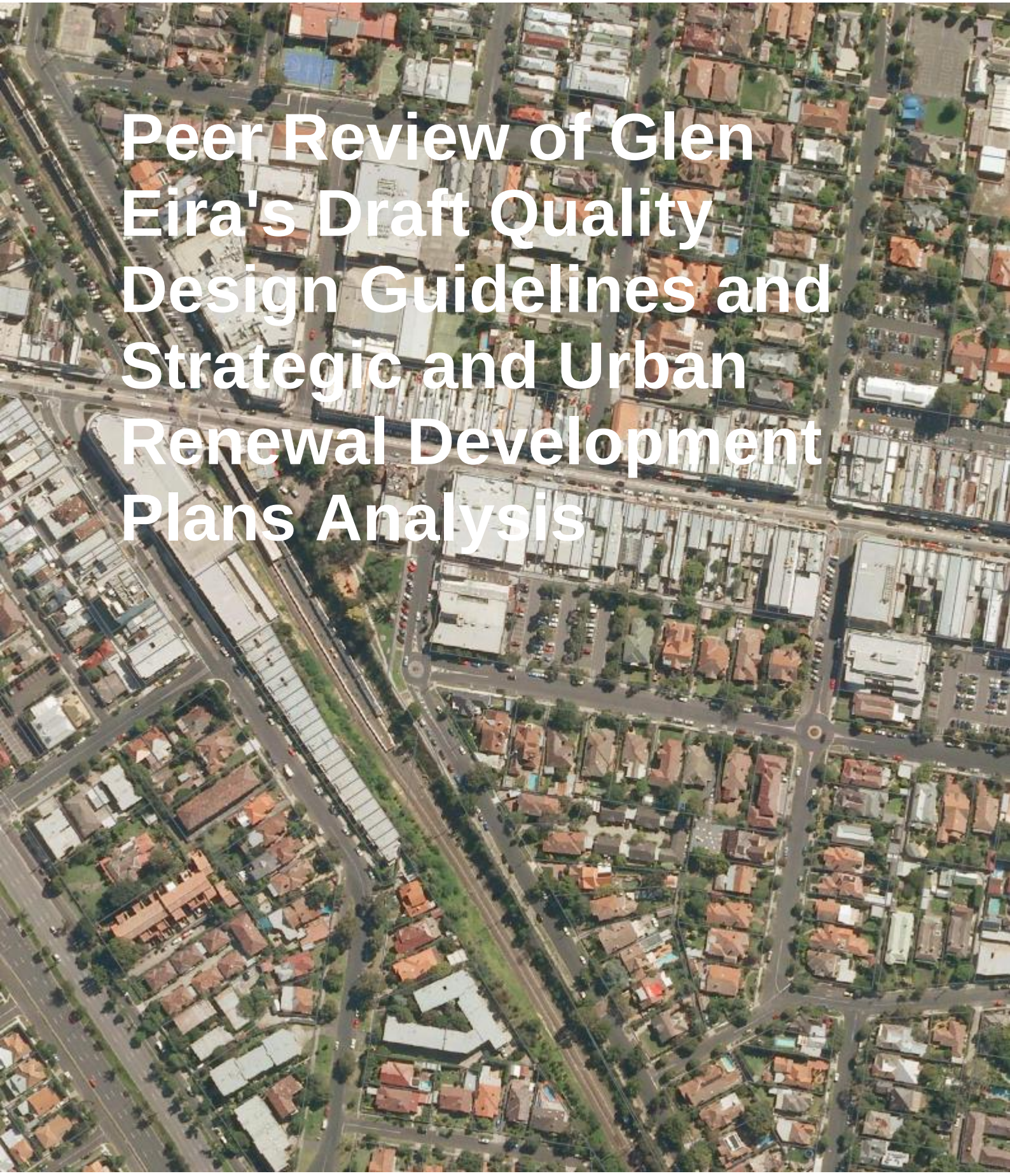
AECOM Imagine it. Delivered.

Glen Eira City Council
17-Oct-2017



Peer Review of Glen Eira's Draft Quality Design Guidelines and Strategic and Urban Renewal Development Plans Analysis

17-Oct-2017
Prepared for – Glen Eira City Council – ABN: 65 952 882 314

Peer Review of Glen Eira's Draft Quality Design Guidelines and Strategic and Urban Renewal Development Plans Analysis

Client: Glen Eira City Council

ABN: 65 952 882 314

Prepared by

AECOM Australia Pty Ltd
Level 10, Tower Two, 727 Collins Street, Melbourne VIC 3008, Australia
T +61 3 9653 1234 F +61 3 9654 7117 www.aecom.com
ABN 20 093 846 925

In association with

HillPDA

17-Oct-2017

AECOM in Australia and New Zealand is certified to ISO9001, ISO14001 AS/NZS4801 and OHSAS18001.

Table of Contents

1.0 Introduction 1
1.1 Background 1
1.2 Project aims 1
1.3 Project methodology 1
1.4 Study Areas 2
1.5 Policy Context 2
1.5.1 State Planning Policies 2
- Activity Centre Design Guidelines (DSE 2005) 3
- Safer Design Guidelines for Victoria (DSE 2005) 3
- Guidelines for Higher Density Residential Development (DSE 2004) 3
1.5.2 Current Council Reports 3
2.0 Review of Key Principles 4
2.1 Background 4
2.2 Residential Principles 5
2.3 Commercial Principles 6
3.0 Testing of Preferred Building Types 7
3.1 Residential Types: 7
3.1.1 Heritage/Character Housing: 61 St Georges Road, Elsternwick 8
3.1.2 Side-by-side townhouse: 13 Renown Street, Bentleigh 10
3.1.3 Terrace townhouse: 34-36 Jersey Parade, Carnegie 12
3.1.4 Terrace townhouse/apartment: 192-194 Centre Road, Bentleigh 14
3.1.5 Garden apartments: 4-8 Blair Street, Bentleigh 16
3.2 Commercial Types: 18
3.2.1 Heritage/character shop top: 400-402 Glen Huntly Road, Elsternwick 19
3.2.2 Shop top: 489-493 Centre Road, Bentleigh 21
3.2.3 Strategic site (mixed use): Shepparson Avenue, Carnegie 23
3.2.4 Urban renewal: Nepean Highway, Elsternwick 26
4.0 Draft Quality Design Guidelines Peer Review 30
5.0 Urban Renewal Areas 31
5.1 Bentleigh 31
5.2 Carnegie 32
5.3 Elsternwick 33

Appendix A
Development Typology Summary Table A

Appendix B
Glen Eira Design Guidelines Review – Property Economics Analysis B

1.0 Introduction

1.1 Background

A review of the Glen Eira Planning Scheme was undertaken in 2016. The aim of the review was to address key planning issues, enhance the clarity of Glen Eira's strategic objectives and ensure consistency with state policies and strategies. Community consultation was undertaken in April and May 2016.

As a result of this process, Council have committed to delivering a number of important planning policy projects for the community. This work is currently being undertaken the 'Our City Futures' department, and includes:

- Activity Centre, Housing and Local Economy Strategy which aims to set a new 15 year vision for the future of Glen Eira
- Quality Design Guidelines to provide direction for future residential, commercial, mixed use and urban renewal development for the whole of Glen Eira,
- Structure Plans for the Bentleigh, Carnegie and Elsternwick Activity Centres,
- Integrated Transport Strategy, and
- Heritage Review to update and refresh of our existing Heritage Precincts and Heritage policy framework.

AECOM and HillPDA have been engaged by Council to provide a Peer Review of the Glen Eira Draft Quality Design Guidelines and Strategic Site and Urban Renewal Development Plans Analysis. The project will guide Council officers in refining the requirements proposed by the Quality Design Guidelines. It will also provide input into the Structure Plans for the Bentleigh, Carnegie and Elsternwick major activity centres.

This Recommendations Report forms the key output of the project and outlines the project team's findings.

1.2 Project aims

The aims of this project are to:

- Refine the Quality Design Guidelines through a peer review to understand their workability and if they can deliver the required outcomes and objectives, and
- Testing and analysis of the proposed strategic site and urban renewal development precincts within the Bentleigh, Carnegie and Elsternwick Structure Plans

1.3 Project methodology

The following methodology was undertaken for this project.

- Review of the Draft Quality Design Principles with consideration of the Draft Quality Guidelines.
- Test the nine building typologies developed as part of the Draft Quality Design Principles located on typical sites located within the appropriate areas identified in the Draft Concept Plans for Bentleigh, Carnegie and Elsternwick, with consideration of vehicle parking, building and dwelling layout and outlook, and provision of private open space.
- Review of Draft Quality Design guidelines, with consideration of:
    - ResCode (Clause 55 of the Glen Eira Planning Scheme),

  - Better Apartment Design Standards (Clauses 55 and 58 of the Glen Eira Planning Scheme,
  - Reformed Residential Zones, and
  - Urban Design Guidelines for Victoria.
- Produce 3D illustrations and a development area summary of the typologies, as an input into community consultation (by Glen Eira City Council) and the property development assessment.
- Undertake a property economic assessment of the nine typologies, with a further comparison of typical development types for the typical sites that the typologies are located.
- Development of a 3D model of the strategic sites and urban renewal areas of Bentleigh, Carnegie and Elsternwick to illustrate the growth potential, urban renewal opportunity, and specific localised overshadowing constraints that may limit development.

1.4 Study Areas

The study areas are centred on the Activity Centres of Bentleigh, Carnegie and Elsternwick, extending to their fringes and the residential area and commercial areas that are within proximity of the centres contained within the Activity Centre study area boundaries identified by Glen Eira City Council in the Draft Concept Plans used for community consultation July 2017.

1.5 Policy Context

The study areas are affected by a range of existing planning frameworks, zones and overlays. Although the current strategic work Council is undertaken will likely amend some of these, they will influence the built form outcomes that are achieved. Of particular relevance and importance are the following:

1.5.1 State Planning Policies

Clause 55 of the Glen Eira Planning Scheme (ResCode)

The design standards within ResCode provide the defined measures to which multi-residential development of four storeys or less are developed and assessed. This includes standards regarding setbacks, site coverage, private open space provision, and front fences relevant to the Draft Quality Design Guidelines. The potential exists for a range of design standards to be adjusted for local outcomes, constraints and aspiration by Council through Schedules in the Residential Zones.

Clause 55 and 58 of the Glen Eira Planning Scheme (Better Apartment Design Standards)

The Better Apartments Design Standards have been introduced to improve the liveability and sustainability of apartments across Victoria. The Standards were implemented in the Victoria Planning Provisions and all planning schemes via Amendment VC136 on 13 April 2017.

This includes standards regarding landscape, functional layout and natural ventilation standards that are relevant to the Draft Quality Design Guidelines.

Residential Growth, General Residential and Neighbourhood Residential Zones (Reformed Residential Zones)

The Reformed Residential Zones introduced a number of amendments to existing residential zones that include design standards regarding minimum garden requirements and maximum building heights that are relevant to the Draft Quality Design Guidelines.

Urban Design Guidelines for Victoria

The Urban Design Guidelines for Victoria are a reference document in all planning schemes through the State Planning Policy Framework. The guideline support state agencies, local councils, and the development sector to deliver liveable, safe places and condense and streamline information from the three former guidelines.

- Activity Centre Design Guidelines (DSE 2005)
- Safer Design Guidelines for Victoria (DSE 2005)
- Guidelines for Higher Density Residential Development (DSE 2004)

The objectives and guidelines in Chapter 5 Buildings are relevant to the Draft Quality Design Principles and Guidelines.

1.5.2 Current Council Reports

In addition, the following Council reports have been reviewed for context by the project team:

- Glen Eira Activity Centres Urban Context Report (June 2017),
- Urban Design Analysis: Bentleigh, Carnegie, Elsternwick (May 2017),
- Glen Eira Activity Centre , Housing and Local Economy Strategy, and
- Glen Eira Community Benefits Discussion Paper.

2.0 Review of Key Principles

2.1 Background

Council have produced a set of Draft Quality Design Principles. The purpose of the document is to provide direction for future residential and commercial development in Glen Eira.

Council's approach is described as putting the 'right buildings in the right locations'. This is achieved by creating a range of building types that embody the Quality Design Principles to help provide an appropriate transition in height, character and housing types Activity Centres and surrounding residential neighbourhoods.

The principles respond to activity centre planning engagement since November 2016. The document was released for consultation in July 2017.

Whilst it is understood that the document was intended for public consultation, the principles' relationship to the preferred building types and Draft Quality Design Guidelines will need to continue to be clearly communicated.

Common opportunities to improve both sets of principles include the following:

- More clarity around the role and intent of the principles (and guidelines) including their relationship to other policies i.e. Rescode, Urban Design Guidelines for Victoria, Better Apartment Guidelines etc.
- Inclusion of a summary or descriptor of each principle that clearly outlines the intent of each.
- Use of 'encourage' and 'avoid' statements to support principle, not as primary text.
- Removal the 'avoid' text where it is only an inverse of 'encourage' text.
- Reduction jargon and simplification of principles to focus on the key outcomes of each.
- Labelling of example images to identify the aspects that make them particularly high-quality.

2.2 Residential Principles

The Residential Principles aspirations are largely well-aligned to the Draft Design Guidelines and the objectives of the Urban Design Guidelines for Victoria (Section 5.2 Higher Density Residential Buildings).

The below is an example of streamlining the messages through the introduction of a broader intent statement that sharpens the objective or outcome being sought.

Proposed Quality Design Guideline Intent Statements

Principle 1 – Street frontages [Note: renamed principle to align to the objective]

Presenting well-scaled, articulated and set back buildings to the street that strengthen the residential character.

Principle 2 – Quality materials

Using hard wearing, natural and familiar materials in new buildings to provide continuity with existing built form.

Principle 3 – Residential garden setting

Maintaining large front and rear garden areas that provide continuous green streetscapes and continuity of rear yards within street blocks.

Principle 4 – Canopy trees and greenery

Maximising the retention and planting of canopy trees and large areas of soft landscaping.

Principle 5 – Access and parking

Reducing the visual presence of vehicle accessways, garages and parking on streetscapes.

Principle 6 – Residential roof forms

Creating roof forms that reduce the apparent scale of taller buildings and provide a residential character.

Principle 7 – Managing overlooking

Reducing opportunities for overlooking of neighbouring properties through building layout, setbacks,

Principle 8 – Universal design

Creating dwellings that are usable for a broad range of household types, and physical abilities.

2.3 Commercial Principles

The Residential Principles aspirations are largely well-aligned to the Draft Design Guidelines and the objectives of the Urban Design Guidelines for Victoria (Sections 1.2 – Activity centre structure, 5.1 – Buildings in activity centres and 5.2 Higher Density Residential Buildings).

The below is an example of streamlining the messages through the introduction of a broader intent statement that sharpens the objective or outcome being sought.

Proposed Quality Design Guideline Intent Statements

Principle 1 – Street character

Strengthening the established built form scale and articulation of key activity centre streets

Principle 2 – Street frontages [Note: renamed principle to align to the objective]

Maintaining continuity of ground level activity and pedestrian safety and comfort along streets.

Principle 3 – Quality materials

Using hard wearing, natural and familiar materials in new buildings to provide continuity with existing built form.

Principle 4 – Commercial priority

Delivering diverse and flexible accommodation that serves the needs of trade and commerce.

Principle 5 – Public spaces

Providing adequate public spaces that serve the needs for existing and new residents and visitors.

Principle 6 – Access and parking

Reducing the visual presence of vehicle accessways and parking on streetscapes while maintaining safe pedestrian access to parking areas.

Principle 7 – Community benefit

Providing for community uses, employment, housing and access via increased development potential.

3.0 Testing of Preferred Building Types

Council's Quality Design Principles document outlines five residential building types and four commercial types. Each building type includes a description of its objective, a list of key attributes, and preferred locations.

3.1 Residential Types:

To understand the effects of the proposed guidelines, test sites were identified for each residential typology. The test sites were selected as being representative of the types and the contexts in which they generally sit and are identified below:

- Heritage/Character Housing: 61 St Georges Road, Elsternwick
- Side-by-side townhouse: 13 Renown Street, Bentleigh
- Terrace townhouse: 34-36 Jersey Parade, Carnegie
- Terrace townhouse/apartment: 192-194 Centre Road, Bentleigh
- Garden apartments: 4-8 Blair Street, Bentleigh

The Draft Quality Design Guidelines propose a range of setback, fence, private open space, landscape and dwelling orientation design standards that have been applied to the test sites, along with key existing design standards that are also applicable to these sites.

The property economics assessment undertaken was based on these test sites and was compared against typical existing dwelling product to provide better context of the results of the Preferred Building Type testing. The property economics assessment was undertaken with the following assumptions:

- An analysis of the Elsternwick residential (apartment and semi-detached dwellings) market to generate values for residential and commercial space
- Identification of development construction costs based on Rawlinsons Australian Construction Handbook 2017
- Identification of other development costs including land acquisition, development contributions, holding costs, escalation and profit/risk.

Note: Further detail is available in 'Glen Eira Design Guidelines Review – Property Economics Analysis'.

The key opportunities for improvement to the Draft Quality Guidelines have been summarised for each type with more detailed recommendations documented in Section 4.0 of this report.

3.1.1 Heritage/Character Housing: 61 St Georges Road, Elsternwick

Typical Site Characteristics:

- Total site area: 329 square metres
- Site dimensions: 15 metres x 36.5 metres
- Dwelling number: one

Figure 1 Aerial image of typical site for heritage/character housing – 61 St Georges Road, Elsternwick

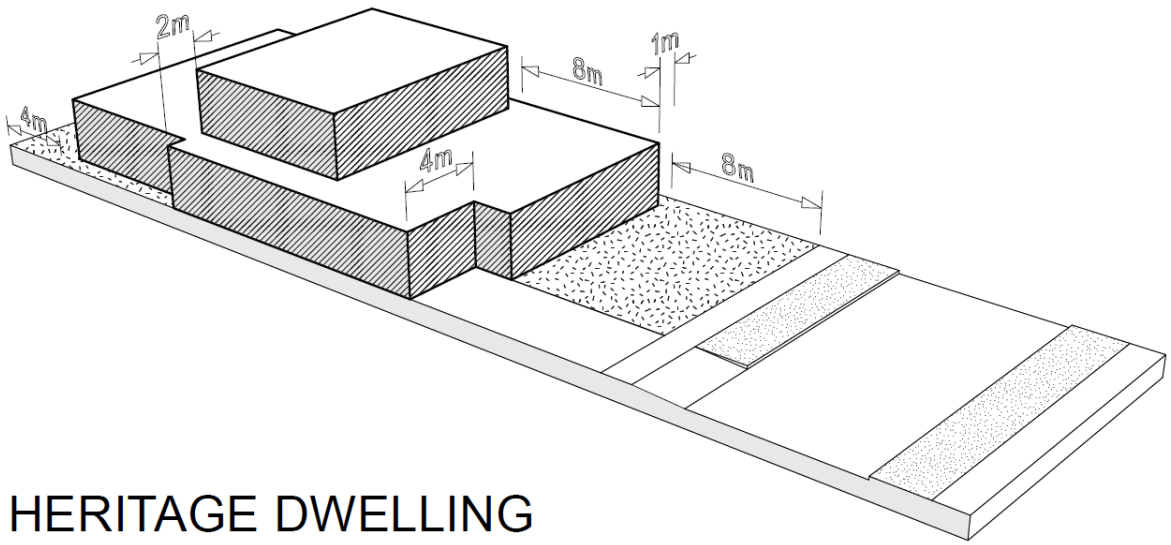


Figure 2 Diagram showing setback requirements for heritage dwelling type

Key Development Outcome Characteristics:

- Ground Floor Development Area: 329 square metres
- First Floor Development Area: 105 square metres
- Single garage only
- Built form presents as a single storey with the first floor contained within a roof form envelope

Key Property Economics Assessment Findings:

- An assessment of this type was not undertaken given the broadly understood capacity to accommodate a single dwelling on a lot.

Key Guideline Improvement Opportunities:

- Create stronger, more uniform and clearly articulated private open space and rear landscape outcomes (in line with draft guidelines proposed with other building types)
- Protect areas of existing neighbourhood character and heritage from more intensive development through amendments to existing zone and a reduction of existing development height.

