

25TH March 2021

Department of Planning, Industry and Environment
4 Parramatta Square
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Parramatta, NSW 2150

Architecture
Urban Design
Planning
Interior Architecture

To: Jim Betts
Secretary, Department of Planning, Industry and Environment

Submission to the exhibition of Design and Place SEPP with regard to Proposed Changes to the Apartment Design Guide

This submission is based on my 35+ years' experience as an urban designer in positions of Director Urban Design and Urban Planning at Architectus, Director City Strategy and Design at Sydney City Council, urban design witness in over 100 multi-unit residential development cases before the NSW Land and Environment Court, experience in the planning and design of many large multiunit residential apartment projects, and as a primary author of many residential DCPs for local governments including the 1996 Central Sydney LEP/DCP containing pioneering provisions as forerunners to many of the provisions in the Residential Flat Design Code of 2002 and the ADG.

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Generally, the direction of the changes mooted for the ADG is strongly supported.

My comments are as follows:

Table A4 carparking rates

All options should be progressed except for "Unbundling" which should not be required because it would create great uncertainty in the market and simply would not be accepted by the market.

Adelaide
Auckland
Brisbane
Christchurch
Melbourne
Perth
Sydney

I note the principle of reducing carparking where here is good public transport – however, I also note that it is reasonable for apartment developments to average one car space per dwelling (the actual distribution ought to be decided by the developer) as cars are needed for journeys for weekend sports, family holidays and the like.

Table A5 urban design and site planning

Item 2

Minimum deep soil does not work for densities greater than 2.5:1 where complete site coverage is usually necessary in urban centres. Also, "deep soil" should be defined. Landscape experts say substantial trees can grow in 1.2m soil depths - however, for longevity of developments my experience is that minimum one storey or 3m depth should be required. Council's often want deep soil to have no structure beneath in order for water recharge of the terrain. However, geology in many parts of Sydney provide an impenetrable water barrier so there is no sense in this approach - especially considering that apartment building zones comprise a very small percentage of the metro area. It would be most appropriate and beneficial if the Government could rule definitively on this issue.

Item 3

Building form floor plate of max 700sqm GFA is not reasonable at densities greater than FSR 4.0:1 in regional urban centres such as Parramatta and Central Sydney. Sydney City Council has a study by Arup (as part of the Central Sydney Strategy) supporting 1,000sqm GFA floor plate limit for tall residential towers. And so there should be an exception for the regional

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centres. Very tall towers (50-90 storeys as may occur in the regional centres – Central Sydney/North Sydney Centre and Parramatta City Centre) should have a slenderness ratio as floorplates could be justifiably larger than 1,000sqm, and more than 8 apartments per floor. Some words to this effect are needed in the ADG.

The concept of slender towers is strongly supported – particularly for towers in strategic centres and major centres (and urban areas where towers above 8 storeys are permissible). The tendency to date for 700sqm GFA floorplates is that the dimensions are 18m x 38m plus balconies. A 12-30 storey building with a length of 38m cannot be regarded as slender. And larger floorplates are even longer - often at 40-45m. Given a need to often reduce shadowing on neighbours such towers usually have a north/south axis so that the long dimension is facing west thus maximising the proportion of apartments facing the hot afternoon sun through a large part of the year. While external shading can ameliorate the heat load, it is not good policy for such orientation to be generally an unintended outcome and therefore generally applied. Therefore, the floorplate control should actually encourage smaller floor plates if “slenderness” is a serious consideration. There is no doubt that 4-6 apartments per floor in a “point tower” is a much more desirable objective for long term amenity, reduced shadow impacts, and sustainability. The development industry would resist this approach but outside the regional centres of Central Sydney/North Sydney and Parramatta, as a society we should require such smaller floor plates and be less concerned about tall heights in major urban centres and strategic centres (and even district centres).

Item 4

Building separation of 30m for 25+ storeys is supported for floor plates exceeding 30m in length - in order to encourage smaller floor plate towers or smaller floorplates at upper levels of towers.

