



***Hawkesbury City  
Council Growth  
Centres Precinct***

***Development Control Plan***



To view an electronic version in PDF format, visit: [www.planning.nsw.gov.au](http://www.planning.nsw.gov.au)

© Crown Copyright 2017

Department of Planning and Environment

Disclaimer

While every reasonable effort has been made to ensure that this document is correct at the time of printing, the State of New South Wales, its agents and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance or upon the whole or any part of this document.

# Contents

|   |           |
|---|-----------|
| <b>1. Introduction</b>  | <b>8</b>  |
| 1.1 Name and application of this plan.....                        | 8         |
| 1.2 Purpose of this plan .....                                    | 8         |
| 1.3 Structure of this plan .....                                  | 8         |
| 1.4 Relationship to other planning documents .....                | 12        |
| 1.4.1. The Act and the Growth Centres SEPP .....                  | 12        |
| 1.4.2. Hawkesbury City Council planning documents.....            | 12        |
| 1.4.3. Growth Centres Biodiversity Certification.....             | 13        |
| 1.4.4. Summary of applicable planning documents .....             | 13        |
| 1.5 Consent authority .....                                       | 13        |
| 1.6 Exempt and Complying Development .....                        | 13        |
| 1.7 Development Application Process .....                         | 15        |
| 1.7.1 Development Application Process .....                       | 15        |
| 1.7.2 Lodging a Development Application.....                      | 16        |
| 1.7.3 Notification of Development Applications.....               | 16        |
| 1.7.4 Variations to Development Controls.....                     | 16        |
| <b>2. Environmental and Design Considerations for Development</b> | <b>18</b> |
| 2.1 Site analysis .....   | 18        |
| 2.2 Environmental Considerations .....                            | 18        |
| 2.2.1 Flooding .....  | 18        |
| 2.2.2 Salinity and soil management .....                          | 24        |
| 2.2.3 Aboriginal and European heritage.....                       | 27        |
| 2.2.4 Native vegetation and ecology .....                         | 30        |
| 2.2.5 Bushfire hazard management .....                            | 33        |
| 2.2.6 Site contamination .....                                    | 33        |
| 2.2.7 Odour assessment and control .....                          | 33        |
| 2.3 Site responsive design .....                                  | 34        |
| 2.3.1 Cut and fill .....  | 34        |
| 2.3.2 Sustainable building design.....                            | 35        |
| 2.4 Water Cycle Management .....                                  | 36        |
| 2.4.1 Stormwater management.....                                  | 36        |
| <b>3. Precinct Planning Outcomes</b>                              | <b>40</b> |
| 3.1 Introduction.....   | 40        |
| 3.2 Vision.....   | 40        |
| 3.3 The Indicative Layout Plan.....                               | 40        |
| <b>4. Neighbourhood and Subdivision Design</b>                    | <b>43</b> |
| 4.1 Residential Density and Subdivision.....                      | 43        |
| 4.1.1 Residential Density .....                                   | 44        |
| 4.1.2 Block and Lot Layout .....                                  | 46        |
| 4.1.3 Battle-axe lots .....                                       | 52        |

|       |  |    |
|-------|--|----|
| 4.1.4 | Corner Lots .....                              | 55 |
| 4.1.5 | Environmental Living Lots .....                | 56 |
| 4.2   | Subdivision Approval Process .....             | 56 |
| 4.3   | Construction Environmental Management .....    | 59 |
| 4.4   | Movement Network .....                         | 59 |
| 4.4.1 | Street layout and design.....                  | 59 |
| 4.4.2 | Laneways.....                                  | 66 |
| 4.4.3 | Shared Driveways .....                         | 70 |
| 4.4.4 | Access to arterial and sub-arterial roads..... | 72 |

## **5. Development in the Residential and Environment Protection Zones 75**

|        |   |     |
|--------|---|-----|
| 5.1.   | Dwelling design controls .....  | 75  |
| 5.1.1  | Summary of Key Controls .....   | 75  |
| 5.1.2  | Streetscape and architectural design.....                               | 81  |
| 5.1.3  | Front setbacks .....  | 85  |
| 5.1.4  | Side and rear setbacks.....   | 87  |
| 5.1.5  | Dwelling Height, Massing and Siting.....                                | 90  |
| 5.1.6  | Landscaped Area .....   | 90  |
| 5.1.7  | Private Open Space .....  | 91  |
| 5.1.8  | Garages, Site Access and Parking .....                                  | 92  |
| 5.1.9  | Visual and acoustic privacy .....                                       | 93  |
| 5.1.10 | Fencing .....   | 95  |
| 5.2.   | Additional controls for certain dwelling types.....                     | 96  |
| 5.2.1  | Residential development adjacent to transmission easements.....         | 96  |
| 5.2.2  | Attached dwellings.....   | 96  |
| 5.2.3  | Secondary dwellings, studio dwellings and dual occupancies .....        | 97  |
| 5.2.4  | Multi dwelling housing .....  | 99  |
| 5.2.5  | Residential flat buildings, manor homes and shop top housing .....      | 100 |
| 5.3.   | Other development in residential and environment protection zones ..... | 103 |
| 5.3.1  | General requirements.....   | 103 |
| 5.3.2  | Educational Establishments and Places of Worship .....                  | 104 |
| 5.3.3  | Neighbourhood Shops.....  | 106 |
| 5.3.4  | Seniors Housing .....   | 107 |
| 5.3.5  | Farm Buildings and Outbuildings .....                                   | 108 |

## **6. Centres Controls 110**

|       |  |     |
|-------|--|-----|
| 6.1   | Introduction.....  | 110 |
| 6.2   | Development controls .....   | 110 |
| 6.2.1 | Streetscape and architectural design.....                          | 110 |
| 6.2.2 | Building bulk, scale and design .....                              | 114 |
| 6.2.3 | Signs .....  | 115 |
| 6.2.4 | Acoustic and visual privacy .....                                  | 116 |
| 6.2.5 | Safety, surveillance and maintenance .....                         | 116 |
| 6.2.6 | Site servicing.....  | 117 |
| 6.2.7 | Traffic circulation, parking and access .....                      | 118 |
| 6.2.8 | Residential flat buildings, manor homes and shop top housing ..... | 119 |

## Appendices

**Appendix A** – Glossary

**Appendix B** – Riparian Protection Area Controls

**Appendix C** – Salinity Management Plan

**Appendix D** – Preferred Plant Species

**Appendix E** – Lodgement Requirements

## Figures

|  |    |
|--|----|
| <b>Figure 1-1</b> Land Application Map .....   | 10 |
| <b>Figure 1-2</b> Vineyard Precinct in the context of the North West Growth Area .....                                   | 11 |
| <b>Figure 1-3</b> Development Approval process.....  | 15 |
| <b>Figure 2-1</b> Flood Planning Area .....  | 22 |
| <b>Figure 2-2</b> Indicative horizontal extent of the <i>1% AEP proposed regional flood level</i> .....                  | 23 |
| <b>Figure 2-3</b> Areas of potential salinity .....  | 26 |
| <b>Figure 2-4</b> Aboriginal cultural heritage .....   | 28 |
| <b>Figure 2-5</b> European cultural heritage.....  | 29 |
| <b>Figure 2-6</b> Riparian Protection Area.....  | 32 |
| <b>Figure 2-7</b> Maximum cut and fill within residential lots.....  | 35 |
| <b>Figure 2-8</b> Water Cycle Management .....   | 38 |
| <b>Figure 3-1</b> Vineyard Precinct Indicative Layout Plan .....   | 41 |
| <b>Figure 4-1</b> Example of how to calculate Net Residential Density .....  | 43 |
| <b>Figure 4-2</b> Distinct and coherent streetscapes occur in varying proportions in density bands .....                 | 45 |
| <b>Figure 4-3</b> Residential Structure.....   | 48 |
| <b>Figure 4-4</b> Measurement of minimum lot widths and lot area.....  | 50 |
| <b>Figure 4-5</b> Two examples of lot subdivision for ‘sets’ of attached terraces .....                                  | 52 |
| <b>Figure 4-6</b> Examples of locations of battle-axe lots .....   | 53 |
| <b>Figure 4-7</b> Examples of driveways and shared driveways for battle-axe lots .....                                   | 54 |
| <b>Figure 4-8</b> Corner lots.....   | 55 |
| <b>Figure 4-9</b> Sample of a Building Envelope Plan (BEP).....  | 58 |
| <b>Figure 4-10</b> Sample of a Public Domain Plan (PDP).....   | 58 |
| <b>Figure 4-11</b> Precinct Road Hierarchy.....  | 62 |
| <b>Figure 4-12</b> Typical collector road .....  | 63 |
| <b>Figure 4-13</b> Typical local street .....  | 63 |
| <b>Figure 4-14</b> Typical access street .....   | 64 |
| <b>Figure 4-15</b> Indicative location and design of roundabout at Harkness Road and Commercial Road .....               | 64 |
| <b>Figure 4-16</b> Indicative location and design of roundabout at Harkness Road and new collector road.....             | 65 |
| <b>Figure 4-17</b> Indicative location and design of roundabout at Commercial Road and new collector road..              | 65 |
| <b>Figure 4-18</b> Indicative location of off road shared pedestrian and bicycle pathways .....                          | 66 |
| <b>Figure 4-19</b> Laneway principles .....  | 68 |
| <b>Figure 4-20</b> Sample lane layouts.....  | 69 |
| <b>Figure 4-21</b> Sample laneways showing maximum number of secondary dwellings or strata studios.....                  | 70 |
| <b>Figure 4-22</b> Indicative examples of shared driveways.....  | 72 |
| <b>Figure 5-1</b> The combination of built form, lot size, garaging and landscaping creates different streetscapes ..... | 82 |
| <b>Figure 5-2</b> Streetscape design principles.....   | 84 |
| <b>Figure 5-3</b> Minimum front setback distances .....  | 85 |

|  |     |
|--|-----|
| <b>Figure 5-4</b> Minimum front setbacks for dwellings fronting open space or drainage land..... | 86  |
| <b>Figure 5-5</b> Minimum setbacks for corner lot dwellings.....                                 | 86  |
| <b>Figure 5-6</b> Dwelling and open space siting principles for different lot orientations.....  | 88  |
| <b>Figure 5-7</b> Battle axe lot without any street frontage setbacks .....                      | 89  |
| <b>Figure 5-8</b> Battle axe lot fronting access denied road setbacks .....                      | 89  |
| <b>Figure 5-9</b> Soft landscaped area and principal private open space .....                    | 91  |
| <b>Figure 5-10</b> Measures to attenuate noise .....   | 93  |
| <b>Figure 5-11</b> Strategies for minimising noise transmission .....                            | 95  |
| <b>Figure 5-12</b> Fencing design for corner lots .....  | 96  |
| <b>Figure 6-1</b> Centres Hierarchy .....  | 111 |
| <b>Figure 6-2</b> Awnings.....   | 113 |
| <b>Figure 6-3</b> Preferred locations for signs .....  | 116 |

## Tables

|   |     |
|---|-----|
| <b>Table 1-1</b> Structure of the Hawkesbury City Council Growth Centres DCP 2017 .....   | 8   |
| <b>Table 1-2</b> Guide to the controls in this DCP .....  | 12  |
| <b>Table 2-1</b> Water quality and environmental flow targets .....   | 37  |
| <b>Table 4-1</b> Typical characteristics of residential net densities .....   | 44  |
| <b>Table 4-2</b> Minimum lot size by density bands.....   | 49  |
| <b>Table 4-3</b> Minimum lot frontages by density bands.....  | 49  |
| <b>Table 4-4</b> Subdivision Approval Process .....   | 56  |
| <b>Table 4-5</b> Street Types.....  | 61  |
| <b>Table 5-1</b> Summary of lot and dwelling types.....   | 76  |
| <b>Table 5-2</b> Summary of key controls for lots with frontage width $\geq 4.5\text{m}$ for rear accessed dwellings .....                      | 77  |
| <b>Table 5-3</b> Summary of key controls for lots with frontage width $\geq 7\text{m}$ and $< 9\text{m}$ for front accessed dwellings .....     | 78  |
| <b>Table 5-4</b> Summary of key controls for lots with frontage width $\geq 9\text{m}$ and $\leq 15\text{m}$ for front accessed dwellings ..... | 79  |
| <b>Table 5-5</b> Summary of key controls for lots with frontage width $> 15\text{m}$ for front accessed dwellings .....                         | 80  |
| <b>Table 5-6</b> Summary of key controls for lots in the Environmental Living Zone.....   | 81  |
| <b>Table 5-7</b> Noise levels permitted within habitable rooms for residential premises impacted by traffic and rail noise .....                | 94  |
| <b>Table 5-8</b> Key controls for secondary dwellings and studio dwellings .....  | 98  |
| <b>Table 5-9</b> Key controls for multi dwelling housing .....  | 100 |
| <b>Table 5-10</b> Key controls for residential flat buildings, manor homes and shop top housing .....   | 101 |
| <b>Table 5-11</b> Car parking requirements for places of public worship and educational establishments .....                                    | 106 |
| <b>Table 6-1</b> Parking requirements in centres.....   | 118 |



# ***1. Introduction***

# 1. Introduction

## 1.1 Name and application of this plan

This Development Control Plan (DCP) is the Hawkesbury City Council Growth Centres Precinct Development Control Plan 2017. It has been prepared pursuant to the provisions of Section 72 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This DCP applies to all development within land identified as Stage 1 of the Vineyard Precinct, as illustrated in **Figure 1-1**. **Figure 1-2** illustrates the Vineyard Precinct in the context of the North West Growth Area (NWGA).

This DCP was adopted by the Secretary (or delegate) of the Department of Planning and Environment on 8 January 2018 and came into force on 18 January 2018.

## 1.2 Purpose of this plan

The purpose of this DCP is to:

- a. Communicate the planning, design and environmental objectives and controls against which Hawkesbury City Council (Council) will assess Development Applications (DAs);
- b. Ensure the orderly, efficient and environmentally sensitive development of the Precinct as envisaged by the North West Land Use and Infrastructure Implementation Plan and *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* (the Growth Centres SEPP); and
- c. Promote high quality urban design outcomes within the context of environmental, social and economic sustainability.

## 1.3 Structure of this plan

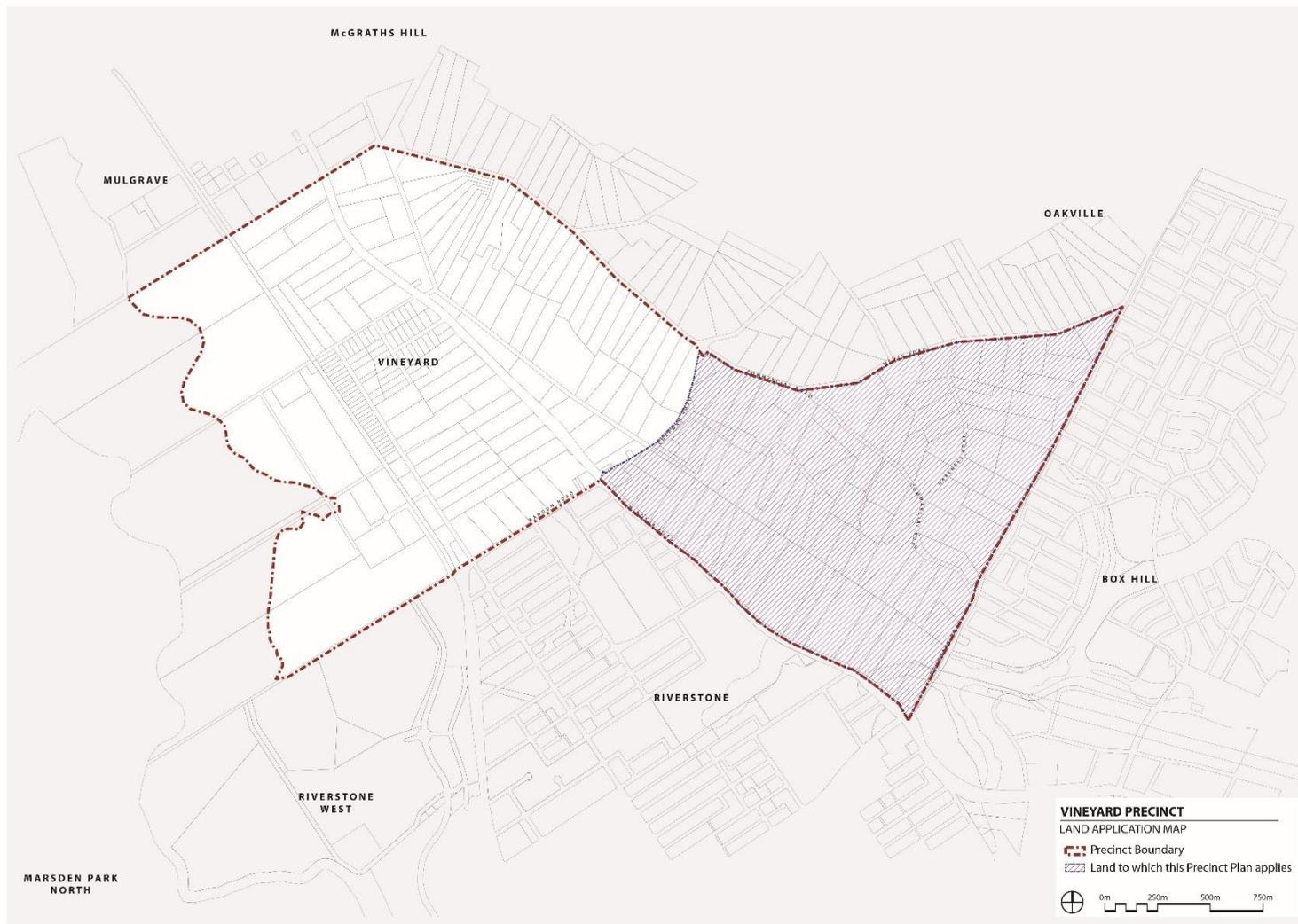
**Table 1-1** provides a summary of the content of each of the seven parts and the appendices.

