

APPENDIX D
NOISE STUDY

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10 April 2005

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Subject: El Cerrito Condominiums
Environmental Noise Study
CSA Project No. 05-0153

Dear Molly:

We have performed an environmental noise study for the proposed project site. Our analysis was based on the Use Permit Design Review drawings dated 16 February 2006. This report summarizes our analysis and provides recommendations necessary to meet the project criteria.

NOISE ENVIRONMENT

The proposed residential development is located between San Pablo Avenue and Kearney Street along Cutting Boulevard in El Cerrito. The main noise sources in the area are vehicular traffic on San Pablo Avenue and BART train activity across Kearney Street.

Between 29 and 30 March 2005, we conducted two 24-hour measurements: along San Pablo Avenue and along Kearney Street. We also conducted a 15-minute measurement along Kearney Street near Knott Avenue. The correlation between the short-term and the long-term measurements was used to calculate the DNL¹ at this location. For a map of the measurement locations and noise levels, see the attached Figure 1.

According to the Caltrans traffic volume website, the estimated peak hour traffic count along San Pablo Avenue is 3,000 vehicles. We have assumed an increase in traffic flow of three percent per year (typically used by Caltrans), which corresponds to a one dB increase over ten years. We have incorporated this increase into our analysis.

MITIGATION RECOMMENDATIONS

For multi-family housing, the California Building Code requires that where the exterior

¹ Day-Night Average Sound Level (DNL) —The DNL corresponds to a sound level average during a 24-hour period. A 10-dB penalty is applied during the hours of 10 p.m. to 7 a.m. due to increased human sensitivity during the night.

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DNL exceeds 60 dB, the indoor DNL must be mitigated to be no more than 45 dB. In order to meet this criterion, sound-rated exterior windows and doors will be necessary. Figures 2 through 12 show the minimum window and door STC ratings needed for the various floors.

Typical construction-grade double-pane windows achieve STC 28. Where sound-rated windows need to be closed to meet DNL 45 dB, the California Building Code requires an alternative form of ventilation to provide fresh air (e.g., air conditioning). The project mechanical engineer should review this requirement.

The drawings indicate rooftop deck areas on the second and third floors for outdoor-use spaces. The City Noise Element (Figure 7-1) indicates a maximum "Normally Acceptable" noise goal of DNL 60 dB. The drawings show 15-foot high walls on all sides of these areas. Our calculations show that the shielding provided by these walls reduces both the BART noise and the San Pablo Avenue traffic noise to meet this goal.

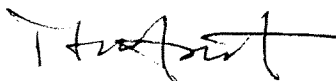
We have been asked to comment on the noise from BART reflecting off this project to surrounding residential projects. Due to the distance between this project and the BART tracks (approximately 110 feet), the noise reflected from the project will be significantly quieter than the direct noise from BART passbys.

We have also been asked to provide STC recommendations for the windows at retail spaces facing San Pablo Avenue. Based on a recommended maximum hourly $L_{eq}(h)^2$ criterion of 45 dB, the windows would need to be approximately STC 38 for 80% window area or STC 35 for 40% window area. We could refine this recommendation once the retail facade design has developed.

This concludes our environmental noise analysis of the El Cerrito residential project. Please do not hesitate to call us with any questions.

Sincerely,

CHARLES M. SALTER ASSOCIATES, INC.



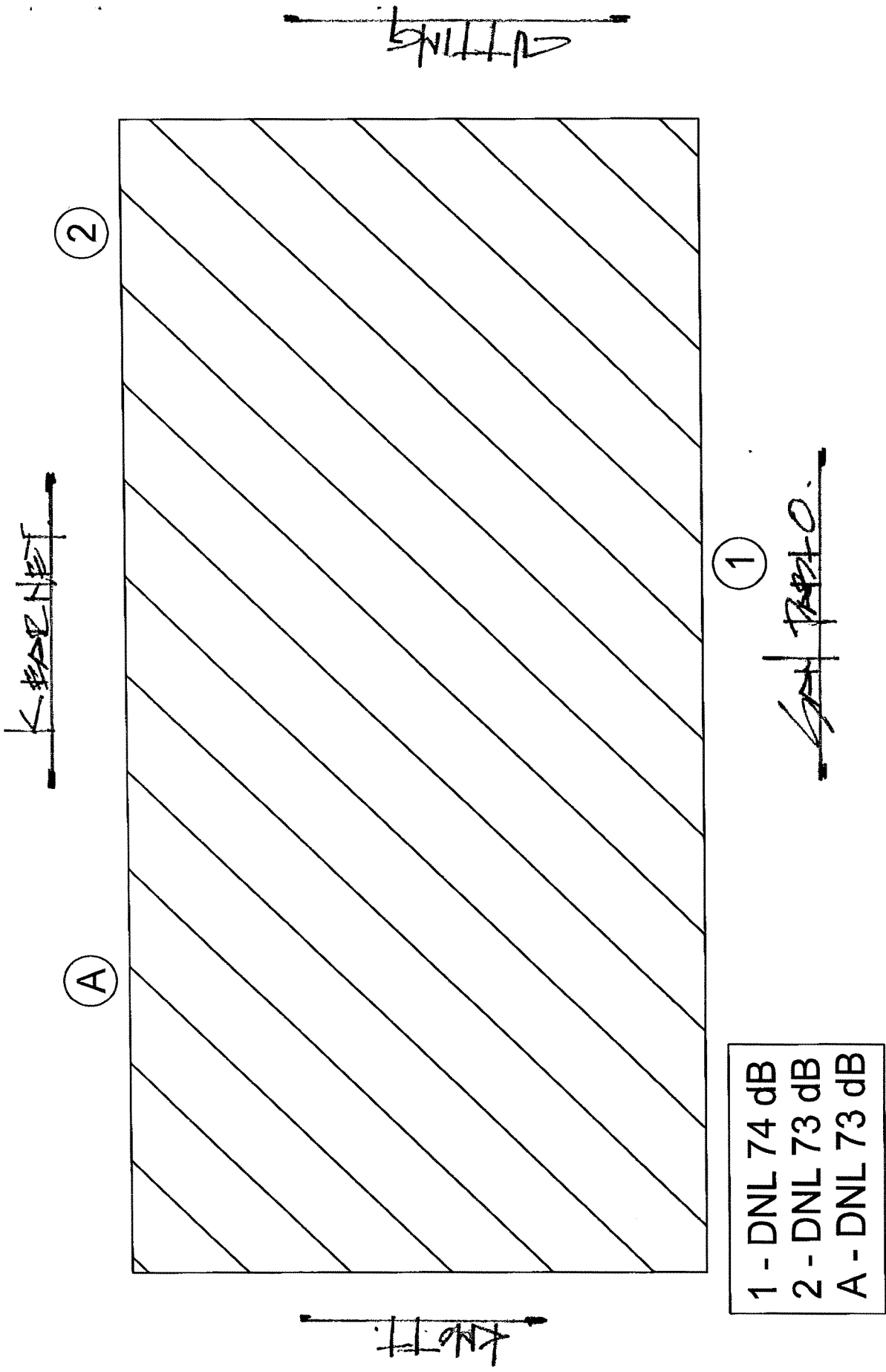
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² $L_{eq}(h)$ — The equivalent steady-state A-weighted sound level that in one hour, would contain the same acoustic energy as the time-varying sound level during an hour.

