

Planning and Environment Act 1987

**Panel Report**

**Moreland Planning Scheme Amendment C142  
Moreland Apartment Design Policy and Code**

**3 June 2015**

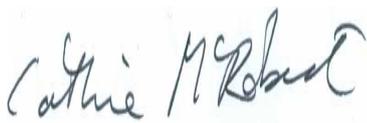
*Planning and Environment Act 1987*

Panel Report pursuant to Section 25 of the Act

Moreland Planning Scheme Amendment C142

Moreland Apartment Design Policy and Code

3 June 2015

A handwritten signature in black ink, appearing to read 'Cathie McRobert', written in a cursive style.

Cathie McRobert, Chair

A handwritten signature in black ink, appearing to read 'Peter Gray', written in a cursive style.

Peter Gray, Member

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## List of Abbreviations

ACZ	Activity Centre Zone
Council	Moreland City Council
DDO	Design and Development Overlay
DELWP	Department of Environment, Land, Water and Planning
DTPLI	Department of Transport, Planning and Local Infrastructure (former)
ESD	Environmentally Sustainable Design
GHDRD	Guidelines for Higher Density Residential Development 2004
GRZ	General Residential Zone
HIA	Housing Industry Association
LPPF	Local Planning Policy Framework
MSS	Municipal Strategic Statement
NCC	National Construction Code
NRZ	Neighbourhood Residential Zone
OVGA	Office of the Victorian Government Architect
RGZ	Residential Growth Zone
SPPF	State Planning Policy Framework
UDIA	Urban Development Institute of Australia
VPP	Victoria Planning Provisions

## Overview

### Amendment Summary

<b>The Amendment</b>	<p>Moreland Planning Scheme Amendment C142</p> <p>The Amendment proposes to:</p> <ul style="list-style-type: none"> <li>• Refer to the Moreland Apartment Design Code (the Code) in the Local Planning Policy Framework and remove references to the <i>Design Guidelines for Developments of Four or More Storeys 2005</i>.</li> <li>• Introduce Clause 22.11 Moreland Apartment Design Code (the Policy) to replace Clause 22.11 Developments of four or more storeys.</li> <li>• Incorporate the Code in the Moreland Planning Scheme (Schedule to Clause 81.01)</li> </ul>
<b>Common Name</b>	Moreland Apartment Design Policy and Code
<b>The Planning Authority</b>	Moreland City Council (Council)
<b>Authorisation</b>	<p>Authorisation No AO2312 27 July 2012<sup>1</sup></p> <p>While the authorisation was not subject to any conditions, Council was requested to consider the following matters relating to the Code before submitting the Amendment for approval:</p> <p><i>As previously advised, the Department considers that the Moreland Higher Density Design Code is not essential for decision making and should be included as a reference document in the Moreland Planning Scheme rather than as an incorporated document.</i></p> <p><i>Please be cognisant of the effect of introducing provisions that would duplicate the building regulations/legislation and have the potential to introduce inconsistencies between the planning system and the building system, and impose higher construction standards through the planning system.</i></p>
<b>Exhibition and Submissions</b>	<p><b>First exhibition 26 October 2012 to 1 March 2013:</b> 57 submissions were received.</p> <p><b>Re-exhibition 5 September to 3 October 2014:</b> 13 submissions were received. They comprised three from Councils; one from VicRoads, one each from the Housing Industry Association (HIA) and Property Council of Australia; one from a local resident; five on behalf of developers. A late submission from the Urban Development Institute of Australia (UDIA) was also received and referred to the Panel.</p> <p>(Submissions are listed in Appendix A)</p>

<sup>1</sup> Incorporation of the Code was originally proposed as part of Amendment C134, however, a separate amendment was created (Amendment C142) and exhibited under the same authorisation number as Amendment C134.

## Panel Process

<b>The Panel</b>	Cathie McRobert (Chair) and Peter Gray
<b>Directions Hearing</b>	Melbourne, 23 February 2015
<b>Panel Hearing</b>	Melbourne, 23, 24, 25 March and 9 April 2015
<b>Site Inspections</b>	Accompanied inspection of three recent apartment developments, 9 April 2015
<b>Appearances</b>	<ul style="list-style-type: none"><li>• Moreland City Council represented by Mark Marsden who was assisted by the following Council officers: Munir Vahanvati, Darren Camilleri, Mary Hoffman, Juliana Aya and Euon Williamson</li><li>• UDIA<sup>2</sup> represented by Panos Nickas of Best Hooper lawyers who called expert evidence from Mark Ellenbroek from SJB Planning in planning</li><li>• Sedmap<sup>3</sup> (the owner of 267 Lygon Street, Brunswick) represented by Panos Nickas of Best Hooper lawyers who called expert evidence from Edward Zagami of Planning Studio on Peel in planning</li><li>• HIA<sup>4</sup> represented by Fiona Nield</li><li>• Suzannah Bigolin<sup>5</sup> requested to be heard but relied on her written submission as she was unable to attend the Hearing.</li></ul>
<b>Date of this Report</b>	3 June 2015

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<sup>2</sup> Submission 57, original exhibition

<sup>3</sup> Submission 9, re-exhibition

<sup>4</sup> Submission 1, re-exhibition

<sup>5</sup> Submission 53, original exhibition

## Overall conclusions

The proposed local policy and Code respond to Council's concerns that many 'mid-rise' apartment developments being developed in the City of Moreland provide sub-standard accommodation for residents and compromise the development opportunities of adjoining sites.

The need for further guidance in the planning scheme relating to the design of apartments has been established and there was consensus in all submissions to the Panel, including from Council, that a State-wide approach is preferred. However, the Panel has proceeded on the basis of advice from the former DTPLI that work at a State level on apartment design is at a preliminary stage, and this suggests that there is limited prospect of State level guidance in the short term. In the absence of State-wide provisions, it is reasonable to introduce sound local provisions to address a policy gap.

Council has responded to an issue of particular concern in Moreland, given the rate of apartment development occurring in the municipality and the continued role that apartment development will play in meeting clear planning policy support for more intensive development in the Coburg and Brunswick activity centre. Council has undertaken extensive work to present more comprehensive analysis justifying the proposed provisions than commonly occurs. Council is to be commended for this and its responsive approach to the outcomes of case study reviews and the 'testing by design' undertaken and issues raised during the Panel process. We think this has resulted in significant improvements to the proposed Policy/Code.

In evaluating the proposed Policy and Code, the Panel has been conscious of the implications of higher standards for matters such as housing affordability, strategies promoting renewal in some locations, potential market responses and consistency in the planning framework across the State. In addition to increasing apartment prices, there is a risk that more demanding local standards and processes could divert development from the strategically important redevelopment areas.

We are also conscious that these other policy directions do not justify poor quality outcomes for residents, the public realm and the surrounding neighbourhood.

The Panel has generally endorsed the objectives and broader guidance proposed, however, we have adopted a conservative approach to higher prescriptive standards for the following reasons:

- In recognition of the absence of a housing strategy to inform the proposed housing diversity standard or a systematic analysis of the housing affordability implications
- To allow the market and residents to determine more discretionary elements of the 'housing package'.

The Panel considers standards have a role to establish a level of certainty, for both designers and the community, about acceptable benchmarks. However, the performance based framework in Victoria is predicated on site responsive development with an emphasis on achieving intended outcomes. We consider that the fundamental role of the urban context report, the site analysis and the design response in the assessment of development proposals should be more prominent in the policy.

Elements of the Policy/Code that were particularly contentious and the Panel's conclusions in relation to those matters are summarised in this overview, with discussion of specific Amendment provisions in Chapter 5 of this report.

The substantial increase in separation distances and lightwells prescribed in the Policy/Code have been moderated during the course of the Amendment process, however, the Panel has significant concerns that these critical standards may have adverse impacts on development yields and hence housing affordability. Further consideration should be given to specifying building separation distances based on 2.4 metre and 2.7 metre ceilings heights, with applicants able to choose which to adopt. We have accepted testing of the proposed separation distances and lightwell provisions as they provide for daylight comparable to other forms of housing and have a sound basis in technical analysis.

The Panel is not satisfied that the justification has been established for the following prescriptive provisions in the proposed Policy/Code:

- 2.7 metre ceiling heights are desirable and most apartment developments may be exceeding the minimum ceiling height specified in current regulations but it is not appropriate to impose a standard on apartments of five storeys in part of one municipality that is higher than applies to all other forms of housing in Victoria.
- While increased ventilation and cross ventilation is worthwhile, the prescription of ventilation standards would be too restrictive given the complexities of building design and the attributes of individual sites.
- The prescription of minimum apartment sizes would require greater justification. The functionality and liveability of apartment layout plans should be the basis for assessing whether the dwelling size is acceptable.
- Although there is a clear and increasing need for additional housing that meets the needs of people with limited mobility, the efficacy of the proposed prescriptive standard is questioned. Further, the design and cost implications of requiring a nominated proportion of visitable/adaptable dwellings was not presented. It is appropriate to provide objectives relating to visitability and adaptable housing and to refer to other Moreland planning scheme provisions (which address this issue) in the policy basis.
- Good acoustic performance is important to the level of amenity enjoyed by apartment residents and to minimise land use conflict and constraints on non-residential uses in mixed use areas. However, apparent inconsistencies and the absence of technical and cost implications of the 'aspirational' criteria originally proposed does not support their adoption. The design measures identified on the final day of the Hearing, together with an acoustic report, is a more appropriate approach.
- Imposing higher standards for private and communal open space on taller apartments in activity centres than applies to lower forms of housing has not been justified. The encouragement of effective use of roof space, podiums and light courts is endorsed by the Panel, rather than the prescription of 20% communal open space provision. The function and urban design implications of deep planting areas in an activity centre context should be considered further before imposing such a standard.

The Panel supports the trialling of the Policy (with recommended revisions), with the Code providing further guidance as a reference document, rather than an incorporated document as advocated by Council. We consider the introduction of the local apartment provisions in the planning scheme should be subject to:

- A framework to systematically monitor and evaluate their implementation.
- A sunset clause triggered by either a nominated time (say three years) or the introduction of State-wide apartment provisions.

Appendix B illustrates recommended changes and includes a range of further edits to clarify objectives or standards.

## **Consolidated Recommendations**

**Based on the reasons set out in this Report, the Panel recommends that Moreland Planning Scheme Amendment C142 should be adopted as exhibited subject to the following:**

- 1. Use language throughout the Policy/Code that makes it clear that the standards are discretionary.**
- 2. Revise the Policy generally as illustrated in Appendix B of this report, including the changes in recommendations 13 to 18.**
- 3. Indicate under the scope of the Policy that place-based policies or planning scheme provisions prevail where there is conflict with the Policy/Code provisions.**
- 4. Highlight under the policy basis the relevance of other planning scheme provisions that address, for example:**
  - The scale of development and built form
  - Interface treatments with the public realm and residential areas
  - Environmentally sustainable design
  - Universal access.
- 5. Include a new subclause *'Urban context report, site analysis and design response'* to identify the central role of the urban context report, site analysis and design response in the assessment of apartment proposals and the exercise of discretion to depart from prescriptive standards.**

### **Building Separation Distances**

- 6. Adopt a performance based approach to building separation through:**
  - a) Emphasis in the application requirements on the site analysis and design response informing the design and assessment processes.**
  - b) Including in the urban context report and design response an equitable development analysis to assess the implications for development opportunities and amenity impact within the application site and for adjoining sites.**
  - c) Use of the tables in Clause 22.07 as benchmarks and the Code as a reference document to provide further guidance.**
  - d) The exercise of discretion to approve separation distances of less than the benchmarks in the standard where analysis demonstrates that daylight performance requirements are met.**

7. Revise the Building Separation Distance subclause 4.2 to:

- a) Insert a new objective *'To provide opportunities for communal open space and open space areas'*.
- b) Make it clear that the main purpose of building separation is to achieve daylight into habitable rooms.
- c) Re-order the three building separation distance tables.
- d) Define building separation distances as *'from glazing line to glazing line of habitable rooms or the external edge of any balcony, whichever is the lesser'*.
- e) Replace *'Primary outlook'* with *'Living/Main outlook'* and *'Secondary outlook'* with *'Bedroom outlook'*.
- f) Change the building separation distances to indicate that the separation distance applies from the first level of residential use.
- g) Consider specifying building separation distances based on 2.4 metre and 2.7 metre ceilings heights, with applicants able to choose which to adopt.
- h) Delete the *'exemption'* under Table 22.07-5.1 that allows narrow lot buildings to have a blank wall up to six storeys.
- i) Maintain the note allowing for a continuous street wall but delete the prescription of the *'exemption'* for the first 18 metre depth of building envelope (i.e. from the frontage).
- j) Add notes to the building separation table for buildings to adjacent properties table:

*Building separation is not required to the side or rear boundary where no outlook is proposed provided it does not affect the reasonable development opportunity of the adjoining site.*

*Zero building separation applies on sites where a continuous street wall is encouraged under the relevant place-based control.*

*Where existing dwellings have not reasonably incorporated access to daylight on their own site, the building separation standards will apply on the basis that:*

- *New dwellings are provided with adequate daylight; and*
- *The new development makes a comparable contribution to the provision daylight into the habitable rooms of those existing dwellings.*

#### Daylight Access

8. Revise the Daylight Access subclause 4.3 to:

- a) Simplify the light court standard to only refer to a minimum dimension and area for buildings of different heights.
- b) Clarify that the length to battle-axe rooms from the edge of the external wall must not be affected by any obstructions and define what constitutes an obstruction.

- c) Add *'Bedroom windows facing lightwells should be staggered to avoid direct overlooking'*.
- d) Include in the fourth standard after *'obstructions' 'and is clear to the sky'* and delete the last sentence.
- e) Amending the standard relating to borrowed light as follows:
  - Reliance on borrowed light to bedrooms should be minimised and is only allowed into the bedroom of a one bedroom dwelling provided:*
    - I. An operable internal door is included to the light source that is 25% of the floor area of the bedroom.*
    - II. The light source contains full height external windows along the full width of the living room to allow adequate daylight.*
- f) Delete the standard that prescribes the maximum depth of living rooms.
- g) Consider revising the battle-axe room standard in terms of a length to width ratio.
- h) Delete the standard that requires a minimum 2.7 metre ceiling height for habitable rooms.

#### Natural Ventilation

- 9. Retain elements of the natural ventilation standards that identify the measures sought in applications but delete all prescriptive requirements in those standards.
- 10. Retain the numerical values in natural ventilation standards in the Code to provide additional guidance.

#### Thermal Comfort

- 11. Revise the Thermal comfort subclause 4.6 to:
  - a) Ensure designers take into account the change in temperatures throughout the year.
  - b) Specify that opportunities for external clothes drying should be provided.
  - c) Delete references to sunlight in the daylight sub-clause.

#### Internal amenity and facilities elements

- 12. Revise the Dwelling size and layout subclause 5.2 to:
  - a) Delete the table prescribing minimum floor areas from the proposed Policy and qualify the minimum floor areas nominated in the Code as indicative only.
  - b) Revise the standard under dwelling size and layout to read:
    - Layout plans should illustrate the functionality and liveability of all proposed apartment types.*

### Accessibility

13. **Revise the Accessibility subclause 5.6 to maintain the objective in the Code/Policy relating to visitability, refer to other planning scheme provisions which address this issue in the policy basis, and delete prescriptions in the associated standards.**

### Acoustic performance

14. **Revise the Acoustic performance subclause 5.6 to adopt the revised acoustic performance design measures presented on the final day of the Hearing (set out in chapter 5.11.2 of this report).**

### Private and communal open space

15. **Revise the Private open space subclause 5.7 to maintain the ResCode balcony area and dimensions in the private open space standard, pending specific evaluation of the adequacy of the standard.**
16. **Revise the Open space and landscape design subclause 5.9 to encourage provision for deep soil planting areas but delete the prescription of an area to be provided.**
17. **Revise the Communal facilities subclause 5.10 standard relating to communal open space to encourage effective use of roof space, podiums and light courts, rather than the prescribing 20% communal open space provision.**

### Bicycle and car parking

18. **Revise the Bicycle and car parking subclause 5.11.1 to:
  - a) **Update bicycle parking guidelines to refer to *The Bicycle Parking Handbook* Bicycle Network Victoria (October 2004).**
  - b) **Explicitly indicate that ‘Reductions of the standard car parking rates in Clause 52.06 will be considered having regard to the level of provision of bicycle parking.’**
  - c) **Delete the vehicle entry standard.****
19. **Revise the Private storage space subclause 5.11.2 to delete the reference to ‘external’ storage space.**

### The Code

20. **Include the Code (updated to reflect changes since the exhibition of the Amendment) as a reference document to the proposed Clause 22.07 Policy, rather than as an incorporated document in the Moreland Planning Scheme.**
21. **Review the graphic illustrations in earlier versions of the Code with a view to reinstating those that remain relevant and will assist in the interpretation of the objectives and standards in the proposed Policy.**

In addition to the above primary recommendation, the Panel provides the following recommendations:

- 22. Apply a sunset clause to Policy/Code. The sunset clause should be triggered by either:**
  - a) A nominated time (say three years) to reinforce the need for evaluation of the operation of the Policy and to ensure responses to the findings of that evaluation; or**
  - b) The introduction of State-wide apartment provisions.**
- 23. Establish and implement a systematic framework to monitor and evaluate the apartment design objectives and standards, including post-occupancy evaluation.**

# 1 Introduction

The Amendment responds to Council's concerns that many 'mid-rise' apartment developments being developed in the municipality provide sub-standard accommodation for residents and compromise the development opportunities of adjoining sites. The proposed Policy/Code is intended to provide minimum standards to guide apartment development of five or more storeys, instead of relying on broad State guidelines and building regulations. The proposed Policy/Code also incorporates higher standards relating to universal access.

## 1.1 The Amendment

The Amendment has been the subject of two exhibition processes, with further notice being given of changes proposed by Council after it had considered submissions. During the Panel process a range of further revisions were put forward to address issues that were raised.

The Panel has focussed on the Amendment provisions that were re-exhibited but describes the evolution of these provisions from those that were originally exhibited.

### 1.1.1 Original exhibition

Council originally exhibited Amendment C142 between 26 October 2012 and 1 March 2013.

Fifty submissions were received and the issues raised included: the introduction of local rather than State-wide provisions; the effect of higher standards on development viability; inconsistencies, unnecessary duplication and vague standards; the higher level of environmental performance required; and opposition to higher density development.

Changes to Amendment provisions that Council supported in response to issues raised in submissions included, in summary:

- Removing the public realm elements such as height, setbacks and interface with residential areas
- Re-structuring the document into three main sections: passive design; internal amenity and facilities; and external amenity
- Expressing provisions in plain English.

### 1.1.2 What is proposed – the re-exhibited Amendment

The revised Amendment was re-exhibited between 5 September and 3 October 2014, and notice was given to the original submitters.

The re-exhibited amendment proposes to:

- Amend the Local Planning Policy Framework<sup>6</sup> to refer to the Code and remove references to the *Guidelines for Higher Density Residential Development 2004* (GHDRD) and the Local Planning Policy for Developments of Four or More Storeys (Clause 22.11)
- Introduce Clause 22.11 Moreland Apartment Design Code (the Policy) to replace Clause 22.11 Developments of four or more storeys
- Incorporate the Code in the Moreland Planning Scheme (Schedule to Clause 81.01).

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<sup>6</sup> Sub-clauses 21.05-1 Housing, 21.05-3 Retail and 21.05-5 Urban Design and Urban Character and Street Landscape, Clause 22.02 Development within designated activity centres and urban villages.

The Policy adopts the apartment design objectives, standards and decision guidelines at Part D of the Code. All objectives must be met and standards should be met. The standards set out *'specific requirements that are considered necessary to achieve the objectives. Standards should normally be met. However, if the responsible authority is satisfied that a proposal for an alternative design solution meets the objectives, the alternative may be considered'*.

The Policy objectives and standards address the following elements:

- Passive design: building orientation, building separation, daylight access, natural ventilation, ceiling heights, thermal comfort
- Internal amenity and facilities elements: dwelling diversity, dwelling size and layout, entry and circulation, accessibility, acoustic performance, private open space, privacy, open space and landscape design, communal facilities, bicycle and car parking, private storage space, waste management
- External amenity impacts.

Specific objectives and standards are discussed in Chapter 5.

Table 1 summarises changes in response to submissions and internal review of the originally exhibited Amendment and further changes put forward at the start of the Panel Hearing.

Issue	Proposed Change	Panel Comment
The use of <i>'mandatory language'</i> in standards	Replace <i>'must'</i> with <i>'should'</i> in standards throughout the document. (Council confirmed that all standards are discretionary. Some further examples were identified for deletion during the Panel process.)	There was consensus in submissions to the Hearing that standards should be discretionary. We endorse removal of mandatory language in standards.
Need to improve clarity.	Define measurement building separation distances as <i>'from glazing line to glazing line of habitable rooms or the external edge of any balcony, whichever is the lesser.'</i>  Replace <i>'Primary outlook'</i> with <i>'Living/Main outlook'</i> and <i>'Secondary outlook'</i> with <i>'Bedroom outlook'</i> to clarify on the nature of the outlook.  Clarify that the length to battle-axe rooms from the edge of the external wall must not be affected by any obstructions.	We endorse these clarifications, however, the term <i>'obstruction'</i> should be clarified.
Equitable development opportunities	Add a decision guideline under building orientation and building separation: <i>'The reasonable development opportunities of adjoining lots'</i>	Building separation was contentious and is addressed in Chapter 5.
The purpose of building separation provisions	Refine the first objective to make it clear that the main purpose of building separation is to achieve daylight into habitable rooms.  Insert a new objective <i>'Provide opportunities for communal open space and open space areas'</i> to indicate building separation also provides opportunity for open space between buildings.	We endorse changes relating to:  The reference to building separation providing opportunities for open space.
	The three separation distance tables were re-ordered.	
Separation (setback) requirements at street frontage and on narrow lots.	Add notes to the building separation for buildings to adjacent properties table: <ul style="list-style-type: none"> <li>• Allow zero building separation where appropriate to achieve a continuous street wall.</li> <li>• Narrow lot buildings may be allowed to have a blank wall up to 6 storeys</li> </ul>	A continuous street wall and a blank wall up to six storeys.  Deletion of the prescription of 18 metres from a street or land for the exemption from

Issue	Proposed Change	Panel Comment
	<ul style="list-style-type: none"> <li>The first 18 metre envelope, measured from a street or lane, is exempted from this building separation. In its closing submission, Council supported deletion of prescription of 18 metre depth.</li> </ul> <p>(Council advised these notes were added to recognise the development constraints of narrow lots and concerns raised in the testing by design project about the impact on yield.)</p>	separation distances.
Separation to rear lane	Delete separation distance where there is no outlook to a laneway (as this outcome is strongly discouraged).	This change was not contentious and is endorsed.
Daylight: Adequacy of lightwells Distinction between daylight and sunlight	<p>Insert new lightwell dimensions to ensure they provide adequate daylight.</p> <p>Delete references to sunlight in the daylight sub-clause and relocate some provisions to the building separation sub-clause.</p>	<p>See discussion relating to lightwells in Chapter 5.3.</p> <p>We endorse the proposed changes relating to sunlight.</p>
Reliance on borrowed light	<p>Replace the prescription that <i>'No more than 25% of bedrooms should rely on borrowed light'</i> with <i>'Reliance on borrowed light to bedrooms should be minimised'</i>.</p> <p>(Council noted that it is receiving few applications with rooms relying on borrowed light.)</p>	We endorse the deletion of the prescription relating to borrowed light. See discussion in Chapter 5.3.
Detailed natural ventilation standards	<p>Remove detail from natural ventilation standards.</p> <p>Specify that opportunities for external clothes drying should be provided.</p>	Generally endorsed – see discussion in Chapter 5.4.
Thermal Comfort	<p>Revise objective to ensure designers take into account the change in temperatures throughout the year.</p> <p>Delete repetition and reference to the quantitative thermal comfort measure.</p> <p>(Council considered it is more appropriate to address such technical requirements in an ESD report).</p>	We endorse the changes.
Vehicle entry	Reinstate a vehicle entry sub-clause (in response to a submission from VicRoads).	See discussion in Chapter 5.13.
Acoustic Performance	Revised standards to ensure consistency with AS 2107 and recent VCAT decisions.	See discussion in Chapter 5.10.
Private open space	<p>Distinguish private open space requirement on the basis of bedroom numbers.</p> <p>Add a minimum area and increase the minimum balcony dimension for 3 bedroom apartments to 2.5 metres.</p>	See discussion in Chapter 5.12.
Additional open space and landscape design provisions	<p>Insert new objectives:</p> <p><i>To provide for landscaping that contributes to the local biodiversity of the area</i></p> <p><i>To provide opportunities for landscaping that minimises the impact of the urban island heat effect and that contributes to the micro-climate of the site.</i></p> <p>(Council advised the new objectives were added to be consistent with Council's new MSS and its Zero Carbon Evolution Strategy)</p> <p>Insert a new standard: <i>'Retain significant established trees, where</i></p>	See discussion in Chapter 5.12.

Issue	Proposed Change	Panel Comment
	<i>appropriate.</i> Identify green facades or green roofs as an alternative if deep soil planting requirements are not met.	
Communal open space standards	Reinstate three standards (in response to suggestions made by Hayball and SJB Urban in the Testing by Design reports)	See discussion in Chapter 5.12
External amenity	Substantially revise objective and standards (in response to concerns about how the quantitative standards would apply in practice).	See discussion in Chapter 5.2

Table 1 Changes proposed in re-exhibited Amendment  
(Source: Derived from Council submission)

The changes proposed by Council address a significant concern in submissions and evidence about the use of *'mandatory'* language in discretionary standards and the Panel endorses that change. Our assessment of the Amendment has been on the basis that standards are discretionary.