**Table 1-1** Structure of the Hawkesbury City Council Growth Centres DCP 2017

| Part  | Summary  |
|---|--|
| 1 – Introduction  | Sets out the aims and objectives of the DCP, identifies the land to which the DCP applies, explains the structure of the document, the relationship of the DCP to other planning documents, and explains procedures for exempt and complying development and submitting a DA.  |
| 2 - Environmental and Design Considerations for Development         | Sets out the matters to be addressed when carrying out a site analysis to inform the design of subdivisions and other developments. This part of the DCP provides the considerations and requirements for development in relation to the physical constraints of the land.   |
| 3 – Precinct Planning Outcomes                                      | Sets out the vision for the Precinct and the general structural elements of the Indicative Layout Plan which development should comply with.   |
| 4 – Neighbourhood and Subdivision Design                            | Provides objectives and controls related to residential subdivision design including the residential density and character, neighbourhood design, movement network, street and laneway design, the subdivision approval process and construction environmental management.   |
| 5 – Development in the Residential and Environment Protection Zones | Establishes the objectives and controls that guide residential development, including dwelling houses, semi-detached, and attached dwellings, multi unit housing, secondary and studio dwellings, dual occupancies, manor homes, residential flat buildings and shop top housing. Also covers residential amenity controls such as streetscape, safety, privacy, sustainable building design and fencing.<br>This part also contains controls applying to non-residential development such as schools, place of worship, neighbourhood shops, seniors housing and farm and outbuildings. |
| 6 – Centres Controls  | Provides objectives, controls and design principles for the town centre.   |

|   |   |
|---|---|
| <b>Appendix A – Glossary</b>                          | Explains the terms used in the DCP.   |
| <b>Appendix B – Riparian Protection Area Controls</b> | Provides details of the management of the riparian zones along the main creek lines in the Precinct, and the management of stormwater quantity and quality from development, to achieve environmental objectives for waterways. |
| <b>Appendix C – Salinity Management Plan</b>          | Provides details to guide subdivision and building DAs and works, to minimise the potential of developments increasing the risk of, and impacts from, soil and groundwater salinity.  |
| <b>Appendix D – Preferred Plant Species</b>           | Provides a list of plant species that are preferred for use in landscaping within the Precinct.   |
| <b>Appendix E – Lodgement Requirements</b>            | Provides a checklist of the lodgement requirements for all DAs.   |

Notes to readers are provided throughout this document. These notes are intended to provide additional guidance and explanation of the provisions. If further guidance is required on the interpretation of provisions in the DCP, readers should refer to the definitions or contact Council for advice.



**Figure 1-1** Land Application Map

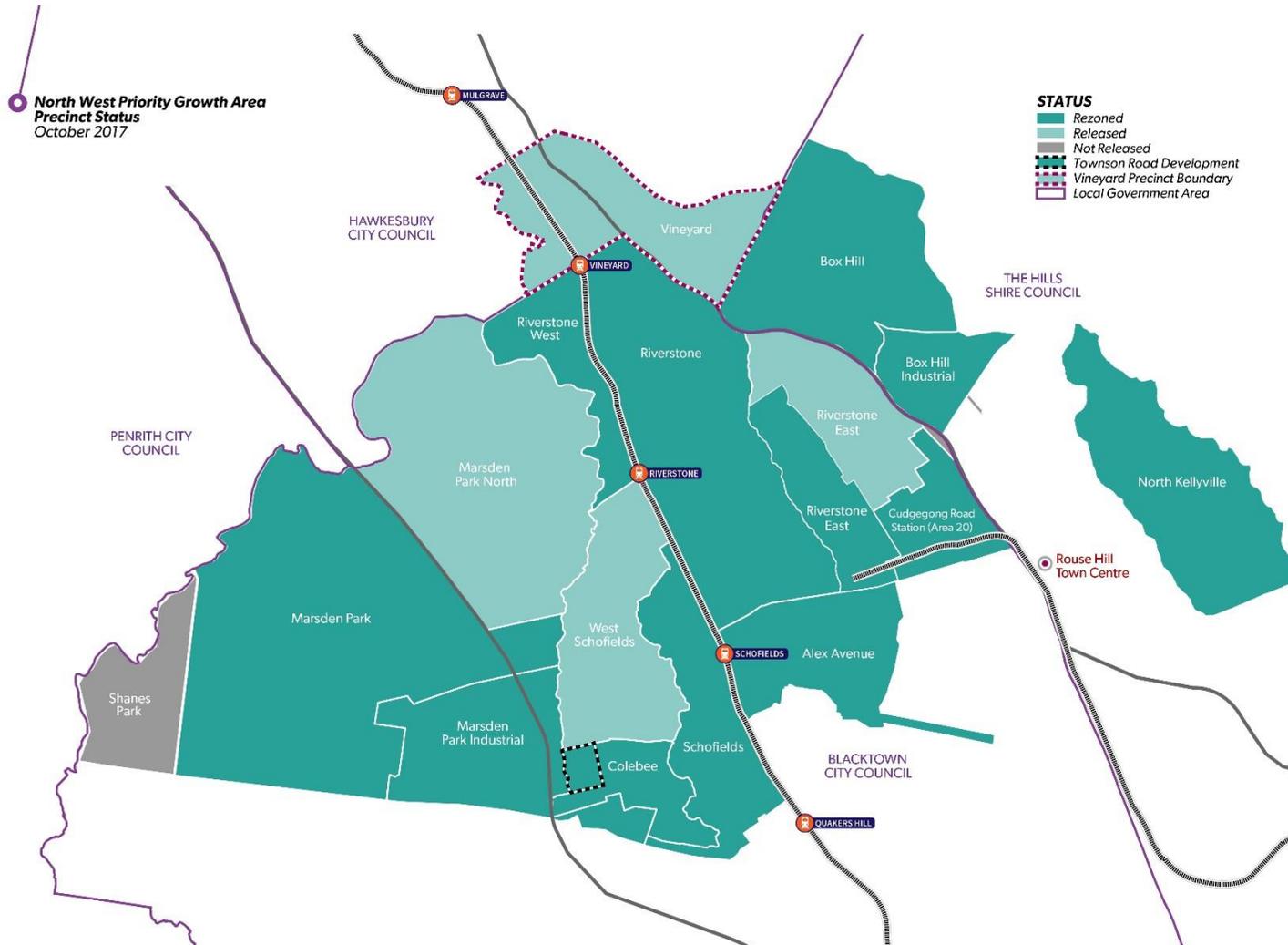


Figure 1-2 Vineyard Precinct in the context of the North West Growth Area

**Table 1-2** summarises the controls that are applicable to the main types of development identified in this DCP.

**Table 1-2** Guide to the controls in this DCP

| Relevant DCP Part | Residential Subdivision | Dwelling House | Dual Occupancy Secondary Dwelling Studio Dwelling | Attached Dwelling | Semi-Detached Dwellings | Multi Dwelling Housing | Residential Flat Buildings Manor Home | Non-residential Development * | Shop top Housing | Retail/ Commercial Development |
|-------------------|-------------------------|----------------|---|-------------------|-------------------------|------------------------|---------------------------------------|-------------------------------|------------------|--------------------------------|
| Part 1            | ✓                       | ✓              | ✓   | ✓                 | ✓                       | ✓                      | ✓                                     | ✓                             | ✓                | ✓                              |
| Part 2            | ✓                       | ✓              | ✓   | ✓                 | ✓                       | ✓                      | ✓                                     | ✓                             | ✓                | ✓                              |
| Part 3            | ✓                       | ✓              | ✓   | ✓                 | ✓                       | ✓                      | ✓                                     | ✓                             | ✓                | ✓                              |
| Part 4            | ✓                       |                |   |                   |                         |                        |                                       |                               |                  |                                |
| Part 5.1          |                         | ✓              | ✓   | ✓                 | ✓                       | ✓                      | ✓                                     |                               | ✓                |                                |
| Part 5.2          |                         | ✓              | ✓   | ✓                 | ✓                       | ✓                      | ✓                                     |                               | ✓                |                                |
| Part 5.3          |                         |                |   |                   |                         |                        |                                       | ✓                             |                  | ✓                              |
| Part 6            |                         |                |   |                   |                         |                        |                                       |                               | ✓                | ✓                              |
| Appendices        | ✓                       | ✓              | ✓   | ✓                 | ✓                       | ✓                      | ✓                                     | ✓                             | ✓                | ✓                              |

**Note:** \*Applies to non-residential development on land in the residential and environment protection zones

## 1.4 Relationship to other planning documents

### 1.4.1. The Act and the Growth Centres SEPP

This DCP has been prepared under the EP&A Act. It has been prepared to provide additional objectives, controls and guidance to applicants proposing to undertake development in the Vineyard Precinct, and for Council's reference in the assessment of DAs. It should be read in conjunction with the Growth Centres SEPP. The Growth Centres SEPP and the Vineyard Precinct Plan provide the statutory planning controls for development in the Precinct. This DCP is consistent with, and supports those controls, by providing more detail in relation to how development is to occur in the Precinct.

### 1.4.2. Hawkesbury City Council planning documents

Hawkesbury Local Environmental Plan 2012 and the Hawkesbury Development Control Plan 2002 do not apply to land to which this DCP applies<sup>1</sup>, except where specifically referred to in the Growth Centres SEPP and this DCP. Some other design standards and guidelines of Council continue to apply, such as Council's *Civil Works Specifications*. Where existing policies, procedures and guidelines continue to apply to the Vineyard Precinct, these are specifically referred to in the relevant parts of this DCP. In the event of an inconsistency between this DCP and referenced Council policies, procedures and guidelines, this DCP prevails to the extent of the inconsistency.

<sup>1</sup> Hawkesbury Local Environmental Plan 2012 and the Hawkesbury Development Control Plan 2002 continue to apply to land outside of Stage 1 of the Vineyard Precinct.

### 1.4.3. Growth Centres Biodiversity Certification

The *Biodiversity Conservation Act 2016* (BC Act) provides for the protection of threatened species and threatened ecological communities in NSW. Typically, threatened species and ecological community issues are addressed during both the rezoning of land and when DAs are submitted to, and assessed by Council. However, the BC Act also provides for planning instruments to be “certified”, meaning that the assessment of threatened species and ecological communities is done at the rezoning stage and does not need to be further considered at the DA stage. This approach provides for more strategic assessment and management of threatened species and ecological community issues, and streamlines the DA process.

Biodiversity Certification was conferred upon the Growth Centres SEPP on 14 December 2007 via the gazettal of a Biodiversity Certification Order signed by the then Minister for Climate Change and the Environment. The Order requires 2,000 hectares (ha) of “existing native vegetation” (ENV) to be retained across the North West and South West Growth Centres. A BC Act assessment will be required to be undertaken for any clearing of ENV within Non-Certified Areas and vegetation removal may need to be offset in accordance with the Biodiversity Certification Ministerial Order.

The Vineyard Indicative Layout Plan, Precinct Plan and this DCP have been prepared in accordance with the Biodiversity Certification Order. The majority of land within the Growth Centre Precincts is certified, meaning that development can occur without the need for further assessment under the BC Act. The Precinct Plan contains controls to restrict the clearing of ENV and this is the principal mechanism for ensuring consistency with the Biodiversity Certification Order. This DCP contains other objectives and controls in relation to the protection and enhancement of native vegetation, consistent with the Biodiversity Certification Order.

### 1.4.4. Summary of applicable planning documents

Applicants proposing to undertake development in the Precinct, and Council when assessing DAs, should refer to:

- the Growth Centres SEPP, as amended, including the Vineyard Precinct Plan at the relevant Appendix;
- this DCP;
- the relevant Section 94 Contributions Plan; and
- the Growth Centres Biodiversity Certification Order, December 2007 and related amendments to the BC Act.

## 1.5 Consent authority

Council is the consent authority for all development on land to which this DCP applies unless otherwise authorised by the EP&A Act. Council will use this DCP in its assessment of DAs.

## 1.6 Exempt and Complying Development

The EP&A Act enables certain forms of development to be classified as either exempt development or complying development through environmental planning instruments.

- **Exempt development** is development of a minor nature that can be undertaken without the need for development consent.
- **Complying development** is development that, providing that certain criteria are met, can be assessed through the issuance of a complying development certificate.

The *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* and the associated *Housing Code* provides controls for the siting and design of detached housing on lots 300m<sup>2</sup> and larger, as well as alterations and additions to existing residential dwellings up to two storeys.

Development that meets the criteria in the *Housing Code* is complying development and this DCP does not apply.

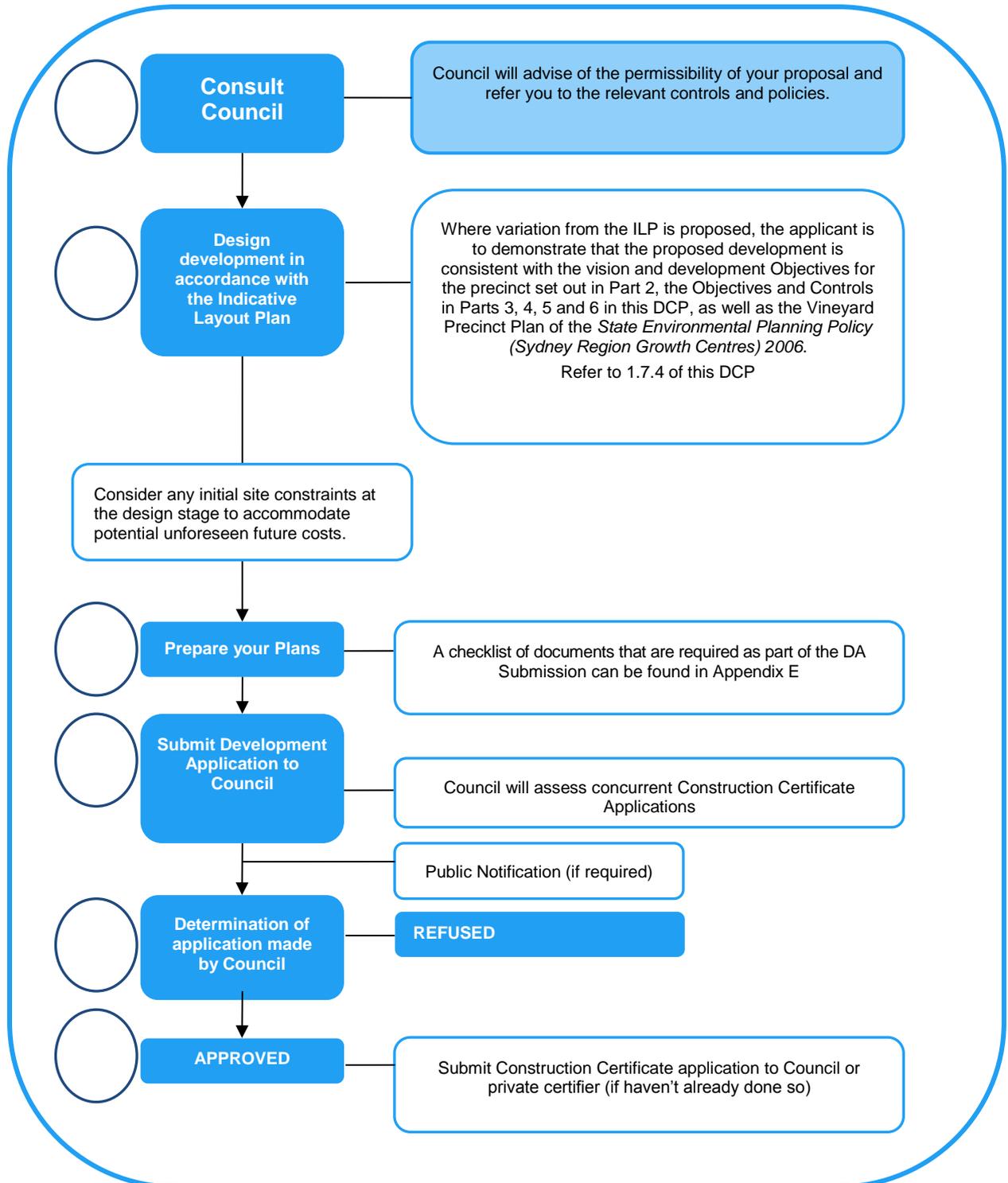
The *NSW Commercial and Industrial Code* outlines how internal modifications to commercial and industrial premises in certain zones can meet the complying development criteria.

Where a development does not meet the requirements of these Codes, consent is required and this DCP applies.

## 1.7 Development Application Process

### 1.7.1 Development Application Process

The DA process is summarised in **Figure 1-3**.



**Figure 1-3** Development Approval process

## 1.7.2 Lodging a Development Application

The documents that are to accompany a DA are listed in **Appendix E** to this DCP.

## 1.7.3 Notification of Development Applications

DAs shall be notified in accordance with the relevant chapter of the Hawkesbury Development Control Plan 2002 or such other Development Control Plan (or equivalent) that might replace it.

## 1.7.4 Variations to Development Controls

Council may grant consent to a proposal that does not comply with the controls in this DCP, providing the intent of the controls is achieved. Similarly, Council may grant consent to a proposal that varies from the Indicative Layout Plan (ILP) where the variation is considered to be minor and the proposal remains generally consistent with the ILP. As such, each DA will be considered on its merits.

Where variation from the ILP is proposed, the applicant is to demonstrate that the proposed development is generally consistent with the Objectives and Controls in Parts 2, 3, 4, 5 and 6 (as relevant), as well as the Vineyard Precinct Plan under the Growth Centres SEPP.

Where a variation is sought it must be justified in writing indicating how the development is meeting the intent of the objectives of the relevant control and/or is generally consistent with the ILP.

A proposed departure from the development controls contained in this DCP will only be considered where written justification is provided for such departure which demonstrates:

- connectivity of the road network;
- why the controls are unreasonable or unnecessary in the circumstances;
- how the development will achieve the aims and objectives of the DCP, ILP and Precinct Plan under the Growth Centres SEPP despite the proposed departure; and
- what innovative and improved outcomes will be achieved by the development to justify the departure.