3.1.2 Side-by-side townhouse: 13 Renown Street, Bentleigh

Typical Site Characteristics:

- Total site area: 768 square metres
- Site dimensions: 16 metres x 48 metres
- Dwelling number: two

Figure 3 Aerial image of typical site for side-by-side townhouses – 13 Renown Street, Bentleigh

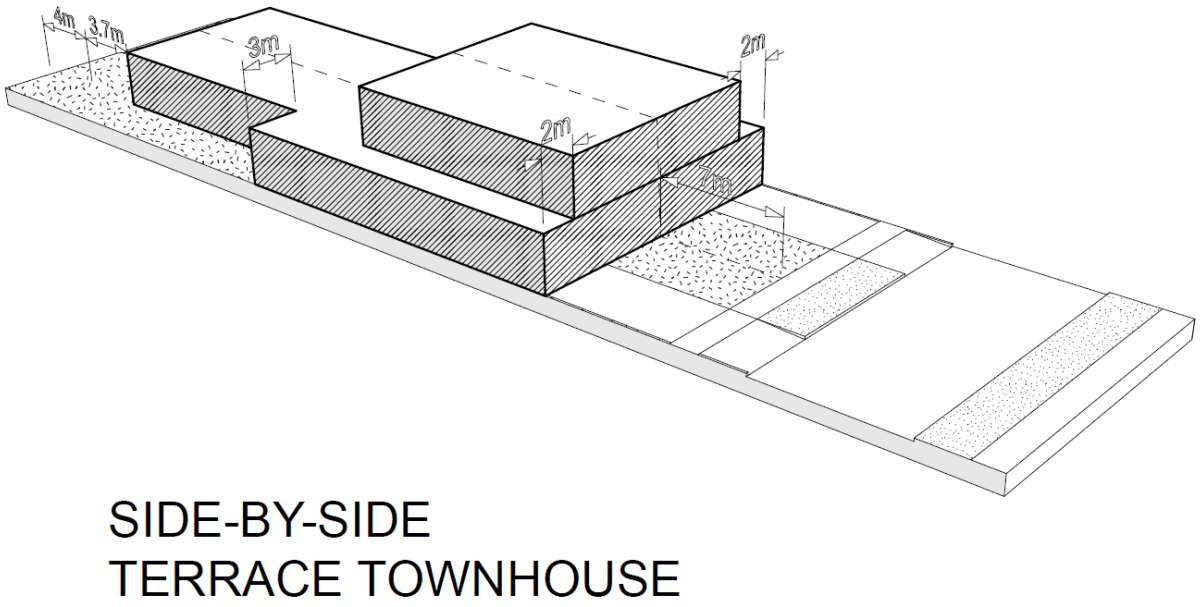


Figure 4 Diagram showing setback requirements for side by side townhouse type

Key Development Outcome Characteristics:

- Ground Floor Development Area: 450 square metres
- First Floor Development Area: 165 square metres
- Single garage only for each dwelling
- Built form presents as a two storey building with a significant rear setback to the first floor based on adjoining buildings

Key Property Economics Assessment Findings:

- Feasible development is possible though with a 5% reduction in site value given the constraints on the overall development area of the site compared to typical dwelling stock that is delivered into the current market.

Key Guideline Improvement Opportunities:

- Balance first floor setbacks with the provision of good quality private open space, landscape opportunity, and overshadowing and overlooking outcomes by providing a uniform, first-floor, rear setback provision that also reduces building footprints and maintains development potential.

3.1.3 Terrace townhouse: 34-36 Jersey Parade, Carnegie

Typical Site Characteristics:

- Total site area: 1,113 square metres
- Site dimensions: 30.5 metres x 36.5 metres
- Dwelling number: Five

Figure 5 Aerial image of typical site for terrace townhouses – 34-36 Jersey Parade, Carnegie

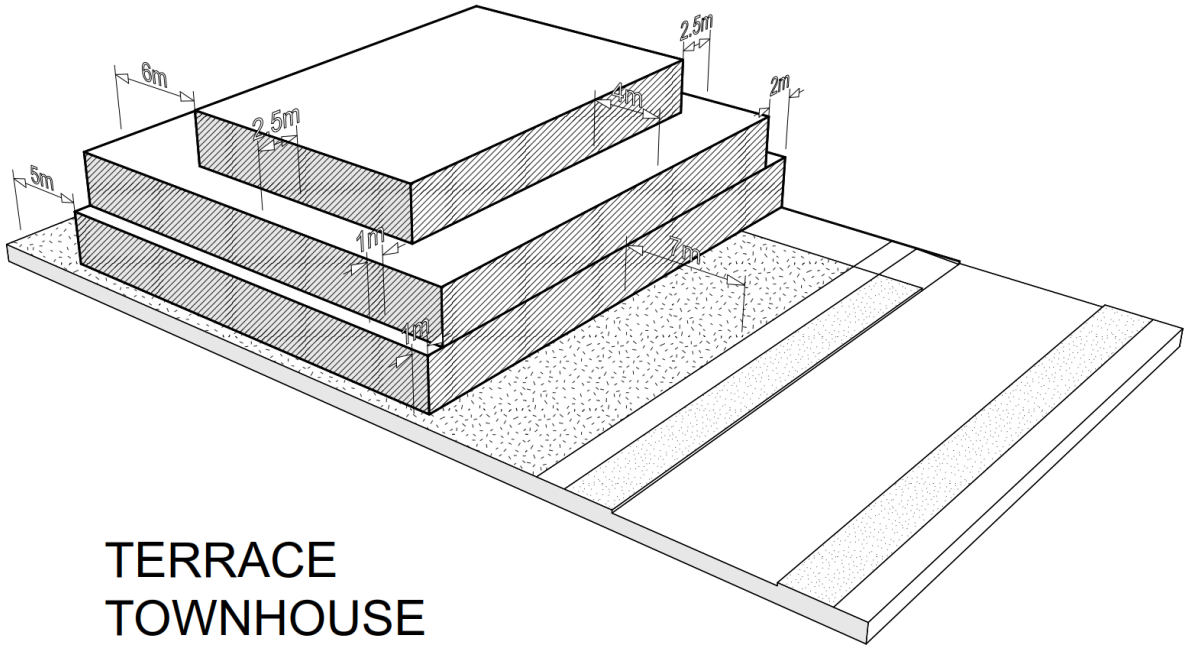


Figure 6 Diagram showing setback requirements for terrace townhouse type

Key Development Outcome Characteristics:

- Basement Car Park Area: 715 square metres
- Ground Floor Development Area: 715 square metres
- First Floor Development Area: 650 square metres
- Second Floor Development Area: 294 square metres
- Two car spaces for each townhouse dwelling
- Built form presents as a two storey building with significant setbacks for upper floors to be contained within a roof form envelope

Key Property Economics Assessment Findings:

- Feasible development is possible though with a 12% reduction in site value given the constraints on the overall development area of the site compared to typical (apartment only) development that would be otherwise delivered on this type of site.
- An apartment only development within this envelope would create significantly more development margin profit potential of 26% rather than 14%.

Key Guideline Improvement Opportunities:

- Undertake further detailed testing of this type to identify optimal and reconciled open space provision, front fence, floor plan layout viability, development yield and economic feasibility.

3.1.4 Terrace townhouse/apartment: 192-194 Centre Road, Bentleigh

Key Site Characteristics:

- Total site area: 1,165 square metres
- Site dimensions: 31.5metres x 37metres
- Dwelling number: Nine

Figure 7 Aerial image of typical site for terrace townhouse/apartments – 192-194 Centre Road, Bentleigh

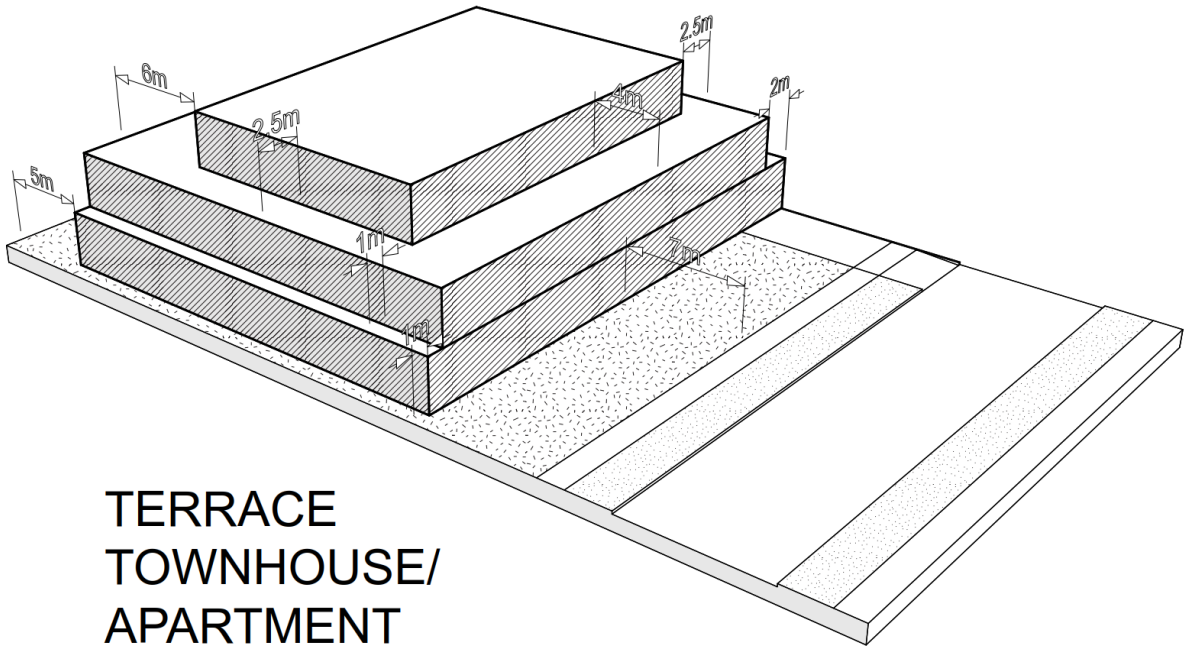


Figure 8 Diagram showing setback requirements for terrace townhouse/apartment type

Key Development Outcome Characteristics:

- Basement Car Park Area: 705 square metres
- Ground Floor Development Area: 705 square metres
- First Floor Development Area: 673 square metres
- Second Floor Development Area: 350 square metres
- Two car spaces for each townhouse dwelling and one car space for each apartment
- Built form presents as a two storey building with significant rear setback for upper floor to be contained within a roof form envelope

Key Property Economics Assessment Findings:

- Feasible development is possible though with a 14% reduction in site value given the constraints on the overall development area of the site compared to typical (apartment only) development that would be otherwise delivered on this type of site.
- An apartment only development within this envelope would create significantly more development margin profit potential of 26% rather than 12%.

Key Guideline Improvement Opportunities:

- Undertake further detailed testing of this type to identify optimal and reconciled open space provision, front fence, floor plan layout viability, development yield and economic feasibility.

3.1.5 Garden apartments: 4-8 Blair Street, Bentleigh

Typical Site Characteristics:

- Total site area: 2,248 square metres
- Site dimensions: 44.6 metres x 50.4 metres
- Dwelling number: Fifty

Figure 9 Aerial image of typical site for garden apartments – 4-8 Blair Street, Bentleigh

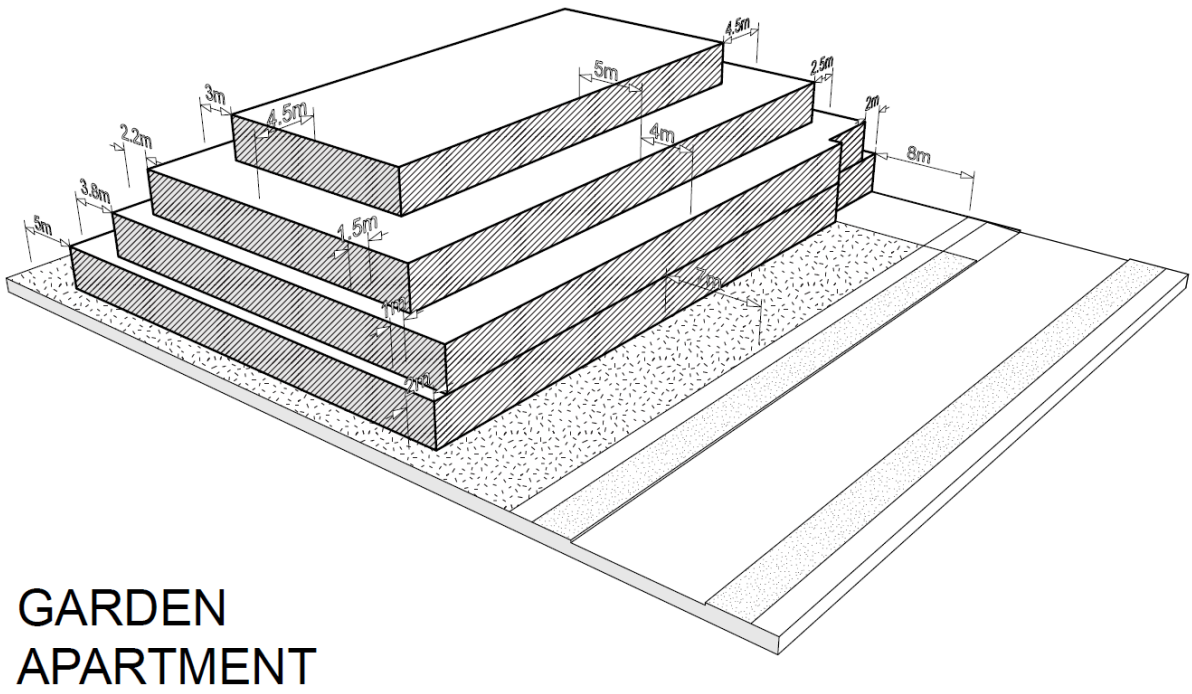


Figure 10 Diagram showing setback requirements for garden apartment type

Key Development Outcome Characteristics:

- Basement Car Park Area: 1,305 square metres
- Ground Floor Development Area: 1,305 square metres
- First Floor Development Area: 1,305 square metres
- Second Floor Development Area: 902 square metres
- Third Floor Development Area: 403 square metres
- One car space for each apartment and one visitor spaces for every five apartments
- Built form presents as a two storey building with increasing rear and side setbacks for upper floors to be contained within a roof form envelope

Key Property Economics Assessment Findings:

- Feasible development is possible though with a 22% reduction in site value given the constraints on the overall development area of the site compared to typical apartment development yield that would be otherwise be delivered on this type of site.
- A typical apartment development on this site would create significantly more development margin profit potential of 32% rather than 17%.

Key Guideline Improvement Opportunities:

- Reconcile front setback, private open space provision and front fence extents, locations and heights to ensure alignment with State planning policies and optimal development yield.

3.2 Commercial Types:

To understand the effects of the proposed guidelines, test sites were identified for each commercial typology. The test sites were selected as being representative of the types and the contexts in which they generally sit and are identified below:

- Heritage/character shop top: 400-402 Glenhuntly Road, Elsternwick
- Shop top: 489-493 Centre Road, Bentleigh
- Strategic site: Shepparson Avenue, Carnegie (existing Council car park site)
- Urban renewal: Nepean Highway, Elsternwick (existing car dealership site)

The Draft Quality Design Guidelines propose a range of setback, height and street frontage design standards that have been applied to the test sites, along with key existing design standards that are also applicable to these sites.

The property economics assessment undertaken was based on these test sites and was compared against typical existing dwelling and commercial space product to provide better context of the results of the Preferred Building Type testing. The property economics assessment was undertaken with the following assumptions:

- An analysis of the Elsternwick residential (apartment and semi-detached dwellings) and commercial markets to generate values for residential and commercial space
- Identification of development construction costs based on Rawlinsons Australian Construction Handbook 2017
- Identification of other development costs including land acquisition, development contributions, holding costs, escalation and profit/risk.

Note: For more detail please refer to 'Glen Eira Design Guidelines Review – Property Economics Analysis'.

3.2.1 Heritage/character shop top: 400-402 Glen Huntly Road, Elsternwick

Typical Site Characteristics:

- Total site area: 548 square metres
- Site dimensions: 12 metres x 44.5 metres
- Dwelling number: Sixteen
- Commercial space: 432 square metres (gross)

Figure 11 Aerial image of typical site for heritage/character shop tops – 400-402 Glen Huntly Road, Elsternwick

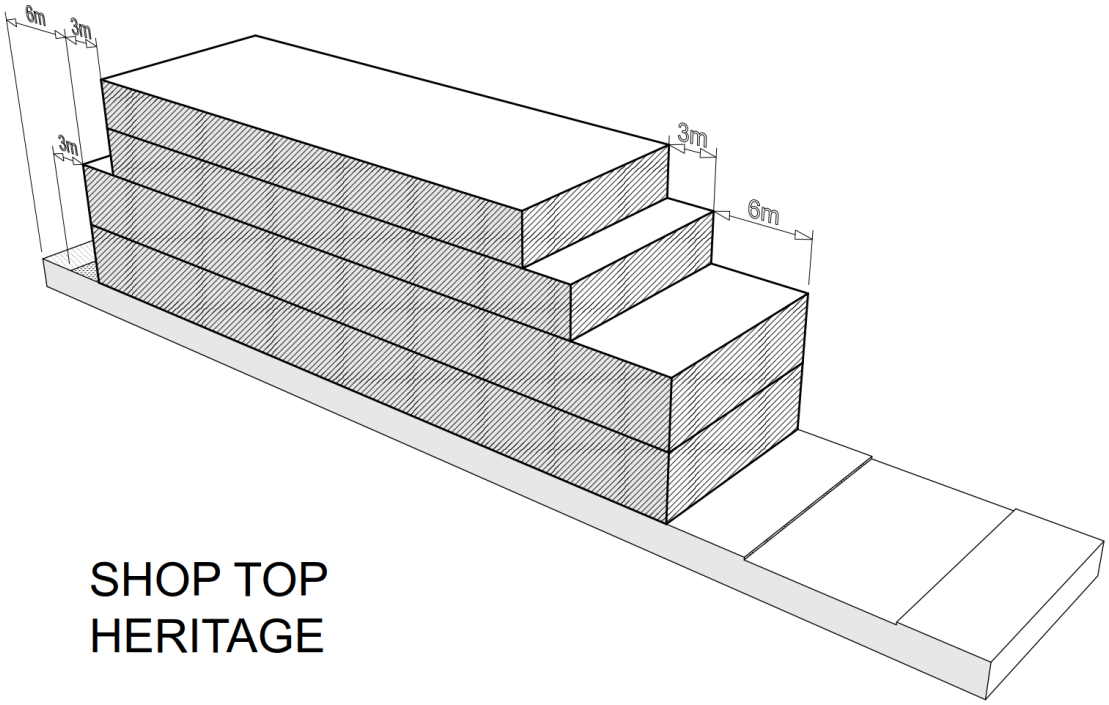


Figure 12 Diagram showing setback requirements for heritage/character shop top type

Key Development Outcome Characteristics:

- Basement Car Park Area: 504 square metres
- Ground Floor Development Area: 504 square metres
- First Floor Development Area: 504 square metres
- Second Floor Development Area: 396 square metres
- Third Floor Development Area: 360 square metres
- One car space for each apartment and one visitor space for every five apartments and one space for ground floor commercial space use
- Increasing built form setback from the existing two storey built form street edge

Key Property Economics Assessment Findings:

- An economic assessment of this type was not undertaken given the highly bespoke nature of the development potential and the broad range of dwelling size and quality (orientation, daylight, access etc) that can be accommodated on this type of development.

Key Guideline Improvement Opportunities:

- Provide definition of active laneway locations, and reconcile car parking and vehicle access with laneway frontage objectives.
- Reconcile and optimise the proposed overall height and development potential with the core ground floor retail use of these sites within the retail core of activity centres, and overshadowing of key retail streets.