### Panel Recommendation

#### Revise the proposed Policy to:

- a) Use language that makes it clear that standards are discretionary.
- b) Define building separation distances as *'from glazing line to glazing line of habitable rooms or the external edge of any balcony, whichever is the lesser.'*
- c) Replace *'Primary outlook'* with *'Living/Main outlook'* and *'Secondary outlook'* with *'Bedroom outlook'*.
- d) Clarify that the length to battle-axe rooms from the edge of the external wall must not be affected by any obstructions and define what constitutes an obstruction.
- e) Revise the thermal comfort objective to ensure designers take into account the change in temperatures throughout the year.
- f) Specify that opportunities for external clothes drying should be provided.
- g) Delete references to sunlight in the daylight sub-clause.
- h) Refine building separation objectives to make it clear that the main purpose of building separation is to achieve daylight into habitable rooms.
- i) Insert a new objective in the building separation sub-clause *'Provide opportunities for communal open space and open space areas'*.
- j) Re-order the three building separation distance tables.
- k) Add a note to the building separation for buildings to adjacent properties table:
  - i. Allow zero building separation where appropriate to achieve a continuous street wall.
  - ii. Delete the prescription of the first 18m depth from a street or lane in the building separation *'exemption'*.
  - iii. Replace *'No more than 25% of bedrooms should rely on borrowed light'* with *'Reliance on borrowed light to bedrooms should be minimised'*.

### 1.1.3 Where will Amendment provisions apply?

The Amendment applies to residential and mixed use development of five or more storeys. If the mandatory building heights Council is seeking through new residential zones and planning frameworks for the Coburg and Brunswick Activity Centres are introduced (see below), development of 5 or more storeys will only be allowed in the locations shown in Figure 1. Locations where development in excess of eight storeys is more limited.

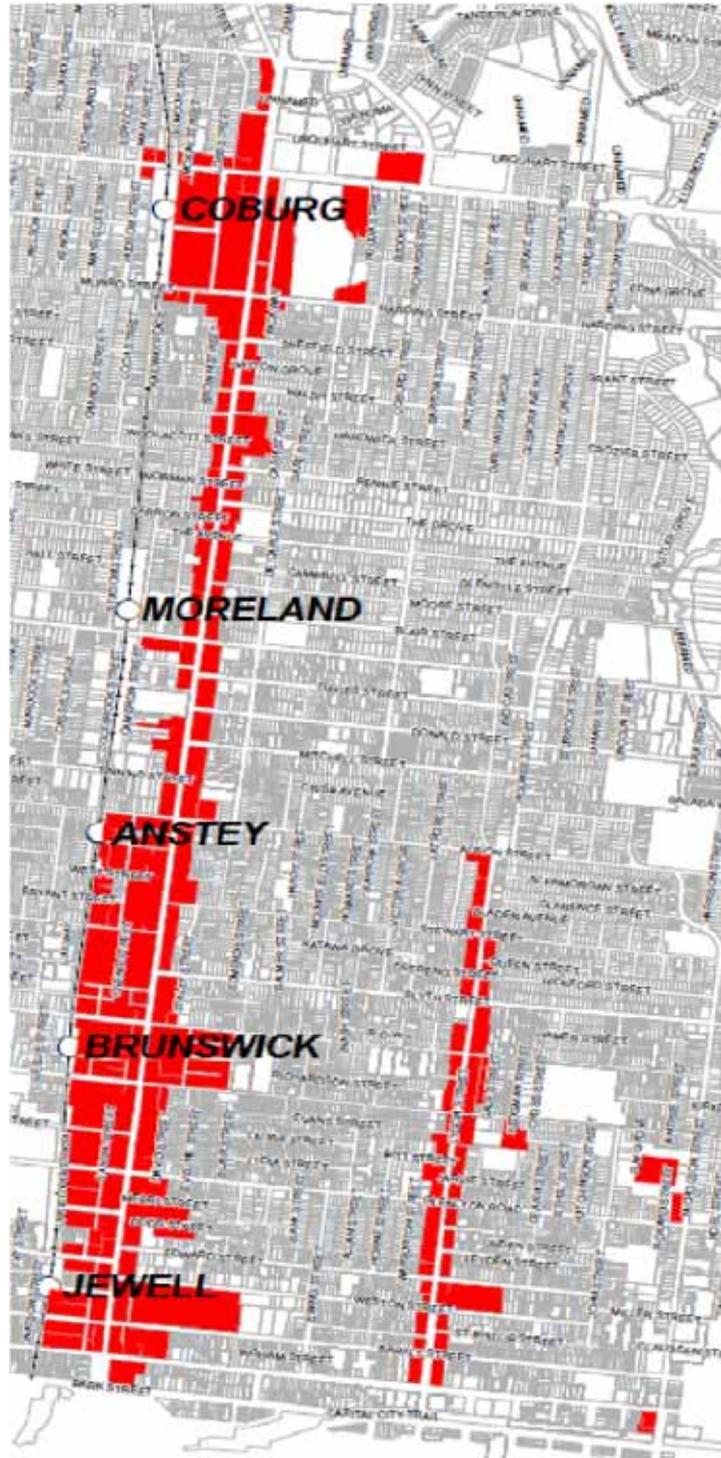


Figure 1 Areas where 5 or more storeys allowed if current Amendments proceed as supported by Council.

## **1.2 Existing and proposed planning scheme provisions**

### **1.2.1 Zones and overlays**

The Amendment forms part of the broader planning framework for the development of apartments. Council emphasised the important relationship between the Code/Policy and the Activity Centre Zone (ACZ) to be applied to the Coburg Activity Centre (Amendment C123), the Design and Development Overlays (DDOs) proposed for the Brunswick Activity Centre (Amendment C134) and the implementation of the new residential zones.

#### **Place-based provisions**

The Panel has treated the ACZ for the Coburg Activity Centre, which has been considered by a Panel and adopted by Council, as seriously entertained. The proposed ACZ includes detailed, precinct based provisions relating to both land use and built form (see discussion in Chapter 4.1).

Amendment C134 to the Moreland Planning Scheme proposes, amongst other things, built form provisions in DDOs 18, 19 and 20. The Amendment C134 Panel report has been submitted since the Panel Hearing. However, at the time of writing it has not been publicly released.

#### **Residential zones**

New residential zones have been approved since the Panel Hearing.

As the Code only applies to developments of 5 or more storeys, it will not apply in the residential zones which are subject to building height restrictions that preclude development of that scale.

### **1.2.2 Particular provisions**

The following provisions, which are in all Victorian planning schemes, form part of the planning framework for the consideration of residential development, including apartments:

- Public Open Space Contribution and Subdivision (Clause 52.01)
- Car Parking (Clause 52.06)
- Crisis Accommodation (Clause 52.22)
- Shared Housing (Clause 52.23 )
- Community Care Unit (Clause 52.24)
- Bicycle Facilities (Clause 52.34)
- Urban Context Report and Design Response For Residential Development of Five or More Storeys (Clause 52.35)
- Government Funded Social Housing (Clause 52.41)
- Live Music and Entertainment Noise (Clause 52.43)
- Two or More Dwellings on a Lot and Residential Buildings (Clause 55) for developments of up to four storeys.

### 1.3 Council testing of Amendment provisions

Council’s submission to the Panel included the following assessment of recent apartment development and testing of the provisions proposed by the Amendment:

- **Case studies:** Council officer analysis of 20 apartment developments was presented in the *Moreland Apartment Quality Case Studies Assessment Working Document* October 2012, which was divided into three parts:
  - Case Studies Sheet
  - Overall Quality data
  - Assessment.
- **Testing by Design:** Council engaged an architecture firm (Hayball) and an urban design firm (SJB Urban) to prepare concept plans using the Code provisions for a total of nine of the case study sites in Brunswick and Brunswick East<sup>7</sup>. Their two basic tasks were to:
  - Test by design the Code's objectives and standards
  - Provide a brief report evaluating the Code.

Council advised that the testing by design exercise was useful and has informed a further review of the Code. Council’s summary of the Hayball and SJB Urban comments is set out in Table 2 below.

Hayball	SJB Urban
<p>Generally support the Code objectives which will increase apartment amenity</p> <p>The Code is more easily applied on smaller sites to improve apartment amenity</p> <p>Full compliance with the Code is difficult to achieve on larger sites or sites with complex interfaces</p> <p>Building separation standards were the most problematic to apply</p> <p>The building forms were often complex and did not improve apartment amenity</p> <p>Difficulty in complying with building separation could establish precedents of non-compliance</p> <p>Some of the standards are covered under the National Construction Code (NCC) and it is not necessary to cover these areas unless the intention is to exceed NCC requirements</p> <p>Yield could be increased by applying the secondary outlook to secondary outlook scenario</p> <p>Confusion with meaning of habitable room and light court</p> <p>Guidelines are needed to allow alternative solutions or innovation.</p>	<p>The document structure is mostly clear and logical, however there is a lack of graphical standards to aid in clarification of standards</p> <p>Application requirements are confusing and Urban Context Report and Local Context Report should be provided at pre-application meeting</p> <p>External amenity section should be included in building separation section as they are dealing with similar issues</p> <p>Siting of a building and its response to the neighbourhood context should be a prominent objective in the guidelines</p> <p>Language of the document could be more positive.</p>

Table 2 Council summary of ‘Testing by Design’ commentary

<sup>7</sup> **Hayball sites:** 3-5 Union Street, 300 Victoria Street, 67 Nicholson Street, 455 Lygon Street, 240 Lygon Street.  
**SJB Urban sites:** 330 Lygon Street, 37-43 Breese Street, 368 Lygon Street, 808-818 Sydney Road.

The Council officer analysis of the outcomes of the 'Testing by Design' process found:

- Some designs proposed greater height to achieve yield (for viability in two cases/to provide the same yield)
- The Code can impact development yields by up to 10% in return for better internal amenity. There were two sites with very poor internal amenity where the impact on yield was 20-30% and these are examples of the type of development the Code is seeking to address.

## **1.4 The Issues**

The Panel considered all written submissions, as well as submissions presented during the Hearing. In addressing the issues raised in submissions, the Panel has been assisted by the information provided to it and its observations from inspections of specific sites and developments.

This report deals with the issues under the following headings:

- Is an apartment code needed?
- Does the Amendment support planning policy?
- Operation of the Policy and the Code
- Code and Policy provisions
- Policy drafting.

## 2 Is an apartment code needed?

### 2.1 The issues

- Is more guidance on apartment design needed?
- Does the current regulatory framework achieve good outcomes?
- Should a State-wide approach be adopted or are local provisions required?
- Are changes to requirements under building regulations and other legislation appropriate?

### 2.2 Evidence and submissions

#### The need for better guidance on apartment development

Council (like other Councils) has major concerns with the standard of apartment development, particularly in relation to inadequate levels of daylight in habitable rooms, lack of dual aspect to provide natural ventilation, poor outlook from dwellings, lack of diversity within developments, small dwellings (which seem to be getting smaller) and inadequate communal facilities such as communal spaces and bicycle facilities.

Council submitted that the Policy/Code are required for the following main reasons:

- There are no State-wide guidelines for apartment development. ResCode provides an effective State-wide framework for assessing medium density residential development, usually of single or two storey townhouse typology. However, the planning scheme does not include appropriate objectives, standards and decision guidelines for apartment development.
- The GHDRD does not provide the type of guidelines appropriate for contemporary apartment development, lacks explicit assessment standards on important issues (like building separation, dwelling size and communal facilities), and has limited weight as the document only has reference document status.
- Apartment development guidelines in a consolidated document is preferable to reliance on place-based strategies such as structure plans, local policies and overlays. It is Council's view that the principal role of the zone schedules and overlay controls is to address public realm issues such as building height, street walls, upper level setbacks and interfaces to residential areas.

Submissions from other municipalities (Boroondara and Stonnington) shared Moreland City Council's concerns over the poor quality of apartment development in recent years and supported the work undertaken by Moreland City Council. The City of Stonnington supported the Amendment as *'a welcome next step in the process of endeavouring to address the shortfall in design policy and performance standards for new apartment developments in Victoria.'*

The City of Boroondara referred to the limitations of the GHDRD and ResCode as tools to effectively negotiate good apartment outcomes. This submission highlighted that the planning framework for apartment development is silent on critical issues such as the internal living amenity (daylight and sunlight access, ceiling heights) and minimum dwelling size and only broad guidance is provided on other important issues such as implications for

the public realm and energy and resource efficiency. It submitted that various councils, such as Darebin, Maribyrnong, Moonee Valley, Port Phillip, Stonnington and Yarra, have responded to the policy weakness at the State level by introducing local planning policies or DDOs into their planning schemes.

Ms Bigolin submitted it is inequitable to accept a lower level of amenity for residents in activity centres and:

*My concerns regarding the Code are generally that the emphasis on minimum standards will result in a lack of diversity and a 'tick-a-box' approach to assessing high density developments. In addition, the Code encourages a reduced level of amenity and negative impacts on the passive design features of existing buildings located within activity centres and not within the R1Z. While the Code seeks to ensure that proposed buildings do not unreasonably reduce access to light, air and outlook of existing buildings, there is a lack of supporting objectives and standards for properties not within the R1Z.*

Submissions from those representing developer interests argued the Policy/Code are not necessary, or are at least premature.

The HIA submitted that the existing planning system already provides sufficiently robust tools to guide the design and assessment of higher density residential development proposals. These existing built form provisions allow the local context and a range of site constraints - such as site orientation, site configuration and the neighbouring built form - to be taken into account.

Mr Zagami's expert evidence criticised the 'one size fits all' approach adopted in the Amendment, expressing the view that it would unnecessarily constrain design innovation, responses to site attributes and the capacity for residents to make trade-offs to secure the housing/locational package they prefer within the reality of personal budget constraints. He also advocated more general design guidance, rather than straying into matters controlled under separate legislation relating to matters such as disabled access.

The UDIA submitted that '*notwithstanding Council's concern that there has purportedly been an increase in poor quality design, the Council has not been able to provide examples and specifically state what elements comprise the 'poor design quality'*'. The UDIA referred to the evidence of Mr Ellenbroek and Mr Zagami which identified examples to the contrary, such as 7 Florence Street (The Commons development) and 201-207 Albert Street.

Mr Ellenbroek supported, in broad terms, Council's desire to improve the standard of apartment development. However, his expert report argued that insufficient evidence had been presented to demonstrate the need for the Amendment, stating:

*... the need to introduce prescriptive apartment design guidelines, as proposed under the Amendment, should, in my opinion, be informed by an analysis of existing apartment developments that clearly demonstrate a common failure to deliver appropriate amenity outcomes. There is no evidence of such analysis having been undertaken in this instance.*

*Likewise, no evidence has been presented to indicate that the proposed MADC design standards have been tested with sufficient rigour to properly*

*understand the development outcomes that compliant proposals are capable of delivering in different site scenarios. In my opinion, it is not reasonable or appropriate for landowners, developers and practitioners to carry the burden of testing the validity and usability of the standards through future development proposals.*

At the Hearing, Mr Ellenbroek acknowledged that documents provided in the lead up to the Hearing had illustrated a level of testing of recent apartment developments and the implications of the Policy/Code that had not previously been apparent.

The UDIA and the Property Council also expressed concern about the Policy/Code provisions apparently adopting content from draft documents prepared by the Office of the Victorian Government Architect (OVGA) and the NSW government. The Property Council emphasised the need for extensive rigorous consultation with the development industry to learn from *'the experience of the NSW industry, which has taken a decade to recover from the introduction of design codes for apartments'*.

### **State-wide or local provisions?**

There was a strong consensus in submissions, including from Council and those representing developer interests, that State-wide guidance on apartment design would be preferable to local provisions.

Council participated in the initiative commenced by the OVGA to develop State-wide guidelines and considers a State-wide approach on guidelines for apartment development is appropriate (provided there is sufficient flexibility to allow for local circumstances). However, Council submitted that the development of State-wide provisions appears to have stalled.

Council emphasised that, while *Plan Melbourne* (the metropolitan strategy) foreshadowed the development of a State-wide Apartment Code, timeframes for its introduction have not been provided and the apartment development activity means that a planning framework to improve the quality of apartment development is needed now.

Council referred to the Environmentally Efficient Design Local Policy Advisory Committee acceptance of a local approach even where a State-wide approach was found to be the most effective way to achieve the desired outcomes, comprehensive coverage, consistency, fairness and simplicity. That Advisory Committee addressed the issue as follows:

*The Committee acknowledges the Amendment Councils have developed these policies in response to a lack of a State-wide approach and are to be commended for their vision and commitment. The Committee is concerned, however, that the adoption of varying approaches between municipalities could lead to confusion and inequity.*

*In the interim, until such time as a more cogent approach is developed at the State-wide level, the Committee accepts there is a case for municipalities to include a local policy which provides the strategic justification for the consideration of sustainability outcomes for defined developments.*

*The Committee also believes that even if a State-wide policy is introduced, local policies may still be appropriate where municipalities seek to 'raise the bar higher' either in specific locations, or where the community has higher sustainability expectations.*

*The Committee considers there is merit in including a sunset clause on any local policy introduced that would enable the review of these policies in light of any State-wide approach introduced. If these policies duplicate the State-wide approach it would be appropriate for these local policies to be deleted, however if the local policies go further than the State-wide approach, the policies could be refined to delete areas of duplication and focus solely on those elements which seek to 'raise the bar' at the local level.*

Council submitted that the same principle should apply in relation to apartment development.

Submissions from those representing developer interests opposed the introduction of local provisions, particularly while State-wide guidelines are being prepared. The HIA and the UDIA submitted that the introduction of another layer of planning control through local provisions, has the very real potential for contradictory or inconsistent State-wide and local provisions which would result in confusion, uncertainty and further unnecessary delays for the industry and the community. The UDIA and the Property Council also expressed concern about Policy/Code provisions apparently adopting content from draft documents (prepared by the OVGA and the NSW government) which have not yet been subject to full testing and scrutiny.

The UDIA expressed an 'overriding concern' that the Amendment is being sought in the absence of a final report from the OVGA. It submitted:

- 15. The continuing work by the VGA (OVGA) should be completed before any Council attempts its own Guidelines. The new State government has indicated its intention to continue with the development of guidelines.*
- 16. Orderly and proper planning of this important issue requires a set of guidelines applying across the whole of metropolitan Melbourne. Like ResCode, if a particular municipality believes that it has a case to depart from the guidelines, it should be required to justify that through a planning scheme amendment process including public submissions and referral to a Panel if submissions not accepted.*

Mr Ellenbroek noted that Plan Melbourne identifies the preparation of State-wide apartment design guidance as a short term action. It was his view that:

*It would be more appropriate, in my view, for the need for local design requirements to be assessed following the adoption of updated State-wide guidance on apartment design. Assuming that such guidance would ultimately be provided in the SPPF, the premature inclusion of local design standards would potentially result in contradictory provisions between State and local policy in the scheme.*

## 2.3 Discussion

### Is further guidance on apartment development needed?

While there is policy support for significantly more intensive development with apartments constituting a larger part of the future housing stock, this does not justify poor quality outcomes for residents, the public realm or the surrounding neighbourhood. Concern about the prevalence of poor apartment outcomes and the amenity provided for residents of new apartments is widespread<sup>8</sup>, although submissions and inspections suggested to the Panel that the market is responding to some areas of poor performance.

The Panel agrees with submissions that ResCode was developed with a particular focus on single houses and multi-unit development. We also agree that, while the broad guidance provided in the existing GHDRD guidelines remains sound, there is now much greater experience in apartment development than when those guidelines were prepared. As the intensity of development increases, the importance of good design responses to effectively resolve more complex design challenges also increases. Specific forms of housing, such as taller, higher density apartments, require a framework that recognises the particular challenges in achieving good outcomes.

Plan Melbourne<sup>9</sup>, which must be considered in planning<sup>10</sup>, highlighted that the design of apartments is not currently regulated, beyond what is required under the National Construction Code (NCC). It noted the following concerns about the design quality of apartments:

- The small size of many apartments
- The tendency for a large number of apartments to be designed with habitable rooms (notably bedrooms) that have no direct access to daylight and ventilation
- The lack of consideration of the amenity impacts of adjacent apartment developments
- The lack of variety and choice of apartment designs.

Although the inspections undertaken by the Panel did not include apartments that would fail the proposed standard relating to size, they provided useful insights. For example, in one case the limitations of light courts under current regulations were illustrated, in several cases balconies that are narrower than the proposed standards appeared to serve the intended purpose and the inspection of *The Commons* illustrated that good outcomes can be achieved without satisfying all of the standards proposed in the Policy/Code.

The Council provided the Panel with useful analysis of recent apartment developments and approvals. However, this work did not extend to post-occupancy evaluation that addressed the full range of design considerations and the views of stakeholders, including the apartment residents (who are perhaps the best judges of the amenity they experience).

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<sup>8</sup> For example, as highlighted in submissions from other Councils to the Amendment, wide media coverage, the City of Melbourne's discussion paper *Future Living*, and the recent review of New South Wales State Environmental Planning Policy 65.

<sup>9</sup> See Plan Melbourne Initiative 2.1.5 Improve the quality and amenity of residential apartments.

<sup>10</sup> Clause 11.04 Metropolitan Melbourne.

Nevertheless, the Panel considers that the need for further guidance in the planning scheme relating to the design of apartments has been established. The questions relating to the form and scope of that guidance and the level of amenity that should be required are addressed in the remainder of this report.

### **Should guidance on apartment development be State-wide or local?**

Plan Melbourne foreshadowed that the former Department for Transport, Planning and Local Infrastructure (DTPLI) would undertake the following work in the short term:

- Update design guidelines and introduce measurable standards for high-density residential and mixed-use development.
- Review the design, layout, internal living amenity and balcony needs of apartments.

The requirements of short-term accommodation and student accommodation, and the ability to encourage family-friendly apartments are to be considered, together with the appropriateness of current planning and building controls, and the potential to streamline development applications. Plan Melbourne also indicates that the review will assess the impact of any new regulations on the construction sector, housing affordability and any potential economic impacts.

It is widely known that the OVGA has prepared a draft Apartment Code but that document is not publicly available. The Panel was provided with a copy of the confidential OVGA Draft apartment code but does not consider it is in a position to refer to or comment on its content (other than referring to specific comparison between the standards in the Moreland and OVGA codes in Council's submission).

As the relationship between the Amendment and work being undertaken at a State level relating to design guidelines for apartments was a key issue in submissions, the Panel invited Department of Environment, Land Water and Planning (DELWP) to submit in relation to the Amendment and to present at the Panel Hearing. The Panel sought advice from DELWP regarding:

- Work being undertaken at a State level relating to review of the existing Guidelines for Higher Density Development or an Apartment Code; and
- The implications of that work for the Amendment.

DELWP responded (20 March 2015):

*As you are aware the Government has indicated its intention to consider the merits of a code or other guidelines to promote more liveable outcomes in apartment development.*

*This work is at a preliminary stage and Government is yet to consider any formal proposals or conclude any broader consultation that it may wish to undertake. Accordingly there is nothing substantive on this issue that could be presented in the context of your consideration of submissions at this time in relation to Moreland Planning Scheme Amendment C142.*

While there is a clear intention to prepare a State-wide Code, at the time of writing the timeframe for implementation is uncertain. It is unfortunate that the Department did not participate in the Panel process or provide information on work on the development of

apartment design guidance that has been undertaken to date. The Panel proceeded on the advice that was provided, namely that work on this issue is only at a preliminary stage, and this suggests that there is limited prospect of State level guidance in the short term<sup>11</sup>.

The Panel recognises Council's concern that significant rates of apartment development in the municipality could result in extensive apartment development of poor quality. In the absence of State-wide provisions, it is reasonable to introduce sound local provisions to address a policy gap. The operation of local provisions would provide an opportunity to test new apartment guidelines in practice.

The efficacy of specific local objectives and standards requires evaluation and, where the local provisions *'raise the bar'* compared to establish State-wide requirements, strong justification is required. This assessment needs to extend beyond the aspirations of a particular municipality about desirable built form and amenity outcomes, to take into account broader implications relating to matters such as housing affordability for people with limited resources or with particular needs, broader strategies promoting renewal in some locations, potential market responses and consistency in the planning framework across the State.

The Panel considers the introduction of local apartment provisions in the planning scheme should be subject to:

- A framework to systematically monitor and evaluate their implementation.
- A sunset clause triggered by either:
  - A nominated time (say three years) to reinforce the for need evaluation of the operation of the Policy and to ensure responses to the findings of that evaluation; or
  - The introduction of State-wide apartment provisions.

### **Panel conclusions**

- The need for further guidance in the planning scheme relating to the design of apartments has been established.
- The Panel has proceeded on the advice that work at a State level on provisions relating to apartment development is at a preliminary stage, and this suggests that there is limited prospect of State level guidance in the short term.
- In the absence of State-wide provisions, it is reasonable to introduce sound local provisions to address a policy gap.
- Specific local objectives and standards, and their cumulative effect, require justification. In addition to the efficacy of the provisions in meeting intended design and amenity outcomes, the evaluation of local provisions should have regard to the implications of higher standards for matters such as: housing affordability; strategies to promote renewal in some locations; potential market responses; and consistency in the planning framework across the State.
- A sunset clause should apply if local provisions are introduced.

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<sup>11</sup> The Panel notes that DELWP released a discussion paper on Apartment Guidelines on 13 May 2015. The Panel makes no comment on that document as Council and other parties have not had an opportunity to present their views on it.

### **2.3.1 Panel Recommendations**

**Apply a sunset clause to Policy/Code. The sunset clause should be clause triggered by either:**

- a) A nominated time (say three years) to reinforce the need evaluation of the operation of the Policy and to ensure responses to the findings of that evaluation; or**
- b) The introduction of State-wide apartment provisions.**

**Establish and implement a systematic framework to monitor and evaluate the apartment design objectives and standards, including post-occupancy evaluation.**

### 3 Does the Amendment support planning policy?

This chapter focuses on the effect of the Amendment on planning policy to accommodate population growth, housing choice and housing affordability. The implications of the Amendment for policy promoting high quality architecture and urban design and energy efficiency are addressed in Chapter 5.

#### 3.1 The issues

- Will the Amendment make a positive contribution to policy?
- Will the Amendment promote high quality architecture and urban design? (addressed in Chapter 5)
- Will the Amendment accommodate projected population growth?
- Will the Amendment meet the diversity of housing needs, including the need for more affordable housing?
- Will the Amendment encourage the efficient use of energy and minimising greenhouse gas emissions? (addressed in Chapter 5)

#### 3.2 Planning policy

##### 3.2.1 State planning policy

Council submitted that the Amendment supports State planning policy (Clause 15 Built environment and heritage) to achieve high quality urban design and architecture that:

- Contributes positively to local urban character and sense of place
- Reflects the particular characteristics, aspirations and cultural identity of the local community
- Enhances liveability, diversity, amenity and safety of the public realm
- Promotes attractiveness of towns and cities within broader strategic frameworks
- Minimises detrimental impacts on neighbouring properties.