## ***2. Environmental and Design Considerations for Development***

## 2. Environmental and Design Considerations for Development

### 2.1 Site analysis

Site analysis for each individual lot is an important part of the design process. Development proposals need to illustrate design decisions which are based on careful analysis of the site conditions and their relationship to the surrounding context. By describing the physical elements of the locality and the conditions impacting on the site, opportunities and constraints for development can be understood and addressed in the design.

A Site Analysis Plan must be submitted with any DA and should show the existing features of the site and its surrounding area, together with supporting written material. At a minimum, the Site Analysis Plan must show the following features (for further guidance refer to **Appendix E**):

- the position of any proposed building(s) in relation to site boundaries and any other structures and existing vegetation and trees on the site;
- any easements over the land;
- location of services (electricity, sewer, stormwater, gas, telecommunications);
- the location, boundary dimensions, site area and north point of the land;
- location of existing street features adjacent to the property, such as trees, planting, street lights, street/road intersections;
- contours and existing levels of the land in relation to buildings and roads and, whether the proposed development will involve any changes to these levels;
- location and uses of any buildings on sites adjoining the land, as well as trees located adjacent to shared boundaries; and
- a concept stormwater plan.

### 2.2 Environmental Considerations

The following parts contain matters to be addressed in relation to existing site characteristics when planning new development.

#### 2.2.1 Flooding

##### Definitions

**Annual Exceedance Probability (AEP)** means the chance of a flood of a given or larger size occurring in any one year, usually expressed as a percentage.

**Commercial development** means any of the following development types child care centres, community facilities, food and drink premises, health consulting rooms, home based child care, home businesses, home industries, home occupations, information and education facilities, neighbourhood shops, places of public worship, public administration buildings, recreational facilities (indoor), respite day care, veterinary hospitals,

**Flood planning area** means the area so described in **Figure 2-1** or any other area of land adopted by Council for the purposes of this DCP.

**Floodway** means those areas of the floodplain where a significant discharge of water occurs during floods. They are often aligned with natural defined channels. Floodways are areas that even if only partially blocked, would cause a significant redistribution of flood flow, or a significant increase in flood levels.

**Habitable floor** means:

- in a **residential situation**: a room used for normal domestic activities and includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom and sunroom. It excludes a bathroom, laundry, water closet, food-storage pantry, walk in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes drying room, and other spaces of a specialised nature that are occupied only infrequently; and
- in all **other situations**: an area used for offices, the display or sale of goods and services and/or to store valuable possessions susceptible to flood damage in the event of a flood and/or an area that is likely to be occupied frequently or for extended periods.

**Recreation or Non-Urban Uses** means any of the following development types environmental facilities, kiosks, markets, recreational facilities outdoor.

**Residential development** means any of the following development types: attached dwellings, bed and breakfast accommodation, dual occupancy, dwelling houses, exhibition homes, manor homes, multi dwelling housing, residential flat buildings, secondary dwellings, semi-detached dwellings, shop top housing, studio dwellings.

**1% AEP existing regional flood level** means the flood level as shown in map titled *Vineyard ILP 1% AEP Existing Regional Flood Depth (Tail Water 17.3m AHD)*, drawing number VY\_EXR\_100yr\_360m\_D, dated 31/10/2017 contained in Appendix D to *Water Cycle Management Report Vineyard Precinct, October 2017* prepared by Mott MacDonald.

**1% AEP proposed regional flood level** means the flood level as shown in map titled *Vineyard ILP 1% AEP Proposed Regional Flood Depth (Tail Water 17.3m AHD)*, drawing number VY\_PRR\_100yr\_360m\_D, dated 31/10/2017 contained in Appendix D to *Water Cycle Management Report Vineyard Precinct, October 2017* prepared by Mott MacDonald.

**Flood planning level** means the following:

- the *1% AEP proposed regional flood level* plus any applicable freeboard, or
- any other 1% AEP related flood level plus any applicable freeboard adopted by Council for the purposes of this DCP.

**Note:** The *Water Cycle Management Report Vineyard Precinct, October 2017* prepared by Mott MacDonald proposes a range of waterway realignments and stormwater management devices to achieve the *1% AEP proposed regional flood level*. Such realignments and management devices will be built over time as funding and delivery arrangements permit. Where the *1% AEP existing regional flood level* is greater than the *1% AEP proposed regional flood level* developers will need to manage existing flooding onsite with temporary solutions until such time as the relevant realignments and management devices are realised. This may involve the installation of temporary works such as temporary on-site detention and temporary flood storage works and the delayed development of part of the subject site. The horizontal extent of the *1% AEP proposed regional flood level* is indicatively shown in **Figure 2-2**.

## Objectives

- a. To minimise the flood risk to life and property with the use of land.
- b. To allow development on land that is compatible with the land's flood hazard.
- c. To allow development that will not have a significant adverse effect on flood behaviour.

## Controls – Riverine flooding - General

- 1) In general, Council will not support development, including the filling of land, within a *floodway* due to its function as the main flow path for flood waters once the main channel has overflowed and the possibility that a significant threat to life and property exists in a major flood.

## Controls – Riverine flooding - Subdivision

- 2) Each lot created by the subdivision of land within a residential zone is to be located wholly at a level at or above the *flood planning level* unless it is also a subdivision to which control 3) applies.
- 3) Each lot created by the subdivision of land within the E4 Environmental Living zone must have an area of land with a level at or above the *flood planning level* sufficient in area for the erection of a dwelling house. The dwelling house area may be on land zoned E4 Environmental Living or on land that is zoned for residential purposes if the lot contains such zoned land.
- 4) All lots created by the subdivision of land must provide vehicular access with a level at or above the *flood planning level* from the proposed dwelling area to a public road.

**Note:** Controls 2) – 4) do not apply to:

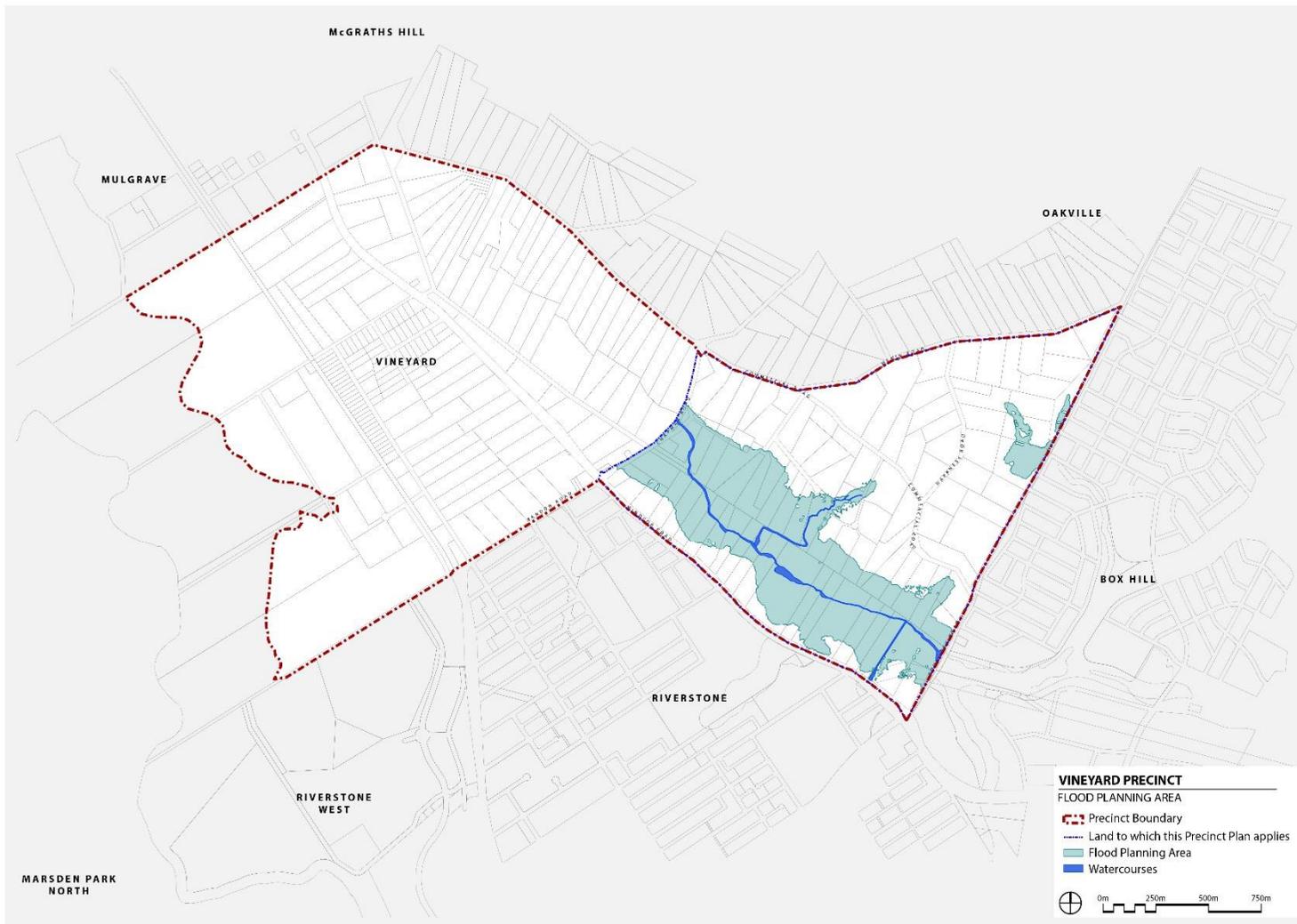
- a lot created for a public purpose, a lot created as neighbourhood property in a community title subdivision or common property in a strata title subdivision
  - a lot created in the E4 Environmental Living zone as a result of part or parts of the property being subdivided for public purposes and no additional lots for the purposes of erecting a dwelling are created within the E4 Environmental Living zone
- 5) Roads serving residential and environmental living areas are to be located at or above the *flood planning level*.

## Controls – Riverine flooding - Building

- 6) DAs are to demonstrate:
  - whether the land is within a floodway or flood storage area;
  - whether the proposed building materials are flood compatible;
  - whether the building is structurally adequate to withstand the likely impacts of flood water, including buoyancy forces;
  - whether the buildings are to be sited in the optimum position to avoid flood waters and allow evacuation;
  - whether the orderly and safe evacuation of people from the development can be achieved;
  - whether proposed structures or the filling of land are likely to affect flood flows;
  - whether earthworks required to maintain the capacity of the floodplain and flood flow velocities will impact on soil salinity and soil stability; and
  - the potential impact of the development, including earthworks, on native vegetation.
- 7) For development on land designated as being within a floodway (other than agriculture, cultivation and minor alterations to existing buildings), DAs are to demonstrate that:
  - the development will not increase flood hazard or damage to other properties or adversely affect them in any way, by the provision of a report from a professional civil engineer

- experienced in hydraulics; and
  - the building can withstand the force of flooding, by the provision of a detailed report from a professional structural engineer.
- 8) For *residential development* and *commercial development*, *habitable floor* levels are to be at or above the *flood planning level*.
- 9) For *recreation or non-urban uses*:
- all permanent structures are to have flood compatible building components and flood compatible building methods up to and including the *flood planning level*;
  - an Engineer's report is to be provided certifying that the permanent structures can withstand the forces of floodwater, debris and buoyancy up to and including the *flood planning level*. In the case of alterations or additions to an existing development, the structure to be certified is that which is proposed to be newly constructed; and
  - the minimum surface level of open car parking spaces, carports or garages, shall be as high as practical. The driveway providing access between the road and parking space shall be as high as practical and generally rising in the egress direction.
- 10) For additions or alterations to an existing dwelling that existed at the date of commencement of this DCP:
- any additional floor area shall not exceed 40% of the *habitable floor* area that existed at the date of commencement of this DCP;
  - additional *habitable floor* levels are to be at or above the *flood planning level*. Where this is not practical due to compatibility with the floor level of the existing building, compatibility with the height of adjacent buildings, or the need for access for persons with disabilities, a lower floor level may be considered. In these circumstances, the floor level is to be as high as practical and no lower than the existing *habitable floor* level;
  - a restriction is to be placed on the title of the land, pursuant to S.88B of the Conveyancing Act, where the lowest *habitable floor* area is elevated above finished ground level, confirming that the undercroft area is not to be enclosed, where Council considers this may potentially occur;
  - building additions and alterations are to have flood compatible building components and flood compatible building methods up to and including the *flood planning level*; and
  - an Engineer's report is to be provided certifying that the building additions can withstand the forces of floodwater, debris and buoyancy up to and including the *flood planning level*.

**Note:** Where development is proposed within or adjacent to land that is shown on **Figure 2-1**, Council may require a more detailed flood assessment to be undertaken by the applicant to confirm the extent of the flood affectation on the subject land.



**Figure 2-1** Flood Planning Area

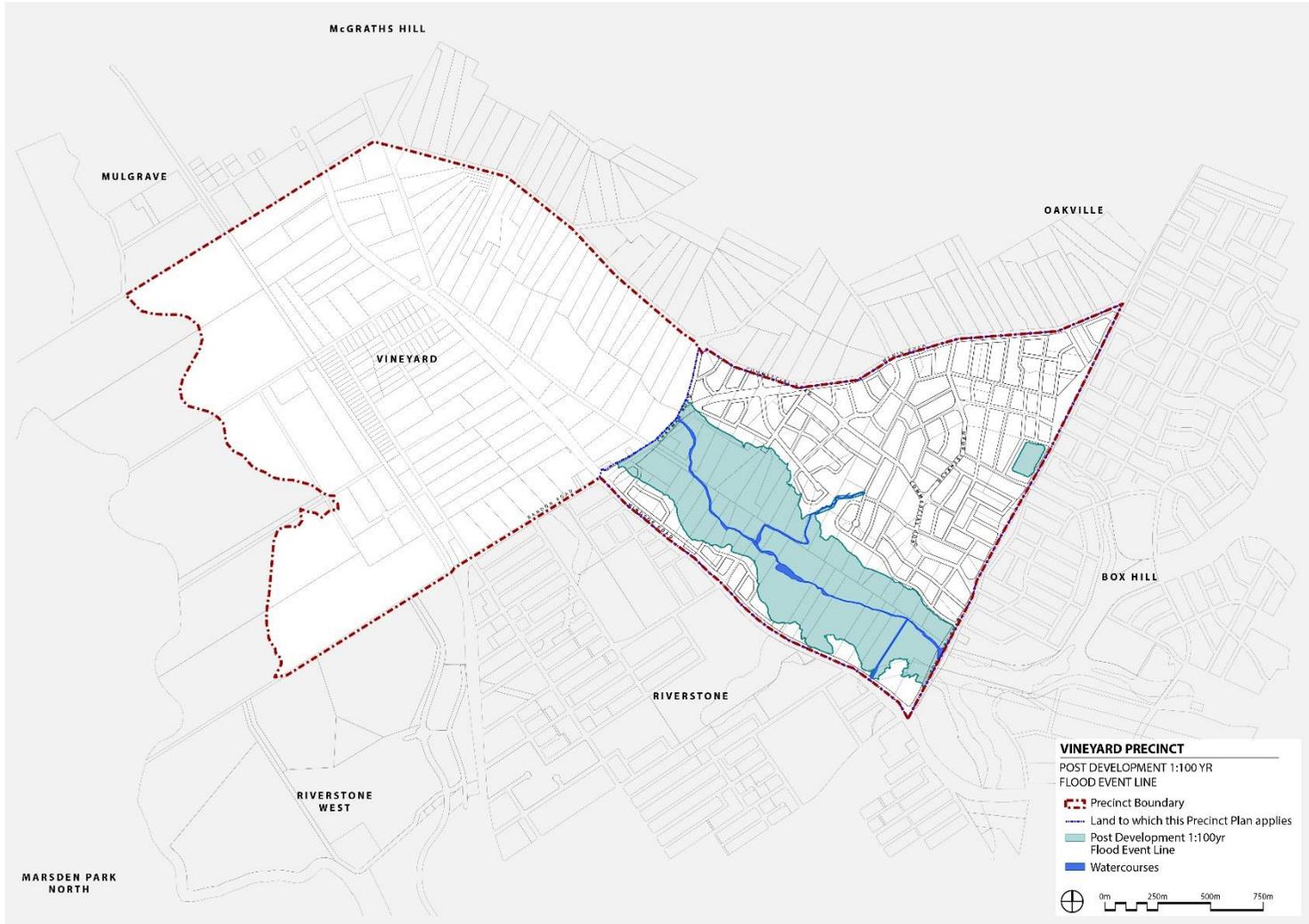


Figure 2-2 Indicative horizontal extent of the 1% AEP proposed regional flood level

## 2.2.2 Salinity and soil management

### Objectives

- a. To manage and mitigate the impacts of, and on, salinity and sodicity.
- b. To minimise the damage caused to property and vegetation by existing saline soils, or processes that may create saline soils.
- c. To ensure development will not significantly increase the salt load in existing watercourses.
- d. To prevent degradation of the existing soil and groundwater environment, and in particular, to minimise erosion and sediment loss and water pollution due to siltation and sedimentation.

### Controls - Subdivision

- 1) DAs are to demonstrate how salinity shall be considered during the planning, design and carrying out of earthworks, rehabilitation works and during the siting, design and construction of all development, including infrastructure:
  - to protect development and other works from salinity damage; and
  - to minimise the potential impacts that development and other works may have on salinity.
- 2) Every DA on land identified in **Figure 2-3** as being in an 'Area where management measures will be required due to moderately saline or very saline soils, or soils which are mildly aggressive to concrete' or an 'Area where a salinity report is required' are to be accompanied by a salinity report prepared by a suitably qualified person. The report is to cover the conditions of the site, the impact of the proposed subdivision or development on any saline land, the land's suitability for future development and the mitigation measures that will be required during the course of construction. The qualified person is to certify the project upon completion of the works.
- 3) Investigations and sampling for salinity are to be conducted in accordance with the requirements of *Site Investigations for Urban Salinity* (Department of Land and Water Conservation, 2002). Where applicable, the salinity report shall also report on the issues of soil aggressivity and sodicity and any mitigation measures required. All works are to comply with the *Western Sydney Salinity Code of Practice*, WSROC, 2004.
- 4) A comprehensive Salinity Management Plan must be submitted based on the findings of the site specific investigation and prepared in accordance with the *Western Sydney Salinity Code of Practice*, WSROC, 2004 and **Appendix C**. All DAs are to demonstrate that the recommendations of the Salinity Management Plan have been incorporated into the development.
- 5) Salinity and sodicity management actions are to complement Water Sensitive Urban Design (WSUD) strategies, improving or at least maintaining the current condition, without detriment to the waterway environment.
- 6) All developments must incorporate soil conservation measures to minimise soil erosion and siltation during construction and following completion of development. Soil and Water Management Plans, prepared in accordance with *Managing Urban Stormwater: Soils and Construction*, Landcom ('The Blue Book'), are to be submitted with each DA.

