2.6 GENERIC PROVISIONS ACOUSTIC AND VISUAL PRIVACY





Marrickville Development Control Plan 2011



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Part 2 Generic Provisions

2.6 Acoustic and Visual Privacy

Privacy refers to both visual and acoustic privacy. Well-designed development can readily avoid most sources of conflict between neighbours over noise and privacy problems.

Complete protection of privacy in a densely built up environment such as the Inner West Local Government Area is not always possible. Standards of privacy need to be balanced against the need for urban consolidation and the need to maintain a reasonable level of privacy to adjoining premises.

This section addresses the components involved in building design as they relate to the maintenance of visual and acoustic privacy. Emphasis is placed on the design, location and screening of windows, balconies and decks.

This section also addresses acoustic amenity issues between different types of land uses. Council needs to consider the impacts of new developments on the amenity of other land users, particularly on residential and other sensitive land uses.

2.6.1 **Objectives**

- 01 To ensure new development and alterations and additions to existing buildings provide adequate visual and acoustic privacy for the residents and users of surrounding buildings.
- 02 To design and orientate new residential development and alterations and additions to existing residential buildings in such a way to ensure adequate acoustic and visual privacy for occupants.
- 03 To ensure new development does not unreasonably impact on the amenity of residential and other sensitive land uses by way of noise or vibration.

2.6.2 Aircraft Noise

The ANEF is the prediction for noise from Sydney Airport's Master Plan 2039. It is a noise index which takes into account the loudness, noise frequencies, whether it is day or night and how many aircraft fly over each area.

The 2039 ANEF contours over the land where this DCP applies are shown in Figure 1.

Australian Standard AS 2021 Acoustics – aircraft noise intrusion – building, siting and construction provides standards for noise attenuation of buildings located within an ANEF affected area.

2.6.3 Controls

C1 Aircraft noise

> New development on land within an ANEF affected area must be i. designed and constructed in accordance with the relevant Australian Standard and other guidelines issued by relevant agencies and authorities; and

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ii. The introduction of acoustic measures to reduce aircraft noise must not unacceptably detract from the streetscape value of individual buildings.



Figure 1: ANEF 2039 map - the solid lines represent noise contour levels

C2 General acoustic privacy

i. New dwellings close to high noise sources such as busy roads, rail lines and industry must be designed to locate habitable rooms and private open spaces away from noise sources or protect those areas with appropriate noise shielding devices. Development for the purpose of child care centres, educational establishments, hospitals, places of public worship and residential accommodation close to busy roads and rail lines must also comply with the relevant Australian Standards and State Environmental Planning Policies (SEPPs);

Refer to Australian Standard AS 3671 Roads traffic noise intrusion, Australian Standard AS 2107- Acoustics – recommended design sound levels and reverberation times for building interiors and requirements under State Environmental Planning Policy (Infrastructure) 2007 SEPP (Infrastructure SEPP).

AS 3671 sets out guidelines to determine the acceptability of indoor and outdoor spaces for specific activities in the presence of road traffic noise, and the extent of noise reduction or type of construction that might be needed to make such spaces acceptable. It also sets out guidelines to determine the acoustical adequacy of existing buildings near routes carrying more than 2,000 vehicles per day.

AS 2107 recommends design sound levels and reverberation times for different areas of occupancy in various categories of buildings. It also specifies methods of measuring the ambient sound level reverberation time. This Standard is intended for use in assessing the acoustic performance of buildings and building services. It does not apply to the evaluation of occupancy noise.

- ii. Decks, balconies and verandas alongside boundaries and noisy walking surfaces or elevated side passages must be avoided where they face a residential building; and
- Recreational facilities such as swimming pools and barbecue areas iii. must be located away from the bedroom areas of adjoining dwellings.

C3 Visual privacy

- i. Private open spaces of new residential development must be located and designed to offer a reasonable level of privacy for their users:
- ii. Elevated external decks for dwelling houses must generally be less than 10m² in area and have a depth not greater than 1.5 metres so as to minimise privacy and noise impacts to surrounding dwellings;
- iii. First floor windows and balconies of a building that adjoins a residential property must be located so as to face the front or rear of the building:
- Where it is impractical to locate windows other than facing an iv. adjoining residential building, the windows must be offset to avoid a direct view of windows in adjacent buildings;
- Where the visual privacy of adjacent residential properties is likely ۷. to be significantly affected from windows or balconies (by way of overlooking into the windows of habitable areas and private open spaces), one or more of the following measures must be applied:
 - Fixed screens of a reasonable density (minimum 75% block a. out) to a minimum height of 1.6 metres from finished floor level must be fitted to balconies in a position suitable to alleviate loss of privacy;
 - b. Windows must have minimum sill height of 1.6 metres above finished floor level or fixed opague glazing to any part of a window less than 1.6 metres above finished floor level; and
 - C. Screen planting or planter boxes in appropriate positions may supplement the above two provisions in maintaining privacy of adjoining premises.
- **NB** Screen planting or planter boxes can be used as supplementary to a privacy screen but not as standalone privacy measure.
- The applicant can propose other innovative solutions to ensure privacy, provided NB they satisfy the objectives of this section and where such measures do not distract from the streetscape or architectural integrity of the building.
 - C4 Air-conditioning
 - Air-conditioning units must be appropriately soundproofed from any i. habitable room of an adjoining property;
 - Where an air-conditioning unit cannot be located within a building, ii. it must be concealed in a structure that has been designed or

