traffic on roadways. Other sources of noise affecting the Specific Plan area include activities associated with ongoing commercial and industrial operations, including truck loading and unloading. The main roadways of concern in the Specific Plan area include Mt. Hermon Road and Skypark Drive, although several other streets carry substantial traffic, which can also generate noise. The roadways in the project area with traffic volumes large enough to produce substantial noise levels include:

- *Mt. Hermon Road*
- *Skypark Drive*
- *Lockwood Lane*
- *Blue Bonnet Lane*
- *Bean Creek Road*
- *Scotts Valley Drive*
- *Glen Canyon Road*

Field noise measurements were performed for 30 minute intervals at three locations surrounding the Specific Plan area. The field measurements were performed on March 3, 2008. Distance from the noise source, time of day, ambient conditions, and notes regarding vehicle counts and noise sources for each of the readings were logged on field data sheets, included in Appendix D. The field measurements were conducted using a Larson-Davis Model 720 (ANSI Type 2), integrating sound level meter and statistical data logger. Instantaneous sound levels were measured, integrated, and recorded by the sound level meter in 0.1-second intervals. The sound level data collected included date, time, duration of measurement (in seconds), Leq, statistical sound levels (L90, L50, L33 and L10), Lmax, Lmin, and peak (A-weighted). The sound level meter logged the data, which was then transferred to a computer. The set-up consisted of mounting the sound level meter on a tripod with the microphone top at 5.5 feet above the ground surface level, approximately 50 feet from the centerline of each roadway. Distance from the nearest roadway noise source was measured with a 500-foot long tape. Calibration of the sound level meter prior to measurements was performed using a Larson-Davis Acoustic Calibrator CAL150, using a sound power level of 114 dBA at a frequency of 1,000 Hz. Calibration level was also checked at the end of the measurement period to ensure accurate results.

4.9.2 Impact Analysis

a. Methodology and Impact Criteria. Noise levels associated with existing and future traffic along area roadways were calculated using standard noise modeling equations adapted from the Federal Highway Administration Traffic Noise Model (Noise Modeling Data sheets can be viewed in Appendix D of this document). The model calculations are based on traffic



data for the project and cumulative projects from Section 4.11, *Transportation and Circulation* (see Appendix E).

The following issue areas related to noise were determined in the City's Initial Study to have no impact:

- *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, expose people residing or working in the project area to excessive noise levels.*
- *For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise.*

Consistent with the criteria used in the Initial Study for this project, development pursuant to the proposed Town Center Specific Plan would create a significant impact if it would expose existing and future sensitive receptors to noise levels exceeding City standards. Pursuant to the *State CEQA Guidelines*, Appendix G, potentially significant impacts would occur if the project would result in:

- *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;*
- *Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;*
- *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or*
- *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.*

The Scotts Valley General Plan indicates that increases in noise levels of up to three dB due to proposed developments are acceptable for noise-sensitive and residential uses. Therefore, off-site project impacts would be considered significant if an increase of more than three dB occurs from project-related activities. On-site noise levels would be considered significant if the proposed uses would be exposed to noise levels above thresholds set in section 17.44.020.C.3 of the City's Municipal Code.

b. Project Impacts and Mitigation Measures.

Impact N-1 **Specific Plan construction would be located adjacent to sensitive receptors and could intermittently generate audible noise at locations on and adjacent to the Specific Plan area. This noise has the potential to exceed thresholds in the City General Plan Noise Element; impacts are considered Class II, significant but mitigable.**

Development pursuant to the proposed Specific Plan would result in noise impacts from demolition, site preparation, and construction activities. These activities typically involve the use of heavy equipment such as tractors, loaders, and concrete mixers. Trucks would be used to deliver equipment and building materials, and to haul away waste materials. Smaller equipment such as jack hammers, pneumatic tools, saws, and hammers would also be used



throughout the site during the construction phase. This equipment would generate both steady state and episodic noise that would be heard both on and off the project site. Noise generated by construction equipment would occur with varying intensities and durations during the different phases of construction: clear and grub, earthwork, base preparation, paving, and cleanup. The operation of heavy equipment during construction would result in temporary increases in noise in the immediate vicinity of the Specific Plan area. According to the *State CEQA Guidelines*, Appendix G, a substantial temporary or periodic increase in ambient noise levels in the project vicinity constitutes a significant impact.