### Controls - Building

- 7) All development must comply with the Salinity Management Plan developed at the subdivision phase. The actions/works from the Salinity Management Plan must be certified upon completion of the development. DAs must demonstrate compliance with the Salinity Management Plan.
- 8) Salinity shall be considered in the siting, design and construction of buildings (including: drainage,

vegetation type and location, foundation selection and cut and fill activities), to ensure the protection of the building from salinity damage and to minimise the impacts development may have on the salinity process, and must have regard to the recommendations of the Salinity Management Plan.

- 9) In salinity prone areas materials for pipe infrastructure, foundations and brickwork must have sulfate resistant properties to cope with the saline conditions.
- 10) Applications for new buildings must be consistent with any conditions of consent for the subdivision of the land in relation to the management of soil salinity, sodicity and aggressivity, and with the Salinity Management Plan.
- 11) Salt tolerant plant species are to be chosen for landscaping purposes.



Figure 2-3 Areas of potential salinity

## 2.2.3 Aboriginal and European heritage

### Objectives

- a. To manage Aboriginal heritage values to ensure enduring conservation outcomes.
- b. To ensure areas identified as archaeologically or culturally significant are managed appropriately.

### Controls – Aboriginal Heritage

- 1) **Figure 2-4** identifies sites of known Aboriginal Heritage and areas of high and moderate–high Aboriginal archaeological potential.
- 2) In order to ensure that a person undertaking any development or activities on land does not harm Aboriginal objects, DAs must identify any areas of Aboriginal heritage value that are within or adjoining the area of the proposed development, including any areas within the development site that are to be retained and protected (and identify the management protocols for these).
- 3) Developments or other activities that will impact on Aboriginal heritage may require consent from the Office of Environment and Heritage under the *National Parks and Wildlife Act 1974* and consultation with the relevant Aboriginal communities.
- 4) Any DA that is within or adjacent to land that contains a known Aboriginal cultural heritage site, as indicated on **Figure 2-4**, must consider and comply with the requirements of the *National Parks and Wildlife Act 1974*. An Aboriginal Heritage Impact Permit (AHIP) issued under Part 6 of the *National Parks and Wildlife Act 1974* (NPW Act) is required for any works which directly affect these sites.
- 5) Where the necessary consents have already been obtained from the Office of Environment and Heritage, the DA must demonstrate that the development will be undertaken in accordance with any requirements of that consent.

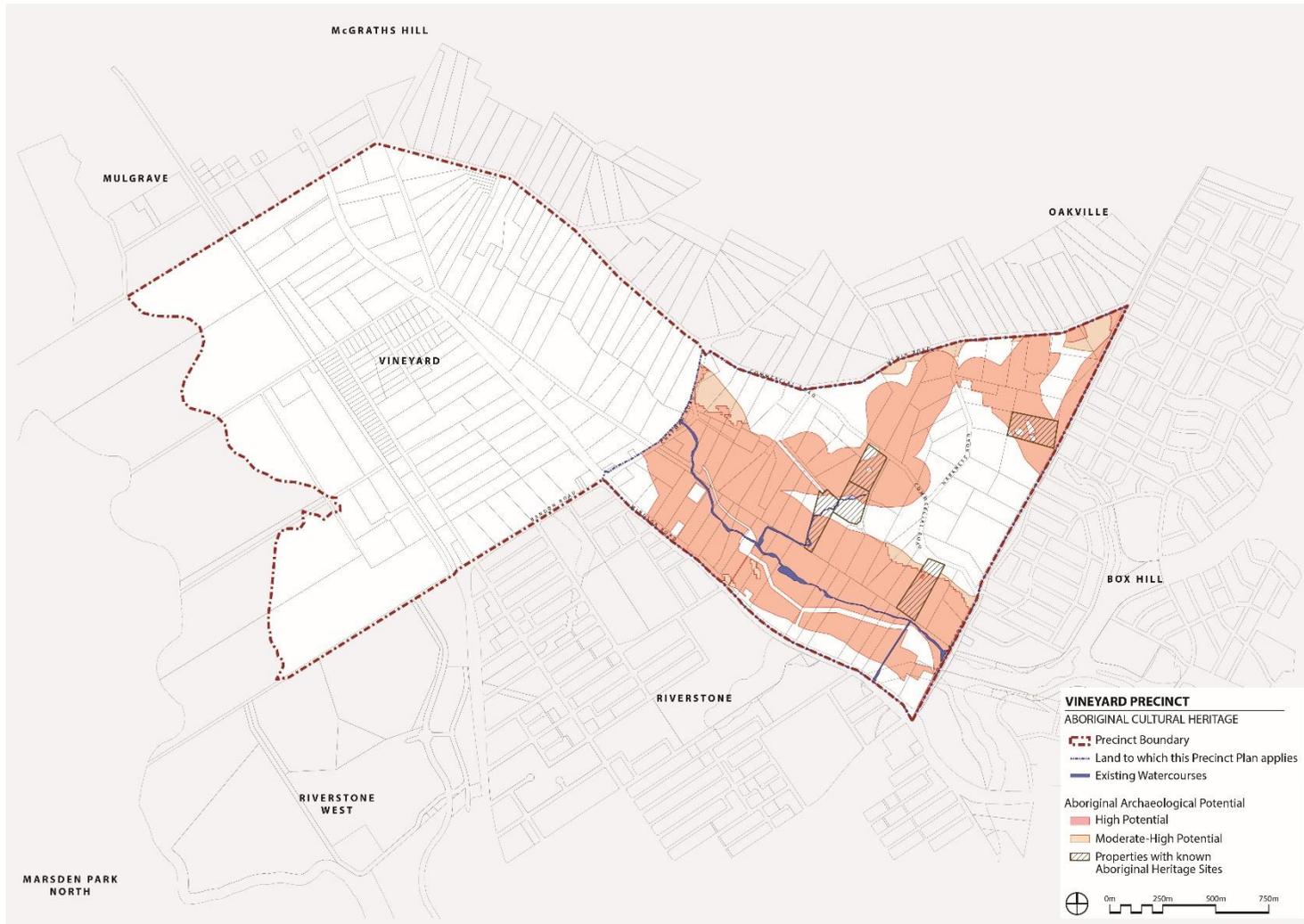
**Notes:** Applicants should consult with the Office of Environment and Heritage to determine requirements for assessment and approval where developments or other works are to be carried out on or near Aboriginal heritage sites identified on the Aboriginal cultural heritage sites figure.

Council or Office of Environment and Heritage may require additional investigations to be undertaken as part of a DA to confirm the presence of Aboriginal cultural heritage on the land.

Where works uncover items that may be of Aboriginal cultural heritage, the developer is to consult with Office of Environment and Heritage to determine an appropriate course of action.

### Controls – European Heritage

- 6) Applications for subdivision and building on land identified as a heritage item on **Figure 2-5** are to be accompanied by a report from a suitably qualified heritage consultant detailing the results of archaeological investigations undertaken to confirm the presence of archaeological material relating to the heritage site. Where archaeological material is identified, the proposal is to address the requirements of the *Heritage Act 1977*.
- 7) Any DA on, adjacent to or in the vicinity of, land identified as a heritage item on **Figure 2-5** is to be consistent with the relevant Heritage Conservation chapter of the Hawkesbury Development Control Plan 2002 or such other Development Control Plan (or equivalent) that might replace it.
- 8) A Heritage Impact Statement is to be submitted with any DA on, adjacent to or in the vicinity of, land identified as a heritage item on **Figure 2-5**.



**Figure 2-4** Aboriginal cultural heritage

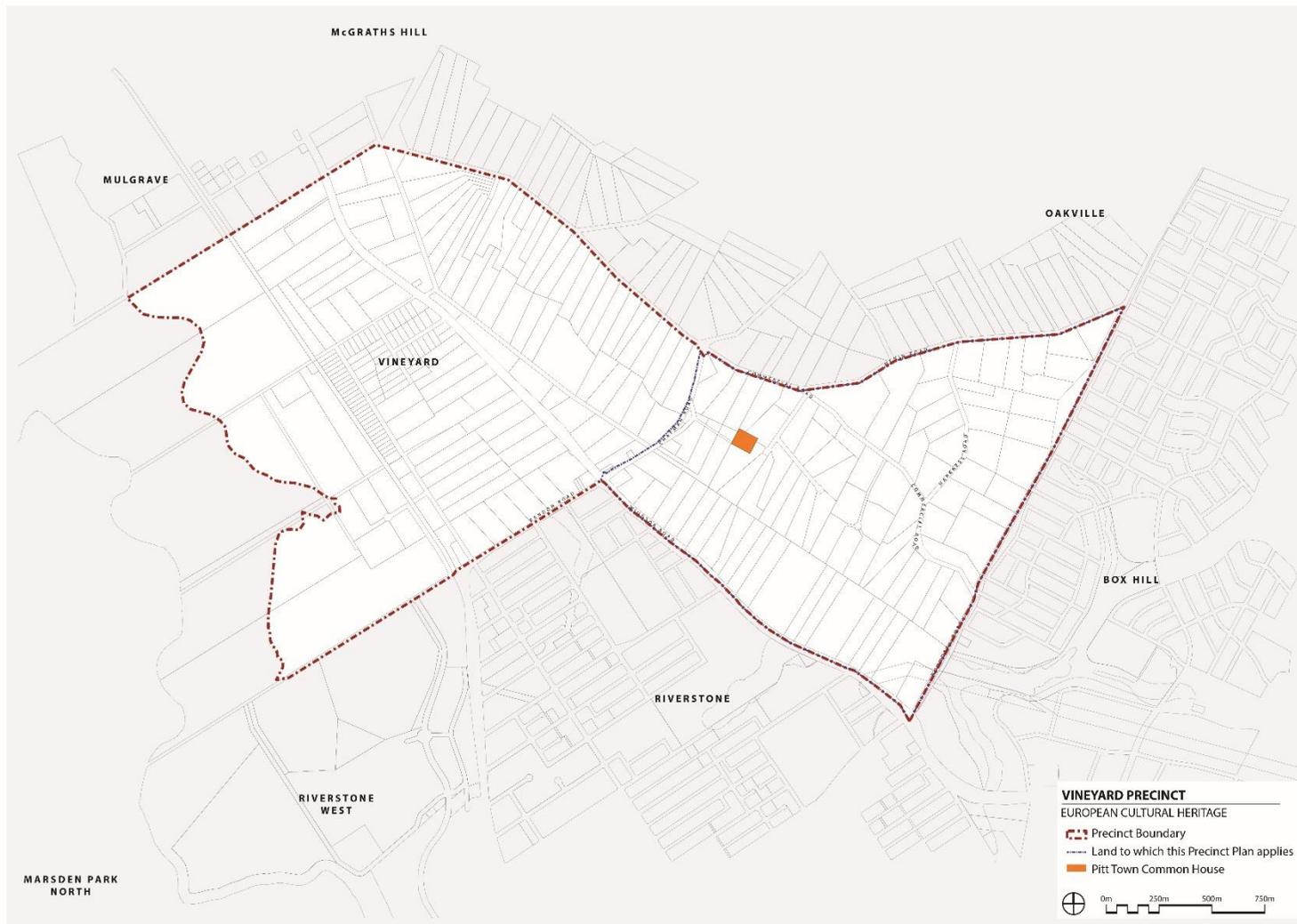


Figure 2-5 European cultural heritage

## 2.2.4 Native vegetation and ecology

### Objectives

- a. To conserve and rehabilitate the remaining native vegetation within the Precinct.
- b. To ensure that native vegetation contributes to the character and amenity of the Precinct.
- c. To preserve and enhance the ecological values of the Precinct and ecological links to surrounding areas.

### Controls

- 1) Where relevant, DAs are to contain a map showing the location, extent and area of any Existing Native Vegetation (ENV) within non-certified land located on the development site.
- 2) DAs for land that contains a Riparian Protection Area, a threatened species, or a threatened ecological community is to be accompanied by a Vegetation Management Plan (VMP) for the rehabilitation and conservation of native vegetation and habitat. The VMP is to be prepared in accordance with **Appendix E** of this DCP.
- 3) A landscape plan is to be submitted with all DAs, including subdivision, identifying:
  - all existing trees on the development site and those that are proposed to be removed or retained;
  - the proposed means of protecting trees to be retained during both construction of subdivision works and construction of buildings;
  - proposed landscaping including the locations and species of trees, shrubs and ground cover to be planted; and
  - the relationship of the proposed landscaping to native vegetation that is to be retained including factors such as the potential for weed or exotic species invasion and the contribution of the proposed landscaping to the creation of habitat values and ecological linkages throughout the Precinct.
- 4) The selection of proposed trees and other landscaping plants is to consider:
  - the preferred trees in **Appendix D** to this DCP;
  - the use of locally indigenous species where available;
  - the re-use of native plants or top soil removed during subdivisions works or earthworks; and
  - the contribution to the management of soil salinity, groundwater levels and soil erosion.
- 5) Native trees and other vegetation are to be retained where possible by careful planning of subdivisions to incorporate native vegetation and wildlife corridors into areas such as road reserves and private or communal open space.
- 6) Where practical, prior to development commencing, applicants are to:
  - provide for the appropriate re-use of native plants (including but not limited to seed collection) and re-use of topsoil that contains known or potential native seed bank; and
  - relocate native animals from development sites. Applicants should refer to OEH's *Policy on the Translocation of Threatened Fauna in NSW*.
- 7) All subdivision design and bulk earthworks are to consider the need to minimise weed dispersion and promote weed eradication. A Weed Eradication and Management Plan, outlining weed control measures during and after construction, is to be submitted with any subdivision DA.
- 8) Within land that is in a Riparian Protection Area as shown on **Figure 2-6**:
  - all existing native vegetation is to be retained and rehabilitated, except where clearing is required for essential infrastructure;

- native vegetation is to be conserved and managed in accordance with the Riparian Protection Area controls of **Appendix B** to this DCP; and
  - development is to be carried out in accordance with the Riparian Protection Area controls of **Appendix B** to this DCP.
- 9) Land subject to Condition 12 of the Growth Centres Biodiversity Certification Order must not be cleared unless it is in accordance with a plan of management or unless such clearance has been agreed to by the OEH.
- 10) Vegetation to which Part 3 of *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017* applies is the same vegetation that must not be ringbarked, cut down, lopped, topped, removed, injured, wilfully destroyed or cleared without a development consent or permit granted by Council as described in the relevant chapter of the Hawkesbury Development Control Plan 2002 or such other Development Control Plan (or equivalent) that might replace it.



Figure 2-6 Riparian Protection Area

## 2.2.5 Bushfire hazard management

### Objectives

- a. To prevent loss of life and property due to bushfires by providing for development that is compatible with bushfire hazard.
- b. To encourage sound management of bushfire prone areas.

### Controls

- 1) DAs must demonstrate compliance with *Planning for Bushfire Protection 2006* for development located on 'bushfire prone land'.
- 2) In addition to complying with the requirements of *Planning for Bushfire Protection 2006* Asset Protection Zones (APZs):
  - are to be located wholly within the Precinct;
  - may incorporate roads;
  - are to be located wholly outside of the Riparian Protection Area; and
  - are not to burden Council owned or managed land (other than roads).

## 2.2.6 Site contamination

### Objectives

- a. To minimise the risks to human health and the environment from the development of potentially contaminated land.
- b. To ensure that potential site contamination issues are adequately addressed at the subdivision stages.

### Controls

- 1) Prior to granting development consent, Council must be satisfied that the site is suitable, or can be made suitable, for the proposed use having regard to land contamination.
- 2) All DAs where the site has not been investigated for contamination shall be accompanied by a Stage 1 Preliminary Site Investigation prepared in accordance with *State Environmental Planning Policy No 55 – Remediation of Land* and the *Contaminated Land Management Act, 1995*.
- 3) Where the site has known contamination or a Stage 1 Preliminary Site Investigation identifies potential or actual site contamination a Stage 2 Detailed Site Investigation must be prepared in accordance with *State Environmental Planning Policy No 55 – Remediation of Land* and the *Contaminated Land Management Act, 1995*. A Remediation Action Plan (RAP) will be required for areas identified as contaminated land in the Stage 2 Detailed Site Investigation.
- 4) All investigation, reporting and identified remediation works must be in accordance with the protocols of the NSW EPA's *Guidelines for Consultants Reporting on Contaminated Sites*.
- 5) Council will require a Site Audit Statement (SAS) (issued by an Accredited Site Auditor) where remediation works have been undertaken to confirm that a site is suitable for the proposed use.

**Note:** All applicants should consider and assess contamination hazards on their land in accordance with the *Contaminated Land Management Act, 1995* and *State Environmental Planning Policy No 55 – Remediation of Land*, both of which override any controls in this DCP.

## 2.2.7 Odour assessment and control

Prior to the commencement of this DCP the Vineyard Precinct was used mostly for rural purposes. The Precinct, and nearby rural areas, contain a number of existing rural uses that have the potential to generate odour and other associated impacts that may affect the amenity of nearby urban areas. While these activities may cease operation at some point in the future (such as when the land is developed for urban

purposes) the timing of cessation of odour generating land uses is not known. Developers and buyers of property within the Precinct should be aware that their property may be subject to odour impacts from these uses for an indeterminate period of time.

### **Objectives**

- a. To minimise nuisance caused by odour generating activities.

