

21 July 2009

Nicholas Dowie
Planning Policy and Environment Section
Airports Branch
Department of Infrastructure, Transport,
Regional Development and Local Government
GPO Box 594
CANBERRA ACT 2601

Dear Mr Dowie

Safeguards for Airports and the Communities around them - Discussion Paper

Thank you for providing the City of West Torrens with the opportunity to comment on the above discussion paper.

As you are aware, the City of West Torrens has a particular interest in what happens in association with airport development and activity.

Council acknowledges the need to provide safety to both Airports/Aviation and the broader community. In doing so, there is a need to recognise the order of presence and the likely speed of change for land use versus aircraft technology and use. Therefore any system developed must provide sufficient flexibility to account for potential changes in the future.

Importantly, any system should avoid being focused on the primacy of the aviation activity, and provide instead a shared emphasis on aviation and community expectations.

For example, the Preliminary Draft Master Plan (May 2009) prepared by Adelaide Airport Ltd, currently out for consultation, places the emphasis on local government to acknowledge the presence of the airport and to do more planning to resolve issues associated with the existence of the airport. Council's very strongly held view is that airport operators must have regard to the pre existing neighbouring areas during their planning processes, as well as to aviation operations.

The Discussion Paper places the responsibility on to the community to address potential safety risks, calling on commercial and/or residential development not to occur in areas close to runway ends, and wants to protect the economic value of airports by seeking clarity in planning for land uses around airports.

Any safeguard measures have great potential to succeed within a Greenfield site. However, the majority of Australia's airports are already surrounded by pre existing residential and commercial developments. Consequently, a national system may not be practical given the placement of individual airports.

Planning for Compatible Development

Planning at the boundary has been a persistent issue for planners when considering any potential land use. Traditional zoning seeks to separate incompatible uses such as residential and industrial. Performance based policies seek to provide ample buffering to reduce potential impacts. Inevitably, it is necessary to ensure that both sides of the boundary are equally addressed.

Local government is generally responsible for developing planning schemes that address land use issues. However, the presence of airports separates that control through the provisions of the Federal Airport Act. Consequently, the ability to better align boundary planning is significantly reduced, given the two competing interests.

As stated in our submission on the Aviation Green Paper, Council would prefer to have Section 112 of the Airports Act removed to allow Council to have control over all non-aviation development within lands leased to airport operators.

Aircraft noise is a critical concern to the community when it comes to airport operations. It is noted that pursuant to the Airports Act, airport operators are not responsible for the noise from aircraft while landing, taking off or taxiing, notwithstanding that noise management is a shared responsibility amongst key stakeholders as stated in the Aviation Green Paper.

Within an existing airport site, such as Adelaide Airport, much more emphasis should be placed on operational changes to reduce noise. Such controls should be particularly emphasised along the airport boundary.

In its draft Master Plan, Adelaide Airport Ltd (AAL) state that '*the most effective*' means for reducing the impact of aircraft noise is through '*the proper planning of land use for areas adjacent to the airport*'. Land use is one mechanism that can be used, but it is not sufficiently responsive to manage impacts from operational changes, nor do changes to land use policy assist existing land users that may find themselves affected by operational changes on airport land.

We note that the Discussion Paper does not 'discuss' the various merits or otherwise of the Australian Noise Exposure Index (ANEI), the Australian Noise Exposure Forecast (ANEF), or the Australian Noise Exposure Concept (ANEC) when considering appropriate land uses or noise attenuation requirements for new development in proximity to aviation operations?

Further clarification is required on the preferred methodology if planning authorities are to have appropriate regard to noise exposure as part of the land use planning process.

The City of West Torrens' Development Plan contains provisions associated with aircraft noise mitigation. Figure R1/1 Area Affected by Aircraft Noise (**Attachment 1**) is based on the 30 Australian Noise Exposure Index.

In addition Design Technique 138.1 makes direct reference to the Australian Standard AS2021 (**Attachment 2**). Development within this area should be designed having regard to the flight paths, height restrictions and noise exposure.

As with most impacts, engineered solutions are available. For example, properties identified within Figure R1/1 were provided access to Australian Government funds to assist in the installation of noise attenuation measures such as double glazed windows.

On balance, it is considered that the ANEF provides a suitable framework for land use decision making. However, the variability of the modelling cannot provide a definitive answer long term. In addition, new technology may eventually surpass the need to use ANEF as a planning tool.