As illustrated in Table 4.9-2, equivalent noise levels associated with the use of heavy equipment at construction sites can range from about 78 to 88 dBA at 15 meters (50 feet) from the source, depending on the types of equipment in operation at any given time and the phase of construction. The highest noise levels would generally occur during excavation and foundation development, which involve the use of such equipment as backhoes, bulldozers, shovels, and front-end loaders. In addition, construction vehicles traveling on local roadways can generate substantial noise levels that affect adjacent receptors. Average noise levels associated with the use of heavy equipment at construction sites can range from about 65 to 88 dBA, at a distance of 50 feet from the source, depending upon the types of equipment in operation and the phase of construction.

Table 4.9-2. Typical Noise Level Ranges at Roadway Construction Sites

| Construction Phase | Equivalent Hourly Noise Level at 15 meters (50 feet) | |
|-----------------------|--|---------------------------------|
| | Minimum Required Equipment On-Site | All Pertinent Equipment On-Site |
| Ground Clearing | 83 dBA | 83 dBA |
| Excavation | 75 dBA | 88 dBA |
| Foundations | 81 dBA | 81 dBA |
| Erection | 65 dBA | 81 dBA |
| Finishing and Cleanup | 72 dBA | 88 dBA |

Source: Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the U.S. Environmental Protection Agency, 1971.

The nearest existing sensitive receptors to the Specific Plan area are the residences located across Skypark Drive to the northwest and the residences adjacent to the Specific Plan area to the east and northeast. There are also nearby residences across Blue Bonnet Lane, north of the proposed parking structure and housing (refer to Figure 2-4). Some of these residences are adjacent to where construction activities related to the Specific Plan would take place. Because this construction has the potential to expose existing residences to a substantial temporary noise increase, this is a potentially significant impact.

Mitigation Measures. The following measures are recommended to reduce demolition and construction noise impacts on nearby sensitive receptors:

- N-1(a) Construction Activity Timing.** Demolition and construction activity for site preparation and for future development shall be limited to the hours between 8:00 AM and 5:00 PM, Monday through Friday. No construction shall occur on State holidays (e.g. Thanksgiving, Labor



Day). Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities such as interior painting are not subject to these restrictions.

N-21(b) Construction Noise Attenuation. For all demolition and construction activities in the Specific Plan area, additional noise attenuation techniques shall be employed as needed to ensure that noise remains within levels allowed by the City of Scotts Valley noise standards. The following measures shall be incorporated into contract specifications to reduce the impact of construction noise:

- *All construction equipment shall have properly maintained sound-control devices. No equipment shall have an un-muffled exhaust.*
- *Contractors shall implement appropriate additional noise mitigation measures including, but not limited to, changing the location of stationary construction equipment, shutting off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.*

N-1(c) Construction Equipment. Stationary demolition and construction equipment that generates noise that exceeds 60 dBA Leq at the boundaries of an identified on- or off-site residential, recreational, park, or office use shall be shielded. All construction equipment powered by internal combustion engines shall be properly muffled and maintained. Unnecessary idling of internal combustion engines shall be prohibited. Electrical power shall be used to run air compressors and similar power tools, when available within 150 feet.

Significance After Mitigation. With implementation of recommended mitigation measures to reduce construction noise to the extent feasible, construction noise impacts would be less than significant.

Impact N-2 Implementation of future development in accordance with the Specific Plan would expose on-site sensitive receptors to noise potentially exceeding City standards. This is a Class II, significant but mitigable, impact.

A potentially significant impact would occur when a noise-sensitive use is constructed in close proximity to a noise source that would result in noise levels of greater than 60 dBA in exterior spaces or greater than 45 dBA in interior spaces. Under buildout conditions, residences would be located along major roadways within the Town Center, and could be exposed to noise levels that exceed the 60 dBA exterior and 45 dBA CNEL interior noise standards. Of particular concern is new development along or in close proximity to Mt. Hermon Road, Skypark Drive, Kings Village Road, and Blue Bonnet Lane. Impacts related to exposure to traffic-related noise would be potentially significant.



Operation of on-site commercial uses could involve noise associated with mechanical equipment (such as generators or heating, ventilating, and air conditioning (HVAC) units), deliveries, trash hauling activities, and customer and employee use of facilities. Noise from these activities, in addition to general parking lot noise, could affect nearby or adjacent on- and off-site sensitive receptors. The City's noise standard in General Plan Action NA-454 would apply to these uses.