3.2.2 Shop top: 489-493 Centre Road, Bentleigh

Typical Site Characteristics:

- Total site area: 648 square metres
- Site dimensions: 16 metres x 40.5 metres
- Dwelling number: Twenty-five
- Commercial space: 528 square metres (gross)

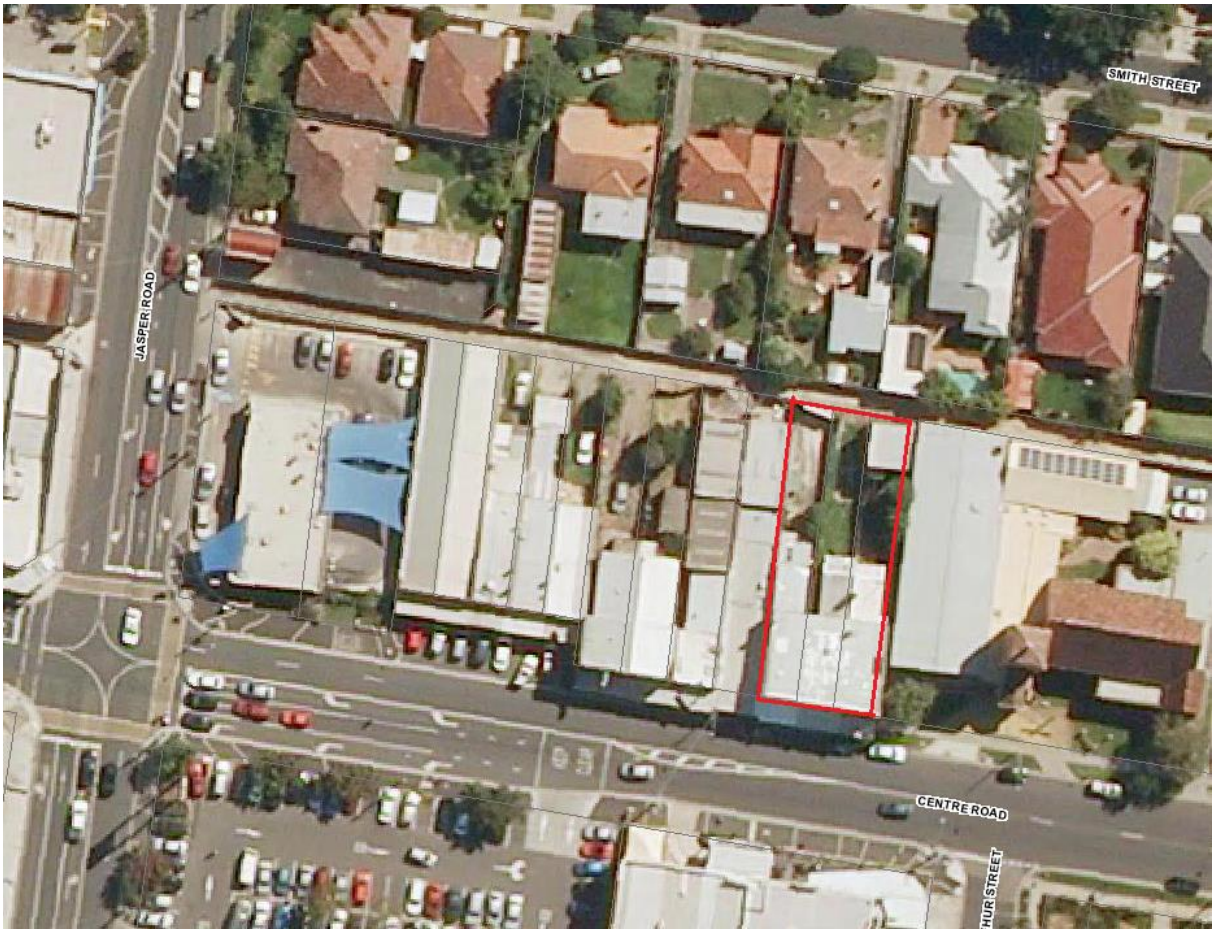


Figure 13 Aerial image of typical site for shop tops – 489-493 Centre Road, Bentleigh

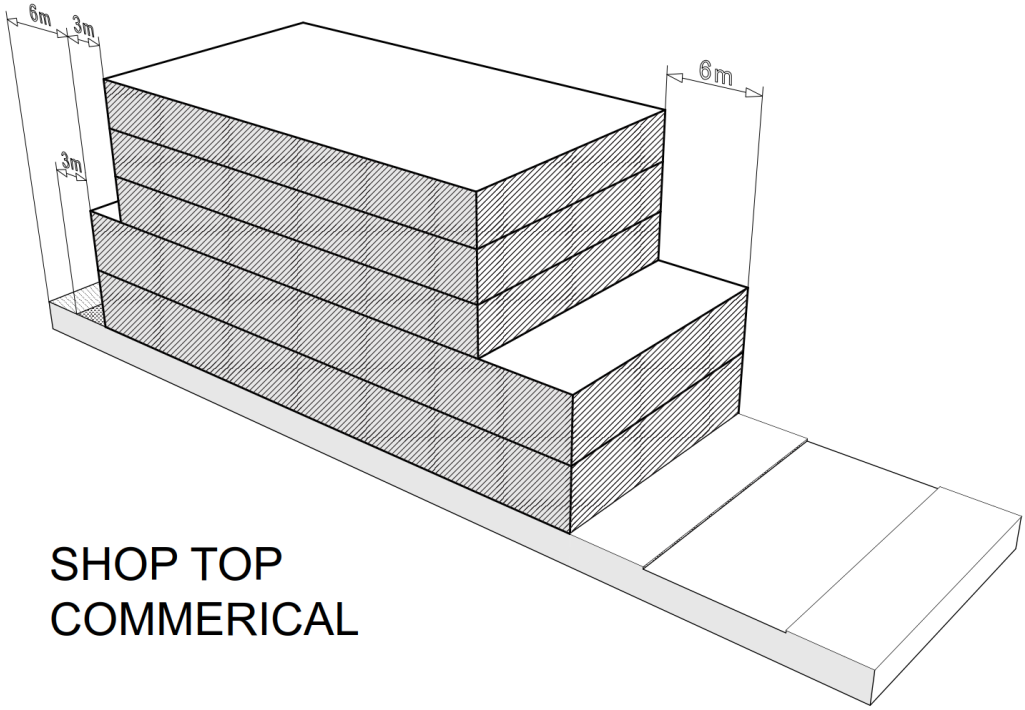


Figure 14 Diagram showing setback requirements for shop top type

Key Development Outcome Characteristics:

- Basement Car Park Area: 600 square metres
- Ground Floor Development Area: 600 square metres
- First Floor Development Area: 600 square metres
- Second Floor Development Area: 456 square metres
- Third Floor Development Area: 456 square metres
- Fourth Floor Development Area: 456 square metres
- One car space for each apartment and one visitor spaces for every five apartments and one space for ground floor commercial space
- Built form setback from the existing two storey built form street edge

Key Property Economics Assessment Findings:

- An assessment of this type was not undertaken given the highly bespoke nature of the development potential and the broad range of dwelling size and quality (orientation, daylight, access etc) that can be accommodated on this type of development.

Key Guideline Improvement Opportunities:

- Provide definition of active laneway locations, and reconcile car parking and vehicle access with laneway frontage objectives.
- Reconcile and optimise the proposed overall height and development potential with the core ground floor retail use of these sites within the retail core of activity centres, and overshadowing of key retail streets.

3.2.3 Strategic site (mixed use): Shepparson Avenue, Carnegie

Typical Site Characteristics:

- Total site area: 2,849 square metres
- Site dimensions: varies
- Dwelling number: Seventy-six
- Commercial space: 5,290 square metres (gross)

Figure 15 Aerial image of typical site for strategic sites – Shepparson Avenue, Carnegie

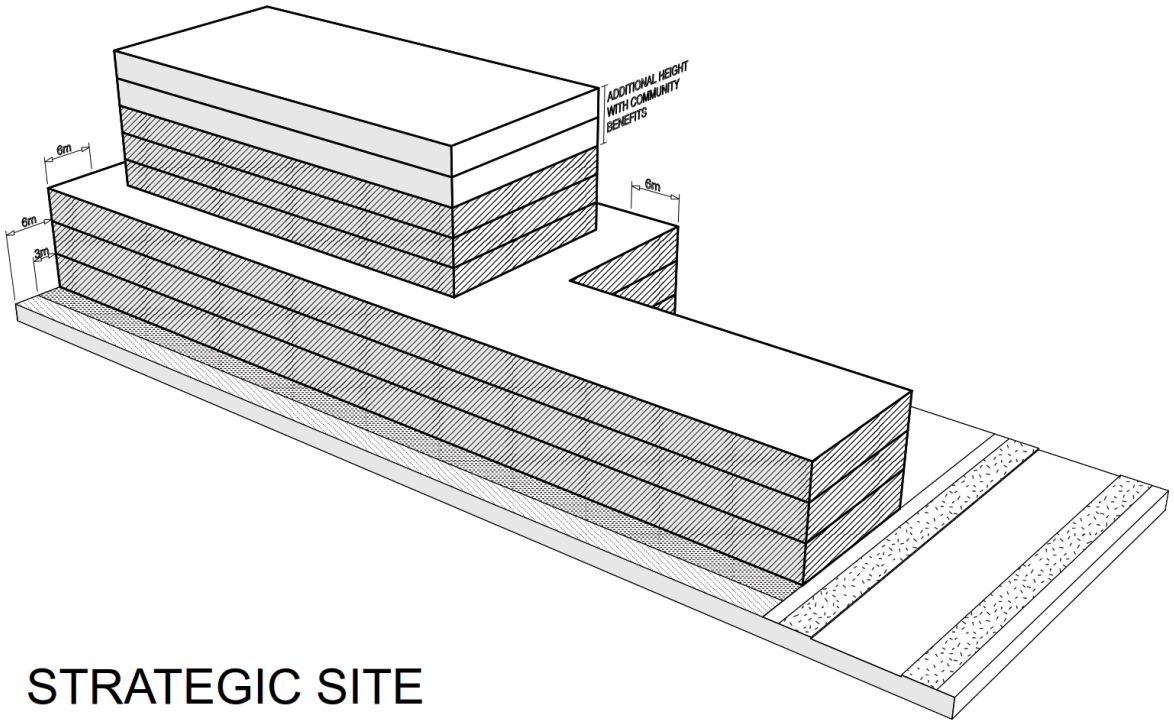


Figure 16 Diagram showing setback requirements for strategic site type

Key Development Outcome Characteristics:

- Basement 1 Car Park Area: 2,717 square metres
- Basement 2 Car Park Area: 2,717 square metres
- Ground Floor Development Area: 2,717 square metres (commercial)
- First Floor Development Area: 2,717 square metres (commercial)
- Second Floor Development Area: 2,717 square metres (commercial and/or residential)
- Third Floor Development Area: 1,175 square metres (residential)
- Fourth Floor Development Area: 1,175 square metres (residential)
- Fifth Floor Development Area: 1,175 square metres (residential)
- Sixth Floor Development Area: 1,175 square metres (residential – 'bonus level')
- Seventh Floor Development Area: 1,175 square metres (residential – 'bonus level')
- One car space for each apartment and one visitor spaces for every five apartments and 2.0 spaces per 100m2 of NLA commercial space
- Built form beyond a three-storey podium setback from all frontages and interfaces

Key Property Economics Assessment Findings:

- The property economic assessment was undertaken ***without the cost of the replacement of the existing Council car parking spaces on the site*** to understand the feasibility of the development model alone, which includes a balance of commercial and residential space. This achieved a development margin profit potential of 18%, demonstrating a feasible outcome, however a residual land value that is marginally below the expected land purchase cost.
- A further development model was tested which assumed the waiving of residential visitor car parking and reduced the commercial car park provision rate to 1.0 space per 100m2 of NLA commercial space which increased the development margin profit potential to 22% and the residual land value comfortably above the expected land purchase cost.
- The cost of replacing the existing 123 Council car parking spaces (all space south of the Council facility at 7 Shepparson Street) would add a further $6 million to the cost of the development (calculated at $50,000 per space in a basement) which would further drive down the development profit margin potential and residual land value for the site significantly below the expected purchase cost.
- Note: The property economics assessment modelling was undertaken assuming the development potential of the additional two storeys available for delivery of community benefits.

Key Guideline Improvement Opportunities:

- Provide strong definition, built-in requirements or contractual obligations through sales agreements on the delivery of significant non-residential uses on these sites.
- Provide definition of active laneway locations, and reconcile active laneway frontage objectives with vehicle and loading access needs along laneways.
- Provide definition of community benefits that will be considered as part of the additional height development opportunity and that are appropriate for strategic sites.
- Provide minimum site area requirements that distinguish strategic sites from shop top type development to better clarify and delineate the differences in yield and development potential.

Further Considerations Beyond the Scope of the Draft Guidelines:

- Reconcile (and distinguish from community benefits) the costs associated with reinstatement of existing community car park spaces, the optimal land use and development outcome sought and the impacts on the potential sales prices of these types of sites.

3.2.4 Urban renewal: Nepean Highway, Elsternwick

Typical Site Characteristics:

- Total site area: 29,860 square metres
- Site dimensions: varies
- Total Site:
  - Dwelling number: 1,490
  - Commercial space: 10,236 square metres (gross)
- Typical building:
  - Dwelling number: 154
  - Commercial space: 1,820 square metres (gross)

Figure 17 Aerial image of typical site for urban renewal areas – Nepean Highway, Elsternwick

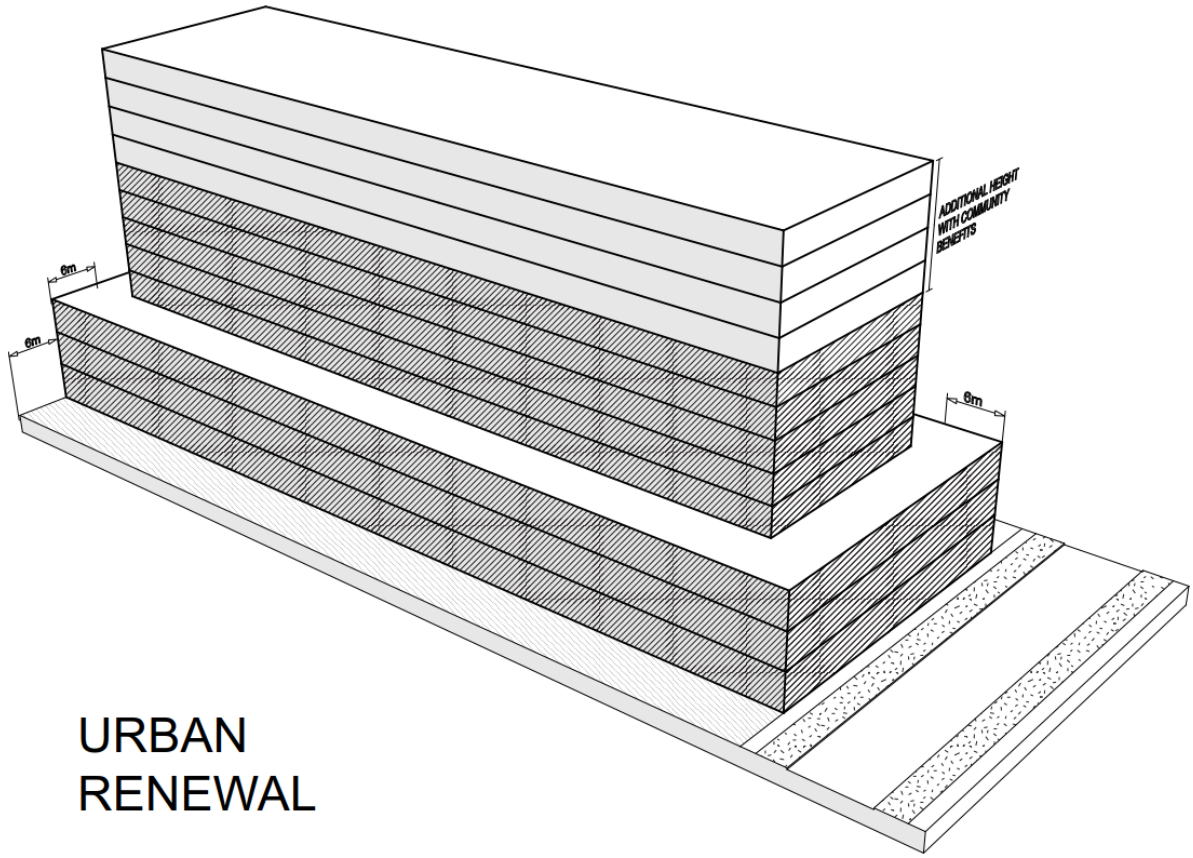


Figure 18 Diagram showing setback requirements for (typical) urban renewal type buildings

Key Development Outcome Characteristics (Typical Building):

- Basement 1 Car Park Area: 1,820 square metres
- Basement 2 Car Park Area: 1,820 square metres
- Basement 3 Car Park Area: 1,820 square metres
- Basement 4 Car Park Area: 1,820 square metres
- Ground Floor Development Area: 1,820 square metres (commercial)
- First Floor Development Area: 1,820 square metres (commercial and/or residential)
- Second Floor Development Area: 1,820 square metres (commercial and/or residential)
- Third Floor Development Area: 930 square metres (residential)
- Fourth Floor Development Area: 930 square metres (residential)
- Fifth Floor Development Area: 930 square metres (residential)
- Sixth Floor Development Area: 930 square metres (residential)
- Seventh Floor Development Area: 930 square metres (residential)
- Eighth Floor Development Area: 930 square metres (residential – 'bonus level')
- Ninth Floor Development Area: 930 square metres (residential – 'bonus level')
- Tenth Floor Development Area: 930 square metres (residential – 'bonus level')
- Eleventh Floor Development Area: 930 square metres (residential – 'bonus level')

- One car space for each apartment and one visitor spaces for every five apartments and 2.0 spaces per 100m2 of NLA commercial space
- Built form beyond a three-storey podium setback from all frontages and interfaces
- Larger urban renewal area sites will need some degree of new public or communal street construction to provide for development access and community connectivity outcomes, and are expected to deliver substantial public open space in a form that is suitable for wider community use.

Key Property Economics Assessment Findings:

- The property economic assessment was undertaken ***on a typical building footprint and envelope for this type*** to understand the feasibility of the building development model alone, which includes a balance of commercial and residential space. This achieved a development margin profit potential of 30%, demonstrating a feasible outcome, as well as a residual land value that is substantially above the expected land purchase cost for that typical building footprint.
- The development costs of more significant service infrastructure upgrades (drainage, road construction, open space, power, water and other reticulation) have not been included in this as they are a unique cost for every site and can substantially alter the feasibility of the development.
- A further development model was tested which assumed a more significant amount of commercial space (5,460 m2 NLA), and a reduction in residential dwellings (105 apartments) which reduced the development margin profit potential to 9% (making this unfeasible) as well as reducing the residual land value by 29%.
- Note: The property economics assessment modelling was undertaken assuming the development potential of the additional four storeys available for delivery of community benefits.

Key Guideline Improvement Opportunities:

- Provide strong, built-in design and/or land use requirements to ensure the delivery of significant active, commercial uses that accommodate a range of employment and commercial opportunities.
- Provide definition of active laneway locations, and reconcile active laneway frontage objectives with vehicle and loading access needs along laneways.
- Provide definition of key community assets to be delivered as part of the urban renewal areas, and that form part of the community benefits that will be considered as part of the additional height development opportunity and that are appropriate for each urban renewal area, including at a minimum:
    - The location and attributes of active laneways and key pedestrian links,
    - The location and attributes of key public streets, and
    - The location, size and attributes of public open spaces.
- Reconcile shadow impacts to public open space and maximum development heights through more focused definition of key public open spaces and/or use of more manageable Equinox shadows.
- Provide greater guidance to acceptable maximum development heights adjacent to residential areas and reconcile this with additional development height potential with community benefits.
- Undertake further review of the extent of Urban Renewal Areas in Carnegie and Elsternwick that are proposed for existing residential and fine-grained commercial areas and contemplate alternative types, maximum heights or other guidance that responds to the significantly different existing urban form of these precincts.

Further Considerations Beyond the Scope of the Draft Guidelines:

- Develop more comprehensive plans and strategies for Urban Renewal Areas that investigate and address existing road, service and community infrastructure capacities and requirements of the future residents and visitors.

4.0 Draft Quality Design Guidelines Peer Review

The Draft Quality Design Guidelines Peer Review has been undertaken with consideration of existing design standards that apply to the development types and land use zones that the proposed types are anticipated.

The following pages provide a detailed review of each of the proposed guidelines and standards that have been highlighted in the preceding chapter as relevant for each type.

At a strategic level the Draft Quality Design Guidelines provide a high degree of alignment to State planning policy and the intentions of the Draft Quality Principles.

Below is a high order summary of the more general observations to further improve the Draft Quality Design Guidelines:

- A large degree of overlap with existing and proposed design standards and guidelines exist which can be simplified by removing redundant controls and measures. In particular design guidance and existing standards regarding building setbacks, garden areas, deep soil areas and landscape provide for similar outcomes and have potential to be consolidated.
- There is a degree of complexity and repetition created with the current structure of Draft Quality Guidelines that seek to address a range of preferred building types, street types and interface types with the potential to be streamlined and encapsulated within a single structure. For example a single document structured around each element (e.g. front setbacks) and clearly tabulated could simplify the communication and remove repetition.
- Some key tensions exist between existing design standards, preferred building types and the Draft Quality Guidelines which will need an agreed resolution in order to eliminate conflicts. These have been highlighted in Section 3.0 of this report but namely:
    - Optimising upper level setbacks and ground floor footprints to balance overlooking and overshadowing management with landscape opportunity and development yield;
    - Further, more detailed testing of relatively new building types (for example, terrace townhouses and terrace townhouse apartments) that will need to both confirm their spatial viability as well as their economic feasibility and relative development attractiveness;
    - Reconciling front setback, front fence and private open space provision for garden apartments (and other types if needed) that both maintains the aspiration of the garden setting for streetscapes and accommodating dwelling requirements;
    - Reconciling overshadowing controls of public open spaces that will cause significant limitations of the potential of Urban Renewal Areas; and
    - Balancing the spatial and accommodation needs of commercial and employment uses within core retail, Strategic Sites and Urban Renewal Areas and the community benefits, community infrastructure and car parking provision for the land uses that Council seeks to attract to these activity centres.

Residential typologies covered by these guidelines:

Terrace townhouse

Located on residentially zoned land along local roads and not within a NCO or HO. Zoning is a mix of NRZ, GRZ and RGZ.

Terrace townhouse / Apartment

Located on residentially zoned land along major roads and not within a NCO or HO. Zoning is a mix of NRZ, GRZ and RGZ.

Garden Apartment

Located on residentially zoned land along major roads or in close proximity to public transportation. Zoning is predominantly RGZ; however, there is also a mix of GRZ and NRZ.

Key observations:

- Draft guidelines are generally aligned to the intentions of the Quality Design Principles.
- Some guidelines duplicate, or closely replicate, newly adopted planning controls (Reformed Residential Zones, Apartment Standards adopted through Clause 55 and 58).
- Some guidelines will impact the spatial viability and economic feasibility of the desired typologies.
- Existing residential zones in the vicinity of activity centres does not align with the building transition plan and will prevent realisation of certain building typologies in some locations.