Related strategies include to, amongst other things, ensure development:

- Contributes to diversity and choice, accessibility and inclusiveness and environmental sustainability
- Responds to analysis of its context in terms of urban character, cultural heritage, natural features, surrounding landscape and climate.

Urban design principles<sup>12</sup> (Clause 15.01-2) seek a high quality architecture and urban design. The principles, in summary, relate to:

- **Context:** Development must take into account the natural, cultural and strategic context of its location; urban design policies and frameworks for key locations or precincts should be emphasised; and a comprehensive site analysis should be the starting point of the design process and form the basis for consideration of height, scale and massing of new development.

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<sup>12</sup> For residential development not covered by Clauses 54, 55 or 56.

- **The public realm and pedestrian spaces:** should be protected and enhanced. Design of interfaces between buildings and public spaces, including the arrangement of adjoining activities, entrances, windows, and architectural detailing, should enhance the visual and social experience of the user. There should be a desirable balance of sunlight and shade.
- **Safety:** should be enhanced so that people feel safe to live, work and move at any time.
- **Landmarks, views and vistas:** should be protected and enhanced or, where appropriate, created by additions to the built environment.
- **Heritage:** new development should respect historic precedents and create a worthy legacy for future generations.
- **Consolidation of sites and empty sites:** the complexity and rhythm of existing streetscapes should be recognised.
- **Energy and resource efficiency:** development should include efficient use of resources and energy efficiency.
- **Landscape architecture:** should be cognisant of the setting and have an integrating role in the design of buildings.

State planning policy encourages the efficient use of energy and minimise greenhouse gas emissions through development design, greater use of renewable energy, urban consolidation integration of land use and transport. Walking and cycling are promoted (Clause 15.02 Energy and resource efficiency).

### 3.2.2 Plan Melbourne

The (then) State Government adopted *Plan Melbourne* in May 2014. This metropolitan strategy, includes the following objectives and directions that are of particular relevance to the Amendment:

#### **Housing choice and affordability**

*Provide a diversity of housing in defined locations that cater for different households and are close to jobs and services.*

*Understand and plan for expected housing needs.*

*Reduce the cost of living by increasing housing supply near services and transport.*

*Improve the quality and amenity of residential apartments.*

Short-term initiatives, which have recently been re-affirmed by the current Minister for Planning, include:

*Update design guidelines and introduce measurable standards for high-density residential and mixed-use development.*

*Review the design, layout, internal living amenity and balcony needs of apartments.*

Under Liveable communities and households, a direction is to:

*Achieve and promote design excellence.*

Plan Melbourne identifies urban renewal precincts that will absorb much greater numbers of people in the future and will take pressure off population growth in existing suburbs. Moreland is in the northern sub-region which has an existing population 869,000 and is projected to grow by 400,000 - 470,000 by 2031. The Brunswick to Batman station corridor is identified as a '*Potential urban renewal opportunity/ investigation area*' and land around Jewel railway station is identified as an '*Urban renewal opportunity that includes significant parcels of government held land*' (Plan Melbourne map 11). These areas are identified for more intensive development and have a significant role in accommodating projected population growth.

### **3.2.3 Guidelines for Higher Density Residential Development**

In assessing development proposals, planning and responsible authorities must have regard to the *Guidelines for Higher Density Residential Development 2004* (GHDRD) which apply to buildings of four or more storeys (Clauses 11.01-2 and 15.01-2). The GHDRD address height, neighbourhood character, street setback, open space, overlooking and overshadowing. They are structured around under six elements of design consideration:

- Urban context
- Building envelope
- Street pattern and street edge quality
- Circulation and services
- Building layout and design
- Open space and landscape design.

The GHDRD does not include prescriptive requirements or benchmarks.

### **3.2.4 Local Planning Policy**

An updated Municipal Strategic Statement (MSS) was recently approved by the Minister for Planning (29 January 2015)<sup>13</sup>.

Strategic Direction 3 of the MSS relates to housing and states:

*Council will facilitate housing development to meet the needs of the growing and diverse population, with a focus on:*

- *Providing a range of housing sizes and types to accommodate a diversity of household sizes;*
- *Housing affordability; and*
- *Housing designed to be visitable by people with limited mobility, and adaptable for residents with specific accessibility requirements.*

The MSS encourages housing diversity and choice across the municipality, and increased residential densities in activity centres, including Coburg and Brunswick. The character of these activity centres is expected to change over time. The Coburg and Brunswick Activity Centres are expected to accommodate a significant increase in medium and higher density housing in accordance with the *Coburg Place Framework 2010* and *Central Coburg 2020*

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<sup>13</sup> The updated MSS was introduced by Amendment C152. A Panel was not required for the Amendment.

*Structure Plan, 200* and the *Brunswick Structure Plan*. In developments of 10 or more dwellings, the MSS encourages ‘a balance of 1, 2 and 3+ bedroom dwellings’.

The MSS (objective 8) addresses housing affordability through the following strategies:

- 8.1 *Reduce the ongoing living costs associated with housing, by ensuring development is designed to maximise energy efficiency ...*
- 8.2 *Encourage developments to include a proportion of affordable rental housing to be owned and managed by a registered Housing Association, Housing Provider or similar not for profit organisation.*

The MSS aims to increase the supply of housing that meets the needs of different sectors of the community, including people with limited mobility. This is to be achieved by ensuring visitability and the provision of liveable (or efficiently adapted) housing for people with limited mobility (see discussion in Chapter 5.9).

There is clear policy to ensure development achieves passive energy efficiency through site layout and building design that maximise solar access and passive design opportunities (Objective 11). Building separation, building depth and orientation of internal living spaces should maximise access to daylight and natural ventilation. On-site renewable and low emission energy generation are encouraged. The ability of adjoining sites to gain adequate access to daylight and outlook is to be considered.

Clause 22.07 provides local guidelines to complement the GHDRD and the *Safer Design Guidelines for Victoria*<sup>14</sup>. Amendment C142 proposes to incorporate the Code and replace Clause 22.07 with a new policy that inserts the objectives, standards and decision guidelines of the Code.

### **3.3 Submissions and evidence**

#### **Accommodating projected population growth**

Ms Bigolin submitted that it is inequitable to accept a lower level of amenity for residents in activity centres and:

*My concerns regarding the Code are generally that the emphasis on minimum standards will result in a lack of diversity and a ‘tick-a-box’ approach to assessing high density developments.*

Submissions from the HIA, UDIA and owners of development sites questioned whether the higher development standards and application requirements proposed in the Amendment support the clear policy identification of activity centres and Plan Melbourne urban renewal areas - such as the Jewell Station precinct and the adjoining Brunswick to Batman station corridor - as preferred locations for medium and high residential development. Tallow Group Pty Ltd, Alocor Pty Ltd and others, submitted that excessively restrictive requirements relating to typical building forms, building separation, daylight access, dwelling diversity,

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<sup>14</sup> *Safer Design Guidelines for Victoria Crime Prevention* Victoria and Department of Sustainability and Environment 2005.

dwelling accessibility, and community facilities would be *'prohibitive to urban consolidation and the ongoing renewal of Brunswick and the surrounding area'*.

Evidence from Mr Ellenbroek also expressed concern that the Amendment is at odds with established planning policy that directs substantial housing growth and built form change to activity centre locations, noting that the proposed standards impose more conservative built form outcomes in activity centre settings than is currently sought in residential areas.

Council's submission to the Panel emphasised the high level of apartment activity in recent years in Moreland, particularly in Brunswick and East Brunswick and its activity centres. It referred to the *Housing Development Data Analysis Report* (September 2013) by the (then) DTPLI<sup>15</sup>. That report highlighted the success in promoting growth in the Brunswick Activity Centre and along Moreland's transport corridors. Some of the main findings are summarised below:

- Between 2001-2011 Moreland's population grew by approximately 15,600 residents to 147,000 residents, with Brunswick, Brunswick West and Brunswick East experiencing the greatest share of this population growth.
- Over the 7 year period to 2011 there was a net addition of 5,578 dwellings at an average of nearly 800 new dwellings per annum. Since 2002 building approvals have steadily increased, consistently exceeding more than 1000 dwellings per annum since 2007. 2012-2013 looks likely to be a record year, with approvals exceeding 1800 dwellings.
- Since 2007, Moreland's housing stock has been rapidly diversifying with the addition of significant numbers of apartments, units and townhouses. At present, apartments are the main form of dwelling being approved for construction in the municipality.
- Between 2004 and 2011, 26% of the municipality's new dwellings (1,470 dwellings) were in activity centres.
- 48 projects of 20 + dwellings contributed 34% (2,722 dwellings) of all new dwellings constructed from 2004 to 2012 but comprised only 2% of construction projects.

Council acknowledged that the higher standards in the Policy/Code may affect the development yield, with associated impacts on the viability of individual projects. However, it submitted that the impact on yield has been over-stated and is limited to buildings on *'mid-range'* sized lots where developers seek to have primary outlooks within sites.

### **Housing diversity**

The Property Council, the HIA and Mr Zagami argued that prescriptive standards constrain the capacity of designers, developers and the market to deliver optimum responses to the characteristics of particular sites and to consumer preferences. The HIA outlined its concerns that the proposed prescriptive requirements would discourage housing diversity, which is delivered through innovative responses to design challenges and market responsive products. Mr Zagami considered that the Code must come to terms with the different

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<sup>15</sup> DTPLI prepared a Housing Development Data Analysis (September 2013) for Council to assist in the implementation of the new residential zones. This report provides information on population and household change in Moreland between 2004 and 2011. The main information sources in this report included ABS Regional Population Growth and Housing Development Data.

concept of space applicable to apartments compared to the suburban model of development and suggested that providing a diversity of configurations and dimensions is a far better outcome than standardising new apartment buildings. Evidence from Mr Ellenbroek addressed the proposed housing diversity provision as follows:

*In my view it is reasonable to encourage a range of dwelling types within larger developments, but it not reasonable to prescribe that developments should contain studio, 1, 2 and 3+ bedroom apartments. Providing a range of one and two bedroom apartments with different layouts and sizes within a development, for example, can be an effective way of providing dwelling diversity without also needing to provide studios and apartments with three or more bedrooms.*

Council acknowledged the need to undertake further research to ensure the future housing stock matches the various housing needs and that the issue should be considered in a wider context than the activity centres. Council has established the Moreland Housing Matters Advisory Committee to advise Council about affordable and appropriate housing in the municipality. That Committee has an interest in exploring innovative housing approaches and engagement; and it considers the diverse housing experiences of tenants, home owners, potential home owners and those with very insecure housing.

Nevertheless, Council considers dwelling diversity is an important consideration in meeting different household needs and there is scope in larger developments to provide a proportion of affordable housing and a variety of dwelling sizes. On the final day of the Hearing Council proposed revisions to the dwelling diversity standard, which increased the size of projects where larger apartments should be provided. Council explained:

*The trigger that developments of 50 or more dwellings provide some 3 bedroom dwellings aims to provide a balance between developer perceptions of demand and ensuring consideration is given to a greater variety of housing types in larger developments.*

The revised standard put forward on the final day of the Panel Hearing relating to dwelling diversity was:

*All developments of ten or more dwellings should provide a range of dwelling sizes that includes all of the following dwelling types:*

- *Studios*
- *1 bedroom*
- *2 bedroom*
- *3+ bedrooms in developments of 50 or more dwellings.*

Council's preference is to encourage a range of dwelling sizes and a variety in the number of bedrooms to cater for different housing types, including households with children. It submitted that a variety of bedroom numbers in developments promotes housing choice for individuals and results in a wider range of demographics for an area. Council is concerned that the vast majority of apartments being approved contain small one and two bedroom dwellings that will predominantly cater for young singles/couples. In the 20 case studies of recent developments, nearly all apartments were either one or two bedrooms and very few

contained 3 bedroom dwellings. With over 12,000 dwellings projected to be constructed in Brunswick to 2036, there would be a significant impact on the demographic profile of the area.

Council's submission noted that the 'Testing by Design' assessment suggested that:

- Building separation and depth controls encouraged larger development types with less one bedroom and studio apartments in the dwelling mix (Hayball).
- Further explanation could be given to clarify why diversity is important. This includes apartments suitable for different family sizes and tenures (SJB Urban).

Boroondara City Council supported proposed dwelling diversity provision, submitting:

*The issue of dwelling diversity (D.2.1) is of considerable interest to Council and considered critical to achieve a balanced housing market. At present, many apartment developments comprise studio and one-bedroom apartments which do not necessarily respond to local housing demand but is driven by increased financial returns (due to greater sale price per sqm compared to 2+ bedroom apartments).*

*However, officers are concerned that the standard provides very little guidance of what an appropriate split of apartment types would be. In its current form, this guideline would not provide sufficient strength to council to enforce the provision of a 'genuine' mix of dwelling sizes. To ensure this objective can be achieved, the inclusion of minimum % or range for each apartment would be beneficial.*

### **Impact of increased standards on housing affordability**

The Property Council, UDIA, HIA submissions and evidence from Mr Zagami expressed a common view that the impact of onerous apartment standards on the cost of development, and therefore apartment prices, is contrary to the State government objective to increase housing affordability. The HIA highlighted that impacts on housing affordability extend beyond restricted access at the time of purchase, with the impact of a higher purchase price extending throughout the life of a mortgage.

Mr Zagami expressed the view that it would be more effective to incentivise high quality and affordable housing, rather than prescribing standards. He considered that the apartment market is becoming more mature and, in many cases, prospective buyers or renters can readily assess attributes like floor area, aspect, storage provision, ceiling height, balcony size, interior light penetration, solar access and communal facilities. Mr Zagami emphasised that the housing choices of many people demonstrate the very high premium on securing housing in a preferred location and that decisions often involve trading off attributes such as space for location. It was his view that:

*Residents of small apartments are not necessarily forced to live in them, they are likely to trade-off 'place' for 'space'. Those who choose to live in sub 50sqm apartments may like to live in a larger one if they could afford it - it is also true that their optimal size/rent trade-off favours a smaller apartment.*

and

*The MADC (the Code) suggests that minimum apartment sizes would benefit residents however it is clear that residents would not be better off if this means they can not live in their preferred location.*

The HIA submitted that application requirements add to the already overwhelming amount of red tape and proposed standards impact on the real construction costs by dictating a particular style of construction.

As already noted, Council acknowledged that the higher standards in the Policy/Code may affect the development yield with associated impacts on the viability of individual projects. However, it submitted that the impact on yield has been over-stated and is limited to buildings on 'mid-range' sized lots where developers seek to have primary outlooks within sites.

Council considers that it has an overriding responsibility to provide a standard of accommodation that should not be dictated by poor quality development and that providing clearer standards will provide more certainty for investment decisions. Council noted that many of the provisions are comparable to the OVGAs draft standards and the NSW draft Apartment Design Guide.

### **3.4 Discussion**

There is clear, long standing planning policy to promote more intensive residential development in activity centres and infrastructure rich areas, such as those to which the Amendment applies (see Figure 1). Plan Melbourne, and in particular the identification of urban renewal areas in Moreland, have reaffirmed the policy support for significant change in these areas. The limits on development in extensive areas through the implementation of new residential zones reinforces the strategic role of these areas in accommodating future growth. These policies involve an increasing role for apartments, which is evident in Moreland.

While there is policy support for significantly more intensive development, this does not justify poor quality outcomes for residents, the public realm and the surrounding neighbourhood.

The Panel has already endorsed the need for further guidance to achieve acceptable apartment development in the future (see Chapter 2) and the desirability of a this guidance applying on a State-wide basis.

In the absence of comparable State-wide provisions, the Panel shares the concern in some submissions and evidence that development in the strategically important redevelopment areas of Brunswick and Coburg could be discouraged and diverted to other locations if more demanding standards and processes only apply in these areas.

Existing residential development provisions were developed to apply across housing types and tenures and to establish basic, acceptable requirements, rather than '*desirable*' requirements. Decisions about more discretionary elements of the '*housing package*' have been treated as matters for the market and consumers to determine. In view of the impact of increasing standards on housing affordability, the Panel considers this approach remains sound.

We note that higher prices will generally be passed onto buyers or tenants (with supply/demand of stock influencing the impact on price). Housing affordability issues are not confined to being able to access a particular housing product when housing is purchased. As Mr Zagami highlighted, the housing affordability effects extend to the ongoing costs to residents (and the broader community) over the life of the building and the ongoing costs borne by residents to service mortgages or pay rents as a result of higher/lower development costs. It is also recognised that ongoing costs may be reduced by standards that reduce energy costs or enhance the utility of the public realm.

Unfortunately, assertions in submissions about the implications of the Policy/Code on housing affordability and broader costs and benefits to the community have not been verified. In the absence of a more systematic understanding of these implications to inform our consideration of the proposed apartment provisions, the Panel has adopted a conservative approach to prescriptive standards.

The Policy/Code encourages the inclusion of a range of apartment sizes in new developments in support of objectives to provide housing choice through a diversity of housing options. During the course of the Hearing, Council maintained the view that larger development should include a spread of apartment sizes, including three or more bedroom apartments in developments of 50 or more apartments. It cited a development of more than 600 dwellings in Brunswick East which only provided a few three bedroom dwellings as an example where a large, homogenous population profile is the likely outcome.

The Panel questions the housing diversity standard and whether housing diversity objectives need to be satisfied on a site by site basis. Some locations or sites may be more suited to housing of a certain type. Analysis of housing needs may indicate there should be greater provision of smaller homes in a locality and it may be appropriate to rebalance the existing supply to meet projected future needs. Further, there may be development models directed at particular residents (such as the aged, traditional rooming house residents, students and the like) which address specific housing needs without incorporating a diversity of apartment sizes on a site. The Panel considers, while objectives to achieve a diversity of housing options in an area is sound policy, the justification for this standard (and its implementation) should be informed by a housing strategy.

The question is *'What is an acceptable standard of housing?'* The consideration of the efficacy of specific requirements in the Code/Policy in Chapter 5 is within the context that avoids *'Rolls Royce'* requirements.

These overarching policy concerns have informed our assessment of specific Policy/Code provisions. Where the Panel considers the need for a standard has not been demonstrated or its efficacy appears to be marginal, we have supported a conservative approach that focuses on the intended objective, rather than prescriptions in standards.

### **Panel conclusions**

- The clear policy support for significantly more intensive development in the area affected by the proposed Policy/Code does not justify poor quality outcomes for residents, the public realm and the surrounding neighbourhood.

- There is a risk that more demanding local standards and processes could divert development from the strategically important redevelopment areas of Brunswick and Coburg.
- The housing diversity objectives are sound but, in the absence of further justification and a housing strategy, the Panel is not convinced that the standard requiring studio, one, two and three bedroom apartments in all developments of 50 or more apartments has been justified.
- The Panel has adopted a conservative approach to higher prescriptive standards:
  - In recognition of the absence of a systematic analysis of the housing affordability implications
  - To allow the market and residents to determine more discretionary elements of the *'housing package'*.

## 4 Operation of the Policy and the Code

In this Chapter the following issues relating to the operation of the proposed Policy and Code are discussed:

- How do the proposed Code and policy integrate with other planning scheme provisions?
- Should the planning scheme address matters addressed by the NCC and other legislation?
- The role of prescriptive requirements'
- Should the Code be an incorporated or a reference document?

As discussed in Chapter 1.1, Council has clarified that proposed standards are not intended to be mandatory and the Panel has endorsed post-exhibition changes to make this clear.

### 4.1 How do the proposed Code and Policy integrate with other planning scheme provisions?

The Amendment indicates that place-based policies or planning scheme provisions prevail where there is conflict with the Policy/Code provisions. As a matter of drafting, the Panel has recommended that this should be clearly indicated in the scope of the policy (rather than as a 'qualifying statement' under Clause 22.07-3).

Of particular relevance are the ACZ that applies to the Coburg Activity Centre and the proposed DDOs that apply to the Brunswick Activity Centre (which are treated by the Panel as seriously entertained).

The proposed ACZ for the Coburg Activity Centre and Brunswick Activity Centre DDOs 18, 19 and 20 include built form provisions that would interact with the operation of the Code. These include mandatory maximum building height, street wall and upper level setbacks. Treatments along laneways and at interfaces with residential zones are also addressed. These provisions will determine the overall scale of development and the built form along the street frontage, along laneway and at interfaces with residential zones.

A number of the revisions put forward by Council during the course of the Amendment process, recognise this interaction. For example, the building separation standards have been revised to recognise the objective to establish street walls with boundary to boundary development.

It is also noted that a range of other local provisions interact with the Policy. In particular, the Policy will rely on (and reinforce) MSS, proposed policy, ACZ and DDO provisions relating to environmentally sustainable design and universal access. Clause 52.06 establishes the basis for dispensations from standard parking requirements.

#### Panel Conclusion

- Revisions to the Policy during the course of the Amendment process have explicitly recognised that the proposed Coburg ACZ and Brunswick Activity Centre DDOs will determine a number of significant built form outcomes.

## Panel recommendations

**Under the scope of the Policy, indicate that place based policies or planning scheme provisions prevail where there is conflict with the Policy/Code provisions.**

**Highlight under the policy basis the relevance of other planning scheme provisions that address, for example:**

- **The scale of development and built form**
- **Interface treatments with the public realm and residential areas**
- **Environmentally Sustainable Design**
- **Universal access.**

### **4.2 Should the planning scheme address matters addressed by the NCC and other legislation?**

The proposed Policy/Code increases standards that would otherwise apply relating to daylight (boundary setbacks, light courts and setbacks to windows) and accessibility. It also increases standards for balconies, compared to those applied to other housing under ResCode.

The submission from the HIA articulated the concerns of others representing developers that another layer of local planning controls would contribute to confusion, uncertainty and unnecessary delays for the industry and the community. It submitted:

*In HIA's view, councils should be prevented from using planning policies as de facto building regulations. Councils should not be able to impose requirements on industry and the community which are additional to, or conflict with, the National Construction Code requirements or State building regulations.*

*The requirements can add to the already overwhelming amount of red tape with designers being forced to design to them in order to achieve a mandated standard - rather than exploring a range of solutions and applying the solution that is most efficient and effective in terms of cost, time and design outcomes.*

While the standards proposed are discussed in Chapter 5, it is noted here that, as a matter of principle, departures in local provisions from State-wide and national benchmarks require strong justification. There has been long standing, bi-partisan support to achieve a consistent framework for regulating development across Victoria. The justification for local provisions may relate to the specific circumstances in a locality (for example a variation to bushfire risk mitigation measures in areas of extreme hazard), to address gaps in the higher level regulatory framework, or to address a form of development not envisaged by the State or national regulations.

### 4.3 The role of prescriptive requirements

Concern was expressed in submissions and evidence presented at the Hearing that a *'one size fits all'* approach based on prescriptive standards can *'dumb down'* the design and assessment of proposals to a formulaic, *'tick the box'* exercise.

The clarification in pre-Hearing Amendment documentation that the Policy maintains the approach in ResCode and does not propose mandatory standards was welcomed by objecting submitters and experts and is endorsed by the Panel.

The Panel considers standards have a role to establish a level of certainty, for both designers and the community, about acceptable benchmarks. However, the performance based framework in Victoria is predicated on site responsive development with an emphasis on achieving intended outcomes. We also consider that the fundamental role of urban context report, the site analysis and the design response should be more prominent in the policy and should have a central role in the assessment of development proposals. This emphasis on performance outcomes and site responsive design should inform the consideration of basic issues of site layout, such as ensuring equity in development opportunities between sites, to departures from more detailed prescriptions in the standards, such as whether adequate daylight or privacy will be achieved.

#### Panel recommendation

**Identify the central role of the urban context report, site analysis and design response in the assessment of apartment proposals and the exercise of discretion to depart from prescriptive standards.**

### 4.4 Should the Code be an incorporated or a reference document?

The authorisation of the Amendment included the following advice:

*As previously advised, the Department considers that the Moreland Higher Density Design Code is not essential for decision making and should be included as a reference document in the Moreland Planning Scheme rather than an incorporated document.*

#### 4.4.1 Submissions and evidence

Council and the City of Boroondara submitted that incorporation of the Code in the planning scheme is important to ensure it is accorded sufficient weight in decision making and review by VCAT.

On the other hand, submissions from those representing development interests and the evidence argued that it should be a reference document on the following basis:

- The Policy extracts the objectives, standards and decision guidelines from the Code to establish the basis for planning decisions.
- Incorporation would be contrary to the DTPLI *Practice Note 13 - Incorporated and Reference Documents, October 2013* because the Code is not essential to the administration or enforcement of a planning scheme.
- As an incorporated document, it would be more difficult to amend the Code to ensure its content is current and relevant.

#### 4.4.2 Discussion

The Panel agrees with submissions that the Policy has extracted from the Code the key elements necessary to guide planning decisions and it is not necessary for the Code to be incorporated. As noted elsewhere in this report, the Panel does support the inclusion in the Policy of Code content relating to application requirements (in an edited form and with an emphasis on the site analysis and design response) to reinforce this important part of the planning framework.

Otherwise, the Code's status as a reference document facilitates its role in providing guidance, rather than regulation, on matters such as more detailed application documentation requirements, potential design responses, building typologies, building width, ventilation and the like. It would also facilitate the inclusion of additional supporting material without the need for a further planning scheme amendment.

#### Panel recommendation

**Include the Code (updated to reflect changes since the exhibition of the Amendment) as a reference document to the proposed Clause 22.07 Policy, rather than as an incorporated document in the Moreland Planning Scheme.**

### 4.5 The scope of the Policy/Code

#### 4.5.1 Submissions and evidence

The City of Boroondara submitted that a number of design aspects that were included in the exhibited Code but deleted following the exhibition period should be retained. These include objectives and standards relating to:

- Building depth which addressed visual bulk impacts and optimised daylight access and cross ventilation. Officers submitted that *'the ideal depth of any apartment building, especially above podium should be 18 metres. This maximum building depth would allow natural cross ventilation in a building with a double loaded corridor. In turn, apartment development will have less visual impacts on the surrounding area due to a more slender form.'*
- Public realm interface treatment which addressed building frontages, building articulation, awnings, and vehicle entry. Officers considered the exhibited provisions represent universally accepted design outcomes that apply to any apartment development but which have not been clearly prescribed in planning schemes. The consolidation of generic design objectives would avoid the need for site or area specific DDOs or development plans with repetition in multiple local area provisions.