The suggestion of establishing a referral for residential development within a specified ANEF to the Commonwealth Transport Minister or Secretary is unwarranted, if appropriate policies exist within a planning scheme to address design issues for development.

Protection of operational airspace

Protection of the Obstacle Limitation Surface (OLS) is acknowledged as being paramount to the safety of aircrafts as they approach runways. The West Torrens Development Plan contains the following principles associated with operational airspace:

5 Buildings and structures should not adversely affect by way of their height and location the long-term operational, safety and commercial aviation requirements of Adelaide International Airport.

6 Buildings and structures which exceed the heights shown on Map WeTo/1 (Overlay 2) and which penetrate the obstacle limitation surfaces (OLS) should be designed, marked or lit to ensure the safe operation of aircraft within the airspace around the Adelaide International Airport.

The South Australian Planning System also maintains a requirement to refer development applications to the Australian Government where a development proposal may exceed certain heights as defined in the Airport Building Heights (Map WeTo/1) overlay (**Attachment 3**).

In this system, the Australian Government Department responsible for the referral has the power to 'direct' a planning authority to either refuse an application or impose conditions should planning consent be granted. The planning authority cannot ignore the direction provided.

While this system has been effective in preventing tall structures from being built under flight paths, a recent example demonstrates that the referral process can fail when comments are not provided to Council within the statutory timeframe. This resulted in two dwelling being approved on the airport boundary that had the potential to penetrate the OLS. This situation highlighted the need for a better integrated response from all interested parties (i.e. CASA, AAL, DITRDLG)

Wildlife hazards

When an activity is deemed 'development', councils have the ability to provide control through planning schemes. Landscaping as part of a new development is captured to an extent if conditions are placed on approval, however it cannot be controlled within existing development unless landscaping conditions were placed on the original consent.

For non development activity there may be other forms of legislative control, but Local Government may not necessarily be the relevant authority to deal with these issues.

Wind turbines

While not directly relevant to the City of West Torrens, we suggest that CASA should develop guidelines to assist developers, who must subsequently issue a statement of compliance with the guidelines.

Technical facilities

Rather than establish another referral, CASA should establish guidelines for local government to incorporate within their existing decision making process.

Public safety zones and third party risk

The Adelaide Airport Preliminary Draft Master Plan states that State and Local Government need to plan the rezoning of land at the end of airport runway to facilitate the establishment of PSZ, which places emphasis on State Government and/or Council to do more planning to resolve issues associated with the existence of the airport.

As previously stated, Council views planning at the boundary as a joint responsibility. Therefore, it is considered appropriate that a portion of the PSZ should be provided on airport land, rather than just impose restrictions on adjoining areas.

In the absence of the modelling criteria to be used in identifying PSZ, it is difficult for Council to comment on the validity of the scheme. Of immediate concern is the potential width and length of the zone given the different current flight paths approaching runways.

To a certain extent, the Airport Building Heights (ABH) overlay within the State Planning System is a form of PSZ, though the intent is focussed on operational airspace rather than safety. There is potential to broaden the scope of the ABH to incorporate safety as a criterion.

The Discussion Paper is silent as to whether any amendments to planning schemes to incorporate PSZ should be at the discretion of the State Minister for Planning or a Council, or whether it would be mandated?