Colour code:

	Alignment with existing Planning Scheme zones, schedules and overlays will need further review
	Suggested change to proposed draft guidelines based on spatial testing and interaction with existing controls
	Guideline generally supported (sometimes with a view for slight change)
	No guideline proposed

Terrace townhouse, Terrace townhouse apartment and Garden Apartment

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
General Requirements			
Building height Terrace townhouse: 2-3 storeys Terrace townhouse / Apartment:: 2-3 storeys Garden apartment: 3-4 storeys	NRZ1 = 9 metres (2 storeys) GRZ = 10.5 metres (3 storeys) RGZ = 13.5 metres(4 storeys)	Existing zone extents do not allow for proposed typologies in all of the locations proposed by the building transition plan.	Planning Scheme Amendments to the existing zone extents and/or schedules will be necessary to the zones to allow for building typologies as outlined in the building transition plan.
Site coverage NRZ1 only:50% ResCode:60%	No change to existing.	Overlapping with (though not contradictory to) Garden Area Requirements (NRZ and GRZ), Landscaping Guidelines and Setback Guidelines.	No change proposed.
Permeability NRZ1 only: 25% ResCode 20%	No change to existing.	Overlapping with (though not contradictory to) Garden Area Requirements (NRZ and GRZ), Landscaping Guidelines and Setback Guidelines.	No change proposed.
Garden area requirement NRZ and GRZ only 400 - 500 square metres 25% 501 - 650 square metres 30% Above 650 square metres 35%	No change to existing requirements.	Overlapping with (though not contradictory to) Site Coverage Requirements. Permeability Requirements, Landscaping Guidelines and Setback Guidelines.	No change proposed.
Primary Street Frontage			
Residential / Local Street			
Setbacks Ground floor setback = 7m to a height of two storeys Third storey setback = Additional 4m from the level below Fourth storey setback = Additional 5 metres from the level below The streetwall is to provide a sloped roof form above.	ResCode 9 metres or average of abutting allotments.	Reduced ground level front setback relative to Rescode is balanced with increased rear setback to accommodate both front and rear yards. Net effect of accommodating similar amount of development, with improved outlook (to street and to rear yard). Note: Garden Area requirements for larger (consolidated) lots are likely to require larger setbacks than those required in this guideline. Upper level setbacks will reduce visual impacts to street. Creating a sloped roof above the first floor can limit the provision of the necessary balcony space required by Clause 55 and 58 (15m2 and minimum 3 metre dimension at podium level) and for buildings that have larger footprints the provision of sloped roofs can potentially create more visually intrusive built forms.	Setback guidelines supported. **Change** sloped roof form guideline to 'Upper floor levels to form a recessive roof-like element to the building forms.'

Landscaping/Canopy Tree Planting Front Setback = 2 medium trees per 750sqm of site area Minimum Deep Soil areas: Medium Tree = 50sqm Small Tree = 25sqm Landscaping should allow for interaction between public and private spaces.	**All developments** <u>Clause 55.03-8 – Landscaping objectives:</u> No numeric metrics. **Apartment developments** <u>Clause 55.07-4 – Deep soil and canopy trees objective:</u> Does not apply specifically to front setbacks. <u>Site area: 750 – 1000sqm</u> 5% of site area (min dimension of 3m) 1 small tree (6-8 m) per 30sqm of deep soil <u>Site area: 1001 - 1500sqm</u> 7.5% of site area (minimum dimension of 3metres) 1 medium tree (8-12 metres) per 50sqm of deep soil; or, 1 large tree per 90sqm of deep soil <u>Site area: 1501 - 2500sqm</u> 10% of site area (minimum dimension of 6m) 1 large tree (at least 12m) per 90sqm of deep soil; or, 2 medium trees per 90sqm of deep soil <u>Site area: >2500sqm</u> 15% of site area (minimum dimension of 6m) 1 large tree (at least 12m) per 90sqm of deep soil; or, 2 medium trees per 90sqm of deep soil	Overlapping, though not always duplicating existing deep soil requirements and duplicates front setback guideline. Supports the Canopy Trees and Greenery Principle. Somewhat complex application with two sets of spatial standards to align. Note: Garden Area requirements for larger (consolidated) lots are likely to require larger areas than those required in this guideline.	**Remove** guideline and retain the simpler Setback guideline, with the assurance that the Deep Soil and Canopy Tree requirements and Garden Area requirements will achieve the same outcome.
Private Open Space As per Rescode for quantam. Ground floor secluded private open space should not be located within the front setback. Upper level balconies should not encroach within the street setback/beyond the street wall.	<u>Clause 55.05-4 – Private open space objective</u> An area of 40 square metres, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 25 square metres, a minimum dimension of 3 metres and convenient access from a living room <u>Clause 55.07-9 - Private open space above ground floor objective</u> No guidance on location in relation to setbacks. <u>Apartment Design Guidelines for Victoria</u> A setback dimension is measured from the site boundary to the external surface of the habitable room window or the open side of the balcony, whichever is lesser.	<u>Ground floor</u> For the garden apartment typology dwellings to the street on the ground floor must provide ground level SPOS of 25m2 which cannot be reconciled with no ground floor open space allowed within the front setback. <u>Upper level balconies</u> The Apartment Design Guidelines specify that balconies cannot protrude into the front setback measurement; however, they can protrude beyond the street wall.	**Change** guideline to allow a degree of SPOS within the front setback – this may be express as a proportion of the total length of frontage, and also limit the proximity of the necessary SPOS to the street to maintain continuity of a visible green streetscape. **Remove** or **change** the guideline to more clearly define the objective – balconies not to encroach on the setback – which is specified in the Apartment Design Guidelines.
Front Fence Height Maximum height= 1.5m Fences should provide visual transparency and allow for interaction with the street. Fences may be solid to a height of 1.2m	<u>Clause 55.06-2 Front fences objective</u> 1.5m within 3 metres of the boundary. <u>Urban Design Guidelines for Victoria – Objective 5.1.5</u> Use low-height or semi-transparent front fences to assist informal surveillance of the street. Where front fences are more than one metre in height, provide a minimum of 50% transparency.	ResCode and The Urban design guidelines for Victoria already provide similar guidance, however in conflict with SPOS requirement for the garden apartment type. For the garden apartment typology dwellings to the street on the ground floor must provide ground level SPOS of 25m2 which cannot be reconciled with no solid high front fence to the street.	**Change** guideline to allow a proportion of the total length of frontage to have a high front fence, however limit the proximity of the fence this to the street to maintain continuity of a visible green streetscape.

Dwelling Entries *For Terrace Townhouses* Each ground floor dwelling with a street frontage should have its own entry facing the primary street.	Clause 55.05-2 – Dwelling entry objective: To provide each dwelling or residential building with its own sense of identity Urban Design Guidelines for Victoria – Objective 5.2.1: Where ground floor dwellings face the street, provide individual entrances to each dwelling	In line with existing requirements and supports more activity on the street and encourages social connections	Guideline supported.
Internal Layout Upper floor habitable rooms, primary outlook areas and balconies should face the front or rear setback, rather than the side setbacks.	Clause 55.07 – Private open space above ground floor objective: Private open space should have convenient access from a living room. Clause 55.07-15 – Natural ventilation objectives: At least 40 per cent of dwellings should provide effective cross ventilation	Natural ventilation requirements will require corner apartments to have openable windows to side boundaries to achieve this requirement.	**Change** guideline to encourage living rooms and balconies to front or rear setback, accommodating bedrooms to open to side setbacks.
Basement Footprint Basement carparking is not to extend beyond the front setback of the building to ensure adequate deep soil areas for trees and Landscaping.	**Apartment Developments** Clause 55.07-4 – Deep soil and canopy trees objective Clause 55.07-4 applies; however this does not control the basement setback.	Duplicates Landscaping guideline however with better definition and supports the Canopy Trees and Greenery Principle. Potentially forces a further level of basement car parking to be created if parking requirements cannot be accommodated with associated costs.	Guideline supported, with a view to exceptions being accommodated to facilitate adequate parking in a basement.
Vehicle access Where possible, driveway and basement/garage entry are not be located off the primary street frontage. If required, driveway and basement/garage entry is to be to one side of the frontage, with ramping to be concealed within the building.	Clause 55.03-9 – Access Objective To ensure that the number and design of vehicle crossovers respects the neighbourhood character. Urban Design Guidelines for Victoria – Objective 5.1.6 Arrange vehicle entries to minimise the number of vehicle crossovers on pedestrian paths. Locate vehicle access to the rear or side of the building.	In line with existing requirements, reduces visibility of car parking to the main street and vehicle crossovers if possible.	Guideline supported.
Commercial Street / Main Street / Transport Corridor			
Setbacks Ground floor setback = 7m to a height of two storeys Third storey setback = a further 4m Fourth storey setback = a further 5m The streetwall is to provide a sloped roof form above.	ResCode 9 metres or average of abutting allotments.	Reduced ground level front setback relative to Rescode is balanced with increased rear setback to accommodate both front and rear yards. Net effect of accommodating similar amount of development, with improved outlook (to street and to rear yard). Note: Garden Area requirements for larger (consolidated) lots are likely to require larger setbacks than those required in this guideline. Upper level setbacks will reduce visual impacts to street. Creating a sloped roof above the first floor can limit the provision of the necessary balcony space required by Clause 55 and 58 (15m2 and minimum 3 metre dimension at podium level) and for buildings that have larger footprints the provision of sloped roofs can potentially create more visually intrusive built forms.	Setback guidelines supported. **Change** sloped roof form guideline to ‘Upper floor levels to form a recessive roof-like element to the building forms.’

Landscaping/Canopy Tree Planting Front Setback = 2 medium trees (or 4 small trees), per 750sqm of site area Minimum Deep Soil areas: Medium Tree = 50sqm Small Tree = 25sqm	**All developments** Clause 55.03-8 – Landscaping objectives No numeric metrics. **Apartment developments** Clause 55.07-4 – Deep soil and canopy trees objective Does not apply specifically to front setbacks. Site area: 750 – 1000sqm 5% of site area (min dimension of 3m) 1 small tree (6-8 m) per 30sqm of deep soil Site area: 1001 - 1500sqm 7.5% of site area (minimum dimension of 3metres) 1 medium tree (8-12 metres) per 50sqm of deep soil; or, 1 large tree per 90sqm of deep soil Site area: 1501 - 2500sqm 10% of site area (minimum dimension of 6m) 1 large tree (at least 12m) per 90sqm of deep soil; or, 2 medium trees per 90sqm of deep soil Site area: >2500sqm 15% of site area (minimum dimension of 6m) 1 large tree (at least 12m) per 90sqm of deep soil; or, 2 medium trees per 90sqm of deep soil	Overlapping, though not always duplicating existing deep soil requirements and duplicates Basement Footprint guideline. Supports the Canopy Trees and Greenery Principle. Somewhat complex application with two sets of spatial standards to align. Note: Garden Area requirements for larger (consolidated) lots are likely to require larger areas than those required in this guideline.	**Remove** guideline and retain the simpler Setback guideline, with the assurance that the Deep Soil and Canopy Tree requirements and Garden Area requirements will achieve the same outcome.
Private Open Space As per Rescode for quantam. *For Terrace Townhouse/Apartments* Ground floor secluded private open space can be located within the front setback. Upper level balconies should not encroach within the street setback/beyond the street wall.	Clause 55.05-4 – Private open space objective An area of 40 square metres, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 25 square metres, a minimum dimension of 3 metres and convenient access from a living room. Clause 55.07-9 - Private open space above ground floor objective No guidance on location in relation to setbacks. Apartment design guidelines for Victoria A setback dimension is measured from the site boundary to the external surface of the habitable room window or the open side of the balcony, whichever is lesser.	Ground floor For the garden apartment typology dwellings to the street on the ground floor must provide ground level SPOS of 25m2 which cannot be reconciled with no ground floor open space allowed within the front setback. Upper level balconies The Apartment Design Guidelines specify that balconies cannot protrude into the front setback measurement; however, they can protrude beyond the street wall.	Guideline regarding SPOS is supported. **Remove** or **change** the balcony guideline to more clearly define the objective – balconies not to encroach on the setback – which is specified in the Apartment Design Guidelines.
Front Fence Height Maximum height = 1.5m - 2m As per zone Rescode requirements (Road Zone = 2m, other roads 1.5m)	Clause 55.06-2 Front fences objective 1.5m within 3 metres of the boundary. Urban Design Guidelines for Victoria – Objective 5.1.5 Use low-height or semi-transparent front fences to assist informal surveillance of the street. Where front fences are more than one metre in height, provide a minimum of 50% transparency.	In line with existing requirements, however potential conflict with private open space provision at the ground floor if transparency required.	Guideline supported.

Dwelling Entries *For Terrace Townhouse/Apartments* Each ground floor dwelling with a street frontage should have its own entry facing the primary street.	Clause 55.05-2 – Dwelling entry objective To provide each dwelling or residential building with its own sense of identity Urban Design Guidelines for Victoria – Objective 5.2.1 Where ground floor dwellings face the street, provide individual entrances to each dwelling	In line with existing requirements and a means of activating all street frontages.	Guideline supported with a view to extend to all dwelling types, including garden apartments.
Internal Layout Upper floor habitable rooms, primary outlook areas and balconies should face the front or rear setback, rather than the side setbacks.	Clause 55.07 – Private open space above ground floor objective Private open space should have convenient access from a living room. Clause 55.07-15 – Natural ventilation objectives At least 40 per cent of dwellings should provide effective cross ventilation	Natural ventilation requirements will require corner apartments to have openable windows to side boundaries to achieve this requirement.	**Change** guideline to encourage living rooms and balconies to front or rear setback, accommodating bedrooms to open to side setbacks.
Basement Footprint Basement carparking is not to extend beyond the front setback of the building to ensure adequate deep soil areas for trees and Landscaping.	**Apartment Developments** Clause 55.07-4 – Deep soil and canopy trees objective Clause 55.07-4 applies; however this does not control the basement setback.	Duplicates Landscaping guideline however with better definition and supports the Canopy Trees and Greenery Principle. Potentially forces a further level of basement car parking to be created if parking requirements cannot be accommodated with associated costs.	Guideline supported, with a view to exceptions being accommodated to facilitate adequate parking in a basement.
Vehicle access Where possible, driveway and basement/garage entry are not be located off the primary street frontage. If required, driveway and basement/garage entry is to be to one side of the frontage, with ramping to be concealed within the building.	Clause 55.03-9 – Access Objective To ensure that the number and design of vehicle crossovers respects the neighbourhood character. Urban Design Guidelines for Victoria – Objective 5.1.6 Arrange vehicle entries to minimise the number of vehicle crossovers on pedestrian paths. Locate vehicle access to the rear or side of the building.	In line with existing requirements, reduces visibility of car parking to the main street and vehicle crossovers if possible.	Guideline supported.
Secondary street frontage (where the site is on a corner)			
All streets			
Setbacks Ground Floor Setback = 3m to a height of 2 storeys Upper Level Setback Third storey setback a further 4m Forth storey setback = 5m Ground floor setback is to provide for dwelling entries and landscaping.	**Setbacks** Clause 55 Front wall = 3 metres Side wall = 2 metres	In line with existing requirements and continues the pattern established from main street frontage setbacks for third and forth storeys.	Guideline supported.

Private Open Space As per Rescode for quantam. Ground floor secluded private open space should not be located within the side street setback. Upper level balconies should not encroach within the street setback/beyond the street wall.	Clause 55.05-4 – Private open space objective An area of 40 square metres, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 25 square metres, a minimum dimension of 3 metres and convenient access from a living room. Clause 55.07-9 - Private open space above ground floor objective No guidance on location in relation to setbacks. Apartment design guidelines for Victoria A setback dimension is measured from the site boundary to the external surface of the habitable room window or the open side of the balcony, whichever is lesser.	Partially in line with existing requirements but potentially interfaces with private open space provision depending on residential typology and whether a single lot or consolidated lots are being developed. Consolidated lots with garden apartment typology will require private open space provision along the side street in part.	**Change** guideline to balance the needs of activating the street frontage with secluded private open space provision.
Side Street Fence Height Maximum height= 1.5m Fences should provide visual transparency and allow for interaction with the street.	Clause 55 Does not specify side fence height. Urban Design Guidelines for Victoria – Objective 5..1 Use low-height or semi-transparent front fences to assist informal surveillance of the street. Where front fences are more than one metre in height, provide a minimum of 50% transparency.	In line with existing requirements, however with a potential to interface with secluded private open space requirements for ground level apartments that interface with the street.	**Change** guideline to balance the needs of activating the street frontage with secluded private open space provision.
Internal Layout Upper floor habitable rooms, primary outlook areas and balconies should face the front or rear setback, rather than the side setbacks. In this case, front setback includes the secondary street frontage.	Clause 55.07 – Private open space above ground floor objective Private open space should have convenient access from a living room. Clause 55.07-12 – Functional layout objective No commentary on the location of rooms in relation setbacks.	In line with existing requirements and supports natural surveillance of streets and reduction of overlooking of adjacent open spaces.	Guideline supported with a view to further direct the orientation of living rooms and balconies preferred, to encourage less active rooms to orientate to more sensitive interfaces.
Dwelling Entries Development should provide ground floor dwellings that address the secondary frontage.	Clause 55.05-2 – Dwelling entry objective To provide each dwelling or residential building with its own sense of identity Urban Design Guidelines for Victoria – Objective 5.2.1 Where ground floor dwellings face the street, provide individual entrances to each dwelling	In line with existing requirements and a means of activating all street frontages.	Guideline supported.
Vehicle Access Vehicle access is encouraged from the secondary street frontage.	Clause 55.03-9 – Access Objective To ensure that the number and design of vehicle crossovers respects the neighbourhood character. Urban Design Guidelines for Victoria – Objective 5.1.6 Arrange vehicle entries to minimise the number of vehicle crossovers on pedestrian paths. Locate vehicle access to the rear or side of the building.	In line with existing requirements, reduces garages doors to the main street and vehicle crossovers.	Guideline supported.
Side Interface Requirements			
Residential Interface			

Setbacks Ground floor = A minimum of one side boundary in accordance with Rescode Cl 55.04-1, with the exception of habitable room windows on the ground level to be setback from side boundaries = 3m. A maximum of one side boundary, build to boundary in accordance with Rescode Cl 55.04-2 (preferred on south side). Other side boundary should be setback as above. Upper Levels = In accordance with Rescode Cl 55.04-1, with the exception of any habitable room windows and balconies above ground level to be discouraged or setback 9m from residential boundaries.	**Ground floor** Clause 55 1 metre at the ground floor unless wall is on boundary. **Upper levels** Clause 55 1 metre plus increase according to height. Clause 55.04-6 – Overlooking objective Avoid direct views within a 9 metre horizontal distance. Clause 55.05-3 - Daylight to new windows An outdoor space clear to the sky or a light court with a minimum area of 3 square metres and minimum dimension of 1 metre clear to the sky, not including land on an abutting lot. Clause 55.07-17 – Natural ventilation objective: At least 40 per cent of dwellings should provide effective cross ventilation	Generally aligns with existing setback requirements, however interfaces with natural ventilate requirements which will need windows of corner apartments towards side boundaries. A 9 metre setback for this windows will not allow for suitable development space at upper levels if applied.	**Remove** guideline or **change** to make a distinction between living room windows (to maintain a 9 metre setback) and bedroom windows which can be accommodated with a reduced setback.
Private Open Space As per Rescode for quantam. Ground floor secluded private open space may be located within the side setback.	Clause 55.05-4 – Private open space objective An area of 40 square metres, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 25 square metres, a minimum dimension of 3 metres and convenient access from a living room, or A balcony of 8 square metres with a minimum width of 1.6 metres and convenient access from a living room Garden area requirement NRZ and GRZ only • 400 - 500 square metres 25% • 501 - 650 square metres 30% • Above 650 square metres 35%	In line with existing requirements and supports the Canopy Trees and Greenery Principle.	Guideline supported.
Internal Layout Upper floor habitable rooms, primary outlook areas and balconies should face the front or rear setback, rather than the side setbacks.	Clause 55.07 – Private open space above ground floor objective: Private open space should have convenient access from a living room. Clause 55.07-12 – Functional layout objective: No commentary on the location of rooms in relation setbacks.	Natural ventilation requirements will require corner apartments to have openable windows to side boundaries to achieve this requirement.	**Change** guideline to encourage living rooms and balconies to front or rear setback, accommodating bedrooms to open to side setbacks.
Sensitive/heritage streetscapes Upper levels of development must be recessive when viewed from nearby heritage streetscapes.		Side residential interfaces and heritage streetscapes to not typically interface or visible across a street, above two storey dwellings, and through street and private trees when applying rear setback guidelines.	**Remove** guideline.
Active Laneway			

Setbacks Ground floor = 3m setback to a height of 2 storeys Upper levels = further 2 metres Ground floor setback is to provide for dwelling entries and landscaping.	**Ground floor** Clause 55 1 metre at the ground floor unless wall is on boundary. **Upper levels** Clause 55 1 metre plus increase according to height.	Provides for the widening of laneways to 6m, however not accommodating a two-way vehicle carriageway plus a pedestrian path. Implementation issues can occur with the staging of laneway widening to follow redevelopment and potential traffic conflicts due to the length of laneways and traffic intensity created. Landscape potential within this space is limited and unlikely.	**Change** guideline, retaining setbacks but with 'encouragement of dwelling entries where possible' and removal of landscape provision.
Dwelling Entries Ground floor dwellings to front the public realm and each have a direct pedestrian entry.	Clause 55.05-2 – Dwelling entry objective To provide each dwelling or residential building with its own sense of identity Urban Design Guidelines for Victoria – Objective 5.2.1 Where ground floor dwellings face the street, provide individual entrances to each dwelling	In line with existing requirements and a means of activating laneways, however implementation issues can occur including, pedestrian accessibility along existing poorly formed laneways, formal address of dwellings and emergency vehicle access/identification.	Guideline supported with view to a change to 'encourage where possible'.
Vehicle Access Vehicle access is encouraged from the laneway.	Clause 55.03-9 – Access Objective To ensure that the number and design of vehicle crossovers respects the neighbourhood character. Urban Design Guidelines for Victoria – Objective 5.1.6 Arrange vehicle entries to minimise the number of vehicle crossovers on pedestrian paths. Locate vehicle access to the rear or side of the building.	In line with existing requirements, reduces garages doors to the main street and vehicle crossovers.	Guideline supported.
Public Open Space (existing and future)			
Setbacks In accordance with Rescode Clause 55.04-1, with the exception of ground floor setback a minimum of 3 metres, to allow for landscaping and residential access to the public realm.	**Ground floor** Clause 55 1 metre at the ground floor unless wall is on boundary. **Upper levels** Clause 55 1 metre plus increase according to height.	Public open space should be treated as frontages such as streets and habitable rooms should face onto these spaces.	**Change** guideline to support orientation of upper floor rooms and balconies to open space.
Dwelling entries Ground floor dwellings should address the public realm with direct pedestrian entries.	Clause 55.05-2 – Dwelling entry objective To provide each dwelling or residential building with its own sense of identity.	In line with existing requirements and supports more activity on the street and encourages social connections	Guideline supported.
Boundary fence Maximum height = 1.2m	Clause 55 Does not specify side fence height. Urban Design Guidelines for Victoria – Objective 5..1 Use low-height or semi-transparent front fences to assist informal surveillance of the street. Where front fences are more than one metre in height, provide a minimum of 50% transparency.	In line with existing requirements and provides strong private and public space definition, with natural surveillance accommodated.	Guideline supported.
Rear Interface Requirements			
Residential Interface			