The City of Boroondara also submitted that many illustrative diagrams, cross sections, floor plans, etc. that have been deleted in the interests of achieving a more succinct and user friendly document, assist in interpreting the objectives and standards.

#### 4.5.2 Discussion

As a reference document, there is scope to provide broader guidance about design considerations and potential solutions to achieve the intended outcomes. The Code can articulate likely responses to different types of sites (for example, through the building

typologies) or common benchmarks for specific issues (such as for building depth and ventilation). It can also be an aid to interpretation of the objectives and standards in the Policy, through explanation of the basis for policy provisions (such as daylighting and building separation standards), and therefore circumstances where the exercise of discretion would be appropriate. Illustrations in the Code can certainly assist in this role and the Panel agrees with the submission that the reinstatement of diagrams should be considered.

The Panel recognises that the depth of buildings is an important factor in achieving daylight, ventilation and built form outcomes. However, while it is reasonable to address the issue and the merit of avoiding excessive building width, we are not convinced that a particular prescription has been justified.

The Panel agrees with Council that it is appropriate to delete the public realm (and residential zone) interface treatments in the Policy/Code. The proposed area specific ACZ and DDOs address these issues for the areas to which the Policy/Code will apply and different provisions in the Policy/Code would be a source of ambiguity. If the Policy/Code was to apply more broadly, for example to apartment development of less than five storeys in other locations, it would be appropriate to address these issues.

#### **Panel conclusions**

- As a reference document, there is greater scope for the Code to provide guidance that will assist in interpreting Policy objectives and standards. This could extend to reinstating some supporting graphic illustrations.
- The deletion of Policy content that is addressed by the area specific planning scheme provisions (the proposed ACZ and DDOs) is appropriate to avoid ambiguity.

#### **Panel recommendation**

**Review the graphic illustrations in earlier versions of the Code with a view to reinstating those that remain relevant and will assist in the interpretation of the objectives and standards in the proposed Policy.**

## 5 Code and Policy provisions

### 5.1 Building typologies

#### 5.1.1 The issues

- Is the building typologies 'approach' sound?
- What is the role of the typologies in design, assessment and decision making?

#### 5.1.2 What is proposed?

Council does not propose to include the building typologies in the Code as a part of the Policy.

The Code describes the building typologies as follows:

*A building type is a generic building form that is suitable for a particular type of site and context. It is not a building but a desired 3D envelope which can be modified to allow site-specific response and architectural details. The purpose of defining building types is to identify the built form considered ideal for various sites common to Moreland.*

The following six building typologies are identified, although it is noted in the Code that larger sites may have a combination of more than one building type:

- Narrow lot building
- Block building
- Slab building
- Tower building
- Courtyard building
- Hybrid building

#### 5.1.3 Submissions

Boroondara City Council supported the inclusion of the building typologies, while acknowledging that each site needs to be considered on its merits. It was submitted that the building typologies provide a starting point for site responsive design. They are a useful tool for designers in selecting the right building type for a site based on the analysis in the Code, and would assist in achieving the various objectives. Further, the images of lot scenarios provide prospective planning permit applicants with an easy to understand reference for selecting appropriately sized and shaped sites to ensure appropriate apartment design.

#### 5.1.4 Discussion

The building typologies section of the Code illustrates how the outcomes of the Policy may manifest themselves in design outcomes. At the Hearing, it was clear that Council has spent considerable time thinking about typology and studying the effects of their proposed Policy. It would be reasonable to expect that a designer who has not worked with or tested the policy before may find some guidance in this part of the Code and, importantly, some insight into how Council sees the Policy will be applied for different site types.

Whilst we believe this guidance will be valuable for applicants and do not wish to understate its value, we see it as guidance only and its application should not exclude innovation and good design that manifests itself in alternative forms.

Council does not intend to include it in the Policy, and the Panel agrees that it should not.

### **Conclusions**

- The building typology part of the Code provides valuable guidance that illustrates how Policy may manifest itself in the built form and is likely to be a useful design tool for applicants.

## **5.2 Building orientation**

The issues

- Should building orientation provisions address amenity and passive design outcomes for existing buildings?
- Should there be an additional standard prescribing the maximum % of single-aspect, south-facing apartments in a development?

### **5.2.1 What is proposed?**

The proposed Policy aims to:

- Ensure that site layout and building orientation optimise solar access to dwelling living areas and open space areas
- create an identifiable address to the street and/or the public realm
- provide opportunities for passive surveillance of the public realm
- Ensure public parks or reserves are substantially fronted by dwellings or open space whilst avoiding a sense of privatisation of the public space.

### **5.2.2 Submissions and evidence**

Ms Bigolin noted that the building orientation objectives are only concerned with the ability for future development to achieve reasonable amenity and passive design outcomes. She queried whether the amenity and passive design outcomes for existing buildings should also be an objective under this section.

The City of Boroondara submitted that the Policy/Code should address the poor internal amenity of single-aspect, south-facing apartments through an additional standard that limits the percentage of these types of apartments in a development.

Mr Ellenbroek generally supported the building orientation provisions. However, he highlighted that orientation to both optimise solar access and minimise amenity impacts on adjoining properties will be directly competing requirements on many sites.

Mr Zagami argued that one approach to building orientation and outlook for all development of five or more storeys ignores the variety of ways in which particular internal apartment spaces can satisfy residents' needs. He referred to a range of circumstances where maximising northern orientation may not produce an optimum outcome and emphasised the need to respond to the site attributes and its context. He also referred to differences in residents' preferences and how they may use the apartments. For example:

- Excellent views of the city or a public open space may be ignored if prescribed standards apply
- A northern orientation may establish an outlook which could detract from internal amenity, such as a petrol station or carwash (such as at 251 Sydney Road, Coburg)
- Living spaces with a western orientation and adequate shading of summer sun capture the afternoon sun and are very pleasant for eight months of the year in Melbourne
- Artists, for example, prefer south facing windows to have controlled levels of light.

Mr Zagami referred to 201-207 Albert Street Brunswick which, in his view, successfully utilised the southern aspect to allow residents an outlook towards the city and Randazzo Park, while deep balconies along the western edge restricted the penetration of afternoon sunlight. He also referred to the highly regarded apartment development at 7 Florence Street Brunswick (The Commons) where half of the apartments have south facing balconies providing views towards the city and there is a communal roof deck with unimpeded solar access.

### **5.2.3 Discussion**

Council acknowledged that most of the development sites in the activity centres where larger buildings will prevail, have west-east orientation because of the north south orientation of Lygon, Brunswick and Nicholson Streets. This restricts access to northern sun. Council therefore believes that daylight access will usually take precedence over solar access. This does not mean that where solar access is available it should not be capitalised upon, however, building separation will have a greater influence on amenity outcomes.

As already emphasised, the Panel considers that a site analysis and design response should be fundamental to the apartment design and evaluation process. The Panel does not support the addition of a prescribed maximum percentage of single-aspect, south-facing apartments in a development.

It is noted that streetscape outcomes will be determined under the requirement of the Activity Centre Zone and the DDOs.

### **Conclusion**

- While building orientation should optimise the amenity enjoyed by apartment residents and the environmental sustainability of the development, it will be largely determined by other influencing factors.

## **5.3 Building separation and lightwells**

### **5.3.1 The issues**

- How does building separation manifest itself in the consideration of daylight, outlook, overlooking and equitable development?
- Are the proposed requirements relating to building separation and lightwells reasonable?

### 5.3.2 What is proposed?

The building separation requirements relate to within sites, to adjoining sites, and to laneways. The Policy aims to ensure that buildings are separated to ensure adequate levels of daylight and outlook, there is no unreasonable overlooking and that equitable development opportunities within the site and for adjacent sites are maintained. In doing so, landscaping opportunities should be created.

There were a number of iterations of these provisions during the course of the Amendment process. Prior to the Hearing some changes of particular note were:

- Building separation standards for buildings within a site were revised to address circumstances where there was no outlook. This addressed a gap identified by Council statutory planning officers.
- The building separation distances to adjacent properties have been reduced for no outlook to side boundary and no outlook to rear boundary, to recognise that smaller separation distances provide sufficient space to achieve adequate amenity for dwellings in these scenarios.
- Secondary outlook to no outlook separation distances were included. Feedback from Council's City Development (statutory planning) officers is that there has been a number of examples where there have been primary and secondary outlook to no outlook but there were no standards in the original Code to provide guidance on this matter.

By the end of the Hearing, the following standards were proposed:

- Building separation distances (measured from glazing line to glazing line of habitable rooms or the external edge of any balcony, whichever is the lesser) should comply with the Tables 22.07.1-1, 22.07.1-2, 22.07.1-3 (see below).

Table 22.07.1-1 Building separation for buildings to adjacent properties.

Minimum building separation (measured from property boundary)			
	Living/Main balcony outlook to boundary	Bedroom outlook to boundary	No outlook to side or rear boundary
Up to 4 storeys/12 metres	6 metres	3 metres	0 metres
5-8 storeys/up to 25 metres	9 metres	4.5 metres	*
9+ storeys/over 25 metres	12 metres	6 metres	*
Notes: * Building separation is not required to the side or rear boundary where no outlook is proposed provided it does not affect the reasonable development opportunity of the adjoining site			

Table 22.07.1-2 Building separation to a lane.

Minimum building separation (measured from the centre of the lane)		
	Living/Main balcony outlook	Bedroom outlook
2 storeys (9 metres high)	0 metres (from boundary)	0 metres (from boundary)
3-8 storeys (up to 25 metres)	6 metres (from centre line of lane)	3 metres (from centre line of lane)
9+ storeys/over 25 metres	9 metres (from centre line of lane)	6 metres (from centre line of lane)

Table 22.07.1-3 Building separation for buildings within sites.

Minimum building separation					
	Living/main balcony outlook to living/main balcony outlook	Bedroom outlook to bedroom outlook	Living/main balcony outlook to bedroom outlook	Living/main balcony outlook to no outlook	Bedroom outlook to no outlook
Up to 4 storeys/12 metres	12 metres	6 metres	9 metres	6 metres	3 metres
5-8 storeys/up to 25 metres	18 metres	9 metres	13.5 metres	9 metres	4.5 metres
9+ storeys/ 25+ metres	24 metres	12 metres	18 metres	12 metres	6 metres
* The building separation requirements commence at the first level of residential use					

- Zero building separation applies on sites where a continuous street wall is encouraged under the relevant place-based control (i.e. the ACZ or relevant DDO).
- Reliance on lightwells for daylight should be minimised. Where lightwells are provided, they should:
  - Provide daylight access to bedrooms only
  - Be painted in a light reflective colour
  - Provide an opportunity for useable space at ground level
  - Bedroom windows facing lightwells should be staggered to avoid direct overlooking
  - Lightwells should comply with either of the following dimensions:

Lightwell (enclosed with minimum 3 walls)		
		Area
Up to 4 storeys/12 metres	3m x 3m	9m <sup>2</sup> (minimum width 2m)
5-8 storeys /up to 25 metres	4.5m x 5.5m	29m <sup>2</sup> (minimum width 3.5m)
storeys/over 25 metres	6m x 8.5m	51m <sup>2</sup> (minimum width 5m)

### 5.3.3 Evidence and submissions

Council summarised the submissions made as a result of the first and second exhibition processes as follows:

*Concerns raised in the original exhibition included (See submission No.'s 4, 10, 11, 16, 21, 22, 30, 36, 48, 54 and 55):*

- *Will have undesirable economic and social impacts;*
- *Will have an impact upon project feasibility and limit the development potential of many sites;*
- *Will impact on housing affordability; and*
- *Requirements are excessive and too onerous, prescriptive and conflicts with other controls.*

*In addition, two submitters (No.'s 16 and 54) expressed concern that lower levels of buildings are provided with greater building depth allowance where in fact light access to these levels is less than upper levels and that there was no consideration as to whether or not an apartment had a north facing aspect.*

*Concerns were also raised that the distance schedules are unclear and unhelpful.*

*Similar concerns were raised in the second exhibition of the Amendment (See submission No.'s 1, 3, 4, 5, 6, 9 and 11).*

*No alternative building separation guidelines were suggested in the submissions.*

Ms Bigolin highlighted that building separation objectives do not address existing buildings that are not in the R1Z. She submitted that the minimum separation distances imply that the lower levels of buildings (not located in the R1Z) will always be in shadow and have reduced levels of amenity (daylight, outlook, solar access, views etc.). Ms Bigolin submitted that the standards lack detail with regard to overshadowing of existing apartment buildings habitable room windows. Furthermore, while one objective in this section raises the different amenity expectations of areas in activity centre, business and mixed use zones compared to areas in residential zones, there is no information or guidance on what these amenity expectations are and how they are defined.

The City of Boroondara submitted that standards relating to building orientation, building separation, daylight access, natural ventilation and ceiling heights are the aspects of greatest concern and areas where the majority of apartment developments fail. It submitted, in summary, that:

- Design objectives and standards relating to building separation are urgently needed to address one of the areas consistently sacrificed to maximise the building envelopes and dwelling yield.
- The proper consideration of building separation as part of the early design and planning permit process will have positive flow on effects for many other aspects addressed in the Code.

Evidence from both Mr Ellenbroek and Mr Zagami questioned the rationale and basis for the nominated separation distances (in the exhibited Policy/Code). They both expressed concern that separation distances are unreasonably onerous. They considered the separation distances required will make it difficult, if not impossible, to develop many narrow or smaller sites that are capable of supporting contextually appropriate built form of five or more storeys in line with Policy objectives. Mr Ellenbroek compared the proposed building separation requirement of up to 24m above a height of 25m<sup>16</sup>, with the DDO for Southbank<sup>17</sup> which nominates a separation distance of 20m for tower forms above 30m high (with discretion to allow lesser separation distances).

In particular, Mr Zagami and Mr Ellenbroek considered:

- Blanket setback standards to shared boundaries with neighbouring properties fail to acknowledge that each property has different interface conditions (Zagami and Ellenbroek). Mr Ellenbroek expressed concern that this *'has the potential to relegate the importance of site responsive design and promote formulaic, unimaginative and less appropriate built form outcomes. This is contrary to the purpose of the Amendment expressed in the Explanatory Report to emphasise the importance of site responsive design.'*
- It makes little sense for the separation distances for *'buildings within sites'* and *'buildings to adjacent properties'* to apply to ground level dwellings, particularly in commercial and mixed use settings where intensive built form character is supported (Ellenbroek).
- Setbacks of 6-12m for buildings between 3-9+ storeys would be excessive, particularly where the lane or the adjacent property are not sensitive (Zagami).
- Minimum building separation of 6m and 3m respectively where the primary or secondary outlook is to no outlook is not necessary in all circumstances (Zagami).
- The setback expectations for apartments with an outlook to neighbouring properties are more onerous than the setback requirements of ResCode (Clause 55.04) for a building's first four levels, which would be unnecessarily confusing and unhelpful (Ellenbroek).
- Specifying setbacks to such an extent, may unwittingly produce a less than ideal urban design outcome where apartment buildings resemble one another in shape, as has occurred as a result of ResCode (Zagami).
- The expression of separation distances should be simplified. The 15 permutations concerning building separations within a site, 12 permutations for building separations to adjacent properties and 12 permutations for building separations to a lane is unclear and unhelpful (Ellenbroek).
- There is not sufficient justification to restrict light courts to bedrooms, only given their demonstrated ability to bring sufficient light into habitable rooms. Apartment buyers and renters have come to understand the advantages and limitations of light courts and Council cannot presume that residents will use a living room any more than a second bedroom, especially where the unit is used for living and working (Zagami).

Mr Zagami expressed the view that, subject to the minimising external impacts on adjoining properties, the requirement for development proposals to address the reasonable

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<sup>16</sup> Table 22.11.1-1 Buildings within sites.

<sup>17</sup> City of Melbourne - gazetted in 2013.

development opportunity of adjoining properties should not necessarily be used to prevent particular development forms. He highlighted the need to take account of *'fixed assets'* which are unlikely to be redeveloped, even in the long term future, such as buildings with high heritage significance and recently constructed buildings. Mr Zagami also questioned how Council can presume to know how a resident will use the apartment space and therefore what will be primary or secondary outlooks.

Council submitted that, with planning objectives to encourage a higher density built form outcome for its activity centres and the prospect that a high proportion of sites being developed with apartments, the building separation requirements are critical to addressing the fundamental amenity issues of daylight, outlook and privacy.

The Council's analysis of 20 case studies found that:

- In most proposals with one building within a site (rather than separated buildings) internal amenity was affected.
- Where there were separate buildings within a site, the distance of the separation was adequate in most cases.
- Inadequate building separation to adjoining sites affected the development opportunities of those adjoining sites.

The findings of the testing by design relating to building separation included:

- The building separation requirements were the most difficult of all the requirements to apply (Hayball).
- The setbacks were too onerous to be broadly applied to all sites and that these standards would make it difficult to develop sites with existing complex interfaces. Replacing the primary outlook to secondary outlook building separation with the secondary outlook to secondary outlook (i.e. to reduce the distances) was recommended (Hayball).
- The tiered building setbacks created large floor plates at lower levels and larger apartment types in less desirable locations. Review of the standards and the development of guidelines allowing for alternative solutions that take into account context and orientation was recommended (Hayball).
- Drafting issues should be addressed, with recommendations to:
  - Use consistent language across the three tables.
  - Clarify the meaning of primary outlook and secondary outlook. It was suggested that primary outlook be defined as the outlook from living areas and secondary outlook be defined as the outlook from bedrooms (SJB Urban).
  - Reorder the three tables to deal with external impacts before internal impacts building separation to adjoining sites (SJB Urban).
- The external amenity impacts guideline should be brought into this section as it gets *'lost'* at the back and is confusing as to the desired outcome (SJB Urban).
- Justification is required for the different building separation guidelines to lanes and the zero setbacks for buildings up to two storeys/nine metres to lanes was questioned (SJB Urban).

Council engaged SBE Consultants to prepare a report to quantify the minimum requirements for apartment development to achieve a suitable level of daylight in occupied spaces (see Chapter 5.3). Council officers then applied the SBE analysis in developing the separation

distance required to achieve the daylight targets for a typical apartment. The building configuration outcome of the calculations was that as the height of the building increases, the amount of separation increases (and does so proportionally to the height).

Council noted that:

- The NSW draft Apartment Design Guide (ADG) contains similar requirements, except for buildings between five and eight storeys where the separation distance between habitable room/non-habitable room (i.e. primary outlook to no outlook) is 12 metres in the draft ADG and 9 metres in the Policy/Code.
- The Policy/Code addresses outlook from habitable rooms only and distinguishes between primary and secondary outlooks.
- The Policy/Code provides two options for the measurement of the distances between buildings (whichever is the lesser), being from glazing line to glazing line, or the external edge of any balcony.

In its closing submission, Council noted that where no outlook is proposed in a new development there is no need for building separation, unless there is a prospect of development of the adjoining site that is likely to have some outlook to the development site. In these situations, it is proposed to require a plan to be submitted during the pre-application process that demonstrates that a reasonable development opportunity of the adjoining site will be maintained. The Code's building types would inform this analysis. Council proposed to add the following decision guideline:

*Building separation is not required to the side or rear boundary where no outlook is proposed provided it does not affect the reasonable development opportunity of the adjoining property.*

Council supported revised requirements for lightwell dimensions that will ensure adequate daylight into bedrooms (i.e. a daylight factor of 0.5) in response to proposals for the narrow lots along Sydney Road, Lygon Street and Nicholson Street corridors typically involve building to the side boundaries with 'matching' lightwells on each side of the boundary to provide daylight into habitable rooms. This makes redundant the 'exemption' under Table 22.07-5.1 that allows narrow lot buildings to have a blank wall up to six storeys.

Council proposed to maintain the note allowing for a continuous street wall but supported deletion of the exemption of the first 18 metres of building envelope (i.e. from the frontage) from the building separation requirements. The exemption was considered too prescriptive and the appropriateness of the depth of the building to ensure a continuous street wall will be considered on a case by case basis.

Revision of the separation to be provided to protect the outlook/daylight of existing buildings on an adjoining site was proposed to acknowledge the extent to which the existing building has contributed to meeting its own needs. It is proposed to include the following decision guideline to address this type of scenario:

*In situations where existing dwellings have not reasonably incorporated access to daylight on their own site, the building separation standards will only apply to the extent that allows some amount of daylight into the habitable rooms of those dwellings.*

With the inclusion of this decision guideline, Council proposed to delete the section on external amenity impacts.

Council proposed to add the following standard: that *'Bedroom windows facing lightwells should be staggered to avoid direct overlooking'*. If bedrooms windows are staggered, the lightwell dimension will be treated as *'Bedroom Outlook to No Outlook'* and the separation distance of 3m will be consistent with other separation distances in the Policy/Code.

It was also proposed to delete the reference to ventilation on the basis this is not relevant to this section.

### **5.3.4 Discussion**

The effects of building separation and the purposes that govern it are four fold:

- Daylight
- Outlook
- Overlooking and
- Equitable Development.

Each of these purposes has its own specific set of parameters that will influence how a building is designed and will also create opportunities for communal open space and landscaping.

Council initially proposed separation distances that resulted from its research into the four purposes and that research also informed their proposals on building typology. The analysis undertaken relating to daylight (see discussion in Chapter 5.3) provided the critical element of the rationale for the proposed separation distances, which are also intended to meet multiple other objectives.

The Amendment is supported by more rigorous technical analysis on matters such as urban design and built form, daylight, and ESD than is typically presented. The analysis of case studies undertaken by Council and testing by SJB Urban and Hayball Architects of the implications of the Policy/Code for apartment design also provided useful insights and have informed both revisions put forward by Council and the Panel's recommendations.

While Council believes that there could have been some misinterpretation of Policy/Code provisions during the testing by design, that assessment did indicate that the proposed building separation standards are demanding and full compliance with them unnecessarily affects yield.

If the objectives can be met and, at the same time, loss of yield is mitigated, this is the optimum outcome. The Panel maintains the view that a performance based approach can capitalise on the urban intensification sought by State policy, without loss of opportunity, amenity or yield. However, there has been strong call from some Councils, some sectors of the design professions and the community, for greater certainty about development outcomes and better apartment design.

The Panel has significant concerns that the substantial increase in separation distances prescribed in the Policy/Code will have adverse impacts on development yields and hence housing affordability. While we share the view of both Mr Ellenbroek and Mr Zagami that loss of yield cannot be ignored because of the risk of affecting dwelling costs and therefore

affordability, there have been examples of poor development where a lower yield would achieve a more acceptable outcome.

We note that some building separation standards have been modified to take into account policy to establish a street wall and to avoid the unnecessary loss of space where no outlook is proposed or likely. Council proposed to specify that the separation distance applies from the first level of residential development. This change recognises that the Policy/Code will apply in activity centre locations and significant portions of the ground level will typically be a non-residential use.

During the evolution of building separation standards, it was proposed to allow on boundary construction for the first 18 metres depth of a site. However, further review recognised that the continuous street wall provisions of the ACZ and DDOs address this issue, and these place based provisions take precedence over the Policy/Code standards. Council has now concluded that the depth of boundary to boundary development behind the street wall should not be prescribed as sites of varying configurations will have inherent differences. The same could apply for the rear of larger sites where adjoining lots may result in the same design response. This would mean that it is more the central portion of longer sites and the rear portion of shorter sites where the objectives and standards relating to outlook, overlooking and daylight are most likely to dictate building envelope and the opportunities for adjacent sites.

The proposed building separation standards recognise that outlook will be different between living rooms or bedrooms in the same dwelling, or living rooms and bedrooms in different dwellings. Recognition of these differences in the Policy/Code started out as primary, secondary and no outlook, but they evolved into more easily understood living / bedroom / main balcony/boundary and no outlook through the course of the Hearing, to the provisions put forward by Council at the end of the Hearing.

The preservation of equitable development opportunities is influenced by combining space across boundaries to meet reasonable levels of daylight, outlook and overlooking. The Panel considers the proposal to inform the assessment of planning applications through a study of how the application will provide equitable development opportunities for adjacent sites is a sensible approach. The '*law of the jungle*' or '*first in best dressed*' approaches were discussed as arbitrary and potentially unfair and, put simply, if it can be demonstrated to adjoining owners how their rights are maintained, it takes the fear of the unknown out of potential argument in the application process. Equally, by carrying out such a study, applicants can ascertain that they are not defending adjoining development rights unnecessarily.

With regard to Ms Bigolin's concerns about protecting the amenity of existing buildings not in a residential zone, the Policy/Code will apply to areas where policy supports change in the form of more intensive development and this will affect what is judged to be reasonable amenity expectations for existing low scale buildings. The revised '*equitable development*' provisions would take into account the level to which that property has been developed with an expectation that the provision of amenity will be shared by adjoining properties and the extent to which the existing property has contributed to meeting its own amenity needs.

We consider the revised provisions are appropriate to allow this issue to be considered, having regard to the specific circumstances that apply to a proposal.

The NCC sizing for natural light and ventilation to light courts largely determine the benchmark for daylight to windows, which have underpinned current setback requirements. Discussion centred on these requirements being dated and not providing for taller, higher density buildings. The Panel accepts that NCC and ResCode daylight and setback requirements were not developed with taller built forms in mind and we consider the Amendment seeks to address this. Compliance with the NCC and ResCode may not achieve good amenity because outlook and daylight may be substandard.

The Panel endorses the proposed increase in standards for apartment light courts, however, we question the proposed form of the standard. It is only for buildings of 5-8 storeys that the prescribed light court area differs from that derived from the dimensions in the table. The nomination of different minimum widths in the two options in the table creates some ambiguity. It appears to the Panel that it would be simpler to specify a minimum dimension and area.

There has been a strong call from some councils, some sections of the design sector and the community, for greater certainty about development outcomes and better apartment design. The proposed standards provide benchmarks to address these concerns. However, we maintain the view that a performance based approach, where discretion is exercised to meet amenity objectives and, at the same time, minimises loss of yield, produces the optimum outcome.

We have accepted the increase in separation distances on the basis that the amenity for apartment residents should be addressed and the separation distances nominated are based on technical analysis to achieve daylight outcomes that are no more than those enjoyed in other forms of housing. Further, as part of the evolution of these requirements during the course of the Panel process, the setbacks have been moderated, for example, where there is no outlook (and therefore daylight is not a consideration) and to take into account recently established urban design objectives for the activity centres. Further, the equitable development assessment should take into account circumstances where the prescribed separation distance is not warranted (for example, where an adjoining heritage building is unlikely to be demolished or where redevelopment of a recent strata subdivided building is unlikely in the foreseeable future).