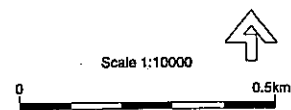
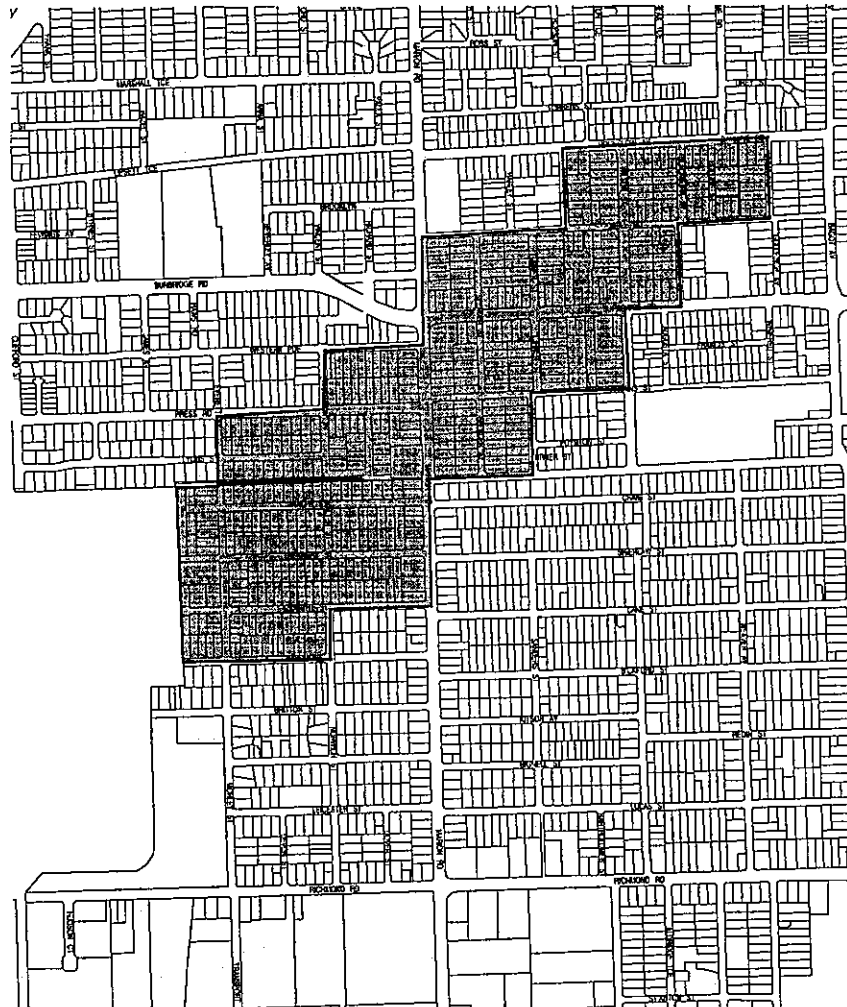
As stated in our submission on the Adelaide Airport Preliminary Draft Master Plan, any adoption of PSZ would need to consider potential compensation to landowners, given that property owners would be restricted from undertaking new development or additions to existing approved development. Compensation would need to be provided by either the Australian Government or the airport operator.


Thank you again for providing Council with the opportunity to comment in the Discussion Paper. Should you wish further clarification on the submission, please contact me on 8416 6286.


Yours sincerely



Terry Buss
Chief Executive Officer



 30 Australian Noise Exposure Index (ANEI)
expanded to natural boundaries
Source: Commonwealth Department of Transport
and Regional Services

 Development Plan Boundary

**WEST TORRENS (CITY)
AREA AFFECTED BY
AIRCRAFT NOISE
Figure R1/1**

Areas affected by Aircraft Noise

- 137 Development should be designed and located having regard to the flight paths, height restrictions and noise exposure forecasts issued by Adelaide Airport Limited.
- 138 Residential development on land within the area defined by Fig R1/1 is affected by aircraft noise from Adelaide Airport and should be designed, constructed and insulated to minimise the effects of noise.

Design Techniques (Design Techniques illustrate ONE WAY of satisfying the above principle)

- 138.1 Dwellings (and dwelling additions – where such additions have a floor area equal to or greater than 50 percent of the existing dwelling) are constructed in accordance with Australian Standard 2021-2000: Acoustics – Aircraft noise intrusion – Building siting and construction; or
- 138.2 Dwellings (and dwelling additions – where such additions have a floor area equal to or greater than 50 percent of the existing dwelling) include the following construction techniques:
- (a) shielding windows and doors with external blinds or verandahs;
 - (b) using masonry walls for external walls and if brick veneer construction is used fully, by insulating the cavity wall with 75 millimetres to 100 millimetres insulation (rockwool or fibreglass);
 - (c) keeping window size to a minimum and using at least six millimetres single glazing or double glazed windows; where possible, windows of sensitive rooms should be orientated away from the direction of view to the flight path;
 - (d) air-conditioning sensitive rooms using a split or ducted system. Wall-mounted air-conditioning units should not be used as they provide a weak path for sound transmission;
 - (e) shielding doors with an entrance verandah and using a solid core construction;
 - (f) sealing airtight all cracks in the housing construction. Cracks between doors, windows and the house construction should also be weather sealed;
 - (g) positioning air exhausts in non-sensitive rooms, eg wall vents should not be placed in bedrooms or living rooms; and
 - (h) insulating the ceiling space with 75 millimetres to 100 millimetres ceiling insulation (rockwool or fibreglass).

Flood Prone Affected Areas

- 139 Ground floor levels of all dwellings should be located above a design flood level which provides an acceptable level of risk to persons and property.