Setbacks Ground level = 5m to a height of two storeys Third Storey = further 6m Fourth Storey = further 3m	**Ground floor** <u>Clause 55:</u> 1 metre at the ground floor unless wall is on boundary. **Upper levels** <u>Clause 55:</u> 1 metre plus increase according to height. **Special setbacks** NRZ = 4 metres GRZ 2 & 3 metres Ground = 4 metres to NRZ Second = 5.5 to NRZ Third = 11.5 metres to NRZ	Overlapping with (though not contradictory to) Garden Area Requirements (NRZ and GRZ), Landscaping Guidelines. Increased setbacks compared to existing requirements, balanced with reduced front setback compared to existing requirements. Net effect of accommodating similar amount of development, with improved outlook (to street and to rear yard). Note: Garden Area requirements for larger (consolidated) lots are likely to require larger areas than those required in this guideline. Supports the Canopy Trees and Greenery Principle. Provides for upper level habitable room windows to remain transparent by limiting visibility to adjacent secluded private open spaces.	Guideline supported.
Landscaping Rear Setback = 2 medium trees (or 4 small trees), per 750sqm of site area Minimum Deep Soil areas: Medium Tree = 50sqm Small Tree = 25sqm	**All developments** <u>Clause 55.03-8 – Landscaping objectives</u> No numeric metrics. **Apartment developments** <u>Clause 55.07-4 – Deep soil and canopy trees objective</u> Does not apply specifically to rear setbacks. <u>Site area: 750 – 1000sqm</u> 5% of site area (min dimension of 3m) 1 small tree (6-8 m) per 30sqm of deep soil <u>Site area: 1001 - 1500sqm</u> 7.5% of site area (minimum dimension of 3metres) 1 medium tree (8-12 metres) per 50sqm of deep soil; or, 1 large tree per 90sqm of deep soil <u>Site area: 1501 - 2500sqm</u> 10% of site area (minimum dimension of 6m) 1 large tree (at least 12m) per 90sqm of deep soil; or, 2 medium trees per 90sqm of deep soil <u>Site area: >2500sqm</u> 15% of site area (minimum dimension of 6m) 1 large tree (at least 12m) per 90sqm of deep soil; or, 2 medium trees per 90sqm of deep soil	Overlapping, though not always duplicating existing deep soil requirements and duplicates Basement Footprint guideline. Supports the Canopy Trees and Greenery Principle. Somewhat complex application with two sets of spatial standards to align. Note: Garden Area requirements for larger (consolidated) lots are likely to require larger areas than those required in this guideline.	**Remove** guideline and retain the simpler Basement Footprint guideline.
Basement Footprint Basement carparking is not to extend beyond the rear setback of the building to ensure adequate deep soil areas for trees and Landscaping.	**Apartment Developments** <u>Clause 55.07-4 – Deep soil and canopy trees objective</u> Clause 55.07-4 applies; however this does not control the basement setback.	Duplicates Landscaping guideline however with better definition and supports the Canopy Trees and Greenery Principle. Potentially forces a further level of basement car parking to be created if parking requirements cannot be accommodated with associated costs.	Guideline supported, with a view to exceptions being accommodated to facilitate adequate parking in a basement.

Internal Layout Upper floor habitable rooms, primary outlook areas and balconies should face the front or rear setback, rather than the side setbacks.	Clause 55.07 – Private open space above ground floor objective Private open space should have convenient access from a living room. Clause 55.07-15 – Natural ventilation objectives At least 40 per cent of dwellings should provide effective cross ventilation	Natural ventilation requirements will require corner apartments to have openable windows to side boundaries to achieve this requirement.	**Change** guideline to encourage living rooms and balconies to front or rear setback, accommodating bedrooms to open to side setbacks.
Private Open Space Quantum as per Rescode. Private open space for ground floor dwellings must be provided at ground floor level. 'Reverse living' arrangements are not supported.	Clause 55.05-4 – Private open space objective An area of 40 square metres, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 25 square metres, a minimum dimension of 3 metres and convenient access from a living room, or A balcony of 8 square metres with a minimum width of 1.6 metres and convenient access from a living room Garden area requirement NRZ and GRZ only • 400 - 500 square metres 25% • 501 - 650 square metres 30% • Above 650 square metres 35%	Aligned with existing requirements and encouraging more 'active' rooms (and therefore private open spaces) to the ground floor to reduce overlooking or adjacent private open spaces opportunities.	Guideline supported, with a view to more clearly direct ground floor dwellings to accommodate living areas and private open space to the ground floor.
Sensitive/heritage streetscapes Upper levels of development must be recessive when viewed from nearby heritage streetscapes.		Rear residential interfaces and heritage streetscapes to not typically interface or visible across a street, above two storey dwellings, and through street and private trees when applying rear setback guidelines.	**Remove** guideline.
Residential interface + laneway			
Setbacks Ground level = 5m to a height of two storeys Third Storey = further 6m Fourth Storey = further 3m	**Ground floor** Clause 55 1 metre at the ground floor unless wall is on boundary. **Upper levels** Clause 55 1 metre plus increase according to height. **Special setbacks** NRZ =4 metres GRZ 2 & 3 Ground = 4 metres to NRZ Second = 5.5 to NRZ Third = 11.5 metres to NRZ	Overlapping with (though not contradictory to) Garden Area Requirements (NRZ and GRZ), Landscaping Guidelines. Increased setbacks compared to existing requirements, balanced with reduced front setback compared to existing requirements. Net effect of accommodating similar amount of development, with improved outlook (to street and to rear yard). Note: Garden Area requirements for larger (consolidated) lots are likely to require larger areas than those required in this guideline. Supports the Canopy Trees and Greenery Principle. Provides for upper level habitable room windows to remain transparent by limiting visibility to adjacent secluded private open spaces.	Guideline supported.

Landscaping Rear Setback = 1 medium tree (or 2 small trees), per 750sqm of site area Minimum Deep Soil areas: Medium Tree = 50sqm Small Tree = 25sqm	**All developments** Clause 55.03-8 – Landscaping objectives: No numeric metrics. **Apartment developments** Clause 55.07-4 – Deep soil and canopy trees objective: Does not apply specifically to rear setbacks. Site area: 750 – 1000sqm 5% of site area (min dimension of 3m) 1 small tree (6-8 m) per 30sqm of deep soil Site area: 1001 - 1500sqm 7.5% of site area (minimum dimension of 3metres) 1 medium tree (8-12 metres) per 50sqm of deep soil; or, 1 large tree per 90sqm of deep soil Site area: 1501 - 2500sqm 10% of site area (minimum dimension of 6m) 1 large tree (at least 12m) per 90sqm of deep soil; or, 2 medium trees per 90sqm of deep soil Site area: >2500sqm 15% of site area (minimum dimension of 6m) 1 large tree (at least 12m) per 90sqm of deep soil; or, 2 medium trees per 90sqm of deep soil	Overlapping, though not always duplicating existing deep soil requirements and duplicates Basement Footprint guideline. Supports the Canopy Trees and Greenery Principle. Somewhat complex application with two sets of spatial standards to align. Note: Garden Area requirements for larger (consolidated) lots are likely to require larger areas than those required in this guideline.	**Remove** guideline and retain the simpler Basement Footprint guideline.
Basement Footprint Basement carparking is not to extend beyond the rear setback of the building to ensure adequate deep soil areas for trees and Landscaping.	**Apartment Developments** Clause 55.07-4 – Deep soil and canopy trees objective Clause 55.07-4 applies; however this does not control the basement setback.	Duplicates Landscaping guideline however with better definition and supports the Canopy Trees and Greenery Principle.	Guideline supported, with a view to exceptions being accommodated to facilitate adequate parking in a basement.
Vehicle Access Vehicle access is encouraged from the laneway.	Clause 55.03-9 – Access Objective To ensure that the number and design of vehicle crossovers respects the neighbourhood character. Urban Design Guidelines for Victoria – Objective 5.1.6 Arrange vehicle entries to minimise the number of vehicle crossovers on pedestrian paths. Locate vehicle access to the rear or side of the building.	In line with existing requirements, reduces garages doors to the street and vehicle crossovers.	Guideline supported.
Public Open Space (existing and future)			
Internal Layout Upper floor habitable rooms, primary outlook areas and balconies should face the front or rear setback, rather than the side setbacks.	Clause 55.07 – Private open space above ground floor objective: Private open space should have convenient access from a living room. Clause 55.07-12 – Functional layout objective: No commentary on the location of rooms in relation setbacks.	Public open space should be treated as frontages such as streets and habitable rooms should face onto these spaces.	**Change** guideline to support orientation of upper floor rooms and balconies to open space.
Dwelling entries Ground floor dwellings should address the public realm with direct pedestrian entries.	Clause 55.05-2 – Dwelling entry objective: To provide each dwelling or residential building with its own sense of identity.	In line with existing requirements and supports more activity on the street and encourages social connections	Guideline supported.
Boundary fence Maximum height = 1.2m	Clause 55: Does not specify side fence height.	In line with existing requirements and provides strong private and public space definition, with natural surveillance accommodated.	Guideline supported.

Side by Side

Generally the Side-by-side townhouse typology is proposed within the existing Neighbourhood Residential Zone – Schedule 1 and not impacted by a Neighbourhood Character Overlay or Heritage Overlay. There are some limited areas where the Side-by-side is located within the General Residential Zone or Residential Growth Zone.

Therefore it has been separated from the Heritage typology and assumed that the Side-by-side areas will fall within the NRZ1.

Key observations:

- Draft guidelines are generally aligned to the intentions of the Quality Design Principles.
- Some guidelines duplicate, or closely replicate, newly adopted planning controls (Reformed Residential Zones).
- Some guidelines will impact the spatial viability the desired typologies on specific lots.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
General Requirements			
Building height Preferred 1-2 Storeys	NRZ1 = 9 metres (2 storeys) GRZ = 10.5 metres RGZ = 13.5 metres	Alignment to existing zones is mixed and where existing zones accommodate taller buildings future development proposals are likely to capitalise on this potential.	Planning Scheme Amendments to the existing zone extents and/or schedules will be necessary to the zones to allow for building typologies as outlined in the building transition plan. A more detailed examination of existing development should be undertaken to understand the alignment of the building transitions plan to the existing development pattern
Site coverage NRZ1 only 50%	Existing controls and policy are retained		No change proposed.
Permeability NRZ1 only 25%	Existing controls and policy are retained		No change proposed.
Private open space NRZ1 only An area of 60 square metres, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 40 square metres, a minimum dimension of 4 metres and convenient access from a living room. Minimal change area policy Ensure that the amount, location and width of private open space provided at ground level reflects the open space and garden character of Glen Eira's residential areas. Ensure the provision of private open space areas are of a sufficient size and width to enable the retention of existing significant trees and other vegetation and allow for the planting of new canopy trees.	Existing controls and policy are retained	Front and rear setback guidelines and requirements and Garden Area requirements will likely exceed these requirements, however corner lots are unlikely to achieve all street setback, open space and fence guidelines.	Provide specific guidance for corner lots.
Garden area requirement NRZ and GRZ only	Existing controls and policy are retained	Overlapping with setback and private open space requirements.	No change proposed.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
• 400 - 500 square metres 25% • 501 - 650 square metres 30% • Above 650 square metres 35%			
Primary Street Frontage Requirements			
Residential / local street			
Setbacks ResCode 9 metres or average of abutting allotments NRZ - Minimal Change Area Policy To maintain the open landscaped front yard which is a strong characteristic of Glen Eira.	Existing controls and policy are retained	Overlapping with Garden Area and Private Open Space requirements.	No change proposed.
Front Fence ResCode 1.5 metres	Existing controls and policy are retained	Corner lots are unlikely to achieve this requirement in conjunction with private open space requirement.	Provide specific guidance for corner lots.
Carparking NRZ - Minimal Change Area Policy Ensure that car spaces, carports and garages are not located within the front setback or project forward of a dwelling with street frontage.	Existing controls and policy are retained	In line with good urban design principles, Quality Design Principles and existing practice.	No change proposed.
Landscaping NRZ - Minimal Change Area Policy Ensure the garden character of Glen Eira is maintained by providing front yard garden space which can support canopy tree planting.	Existing controls and policy are retained	In line with Quality Design Principles and guidelines for other typologies in residential streets.	No change proposed.
Secondary Street Frontage Requirements (where the site is on a corner)			
All Streets			
Setbacks Clause 55 Front wall = 3 metres Side wall = 2 metres NRZ – Minimal Change Area Policy Ensure that the setbacks of dwellings on the long side of corners provide a transition by stepping the building back between the two immediately adjoining dwellings on the same side of the street.	Existing controls and policy are retained	In line with other typology setbacks.	No change proposed.
Side Interface Requirements			
Residential / Local street			
Setbacks Clause 55 1 metre at the ground floor. NRZ – Minimal Change Area Policy	Existing controls and policy are retained		No change proposed.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
To provide separation between buildings, reflecting the differences in character between housing diversity areas and minimal change areas. To minimise the effects of two storey or multiple storey dwellings on neighbourhood character and adjoining properties. Ensure that side setbacks reflect the surrounding streetscape character by ensuring that space is preserved between buildings reflecting the rhythm of dwellings in the street.			
Walls on Boundaries <u>Clause 55</u> As per the B18 standard <u>NRZ – Minimal Change Area Policy</u> Ensure that the design and siting of duplex style or side by side development creates the appearance of spaces between the buildings by ensuring that where walls adjoin boundaries they are set further back on the lot than the main façade of the dwelling.	Existing controls and policy are retained	Side by side typologies will require both garages to be built to the boundary in order to accommodate habitable rooms to the street.	No change proposed if clarified in practice.
Rear Interface Requirements			
Residential Interface			
Setbacks <u>Ground floor – NRZ1 only</u> 4 metres <u>Upper level</u> The rear wall of the second storey should align with the adjoining rear setbacks. <u>NRZ – Minimal Change Area Policy</u> To minimise the effects of two storey or multiple storey dwellings on neighbourhood character and adjoining properties. Discourage the siting of two storey or multiple storey dwellings at the rear of sites Ensure that changes in heights in buildings from adjoining properties are graduated both across the site and along the length of the site. Ensure that the siting and design of two storey or multiple storey dwellings is respectful of adjoining buildings and neighbouring secluded open space. Provide adequate rear setbacks in minimal change areas that allow for the planting of substantial vegetation, provide adequate separation between neighbouring dwellings and preserve the sense of “openness” in the rear of properties.	Existing controls and policy are retained except for a change to the upper level setback:	Setback to the upper level limited to the adjoining building extents is significantly variable and not necessarily aligned to the desired outcome of continuous rear yards at the rear of lots. Some existing dwellings extend deep into lots while others are contained to their original bungalow footprint.	**Change** guideline to provide greater certainty for upper level rear setbacks, maintaining a generous setback that limits overshadowing and overlooking no matter which orientation of the lot. Recommendation: Apply a 9.0 metre minimum rear setback to first floor levels. This will allow for rear facing first floor windows without the need for screening (meeting Clause 55 overlooking design standards) and eliminates overshadowing of adjacent rear property gardens in mid-winter (improving landscape viability) and achieves the objective of graduating to storey forms, and minimising two-storey impacts, whilst also accommodating opportunity to increase garden areas by locating habitable spaces upstairs.

Heritage /Character

Heritage / Character housing applies to all residential areas located within a HO or NCO. Generally the Heritage / Character Housing is located within the NRZ1; however, there are areas where the Heritage / Character is located within the General Residential Zone or Residential Growth Zone. For the purposes of this assessment (unless specifically mentioned), it has been assumed that the Heritage / Character areas fall within the NRZ1.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
General Requirements			
Building height Preferred 1-2 Storeys	NRZ1 = 9 metres (2 storeys) GRZ = 10.5 metres RGZ = 13.5 metres	Alignment to existing zones is mixed and where existing zones accommodate taller buildings future development proposals are likely to capitalise on this potential.	Planning Scheme Amendments to the existing zone extents and/or schedules will be necessary to the zones to allow for building typologies as outlined in the building transition plan. Where existing development has already exceeded 2 storeys a review of the building transition plan should be undertaken.
Site coverage NRZ1 only 50%	Existing controls and policy are retained		No change proposed.
Permeability NRZ1 only 25%	Existing controls and policy are retained		No change proposed.
Private open space NRZ1 only An area of 60 square metres, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 40 square metres, a minimum dimension of 4 metres and convenient access from a living room. Minimal change area policy Ensure that the amount, location and width of private open space provided at ground level reflects the open space and garden character of Glen Eira's residential areas. Ensure the provision of private open space areas are of a sufficient size and width to enable the retention of existing significant trees and other vegetation and allow for the planting of new canopy trees.	Existing controls and policy are retained	Garden Area and setback requirements are likely to exceed this requirement.	No change proposed..
Garden area requirement NRZ and GRZ only 400 - 500 square metres 25% 501 - 650 square metres 30% Above 650 square metres 35%	Existing controls and policy are retained		No change proposed.
Primary Street Frontage Requirements			
Residential / local street			
Setbacks ResCode – Areas not covered by NCO 9 metres or average of abutting allotments NCO1-5	Existing controls and policy are retained	Although not mandatory, upper level front setbacks are in conflict with rear upper level conflicts potentially limiting any two storey element and encouraging the maximum single level footprint which will then conflict with the Residential Garden Setting Principle.	Provide more clarified guidance that balances development space, garden setting and heritage sensitivity.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
Ground Floor Street Setback Equal to the greater setback from the front street of adjacent dwellings within the same Overlay area. Upper levels Set back at least 8 metres from the front building façade where the main ridge line of the roof is perpendicular to the street, or located at least 1m behind the main ridgeline of the roof where this is parallel to the street NRZ - Minimal Change Area Policy To maintain the open landscaped front yard which is a strong characteristic of Glen Eira.			
Front Fence ResCode – Areas not covered by NCO 1.5 metres NCO NCOs have various requirements including: • 0.5 metres, or 0.8 metres for the height of a pillar. • 1.2 metres and have at least 25% permeability • 0.8 metres if constructed in brick/masonry.	Existing controls and policy are retained	Unlikely to be met on corner lots.	No change proposed if clarity of application is understood.
Carparking NCO1 A garage, carport or car space constrained by walls should be…: A maximum width of 4 metres where visible from the street or not located to the rear of the dwelling; Located at least 10 metres behind the front wall of the dwelling. NCO2 & NCO3 & NCO4 & NCO5 A garage, carport or car space constrained by walls should be…: A maximum width of 4 metres where visible from the street or not located to the rear of the dwelling; Located at least 2 metres behind the front wall of the dwelling. NRZ - Minimal Change Area Policy Ensure that car spaces, carports and garages are not located within the front setback or project forward of a dwelling with street frontage.	Existing controls and policy are retained		No change proposed.
Landscaping NRZ - Minimal Change Area Policy Ensure the garden character of Glen Eira is maintained by providing front yard garden space which can support canopy tree planting.	Existing controls and policy are retained		No change proposed.
Secondary Street Frontage Requirements (where the site is on a corner)			
All Streets			

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
Setbacks Clause 55 – Areas not covered by an NCO 3 metres NCO1-5 Equal to the greater setback from the side street of all dwellings on a corner allotment within the same Overlay area NRZ – Minimal Change Area Policy Ensure that the setbacks of dwellings on the long side of corners provide a transition by stepping the building back between the two immediately adjoining dwellings on the same side of the street.	Existing controls and policy are retained		No change proposed.
Side Interface Requirements			
Residential / Local street			
Setbacks Clause 55 1 metre at the ground floor. NRZ – Minimal Change Area Policy To provide separation between buildings, reflecting the differences in character between housing diversity areas and minimal change areas. To minimise the effects of two storey or multiple storey dwellings on neighbourhood character and adjoining properties. Ensure that side setbacks reflect the surrounding streetscape character by ensuring that space is preserved between buildings reflecting the rhythm of dwellings in the street.	Existing controls and policy are retained		No change proposed.
Walls on Boundaries Clause 55 – Areas not covered by an NCO As per the B18 standard NCOs Various requirements allowing walls on boundaries where it is a carport, garage or outbuilding set back from the front wall. Buildings should be on only one boundary. NRZ – Minimal Change Area Policy Ensure that the design and siting of duplex style or side by side development creates the appearance of spaces between the buildings by ensuring that where walls adjoin boundaries they are set further back on the lot than the main façade of the dwelling.	Existing controls and policy are retained		No change proposed.
Rear Interface Requirements			
Residential Interface			
Setbacks	Existing controls and policy are retained	Although not mandatory, upper level front setbacks are in conflict with rear upper level	Provide more clarified guidance that balances development space, garden setting and heritage

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
<u>Ground floor – NRZ1 only</u> 4 metres <u>NRZ – Minimal Change Area Policy</u> To minimise the effects of two storey or multiple storey dwellings on neighbourhood character and adjoining properties. Discourage the siting of two storey or multiple storey dwellings at the rear of sites Ensure that changes in heights in buildings from adjoining properties are graduated both across the site and along the length of the site. Ensure that the siting and design of two storey or multiple storey dwellings is respectful of adjoining buildings and neighbouring secluded open space. Provide adequate rear setbacks in minimal change areas that allow for the planting of substantial vegetation, provide adequate separation between neighbouring dwellings and preserve the sense of “openness” in the rear of properties.		conflicts potentially limiting any two storey element and encouraging the maximum single level footprint which will then conflict with the Residential Garden Setting Principle.	sensitivity. Recommendation: Apply a 9.0 metre minimum rear setback to first floor levels. This will allow for rear facing first floor windows without the need for screening (meeting Clause 55 overlooking design standards) and eliminates overshadowing of adjacent rear property gardens in mid-winter (improving landscape viability) and achieves the objective of graduating to storey forms, and minimising two-storey impacts, whilst also accommodating opportunity to increase garden areas by locating habitable spaces upstairs.