The Panel has significant concerns that the substantial increase in separation distances prescribed in the Policy/Code will have unnecessary impacts on development yields and hence housing affordability. We consider the Policy should be subject to a sunset clause to ensure there is a systematic post-occupancy evaluation of apartment development and to provide for review of the local provisions if a State-wide apartment code is introduced. Such an evaluation should address the effect of the requirements on housing costs and take account of the views of the residents, designers, developers and the community. This would provide a stronger basis for crafting an effective planning framework that addresses the critical elements in the most effective way. In addition to reviewing the effectiveness of the standards in achieving the intended outcomes, this evaluation should also address whether the exercise of discretion to depart from the benchmarks in standards meets objectives.

### Panel conclusions

- Although some separation distances have been moderated during the course of the Amendment process, the Panel has significant concerns that the substantial increase in separation distances prescribed in the Policy/Code will have unnecessary impacts on development yields and hence housing affordability.
- The building separation standards set benchmarks but a performance based approach should be adopted whereby discretion is exercised if it is demonstrated that adequate daylight will be achieved with a lesser setback (for example, where there are multiple aspects to gain daylight, having regard to the scale of development that should be anticipated on the adjoining land, or if the design incorporates features such as more extensive glazing than assumed in modelling).
- It is reasonable to trial the proposed separation distances and light court provisions as they provide for daylight comparable to that available to other forms of housing and are supported by more rigorous technical analysis, review of case studies and testing of proposed provisions than is typically presented.
- The Policy should be subject to a sunset clause to ensure there is a systematic post-occupancy evaluation of apartments and the operation of the policy and review if State-wide provisions are introduced.

### Panel recommendations

#### **Adopt a performance based approach to building separation through:**

- a) Emphasis in the application requirements on the site analysis and design response informing the design and assessment processes.**
- b) Including in the urban context report and design response an equitable development analysis to assess the implications for development opportunities and amenity impact within the application site and for adjoining sites.**
- c) Use of the tables in clause 22.07 as benchmarks and the Code as a reference document to provide further guidance.**
- d) The exercise of discretion to approve separation distances of less than the benchmarks in the standard where analysis demonstrates that daylight performance requirements are met.**

#### **Revise the building separation standards as follows:**

- a) Change the building separation distances to indicate that the separation distance applies from the first level of residential use.**
- b) Add *'Bedroom windows facing lightwells should be staggered to avoid direct overlooking'*.**
- c) Delete the *'exemption'* under Table 22.07-5.1 that allows narrow lot buildings to have a blank wall up to six storeys.**
- d) Maintain the note allowing for a continuous street wall but delete the exemption of the first 18 metre of building envelope (i.e. from the frontage).**
- e) Simplify the light court standard to only refer to a minimum dimension and area for buildings of different heights.**
- f) Add a note under building separation as follows:**

***Building separation is not required to the side or rear boundary where no outlook is proposed provided it does not affect the reasonable development opportunity of the adjoining property.***

- g) **Revise the separation to be provided to protect the outlook/daylight of existing buildings on an adjoining site to add:**

***Where existing dwellings have not reasonably incorporated access to daylight on their own site, the building separation standards will apply on the basis that:***

- ***New dwellings are provided with adequate daylight; and***
- ***The new development makes a comparable contribution to the provision daylight into the habitable rooms of those existing dwellings.***

## **5.4 Daylight access**

### **5.4.1 The issues**

- To what extent should apartments be designed for daylight access?
- What controls should be placed on borrowed light (and ventilation) and the configuration of apartments?

### **5.4.2 What is proposed?**

The proposed Policy/Code aims to ensure that dwellings have adequate access to daylight, through the following standards:

- All habitable rooms should have access to natural light which is to be principally achieved by compliance with Standard 22.07-4.2 – Building separation
- All habitable rooms should have an external window that is open to the sky or a balcony that is open for at least one third of its perimeter
- Living areas should not exceed a depth of 8 metres, except for south facing living areas which should not exceed a depth 5 metres
- Access to daylight to battle-axe rooms should not exceed 2.5 metres length from the edge of the external wall, should not be affected by any obstructions, should be clear to the sky, and should not be less than 1.2 metres width
- Buildings should provide windows to circulation corridors and lift lobbies to maximise daylight access
- Reliance on borrowed light to bedrooms should be minimised and be confined to studios and to no more than one bedroom in a dwelling provided
- An operable internal glazed door to the light source is included that is 25% of the floor area of the bedroom
- The light source contains full height external windows along the full width of the living room to allow adequate daylight
- Ceiling heights, measured from finished floor level to finished ceiling level should be a minimum of 2.7 metres for habitable rooms
- Developments which do not meet the above ceiling heights should demonstrate that dwellings will receive adequate daylight access.

It is noted that post-exhibition changes supported by Council included deletion of requirements:

- For 1m<sup>2</sup> of all living rooms and private open spaces to receive direct sunlight for 3 hours on the winter solstice
- That no more than 25% of bedrooms rely on borrowed light.

### 5.4.3 Evidence and submissions

As noted earlier, Council engaged SBE Consultants to prepare a report to quantify the minimum requirements for apartment development to achieve a suitable level of daylight in occupied spaces. The report outlines the NCC minimum requirements for natural light provision<sup>18</sup> and building geometry and compares this with the Green Star Multi Unit Residential tool<sup>19</sup>, which sets a high performance benchmark for daylight performance. The final daylight outcome is also dependent on a range of other interdependent factors, and will vary on a case-by-case basis. As stated in the SBE report in relation to the NCC (was BCA), daylight is not a performance requirement and:

*There are clear gaps in the NCC requirements and it is inadequate to ensure a minimum amount of daylight is achieved. Amongst other items that have not been defined to ensure adequate daylight they do not specify:*

- *Maximum room depth*
- *Minimum width of area open to sky outside a required window*
- *The outlook including the height of the wall the window is facing*

It was noted that even the 'leading edge' Green Star standards can still produce a proportion of poorly performing apartments.

The Policy/Code separation distances were devised to achieve a 1.0 daylight factor to living areas and 0.5 daylight factor to bedrooms<sup>20</sup> which SBE recommended as an acceptable minimum of daylight in new apartments. Euan Williamson, on behalf of Council, advised at the Hearing that this provides daylight to living areas to enable everyday household tasks without relying on artificial light during the day. The standard for living areas is considerably higher than the minimum NCC standard but is lower than the leading standard set in the current Green Star Multi Unit Residential tool. Council advised that this standard has been adopted by councils across metropolitan Melbourne through the Sustainable Design Assessment in the Planning Process (SDAPP) and have been included the reference documents for the C71 ESD Policy and also within Council's new BESS tool.

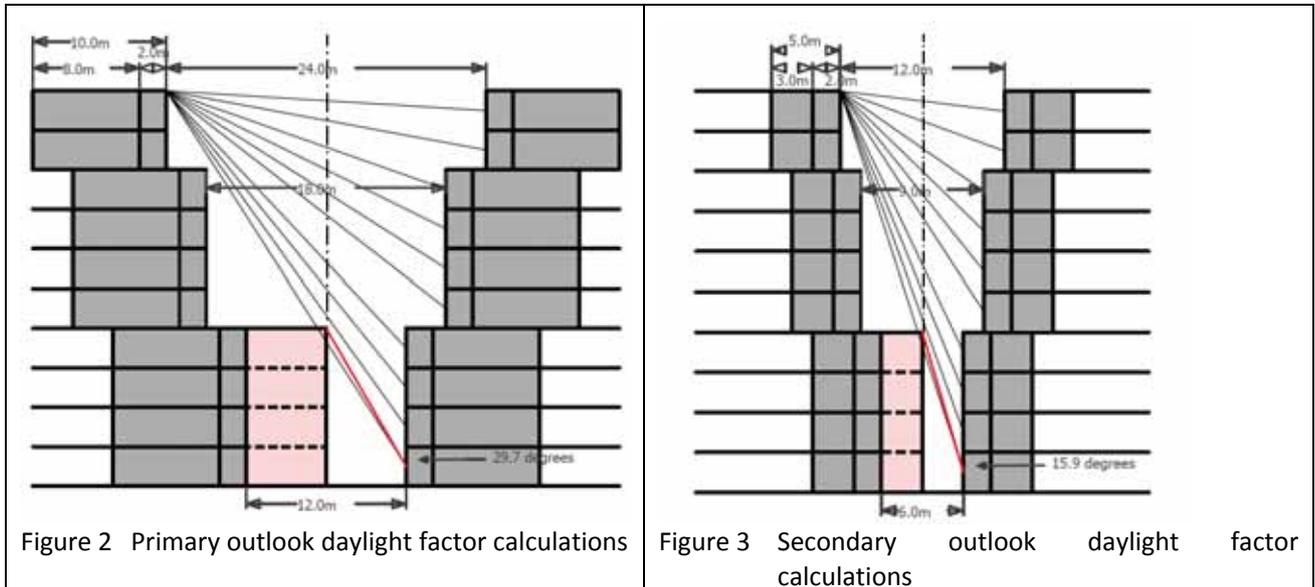
<sup>18</sup> The NCC does not set out a requirement for a minimum amount of daylight to be achieved into habitable rooms but sets out the building configurations of window size and distance to walls and boundaries.

<sup>19</sup> Green Star Multi Unit Residential tool V1 2009 credit IEQ-4 is a voluntary performance based framework that rewards excellent performance. It gives up to two points where it is demonstrated that a nominated percentage of the living area has a Daylight Factor of no less than 2% for kitchens and 1.5% for other living areas measured at the floor level under a uniform design sky.

<sup>20</sup> The targets for daylight factors into rooms are as follows:

- Living areas 1.0% for 90% of the room, or equivalent to approximately 2.15% room average
- Bedrooms 0.5% for 90% of the room, or equivalent to approximately 1.075% room average.

SBE developed two formulae to calculate the maximum apartment depth that would be required to achieve the recommended daylight performance. In broad terms, it was concluded that an apartment depth of 10 metres (which includes two metres of open balcony with 1 metre high balustrade) would be the maximum depth that would achieve the daylight targets. The separation distances were derived from this analysis and were translated to the building separation for buildings within sites standard (see chapter 5.2).



Council undertook some additional analysis in response to queries from the Panel about how the daylight performance under the standards for apartments compares with the performance achieved under setback requirements for other forms of housing under ResCode. This analysis concluded that the proposed standards did not impose a higher daylight standard than for other forms of housing under the NCC or ResCode.

The City of Boroondara considers natural light to all habitable rooms is a key area where improvements are urgently required, as many apartment developments incorporate a high number of bedrooms that rely on borrowed light from adjoining rooms, common areas or lights wells with minimal dimensions. It submitted that the requirement that no more than 25% of bedrooms should rely on borrowed light sets the bar too low and good design should be aspiring to ensure no habitable room relies on borrowed light.

Mr Ellenbroek expressed the view that:

- Restricting the depth of open plan living, dining and kitchen areas to 8m (or 5m if south facing) is an unreasonable design requirement and has no regard to the ability to enhance daylight access through the location and size of window openings. He noted that the application of the standard is not limited to single aspect apartments.
- The requirement for 1m<sup>2</sup> of all living rooms and private open spaces to receive direct sunlight for 3 hours on the winter solstice is unrealistic, noting that south facing apartments could not comply. He queried whether testing of the standard has been undertaken to determine whether compliance is readily achievable, particularly in dense activity centre settings.

- The suggestion that no more than 25% of bedrooms rely on borrowed light conflicts with the standard requiring all habitable rooms to have a window open to the sky.

It was Mr Zagami's opinion that buyers and renters can observe if a room does not have an external window and argued that people selecting those apartments may need or prefer darker spaces. He also considered that borrowed light from south facing windows may be acceptable, such as where windows are floor to ceiling over a large expanse. It was noted during Mr Zagami's evidence that most use of bedrooms is at night, when lights are required irrespective of access to daylight.

In its closing submission Council supported the revisions to the daylight provisions, particularly in relation to borrowed light, to only allow borrowed light for apartments of no more than one bedroom in a dwelling and to ensure at least a minimum amount of daylight to the bedroom relying on the borrowed light.

#### **5.4.4 Discussion**

Both the building separation and access to daylight provisions of the Amendment have critical implications for the form, amenity and yield of apartment developments.

The Panel accepts that provisions of the NCC and ResCode were developed primarily with low rise forms of housing in mind, rather than apartments and taller built forms. Council's submission demonstrated that the standards proposed for building separation and access to daylight were underpinned by technical analysis. The further analysis undertaken addressed a Panel concern that the proposed standards would impose higher daylight performance expectations than apply to houses, multi-unit development and lower-rise apartments under the NCC and ResCode.

There was no argument from any submitter or expert witness that access to daylight should be optimised or indeed maximised.

Discussion during the Hearing resulted in the suggested standards put forward, as above, in Council's closing submission.

However, in its submission, Council cited discussion that only one bedroom in an apartment can rely on borrowed light. The Panel agrees that such a concession should only be made in one-bedroom apartments and never for apartments with more than one bedroom. The occupants of single bedroom apartments, irrespective of the apartment orientation, have full control over their light and ventilation because they are the sole occupants. Therefore, we do not see that it is usually a problem to borrow light and ventilation in one-bedroom apartments. We note the consequential effect of ventilation inadequacies in two bedroom apartments where a bedroom(s) relies on borrowed light (and ventilation) if occupants want to sleep with their bedroom door closed for privacy reasons. The Panel accepts the new provision requiring a large door to the bedroom (25% of the bedroom floor area) but does not consider it should be required to be glazed - if the resident wants to access the borrowed light, they can open the door.

The Panel has significant reservations about the nomination of maximum depths of living rooms on the basis of poor daylight in part of the room on the lower levels of the building. We note that the daylight simulation '*model room*' was the bottom level(s) of the 10 storey

building scenario and assumptions were made about the amount of glazing. Provided that there is a reasonable area of the living room with good daylight, we do not think larger living rooms should be precluded because part of the room has low levels of natural light. For example, a future resident may prefer the extra space in the living room or kitchen, even if the depth of the room means that the area most distant from the window does not have the desirable level of natural light. The Panel does not support the prescription of a maximum depth for living rooms.

The Panel generally endorses the battle-axe room standard. However, although not canvassed at the Hearing, we suggest that the standard could be reframed to allow longer 'axe handles' if they are wider. This could result in more useable spaces. The standard could be couched in terms of a width to length ratio of 1:2.

Most buildings have orientation to all geographic directions and usually include a southern orientation. It follows that it will usually be difficult to avoid south facing apartments. We agree with Council's change in approach that, provided the design response minimises the number of south facing apartments and makes every effort to reduce the depth of them, an application should not be refused just because of its geographical disadvantages. It may well be that some buyers would prefer to have a bigger south facing apartment at a reduced price because it faces south, even if it is more than 5 metres to the bedroom wall or the living room is more than 5 metres deep. Providing this type of apartment is not the prevailing type we think there should be some flexibility.

#### **Panel conclusions**

- The daylight provisions of the Amendment have a sound basis in technical analysis.
- While the Panel agrees in principle with Council's direction, there should be some flexibility if it can be demonstrated that all of the standards cannot be met in certain instances.
- The prescription of maximum depths for living rooms and the requirement for glazing of the door to a bedroom relying on borrowed light are not supported.

#### **Panel recommendations**

**Revise Clause 22.07-4.3 Daylight access by:**

- a) Including in the fourth standard after '*obstructions*' '*and is clear to the sky*' and deleting the last sentence.
- b) Amending the standard relating to borrowed light as follows:
  - Reliance on borrowed light to bedrooms should be minimised and is only allowed for the bedroom of a one bedroom dwelling provided:*
    - i. *An operable internal glazed door is included to the light source that is 25% of the floor area of the bedroom*
    - ii. *The light source contains full height external windows along the full width of the living room to allow adequate daylight*
- c) Deleting the standard that prescribes the maximum depth of living rooms.
- d) Consideration of revising the battle-axe room standard in terms of a length to width ratio.

## **5.5 Ceiling heights**

### **5.5.1 The issue**

- Should the apartment ceiling heights that exceed the NCC requirements be prescribed?

### **5.5.2 What is proposed?**

The daylight access standard includes a requirement that ceiling heights (measured from finished floor level to finished ceiling level) should be a minimum of 2.7 metres for habitable rooms. This provision was relocated to the daylight access sub-clause, whereas earlier versions of the Policy included ceiling height as a separate sub-clause.

### **5.5.3 Evidence and submissions**

The City of Boroondara supported the proposed ceiling height objectives and standards as contributing to positive environmental effects and greatly improving the internal living amenity of apartments.

On the other hand, evidence from Mr Ellenbroek queried why a standard applying to retail and commercial uses is proposed in an amendment regarding apartment design. He considered the standard to be unnecessarily onerous as appropriate daylight penetration and amenity outcomes can be achieved in rooms with lower ceiling heights through placement and size of windows and internal layouts.

In its closing submission, Council:

- Advised that the minimum ceiling heights in habitable rooms has a principal purpose to ensure adequate access to daylight and the standard has been relocated accordingly.
- Proposed to include a ceiling height decision guideline in the dwelling size and layout sub-clause on the basis that this is relevant to the feeling of space within a dwelling and is a relevant consideration in the reduction of minimum dwelling size.
- Advised that most, if not all, applications for apartment development are complying with the standard of 2.7 metres ceiling height for habitable rooms.
- Proposed to delete a provision encouraging commercial ground floor uses, as the DDOs for Brunswick and the Coburg ACZ address the issue.

### **5.5.4 Discussion**

Opinion during the Hearing was consistent that higher ceilings contribute to the greater amenity of dwellings. Council has acknowledged that most applications now include 2.7 metre high ceilings and the experts acknowledge that the market appears to expect higher ceilings.

The Panel agrees that 2.7 metre ceiling heights are desirable and most apartment developments may be exceeding the minimum ceiling height specified in current regulations. However, we do not consider it is appropriate to impose a higher standard on apartments of five storeys in part of one municipality than applies to all other forms of housing in Victoria.

It is acknowledged that the analysis of daylighting assumed a 2.7 metre height and advice from Council, using the same methodology and calculations<sup>21</sup> that were used to develop the Code, was as follows:

*The analysis illustrates that a reduction of ceiling height to 2.4m would result in the loss of adequate daylight to approximately 2m of room depth. For example, instead of an adequate level of daylight reaching 8m into a living room that has a 2.7m ceiling height, the same room with a 2.4m ceiling height restricted the depth of adequate daylight to 6m.*

*It is interesting to note that the difference between a 3m ceiling and a 2.7 ceiling, is not as great as between 2.7 and 2.4m, indicating a sensitive threshold somewhere in the vicinity of 2.7m.*

*In conclusion, given that an additional 30cm of ceiling height enables daylight to travel an additional 2m deeper into a floorplan it can be demonstrated that ceiling heights of 2.7m are an effective mechanism of delivering internal amenity, when compared to the 2.4m minimum.*

It was clear at the Hearing, and as illustrated above, that changes to assumptions put into the model do not necessarily produce proportionate changes in the daylight outcome in a room. As ceiling height has been identified as a key determinant of daylight into rooms, we consider it should be addressed in the separation distances.

Although not canvassed at the Hearing, we put forward the option of specifying separation distances based on either 2.4 metre or 2.7 metre ceilings heights, with applicants able to choose which to adopt. That is, if a proposal provides 2.7 metre ceiling heights, the separation distance would be less than where a 2.4 metre ceiling height is used. This option would require further modelling to establish the relevant separation distance with a 2.4 metre ceiling height. Alternatively, as noted in Chapter 5.3, an applicant may justify lesser separation distances through a daylight analysis.

### **Conclusions**

- 2.7 metre ceiling heights are desirable and most apartment developments may be exceeding the minimum 2.4 metre ceiling height specified in current regulations.
- It is not appropriate to impose a higher standard on apartments of five storeys in part of one municipality than applies to all other forms of housing in Victoria.
- Further consideration should be given to specifying building separation distances based on 2.4 metre and 2.7 metre ceilings heights, with applicants able to choose which to adopt.

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<sup>21</sup> This includes the same assumptions on building separation, reflectivity of internal surfaces and the visual light transmittance of glazing. The same model 'room' was created at the bottom level of the 10 storey building scenario that was used in the development of the MADC, as it shown below. The daylight calculator simulated the impact on access to daylight in three scenarios; a 3m ceiling height, a 2.7m and a 2.4m ceiling height.

## Panel recommendations

**Delete the standard that requires a minimum 2.7 metre ceiling height for habitable rooms.**

**Consider specifying building separation distances based on 2.4 metre and 2.7 metre ceilings heights, with applicants able to choose which to adopt.**

## 5.6 Natural ventilation

### 5.6.1 The issue

- To what extent should natural ventilation standards exceed the requirements of the NCC?

### 5.6.2 What is proposed?

The proposed Policy/Code aims to ensure that dwellings have adequate natural ventilation, through the following standards:

- All habitable rooms should be naturally ventilated
- Cross ventilated dwellings should be maximised by:
  - Maximising the number of dual aspect dwellings
  - Incorporating a breeze path between two ventilation openings within rooms, or from one room to another, in accordance with the following:
    - The length of the breeze path should be a maximum of 15 metres, measured between ventilation openings and around internal walls, obstructions or partitions
    - The size of ventilation openings should be more than 1m<sup>2</sup> or more than 2% of the total floor area of the room, whichever is the greater
    - If on adjacent walls, ventilation openings should be at least 3 metres apart to ensure that the room has reasonable ventilation throughout
    - There should not be more than 1 doorway or opening less than 2m<sup>2</sup> between ventilation openings
    - Where the breeze path travels through a doorway, that door should be provided with catches to hold the door open. Where the doorway is the front door to a dwelling, a security screen door should be fitted.
- Where single sided ventilation is provided, the room depth should not exceed 5 metres
- Operable windows to circulation corridors and lift lobbies should be provided to facilitate natural ventilation
- Opportunities for external clothes drying should be provided.

### 5.6.3 Evidence and submissions

Council is concerned that health issues can result from mould and mildew borne humidity resulting from poor ventilation. Council submitted that the NCC has a minimum requirement for ventilation, Greenstar sets a high benchmark and the Policy/Code establishes appropriate standards in between the two.

Council engaged SBE to prepare a technical report on natural ventilation, the objectives being to improve the amenity of apartments by ensuring they are designed to maximise the benefits of natural ventilation by Increased fresh air rates/quantities, the comfort/cooling

effects attributable to good air movement, reduced energy costs from mechanical heating and cooling systems, whilst ensuring smoke management requirements are not compromised and allowing occupants to control the ventilation.

In summary, Council is keen to maximise dwellings with cross ventilation and to minimise those that are one sided.

Boroondara City Council generally supports the inclusion of standards to improve natural ventilation and specifically the standards to increase the number of dual aspect apartments within developments. However, they commented that the detailed, prescriptive standards for breeze paths might prove to be difficult to assess and distract negotiating or achieving the more fundamental apartment design improvements.

Mr Ellenbroek agreed that the standards are overly prescriptive and stray into an aspect of design already addressed in the NCC. He believes that the level of internal design detail and specification that would be necessary to demonstrate compliance with the suite of proposed standards is an unreasonable expectation at the planning application stage and that a 5 metre maximum depth for open plan living, kitchen and dining areas is unrealistic.

#### **5.6.4 Discussion**

Like natural light, there was no argument that the provision of good ventilation and cross ventilation should not be strived for. There was argument, however, against it being prescriptive because of the difficulties in administering prescriptive requirements, especially where the prescription is contrary to the NCC requirements. Whilst the NCC requirements are minima, and do not deal with cross ventilation, the opportunities to improve on these minima are likely to always be welcomed, but should not be prescribed.

It may be useful for the Code to provide guidance for applicants as to how effective cross ventilation can be achieved and what building initiatives could be incorporated into a design to mitigate any consequences of providing it. We endorse the objectives and elements of standards that are not prescriptive but we believe that prescriptive requirements would be onerous and very difficult to administer.

On the issue of single sided apartments being limited to 5 metres deep, this particular prescription could also create onerous design restrictions but guidance could be provided via the Code as a reference document.

#### **Conclusions**

- The pursuit of increased ventilation and cross ventilation opportunities is worthwhile.
- Guidance on how improved ventilation can be optimised would be likely to result in improvements to dwellings in general.
- The prescription of ventilation standards would be too restrictive given the complexities of building design and the individuality of sites.

#### **Panel recommendation**

**Retain elements of the natural ventilation standards that identified the measures sought in applications but delete all prescriptive requirements in those standards.**

**Retain the numerical values in natural ventilation standards in the Code to provide additional guidance.**

## **5.7 Thermal comfort**

### **5.7.1 The issue**

- To what extent should the Policy/Code prescribe standards that affect the thermal comfort of residents?

### **5.7.2 What is proposed?**

The proposed Policy/Code aims to ensure that dwellings have adequate thermal comfort, through the following standards:

- All dwellings should demonstrate that habitable room glazing receives adequate shading from summer sun and optimises solar access during winter. This could be via a combination of balconies, horizontal shading features and vertical shading features
- Where external shading is not provided to northern, eastern or western facades, effective thermal comfort levels should be achieved by demonstrating a maximum cooling load for each dwelling using accredited energy rating software
- Occupant control of the thermal environment should be facilitated. This could be through the provision of reversible ceiling fans, adjustable external shading devices, openable windows and zoning of mechanical heating and cooling systems where these are provided.

### **5.7.3 Evidence and submissions**

Council is keen to ensure that thermal comfort is provided to dwellings through the design of the building (rather than relying on mechanical services) to make the operation of buildings more efficient, reduce peak demand on electricity infrastructure and to build in resilience to climate change. Council submitted that thermal comfort has an influence on the health and wellbeing of residents, which can be enhanced when people feel a sense of control over the factors that influence it. Those factors include air temperature and movement, humidity, radiant heat and glare.

Mr Ellenbroek noted that Amendment C71 to the Moreland Planning Scheme, which is awaiting Ministerial approval, proposes to introduce an Environmentally Efficient Design policy. That policy nominates assessment tools and software to be used to assess the environmental performance of proposed buildings. Each of the nominated tools establishes best practice benchmarks to be achieved. He stated that most of the thermal comfort standards proposed are reasonable. However, Mr Ellenbroek questioned the need for prescription in relation to cooling loads when Amendment C71 proposes to address the issue.

