

B1.16 Acoustic Amenity

Background

Acoustic amenity can be impacted upon from a range of sources including, motor vehicles, aircraft, trains and industrial uses. This can not only be an annoyance, but also have significant health consequences. A variety of mitigation strategies exist to reduce sound levels and sustain the acoustic amenity of an area. This subsection seeks to detail acoustic design measures to alleviate noise emissions that may arise from development.

Objectives

1. Ensure that excessive noise impacts from busy roads, rail corridors and other noise-generating land uses, which affect sensitive receivers, are mitigated.
2. Design and manage subdivisions to minimise noise intrusion into residential areas.
3. Ensure the amenity of nearby residential uses is not unreasonably decreased by noise intrusion from commercial or industrial development.

Controls

Residential Development

1. Subdivision or development for residential purposes near roads, airports, and industrial/commercial uses, shall include a program of appropriate noise attenuation measures to reduce traffic or other noise that potentially will affect residential properties. For roads, noise attenuation measures must be prepared in accordance with Council's Environmental Noise Policy. The program shall predict noise levels for a ten year period and any noise attenuation measures shall address these noise levels.
2. Where proposed noise attenuation measures impede on identified view corridors (in chapter B3 and elsewhere), it must be demonstrated how such view corridors can be preserved and still achieve external acoustic criteria (amenity) for residents.
3. Noise barriers must be constructed as part of a subdivision where required by an acoustic study.
4. Height and/or the type of construction of dwellings are to be defined by the required acoustic study establishing the appropriate noise attenuation measures. Each site identified will require a s88B Instrument identifying the noise attenuation measures.
5. The environmental goal for road traffic noise shall be based on those levels set in Council's Environmental Noise Policy.
6. The maximum façade reflection levels are to be achieved 1.0 metre from the most affected boundaries or other sensitive location, at a height of 1.5 metres above finished floor level.
7. Architectural treatments are to be designed in accordance with AS3671 - Traffic Noise Intrusion Building Siting and Construction, the indoor sound criteria of AS2107 - Recommended Design Sound Levels and Reverberation Times for Building Interiors. The traffic noise measurement used in conjunction with AS3671 - should be those currently recommended for use by DECCW.
8. A traffic noise mitigation program satisfying the above requirements is to be submitted to Council with the development application.
9. The materials proposed for use to mitigate noise shall be guaranteed to provide a minimum of twenty (20) years of life and will be maintained by the landowner for normal wear and tear. Alternatively, other arrangements may be considered for the maintenance of the noise barriers.
10. A traffic noise assessment survey undertaken by a suitably qualified acoustic consultant in accordance with the RTA's and DECCW's measurement methodology, shall accompany the development application.
11. Applicants will be required to submit an acoustic report for development where indicated in Council's Environmental Noise Policy. This may include:
 - (a) The provision of noise barriers, mounding, landscaping, additional setbacks or a combination of all these measures

- (b) Architectural treatment of buildings will only be considered where it has been demonstrated that noise barriers or mounding is not reasonable or feasible.
- (c) The noise attenuation measure will only be approved following a review of its visual impact and the resultant proposals to create quality urban design, e.g. materials and artistic design to minimise graffiti.

Note: *The acceptance of such measures will be at Council's discretion and will be considered on a case by case basis.*

12. Acoustic barriers and other measures shall be augmented by suitable landscape measures (including automated irrigation) to be shown on a detailed landscape plan which shall be submitted to Council with the development application. An indication of the overall height of the acoustic barrier should be given relative to a known point. An acoustic engineer shall endorse the acoustic barrier at construction certificate stage.
13. Noise attenuation fencing or barriers are preferred to be 1.8m however, additional heights up to 2.4 metres may be acceptable where these are located adjacent to a major road. If required, the additional noise attenuation barrier height is to be made up of earth mounding. All attenuation fences or barriers must have appropriate landscaping and water irrigation as approved by Council. Stand alone fencing, i.e. not adjacent to private land, shall be of more durable material, e.g. concrete with cast patterns/symbols and painted with anti graffiti coating. A s88B Instrument is to be created where a noise attenuation barrier is adjacent to private land ensuring the integrity of the barrier is maintained by the private landowner.
14. A noise attenuation compliance report / certificate may be required as per Council's Environmental Noise Policy after the development becoming operational.

Industrial and Commercial Development

15. Noise from industrial and commercial development must be assessed in accordance with Council's Environmental Noise Policy to determine if an acoustic assessment is required. Any required acoustic assessment must be submitted with the development application.

Road and Rail Traffic Noise

16. Noise from road and rail developments must be assessed in accordance with Council's Environmental Noise Policy to determine if an acoustic assessment is required. Any required acoustic assessment must be submitted with the development application.

State Environmental Planning Policy (Infrastructure)

17. Development as proposed under the infrastructure SEPP that has the potential to impact on other sensitive development with noise must be assessed in accordance with Council's Environmental Noise Policy and the requirements of the SEPP.
18. Any required acoustic assessment must be submitted with the development application.

Further Information:

- *Camden Council's Environmental Noise Policy*
- *Building Code of Australia*
- *Environmental Protection Authority, NSW Industrial Noise Policy*
- *Environmental Protection Authority, Environmental Criteria for Road Traffic Noise*
- *NSW Department of Planning, Development near Rail Corridors and Busy Roads – Interim Guideline*
- *Roads and Traffic Authority, Reducing Traffic Noise – a Guide for Home Owners, Designers and Builders.*
- *State Environmental Planning Policy (Infrastructure).*
- *AS 3671 Road Traffic Noise Intrusion*
- *AS 1055 Acoustics – Description and Measurement of Environmental Noise*
- *AS 2107 Acoustics – Recommended design sound levels and reverberation times for building interiors*
- *AS 2021 Acoustics – Aircraft Noise Intrusion – Building Siting and Construction*