Commercial types covered by these guidelines:

Heritage/Character Shop top

Located in commercial or mixed use zoned land and located within a heritage or significant character precinct and comprised of ground floor retail and upper floor office or residential uses.

Shop top

Located in commercial or mixed use zoned land and comprised of ground floor retail and upper floor office or residential uses.

Strategic site (mixed use)

Identified strategic sites within major activity centres or neighbourhood centres and comprised of ground floor retail and ground floor office with dwellings located on upper levels.

Urban Renewal Development

Sites that have been identified as urban renewal precincts and comprised of mixed uses.

	Alignment with existing Planning Scheme zones, schedules and overlays will need further review
	Suggested change to proposed draft guidelines based on spatial testing and interaction with existing controls
	Guideline generally supported (sometimes with a view for slight change)
	No guideline proposed

Exclusions:

- Clause 22.05 Urban Villages Policy – An analysis of the Urban Villages Policy covering Bentleigh, Elsternwick and Carnegie has not been undertaken as it is too fine grain for this analysis. Existing policy within this clause may not be consistent with the proposed guidelines.

Key observations:

- Draft guidelines are generally aligned to the intentions of the Quality Design Principles.
- Guidelines provide more specific guidance than the newly adopted planning controls or guidelines (Urban Design Guidelines for Victoria, Apartment Standards adopted through Clause 55 and 58).
- Active laneway network will need to be defined by Council to provide clarity prior to issue of guidelines.
- Ground floor requirements for vehicle access, loading bays and utilities conflict with guidelines around active frontages and awnings/verandahs.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
Overall Building Height Requirement			
Shop Top – Heritage, Character and Sensitive			
Absolute Maximum = 4 storeys (14 metres) The preferred maximum building height may not be achievable on every site, particularly smaller sites and constrained sites. Consolidation is encouraged to achieve preferred maximums.	<u>Mixed Use Zone (MUZ)</u> • MUZ1 – None specified • MUZ2 – 10.5 metres <u>Commercial Zone (CZ)</u> • None specified <u>Design and Development Overlay (DDO)</u> *DDO8 – Bentleigh Urban Village (interim control)* • DDO8-1 - 14 metres (4 storeys) (mandatory) • DDO8-2 – 11 metres (3 storeys) (mandatory) • DDO8-3 – 17 metres (5 storeys) (preferred) • DDO8-4 – 14 metres (4 storeys) • Buildings on the North side of Centre Road to be designed and articulated so that they do not overshadow onto the footpath on the southern side of Centre Road at the September equinox at noon *DDO9 – Carnegie Urban Village (interim control)* • DDO9-1 – 23 metres (7 storeys) (preferred) • DDO9-2 – 20 metres (6 storeys) (preferred) • DDO9-3 – 14 metres (4 storeys) (mandatory) <u>Clause 22.01 (Heritage Policy) (proposed)</u> • New buildings in heritage precincts should not be substantially taller than adjacent contributory buildings unless an additional storey is set well back on the site to reflect the prevailing scale of contributory buildings when viewed from the street (Clause 22.01-3 Policy).	Evidence of recent development on sites in traditional retail streets demonstrate the cumulative impacts of car parking access, DDA access and vertical circulation requirements eroding the core land use function of retail at ground floor level and the continuity and quality of active street frontages in these streets. Clause 55 cross ventilation, functional layout and private open space requirements will limit apartment yields on narrow sites and likely to require more than two sites to accommodate more than two apartments per level. Overshadowing of the southern footpath of east-west streets will not occur in the equinox.	Height guideline supported. **Introduce** guidance that requires minimum site area (that demands site consolidation) to achieve maximum height in order to reduce the cumulative impacts on street frontages, laneway frontages and laneway access. **Consider** the role that shop top sites have in the provision of housing growth in the municipality relative to other precincts that may have more capacity and their traditional role in providing flexible, core retail function with a view to further reducing the height.
Shop Top - Standard			
Absolute Maximum = 5 storeys (17 metres) The preferred maximum building height may not be achievable on every site, particularly smaller sites and constrained sites. Consolidation is encouraged to achieve preferred maximums.	As above.	Evidence of recent development on sites in traditional retail streets demonstrate the cumulative impacts of car parking access, DDA access and vertical circulation requirements eroding the core land use function of retail at ground floor level and the continuity and quality of active street frontages in these streets. Clause 55 cross ventilation, functional layout and private open space requirements will limit apartment yields on narrow sites and likely to require more than two sites to accommodate more than two apartments per level. Overshadowing of the southern footpath of east-west streets will not occur in the equinox.	Height guideline supported. **Introduce** guidance that requires minimum site area (that demands site consolidation) to achieve maximum height in order to reduce the cumulative impacts on street frontages, laneway frontages and laneway access. **Consider** the role that shop top sites have in the provision of housing growth in the municipality relative to other precincts that may have more capacity and their traditional role in providing flexible, core retail function with a view to further reducing the height.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
Primary Street Frontage Requirements			
All Street			
Setbacks *Standard streets* Street wall height – 2 storeys (9 metres). Street wall setback – 0 metres Upper Level setbacks – 6 metres *Identified Heritage/Character buildings and streets* Street wall height – To match parapet of nearest contributory building. Street wall setback – 0 metres Upper level setbacks – Minimum 6 metres. Above the street-wall, additional storeys must also be set back so as not to be visible when viewed from standing eye level (1.6m) at the street frontage directly across the street.	ResCode (Standard D14) – Commercial zones (all apartments) and MUZ (5 stories or more) • The built form of the development must respect the existing or preferred urban context and respond to the features of the site. Apartment Design Guidelines for Victoria • Establish the street frontage setback alignment of buildings to contribute to the character and amenity of the public realm. Rescode (Standard B6) – MUZ Only (4 Stories or less) • *Existing buildings on both abutting allotment:* 9 metres or average of abutting allotments whichever is the lesser Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* Where the street proportions and character are strongly defined, align the building frontage with existing front setbacks (TIP: street character may also be defined by heritage buildings and landscape settings) (Action 5.1.1e). Set back upper levels of tall buildings or use a podium and tower form to create a pedestrian scale at street level (Action 5.1.1h). Clause 22.01 (Heritage Policy) (proposed) • Encourage higher building additions to be well set back from the front wall of the building. • Encourage the conservation of setbacks that impart significance to those buildings that are surrounded by open space (including but not limited to churches and schools). • Ensure any new upper level additions and works are respectful to the scale and form of the heritage place or contributory elements of the place and, where relevant, the heritage precinct as a whole.	In line with existing policy and precedents in heritage retail street environments. Clause 55 cross ventilation, functional layout and private open space requirements will limit apartment yields on narrow sites and likely to require more than two sites to accommodate more than two apartments per level.	Guideline supported. **Consider** guidance that provides direction on side setbacks for upper floors which are likely to vary between applications in future to accommodate cross ventilation and private open space requirements in Clause 55 and 58.
Fixed Awnings/Verandahs **100%** of frontage.	Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* As part of a buildings design, install continuous weather protection for pedestrian priority streets and public spaces (TIP. Awnings provide protection from sun, wind and rain at street level) (Action 5.1.4c). Clause 22.01 (Heritage Policy) (proposed) • Verandahs are discouraged on (former) public buildings and banks unless evidence can be provided indicating an original verandah to the building. • Encourage new verandahs to be setback 750mm from the street pavement to avoid damage sustained by passing trucks.	In line with existing guidelines.	Guideline supported.
Openings At least **80%** of the building facade at ground floor level is maintained as an entry or window with clear glazing.	Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* Provide building entries and transparent windows to the street frontage (Action 5.1.5b).	In line with existing guidelines.	Guideline supported.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
	• *5.3 Large format retail premises* Where a building is located on the front lotline, provide a level of clear window that allows opportunities for informal surveillance of the street from within the building (Action 5.3.1b). <u>Clause 22.01 (Heritage Policy) (proposed)</u> • Conserve original elements on the front façade of the building. New openings may be introduced on secondary elevations to corner buildings provided they do not irreversibly alter valued architectural treatments. Conserve original elements on the front façade of the building. New openings may be introduced on secondary elevations to corner buildings provided they do not irreversibly alter valued architectural treatments.		
Vehicle Access Vehicle access **not supported** from the primary frontage if access from other streets or laneways are available. Vehicle access and crossover widths to be minimised if no other option available.	<u>ResCode Access objective (Standard D11 and B14)</u> • Objective - To ensure the number and design of vehicle crossovers respects the urban context. <u>Urban Design Guidelines for Victoria</u> • *5.1 Buildings in Activity Centres* Arrange vehicle entries to minimise the number of vehicle crossovers in pedestrian paths (Action 5.1.6e). Locate vehicle and service access to the rear or side of the building (Action 5.1.6f). • *5.4 Car parking Structures* Locate vehicle entrances to car parking structures away from pedestrian priority streets and public transport routes (Action 5.4.4a).	In line with existing guidelines	Guideline supported.
Secondary Street Frontage Requirements (where the site is on a corner)			
Commercial Street/Main Street/Transport Corridor			
Setbacks Street wall height – 2 storeys (9 metres). Street wall setback – 0 metres Upper Level setbacks – 6 metres	<u>ResCode (Standard D14) – Commercial zones (all apartments) and MUZ (5 stories or more)</u> • The built form of the development must respect the existing or preferred urban context and respond to the features of the site. <u>Apartment Design Guidelines for Victoria</u> • Ensure building setback is responsive to the adjoining building form and height to deliver adequate daylight, privacy and outlook for dwellings (1.10 Design Guidance). <u>Rescode (Standard B6) (MUZ – 4 stories or less)</u> • Side Setback Front walls of new development facing the side street should be setback same distance of setback of front wall of abutting existing building or 3 metres, whichever is lesser. Side walls of new development should be setback same distance of the front wall of abutting existing building or 2 metres, whichever is lesser. <u>Clause 22.01 (Heritage Policy) (proposed)</u> • Encourage higher building additions to be well set back from the front wall of the building.	Upper setback will limit development of corner sites without significant consolidation.	**Change** guideline to consider constraints of smaller corner commercial sites.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
	• Encourage the conservation of setbacks that impart significance to those buildings that are surrounded by open space (including but not limited to churches and schools). • Ensure any new upper level additions and works are respectful to the scale and form of the heritage place or contributory elements of the place and, where relevant, the heritage precinct as a whole.		
Fixed Awnings/Verandahs **100%** of frontage.	Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* As part of a buildings design, install continuous weather protection for pedestrian priority streets and public spaces (TIP. Awnings provide protection from sun, wind and rain at street level) (Action 5.1.4c). Clause 22.01 (Heritage Policy) (proposed) • Verandahs are discouraged on (former) public buildings and banks unless evidence can be provided indicating an original verandah to the building. • Encourage new verandahs to be setback 750mm from the street pavement to avoid damage sustained by passing trucks.	Excessive given they are side boundaries and unlikely to have more than 50% retail frontage due to requirements for vehicle access, services, and utilities etc.	**Change** guideline to take into consideration reduced frontages.
Openings At least **80%** of the building facade at ground floor level is maintained as an entry or window with clear glazing.	Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* Provide building entries and transparent windows to the street frontage (Action 5.1.5b). • *5.3 Large format retail premises* Where a building is located on the front lotline, provide a level of clear window that allows opportunities for informal surveillance of the street from within the building (Action 5.3.1b). Clause 22.01 (Heritage Policy) (proposed) • Conserve original elements on the front façade of the building. New openings may be introduced on secondary elevations to corner buildings provided they do not irreversibly alter valued architectural treatments. Conserve original elements on the front façade of the building. New openings may be introduced on secondary elevations to corner buildings provided they do not irreversibly alter valued architectural treatments.	Excessive given they are side boundaries and unlikely to have more than 50% retail frontage due to requirements for vehicle access, services, and utilities etc.	**Change** guideline to take into consideration reduced openings along secondary frontages.
Vehicle Access Vehicle access **not supported** from the secondary frontage if access from laneways are available. Vehicle access and crossover widths to be minimised if no other option available.	ResCode Access objective (Standard D11 and B14) • Objective - To ensure the number and design of vehicle crossovers respects the urban context. Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* Arrange vehicle entries to minimise the number of vehicle crossovers in pedestrian paths (Action 5.1.6e). Locate vehicle and service access to the rear or side of the building (Action 5.1.6f). • *5.4 Car parking Structures* Locate vehicle entrances to car parking structures away from pedestrian priority streets and public transport routes (Action	May limit car parking arrangement of basement and access by service vehicles to loading bays.	Guideline supported, with a view to exceptions being accommodate service vehicle and loading bay access.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
	5.4.4a).		
Residential / Local street			
Setbacks Street wall height – 2 storeys (9 metres). Street wall setback – 0 metres Upper Level setbacks – 3 metres	<u>ResCode (Standard D14) – Commercial zones (all apartments) and MUZ (5 stories or more)</u> • The built form of the development must respect the existing or preferred urban context and respond to the features of the site. <u>Apartment Design Guidelines for Victoria</u> • Ensure building setback is responsive to the adjoining building form and height to deliver adequate daylight, privacy and outlook for dwellings (1.10 Design Guidance). <u>Rescode (Standard B6) (MUZ – 4 stories or less)</u> • Side Setback Front walls of new development facing the side street should be setback same distance of setback of front wall of abutting existing building or 3 metres, whichever is lesser. Side walls of new development should be setback same distance of the front wall of abutting existing building or 2 metres, whichever is lesser. <u>Clause 22.01 (Heritage Policy) (proposed)</u> • Encourage higher building additions to be well set back from the front wall of the building. • Encourage the conservation of setbacks that impart significance to those buildings that are surrounded by open space (including but not limited to churches and schools). • Ensure any new upper level additions and works are respectful to the scale and form of the heritage place or contributory elements of the place and, where relevant, the heritage precinct as a whole.	In line with existing guidelines.	Guideline supported.
Fixed Awnings/Verandahs At least **40%** the frontage. The awning/verandah should 'round the corner'.	<u>Urban Design Guidelines for Victoria</u> • *5.1 Buildings in Activity Centres* As part of a buildings design, install continuous weather protection for pedestrian priority streets and public spaces (TIP. Awnings provide protection from sun, wind and rain at street level) (Action 5.1.4c). <u>Clause 22.01 (Heritage Policy) (proposed)</u> • Verandahs are discouraged on (former) public buildings and banks unless evidence can be provided indicating an original verandah to the building. • Encourage new verandahs to be setback 750mm from the street pavement to avoid damage sustained by passing trucks.	In line with existing guidelines.	Guideline supported.
Openings At least **40%** of the building facade at ground floor level is maintained as an entry or window with clear glazing.	<u>Urban Design Guidelines for Victoria</u> • *5.1 Buildings in Activity Centres* Provide building entries and transparent windows to the street frontage (Action 5.1.5b). <u>Clause 22.01 (Heritage Policy) (proposed)</u> • Conserve original elements on the front façade of the building.	In line with existing guidelines.	Guideline supported.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
	New openings may be introduced on secondary elevations to corner buildings provided they do not irreversibly alter valued architectural treatments. Conserve original elements on the front façade of the building. New openings may be introduced on secondary elevations to corner buildings provided they do not irreversibly alter valued architectural treatments.		
Vehicle Access Vehicle access **supported but not preferred** in cases where alternative laneway access is available. Vehicle access and crossover widths to be minimised.	<u>ResCode Access objective (Standard D11 and B14)</u> • Objective - To ensure the number and design of vehicle crossovers respects the urban context. <u>Urban Design Guidelines for Victoria</u> • *5.1 Buildings in Activity Centres* Arrange vehicle entries to minimise the number of vehicle crossovers in pedestrian paths (Action 5.1.6e). Locate vehicle and service access to the rear or side of the building (Action 5.1.6f). • *5.4 Car parking Structures* Locate vehicle entrances to car parking structures away from pedestrian priority streets and public transport routes (Action 5.4.4a).	May limit car parking arrangement of basement and access by service vehicles to loading bays.	Guideline supported.
Side Boundary Interface Requirements			
Residential Boundary			
Setbacks Boundary wall setback – 0 metres to a height of 3 storeys (11 metres) Upper Level side setback – 3 metres where above 3 storeys (11 metres) <u>Where abutting a heritage precinct or building:</u> All upper levels of development must be recessive when viewed from nearby heritage streetscapes.	<u>ResCode (Standard D14) – Commercial zones (all apartments) and MUZ (5 stories or more)</u> • Buildings should be setback from side and rear boundaries, and other buildings within the site to: ○ Ensure adequate daylight into new habitable room windows. ○ Avoid direct views into habitable room windows and private open space of new and existing dwellings. Developments should avoid replying on screening to reduce views. ○ Provide an outlook from dwellings that creates a reasonable visual connection to the external environment. ○ Ensure the dwellings are designed to meet the objectives of Clause 58. <u>ResCode (Standard B6) (MUZ – 4 stories or less)</u> • Ground floor - 1 metre at the ground floor unless wall is on boundary. • Upper levels - 1 metre plus increase according to height. <u>Clause 22.01 (Heritage Policy) (proposed)</u> • Encourage the conservation of setbacks that impart significance to those buildings that are surrounded by open space (including but not limited to churches and schools). • Ensure any new upper level additions and works are respectful to the scale and form of the heritage place or contributory.		Guideline supported.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
Commercial boundary/Service laneway			
Setbacks No additional setbacks required.	As above.		No change proposed.
Blank Boundary Wall Treatment Boundary walls should be treated and articulated to provide interest assuming that development will not occur on adjoining sites for some time.	Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* Where a building has a solid external wall facing a street or public place, detail the walls to provide an interesting appearance (Action 5.1.7b).		Guideline supported.
Active Laneways			

Setbacks
 	
Street wall setback – Setback to provide a minimum 6 metre laneway width, up to a height of 2 storeys (9 metres).
 	
Upper Level setbacks – 3 metres measured from the streetwall façade, where above 2 storeys.
	ResCode (Standard D14) – Commercial zones (all apartments) and MUZ (5 stories or more)
	
	• Buildings should be setback from side and rear boundaries, and other buildings within the site to:
	  ○ Ensure adequate daylight into new habitable room windows.
	  ○ Avoid direct views into habitable room windows and private open space of new and existing dwellings. Developments should avoid replying on screening to reduce views.
	  ○ Provide an outlook from dwellings that creates a reasonable visual connection to the external environment.
	  ○ Ensure the dwellings are designed to meet the objectives of Clause 58.
	
	ResCode (Standard B6) (MUZ – 4 stories or less)
	
	• Ground floor - 1 metre at the ground floor unless wall is on boundary.
	
	• Upper levels - 1 metre plus increase according to height.
	
	Clause 22.01 (Heritage Policy) (proposed)
	
	• Encourage the conservation of setbacks that impart significance to those buildings that are surrounded by open space (including but not limited to churches and schools).
	
	• Ensure any new upper level additions and works are respectful to the scale and form of the heritage place or contributory.
		Currently unclear what is defined as an active laneway.
		
		Active laneway network will need to be defined by Council to provide clarity for landholders and developers.
			Guideline supported, with a view of the term ‘active laneway’ being clearly defined.