### **5.7.4 Discussion**

There is no contention about the desirability to optimise thermal comfort by reducing the need for energy consumption through good design and this does not mean that occupant comfort cannot be supplemented by mechanical means when passive measures cannot cope.

The standards proposed are not prescriptive and are intended only to encourage good passive design outcomes. The added benefits of occupants being able to control their comfort through manually or mechanically controlled devices further enhances their wellbeing and is encouraged.

### Conclusions

- The proposed standards are appropriate and would encourage good thermal comfort design outcomes.

## 5.8 Dwelling size and layout

### 5.8.1 The issues

- Should minimum dwelling sizes be specified or should the functionality of the dwelling layout be the primary consideration?
- If minimum apartment sizes are specified, what is a reasonable minimum apartment size above which there should be flexibility for consumers to exercise their choice about how they allocate their financial resources?

### 5.8.2 What is proposed?

The proposed policy aims to ensure that dwellings are suitably sized and arranged to meet the needs of occupants and to enable flexibility of use, through the following standards:

- Dwellings should meet the following minimum size standards in the proposed Policy:

**Table C.2.2 Minimum Size Standards Schedule**

Studio	37m <sup>2</sup>
1 bedroom dwelling	50m <sup>2</sup>
2 bedroom dwelling	65m <sup>2</sup>
3 or more bedroom dwellings	90m <sup>2</sup>

In the Council's closing submission, it proposed to amend the standard to add the following:

*Layout plans of all apartment types should be provided to ensure the functionality and livability of dwellings. These plans should also show typical furniture layouts.*

### 5.8.3 Evidence and submissions

Council noted that the original version of the Code did not contain an element on dwelling size, however, a minimum dwelling size standard is proposed in response to concern about the increasing number of very small dwellings in apartment developments. Council referred to a study by the Royal Institute of British Architects (RIBA) on the importance of a reasonable amount of space for occupants, the identification of good and bad examples of

dwelling layouts in the 20 case studies, and comparisons with other apartment codes.<sup>22</sup> Council cited the RIBA study and the importance relatively small difference in floor space can make as follows:

*The RIBA report referred to above, 'The Case for Space'<sup>23</sup>, found that the average one bedroom home from a sample of 1,159 dwellings across 41 sites in England is 46 square metres. This is four square metres short of the recommended minimum for a single storey, one bedroom home for two residents. The report states:*

*4sqm is just a number. But in lifestyle terms it means ...*

*The equivalent of a single bed, a bedside table and a dressing table with a stool,*

*3 sqm is the equivalent of a 3 seat sofa and a desk and chair.*

*4 sqm is the space that allows you to work at home at the computer in the day and also have an extra sofa when you've got friends round in the evening. 4sqm might not sound like much but it could make everyday life a lot more comfortable ...*

*RIBA's report has been criticised because it does not allow for the growth of micro-apartments which is a choice for some consumers and assists in affordability. However, in Council's view it is important to require a minimum apartment size which will cater for the needs of typical internal living environments and that if a case can be made for smaller apartment sizes, Council will consider the case on its merits.*

Council's submission referred to the Testing by Design findings that:

- Mandatory minimum apartment sizes prevent smaller solutions that can achieve desirable amenity and encourage affordability. The sizes could be modified to address affordability or Council could allow a limited number of smaller apartments (Hayball).
- This objective deals with minimum size requirements and 'flexibility' as opposed to 'layout'. The layout of apartments more logically refers to the positioning of kitchens bathrooms, bedrooms and living spaces and is addressed primarily through the daylight access standards and the natural ventilation standards (SJB Urban).
- It would be beneficial to refer to other standards (such as daylight and ventilation) to the formulation of floor plans (SJB Urban).
- Apartment layout types would provide guidance for best practice (Hayball) and graphical examples of good and bad layouts would also be helpful to guide designers away from outcomes such as lengthy battle-axes, corridor kitchens and little to no storage and laundry spaces (SJB Urban).

<sup>22</sup> The OVGA draft guidelines adopted the same quantitative standards, the NSW draft ADG standards are: Studio is 35 m<sup>2</sup>, two bedrooms is 70m<sup>2</sup>; and three bedrooms is 95 m<sup>2</sup>, and the London Housing Design Guide (Interim Edition – August 2010) standard is 50m<sup>2</sup> for a single bedroom dwelling on one level for two people and 61 m<sup>2</sup> for a two bedroom dwelling on one level for three people.

<sup>23</sup> *The Case for Space: The Size of England's New Homes* Royal Institute of British Architects 2011.

The City of Boroondara considers objectives and standards regarding dwelling size and layout to be very important but submitted the minimum apartment sizes should be increased to at least the standards set out in the NSW Residential Flat Design Code. The City of Boroondara submitted that its experience and analysis of development in Boroondara suggests the following minimum floor area (excluding external private open space areas) to achieve appropriate apartment internal amenity:

- 2 bedroom dwellings 80+m<sup>2</sup>
- 3+ bedroom dwellings 100+m<sup>2</sup>.

The City of Boroondara also suggested it should be made clear whether the minimum size standards include outdoor private open space areas. It was their view that these areas should be excluded.

It was Mr Ellenbroek's evidence that:

- It is not necessary to stipulate minimum dwelling sizes
- Apartments that are smaller than the proposed minimum areas can be '*perfectly functional and amenable*'
- Intelligent, logical and flexible internal layouts are far more important to achieving high quality apartment design
- The requirement to provide alternative furniture layouts for all living rooms in a development will unreasonably and unnecessarily duplicate the documentation requirements at the planning application stage.

Mr Zagami did not support the '*one size fits all*' approach in the standard nor assumed apartment layout with conventional 3m x 3m bedrooms. It was his view that this standard:

*... does not allow for innovative layouts such as micro bedrooms, mezzanines and fold out beds which can result in more efficient use of a smaller space, providing affordability without compromising amenity ..... a minimum size may reduce affordability by imposing a higher entry price. This could reduce the locational choices of those with the less financial resources. Residents of small apartments are not necessarily forced to live in them, they are likely to trade-off 'place' for 'space'. Those who choose to live in sub 50sqm apartments may like to live in a larger one if they could afford it - it is also true that their optimal size/rent trade-off favours a smaller apartment.*

#### **5.8.4 Discussion**

The driver for establishing standards for dwelling size and layout is to ensure that occupants can expect a reasonable standard of living when they buy or rent an apartment. People who are not educated in design and construction may not understand plans when they are buying off the plan, though a completed apartment will enable buyers or renters to see what they are to commit to.

Whereas Boroondara endorsed the dwelling size and layout objective and standards as very important but felt that the minimum apartment sizes proposed are conservative, Mr Ellenbroek and Mr Zagami considered perfectly acceptable living environments can be accommodated within sizes much less than those proposed. There was discussion at the Hearing based on Mr Zagami's evidence around the shifting paradigm of market

acceptability in that sophisticated developers are now seeing that higher ceilings, better facilities and useable larger spaces are ensuring market acceptability and, as a consequence, success. 250 Lygon Street was put forward as one example of where the developer has redesigned their offering from smaller 'less liveable' apartments to larger 'more liveable' apartments because the former was proving difficult to sell.

The Panel does not have a definitive view on how the market can be expected to respond in relation to apartment sizes in the absence of minimum floor area standards. It is apparent, however, that there have been trends to smaller sized apartments. We also acknowledge the view that, as the apartment market matures, market forces may be improving accommodation standards in some cases. During our inspections of completed developments, we were given opposite views on apartment size. One developer told us that very small apartments sell very well because they are inexpensive, enabling those with lesser financial means to get into the market whereas, during the very next inspection, the Panel was told that apartments that are too small simply do not sell. There was agreement though, that if apartments are well designed, they will gain better acceptability.

While it is encouraging to see some market shift, the risk remains that less sophisticated developers will continue to take an inferior product to the market and that this product will be sold to unsuspecting buyers. We agree that consumers should be protected from inferior apartments that will not meet their needs. We are conscious, however, that setting minimum apartment sizes will have implications for apartment prices and therefore housing affordability. The effect on prices, however, has not been specifically assessed. We also note that consumers are prepared to make trade-offs and these are different in different locations and different market segments.

The question is 'What would be a reasonable minimum apartment size above which there should be flexibility for consumers to exercise their choice about how they allocate their resources.'

The Panel was referred to standards in four different apartment guidelines which prescribe very specific, but different, minimum floor areas that are in the following ranges:

- Studio 35 - 37m<sup>2</sup>
- 1 bedroom dwelling 50m<sup>2</sup>
- 2 bedroom dwelling 61 - 70m<sup>2</sup>
- 3 or more bedroom dwellings 90 - 95m<sup>2</sup>

We are not convinced that one of the set of prescriptions in the four examples of apartment guides should be adopted.

The Panel notes that of the six developments cited by Council as examples of floor areas in recent developments<sup>24</sup>, the average apartment floor areas were all within 1m<sup>2</sup> of the lower end of these ranges, except in two cases where the average size of one bedroom apartments was 45-46m<sup>2</sup> (rather than 50m<sup>2</sup>). This suggests that the floor area of most apartments being developed are within the ranges that have been adopted as minima.

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<sup>24</sup> See the table on page 98 of Council's submission to the Panel.

The Panel agrees with Mr Ellenbroek that intelligent, logical and flexible internal layouts are far more important to achieving high quality apartment design than minimum floor areas. A well designed apartment may be far more liveable than a larger, poorly designed apartment. We believe that the function of the internal layout should be the focus in assessing whether the apartment design is acceptable.

In forming our conclusions on dwelling design, we believe that all apartments should be designed so that all aspects are fit for purpose. An in-principle approach could be that, for every '*permanent pillow*' in the apartment, there is:

- In bedrooms, sufficient wardrobe length and space for bedside tables
- In kitchens, sufficient bench space to prepare and cook
- In living spaces, sufficient space for living and dining seating.

Around these facilities, there should be sufficient space to ensure that:

- There is no conflict between items of furniture, such as wardrobe doors opening onto bedside tables
- There is sufficient space around furniture items to circulate
- Furniture does not have to be shuffled around on a daily basis to meet the occupants' everyday needs, such as pulling out the dining table every time one eats.

The '*permanent pillow*' principle would be determined by how many permanent residents could be accommodated, given the size and potential layout of each bedroom.

### Conclusions

- The prescription of minimum apartment sizes would require greater justification.
- The functionality and liveability of apartment layout plans should be the basis for assessing whether the dwelling size is acceptable.
- The requirement to provide apartment layouts at the planning permit stage is appropriate, but may not be necessary where apartments are of a generous size that exceeds the indicative size in the Code.

### Panel recommendations

**Delete the table prescribing minimum floor areas from the proposed Policy and qualify the minimum floor areas nominated in the Code as indicative only.**

**Revise the second standard under dwelling size and layout to read**

***Layout plans should illustrate the functionality and liveability of all proposed apartment types.***

## 5.9 Entry and circulation

### 5.9.1 The issues

- Should the number of apartments serviced by the same corridor and core be prescribed?
- Will entry and circulation standards enhance safety and amenity?

### 5.9.2 What is proposed?

The proposed Policy/Code aims to ensure that:

- Apartment entries are clearly identified and sheltered

- Circulation within buildings and access to dwellings and to communal areas is efficient and safe.

The proposed standards address matters such as identifiable pedestrian entrances, avoiding ramps that impede direct access to individual tenancies, protection from sun and rain, separation of vehicle and pedestrian entries, direct visual connection between the pedestrian entry and lift lobbies, generous corridor widths and ceiling heights, minimising corridor lengths, natural light and ventilation to all communal circulation spaces, the use of multiple cores in long buildings. The standards prescribe:

- Where dwellings are arranged off a double loaded corridor, corridor length should not exceed 25 metres. Any corridors longer than 25 metres should be articulated with design solutions such as:
  - Utilising a series of foyer areas, as break space from the long corridor
  - Providing windows at the end of a corridor, along the corridor or around lift lobby areas.

### **5.9.3 Evidence and submissions**

The entry and circulation provisions in the Policy/Code were not contentious.

The submission from the City of Boroondara highlighted the importance of these provisions in terms of both design and liveability. It noted that urban design benefits of effective internal circulation include:

- It has a direct relationship with the building's form, articulation, massing and overall visual bulk as perceived within the public realm.
- It ensures that a sense of community is developed and creates a safer environment for residents.

The City of Boroondara endorsed the consolidation of entry and circulation standards in one overarching document, rather than repeating the requirements in multiple DDOs as occurs in many local planning schemes. However, it suggested that the proposed internal circulation standard may not go far enough in emphasising the importance of good circulation in apartment buildings and referred to the NSW Residential Flat Code as probably the best reference. The City of Boroondara submitted that: *'Research has shown that the number of apartments serviced by the same corridor and core should ideally be eight and at no case exceed ten. Empirical research revealed that when the number exceeds this, residents no longer recognise their neighbours and watch out for their properties.'*

Evidence from Mr Ellenbroek generally supported these provision but noted that most of the proposed standards duplicate the design criteria already contained in the GHDRD.

### **5.9.4 Discussion**

The standards proposed were not contentious at the Hearing. The Panel considers it is appropriate to address these issues in the Code/Policy. However, sufficient justification has not been provided to support additional prescriptive requirements identified by the City of Boroondara relating to the number of apartments serviced by the same corridor and core.

### **Conclusion**

The standards are a positive contribution to logical and desirable outcomes.

## 5.10 Accessibility

### 5.10.1 The issues

- Should a proportion of visitable and adaptable housing be prescribed in larger developments?
- Are the proposed visitability standards appropriate?

### 5.10.2 What is proposed?

The proposed policy aims to ensure that access to buildings and individual dwellings and the layout of dwellings caters for people of all abilities through the following standards:

*All development should provide the following visitable features:*

- *Safe and continuous levelled path to entrances*
- *Accessible entry door with a minimum 820mm clear opening width and a step-free threshold*
- *Level landing area of 1200mm x 1200mm at the entrance door*
- *A disabled toilet is provided on the ground or entry level in multi-level apartments that provides:*
  - *Minimum clear width of 900mm between walls*
  - *Minimum clear circulation space forward of the toilet pan of 1200mm (excluding the door swing)*
  - *Internal doors with a minimum 820mm clear opening width and a step-free transition between surfaces*
  - *Internal corridors with a minimum 1000mm clear width.*

*Twenty per cent (20%) of all dwellings in developments of 10 or more dwellings should provide a bedroom, living area, kitchen, private open space, bathroom and toilet which can be efficiently adapted for people with limited mobility on entry level with the type of features in AS 4299 – 1995 (Adaptable Housing).*

### 5.10.3 Evidence and submissions

Boroondara City Council supported the proposed standards to increase accessibility and the link to Australian Standard AS4299 to ensure developments are accessible, visitable and adaptable. The Policy/Code accessibility provisions were seen as critical to ensure that housing demand to accommodate people with limited mobility and the elderly is considered from the outset of the design process.

Evidence from Mr Ellenbroek raised the following concerns relating to the proposed accessibility provisions:

- The basis in research to determine that it is necessary or appropriate that 20% of all dwellings be designed as adaptable dwellings was questioned.
- Accessibility requirements for apartment buildings are controlled by the *Disability Discrimination Act* and he did not consider it appropriate for the planning system to either duplicate or impose a different set of accessibility requirements to those already legislated for.

Mr Zagami also referred to the view expressed in the South Australian Housing's Sustainable Housing Principles that the Australian Standard - Adaptable housing are now largely dated<sup>25</sup>.

The Council responded to queries about the justification for the standard requiring 20% of all dwellings be adaptable, and whether the Code's standards would be consistent with the accessibility requirements for commercial development in the NCC as follows:

*As stated at the Panel hearing, the proposal that 20% of all dwellings be adaptable is based on Liveable Housing Design Guidelines<sup>26</sup> that 1 in 5 people currently have a disability of some type. With respect to the BCA requirements for commercial development, Council's municipal building surveyor confirmed that Part D3 of the BCA has access requirements for commercial development and that the actual design requirements are found in Australian Standard AS 1428. However, there (sic) requirements have a number of variables (such as number of occupancies, number of doorways, degree of separation between doorways etc.) and it is very difficult to ascertain clearly what is required. In view of this, Council considers the standard that all apartment buildings be visitable should be retained. It is also noted quantifiable measures regarding accessibility are contained in Council's recently approved MSS. The Code's application requirements state that an accessibility report must be submitted with an application and it is proposed to retain this requirement.*

Council noted that perusal of the Banyule, Bayside and Manningham planning schemes did not reveal any specific requirements about the proportion of development that should be adaptable.

#### **5.10.4 Discussion**

The universal access and adaptable housing provisions in the Amendment largely duplicate provisions in the MSS and ACZ/DDOs that are proposed to apply to the areas affected by the Amendment. In particular, the following are relevant:

- Objectives

*To increase the supply of housing that is visitable and adaptable to meet the needs of different sectors of the community (MSS Objective 9).*

*To encourage the provision of adaptable and visitable housing designed in accordance with the requirements of AS4299 (Coburg ACZ).*

*To ensure buildings are designed to provide dignified and independent access for all (Coburg ACZ).*

*To create accessible, adaptable and visitable housing within the activity centre to ensure housing caters for all residents' needs (Proposed Brunswick Activity Centre DDOs).*

- The MSS Objective 9 Strategies and proposed Brunswick Activity Centre DDOs state:

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<sup>25</sup> Government of South Australia, *Design Guidelines for Sustainable Housing & Liveable Neighbourhoods: Section 2 - Sustainable Housing Principles - 2.3 Housing SA Universal Housing Design Criteria*, p9.

<sup>26</sup> Established in 2011, Livable Housing Australia is a not-for-profit partnership between community and consumer groups, government and the residential building industry.

*Encourage all dwellings to be visitable by a person with limited mobility by providing:*

- *An accessible path from the street and car park areas to a level entry;*
- *Minimum width of 850mm for doors and 1000mm for hallways at entry level; and*
- *A clear path of travel from the accessible entry to a living area and toilet suitable for people with limited mobility.*

*Encourage the provision of (20% in the proposed Brunswick Activity Centre DDOs) liveable housing that can be lived in by people with limited mobility (or easily adapted to be lived in) by incorporating the following design features:*

- *An accessible path from the street and car park areas to a level entry;*
- *A bedroom, living area, kitchen, private open space, bathroom and toilet which can be efficiently adapted for people with limited mobility on entry level; and*
- *Minimum width of 850mm for doors and 1000mm for hallways at entry level.*

The additional guidance provided in the Code/Policy relates to:

- Specifying dimensions for a level landing area at the entrance door and a disabled toilet.
- The amount of *'liveable housing'* to be provided is specified as 20% (as is also proposed in the Brunswick Activity Centre DDOs).
- The minimum width for doors in the *'liveable housing'* component is reduced from 850mm to 820mm.

The Panel is sympathetic to the inclusion of the proposed visitability and adaptable housing provisions as there is a clear and increasing need for additional housing for people with limited mobility. Others (such as parents with strollers) also benefit. Further, the 'burden' is reduced because in the activity centres where the Amendment provisions will apply, non-residential use or adaptability for conversion to non-residential use at ground level is envisaged and accessibility requirements will apply.

However, we note advice that Council's building surveyor was reluctant to endorse the provisions and any changes to national requirements needs strong justification. The Panel is concerned that limited evaluation of the effect of the proposed accessibility provisions was presented. We also consider that requirements should adopt AS4299 and the NCC, as *'tinkering'* with the requirements for matters such as doorway widths and cherry picking only some of the very detailed requirements from the Australian Standard and the NCC may mean that the accessibility objectives are not realised.

Given the existing Moreland planning scheme provisions, we consider it is appropriate to provide objectives relating to visitability and adaptable housing and to refer to other planning scheme provisions (which address this issue) in the policy basis.

The Panel encourages a post-occupancy evaluation after the completion of a number of developments that incorporate the visitability and adaptable housing provisions that were recently included in the Moreland MSS. This would provide an understanding of the implications from a development perspective, market responses and their effectiveness from resident perspectives.

## Conclusions

- Although specific research to justify the proposed visitability and adaptable housing provisions was not presented, there is a clear and increasing need for additional housing that meets the needs of people with limited mobility.
- It is appropriate to provide objectives relating to visitability and adaptable housing and to refer to other Moreland planning scheme provisions (which address this issue) in the policy basis.

## Panel Recommendation

**Maintain the objective in the Code/Policy relating to visitability and refer to other planning scheme provisions which address this issue in the policy basis, and delete prescriptions in the associated standards.**

## 5.11 Acoustic performance

### 5.11.1 The Issue

- Have the proposed acoustic performance standards been justified?

### 5.11.2 What is proposed?

The Policy/Code objective is:

- To minimise the impact of both external and internal noise

The related standard requires acoustic treatment to be provided to:

- Meet the following maximum noise levels in unfurnished and uncarpeted rooms with the windows closed:*
  - *Bedrooms: 35dB(A) Leq*
  - *Other habitable rooms: 40dB(A) Leq*
- Protect all dwelling occupants from external noise sources such as busy roads, railway/tram lines, industry or entertainment venues must achieve an internal noise level of 45dB(A) Leq*
- Protect future residents within a building with a direct interface to commercial tenancies above, next to or below from associated commercial noise sources, including but not limited to loading dock (including reversing beepers), plant and equipment.*

Council's submission to the Panel advocated a number of revisions, inserting a new noise from a railway line performance standard and reinserting two standards from the original version of the Code relating to the location of bedrooms away from noise sources and architectural solutions in noisy areas. These changes were:

*Replace standards 1a and 1 b as follows:*

- 1. Acoustic treatment should be provided to meet the following requirements from major roads and from within(sic) potential noise sources from within the site and nearby sites:*

Type of occupancy	Recommended Design sound level, $L_{Aeq1}$ dBA	
	Satisfactory	Maximum
<i>Apartment</i>		
<i>Sleeping areas (near major roads)</i>	30	40
<i>Living areas (near major roads)</i>	35	45
<i>Common areas (e.g. foyer, lift lobby)</i>	45	55

2. Acoustic treatment should be provided to meet the following requirements from railway lines:

	Airborne noise level	Structure- borne vibration induced noise levels
<i>Bedroom</i>	$L_{max} \leq 50 \text{ dB(A)}$	$L_{max} \leq 40 \text{ dB(A)}$
<i>Living room</i>	$L_{max} \leq 60 \text{ dB(A)}$	$L_{max} \leq 50 \text{ dB(A)}$

Add the following two standards:

*Locate communal areas, parking areas, vehicle access ways and service equipment away from bedrooms.*

*Consider the use of architectural solutions such as double glazing, double framed windows and solid balustrades.*

### 5.11.3 Evidence and submissions

A submission on behalf of the Park Street Residents Action Group to the original exhibition sought:

- A change to the objective to include 'to minimise the impact of noise on surrounding residential properties'.
- New standards that ground floor uses with negative off-site impacts be located away from surrounding sensitive land-uses; that all ground floor uses submit management plans addressing delivery times; the prevention of live music and the provision of background noise only; and that patron management plans be required for any proposed restaurant.

Sedmap highlighted that the acoustic standards need to have regard to the newly introduced Clause 52.43 (Live Music Entertainment Venues)<sup>27</sup>. Mr Zagami's evidence also questioned why the Code is adopting stricter noise standards, with the Code stipulating 35dB(A)Leq within bedrooms and 40dB(A)Leq in other habitable rooms, whereas Clause 52.43 stipulates 45dB(A).

Evidence from Mr Ellenbroek questioned the need for an acoustic report for all applications. He stated:

<sup>27</sup> Clause 52.43 was incorporated into the Moreland Planning Scheme on 4 September 2014.

*Whilst I acknowledge that technical advice may be appropriate to ensure acceptable internal amenity is achieved in noisy locations (eg. adjacent main roads or rail corridors), to require it for all apartment developments will unnecessarily add to project cost in most instances.*

Council submitted that guidelines on acoustic performance are important as many apartment buildings are located in activity centres where commercial and entertainment activities occur outside daylight hours, and parts of apartment buildings themselves can generate nuisance through noise from commercial uses, communal recreational areas and vehicles, car parking areas and plant services.

The City of Boroondara supported this view, submitting that the increased presence of residential apartment buildings in commercial areas should not undermine the economic viability of long established commercial uses that are encouraged in these areas. Acoustic performance of residential developments in commercial areas is particularly important and the onus to ensure appropriate noise levels should be on the new residential use as it is the agent of change.

At the Hearing Council noted with respect to the standards proposed that:

- The maximum noise levels to be achieved in apartments in the first standard is consistent with the Australian Standard AS 2107.
- The second standard relating to noise from a railway line adopts the standard applied by the Tribunal in *Richmond Icon Pty Ltd v Yarra CC (Red Dot) [2011] VCAT 2175* (the Richmond Icon decision).

Council considered protection of surrounding residents from noise from commercial uses should be considered on a case by case basis having regard to matters such as the size of the premises and the immediate context, rather than additional standards (as suggested by the Park Street Residents Action Group).

Council noted in relation to consistency with Clause 52.43 (Live Music Entertainment Venues), that one of the proposed standards refers to the need to protect future residents from entertainment venues and this is a matter that should be specifically addressed in the acoustic report to be submitted with applications.

In its closing submission, Council acknowledged that an alternative to specifying noise standards in the Code would be to insert a number of performance criteria, such as those in the New South Wales draft Apartment Design Guidelines to address matters that should be considered in the early design stage of a development. These include:

- Orienting windows and door openings away from noise sources
- Locating noisy/quieter areas next to or above each other
- Locating storage, circulation areas and non-habitable rooms to buffer noise from external sources
- Limit the number of party walls and appropriately insulate them
- Noise sources are located at least 3 metres from bedrooms
- Internal apartment layout separates noisy spaces from quiet spaces
- Where physical separation cannot be achieved, noise conflicts are resolved using design solutions such as double or acoustic glazing, acoustic seals, materials with low noise penetration properties, continuous walls to ground level courtyards.

#### 5.11.4 Discussion

In addition to noise from established (and future) non-residential uses, the areas to which the Policy/Code will apply are along busy roads and are subject to noise from trams and trains. Good acoustic performance is important to the amenity enjoyed by apartment residents and to minimise land use conflict and constraints on non-residential uses in mixed use areas.