### **Controls**

- 1) Where a proposed development has the potential to create an odour nuisance or is likely to be affected by an odour nuisance Council will consider whether the development is appropriate and will also consider the need for the applicant to provide additional supporting information with the DA.
- 2) Commercial or apartment buildings are to be orientated and designed to provide adequate air flow around the building and, if required, encourage air flow in a particular direction (e.g. away from outdoor café areas). Dead end courtyards or long narrow spaces perpendicular to the prevailing winds where air can lay dormant and stagnate should be avoided.
- 3) Where necessary, a barrier such as continuous dense landscaping (bunds and vegetation) is to be provided to assist in odour dispersion from nearby odour sources.
- 4) Buildings should be designed so that living and work spaces such as bedrooms and offices do not face odorous sources. Apartment buildings should have non-opening windows on the odorous side of the building and duct cleaner air into the building from the non-odorous side and out to the odorous side.
- 5) Separation buffers or development restrictions may be removed if an odour source ceases operation.

## **2.3 Site responsive design**

### **2.3.1 Cut and fill**

#### **Objectives**

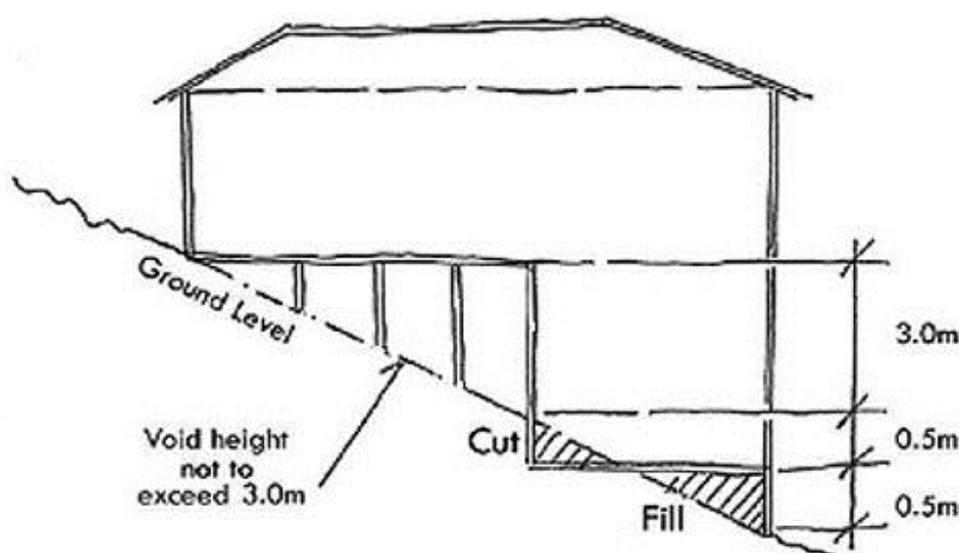
- a. To minimise the extent of cut and fill within the Precinct.
- b. To protect and enhance the aesthetic quality of the area by controlling the form, bulk and scale of land forming operations.
- c. To ensure that fill material is not contaminated and does not adversely affect the fertility or salinity of soil, or the quality of surface water or groundwater.
- d. To ensure that the amenity of adjoining residents is not adversely affected by any land forming operation.

#### **Controls**

- 1) DAs are to illustrate where it is necessary to cut and/or fill land and provide justification for the proposed changes to the land levels.
- 2) Earthworks shall be undertaken to a maximum of 500mm excavation or fill from the present surface level of the property.
- 3) Council will assess proposals for excavation or fill greater than 500mm having regard to the visual impact of the proposed earthworks.
- 4) On sloping sites, site disturbance is to be minimised by use of split level or pier foundation building designs. Council will consider greater cut for basement garages.
- 5) A Site Validation Report is required to be submitted to Council prior to the placement of imported fill on site.
- 6) DAs are to demonstrate that the importation of fill shall comply with the *Site Investigation for Urban*

Salinity, Department of Water and Energy and the *Guidelines for the NSW Site Auditor Scheme (2nd edition) – Soil Investigation Levels for Urban Development Sites in NSW*, DECC Contaminated Sites Guidelines.

- 7) Where cut is proposed on the boundary of a lot, retaining walls are to be constructed with side fence posts integrated with its construction (relevant construction details are required with retaining wall approval). Otherwise retaining walls must be located a minimum of 450mm from the side or rear boundary of the lot containing the cut.
- 8) Where cut is proposed, retaining walls within residential allotments are to be no greater than 600mm high at any point on the edge of any residential allotment. A combined 1200mm maximum retaining wall height is permissible between residential lots (2 x 600mm). Where terraced walls are proposed the minimum distance between each step is 0.5m. A variation to the retaining wall heights can be considered with supporting justification.
- 9) The maximum height of voids within individual allotments is 3m, as illustrated in **Figure 2-7**.
- 10) All retaining walls proposed for the site are to be identified in the DA.
- 11) Filling on lots must be either contained within the 'building footprint' or no closer than 2 metres from a property boundary and up to 500mm in depth.



**Figure 2-7** Maximum cut and fill within residential lots

## 2.3.2 Sustainable building design

### Objectives

- a. To maximise microclimate benefits to residential lots.
- b. To enhance streetscape amenity.
- c. To minimise energy usage and greenhouse emissions and encourage the adoption of renewable energy initiatives.
- d. To minimise the use of non-renewable resources and minimise the generation of waste during construction.

### Controls

- 1) New residential dwellings, including a residential component within a mixed use building and serviced apartments intended, or capable of being, strata titled, are to be accompanied by a BASIX Certificate and are to incorporate all commitments stipulated in the BASIX Certificate on the

submitted plans in accordance with *State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004*.

- 2) At least 50% of plants used in landscaping must consist of native species of local provenance.
- 3) Plant species are to be selected from the preferred species listed at **Appendix D** to this DCP.
- 4) Outdoor clothes lines and drying areas are required for all dwellings and can be incorporated into communal areas for multi-dwelling development and residential flat building developments and mixed use development.
- 5) Dwelling and private open space location and orientation must be consistent with the siting principles of **Figure 5-6**.

## **2.4 Water Cycle Management**

### **2.4.1 Stormwater management**

#### **Objectives**

- a. To manage the flow of stormwater from urban parts of the Precinct to replicate pre-development flows.

#### **Controls**

- 1) Stormwater management is to be designed and implemented with all subdivisions.
- 2) Stormwater is to be managed and associated infrastructure provided in accordance with the provisions of *Water Cycle Management Report, October 2017* prepared by Mott MacDonald or other water cycle management plan (or equivalent) approved by Council and the Hawkesbury City Council's *Civil Works Specifications*.
- 3) In order to achieve the stormwater quality and quantity objectives for the precinct all dwellings are to be provided with a 3000L minimum rainwater tank which must be plumbed for internal use.
- 4) Management of 'minor' flows using piped systems for the 20% AEP (residential land use) and 5% AEP (commercial land use) shall be in accordance with Hawkesbury City Council's *Civil Works Specifications*. Management measures shall be designed to:
  - prevent damage by stormwater to the built and natural environment;
  - control stormwater to minimise localised flooding and reduce nuisance flows to a level that is acceptable to the community;
  - provide a stormwater system that can be economically maintained and that uses open space in a compatible manner;
  - minimise urban water run-off pollutants to watercourses; and
  - meet the standards for a 20% AEP flood level for residential development.
- 5) Management of 'major' flows using dedicated overland flow paths such as open space areas, roads and riparian protection areas for all flows in excess of the pipe drainage system capacity and above the 20% AEP shall be in accordance with Hawkesbury City Council's *Civil Works Specifications*. Management measures shall be designed to:
  - prevent both short term and long term inundation of habitable dwellings;
  - control localised flooding from storm events to maintain access to lots, maintain the stability of the land form and to control erosion;
  - provide for the orderly and safe evacuation of people away from rising floodwaters;
  - meet the standards for the *flood planning level*;
  - where practical, development shall attenuate up to the 50% AEP peak flow for discharges into the local tributaries. This will be achieved using detention storage within water quality

- features and detention basins;
- the developed 1% AEP peak flow is to be reduced to pre-development flows through the incorporation of stormwater detention and management devices; and
- the trunk stormwater system is to be designed in accordance with the Water Cycle Management strategy shown in
- , satisfy the requirements of **Appendix B** – Riparian Protection Area Controls and achieve the water quality targets in **Table 2-1**.

6) Where appropriate detention basins are to be planted with wetland species of local provenance for the purposes of establishing suitable wetland / aquatic habitat.

**Table 2-1** Water quality and environmental flow targets

|                                 | WATER QUALITY<br>% reduction in pollutant loads |                        |                   |                | ENVIRONMENTAL FLOWS<br>Stream erosion control ratio <sup>1</sup> |
|---------------------------------|---|------------------------|-------------------|----------------|--|
|                                 | Gross Pollutants (>5mm)                         | Total suspended solids | Total phosphorous | Total nitrogen |  |
| Stormwater management Objective | 90  | 85                     | 65                | 45             | 3.5-5.0: 1   |
| 'Ideal' stormwater outcome      | 100   | 95                     | 95                | 85             | 1:1  |

<sup>1</sup> This ratio should be minimised to limit stream erosion to the minimum practicable. Development proposals should be designed to achieve a value as close to one as practicable, and values within the nominated range should not be exceeded. A specific target cannot be defined at this time.

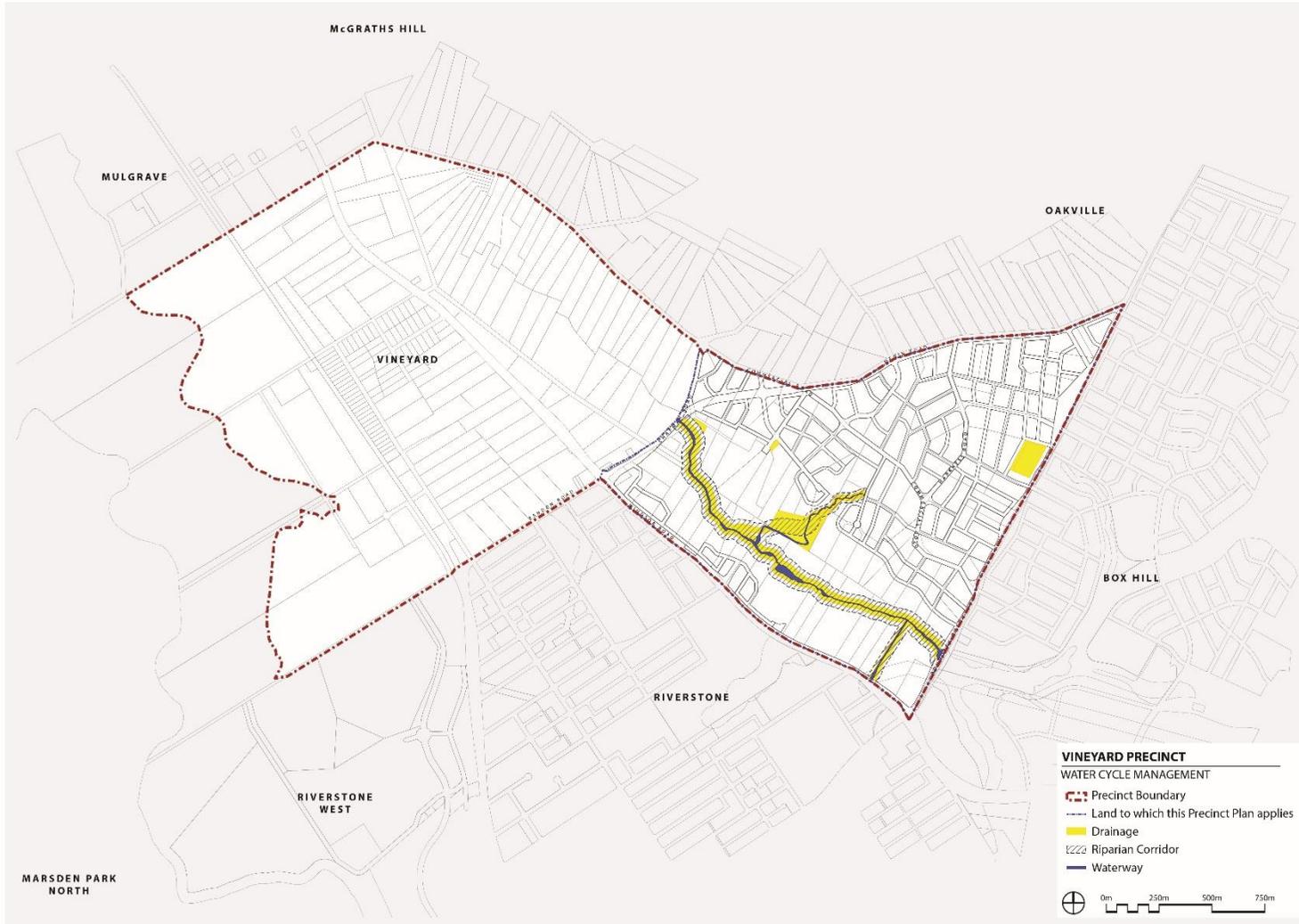


Figure 2-8 Water Cycle Management

A white line starts from the top left corner of the page and extends diagonally down to a white circle. The circle is positioned to the left of the main text.

## ***3. Precinct Planning Outcomes***

## 3. Precinct Planning Outcomes

### 3.1 Introduction

This Part of the DCP defines Precinct wide planning outcomes. It also outlines the matters to be considered when undertaking site analysis for subdivision planning. These controls should be considered during the initial stages of subdivision planning to determine the suitability and the development potential of land.

### 3.2 Vision

Planning for the Vineyard Precinct responds to the need for new and diverse housing in Sydney that is well connected to major centres and employment, protects natural assets and encourages sustainable living. Consideration of the surrounding context, history and natural environment has informed the precinct planning process.

The Precinct will consist of a mix of housing types that will allow for greater choice for different household types. It predominantly provides for low density housing, with some medium density around the village centre and open spaces.

Places of significant heritage value, particularly the Pitt Town Common House, have been integrated into the planning of the Precinct to ensure protection through a sensitive design approach. The village centre will support retail, commercial and community services to promote community interaction.

Regional public transport accessibility has been provided through road connections to the nearby Vineyard railway station and a regional bus network along the major roads. A safe and permeable street network will promote accessibility, connectivity and social interaction. The provision of cycle ways and pedestrian connections, as well as public transport connections to surrounding centres, will promote a community that is less dependent on private vehicle use.

### 3.3 The Indicative Layout Plan

The Indicative Layout Plan (**Figure 3-1**) forms the basis for urban development in the Precinct by setting out:

- the road network;
- the open space and drainage networks;
- the locations of land uses including residential development, a school, open space, drainage land and a retail centre;
- areas requiring protection because of environmental or heritage values; and
- the density and types of housing that are preferred in various parts of the Precinct.

#### Objectives

- a. To ensure that development occurs in a coordinated manner consistent with the North West Land Use and Infrastructure Implementation Plan and the Vineyard Precinct ILP.

#### Controls

- 1) All DAs are to be generally in accordance with the ILP.
- 2) If any variations to the general arrangement of the ILP are proposed, the applicant must demonstrate, to Council's satisfaction, that the variation is consistent with the precinct planning vision (**Part 3.2**).

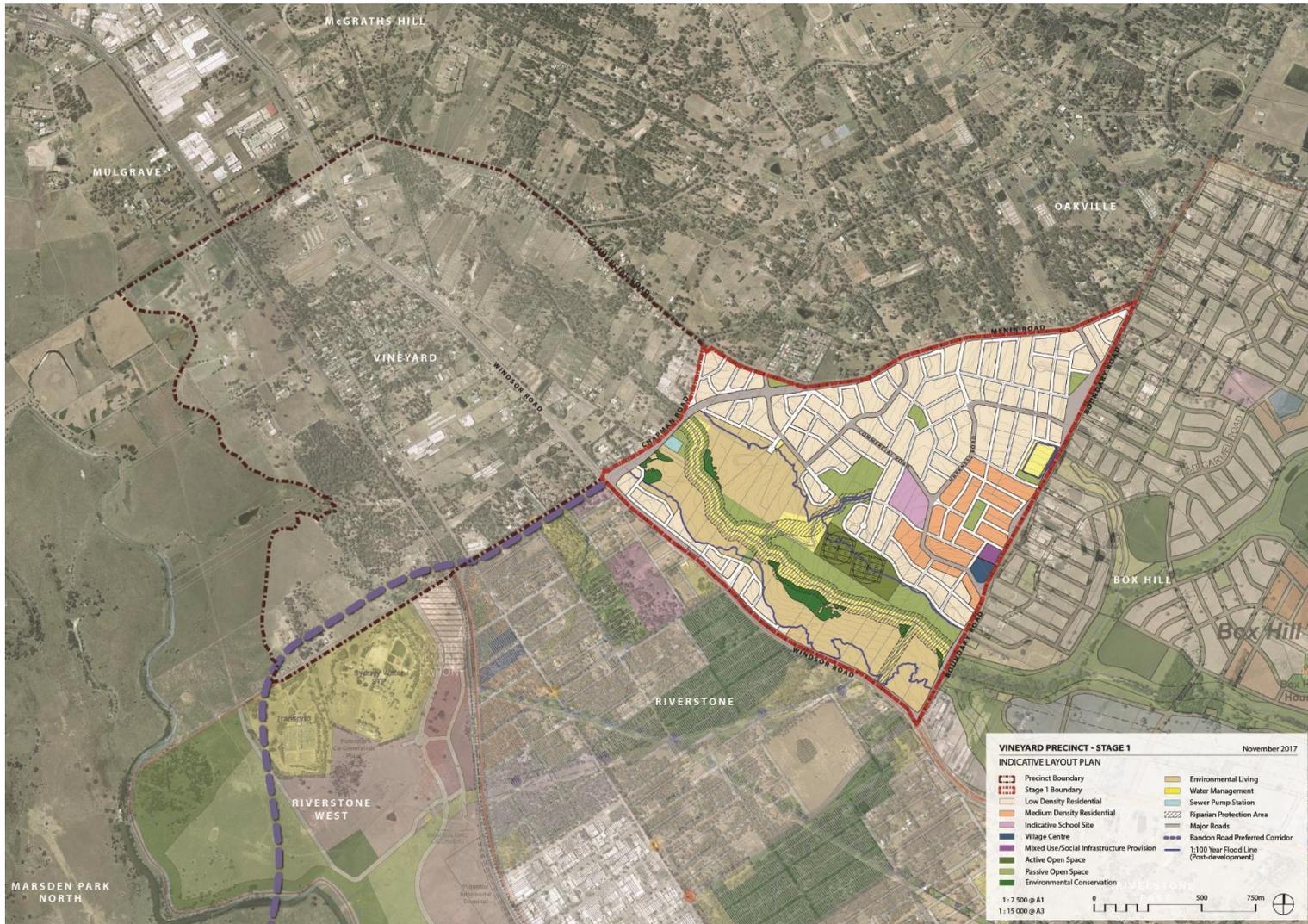


Figure 3-1 Vineyard Precinct Indicative Layout Plan

A thin white line starts from the top left corner of the page and extends diagonally down to the left, ending at a small white circle that precedes the section header.

