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Phelan Pinion Hills CSD  
4176 Warbler Road  
Phelan, CA 92371  
Attn.: Don Bartz, Gen. Mgr.

Subject: Preliminary Acoustical Analysis of the Proposed Development for the Phelan Pinion Hills Community Services District.

Dear Mr. Bartz,

Prompted by a request from the County of San Bernardino Environmental Health Services that the proposed project be evaluated for anticipated compliance with the County Noise Standards as found in San Bernardino Development Code Section 83.01.080, we have performed site noise measurements and mathematical analyses to determine future on-site and off-site noise impacts associated with the operation of the proposed facility. The proposed development consists of three new buildings located between Sheep Creek Road and Sahara Road in the Phelan area of unincorporated San Bernardino County (see attached site plan). One building is slated for administration purposes, another will be used for service, and the other will be a gymnasium.

The area surrounding the proposed development is essentially commercial involving fast-food and dining-in restaurants. The major sources of noise impacts onto the proposed CSD site is the vehicular traffic on Phelan Road which lies about 1000 feet to the north, and Sheep Creek Road which adjoins the site on the west. Noise measurements made on the site showed relatively low noise levels from the vehicular traffic. Noise from Phelan Road was less than 48 dB(A) Leq and, as such, is not a matter of concern. Noise levels from traffic on Sheep Creek Road was measured as 56 dB(A) Leq at 2:30 p.m. on a weekday at a distance of 150 feet from the road centerline. The building line of the Administrative Building nearest Sheep Creek Road will lie at a distance of about 216 feet from the road centerline. The noise level at this distance, as projected from the field measurement made at 150 feet, would be about 53.6 dB(A) Leq. Using this value in a short-term noise measurement/noise prediction vehicular traffic noise model yielded an estimated CNEL of about 57 dB(A) at the subject building line which is

less than the applicable noise level limit of 65 dB(A) CNEL imposed by the County of San Bernardino.

Potential community noise issues *from* the proposed development would be associated with the air conditioning compressors located along the east elevations of the Service Building and Gymnasium. The property line nearest this mechanical equipment lies at a distance of about 100 feet to the east. A noise impact at this distance was calculated to be about 43.5 dB(A) using generic noise emission data typical of the proposed mechanical equipment, and the noise analysis methodology found in ARI Standard 275. This is in compliance with the applicable county noise level limit for stationary noise sources of 60 dB(A) Leq for the most noise-sensitive nighttime hours of 10 p.m.-7 a.m. for commercial property.

Another potential source of noise impact along the east property line would be automotive repair operations in the Service Building. Assuming open steel roll-up doors on the east elevation of the Service Building, and the use of pneumatic wrenches in vehicle wheel removal (the estimated most noisy operation to be conducted inside the building), a potential noise impact at the east property line calculated to be about 65 dB(A) using noise data collected at a Costco tire service facility. The duration of pneumatic wrench use in the removal or installation of a wheel is about 15 seconds. The total time, therefore, to remove or install four wheels on a vehicle would be about one minute. For a one-minute noise duration, the county noise level limit would be 75 dB(A) for the daytime hours (normal operational hours anticipated for the Service Building). The calculated anticipated worst case noise emissions from the Service Building at 65 dB(A) would therefore be in compliance with the applicable county noise criteria.

The conclusion of this preliminary noise impact evaluation is that the proposed commercial development can be expected to be in compliance with applicable noise criteria of the County of San Bernardino Development Code, and no further noise analysis will be necessary.

Yours truly,

Paul A. Penardi  
Acoustical Consultant  
Member, Acoustical Society of America

Attachment