While these provisions were not highly contentious, appropriate noise limits are often the subject of debate and road noise limits are currently the subject of review. Acoustics is a highly technical area and the Panel did not have the benefit of evidence from an acoustic expert. Our consideration of the issue has relied on the submissions and reporting in cases where the issue has been addressed. Nevertheless, we set out some of the issues raised by the standards put forward.

We note that the East West Link (Eastern Section) Project Assessment Committee<sup>28</sup> adopted criteria to reduce noise to reach internal night time noise levels of 30 dB LAeq, which is consistent with the 'satisfactory' criteria adopted in the Code for bedrooms. However, in the Richmond Icon decision various noise criteria were noted, including:

- Recent Tribunal cases have applied 55-60dBA L<sub>max</sub> or less, many cases have accepted NSW criteria (May 1999) of maximum internal noise levels below 50-55dBA to avoid awakening reactions
- The NSW Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects contains a noise criteria of 35dBA Leq at night in sleeping areas and 40dBA Leq for other habitable rooms
- Australian Standard 2107-2000 recommends indoor sound levels for traffic noise and services noise in sleeping areas of 30-35dBA Leq and in living areas of 30-40dBA Leq
- A Noise Technical Fact Sheet (16) produced by Adelaide City Council nominates a maximum intermittent noise level of 50dBA L<sub>max</sub>
- The Melbourne Planning Scheme DDO12 applies a maximum noise level of 45dB in habitable rooms when music is emitted from the Docklands stadium.

With regard to the acoustic treatment near railway lines, the Richmond Icon decision adopted the criterion of 50dBA L<sub>max</sub> to the bedrooms, as is proposed in the revised provisions put to the Panel by Council. However, the Panel queries the translation of the standard adopted in that case, which was more conservative than had been applied to bedrooms in other circumstances ( $L_{\max} \leq 55 \text{ dB(A)}$ ). In that case the exposure to consistent railway noise from multiple lines, which was probably higher than is likely in Moreland, appears to have been a significant consideration.

The areas to which the Code will apply are generally subject to external noise, are identified for substantial redevelopment and are expected to accommodate large numbers of people. The Panel considers in these types of areas it is better to design in good acoustic amenity from the earliest stage. The Panel finds the 'satisfactory' criteria adopted in the acoustic standard tables in the Policy/Code are conservative but within the range applied elsewhere. However, we do not have the benefit of the evaluation of the technical and cost implications

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<sup>28</sup> Chapter 9.4 East West Link (Eastern Section) Project Assessment Committee Report 30 May 2014.

of these *'aspirational'* criteria and we identify this as a matter for further specific advice and consideration.

With regard to the standard in the first table, it is unclear to the Panel how the *'satisfactory'* and *'maximum'* noise levels would operate. In practice, the *'maximum'* may prove to be the default that is the primary influence on design. The Panel considers the *'maximum'* noise level creates confusion and the acoustic amenity in areas such as lift lobbies and foyers does not need to be regulated.

The Panel endorses the approach adopted in the version of the Policy put forward on the last day of the Hearing. The measures address siting and layout of buildings and other design solutions to enhance the acoustic amenity for residents and minimise the risk of complaints that could inhibit non-residential uses in the activity centre.

The Panel acknowledges that an acoustic assessment report may not always be necessary but Council will have discretion on whether noise is likely to be an issue at a particular site and therefore whether there should be an exemption from the requirement for a report. The need for an acoustic report should be addressed through the urban context report, which may indicate that an acoustic report is not required.

The concerns expressed related to the capacity to effectively prepare an acoustic report at the application stage has some basis. It is true that a range of mitigating measures would normally not be addressed until more detailed design stages. However, we consider it is important to address noise mitigating design responses, such as orientation and the location of activities, early in the design process. An acoustic report at the planning stage promotes this approach and also establishes the *'brief'* for necessary mitigation measures as the design process progresses.

### **Conclusions**

- Good acoustic performance is important to the amenity enjoyed by apartment residents and to minimise land use conflict and constraints on non-residential uses in mixed use areas.
- The proposed *'satisfactory'* noise levels in first table and the levels in the second table are conservative but within the range applied elsewhere. However, apparent inconsistencies and the absence of technical and cost implications of these *'aspirational'* criteria does not support their adoption.
- The identification of design measures identified on the final day of the Hearing, together with an acoustic report, is a more appropriate approach.

### **Panel recommendation**

**Adopt the revised design acoustic performance design measures presented on the final day of the Hearing (set out in Chapter 5.11.2 of this report).**

## **5.12 Privacy**

### **5.12.1 The issues**

- To what extent should privacy issues be addressed in addition to outcomes of building separation?

### **5.12.2 What is proposed?**

The proposed policy aims to ensure that reasonable privacy is maintained for the occupants of all dwellings within a building and in adjacent buildings through the following standards:

- Overlooking should be minimised principally by compliance with Clause 22.07-4.2 – Building separation
- Dwelling layouts should be designed to minimise direct overlooking into habitable spaces and private open spaces instead of reliance on screening/obscuring measures that adversely impact on the quality of the outlook
- Where direct views into private open space and habitable rooms are unavoidable, measures to reduce overlooking should be considered. Such measures may include level changes, landscaping, balconies, balustrades to balconies and screening devices such as horizontal or vertical fins.

### **5.12.3 Evidence and submissions**

Council is generally satisfied that the principal privacy issues are dealt with by building separation but acknowledges that there may be instances where some overlooking may be unavoidable and some additional measures may need to be adopted. The Code provides some design measures to illustrate how such instances can be dealt with.

Mr Ellenbroek agreed that privacy standards principally refer back to the building separation standards already addressed and went on to say that in most instances the building separations sought far exceed those necessary to uphold reasonable levels of privacy, particularly in activity centre settings where residents must have lesser amenity expectations than in lower density residential areas.

### **5.12.4 Discussion**

The separation standards do deal with privacy issues in the main and they are generally well in excess of what one would anticipate and accept through ResCode. Accordingly, these standards only deal with the instances where the separation standards do not achieve satisfactory privacy, for example, in adjacent balcony situations or other adjacencies.

The standards did not stimulate any adverse discussion, though there was some discussion around whether bedrooms can look after their own privacy via internal blinds or other screening.

### **Conclusions**

- Privacy is an important issue that is largely dealt with by the separation standards.
- In instances where the separation standards cannot resolve specific privacy issues, screening can be installed.

## 5.13 Open space, landscape design and communal facilities

### 5.13.1 The issues

- Is the standard requiring larger, wider balconies reasonable?
- Should communal open space be required in larger developments?
- Is it reasonable to require deep soil planting for a minimum 7.5% of site area?

### 5.13.2 What is proposed?

The Policy/Code open space and landscape design provisions seek an integrated approach to the design of the public realm, site layout, buildings, open space and landscaping. Objectives and standards relate to the provision of open space for residents, the functionality and attractiveness of such areas and ensuring there is a reasonable amount of solar access.

After considering submissions Council supported additional objectives directed at ensuring that landscaping that contributes to the local biodiversity of the area, minimises the impact of the urban island heat affect and contributes to the micro-climate of the site. An additional standard relating to the retention of significant established trees was also proposed.

The proposed Policy/Code private open space standard specifies that balconies should extend from the living area and have a minimum depth of 2 metres. At the Hearing, Council agreed with Hayball's conclusion that there should be more guidance provided on balconies and supported revisions that from the draft NSW ADG that differentiate balcony requirements based on the number of bedrooms in the apartment.

Dwelling type	Minimum area	Minimum depth
1 bedroom apartments	8m <sup>2</sup>	2m
2 bedroom apartments	10m <sup>2</sup>	2m
3 bedroom apartments	12m <sup>2</sup>	2.5m

Table 3 Proposed revisions to balcony requirements

The standard for communal open space in the Policy/Code is 20% of the site area for developments of 15 or more dwellings, whereas this standard applied to developments of 10 or more dwellings in the original Code. Council supported the following changes in response to submissions resulting from exhibition of the Amendment:

- Communal open space is consolidated into a recognisable and useable area
- Solar access is provided to 50% of the principal portion of the communal open space for a minimum of two hours between 9am and 3pm at the solstice
- Facilities are provided for a range of age groups where size permits, incorporating some of the following elements: seating for individuals or groups, barbeque areas, play equipment or play areas, swimming pools, gyms or common rooms.

Deep soil planting<sup>29</sup> should be provided on larger sites. It is now proposed that a minimum 7.5% of site area should be provided where the site area exceeds 1000 square metres, whereas the standard in the original Code was 5% of site area for sites greater than 750 square metres. If deep soil planting requirements are not met, alternative forms of landscape were identified and could include: green facades, green roofs or landscape over structure. A number of standards in the original Code were relocated to communal facility provisions in the revised Policy/Code.

### 5.13.3 Evidence and submissions

Cultivating Community submitted (as a result of the first exhibition) that the landscape provisions should refer to edible planting, integration of rainwater capture/storage with landscaping and communal open space areas should make available composting facilities, worms farms etc. for residents to use. The Moreland Food Gardens Network also suggested that provision be made for edible landscaping.

Sedmap, supported by evidence from Mr Zagami, submitted that the minimum depths of balconies:

- Fails to have regard to smaller studio or one bedroom apartments, or the context of an area (i.e. parks and gardens nearby)
- Is unnecessary and beyond the GHDRD or ResCode.

Mr Ellenbroek considered a useable area of private open space capable of accommodating outdoor furniture for passive recreation is possible in a width of less than 2m. His evidence questioned the imposition of higher standards in activity centres, with associated decreases in yield and increased project costs stating:

*People who choose to live in activity centre locations (where most MADC developments will be located) derive much of their amenity from being proximate to the range of amenities and services that these areas typically accommodate. For the Planning Scheme to impose more onerous open space requirements in these areas than in residential areas where Rescode provisions apply would be illogical in my view.*

Mr Zagami's evidence expressed similar views, stating:

*I understand this to be an arbitrary dimension and not one which has been established by any thorough investigation or survey of existing apartment residents.*

*Buyers and renters may be willing to forego a 2m deep balcony because at particular height or orientation it is too windy or sunny at times.*

*Furthermore, the activity centre that attracts the buyer/renter may provide all the outdoor space required.*

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<sup>29</sup> They exclude impervious surfaces such as car parks, services, driveways and roof area.

Submissions from a number of property owners<sup>30</sup> and evidence from Mr Zagami and Mr Ellenbroek expressed the view that the requirement for 20% of site area for communal open space is onerous and unreasonable, particularly when combined with higher requirements than apply under ResCode (such as in relation to balconies). Mr Ellenbroek stated:

*Encouraging provision of communal open space and resident facilities is appropriate for larger residential developments (say, proposals of 50 dwellings or more). However, I do not support the prescription of a minimum area requirement. The quality and appropriateness of proposed communal facilities should determine their acceptability, not their footprint.*

Mr Zagami referred to the impact of this requirement in reducing the number of apartments and thereby increasing market prices even in circumstances where more private open space is provided than required. He stated:

*It is of concern that such a standard may be applied rigidly without adequately understanding the actual demand for such a communal space within each apartment development. The design brief may be to avoid all communal open space but the proposed mandatory provision leaves no flexibility for the architect.*

Park Street Residents Action Group submitted there should be a requirement that communal areas are well managed to ensure the amenity of residents and surrounding properties is not adversely affected.

Both Mr Ellenbroek and Mr Zagami questioned the requirement to allocate 7.5% of larger sites for deep soil planting in activity centres where intense built form, rather than landscaping, typically defines the streetscape character. While Mr Zagami acknowledged the contribution that vegetation in private and public space makes to the level of amenity, he considered the requirement for in-soil planting to the extent proposed to be over-simplistic. He noted that many popular and interesting urban spaces are occupied by buildings built boundary to boundary and there are many contexts in the City of Moreland where established setbacks are minimal and where vegetation could compromise the urban character of the precinct. Mr Zagami identified a variety of successful alternatives to ground level trees as ways to 'green' a place, such as, planter boxes, rooftop gardens and green facades.

Council acknowledged that the deep soil standard is controversial due to the potential impact on yield. Council's review of a number of apartment developments in the Brunswick activity centre showed that very few developments provide for deep soil planting and it noted that both the OVGAs draft apartment design guidelines and the NSW draft ADG include more stringent requirements for deep soil planting than that proposed in Moreland's Code.

After issues were raised at the Panel Hearing, Council reviewed its position. It considered that deep soil planting can only be reasonably provided on large sites (defined as 2,000+ square metres) in the Code. Council therefore proposed to amend standard five as follows:

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<sup>30</sup> Sedmap Investments Pty Ltd (first and second exhibition), owners of 1191 Lygon Street and 193 Lygon Street, 269 Stewart Street and 362-366 Lygon Street (first exhibition).

- For lots larger than 2,000 square metres, provision should be made for deep soil planting.
- The minimum area should be 7.5% of site area and be of an adequate dimension that allows for the planting of canopy vegetation.

Further examples and diagrams will be included in the Design Guidelines regarding location and minimum dimension. As an examples, Council referred to deep soil planting being incorporated within:

- The rear and side setback, along the edge of the basement car parking to create mid-block planting area which can be mirrored on the adjacent site.
- The front or rear setback depending on preferred streetscape character.

Council submitted that where deep soil planting cannot reasonably be provided, there should be strong compliance with other open space, landscaping and ESD provisions to realise environmental, amenity and health wellbeing benefits. To this end, Council proposed to reinsert objectives related to environmental performance and minimising the urban island heat effect and proposed new standards relating to the retention of significant vegetation and alternative forms of landscaping. Council did not propose provisions relating to edible gardens and planting of fruit trees as resident interest is necessary.

As most private open space in apartment buildings is in the form of balconies, Council emphasised the importance of balcony size, dimensions and connection to internal living spaces to maximise their usability. While ResCode provides a minimum balcony size of 8m<sup>2</sup> with a minimum dimension of 1.6m, Council is of the view that a minimum width of 2 metres improves balcony useability. The City of Boroondara supported this view.

The 20 case studies found that most apartments had at least 5 square metre balconies, however, in most cases balcony depths were under 2 metres width and this was considered to limit their useability. Council responded to Sedmap's submissions that the depths of balconies fails to have regard to smaller studio apartment or one bedroom apartments, that the starting point for design is to have a base line of minimum requirements and that the onus should be on an applicant to demonstrate why a variation of the minimum requirements is justified.

Council submitted that the provision of communal open space for passive recreation activities and interaction is important for residents living in relatively small dwellings and the requirement for 20% of site area in larger developments is reasonable. The 20 case studies found that few developments provided communal open space within the site and where it was provided, it was often located on podiums or on rooftops. Council noted that:

- The draft NSW guideline requires a minimum area of 25% of total site area for all developments (i.e. there is no trigger based on number of dwellings) and the draft OVGA standard requires a minimum external area of 20% of total area for developments of 10 or more dwellings.
- Communal areas can double up as open space areas that may also be required to provide building separation.
- Where communal open space is provided on roof areas there may not be an impact on development yield.

The 'Testing by Design' highlighted that:

- The location of deep soil was dictated by efficient car parking arrangements, often meaning that the open space above had poor orientation and was not suitable for communal open space or canopy trees (Hayball)
- A clearer definition of deep soil and guidance on minimum allowable sizes would assist in designing for amenity (Hayball)
- It was difficult to provide deep soil planting, however, the lightwell could incorporate vertical landscape elements (SJB Urban)
- More guidance should be provided on minimum or preferred sizes of private open space to assist in designing for amenity (Hayball)
- Graphical representation of how front courtyards could be successfully inserted into the streetscape would be beneficial (SJB Urban)
- Larger floor plates at lower levels could encourage communal open space with poor amenity in the centre of these lower levels (Hayball)
- A clearer definition of acceptable communal open space would assist in designing for amenity (Hayball)
- While the objectives and standards for communal open space were clear, improvements could include considered in conjunction with landscape design and recommendations for communal facilities such as BBQ's, sheltered seating areas and gardens (SJB Urban).

#### **5.13.4 Discussion**

Although apartment residents may make greater use of the public realm and recreation options in activity centres than others, the Panel agrees that functional private open space remains valuable in apartments. In addition to providing for outdoor passive recreation it commonly extends the living space, can enable micro-gardening and allows outdoor clothes drying (subject to owners' corporation by-laws). The Panel considers balconies should be included in the layout plans to be provided with an application to illustrate the functionality and liveability of spaces provided in apartments (see Chapter 5.8).

The Panel queries increasing the prescribed minimum balcony width to 2 metres (as exhibited) and the further increase in private open space standards that Council now proposes (two bedroom apartments to 10m<sup>2</sup> area and three bedroom apartments 12m<sup>2</sup> area and 2.5m balcony minimum width). Justification for increasing standards, beyond a desire for more generous spaces, was not presented. The Panel noted during inspections that balconies of less than 2 metres width (in some cases with greater width at one end) appeared to fulfil their intended functions in an acceptable way. The Panel also considers there is a basis to the concern expressed that a higher standard than currently applies under ResCode is proposed only for taller apartment buildings in activity centres.

The Panel endorses the increasing use of roof tops for open space in new apartments but is also conscious that communal spaces require particularly careful planning, the effect on yield will commonly flow to apartment prices and there are ongoing costs and management implications. The Panel endorses policy to promote effective communal use of roof top areas and the space associated with separation distances (podiums and light courts) but is not convinced that the prescription of 20% communal open space has been justified.

Unlike some other aspects of the Code, the Panel does not consider that there has been thorough consideration of the role and utility of deep planting areas or their likely location in activity centre context where lots are relatively narrow and policy supports consistent street walls, rather than treed setbacks along streets. Nor was the basis presented for prescribing 7.5% of the site being devoted to deep planting areas.

It is not clear to the Panel what would be required to satisfy the new biodiversity provision and the Panel questions the introduction the requirement in the context of tall apartment buildings in activity centres.

### **Conclusions**

- Functional open space is important for apartment residents. However, imposing higher standards for private and communal open space on taller apartments in activity centres than applies to lower forms of housing has not been justified.
- The layout plans to be provided with an application to illustrate the functionality and liveability of spaces should include balconies.
- The encouragement of effective use of roof space, podiums and light courts is endorsed, rather than the prescription of 20% communal open space provision.
- The function and urban design implications of deep planting areas in an activity centre context should be considered further before imposing a standard.

### **Panel recommendations**

**Maintain the ResCode balcony area and dimensions in the private open space standard, pending specific evaluation of the adequacy of the standard.**

**Revise the standard relating to communal open space to encourage effective use of roof space, podiums and light courts, rather than the prescribing 20% communal open space provision.**

**Encourage provision for deep soil planting areas but delete the prescription of an area to be provided.**

## **5.14 Bicycle and car parking**

### **5.14.1 The issue**

- Is the requirement for bicycle parking excessive?

### **5.14.2 Submissions and evidence**

Evidence from both Mr Zagami and Mr Ellenbroek questioned the justification for the very high rates of bicycle parking required, particularly in the absence of any car parking dispensation.

Mr Ellenbroek queried whether data on existing or likely future bicycle ownership underpins the suggested rates of provision and highlighted that:

- The Code requirement for 1 bicycle space for every 1 bedroom apartment and 2 spaces for every 2 bedroom apartment or larger far exceeds the current Planning Scheme requirement for 1 resident space/5 dwellings and 1 visitor space/10 dwellings. For a

development comprising 20 x 2 bed apartments, 6 spaces are currently required under Clause 52.34 of the scheme and 40 spaces would be required under the Policy/Code.

- Clause 52.34-4 design requirements are adopted in the Policy/Code but are outdated. They do not contemplate space saving design solutions, such as wall mounted racks, which have become commonplace in the apartment market.
- Significantly larger bicycle parking areas has the potential to complicate building design and add significant cost to projects.

Council highlighted that the proposed rates of bicycle parking provision were accepted by the Panel that considered Amendment C123 (the Coburg ACZ). Council referred to evidence from GTA Consultants to that Panel which concluded that Moreland is second only to the City of Yarra for mode share of cycling to work and that there is an increasing popularity for journey to work trips by bicycle. The GTA Consultants evidence supported the proposed bicycle parking rates on the basis of the following factors<sup>31</sup>:

- *The aim is to prioritise bicycle use above public transport and private car travel*
- *A 2009 ABS report found that 52% of Victorian homes own at least one bicycle with 36% owning two or more*
- *The proposed rate includes visitor parking and 1 resident space per dwelling plus 0.25 visitor spaces per dwelling is best practice*
- *Moreland has traditionally been a municipality that attracts cyclists willing to commute to work, residential parking rates should support and encourage this*
- *It is expected that car parking rates within the Activity Centre will be reduced below the standard requirement (GTA's Central Coburg Car Parking Strategy (June 2013)), which is yet to go to public consultation, suggests a 20-50% reduction in residential parking rates, depending on location and size of dwelling*
- *Dwellings with no car parking are often recommended to provide a bicycle space in lieu.*

Council agreed with the expert evidence and the testing by design recommendation (SJB Urban) that the provision of bicycling spaces will be a relevant factor in considering a reduction of the standard car parking rates in Clause 52.06. Council noted that, while car parking dispensations are not addressed in the Policy/Code, Clause 52.06-6 includes the following matters when seeking a reduction of car parking:

- *The convenience of pedestrian and cyclist access to the land.*
- *The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.*

Nevertheless, in its closing submission Council proposed the following standard to make the potential for a car parking dispensation explicit:

- *Reductions of the standard car parking rates in Clause 52.06 will be considered for developments that provide the above bicycle parking rates.*

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<sup>31</sup> GTA Transport Evidence Statement, Coburg Principle Activity Centre Zone, page 14.

In its closing submission, Council also:

- Agreed with Mr Ellenbroek that the design standards of bicycle spaces in Clause 52.34 are out-dated and proposed to amend this standard to reference *The bicycle parking handbook, Bicycle Network Victoria* (October 2004). Consideration will also be given to referring to Council design templates for bicycle parking as a design guideline after further discussion with Council's engineers.
- Proposed to delete Clause 22.07-5.4 vehicle entry, which was included in response to the VicRoads submission, as:
  - The Brunswick DDOs and Coburg ACZ contain provisions about vehicle entry and access to buildings that address public realm issues.
  - Clause 52.06 contains a number of provisions on accessway standards that address the type of matters in the Code.

SJB Urban testing of the Code also suggested:

- The addition of a standard addressing circulation of pedestrians, bicycles and vehicles to highlight potential conflict points.
- A standard that car parking entries be located in laneways only 'where possible' as some laneways do not have the capacity to accommodate significant traffic volumes or for the provision of loading/unloading.

### **5.14.3 Discussion**

The proposed bicycle parking requirements are very significantly higher than those that apply across the State. However, the Panel considers that this generous provision supports clear policy at State and local levels to promote active transport. It also recognises the circumstances in Moreland and the activity centres where the Policy/Code will apply. This rate of bicycle parking has already been adopted in the Coburg ACZ, which is one of the areas to which the Policy/Code will apply.

The space devoted to bicycle parking (and therefore its cost) will be significantly reduced if updated bicycle parking guidelines apply, as is now proposed. The Panel endorses the explicit reference to dispensations from the Clause 52.06 car parking requirements if generous bicycle parking is provided. We also note that the recommended post-occupancy evaluation of developments under the Policy/Code, would address whether the requirement is excessive.

### **Conclusions**

- The very generous requirement for bicycle parking provision is supported as it is consistent with policy to promote active transport, recognises the circumstances in Moreland and already applies in part of the areas to which the Policy/Codes will apply.
- There should be explicit reference to car parking dispensations where the parking standard is met.
- Updated bicycle parking design guidelines should apply.

### **Panel Recommendations**

**Update bicycle parking guidelines to refer to *The bicycle parking handbook Bicycle Network Victoria* (October 2004).**

**Explicitly indicate that *'Reductions of the standard car parking rates in Clause 52.06 will be considered having regard to the level of provision of bicycle parking.'***

**Delete the vehicle entry standard.**

## **5.15 Private storage space**

### **5.15.1 The issue**

- Should private storage space be prescribed?

### **5.15.2 Evidence**

Mr Ellenbroek did not see a need to prescribe minimum storage volumes in the standards. He suggested that smaller apartments, arguably, have a greater requirement for storage, as larger apartments would typically have greater capacity for storage in the form of internal wardrobes and cupboards.

In its closing submission, Council responded to this issue by proposing to delete the reference to having 'external' storage space.

### **5.15.3 Discussion**

Storage is clearly important, particularly in compact apartments. However, as discussed at the Hearing, many apartment residents may prefer storage space to be provided within their apartment.

### **Conclusions**

- The Panel endorses the deletion of the requirement for storage space to be external.

### **Panel Recommendation**

**Delete the reference to *'external'* storage space.**

## **5.16 Waste management**

### **5.16.1 The issue**

- Should dedicated composting and green waste facilities be required?

### **5.16.2 Evidence**

Mr Zagami's evidence questioned the effectiveness of Waste Management Plans providing for dedicated facilities for composting and green waste *'where opportunity exists for on-site disposal and reuse'* as no details are provided as to what on-site disposal and reuse opportunities may look like.

### **5.16.3 Discussion**

The Panel considers it is appropriate to address opportunities for on-site disposal and reuse of green waste in the preparation of waste management plans.

## 6 Policy drafting

A number of drafting issues raised in submissions and evidence have been addressed by revisions put forward by Council at the Hearing and earlier chapters of this report. For example it has been clarified that the standards are discretionary, the description of outlook has been revised, and various edits are proposed.

The Panel has recommended several further structural changes to the Policy, including:

- Addressing the relationship to place based policies or planning scheme provisions under the scope of the policy.
- Indicating in the policy basis:
  - The nature and scope of the ACZ and DDO provisions that apply.
  - The relevance of other planning scheme provisions that also address the design of apartments of 5 or more storeys, such as ESD, accessibility and built form provisions in the MSS, local policy, the ACZ and DDOs.
  - The role of the Code to assist in interpreting the Policy and to provide guidance on potential design responses.
  - Including a new sub-clause relating to the urban context report, site analysis and design response, plus reference to them in the decision guidelines of most sub-clauses.

Appendix B illustrates recommended changes and includes a range of further edits to clarify objectives or standards.