## ***4. Neighbourhood and Subdivision Design***

## 4. Neighbourhood and Subdivision Design

### 4.1 Residential Density and Subdivision

The Growth Centres are subject to residential density controls as detailed in the Residential Density Maps in the SEPP. This part of the DCP provides guidance on the typical characteristics of the residential density bands.

Net Residential Density means the number of dwellings proposed to be located on land to be developed divided by the net developable area in hectares of the land to be developed. Net Developable Area means the land occupied by the development, including internal streets plus half the width of any adjoining access roads that provide vehicular access, but excluding land that is not zoned for residential purposes. An example of how to calculate Net Residential Density is shown below in **Figure 4-1**.



**Figure 4-1** Example of how to calculate Net Residential Density

Net Residential Density is an averaging statistic. The average dwelling density target in the SEPP should be achieved across the identified area with a diversity of lot and housing types. However, this does not mean that all streets offer the same housing and lot mix. Built form intensity should vary across a neighbourhood in response to the place: more intense around centres or fronting parks, less intense in quieter back streets. In lower density areas, there will be a higher proportion of larger lots and suburban streetscapes but there may also be some streets with an urban character. In higher density areas, urban streets with more attached housing forms will be more common but there will also be some suburban streetscapes.

In recognition of different objectives and street characters at varying densities, certain built form controls vary by density bands. Refer to Part 5 Development in the Residential and Environment Protection Zones of this DCP.

### 4.1.1 Residential Density

#### Objectives

- a. To ensure density targets are met.
- b. To provide guidance to applicants on the appropriate mix of housing types and appropriate locations for certain housing types.
- c. To establish the desired character of the residential areas.
- d. To promote housing diversity and affordability.

#### Controls

- 1) All applications for residential subdivision and the construction of residential buildings are to demonstrate that the proposal meets the residential density requirements and contributes to meeting the overall dwelling target of the Vineyard Precinct.
- 2) Residential development is to be generally consistent with the residential structure as set out in **Figure 4-3 Residential Structure** and the typical characteristics of the corresponding Density Band in **Table 4-1**.

**Table 4-1** Typical characteristics of residential net densities

| Net Residential Density dw/Ha | Typical Characteristics  |
|-------------------------------|--|
| 15-18dw/Ha                    | <ul style="list-style-type: none"> <li>• Generally located away from centres and transport.</li> <li>• Predominantly detached dwelling houses.</li> <li>• Typically single and double storey dwellings.</li> <li>• Mainly garden suburban streetscapes. (See Figure 4-2).</li> </ul> |
| 20-30dw/Ha                    | <ul style="list-style-type: none"> <li>• Focused areas of a mix of smaller lot dwelling types close to centres.</li> <li>• Typically single, double and three storey dwellings.</li> <li>• Mainly suburban streetscapes and urban streetscapes. (See Figure 4-2).</li> </ul>         |



**Garden Suburban**



**Suburban**



**Urban**

**Figure 4-2** Distinct and coherent streetscapes occur in varying proportions in density bands

- 3) Residential development in the Environmental Living area, on **Figure 4-3** is to:
- consist primarily of single dwellings on larger lots, reflecting the environmental sensitivity and visual character of these parts of the Precinct;
  - emphasise high quality housing design to make the most of the environmental characteristics of the surrounding area;
  - be designed and located to minimise impacts on flood prone land and risks to property from flooding;
  - avoid impacts on Existing Native Vegetation and other remnant native vegetation;
  - consider relationships to adjoining land uses including public open space and drainage infrastructure;
  - be designed to respond to constraints from infrastructure; and
  - consider views to and from the land and surrounding parts of the Precinct.
- 4) Non-residential development in the residential areas is encouraged where it:
- contributes to the amenity and character of the residential area within which it is located;
  - provides services, facilities or other opportunities that meet the needs of the surrounding residential population, and contributes to reduced motor vehicle use;
  - will not result in detrimental impacts on the amenity and safety of surrounding residential areas, including factors such as noise and air quality; and
  - is of a design that is visually and functionally integrated with the surrounding residential area.

**Note:** The Vineyard Precinct Plan permits certain non-residential development within the residential and environment protection zones. Other parts of this DCP provide more detailed objectives and controls for these types of development.

#### **4.1.2 Block and Lot Layout**

##### **Objectives**

- a. To establish a clear urban structure that promotes a 'sense of neighbourhood' and encourages walking and cycling.
- b. To efficiently utilise land and achieve the target dwelling yields for the Precinct.
- c. To emphasise the natural attributes of the site and reinforce neighbourhood identity through the placement of visible key landmark features, such as parks, squares and landmark buildings.
- d. To optimise outlook and proximity to public and community facilities, parks and public transport with increased residential density.
- e. To encourage variety in dwelling size, type and design to promote housing choice and create attractive streetscapes with distinctive characters.
- f. To accommodate a mix of lot sizes and dwelling types across the Precinct.
- g. To establish minimum lot sizes for different residential dwelling types.

##### **Controls**

##### **Blocks**

- 1) Subdivision layout is to create a legible and permeable street hierarchy that responds to the natural site topography, the location of existing significant trees and site features, place making opportunities and solar design principles.
- 2) Pedestrian connectivity is to be maximised within and between each residential neighbourhood with a particular focus on pedestrian routes connecting to public open space, bus stops and railway stations, educational establishments and community/recreation facilities.

- 3) Street blocks are to be generally a maximum of 250m long and 70m deep. Block lengths in excess of 250m may be considered by Council where pedestrian connectivity, stormwater management and traffic safety objectives are achieved. In areas around town centres, the block perimeters should generally be a maximum of 520m (typically 190m x 70m) to increase permeability and promote walking.

#### **Lots**

- 4) Minimum lot sizes for each dwelling type are to comply with the minimum lot size provisions permitted by the Growth Centres SEPP, summarised in **Table 4-2**. In certain density bands, variations to some lot sizes may be possible subject to Part 4 of the Vineyard Precinct Plan in the Growth Centres SEPP.
- 5) Minimum lot frontages applying to each density band will comply with **Table 4-3**. Lot frontage is measured at the street facing building line as indicated in **Figure 4-4**.

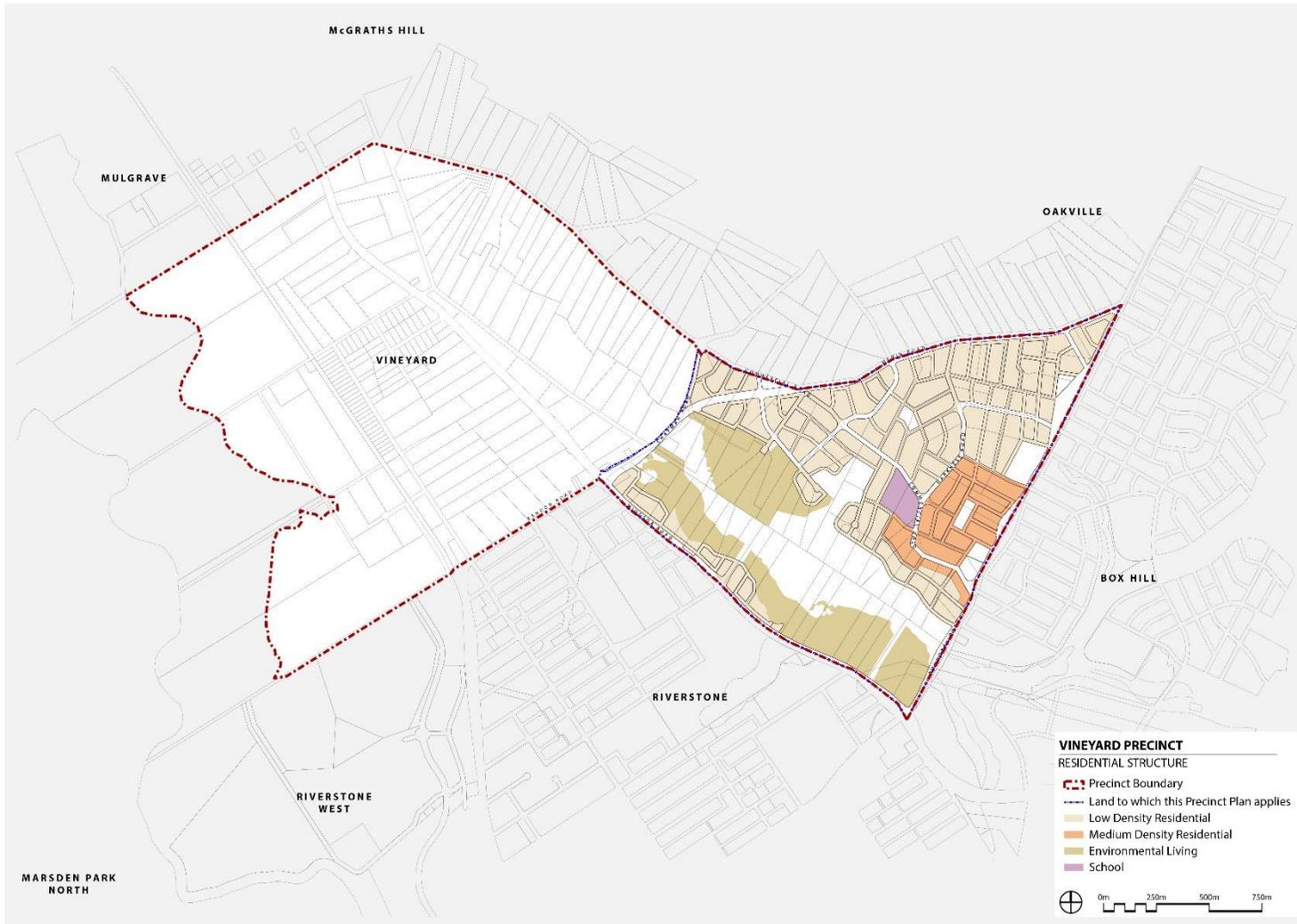


Figure 4-3 Residential Structure

**Table 4-2** Minimum lot size by density bands

|   | R2 Low Density Residential   | R3 Medium Density Residential |
|---|--|-------------------------------|
| Residential density range (dwellings/ha)    | 15-18  | 20-30                         |
| Dwelling House (base control)               | 300  | 300                           |
| With Building Envelope Plan (BEP)           | 250  | 225                           |
| As Integrated DA                            | 250  | 125                           |
| Locational criteria* (BEP or Integrated DA) | 225  | N/A                           |
| Studio Dwelling                             | No minimum lot size as strata development not subject to minimum lot size controls |                               |
| Secondary Dwelling                          | 450  | In principal lot              |
| Dual Occupancy                              | 500  | 400                           |
| Semi Detached Dwelling                      | 200  | 125                           |
| Attached Dwelling                           | 375*   | 375                           |
| Multi Dwelling Housing                      | 375*   | 375                           |
| Manor Homes                                 | N/A  | 600                           |
| Residential Flat Buildings                  | N/A  | 2000                          |

**Notes:**

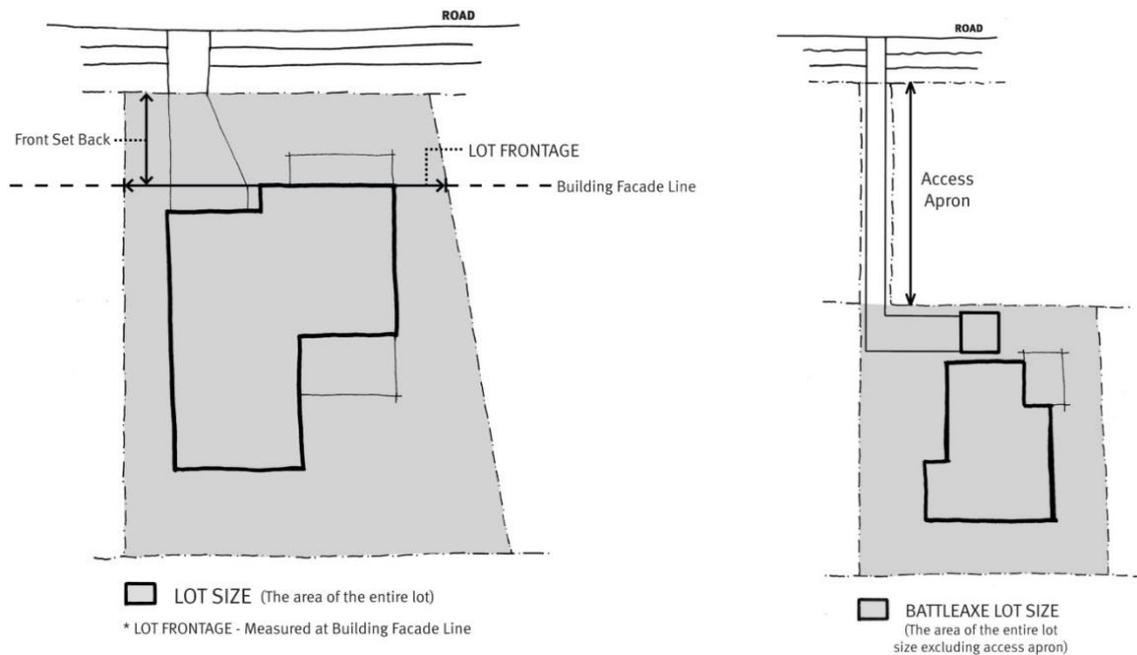
\* On land zoned R2 Low Density Residential with a minimum residential density of 15dw/ha, the minimum development lot size for the purposes of a dwelling house can be varied to 225m<sup>2</sup> in places that satisfy one of the following locational criteria. Attached and multi dwelling housing is also permissible on land zoned R2 Low Density Residential with a minimum residential density of 15dw/ha that also satisfies one of these criteria:

- a. adjoining land within the RE1 Public Recreation zone or land that is separated from land within the RE1 Public Recreation zone only by a public road;
- b. adjoining land within the B2 Local Centre zone or the B4 Mixed Use zone or land that is separated from land the B2 Local Centre zone or the B4 Mixed Use zone only by a public road;
- c. adjoining land that is set aside for drainage or educational purposes, or is separated from that land only by a public road; and is within 400m of land in the B2 Local Centre zone or the B4 Mixed Use zone.

**Table 4-3** Minimum lot frontages by density bands

|                       |              | Net Residential Density Range (dw/ha) |       |
|-----------------------|--------------|---------------------------------------|-------|
|                       |              | 15-18                                 | 20-30 |
| Minimum Lot Frontages | Front Loaded | 9m                                    | 7m    |
|                       | Rear Loaded  | 4.5m                                  | 4.5m  |

**Note:** The combination of the lot frontage width and the size of the lot determine the type of dwelling that can be erected on the lot, and the development controls that apply to that dwelling.



**Figure 4-4** Measurement of minimum lot widths and lot area

- 6) A range of residential lot types (area, frontage, depth, zero lot and access) must be provided to ensure a mix of housing types and dwelling sizes and to create coherent streetscapes with distinctive garden suburban, suburban and urban characters across a neighbourhood.
- 7) In areas with a density range of 15-18 dw/ha no more than 40% of the total residential lots proposed in any one street block may have a frontage of less than 10m wide. Lots subdivided using Subdivision Approval Pathway B1 or B2 (Integrated Housing) for attached dwellings are exempt from this control.
- 8) A street block is defined as a portion of a city, town etc., enclosed by (usually four) neighbouring and intersecting streets. In the density range 20-30 dw/ha, total lot frontage for front accessed lots greater than or equal to 7m and less than 9m should not exceed 20% of any block length due to garage dominance and on-street parking impacts.
- 9) Lots should be rectangular. Where lots are an irregular shape, they are to be large enough and oriented appropriately to enable dwellings to meet the controls in this DCP.
- 10) Where residential development adjoins land zoned RE1 Public Recreation or SP2 Drainage, subdivision is to create lots for the dwelling and main residential entry to front the open space or drainage land.
- 11) The orientation and configuration of lots is to be generally consistent with the following subdivision principles:
  - smallest lots achievable for the given orientations fronting parks and open space with the larger lots in the back streets;
  - larger lots on corners;
  - north to the front lots are either the widest or deepest lots, or lots suitable for residential development forms with private open space at the front. Narrowest lots with north to the rear.
- 12) The preferred block orientation is established by the road layout on the ILP. Optimal lot orientation is east-west, or north-south where the road pattern requires. Exceptions to the preferred lot orientation may be considered where factors such as the layout of existing roads and cadastral boundaries, or topography and drainage lines, prevent achievement of the preferred orientation.
- 13) An alternative lot orientation may be considered where other amenities such as views and outlook over open space are available, and providing appropriate solar access and overshadowing

outcomes can be achieved.