According to the proposed Specific Plan, no dedicated retail uses are projected immediately adjacent to on-site areas planned for residential and mixed-use development. However, there are several locations where the distance between these uses is as little as 60 feet. Therefore, any delivery or trash hauling activities occurring during late night and early morning hours would be disruptive to the nearby occupants of these residences. Because noise levels at new residential uses due to new commercial operations could exceed the 60 dbA standard, this is a potentially significant impact.

The current land use plan for the Town Center also indicates that parking lots and structures would be immediately adjacent to new residential development. Development of these parking structures could cause an increase in ambient noise levels that exceeds City standards. Because noise levels at new residential uses due to parking facilities could exceed the 60 dbA standard, this is a potentially significant impact.

Mitigation Measures. The following mitigation measures are recommended to address operational noise:

- N-2(a) Acoustical Report and Design Mitigation.** Because of the general level of intensified development within the downtown area, applicants proposing future noise-sensitive land uses within the Specific Plan area shall consult a professional acoustical engineer, and conduct a noise study. The recommendations made within such a noise study shall be incorporated into project design, in order to minimize both interior and exterior noise levels to meet City standards.
- N-2(b) Noise Attenuation.** For any new residential development or other sensitive receptor development that would be subject to exterior noise levels exceeding 60 dBA, the project applicant shall retain an acoustical engineer during project design to incorporate construction/design specifications that would result in an ambient noise environment where all residents would be exposed to noise of less than 60 dBA in exterior usable spaces and 45 dBA in interior spaces. Typical design features that would be incorporated may include but are not limited to the following.
- *Orientation of non-sensitive uses such as parking/garages and roadways closest to the noise source.*
 - *Orientation of buildings such that the first row of buildings has 90% linear coverage parallel to the noise source For a building of 30 feet in*



height, in an ambient noise environment in excess of 70 dBA, building shielding would be anticipated to provide attenuation of 20 dBA.

- *Sound walls between residential and non-residential uses.*
- *Windows and sliding glass doors facing the noise source with a minimum Standard Transmission Class (STC) of 39 that are properly installed, weather stripped, and insulated.*
- *Exterior doors facing the noise source with a minimum STC of 39 and insulated in conformance with Title 24 requirements.*
- *Exterior wall facing material designed for a minimum STC of 39 (this can typically be achieved by adding absorptive insulation [i.e., fiberglass batts] in the wall cavity).*
- *Roof or attic vents either facing away from the noise source or baffled.*
- *Air conditioning or a mechanical ventilation system so that windows and doors may remain closed.*

N-2(c) Truck Delivery Limitations. Truck deliveries to future commercial and industrial uses on the portion of sites located adjacent to noise-sensitive land uses shall be limited to between the hours of 8:00 AM and 5:00 PM on weekdays and 9:00 AM and 4:00 PM on Saturdays. No deliveries shall occur on Sundays, or as otherwise specified by the City.

N-2(d) Truck Idling Limitations. The owners or operators of commercial uses shall post a sign at each loading area that states the idling time for delivery truck engines shall be limited to no more than three minutes on the portion of sites located adjacent to noise-sensitive land uses.

N-2(e) Sound Barriers for External Equipment. External noise-generating equipment associated with commercial uses (e.g., HVAC units, etc.) that are located in mixed-use developments and/or adjacent to residential uses shall be shielded or enclosed with solid sound barriers.

N-2(f) Disclosure of Potential Noise Conflicts. Upon the transfer of residential property on mixed-use sites, the transferor shall deliver to the prospective transferee a written disclosure statement that shall make prospective home buyers or renters aware that although potential impacts or conflicts between commercial and residential uses (e.g., noise) may be lessened by proper site design and maintenance, some level of incompatibility between the two uses would remain.

Significance After Mitigation. With implementation of recommended mitigation measures to reduce noise conflicts among on-site sensitive receptors, operational noise impacts are expected to be less than significant.



Impact N-3 Specific Plan-generated traffic would incrementally increase noise levels along roads in the Specific Plan vicinity. This noise has the potential to exceed General Plan standards. This is considered a Class III, less than significant, impact.

Development pursuant to the Specific Plan would increase human activity and related noise in the Specific Plan vicinity, primarily due to increased vehicular traffic. Existing, project-related, and cumulative traffic-related noise levels were estimated using the Federal Highway Administration (FHWA) *Traffic Noise Model*®. Existing and projected traffic levels were taken from Section 4.11, *Transportation and Circulation*. Field noise measurements were also conducted in order to validate the traffic model. Measurements at three sites were 30-minute samples consistent with the measurement duration suggested in the Caltrans *Technical Noise Supplement* (October 1998). Such measurements are a sample of the local noise environment, and while expected to be typical of noise levels at the site, considerable variation (± 3 -5 dBA) may occur. The three 30-minute sound level measurements near the study area roadways yielded values that varied by 1.3 to 2.6 dBA from the TNM® calculated levels for peak hour. These deviations are within the expected variation between on-site noise level observations and modeled noise levels. The TNM® calculations were considered a reasonable estimate of sound levels and no adjustments to the TNM® values were considered necessary.

