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SDCC Noise Control Pre Planning Guidance

Applicants' attention is drawn to noise issues in preparing proposals:

Noise, a significant public health issue, needs to be considered when new development may create additional noise or when it would be in a sensitive local acoustic environment. When making decisions about new development, the Council may seek opportunities to improve the acoustic environment

Development Management decisions of the Council will take into account the acoustic environment and will consider:

- whether or not a significant noise adverse effect is occurring or likely to occur;
- whether or not a good standard of acoustic amenity can be achieved.

These issues would include identifying whether the overall effect of noise exposure (including the impact during the construction phase) is, or would be, above the significant observed adverse effect level and the lowest observed adverse effect level. The Table below provides current U.K. recommended internal LAeq target levels for overall noise in the design of new buildings that could be considered. These are the sum total of structure-borne and airborne noise sources.

Activity	Location	Day & Evening	Night (23:00-07:00)
Resting	Living room	35 dB LAeq,16 hr	
Dining	Dining room/area	40 dB LAeq,16 hr	
Sleeping (daytime resting)	Bedroom	35 dB LAeq,16 hr	30 dB LAeq,8 hr

Ground-borne noise is assessed separately and is not included as part of these targets, as human response to ground-borne noise varies with many factors such as level, character, timing, occupant expectation and sensitivity.

High noise levels increases the risk that development may be refused due to noise. This risk may be reduced with a good acoustic design, clearly demonstrated and detailed the planning application. Applicants are strongly advised to seek expert advice on noise.

What factors influence whether noise could be a concern?

The subjective nature of noise means that there is not a simple relationship between noise levels and its potential impact. This depends on how factors combine in any particular situation, i.e.:

- The source and absolute level of the noise together with the time of day it occurs. Some types and level of noise will cause a greater adverse effect at night than if they occurred during the day as people are more sensitive to noise at night (11pm to 7am). The adverse effect is also greater simply because there is less background noise at night;
- For non-continuous noise; the number of noise events, and the frequency and pattern of occurrence of the noise;
- The noise spectrum (i.e. pattern of high or low frequency content) and the general character of the noise (i.e. the tonal characteristics or other particular features). The local built environment and topography should also be taken into account along with the existing and, where appropriate, the planned character of the area.

More specific factors to consider when relevant:

- if applicable, the cumulative impacts of more than one source should be taken into account along with the extent to which the source of noise is intermittent and of limited duration;
- consideration should be given to where avoiding adverse internal impacts depends on closing windows. This is not ideal. For residential development, if proposed mitigation requires windows being closed at night, an alternative means of ventilation must be provided.

How to recognise when noise could be a concern?

1. When noise is not noticeable, there is no effect. As noise exposure increases, it will cross the no effect level as it becomes noticeable. However, noise has no adverse effect so long as the exposure does not cause any change in behaviour or attitude. Such noise can slightly affect the acoustic character of an area but not to the extent there is a change in quality of life. At this level no specific measures are required to manage the acoustic environment.
2. Higher noise levels crosses the lowest observed adverse effect level above which noise starts to cause changes in behaviour and attitude, for example, needing to speak more loudly, or impaired sleep. The noise therefore starts to have an adverse effect and consideration needs to be given to mitigating those effects.
3. Increasing noise levels causes significant observed adverse effects resulting in material change in behaviour such as keeping windows closed for most of the time or sleep disturbance when the noise is present. The planning process seeks to avoid this highly undesirable effect, by use of appropriate mitigation such as by altering the design and layout. Such decisions are made taking account the economic and social benefit of the activity causing the noise.
4. The planning process aims to avoid the highest extreme where noise exposure would cause extensive and sustained changes in behaviour irrespective of mitigation measures. The impacts on health and quality of life are such that regardless of the benefits of the activity causing the noise, the exposure should be prevented.

Further useful information is available from this link:
https://www.epa.ie/pubs/advice/noisemapping/EPA%20Guidance%20Note%20for%20Noise%20Action%20Planning.pdf