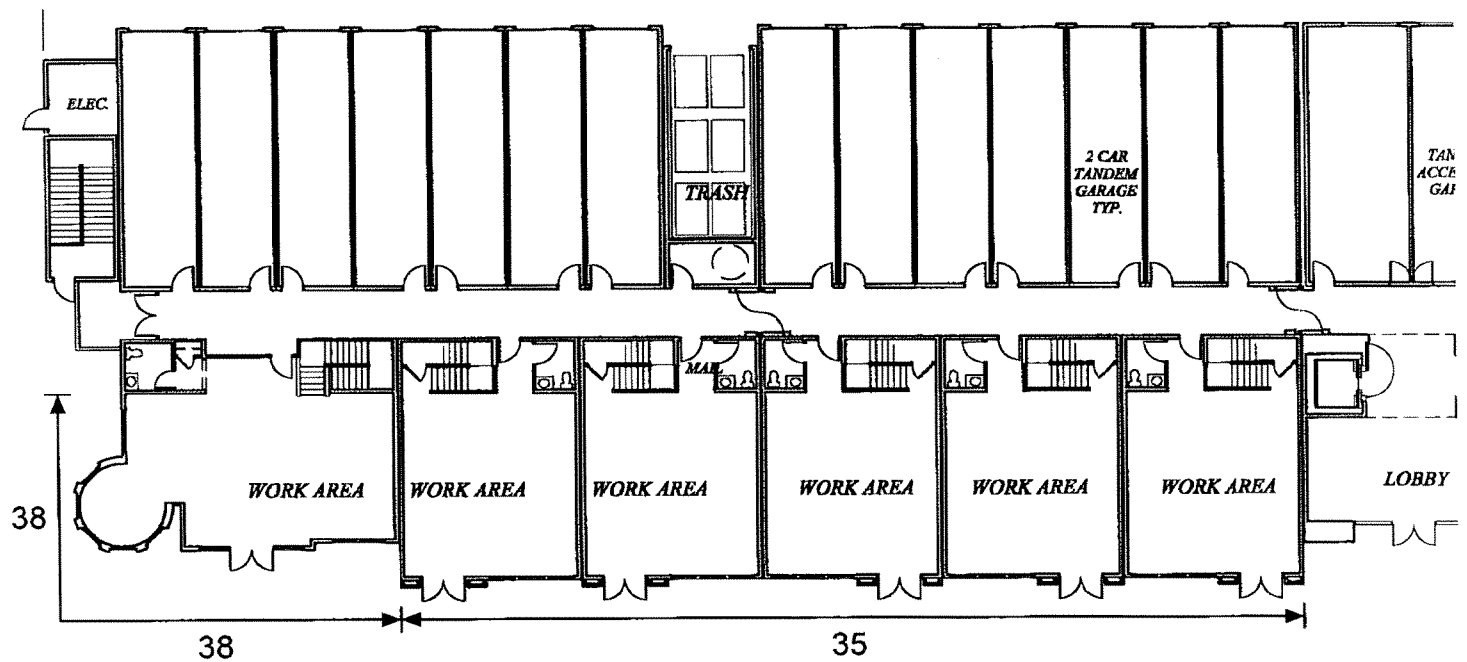


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FIGURE 1

EL CERRITO CONDOMINIUMS
 MEASUREMENT LOCATIONS AND NOISE LEVELS

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 PKH 04.07.07



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EL CERRITO – MIXED USE BLDG
 RECOMMENDED STC RATINGS
 1ST FLOOR NORTH

FIGURE 2

CSA #
 06-0134

PKH
 03.28.06