### **Zero Lot Lines**

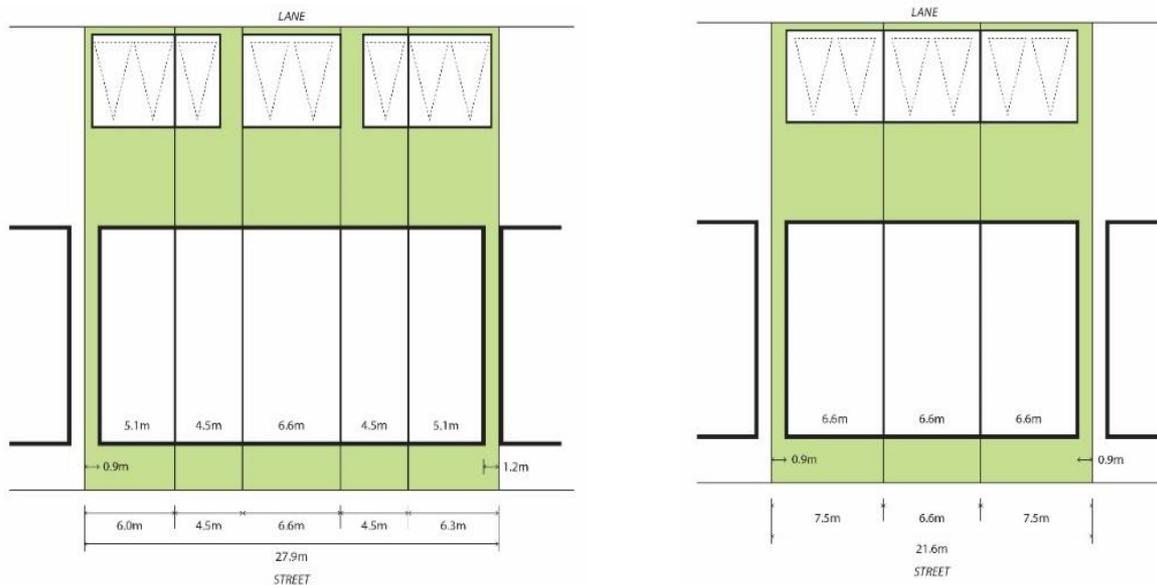
- 14) The location of a zero lot line is to be determined primarily by topography and should be on the low side of the lot to minimise water penetration and termite issues. Other factors to consider include dwelling design, adjoining dwellings, landscape features, street trees, vehicle crossovers and the lot orientation.
- 15) On all lots where a zero lot line is permitted, the side of the allotment that may have a zero lot alignment must be shown on the approved subdivision plan.
- 16) Where a zero lot line is nominated on an allotment on the subdivision plan, the adjoining (burdened) allotment is to include a 900mm easement for single storey zero lot walls and 1200mm for two storey zero lot walls to enable servicing, construction and maintenance of the adjoining dwelling. No overhanging eaves, gutters or services (including rainwater tanks, hot water units, air-conditioning units or the like) of the dwelling on the benefited lot will be permitted within the easement. Any services and projections permitted within the easement to the burdened lot dwelling should not impede the ability for maintenance to be undertaken to the benefitted lot.
- 17) The S88B instrument for the subject (benefited) lot and the adjoining (burdened) lot shall include a note identifying the potential for a building to have a zero lot line. The S88B instrument supporting the easement is to be worded so that Council is removed from any dispute resolution process between adjoining allotments.

### **Subdivision of Shallow Lots**

- 18) Shallow lots (typical depth 14-18m, typical area <200m<sup>2</sup>) intended for double storey dwellings should be located only in locations where it can be demonstrated that impacts on adjoining lots, such as overshadowing and overlooking of private open space, satisfy the requirements of the DCP. For lots over 225m<sup>2</sup> where development is not Integrated Assessment, the Building Envelope Plan should demonstrate in principle how DCP requirements such as solar access and privacy to neighbouring private open spaces will be satisfied.

### **Subdivision for Attached Dwellings**

- 19) Subdivision of lots for Torrens title attached dwellings must take into account that construction will be in 'sets'. A 'set' is a group of attached dwellings built together at the same time that are designed and constructed independently from other dwellings.
- 20) The maximum number of attached or abutted dwellings permissible in a set is six.
- 21) The composition of sets needs to be determined in the subdivision design to take into account the lot width required for a side setback to the end dwellings in each set. Examples of lot subdivisions for sets of attached terraces are illustrated in **Figure 4-5**.



**Figure 4-5** Two examples of lot subdivision for 'sets' of attached terraces

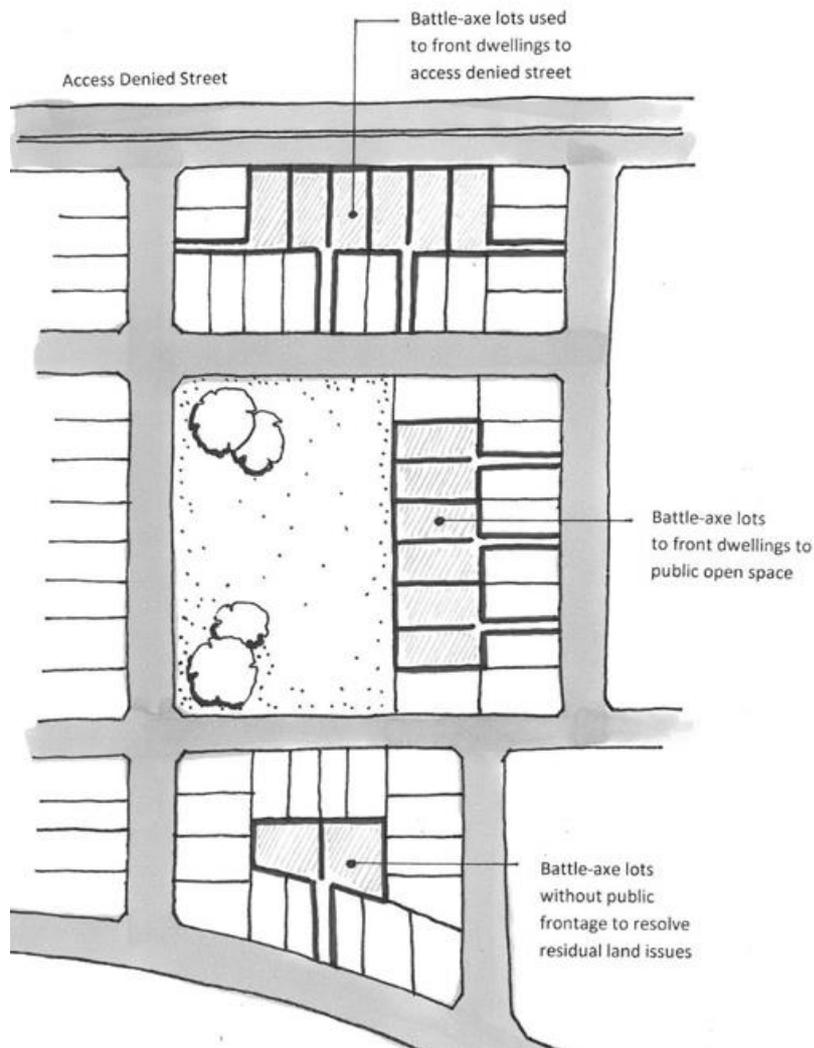
### 4.1.3 Battle-axe lots

#### Objectives

- To limit battle-axe lots to certain circumstances.
- To ensure that where a battle-axe lot without public road or open space frontage is provided, their amenity and the amenity of neighbouring lots is not compromised by their location.
- To enable battle-axe shaped lots or shared driveway access to lots fronting access denied roads.

#### Controls

- Principles for the location of battle-axe lots are illustrated at **Figure 4-6**.
- Subdivision layout should minimise the use of battle-axe lots without public frontage to resolve residual land issues.



**Figure 4-6** Examples of locations of battle-axe lots

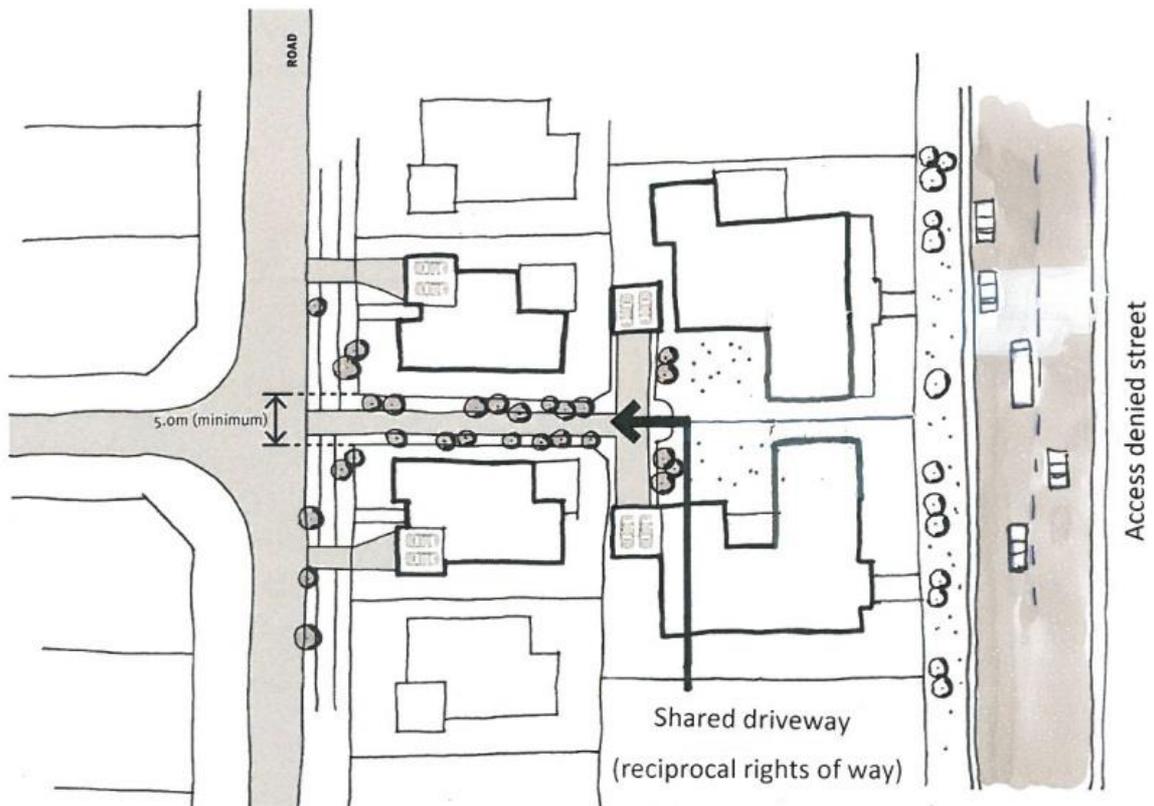
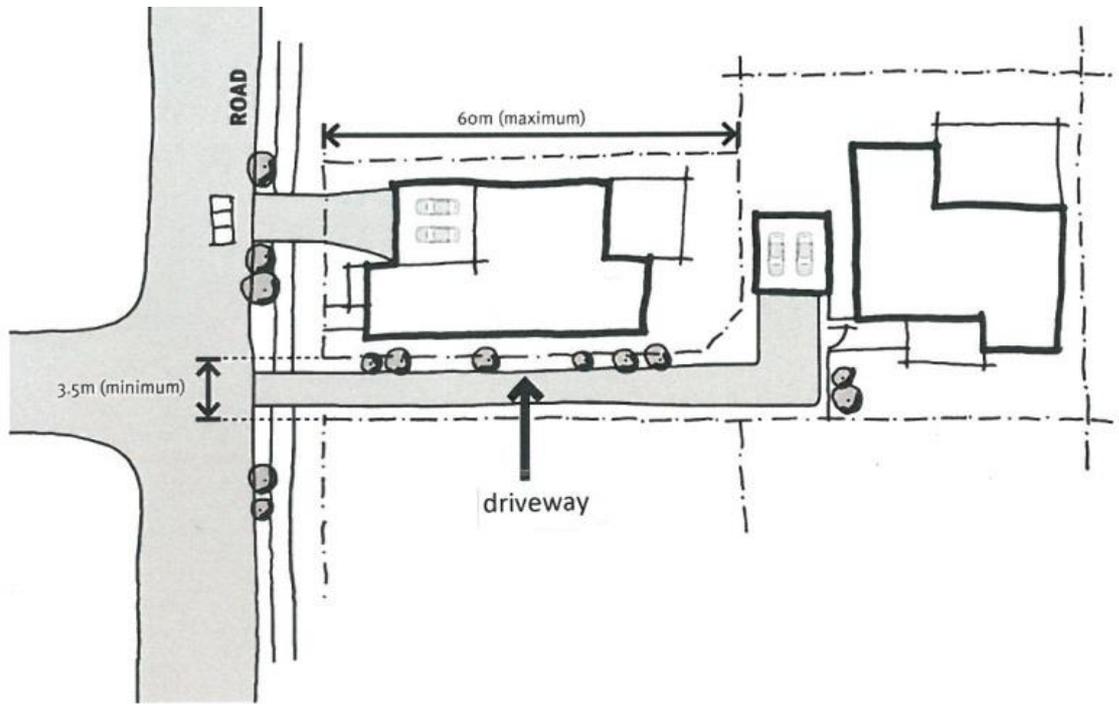
- 3) Driveway design, including dimensions and corner splays, are to be in accordance with **Figure 4-7** and the following:

Driveway to a single battle axe lot:

- The driveway access shall be a minimum of 3.5 metres wide with paved driveway of 2.5m wide and 0.5m wide strip along either side of the driveway for services and landscaping.
- Lots along the driveway bends should allow for a splay to accommodate a 3m radius driveway curve for safe vehicle turning.

Access to multiple battle axe lots (shared driveway):

- The driveway access shall be a minimum of 5 metres wide with paved driveway of 3m wide and 1m wide strip along either side of the driveway for services and landscaping.
- Lots along the driveway bends should allow for a splay to accommodate 3m radius curve for safe vehicle turning.



**Figure 4-7** Examples of driveways and shared driveways for battle-axe lots

#### 4.1.4 Corner Lots

##### Objectives

- a. To ensure corner lots are of sufficient dimensions and size to enable residential controls to be met.

##### Controls

- 1) Corner lots, including splays and driveway locations, are to be designed in accordance with *Australian Standard AS 2890 Parking Facilities*, Hawkesbury City Council's *Civil Works Specifications* and the following requirements:
  - Corner lots shall allow for a splay of minimum 3m x 3m for pedestrian sight distance, vehicle turning, footpaving and landscaping.
  - The driveway location is not permitted within 6m of the kerb as it turns the corner to form a road, see **Figure 4-8**.
  - Where a corner lot fronts a roundabout, the driveway shall be set back 10m from the splay.
- 2) Corner lots are to be designed to allow dwellings to positively address both street frontages as indicated in **Figure 4-8** **Figure 4-8** Corner lots

- 3) Garages on corner lots should be accessed from the secondary street or a rear lane.
- 4) Plans of subdivision are to show the location of proposed or existing substations, kiosks, sewer access points and/or vents affecting corner lots.

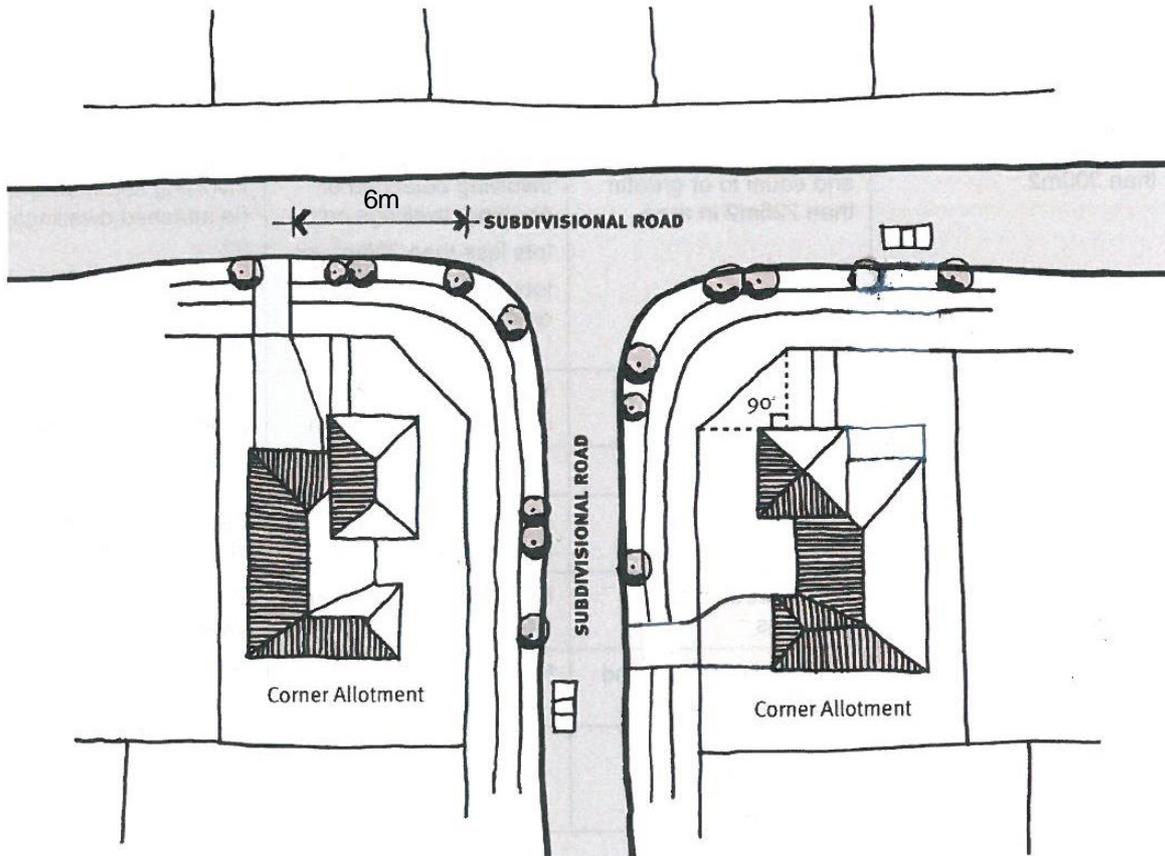


Figure 4-8 Corner lots

## 4.1.5 Environmental Living Lots

### Objectives

- a. To ensure lots created on land zoned E4 Environmental Living are of sufficient dimensions and size to enable residential controls to be met.