Item 5

street activation: it is pointless requiring commercial use at ground floor in areas not designated activity strips - this is a recipe for vacant space and economic inefficiency. The planning at Green Square has resolved this issue by identifying activity strips (developers can still have commercial/retail at street frontages in non-designated activity strips if they wish but it is not required outside activity strips) and in other street frontages having two storey apartments set back behind the main building line to provide a good street interface of front gates to courtyards – townhouse style apartments. Often these apartments are planned with a second living room at the street front ground level which can easily be alternately used as a home office/small business at the occupant’s discretion.

Item 6

The justification for Increasing ground floor ceiling heights from 3.6m to 4.2m is not clear

Table A6 residential amenity

Item 1

The current time period of 70% of apartments achieving 2 hours solar access in midwinter is well tested and accepted. There is little benefit in changing this control. Afterall, the hours of solar access do increase significantly at other times of the year with this control in place. Limiting east-west aspect or maximising units within 15 degrees of north is too hard to administer and not practical on many sites. Smaller floorplates with a greater proportion of corner apartments is more beneficial. West facing apartments should have external operable shades for all glazing - such apartments can be quite comfortable providing the occupant can control the sunlight.

The suggested shading and glare control should be an option to consider - the principle should be occupant control of shading for all glazing facing west and that at least 50% of a western facade is to be solid. "West" meaning within 45 degrees of due west.

It is very important to define the amount of area that must be in sunlight in an apartment that is part of the 70% rule. The current definition is unclear, or it is interpreted as 1 sqm of a living room AND 1 sqm of a balcony/private open space. This has the unintended consequence of forcing architects to plan living rooms at the front of the building with balconies to the side of living rooms and in front of bedrooms. Usually a better plan for amenity of the apartment is to have the balcony in front of the living room to "visually" extend the living room space and make it feel larger. It is also a very complex solar analysis for each DA to check compliance. It would be far simpler to say the 1sqm of the vertical face of living room windows OR balcony opening. This is much easier to administer and check and fulfils the principle of providing useful direct sunlight for winter comfort.

Item 2

natural ventilation: applying 70% to all storeys is unnecessary. Above 25m or 8 storeys when a development is in a tower form the normal air pressure differential around a building provides sufficient natural ventilation with openings controlled by the applicant. This is also the case when single aspect apartments are wider than they are deep. For lower buildings I suspect the same principle applies. My view is that very deep single aspect apartments inherently lack natural ventilation and my experience is that wide fronted single aspect apartments are sufficiently airy. I agree that below 9 storeys there should be more flexibility - my recommendation and experience inside such apartments is that apartments wider than they are deep should qualify as naturally ventilated wherever they are in a building.

Table A7 common spaces

Item 1

For internal common rooms, a list of room uses should be made and thresholds for different numbers of apartments in a development made. For example over 20 units - at least one soundproof common multipurpose room; for 20-100 units - a sound proof common room (can be used for music practice) and a teenage games room; for 101+ units - same as for 20-100 plus a swimming pool or gym. All required common rooms to have external outlook and directly related to external common space. Additional communal uses can be in the basement.

Item 4

building access: the new ADG should encourage external open stairs where possible (up to 4 storeys) so that people are encouraged to use stairs in the fresh air rather than lifts.

Item 7

Waste management is a fraught issue. Councils often require large trucks to go on site and exit in a forward direction. For developments up to 50 apartments this is onerous - servicing from the street should be possible via a garbage room near the street to avoid lines of bins in the public domain.

Other issues:

1. Water and electricity services too often result in unsightly paraphernalia at the street front. The new ADG should show examples how this can be addressed with minimum visual presence to the public domain.
2. Local planners are using the ADG overshadowing criteria to reduce development and to control land use. For example, in Central Sydney, the Council will not allow an apartment building to overshadow another apartment building beyond the 70% 2 hour

rule while allowing commercial use to overshadow residual use without restriction given the ADG does not apply to commercial developments. My view is that in regional centres such as Central Sydney/North Sydney Centre and Parramatta City Centre such a rule should not apply. Certainly, a development should be modelled to enable sunlight to neighbours but should not be a reason for refusal if there overshadowing cannot be avoided while maintaining the maximum FSR.

Conclusion

Thank you for considering this submission. I am happy to discuss further any of the above.

Regards,

A handwritten signature in black ink, appearing to read 'Michael Harrison', followed by a period.

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