Fixed Awnings/Verandahs **100%** of frontage.	Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* As part of a buildings design, install continuous weather protection for pedestrian priority streets and public spaces (TIP. Awnings provide protection from sun, wind and rain at street level) (Action 5.1.4c). Clause 52.07 Loading and Unloading of Vehicles • Loading bays should have a minimum height clearance of 4 metres.	No current recommendations in policy for weather protection in laneways. May interfere with the vehicle access and loading bay requirements of the commercial component.	**Remove** guideline or **change** to be applicable to pedestrian only/priority laneways.
Openings At least **80%** of the building facade at ground floor level is maintained as an	Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* Provide building entries and transparent windows to the street	Excessive given they are side boundaries and unlikely to have more than 50% retail frontage due to requirements for vehicle access, services, and	**Change** guideline to take into consideration reduced openings along active laneway frontages.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
entry or window with clear glazing.	frontage (Action 5.1.5b). <u>Clause 22.01 (Heritage Policy) (proposed)</u> • Conserve original elements on the front façade of the building. New openings may be introduced on secondary elevations to corner buildings provided they do not irreversibly alter valued architectural treatments. Conserve original elements on the front façade of the building. New openings may be introduced on secondary elevations to corner buildings provided they do not irreversibly alter valued architectural treatments.	utilities etc.	
Laneway width 6m laneway width should be achieved unless otherwise specified.	<u>Clause 52.06-9 Design standards for car parking</u> • Accessways must be at least 3 metres wide <u>Urban Design Guidelines for Victoria</u> • *1.5 Public realm structure* Set the street width in relation to the future building height and setback distance so as to allow daylight and winter sun access to key public spaces within streets (Action 1.5.4c).	Achievable where new laneways are provided by developments or where a laneway abuts a large consolidated lot. Difficult to enforce with existing laneway with multiple frontages due to fine grain ownership patterns.	**Change** guideline to apply to new laneways
Rear Boundary Interface Requirements			
Residential boundary			

Setbacks
 	
Ground and first floor setbacks – 0 metres to a height of 2 storeys (9 metres).
 	
Third and fourth floors –2 metres for every 1m of building height above 2 storeys (9 metres).
 	
Above fourth floor – 12 metres.
 	
<u>Where abutting a service laneway:</u>
 	
The above setbacks to be measured from the residential property boundary and includes the laneway width)
 	
<u>Where abutting a heritage precinct or building:</u>
 	
Upper levels of development must be recessive when viewed from nearby heritage streetscapes.
	<u>ResCode (Standard D14) – Commercial zones (all apartments) and MUZ (5 stories or more)</u>
	
	• Buildings should be setback from side and rear boundaries, and other buildings within the site to:
	  ○ Ensure adequate daylight into new habitable room windows.
	  ○ Avoid direct views into habitable room windows and private open space of new and existing dwellings. Developments should avoid replying on screening to reduce views.
	  ○ Provide an outlook from dwellings that creates a reasonable visual connection to the external environment.
	  ○ Ensure the dwellings are designed to meet the objectives of Clause 58.
	
	<u>ResCode (Standard B6) (MUZ – 4 stories or less)</u>
	
	• Ground floor - 1 metre at the ground floor unless wall is on boundary.
	
	• Upper levels - 1 metre plus increase according to height.
	
	<u>Clause 22.01 (Heritage Policy) (proposed)</u>
	
	• Encourage the conservation of setbacks that impart significance to those buildings that are surrounded by open space (including but not limited to churches and schools).
	
	• Ensure any new upper level additions and works are respectful to the scale and form of the heritage place or contributory
			Guideline supported.

Commercial Interface/Service Laneway			
Setbacks Streetwall – 0 metres to a height of 2	As above.		Guideline supported.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
storeys (9 metres). Upper Levels – 6 metres above 2 storeys (9 metres) Where abutting a service laneway: The above setbacks to be measured from the opposite commercial property boundary and include the laneway width).			
Active Laneway			
Setbacks Street wall setback – Located to provide a minimum 6 metre laneway width, up to a height of 2 storeys (9 metres). Upper Level setbacks– 3 metres measured from the streetwall façade, where above 2 storeys.	As above.		Guideline supported.
Fixed Awnings/Verandahs **100%** of frontage.	Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* As part of a buildings design, install continuous weather protection for pedestrian priority streets and public spaces (TIP. Awnings provide protection from sun, wind and rain at street level) (Action 5.1.4c). Clause 52.07 Loading and Unloading of Vehicles • Loading bays should have a minimum height clearance of 4 metres.	No current recommendations in policy for weather protection in laneways. May interfere with the vehicle access and loading bay requirements of the commercial component.	**Remove** guideline or **change** to be applicable to pedestrian only/priority laneways.
Openings At least **80%** of the building facade at ground floor level is maintained as an entry or window with clear glazing.	Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* Provide building entries and transparent windows to the street frontage (Action 5.1.5b). Clause 22.01 (Heritage Policy) (proposed) • Conserve original elements on the front façade of the building. New openings may be introduced on secondary elevations to corner buildings provided they do not irreversibly alter valued architectural treatments. Conserve original elements on the front façade of the building. New openings may be introduced on secondary elevations to corner buildings provided they do not irreversibly alter valued architectural treatments.	Excessive given they are side boundaries and unlikely to have more than 50% retail frontage due to requirements for vehicle access, services, and utilities etc.	**Change** guideline to take into consideration reduced openings along active laneway frontages
Laneway width 6m laneway width should be achieved unless otherwise specified.	Clause 52.06-9 Design standards for car parking • Accessways must be at least 3 metres wide. Urban Design Guidelines for Victoria • *1.5 Public realm structure* Set the street width in relation to the future building height and setback distance so as to allow daylight and winter sun access to key public spaces within streets (Action 1.5.4c).	Achievable where new laneways are provided by developments or where a laneway abuts a large consolidated lot. Difficult to enforce with existing laneway with multiple frontages due to fine grain ownership patterns.	**Change** guideline to apply to new laneways.
Requirements for Interfaces to Public Open Space			

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
All public open space unless otherwise specified			
Overshadowing Existing and future open space must receive a minimum of 3 hours of direct sunlight between 9am and 3pm during mid-winter and at least 5 hours of direct sunlight between 9am and 3pm on September 22. Where this minimum is not currently met, the development must not create additional shadowing of the open space. *Additional requirements may apply for specific sites that warrant further protection (eg linear park south of Egan and Worrayl Streets, Carnegie)*	Clause 22.01 (Heritage Policy) (proposed) • Encourage the conservation of setbacks that impart significance to those buildings that are surrounded by open space (including but not limited to churches and schools). Urban Design Guidelines for Victoria • *1.5 Public realm structure* Set the street width in relation to the future building height and setback distance so as to allow daylight and winter sun access to key public spaces within streets (Action 1.5.4c).	Mid-winter overshadowing controls limit development envelopes to the north of spaces severely with the need for setbacks that are equal to approximately 2.5 times the overall height of the building. As an example this would require a 12 storey built form to be setback over 90 metres from the northern edge of a public open space.	**Change** guideline reflect a more achievable overshadowing outcome or designate a more public space where overshadowing will have less of an impact across a large area of urban renewal.
Passive Surveillance and Activation Development should maximise passive surveillance of public open space. Development should maximise activation of public open space, where appropriate.	ResCode • Standard B5 and D5: Development next to existing public open space should be laid out to complement the open space. • Standard B36 and D7: Be located to provide passive surveillance opportunities, where appropriate. Urban Design Guidelines for Victoria • 3.1 Public spaces principles Arrange doors and windows of buildings to overlook adjacent public spaces (Action 3.1.3a). Surround local parks, on at least three sides, with streets and buildings with active frontages to overlook the park (Action 3.3.3a). Lay out communal open space to create informal surveillance opportunities within the space and from adjacent buildings (Action 3.4.1c). • 5.1 Buildings in activity centres Arrange windows of buildings to overlook adjacent streets and public spaces (Action 5.1.5a). Provide building entries and transparent windows to the street frontage (Action 5.1.5b). Use low-height or semi-transparent front fences to assist informal surveillance of the street (Action 5.1.5d). In mixed-use buildings, provide a compatible mix of activities that attract people after business hours (Action 5.1.5g). Apartment Design Guidelines for Victoria • Layout communal open space to create informal surveillance opportunities within the development and from adjoining buildings (2.9 Design Guidance).	Overlapping but consistent with existing guidelines.	Guideline supported.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
Overall Building Height Requirement			
Strategic site (mixed use)			
Preferred Height: 5-6 Storeys (17-20 metres) **Absolute Maximum Height: 8 Storeys (26 metres)** The preferred maximum building height may not be achievable on every site, particularly smaller sites and constrained sites. Consolidation is encouraged to achieve preferred maximums. Buildings should not exceed the preferred maximum height, unless: • It can be demonstrated that a significant community benefit can be achieved; and • It continues to meet the objectives, requirements and guidelines in relation to visual impact and overshadowing with increased upper level setbacks. Podium levels should be activated for commercial uses or used as private open space.	Mixed Use Zone (MUZ) • MUZ1 – None specified • MUZ2 – 10.5 metres Commercial Zone (CZ) • None specified Design and Development Overlay (DDO) *DDO8 – Bentleigh Urban Village* • DDO8-1 - 14 metres (4 storeys) (mandatory) • DDO8-2 – 11 metres (3 storeys) (mandatory) • DDO8-3 – 17 metres (5 storeys) (preferred) • DDO8-4 – 14 metres (4 storeys) *DDO9 – Carnegie Urban Village* • DDO9-1 – 23 metres (7 storeys) (preferred) • DDO9-2 – 20 metres (6 storeys) (preferred) • DDO9-3 – 14 metres (4 storeys) (mandatory) Urban Design Guidelines for Victoria • *1.5 Public realm structure* Set the street width in relation to the future building height and setback distance so as to allow daylight and winter sun access to key public spaces within streets (Action 1.5.4c). • *5.1 Buildings in Activity Centres* Use the building height and setbacks to frame the street space as a public space (Action 5.1.1d).	Some inconsistencies between preferred heights and existing controls both zones and overlays. Unclear definition of small and constrained sites. No definition of significant community benefit will reduce certainty for developers and could lead to undesirable outcomes.	**Change** to include a minimum site size and provide definition of significant community benefit.
Urban renewal development			
Preferred Height: 6-8 Storeys (20-26 metres) **Absolute Maximum Height: 12 Storeys (38 metres)** The preferred maximum building height may not be achievable on every site, particularly smaller sites and constrained sites. Consolidation is encouraged to achieve preferred maximums. Buildings should not exceed the preferred maximum height, unless: • It can be demonstrated that a significant community benefit	As above.	As above.	**Change** to include a minimum site size and provide definition of significant community benefit.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
can be achieved; and • It continues to meet the objectives, requirements and guidelines in relation to visual impact and overshadowing with increased upper level setbacks. Podium levels should be activated for commercial uses or used as private open space.			
Street Frontage Requirements			
All streets and service laneways			
Setbacks Street wall height – 3 storeys (11 metres). Street wall setback – 0 metres Upper Level setbacks – 6 metres from street wall podium.	ResCode (Standard D14) – Commercial zones (all apartments) and MUZ (5 stories or more) • The built form of the development must respect the existing or preferred urban context and respond to the features of the site. Apartment Design Guidelines for Victoria • Establish the street frontage setback alignment of buildings to contribute to the character and amenity of the public realm. Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* Where the street proportions and character are strongly defined, align the building frontage with existing front setbacks (TIP: street character may also be defined by heritage buildings and landscape settings) (Action 5.1.1e). Set back upper levels of tall buildings or use a podium and tower form to create a pedestrian scale at street level (Action 5.1.1h).		Guidelines supported.
Fixed Awnings/Verandahs **100%** of frontage.	Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* As part of a buildings design, install continuous weather protection for pedestrian priority streets and public spaces (TIP. Awnings provide protection from sun, wind and rain at street level) (Action 5.1.4c). Clause 52.07 Loading and Unloading of Vehicles • Loading bays should have a minimum height clearance of 4 metres.	Frontages all the way around unlikely particular for retail which will need loading bays, multiple car park entries, and utilities at ground floor.	**Change** to require awnings and verandahs along primary street frontages and along secondary and where activated frontages are located along secondary streets and laneways or along pedestrian priority streets.
Openings At least **80%** of the building facade at ground floor level is maintained as an entry or window with clear glazing.	Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* Provide building entries and transparent windows to the street frontage (Action 5.1.5b). • *5.3 Large format retail premises* Where a building is located on the front lotline, provide a level of clear window that allows opportunities for informal surveillance of the street from within the building (Action 5.3.1b).	Frontages all the way around unlikely particular for retail which will need loading bays, multiple car park entries, and utilities at ground floor.	**Change** guideline to take into consideration ground floor frontages required for vehicular and service requirements.
Vehicle Access Vehicle access **not supported** from the	ResCode Access objective (Standard D11) • Objective - To ensure the number and design of vehicle		Guideline supported.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
primary frontage if access from other streets or laneways are available. Vehicle access and crossover widths to be minimised if no other option available.	crossovers respects the urban context. Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* Arrange vehicle entries to minimise the number of vehicle crossovers in pedestrian paths (Action 5.1.6e). Locate vehicle and service access to the rear or side of the building (Action 5.1.6f). • *5.4 Car parking Structures* Locate vehicle entrances to car parking structures away from pedestrian priority streets and public transport routes (Action 5.4.4a).		
Active Laneways			
Setbacks Street wall setback – Located to provide a minimum 6 metre laneway width, up to a height of 3 storeys (11 metres). Upper Level setbacks – 6 metres measured from the streetwall podium façade.	ResCode (Standard D14) – Commercial zones (all apartments) and MUZ (5 stories or more) • The built form of the development must respect the existing or preferred urban context and respond to the features of the site. Apartment Design Guidelines for Victoria • Establish the street frontage setback alignment of buildings to contribute to the character and amenity of the public realm. Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* Where the street proportions and character are strongly defined, align the building frontage with existing front setbacks (TIP: street character may also be defined by heritage buildings and landscape settings) (Action 5.1.1e). • Set back upper levels of tall buildings or use a podium and tower form to create a pedestrian scale at street level (Action 5.1.1h).		Guideline supported.
Fixed Awnings/Verandahs **100%** of frontage.	Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* As part of a buildings design, install continuous weather protection for pedestrian priority streets and public spaces (TIP. Awnings provide protection from sun, wind and rain at street level) (Action 5.1.4c). Clause 52.07 Loading and Unloading of Vehicles • Loading bays should have a minimum height clearance of 4 metres.	Frontages all the way around unlikely particular for retail which will need loading bays, multiple car park entries, and utilities at ground floor.	**Change** guideline to take into consideration ground floor frontages required for vehicular and service requirements.
Openings At least **80%** of the building facade at ground floor level is maintained as an entry or window with clear glazing.	Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* Provide building entries and transparent windows to the street frontage (Action 5.1.5b).	Frontages all the way around unlikely particular for retail which will need loading bays, multiple car park entries, and utilities at ground floor.	**Change** guideline to take into consideration ground floor frontages required for vehicular and service requirements.
Laneway width 6m laneway width should be achieved unless otherwise specified.	Clause 52.06-9 Design standards for car parking • Accessways must be at least 3 metres wide. Urban Design Guidelines for Victoria	Achievable where new laneways are provided by developments or where a laneway abuts a large consolidated lot, which are likely at strategic and urban renewal sites.	Guideline supported.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
	• *1.5 Public realm structure* Set the street width in relation to the future building height and setback distance so as to allow daylight and winter sun access to key public spaces within streets (Action 1.5.4c).		
Side and rear boundary requirements			
If within the Urban Renewal or Strategic Site areas **If abutting a service laneway**			

Setbacks
 	
Street wall height – 3 storeys (11 metres).
 	
Street wall setback – 0 metres
 	
Upper Level setbacks – 6 metres from street wall podium.
	<u>ResCode (Standard D14)</u>
	
	• Buildings should be setback from side and rear boundaries, and other buildings within the site to:
	
	  • Ensure adequate daylight into new habitable room windows.
	
	  • Avoid direct views into habitable room windows and private open space of new and existing dwellings. Developments should avoid replying on screening to reduce views.
	
	  • Provide an outlook from dwellings that creates a reasonable visual connection to the external environment.
	
	  • Ensure the dwellings are designed to meet the objectives of Clause 58.
			Guideline supported.

Boundary Wall Treatment Boundary walls and side-facing interfaces should be treated and articulated to provide interest from oblique views assuming that development will not occur on adjoining sites for some time.	<u>Urban Design Guidelines for Victoria</u> • *5.1 Buildings in Activity Centres* Where a building has a solid external wall facing a street or public place, detail the walls to provide an interesting appearance (Action 5.1.7b).		Guideline supported.
If abutting a Residential zone or precinct or Heritage property			

Setbacks
 	
5m setback to a height of 2 storeys (9 metres)
 	
Plus 2m setback for every 1m of building height above 2 storeys, where within 20 metres from the boundary.
	<u>ResCode (Standard D14)</u>
	
	• Buildings should be setback from side and rear boundaries, and other buildings within the site to:
	
	  • Ensure adequate daylight into new habitable room windows.
	
	  • Avoid direct views into habitable room windows and private open space of new and existing dwellings. Developments should avoid replying on screening to reduce views.
	
	  • Provide an outlook from dwellings that creates a reasonable visual connection to the external environment.
	
	  • Ensure the dwellings are designed to meet the objectives of Clause 58.
			Guideline supported.

Building Transition Development is to provide a visual transition between the taller prevailing heights of the Urban Renewal Area or	<u>Urban Design Guidelines for Victoria</u> • *1.3 Large development site structure* Create a transition from large development sites to adjacent		Guideline supported.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
Strategic Site and the lower scale of adjoining residential areas. Development is to provide a transition to adjoining lower scale residential areas through the use of podiums and upper level setbacks.	residential neighbourhoods using scale, built form and uses. • *1.5 Public realm structure* Locate the transition between incompatible uses along rear boundaries of lots (Action 1.5.5c). • *5.1 Buildings in Activity Centres* Set back upper levels of tall buildings or use a podium and tower form to create a pedestrian scale at street level (Action 5.1.1h). Provide a transition in scale from larger buildings to adjacent areas of smaller scale built form (Action 5.1.2a). • *5.3 Large format retail premises* Where the large format retail premise is adjacent to a lower scale neighbourhood, provide a transition in scale to the surrounding streets and residential areas (Action 5.3.3b). Apartment Design Guidelines for Victoria • In streets where buildings have zero side setback, such as in dense urban context, main streets or for podium forms within centres, continue the built form pattern (1.5 Design Guidance). Clause 22.05 (Urban Villages Policy) • Bentleigh: Buildings step down at the rear to achieve a better transition to residential areas.		
Active Laneway (including new connections)			

Setbacks
 	
Street wall setback – Located to provide a minimum 6 metre laneway width, up to a height of 3 storeys (11 metres).
 	
Upper Level setbacks – 6 metres measured from the street wall podium façade.
	ResCode (Standard D14)
	• Buildings should be setback from side and rear boundaries, and other buildings within the site to:
	  • Ensure adequate daylight into new habitable room windows.
	  • Avoid direct views into habitable room windows and private open space of new and existing dwellings. Developments should avoid replying on screening to reduce views.
	  • Provide an outlook from dwellings that creates a reasonable visual connection to the external environment.
	  • Ensure the dwellings are designed to meet the objectives of Clause 58.
			Guideline supported.

Fixed Awnings/Verandahs **100%** of frontage.	Urban Design Guidelines for Victoria • *1.2 Activity centre structure* As an activity centre evolves and intensifies, allow future developments to front laneways (action 1.2.5c). • *5.1 Buildings in Activity Centres* As part of a buildings design, install continuous weather protection for pedestrian priority streets and public spaces (TIP. Awnings provide protection from sun, wind and rain at street level) (Action 5.1.4c). Clause 52.07 Loading and Unloading of Vehicles	Frontages all the way around unlikely particular for retail which will need loading bays and possibly multiple car park entries.	**Change** guideline to take into consideration ground floor frontages required for vehicular and service requirements.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
	• Loading bays should have a minimum height clearance of 4 metres.		
Openings At least **80%** of the building facade at ground floor level is maintained as an entry or window with clear glazing.	Urban Design Guidelines for Victoria • *5.1 Buildings in Activity Centres* Provide building entries and transparent windows to the street frontage (Action 5.1.5b). • *5.3 Large format retail premises* Where a building is located on the front lotline, provide a level of clear window that allows opportunities for informal surveillance of the street from within the building (Action 5.3.1b).	Frontages all the way around unlikely particular for retail which will need loading bays and possibly multiple car park entries.	**Change** guideline to take into consideration ground floor frontages required for vehicular and service requirements.
Laneway width 6m laneway width should be achieved unless otherwise specified.	Clause 52.06-9 Design standards for car parking • Accessways must be at least 3 metres wide. Urban Design Guidelines for Victoria • *1.5 Public realm structure* Set the street width in relation to the future building height and setback distance so as to allow daylight and winter sun access to key public spaces within streets (Action 1.5.4c).	Achievable where new laneways are provided by developments or where a laneway abuts a large consolidated lot, which are likely at strategic and urban renewal sites.	Guideline supported.
Requirements for Interfaces to Public Open Space			
All public open space unless otherwise specifie			
Overshadowing Existing and future open space must receive a minimum of 3 hours of direct sunlight between 9am and 3pm during mid-winter and at least 5 hours of direct sunlight between 9am and 3pm on September 22. Where this minimum is not currently met, the development must not create additional shadowing of the open space. *Additional requirements may apply for specific sites that warrant further protection (eg linear park south of Egan and Worrayl Streets, Carnegie)*	Urban Design Guidelines for Victoria • *1.5 Public realm structure* Set the street width in relation to the future building height and setback distance so as to allow daylight and winter sun access to key public spaces within streets (Action 1.5.4c).	Mid-winter overshadowing controls limit development envelopes to the north, east and west of spaces severely with the need for setbacks of built forms equal to 1.9 to 4.7 times their height. As a precedent, June 22 shadow controls on public open space within the City of Melbourne is contained between the hours of 11am and 2pm as earlier and later time shadows are extremely long (9am shadow lengths will be almost 5 x the height of buildings. The proposed guideline for 5 hours of sunlight between 9am and 3pm on September 22 will require some additional setback of taller forms to the north, east and west of open spaces however still maintain reasonable development opportunity by limiting setback of built form to the equivalent of 0.8 to 1.6 times their height.	**Change** guideline reflect a more achievable overshadowing outcome (September 22 shadows) and/or designate new public spaces in locations where overshadowing will have less of an impact across a large area of urban renewal.
Passive Surveillance and Activation Development should maximise passive surveillance of public open space. Development should maximise activation of public open space, where appropriate.	Rescode • Standard D5: Development next to existing public open space should be laid out to complement the open space. • Standard D7: Be located to provide passive surveillance opportunities, where appropriate. Urban Design Guidelines for Victoria • 3.1 Public spaces principles Arrange doors and windows of buildings to overlook adjacent public spaces (Action 3.1.3a). Surround local parks, on at least three sides, with streets and buildings with active frontages to overlook the park (Action		Guideline supported.