Design Techniques (Design Techniques illustrate ONE WAY of satisfying the above principle)

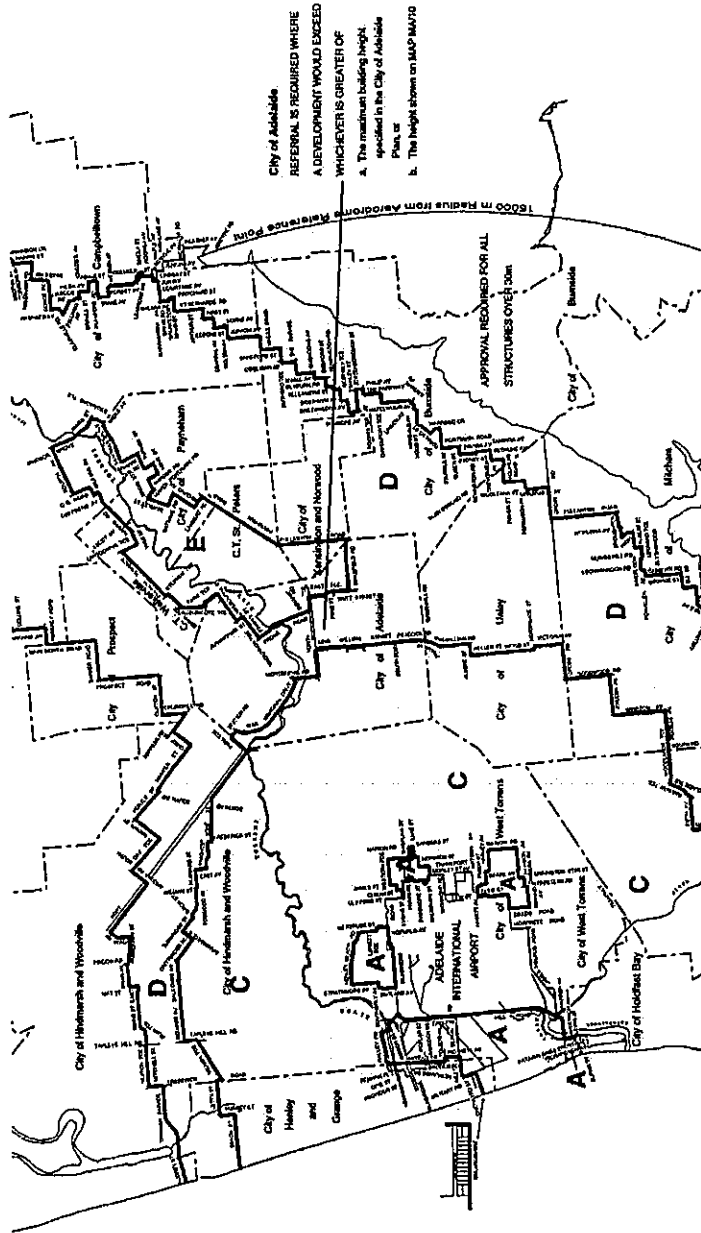
- 139.1 Habitable rooms have clearance above the ARI = 100 years flood level given by:

terrain slope < 5%:
clearance = 0.20m

terrain slope > 5%:
clearance = $0.10m + \frac{V^2 Ave}{2g}$

where:

$V Ave$ = flow mean velocity (m/s).
 g = gravitational acceleration of 9.8 m/s².

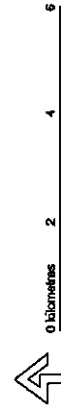


CITY OF ADELAIDE
 REFERRAL IS REQUIRED WHERE
 A DEVELOPMENT WOULD EXCEED
 WHICHEVER IS GREATER OF
 a. The maximum building height
 specified in the City of Adelaide
 Plan, or
 b. The height shown on MAP 16A/19

Referral to Federal
 Airports Corporation required for:

- A All Structures
- C All Structures Exceeding 15 metres above existing ground level
- D All Structures Exceeding 45 metres above existing ground level
- E All Structures Exceeding 100 metres above existing ground level

- Local Government Area Boundary
- Zone Boundary
- A.M.G. Coordinates of Aerodrome Reference Point
 E274 373.835, N6 130 097. 135



**WEST TORRENS (CITY)
 AIRPORT BUILDING HEIGHTS
 MAP WeTo/1 (Overlay 2)**

Consolidated - 2 October 2008