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located to minimise any visual impacts and reduce noise to a level acceptable when heard from any habitable room of an adjoining/adjacent dwelling; and

iii. Where an air-conditioning unit cannot be located in a building or concealed in a structure, it must be located in the rear wall of the building and be a minimum of 3 metres from any boundary of the property.

Air-conditioning units must be installed to comply with the Protection of the Environment Operations Act 1997 and Protection of the Environment Operations (Noise Control) Regulation 2000.

The air-conditioner, associated plant and ancillary fittings must not give rise to "offensive noise" as defined under the provision of the Protection of the Environment Operations Act 1997.

- **NB** Air-conditioning systems must not be located on balconies or areas of high visibility unless applicants can demonstrate they will not have an adverse impact on the streetscape or adjoining properties.
 - C5 Impacts of rail noise or vibration
 - i. Development in or adjacent to a rail corridor must consider the impacts of associated rail noise or vibration on the structure and users of the development; and
 - ii. Where development is for the purpose of a residential accommodation, a place of public worship, a hospital, an educational establishment or a child care centre a statement of consistency with the relevant SEPP must be submitted with the development application.

Division 15, Subdivision 2 of Infrastructure SEPP provides relevant standards and controls for development in and around rail corridors.

- C6 Impacts of road noise or vibration
 - i. Development in or adjacent to the road corridor of a freeway, a toll way, a transit way or any other road with an annual average daily traffic volume of more than 40,000 vehicles must consider the associated road noise or vibration on the structure and users of the development.
 - ii. Where development is for the purpose of a residential accommodation, a place of public worship, a hospital, an educational establishment or a child care centre it must comply with the development guidelines of the relevant SEPP.

Division 17, Subdivision 2 of Infrastructure SEPP provides relevant standards and controls for development in and around road corridors.

- **C7** Noise impacts of commercial and industrial development on residential amenity
 - i. All development must comply with the relevant noise control guidelines.
 - ii. Where sites adjoin a residential area or are located within a mixed use building, Council will consider the potential noise generation of any proposed activities including the use of equipment or

machinery, the use of amplified music/noise on the site and proposed hours of operation.

- iii. Where industrial sites adjoin a residential area, the number of hours and times at which mechanical plant and equipment is used should be limited in conjunction with sound proofing measures.
- iv. New industrial development must be designed so that noise producing activity is remote from the interface boundary.
- v. Industrial sites with a road frontage to residential areas should locate any new offices to the residential areas with restricted access points onto the residential fronted road. Similarly, the warehouse/factory functions of the new development must be located away from residential areas.
- vi. Other sources of noise such as garbage collection, deliveries, ventilation systems, parking areas and air-conditioning plants are to be sited away from adjoining properties, where practicable, and be screened by walls or other acoustic treatment if necessary.
- vii. Where significant amounts of traffic are likely to be generated which could affect residential areas or residential zoned land, schedules of vehicle movements and their routes must be provided and may be regulated in any conditions of consent.
- viii. All applications for noise generating uses adjacent to or located in a building containing a residential use must be accompanied by documentation from a qualified acoustic engineer certifying that the acoustic standards can be met.

The NSW Government has set standards in relation to acceptable noise levels for all operations and land uses through the Environment Protection Authority's Environmental Noise Control Manual. Those standards apply in all cases.

- **NB** Refer to Part 6.2 (Industrial/Residential Interface) of this DCP for additional relevant controls relating to industrial development in proximity to residential and other sensitive land uses.
- **NB** Refer to Part 5.2 (Commercial/Light Industrial/Residential Interface) of this DCP for additional relevant controls relating to commercial and light industrial uses in closes proximity to residential and the sensitive land uses.

2.6.4 The National Airports Safeguarding Framework

The Australian Government has developed the National Airports Safeguarding Framework which provides a number of guidelines for development near airports including measures for managing impacts of aircraft noise. Other guidelines include building generated wind shear and turbulence, wildlife strikes, risks associated with wind turbine farms, lighting in the vicinity of airports and intrusions into the protected space of airports.

For information on the National Airports Safeguarding Framework visit www.infrastructure.gov.au/aviation/environmental/nasf/index.aspx