The project's effects on traffic-related noise levels are assessed based on the difference between existing noise levels and noise levels generated by expected traffic after project buildout, as estimated in the *Traffic and Circulation Study* from Associated Transportation Engineers. Table 4.9-3 below shows the estimated noise levels along roadways in the vicinity that would experience increases in noise due to Specific Plan-generated traffic. Although the setbacks of existing residences from affected roadways vary, the distances to sensitive receptors used in the FHWA noise model are based on an average distance of 50 feet from the roadway center line to existing receptors outside of the Plan Area. A noise model summary and the results are included in Appendix D.

The noise levels shown in Table 4.9-3 show that the proposed Specific Plan's greatest contribution to the increases in noise along these roadways would be 1.7 dBA Ldn along Skypark Drive north of Mt. Hermon Road. This contribution would be imperceptible from existing noise levels and would not exceed the suggested thresholds of the City's General Plan. Therefore, the Specific Plan's traffic noise impact would be less than significant.

Mitigation Measures. No mitigation measures are required.

Significance After Mitigation. Impacts would be less than significant without mitigation.



Table 4.9-3. Comparison of Pre-Project and Post-Project Traffic Noise on Study Area Roadways

| Roadway | Projected Noise Level (dBA CNEL) | | | Change In Noise Level (dBA CNEL) | |
|---|----------------------------------|------------------------|----------------------|----------------------------------|------------------------------------|
| | Existing (1) | Existing + Project (2) | Future + Project (3) | Due to Project Traffic (2-1) | Due to Future Traffic Growth (3-1) |
| Skypark Drive north of Mt. Hermon Road | 57.8 | 59.5 | 59.5 | 1.7 | 1.7 |
| Lockwood Lane south of Mt. Hermon Road | 61.7 | 61.7 | 61.8 | 0.0 | 0.1 |
| Mt. Hermon Road between Skypark Drive and Kings Village Road | 69.4 | 69.8 | 69.9 | 0.4 | 0.5 |
| Blue Bonnet Lane between Kings Village Road and Bean Creek Road | 60.0 | 61.1 | 61.3 | 1.1 | 1.3 |
| Scotts Valley Dr. southwest of Mt. Hermon Road | 63.9 | 64.2 | 64.1 | 0.3 | 0.5 |
| Bean Creek Road between Scotts Valley Road and Blue Bonnet Lane | 62.2 | 62.7 | 63.1 | 0.5 | 0.9 |
| Mt. Hermon Road between Lundy Lane and La Madrona Drive | 70.5 | 70.9 | 71.3 | 0.4 | 0.8 |
| Glen Canyon Road between Mt. Hermon Road and SR-17 | 62.2 | 62.5 | 63.3 | 0.2 | 1.0 |

Estimates of noise generated by traffic from roadway centerline at 50 feet. Refer to Appendix D for the spreadsheets that generated these estimates. Noise levels presented do not account for attenuation provided by existing barriers or future barriers; therefore, actual noise levels at sensitive receptor locations influenced by study area roadways may in many cases be lower than presented.

c. Cumulative Impacts. The Specific Plan, in combination with pending development elsewhere in the City of Scotts Valley planning area, could contribute to the cumulative increase in offensive noise. Cumulative development in the vicinity of the Town Center would generate increased roadway traffic noise and expose new residents and sensitive receivers to noise levels that exceed standards in some areas, particularly those closest to major roadways. The noise levels reported in Table 4.9-3 are based on cumulative traffic volumes and hence incorporate increased roadway traffic volumes from cumulative development within the greater Scotts Valley area. Under cumulative conditions, the increase in noise levels on all six examined road segments would be less than significant based on City thresholds. In addition, cumulative construction-related noise would contribute to the cumulative exceedance noise standards.

This project is a Specific Plan that encompasses long-range development in Scotts Valley, and is consistent with the provisions of the General Plan. Thus, long-term cumulative impacts are addressed by the project-specific analysis described above. Mitigation measures included for project-specific impacts are intended to address impacts on a case by case basis, and in so doing also mitigate for the cumulative condition.