Proposed requirement	Interaction / interface with relevant controls	Impacts / characteristics	Recommendations
	3.3.3a). Lay out communal open space to create informal surveillance opportunities within the space and from adjacent buildings (Action 3.4.1c). • 5.1 Buildings in activity centres Arrange windows of buildings to overlook adjacent streets and public spaces (Action 5.1.5a). Provide building entries and transparent windows to the street frontage (Action 5.1.5b). Use low-height or semi-transparent front fences to assist informal surveillance of the street (Action 5.1.5d). In mixed-use buildings, provide a compatible mix of activities that attract people after business hours (Action 5.1.5g). <u>Apartment Design Guidelines for Victoria</u> • Layout communal open space to create informal surveillance opportunities within the development and from adjoining buildings (2.9 Design Guidance).		
Carnegie Urban Renewal Precinct			
Overshadowing of future open space south of the precinct (Egan and Woorayl Streets) Development must not result in additional overshadowing of open space to the south of Egan Street and Worrayl Street, for a minimum of 3 hours between 9am and 3pm during mid-winter and at least 5 hours between 9am and 3pm on September 22.		Modelling shows this to be significantly limit the urban renewal area in Carnegie and the potential for it to deliver any community benefits or accommodate substantial mixed use growth. Proposed limit of overshadowing to existing conditions will require significant setbacks given the current low rise (1-4 storeys) interface north of Woorayl Street. As a precedent, June 22 shadow controls on public open space within the City of Melbourne is contained between the hours of 11am and 2pm as earlier and later time shadows are extremely long (9am shadow lengths will be almost 5 x the height of buildings. The proposed guideline for 5 hours of sunlight between 9am and 3pm on September 22 will require some additional setback of taller forms along Woorayl Street however still maintain reasonable development opportunity.	**Change** guideline to reflect a more achievable overshadowing outcome (September 22 shadows).

5.0 Urban Renewal Areas

Strategic Sites and Urban Renewal Areas have been modelled across all three activity centres as proposed by the Buildings Transitions Plans to provide an initial spatial appreciation of the built form envelopes that the Draft Design Guidelines accommodate and the type of shadow impacts that they create.

In addition, for the Urban Renewal Areas a series of assumptions have been made in order to illustrate the high-order development potential that the Draft Quality Design Guidelines could create in these areas when applied.

These assumptions point to a series of implementation, staging and interface decisions and resultant issues that Draft Quality Design Guidelines, Structure Plans for these Activity Centres and other initiatives will need to consider.

5.1 Bentleigh

No Urban Renewal Areas are proposed for the Bentleigh Activity Centre. The Strategic Sites are largely accommodated on Council car park sites behind the retail core of Centre Road and will need to address and deal with the reinstatement of existing Council car parking spaces as part of the development brief and the feasibility of the proposed and intended development types as these sites are prepared for any development.

Figure 19 illustrates the regularly shaped Strategic Sites in Bentleigh generally interfacing with the rear of existing shops along Centre Road (generally to the south) and residential areas (indicated for Garden Apartment or Terrace Townhouse types of development) generally across the street to the north of most of these sites. Interfaces with adjacent streets and lanes, and the scale of proposed development types beyond will be easily integrated with the proposed Strategic Site type of development on these sites.

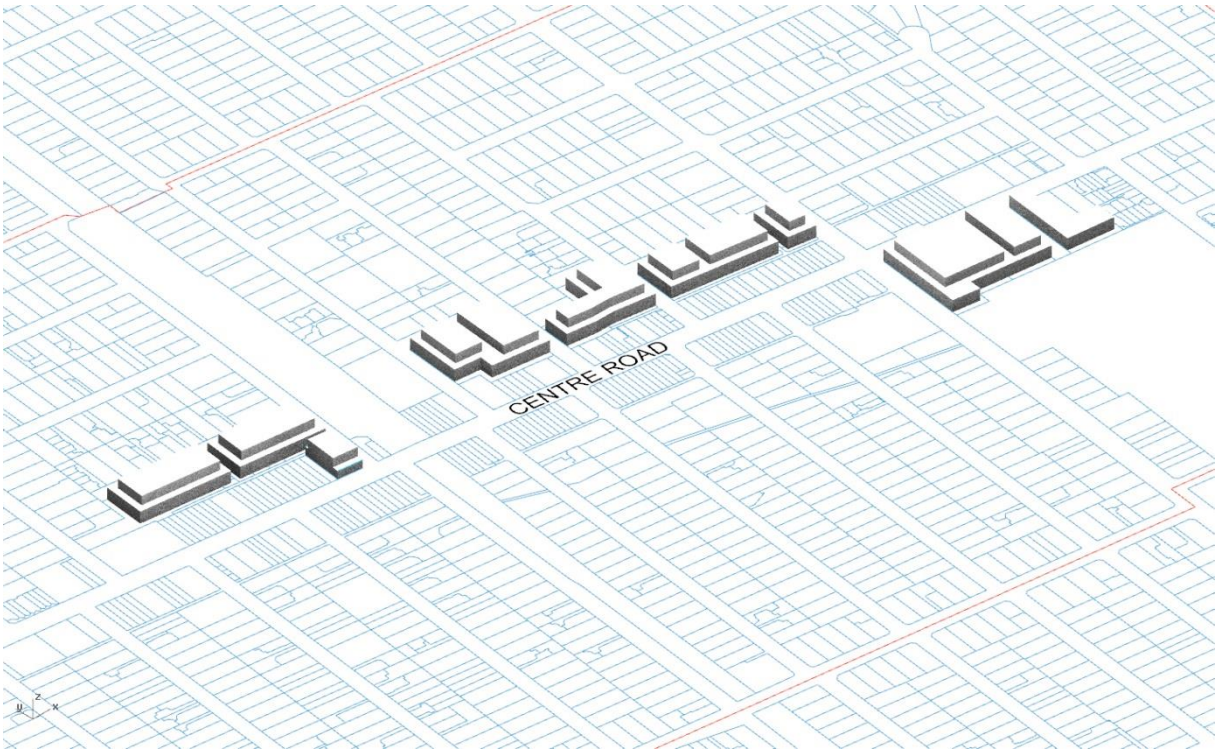


Figure 19 Aerial view (looking south-west to north-east) of strategic site envelopes for Bentleigh Activity Centre

5.2 Carnegie

The Urban Renewal Areas in Carnegie are generally bounded by Dandenong Road, the rear of properties along Chestnut Street, and the rail corridor, largely covering retail and commercial properties with some residential properties to the east along Arrawatta Street.

The application of the Draft Quality Design Guidelines in these Areas has made the following assumptions:

- Site assembly will generally follow a pattern of attempting to create parcels that are approximately 36 metres wide, which will more easily accommodate efficient basement (or podium) car parking and suitable tower floor plates that provide for adequate setbacks (as per the Draft Quality Design Guidelines) and provision for cross ventilation, suitable communal open space opportunities and attractive aspect for views and natural light.
- Large commercial sites are likely to experience further site assembly given the scale of potential development that could be accommodated through the Guidelines and existing design requirements that will need to be met such as the cross ventilation design standard for apartments.
- Smaller residential sites (Arawatta Street, Woorayl Street and Dandenong Road addresses) are likely to experience site assembly given the scale of potential development yield that could be accommodated, though this is likely to occur later and at greater cost than the commercial sites.
- These smaller residential sites will likely to achieve lower yields, less overall heights and fewer opportunities for community benefits that can be considered as part of their redevelopment due to the greater cost, smaller site size (even after site assembly) and the need to design with greater setbacks and more sensitive overlooking and overshadowing interfaces with adjacent residential areas
- Overall heights are likely to not exceed the preferred maximum height of 6-8 storeys on sites adjacent to residential areas (eastern-most part of the Urban Renewal Area).
- Overshadowing impacts to Woorayl Street Park would likely to substantially decrease the overall height and development yield of sites between Woorayl Street and Arawatta Street (to 5-6 storeys) if June 22 shadows are adopted in Guidelines, while September 22 shadows are more easily reconciled with the maximum height (with community benefits) as shown in Figure 20. This model has assumed an adoption of September 22 shadow

Potential community benefits that should be considered as part of urban renewal in Carnegie and incorporated in this model:

- Pedestrian link between Woorayl Street, end of Arawatta Street and Dandenong Road
- Pedestrian link(s) between the rail corridor and Dandenong Road, Between Koornang Road and the western extents

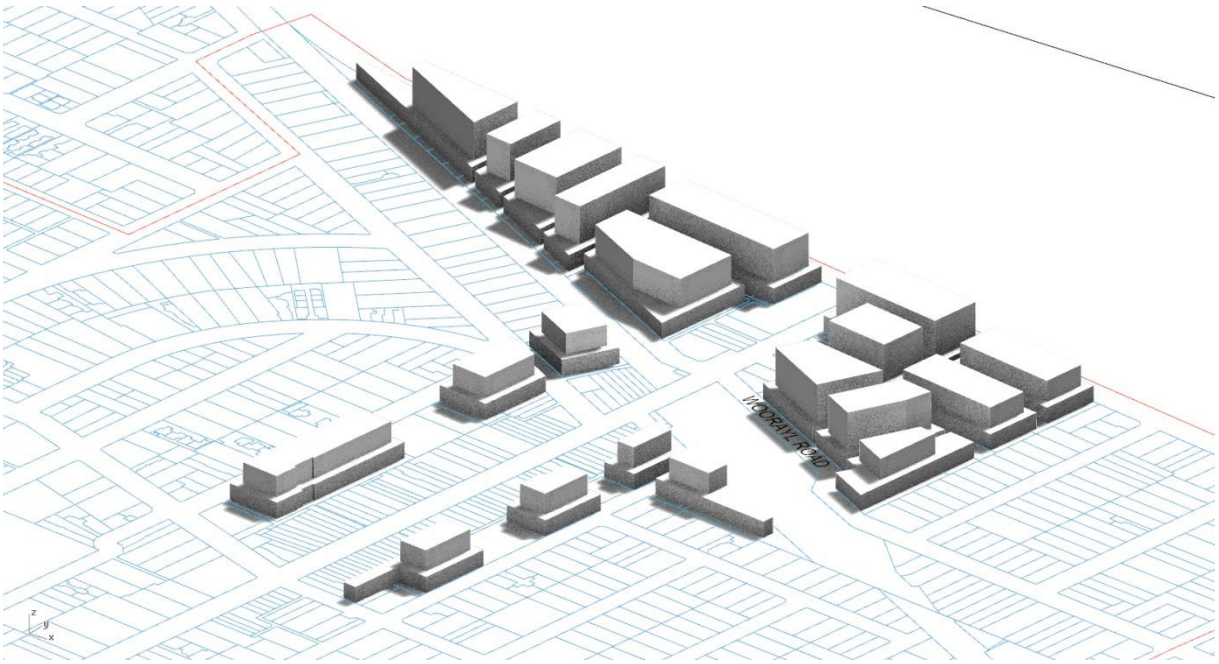


Figure 20 Aerial view (looking south-east to north-west) of strategic site and urban renewal area envelopes for Carneigie Activity Centre – showing midday shadows at September 22

5.3 Elsternwick

The Urban Renewal Areas in Elsternwick are generally bounded by Miller Street, the rail corridor, Nepean Highway, largely covering car sales, small scale commercial and some residential properties addressing Horne Street, Ross Street, Rusden Street and McCombie Street.

The application of the Draft Quality Design Guidelines in these Areas has made the following assumptions:

- A number of very large car dealership properties along Nepean Highway can potentially be developed independently into significant mixed-use precincts and deliver substantial public open spaces and public streets (that will benefit the whole community) if appropriately directed through design guidelines and urban design frameworks or structure plans.
- Integration of these sites will be done in such a way to connect up to the existing street pattern and ensure public open space that can be accommodated on these sites will be located in such a way to provide access to the whole community.
- New public open spaces and public streets will be located and built to a Council standard that allow their ownership and management to be transferred to Council.
- Public open space delivered on large sites will need to be partially contributed to by other surrounding developments that will enjoy benefit from these assets through a contribution mechanism.
- Large commercial sites are likely to experience further site assembly given the scale of potential development that could be accommodated through the Guidelines and existing design requirements that will need to be met such as the cross ventilation design standard for apartments.
- Smaller residential sites are likely to be experience some site assembly given the scale of potential development that could be accommodated, though this is likely to occur later and at greater cost than the smaller commercial sites.

- Many residential sites are already substantially developed (with multi-unit or low-rise apartments) which is likely to delay further redevelopment or potentially prohibit a more orderly and thorough redevelopment of those areas.
- Overall heights are likely to not exceed the preferred maximum height of 6-8 storeys on sites adjacent to residential areas (adjacent to residential areas that will continue to be low-rise) along the rail corridor and (future) Garden Apartment precinct.
- Overshadowing impacts to new public open spaces would likely to substantially decrease the overall height and development yield of sites to the north, east and west of the new public open spaces if June 22 shadows are adopted in Guidelines, while September 22 shadows are more easily reconciled with the maximum height (with community benefits) as shown in Figure 20. This model has assumed an adoption of September 22 shadow

Potential community benefits that should be considered as part of urban renewal in Elsternwick and incorporated in this model:

- A central public open space in the vicinity of Oak Avenue and Elm Avenues
- A network of new public streets that facilitate pedestrian and vehicle access around the mixed use precinct ensuring two-way connectivity for vehicles between Alexandra Ave and the southern-most extent of the area
- Upgrades (or new) pedestrian links across the rail corridor and Nepean Highway that boost access to existing public transport facilities
- Pedestrian links that generally provide walking route alternatives to and through the precinct that are no more than 100 metres apart

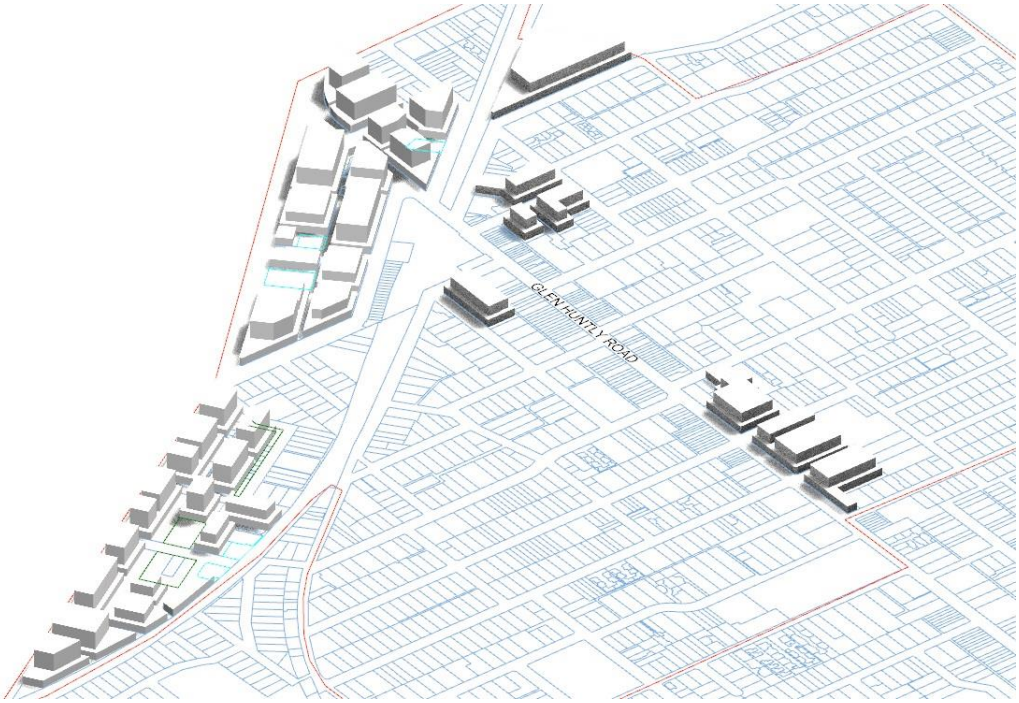


Figure 21 Aerial view (looking south-east to north-west) of strategic site and urban renewal area envelopes for Elsternwick Activity Centre – showing midday shadows at September 22

Appendix A

Development Typology Summary Table

GECC QUALITY DESIGN GUIDELINES

DEVELOPMENT TYPOLOGIES

Date: 5 September 2017

							GROUND																		
	No. of typical sites	**Site Area**	**B4**	**B3**	**B2**	**B1**	**L1**	**L2**	**L3**	**L4**	**L5**	**L6**	**L7**	**L8**	**L9**	**L10**	**L11**	**L12**	**Total**	**Plot Ratio**	**Commercial**	**Dwellings**	**Typ. Dwelling**	**Car parking**	**Car Spaces**	**Test Fit**
RESIDENTIAL		m2	m2	m2	m2	m2	m2	m2	m2	m2	m2	m2	m2	m2	m2	m2	m2	m2	m2		(GFA) m2		m2			
Heritage/N'hood Character Overlay Single Dwelling	1	548	0	0	0	0	329	105	0	0	0	0	0	0	0	0	0	0	434	**0.79**	0	1	434	(Av. Dwelling Area includes garage)	2	n/a
Side by Side	1	768	0	0	0	0	450	168	0	0	0	0	0	0	0	0	0	0	618	**0.80**	0	2	309	(Av. Dwelling Area includes garage)	4	n/a
Terrace	2	1113	0	0	0	715	715	650	294	0	0	0	0	0	0	0	0	0	1659	**1.49**	0	5	331.8	(2 per dwelling plus 1 visitor)	11	24
Terrace/Apartment (4 x 290m2 terraces and 5 x 70m2 apts)	2	1165	0	0	0	708	708	673	350	0	0	0	0	0	0	0	0	0	1731	**1.49**	0	9	183	(1 per dwelling plus 5 visitors)	10	24
Garden Apartment	3	2248	0	0	0	1305	1305	1305	902	403	0	0	0	0	0	0	0	0	3915	**1.74**	0	50	70	(1 per dwelling plus 5 visitors)	60	44
MIXED USE																										
Shop Top Heritage	2	548	0	0	0	504	504	504	396	360	0	0	0	0	0	0	0	0	1764	**3.22**	432	16	70	(1 per dwelling plus 3 visitors and 1 per retail space)	21	14
Shop Top	3	648	0	0	0	600	600	600	456	456	456	0	0	0	0	0	0	0	2568	**3.96**	528	25	70	(1 per dwelling plus 5 visitors and 1 per retail space)	32	18
Strategic Site	n/a	2849	0	0	2717	2717	2717	2717	2717	1175	1175	1175	1175	1175	0	0	0	0	14026	**4.92**	5290	76	70	(1 per dwelling plus 15 visitors and 2.0 per 100m2 NLA commerical and 69 existing replacement)	247	267
Urban Renewal Area (a)	n/a		2430	2430	2430	2430	2430	2430	2430	1350	1350	1350	1350	1350	1350	1350	1350	1350	19440		2430	219	70		321	324
Urban Renewal Area (b)	n/a		1820	1820	1820	1820	1820	1820	1820	930	930	930	930	930	930	930	930	930	13830		1820	154	70		229	243
Urban Renewal Area (c)	n/a		3724	3724	3724	3724	3724	3724	3724	2236	2236	2236	2236	2236	2236	2236	2236	2236	31296		2236	354	70		515	497
Urban Renewal Area (d)	n/a		3350	3350	3350	3350	3350	3350	3350	1250	1250	1250	1250	1250	1250	1250	1250	1250	21300		1250	231	70		357	447
Urban Renewal Area (e)	n/a		2660	2660	2660	2660	2660	2660	2660	1280	1280	1280	1280	1280	1280	1280	1280	1280	19500		1250	217	70		324	355
Urban Renewal Area (f)	n/a		4050	4050	4050	4050	4050	4050	4050	1820	1820	1820	1820	1820	1820	1820	1820	1820	28530		1250	315	70		475	540
Urban Renewal Area (Total)	n/a	29860																	**133896**	**4.48**	**10236**	**1490**		(1 per dwelling plus 1 visitor per 5 dwellings and 3.0 per 100m2 NLA commerical)	**2220**	

LEGEND

- Car Park
- Commerical/Retail Use
- Residential Use
- Residential Use - providing community benefits
- Not accommodating required car parking

AECOM
AECOM Australia Pty Ltd
Level 10, Tower Two
727 Collins Street
Melbourne VIC 3008
Australia
T +61 3 9653 1234
F +61 3 9654 7117
www.aecom.com
ABN 20 093 846 925