### 6.1 Panel recommendation

**Revise the Policy generally as illustrated in Appendix B of this report.**

## Appendix A List of Submitters

### A.1 Original exhibition

No.	Submitter
1	Yarra Valley Water
2	Brimbank City Council
3	Moonee Valley City Council
4	G2 Urban Planning on behalf of Alpha Lygon Developments and Caydon Property Developments Pty Ltd
5	Cathy Jitendra
6	Douglas Jitendra
7	Kelvin Thompson MP
8	Louise Honman
9	Builtmore Investments Pty Ltd
10	SJB Planning
11	Environmental Resources Management Australia
12	Christine Campbell MP on behalf of Cathy and Douglas Jitendra
13	Council Alliance for a Sustainable Built Environment (CASBE)
14	Cultivating Community
15	Kerryn Amery
16	Collie Pty Ltd
17	Broadplan on behalf of Pentridge Village Pty Ltd
18	Norton Rosa Australia on behalf of Valad Pentridge No. 1, 2, 3, 4, 5, 6
19	Public Transport Victoria
20	See Submission 22
21	Glossop Town Planning on behalf of Dr Whalid Ahmar
22	Glossop Town Planning on behalf of BE Resident Holding Pty Ltd
23	Perry Town Planning on behalf of property owners
24	Tess Hardy and Christopher Sandiford
25	UGG Australia Pty Ltd
26	Merri Community Health Services Limited on behalf of Moreland Food Gardens Network
27	Marshalls & Dent lawyers on behalf of UGG Australia Pty Ltd
28	Nic Dolby

29	Pia Herbert on behalf of Friends of Edward Street
30	Hachem Australia Pty Ltd on behalf of Dr Whalid Ahmar
31	Margaret Leach
32	Greg Carden
33	Judy Amery
34	Anthony (No surname provided)
35	John Peter Gibbons
36	Bensons Property Group
37	Brunswick Residents Network
38	Tony Monteleone on behalf of Park Street Residents Action Group
39	Maryla Skiba
40	Peter Lesley
41	Donald R Lussier
42	Paul Hockett
43	Kay Lorraine Game
44	Libby (No surname provided)
45	Catherine McLean
46	Lia Anna Maiorino
47	Pauline Ryan
48	Lucia Cai on behalf of Platform 25x Pty Ltd, ATF Cai & Lin Family Trust
49	Maria Carmen Lombardo
50	R La Rosa
51	Mark Brandi
52	Marshalls & Dent lawyers on behalf of KL Portfolio Pty Ltd
53	Suzannah Bigolin
54	Taylors on behalf of Double LZ Developments Pty Ltd
55	Kim Belfield on behalf of Mr Sener Alkan
56	Paul Rogers
57	UDIA

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## Appendix A.2 Re-exhibition

No.	Submitter
1	Housing Industry Association Ltd
2	City of Stonnington
3	Property Council of Australia (Victoria)
4	SJB Planning on behalf of Land Owner, Brunswick East
5	SJB Planning on behalf of Land Owner, Brunswick East
6	SJB Planning on behalf of Land Owner, Brunswick East
7	Norton Rose Fulbright on behalf of Shayer Properties Pty Ltd
8	City of Boroondara
9	Best Hooper Solicitors on behalf of Sedmap Investments Pty Ltd
10	VicRoads
11	Planning & Property Partners Pty Ltd on behalf of Tallow Group Pty Ltd and Alocor Pty Ltd
12	City of Yarra
13	Ms Morgan

## **Appendix B Panel Recommended Policy**

## Appendix B Panel Recommended Policy

### 22.XX MORELAND APARTMENT DESIGN

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Proposed C142

#### Scope

This policy applies to mixed use and residential development of five or more storeys (excluding a basement). If a requirement in this policy conflicts with a place-based policy or planning scheme provision, the place-based policy or provision prevails.

### 22.XX-1

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Proposed C142

#### Policy basis

Moreland is experiencing significant growth of apartment development and this policy addresses concerns that many apartments are not providing an adequate standard of accommodation for residents and are affecting the reasonable development opportunities of adjoining sites. Apartment development should provide for the health and wellbeing of its residents.

(INSERT

1. Reference to relevant planning scheme provisions that also address the design of apartments of 5 or more storeys, such as ESD, accessibility and built form provisions in the MSS, local policy, the ACZ and DDOs).
2. The Code's role to assist in interpreting the Policy and to provide guidance on potential design responses.)

### 22.XX-2

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Proposed C142

#### Objectives

- To improve the quality of higher density mixed use and residential development through the following key design elements:
  - Passive design elements
  - Internal amenity and facilities elements
  - The reasonable development opportunities of adjoining sites.

### 22.XX-3

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Proposed C142

#### Policy

It is policy to apply the objectives, standards and decision guidelines of this policy.

- **Objectives.** An objective describes the outcome to be achieved and must be met.
- **Standards.** A standard outlines specific requirements to achieve the objectives. Standards should normally be met. However, if the responsible authority is satisfied that a proposal for an alternative design solution meets the objectives, the alternative may be considered.
- **Decision Guidelines.** The decision guidelines identify the factors the responsible authority will consider when assessing an application for planning permit.

The Moreland Apartment Design Code illustrates how the objectives and standards can be met.

### 22.XX-3.1

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Proposed C142

#### Application requirements

(Extract key application requirements from the Moreland Apartment Design Code, with more detailed guidance on application requirements provided in the Code).

### 22.7- 3.2

#### Urban context report, site analysis and design response

An urban context, site analysis and design response must be provided in accordance with Clause 52.35 of the Victoria Planning Provisions.

The urban context, site analysis and design response will be central to the assessment of development proposals, including whether alternative design solutions to the standards are appropriate to achieve the objectives of this policy and respond to the particular attributes of the site.

The Moreland Apartment Design Code provides guidance on the urban context, site analysis and design response to be provided.

**22.XX-4**

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Proposed C142

**Passive design elements**

**22.XX-4.1**

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Proposed  
C142

**Building orientation**

**Objectives**

- To balance optimum solar orientation with contextually responsive design to the public realm

**Standards**

- The site layout should optimise solar access to the living areas of dwellings and open space areas
- The building(s) should create an identifiable address to the street and/or the public realm
- The building(s) should provide opportunities for passive surveillance of the public realm
- Building(s) adjoining a public park or reserve should:
  - be substantially fronted by dwellings or open space
  - clearly delineate private and public land to maximise outlook whilst avoiding a sense of privatisation of the public park or reserve.

**Decision Guidelines**

Before deciding on an application, the Responsible Authority must consider:

- Any structure plan, policy or planning provision applying to the area
- The opportunities and constraints of the site
- The design response
- The design guidelines
- The Sustainability Management Plan

**22.XX1-4.2**

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Proposed C142

**Building Separation**

**Objectives**

- To provide adequate daylight to living rooms and bedrooms
- To provide opportunities for open space areas
- To ensure buildings are located and designed to reduce overlooking into habitable rooms and private open space areas
- To provide a quality outlook for residents
- To ensure adjoining properties make equitable contributions to meeting the above objectives.

### Standards

- The urban context report and design response should include an equitable development analysis to assess the implications for development opportunities and amenity impact within the application site and for adjoining sites.
- Building separation distances should comply with the Tables 22.XX.1-1, 22.XX.1-2, 22.XX.1-3. Separation between buildings is measured from glazing line to glazing line of habitable rooms or the external edge of any balcony, whichever is the lesser. These separation distances have a primary purpose to provide adequate access to daylight in living and bedrooms. Alternative design solutions may achieve that purpose with lesser separation distances.

**Table 22.XX.1-1** Building separation to adjacent properties. *(Consider specifying different separation distances based on 2.7m and 2.4m ceiling heights).*

Minimum building separation (measured from property boundary)		
	Living/Main balcony outlook to boundary line	Bedroom outlook to boundary line
Up to 4 storeys/12 metres	6 metres	3 metres
5-8 storeys /up to 25 metres	9 metres	4.5 metres
9+ storeys/over 25 metres	12 metres	6 metres

#### NOTES:

\* *Building separation is not required to the side or rear boundary where no outlook is proposed provided it does not affect the reasonable development opportunity of the adjoining site.*

*Zero building separation applies on sites where a continuous street wall is encouraged under the relevant place-based control.*

*Where existing dwellings have not reasonably incorporated access to daylight on their own site, the building separation standards will apply on the basis that:*

- *New dwellings are provided with adequate daylight; and*
- *The new development makes a comparable contribution to the provision of daylight into the habitable rooms of those existing dwellings*

*The building separation requirements commence at the first level of residential use.*

**Table 22.XX.1-23** Building separation to a lane.

Minimum building separation		
	Living/Main balcony outlook	Bedroom outlook
2 storeys (9 metres high)	0 metres (from boundary)	0 metres (from boundary)
3-8 storeys (up to 25 metres)	6 metres (from lane centre line)	3 metres (from lane centre line)
9+ storeys/over 25 metres	9 metres (from lane centre line)	6 metres (from lane centre line)

**Table 22.XX.1-3** Building separation for buildings within sites. *(Consider specifying different separation distances based on 2.7m and 2.4m ceiling heights).*

Minimum building separation					
	Living/Main balcony outlook to Living/Main balcony outlook	Bedroom outlook to bedroom outlook	Living/Main balcony outlook to bedroom outlook	Living/Main balcony outlook to no outlook	Bedroom outlook to no outlook
Up to 4 storeys/12 metres	12 metres	6 metres	9 metres	6 metres	3 metres
5-8 storeys /up to 25 metres	18 metres	9 metres	13.5 metres	9 metres	4.5 metres
9+ storeys/ over 25 metres	24 metres	12 metres	18 metres	12 metres	6 metres

**NOTES:**

*The building separation requirements commence at the first level of residential use.*

- The use of light wells for daylight should be minimised.
- Where light wells are provided, they should:
  - Provide daylight access to bedrooms only
  - Be painted in a light reflective colour
  - Provide an opportunity for useable space at ground level
  - Bedroom windows in separate dwellings that face lightwells should be staggered to avoid direct overlooking.
- Light wells should comply with the following area and minimum width:

**Table 22.XX.1-4** Lightwell Minimum areas and dimensions

	Minimum area and dimension
Up to 4 storeys/12 metres	9m <sup>2</sup> (minimum width 3m)
5-8 storeys/up to 25 metres	29m <sup>2</sup> (minimum width 4.5m)
9+ storeys/over 25 metres	51m <sup>2</sup> (minimum width 6m)

**Decision Guidelines**

Before deciding on an application, the Responsible Authority must consider:

- Any structure plan, policy or planning scheme provision applying to the area
- The opportunities and constraints of the site
- The design response
- The reasonable development opportunities of adjoining lots.
- Whether existing dwellings have not reasonably incorporated access to daylight on their own site
- Whether technical analysis demonstrates that separation distances of less than the benchmarks in the standard meet daylight performance requirements
- The design guidelines
- The Sustainability Management Plan.

**22.XX-4.3**

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Proposed C142

**Daylight Access**

**Objective**

- To ensure adequate daylight to dwellings.

## Standards

- Access to natural light in habitable rooms is to be principally achieved by compliance with Standard 22.XX-4.2 – Building separation.
- Reliance on borrowed light to bedrooms should be minimised and is confined only to one bedroom dwellings provided:
  - The bedroom has an operable internal door to the light source that is 25% of the floor area of the bedroom
  - The light source contains full height external windows along the full width of the living room to allow adequate daylight
- All living rooms should have an external window that is open to the sky or a balcony that is open for at least one third of its perimeter
- In battle-axe rooms the space providing access to daylight (which is not be affected by any obstructions and is clear to the sky) should have a maximum length of twice its width
- Buildings should provide windows to circulation corridors and lift lobbies to maximise daylight access
- Developments which do not provide ceiling heights of 2.7 metres (measured from finished floor level to finished ceiling level) for habitable rooms should demonstrate that dwellings will receive adequate daylight access.

## Decision Guidelines

Before deciding on an application, the Responsible Authority must consider:

- Any structure plan, policy or planning provision applying to the area
- The opportunities and constraints of the site
- The design response
- The design guidelines
- Floor to ceiling height of habitable rooms and the extent of glazing
- The Sustainability Management Plan.

### 22.XX-4.4

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Proposed C142

## Natural ventilation

### Objectives

- To ensure adequate natural ventilation of dwellings and common areas
- To provide for the thermal comfort of occupants by optimising the passive heating and cooling of dwellings and communal spaces.

### Standards

- All habitable rooms should be naturally ventilated
- Cross ventilated dwellings should be maximised, by:
  - Maximising the number of dual aspect dwellings
  - Incorporating a breeze path between two ventilation openings within rooms, or from one room to another
  - Where single sided ventilation is provided, deep room should be avoided.
- Operable windows to circulation corridors and lift lobbies should be provided to facilitate natural ventilation.
- Opportunities for external clothes drying should be provided.

### **Decision Guidelines**

Before deciding on an application, the Responsible Authority must consider:

- Any structure plan, policy or planning provision applying to the area
- The opportunities and constraints of the site
- The design response
- The design guidelines
- The Sustainability Management Plan.

### **22.XX-4.6**

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Proposed C142

### **Thermal Comfort**

#### **Objectives**

- To optimise provision of direct sunlight in winter while avoiding overheating in summer
- To ensure comfortable internal temperatures for occupants throughout the year
- To allow occupant control over thermal comfort

#### **Standards**

- All dwellings should demonstrate that habitable room glazing receives adequate shading from summer sun and optimises solar access during winter. This could be via a combination of balconies, horizontal shading features and vertical shading features
- Where external shading is not provided to northern, eastern or western facades, effective thermal comfort levels should be achieved by demonstrating a maximum cooling load for each dwelling using accredited energy rating software
- Occupant control of the thermal environment should be facilitated. This could be through the provision of reversible ceiling fans, adjustable external shading devices, operable windows and zoning of mechanical heating and cooling systems where these are provided.

### **Decision Guidelines**

Before deciding on an application, the Responsible Authority must consider:

- Any structure plan, policy or planning provision applying to the area
- The opportunities and constraints of the site
- The design response
- The design guidelines
- The Sustainability Management Plan.

### **22.XX-5**

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Proposed C142

### **Internal amenity and facilities elements**

#### **22.XX-5.1**

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Proposed C142

#### **Dwelling diversity**

##### **Objectives**

- To provide a range of dwelling sizes.

##### **Decision Guidelines**

Before deciding on an application, the Responsible Authority must consider:

- Any structure plan, policy or planning provision applying to the area
- The design guidelines.

## **22.XX-5.2 Dwelling size and layout**

### **Objective**

- To ensure that dwellings are suitably sized and arranged to meet the needs of occupants and to enable flexibility of use.

### **Standards**

- Layout plans should illustrate the functionality and liveability of all proposed apartment types. These plans should also show typical furniture layouts.

### **Decision Guidelines**

Before deciding on an application, the Responsible Authority must consider:

- Any structure plan, policy or planning provision applying to the area
- The floor to ceiling heights of dwellings
- The size of the balcony
- The design guidelines

## **22.XX-5.3 Pedestrian entry and circulation**

### **Objectives**

- To provide an identifiable street address .
- To provide shelter to the entrances of buildings.
- To ensure that circulation within buildings and access to dwellings and to communal areas is efficient and safe.

### **Standards**

- Pedestrian entries should be clearly visible and identifiable from the public realm
- Avoid location of ramps across building frontages which impede opportunities for direct access to individual tenancies
- Provide awnings to the pedestrian entrances to buildings.
- The design of awnings should:
  - Be continuous along retail/commercial and key pedestrian routes
  - Complement the existing height, depth and form of existing awnings, where appropriate
  - Have regard to any built form controls regarding the preferred character or existing character of the area
  - Contribute to the legibility of the building and the amenity of the public realm
  - Provide illumination
  - Provide sufficient protection from sun and rain
- Distinguish the main entry to the apartment building from the entrances of any commercial and retail premises
- Provide clear separation between vehicle and pedestrian to buildings
- Provide a direct visual connection between the pedestrian entry and lift lobbies
- Provide generous corridor widths and ceiling heights no less than 2.7 metres, particularly in entry areas, ground floor lobby and the waiting area around lifts

- Minimise corridor lengths to give short, clear sight lines and better orientation from within the building
- Natural light and ventilation should be provided to all communal circulation spaces
- Provide visible and attractive stairs from the entry level to a minimum of four floors to encourage stair use
- Long buildings should be designed with multiple cores instead of one core with a very long corridor to:
  - Increase the number of entries along a street
  - Provide for more cross-ventilated dwellings which are not limited by corridors
- Where dwellings are arranged off a double loaded corridor, corridor length should not exceed 25 metres. Any corridors longer than 25 metres should be articulated with design solutions such as:
  - Utilising a series of foyer areas, as break space from the long corridor
  - Providing windows at the end of a corridor, along the corridor or around lift lobby areas.

### **Decision Guidelines**

Before deciding on an application, the Responsible Authority must consider:

- Any structure plan, policy or planning provision applying to the area
- The opportunities and constraints of the site
- The design response
- The design guidelines.

## **22.XX-5.5**

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Proposed C142

### **Accessibility**

#### **Objective**

- To ensure that access to buildings and individual dwellings and the layout of dwellings caters for people of all abilities.

### **Decision Guidelines**

Before deciding on an application, the responsible authority must consider:

- Extent of compliance with the accessibility report
- Any structure plan, policy or planning provision applying to the area.

## **22.XX-5.6**

### **Acoustic performance**

#### **Objectives**

- To minimise noise transfer through the siting of buildings and building layout
- To minimise noise through apartment layout and acoustic treatments

#### **Standards**

- Windows and door openings should be oriented away from noise sources
- Noisy areas within buildings including building entries and doors should be located next to or above each other and quieter areas next to or above quieter areas
- Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources

- The number of party walls should be limited and should be appropriately insulated
- Noise sources such as garage doors, driveways, service areas, plant rooms building services, mechanical equipment, active communal spaces and circulation areas should be located at least 3 metres from bedrooms
- Internal apartment layout should separate noisy spaces from quiet spaces, using a number of the following design responses:
  - Rooms with similar noise requirements should be grouped together
  - Doors should separate different use zones
  - Wardrobes in bedrooms should be co-located to act as sound buffers.
- Where physical separation cannot be achieved noise conflicts should be resolved using the following design solutions:
  - Double or acoustic glazing
  - Acoustic seals
  - Use of materials with low noise penetration properties
  - Continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements.

### **Decision Guidelines**

Before deciding on an application, the Responsible Authority must consider:

- The acoustic report
- Any structure plan, policy or planning provision applying to the area.

## **22.XX-5.7 Private open space**

### **Objective**

- To provide functional and useable private open space areas for individual dwellings.

### **Standards**

- Provide ground floor dwellings with access to landscaped open space having regard to the urban context
- Orient private open space to maximise solar access
- All dwellings should include a balcony with a minimum area of 8 square metres and a minimum width of 1.6 metres
- The balcony should be extended to adjoin the living area to extend the living space
- Air conditioning units should not inhibit the use and amenity of private open space.

### **Decision Guidelines**

Before deciding on an application, the Responsible Authority must consider:

- The opportunities and constraints of the site
- The design response
- The design guidelines
- Any structure plan, policy or planning provision applying to the area.

**22.XX-5.8**

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Proposed C142

**Privacy**

**Objective**

- To ensure a reasonable level of privacy to residents within a building and to residents in adjacent buildings.

**Standards**

- Overlooking should be minimised principally by compliance with 22.XX-4.2 – Building separation
- Dwelling layouts should be designed to minimise direct overlooking into habitable spaces and private open spaces instead of reliance on screening/obscuring measures that adversely impact on the quality of the outlook
- Where direct views into private open space and habitable rooms are unavoidable, measures to reduce overlooking should be considered. Such measures may include level changes, landscaping, balconies, balustrades to balconies and screening devices such as horizontal or vertical fins.

**Decision Guidelines**

Before deciding on an application, the Responsible Authority must consider:

- Any structure plan, policy or planning provision applying to the area
- The opportunities and constraints of the site
- The design response
- The design guidelines.

**22.XX-5.9**

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Proposed C142

**Open space and landscape design**

**Objective**

- To provide and integrate open space within the site layout
- To integrate landscape design with the overall site layout and building design
- To enhance urban landscapes and respond to the existing or desired landscape context
- To enhance landscaping in the public realm
- To provide opportunities for landscaping that minimises the impact of the urban island heat effect and that contributes to the micro-climate of the site.

**Standards**

- Solar access to open space areas should be maximised
- The landscape layout and design should:
  - Protect any significant landscape features including mature trees and vegetation
  - Take into account the soil type, drainage patterns and other relevant conditions of the site
  - Allow for intended vegetation without affecting the structural integrity of the building
  - Identify opportunities for deep soil planting that is of sufficient dimension to allow for the planting of canopy trees
  - Consider green walls and green roofs for thermal insulation and reduction in the urban heat island affect
  - Identify opportunities to provide landscaping in the public realm

- Impervious areas should be minimised through measures such as rain gardens, permeable pavements, grassed areas, vegetated green roofs and other on-site detention systems to reduce the volume storage required, cool the local area and provide irrigation to landscaping
- Regular irrigation of vegetation should be provided using non-potable water where possible
- Landscapes should be designed to allow for effective on-going maintenance and to accommodate intended performance
- Green roofs, green facades and other landscape over structure are encouraged, particularly if areas for deep soil planting are not provided
- Contribute to landscaping in the public realm in accordance with Council's Moreland's Streets Landscape Strategy 2012-2022, if appropriate
- A landscape design report prepared by a suitably qualified landscape architect.

### **Decision Guidelines**

Before deciding on an application, the Responsible Authority must consider:

- Any structure plan, policy or planning provision applying to the area, including any Council street tree or public park planting programs
- The opportunities and constraints of the site
- The design response
- The design guidelines
- The landscape architect report.

## **22.XX-5.10 Communal facilities**

### **Objective**

- To provide adequate communal facilities.

### **Standards**

- Communal spaces should be provided in larger developments
- The effective use of roof space, podiums and light courts for communal open space is encouraged
- All communal spaces and facilities should be safe, accessible and, where possible, naturally lit and ventilated.
- Communal open space should be:
  - Consolidated into a recognisable and useable area.
  - Reasonably accessible from dwellings and from any internal communal open space area
- Facilities should be provided for a range of age groups where size permits, incorporating some of the following elements:
  - Seating for individuals or groups
  - Barbeque areas
  - Play equipment or play areas
  - Swimming pools, gyms or common rooms.

### **Decision Guidelines**

Before deciding on an application, the Responsible Authority must consider:

- Any structure plan, policy or planning provision applying to the area

- The opportunities and constraints of the site
- The design response
- The design guidelines.

**22.XX-5.11 Site services**

**22.XX-5.11-1 Bicycle and car parking**

**Objective**

- To ensure that bicycle and car parking areas and facilities are convenient, accessible and safe
- To ensure sufficient bicycle facilities are provided.

**Standards**

**Provision of bicycle facilities**

- Bicycle parking should be provided in accordance with the requirements of Table 22.XX.10-1

**Table 22.XX.10-1 Bicycle Parking Rate**

Use	Bicycle parking rate
Dwelling	1 space per studio and 1 bedroom dwelling 2 spaces per 2+ bedroom dwelling
Office	1 employee space per 200m <sup>2</sup> gross floor area 1 visitor space per 750m <sup>2</sup> over 1000m <sup>2</sup>
Shop	1 employee space per 300m <sup>2</sup> gross floor area 1 visitor space per 500m <sup>2</sup> over 1000m <sup>2</sup>

- Reductions of the standard car parking rates in Clause 52.06 will be considered having regard to the level of provision of bicycle parking.
- Bicycle parking should be located as close as possible to the building entrance
- Bicycle parking should be accessible, safe and secure
- Showers and change facilities should be provided in accordance with Clause 52.34
- Bicycle spaces should be designed in accordance with the design suggestions contained within *The bicycle parking handbook*, Bicycle Network Victoria, October 2004, or as may be amended from time to time
- Appropriate signage directing cyclists to the visitor spaces should be provided in accordance with the requirements of Clause 52.34-5.

**Layout of car parking and bicycle areas**

- Car parking should:
  - Be reasonably close and convenient to the uses it serves
  - Be secure and designed to allow safe and efficient movements within the development
  - Be well ventilated if enclosed
  - Provide scope for the parking of motorcycles
- Car park areas should be located in basement levels or, if located at or above ground, car parks should be concealed from view through the use of occupied tenancies ('sleeved' with other uses) or dwellings
- When semi-basement car parking is proposed, the area should be naturally ventilated

- Car parks and vehicle accessways should be located at least 1.5 metres from the windows of habitable rooms. This setback may be reduced to 1 metre where there is a fence at least 1.5 metres high or where window sills are at least 1.4 metres above the accessway
- Vehicle accessways be separated from pedestrian entry points
- Car parking areas should be designed to maximise safety, including clear lines of sight to lifts, stairs and exit points, be well lit and clearly signed.

### Decision Guidelines

Before deciding on an application, the responsible authority must consider:

- Any structure plan, policy or planning provision applying to the area
- The opportunities and constraints of the site
- The design response
- The design guidelines.

## 22.XX-5.11-2 Private storage space

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Proposed C142

### Objective

- To provide sufficient and accessible storage for each dwelling.

### Standards

- All dwellings should provide adequate storage for everyday household items
- Additional storage space should be provided as follows:
  - 4m<sup>3</sup> for Studio and 1 bedroom apartments
  - 6m<sup>3</sup> for 2 bedroom apartment
  - 8m<sup>3</sup> for 3 bedroom apartment
- Storage space does not include bicycle or car parking.

### Decision Guidelines

Before deciding on an application, the Responsible Authority must consider:

- Any structure plan, policy or planning provision applying to the area
- The design guidelines.

## 22.XX-5.11-3 Waste management

### Objective

- To ensure that the design of buildings provide for sustainable management facilities and services.

### Standards

- Waste management systems should be designed to meet best practice standards outlined in 'Guide to Best Practice Waste Management in Multi-Unit Developments' (Sustainability Victoria October 2010 and as updated), giving considerations to any local requirements
- A dedicated storage area(s) for separation, collection and recycling of waste with ease of access for all building occupants and waste collection contractors that is sufficiently sized to accommodate various recyclables should be provided
- Dedicated facilities should be provided for composting and green waste where opportunity exists for on-site disposal and reuse.

### **Decision Guidelines**

Before deciding on an application, the Responsible Authority must consider:

- Extent of compliance with Waste Management Plan
- Any structure plan, policy or planning provision applying to the area.

### **22.XX-7.1**

~~7.1~~  
Proposed C142

### **Reference Documents**

*Moreland Apartment Design Code*, Moreland City Council, **UPDATE**