### Controls

- 1) Minimum subdivision lot sizes for E4 Environmental Living zoned land are set out in the Growth Centres SEPP map 'Lot Size Map' and include 600m<sup>2</sup>, 1,500m<sup>2</sup>, 2,500m<sup>2</sup>, 10,000m<sup>2</sup> and 20,000m<sup>2</sup>.
- 2) For lots with a minimum subdivision size of 1,500m<sup>2</sup>, a minimum lot width of 20m is required.
- 3) For lots with a minimum subdivision size of 2,500m<sup>2</sup> or greater, a minimum lot width of 30m is required.

## 4.2 Subdivision Approval Process

### Objectives

- a. To facilitate a diversity of housing sizes and products.
- b. To ensure that subdivision and development on smaller lots is undertaken in a coordinated manner.
- c. To ensure that all residential lots achieve an appropriate level of amenity.

### Controls

- 1) The land subdivision approval process is to be consistent with the requirements of **Table 4-4**.
- 2) Subdivision of land creating residential lots less than 225m<sup>2</sup> or lots less than 9m wide shall include a dwelling design as part of the subdivision DA. The dwelling design is to be included on the S88B instrument attached to the lot.

**Table 4-4** Subdivision Approval Process

| Approval pathway                              | DA for Subdivision                           | DA for Subdivision with Building Envelope Plan  | DA for Integrated Housing (Integrated Assessment with subdivision prior to construction of dwellings)                         | DA for Integrated Housing   |
|---|--|---|---|---|
|   | Pathway A1                                   | Pathway A2  | Pathway B1  | Pathway B2  |
| Application                                   | Lots equal to greater than 300m <sup>2</sup> | Lots less than 300m <sup>2</sup> and equal to or greater than 225m <sup>2</sup> in area, and with a width equal to or greater than 9m*. | Dwelling construction involving detached dwellings on: lots less than 225m <sup>2</sup> , or lots with a width less than 9m*. | Dwelling construction involving common walls (i.e. attached dwellings) on: lots less than 225m <sup>2</sup> , or lots with a width less than 9m*. |
| Dwelling plans required                       | As part of future DA or CDC                  | As part of future DA or CDC   | Yes as part of subdivision application  | Yes as part of subdivision application  |
| Dwelling Design 88B restriction required      | No   | Yes   | Yes, only approved dwelling can be built  | Yes, only approved dwelling can be built  |
| Timing of subdivision (release of linen plan) | Pre-construction of dwellings                | Pre-construction of dwellings   | Pre-construction of dwellings   | Post-construction of dwellings  |

\*For minimum lot width refer to **Figure 4-4**

3) Subdivision applications that create lots smaller than 300m<sup>2</sup> and larger than or equal to 225m<sup>2</sup> must be accompanied by a Building Envelope Plan (BEP). An example of a BEP is included at **Figure 4-9**. The BEP should be at a legible scale (suggested 1:500) and include the following elements:

- lot numbers, north point, scale, drawing title and site labels such as street names;
- maximum permissible building envelope (setbacks, storeys, articulation zones);
- preferred principal private open space;
- garage size (single or double) and location; and
- zero lot line boundaries.

A BEP should be fit for purpose and include only those elements that are necessary for that particular lot. Other elements that may be relevant to show include:

- special fencing requirements;
- easements and sewer lines;
- retaining walls;
- preferred entry/frontage (e.g. corner lots);
- access denied frontages;
- electricity kiosks or substations; and
- indicative yield on residue or super lots.

4) Applications for subdivision using approval pathways A2, B1 and B2 require a Public Domain Plan (PDP) to be submitted as part of the application. The purpose of the PDP is to demonstrate how the public domain will be developed as a result of future development on the proposed lots. An example of a PDP is included at **Figure 4-10**.

5) The PDP should be a legible scale (suggested 1:500) and include the following elements:

- lot numbers, north point, scale, drawing title and site labels such as street names;
- indicative building footprints on the residential lots;
- location of driveways and driveway crossovers;
- verge design (footpath, landscape);
- surrounding streets and lanes (kerb line, material surface where special treatments proposed);
- in laneways, indicative provision for bin collection;
- street tree locations (sizes and species list can be provided on a separate plan);
- demonstrated provision and arrangements for on-street car parking particularly in relation to street tree planting, driveways and intersections\*; and
- extent of kerb line where parking is not permitted\*.

\* In principle, not as public domain works

Other elements that may be relevant to show include:

- location and type of any proposed street furniture;
- location of retaining walls in the public domain;
- electricity substations; and
- indicative hydrant locations at lane thresholds.

Information on landscape treatment within the private lot is not required.

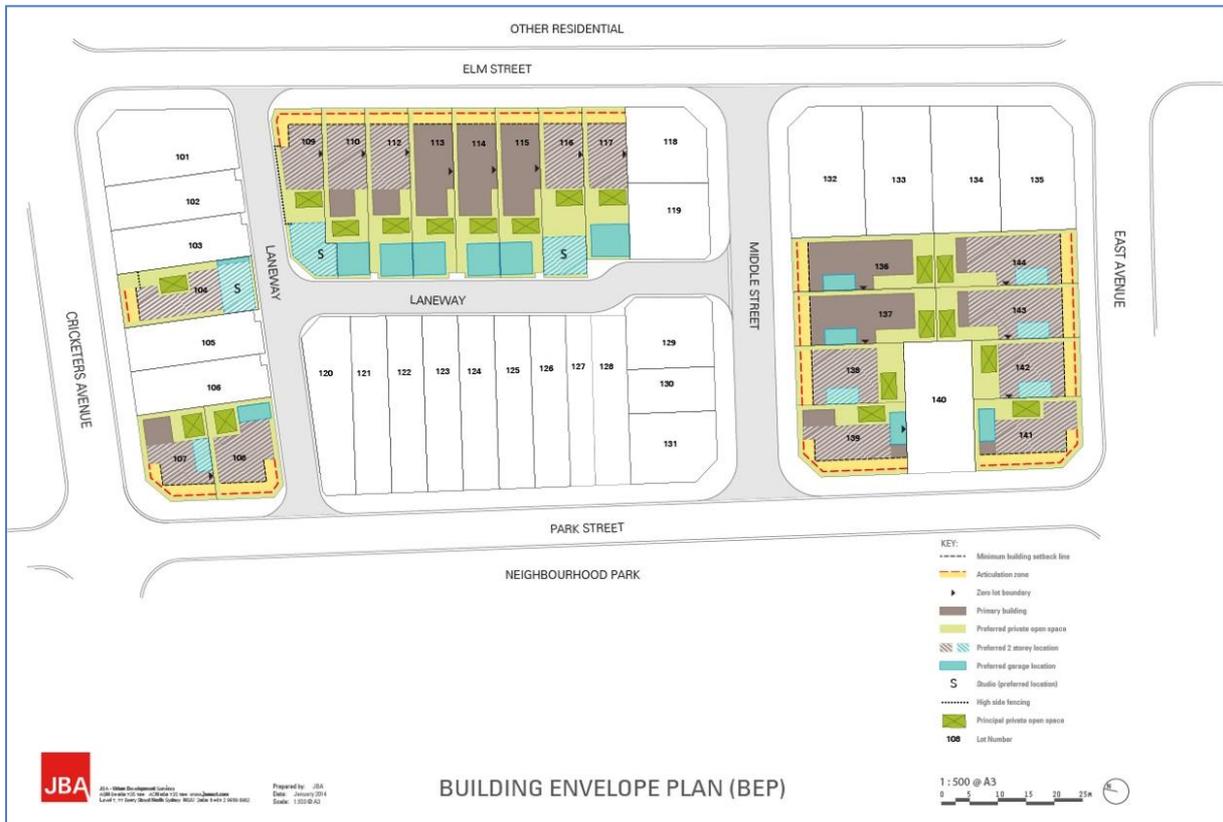


Figure 4-9 Sample of a Building Envelope Plan (BEP)



Figure 4-10 Sample of a Public Domain Plan (PDP)

## 4.3 Construction Environmental Management

### Objectives

- a. To ensure that the construction of subdivisions, new buildings, other structures and works is done in an environmentally responsible manner.

### Controls

- 1) A Construction Environmental Management Plan is to be submitted to Council or the accredited certifier and approved prior to the issue of a construction certification for subdivision works.
- 2) The Construction Environmental Management Plan is to detail the methods of ensuring the protection of the environment during construction, monitoring and reporting on construction activities, and procedures to be followed in the event of an incident that is likely to cause harm to the environment.
- 3) Construction activities are to be undertaken to ensure that water quality, soil stability, trees and vegetation cover, and heritage sites are protected in accordance with the development consent and to maintain the quality of the natural environment.
- 4) Preservation of trees and native vegetation during construction is to be in accordance with the development consent issued for the development, and with the native vegetation and tree preservation provisions of the Vineyard Precinct Plan.

## 4.4 Movement Network

### 4.4.1 Street layout and design

#### Objectives

- a. To establish a hierarchy of interconnected streets that give safe, convenient and clear access within and beyond the Precinct.
- b. To contribute to the creation of an interesting and attractive streetscape.

#### Controls

- 1) Roads are to be provided in accordance with the hierarchy shown on **Figure 4-11**.
- 2) The design of streets, roundabouts and intersections is to be consistent with the relevant typical designs in **Figure 4-12 to Figure 4-18, Table 4-5** and Hawkesbury City Council's *Civil Works Specifications*. Alternative street designs for local streets and access ways may be permitted on a case by case basis if they preserve the functional objectives and requirements of the design standards.
- 3) The locations and alignments of all roads are to be generally in accordance with the locations shown on **Figure 4-11**. Where any variation to the residential street network indicated at **Figure 4-11** is proposed the alternative street network is to be designed to:
  - create a permeable network that is based on a modified grid system;
  - encourage walking and cycling and minimise travel distances;
  - maximise connectivity between residential areas and community facilities, open space and centres;
  - take account of topography and site drainage, and accommodate significant vegetation;
  - optimise solar access opportunities for dwellings;
  - provide frontage to and maximise surveillance of open space and drainage lands;
  - provide views and vistas to landscape features and visual connections to nodal points and centres;

- maximise the effectiveness of water sensitive urban design measures; and
- minimise the use of cul-de-sacs.

Applicants wishing to amend the proposed road pattern are advised to liaise with affected adjoining owners prior to the submission of the DA.

Variation to the residential street network will only be approved by Council where the applicant can demonstrate to Council's satisfaction that the proposal:

- will not detrimentally impact on access to adjoining properties;
  - provides for the management of stormwater to drain to Council's trunk drainage network, without negative impacts on other properties;
  - will not impede the orderly development of adjoining properties in accordance with the Vineyard Precinct Plan and this DCP; and
  - does not restrict the ability to provide water, sewer, electricity and other essential services to adjoining properties.
- 4) Where necessary to ensure that access to residential properties is provided in the early stages of development, Council may consent to the construction and operation of temporary access roads. Temporary access roads are to remain in operation only until such time as the road network has been developed to provide permanent access to all properties.
  - 5) Residential roads, i.e. minor collector roads, local streets, access road/paths shall be designed for and sign posted at a maximum of 50kph (i.e. traffic management must be considered at the DA for subdivision, with road layout, intersection controls and speed reducing devices used to produce a traffic environment which reduces traffic speed).
  - 6) The minimum distance from an access place to a collector road is to be 50m if the junction is on the same side of the road or 40m if staggered on the opposite side of the road. The minimum distance between collector roads is to be 100m if the junction is on the same side or 100m if it is staggered on the opposite side of the road.
  - 7) Where four way intersections are proposed, traffic is to be controlled, where appropriate, by traffic lights, roundabouts, median strips or signage.
  - 8) Any private road is to be designed and built in accordance with Council's *Civil Works Specifications*. Details must be shown on the engineering design plans and must be submitted prior to the issue of the occupation or subdivision certificate (whichever occurs first).
  - 9) Street trees are required for all streets. Street planting is to:
    - use the preferred species listed in **Appendix D**;
    - be consistently used to distinguish between public and private spaces and between different classes of street within the street hierarchy;
    - minimise risk to utilities and services;
    - be durable and suited to the street environment and, wherever appropriate, include endemic species;
    - maintain adequate lines of sight for vehicles and pedestrians, especially around driveways and street corners;
    - provide appropriate shade in summer and solar access in winter; and
    - provide an attractive and interesting landscape character and clearly define public and private areas, without blocking the potential for street surveillance.
  - 10) Signage, street furniture and lighting is to be:
    - designed to reinforce the distinct identity of the development;
    - coordinated in design and style;

- located so as to minimise visual clutter and obstruction of the public domain; and
  - of a colour and construction agreed by Council.
- 11) Locating entry signage and the like within a public road reserve is subject to Council agreement.
  - 12) The location and design of signage and street furniture is to be indicated on the Landscape Plan and on engineering construction drawings.
  - 13) Street lighting is to be designed to meet the current Australian Standards AS/NZS 1158 series. Shared pedestrian and bicycle pathways are to be provided generally in accordance with **Figure 4-18**.

**Table 4-5** Street Types

| Road/<br>Street Type | Description  |
|----------------------|--|
| <b>Collector</b>     | Collector roads collect traffic from local streets and carry a higher volume of traffic, linking neighbourhoods and centres and accommodating public transport routes. Amenity and safety is to be maintained by restricting vehicle speeds through traffic-calming measures and intersection design. Intermittent parking with landscaping is permitted on both sides of the street.<br>Refer to <b>Figure 4-12</b> for a typical collector road cross section.   |
| <b>Local</b>         | Local streets provide local residential access. These streets are designed to slow residential traffic in order to give priority to pedestrians and cyclists. Amenity and safety is to be maintained by introducing various traffic calming measures. On-street parking is permitted on both sides of the street.<br>Refer to <b>Figure 4-13</b> typical access street for a typical local street cross section.   |
| <b>Access</b>        | Access places may be used where: <ul style="list-style-type: none"> <li>• the access place separates residential land from open space or drainage land;</li> <li>• the road is not a through traffic route (ie it provides access only to residences on it);</li> <li>• the maximum number of dwellings serviced by the access place is 10; and</li> <li>• on-street parking is permitted on one side of the street only.</li> </ul> Refer to <b>Figure 4-14</b> for a typical access street cross section.<br><b>Note:</b> Where an access street has frontage to open space or drainage land, the footpath must be constructed as part of the access street. Where the access street is adjacent to a sub-arterial or arterial road, the footpath is not required. |

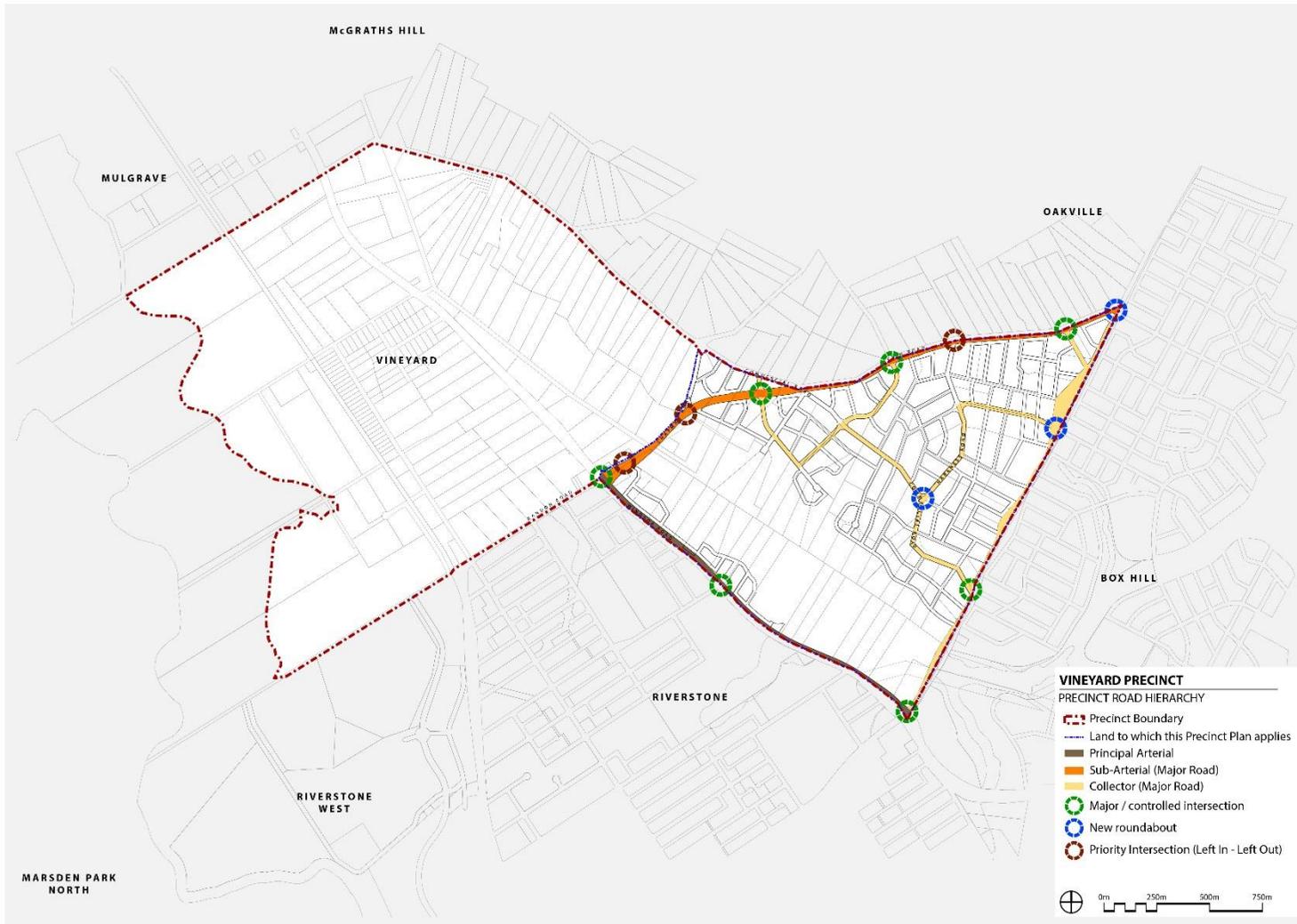
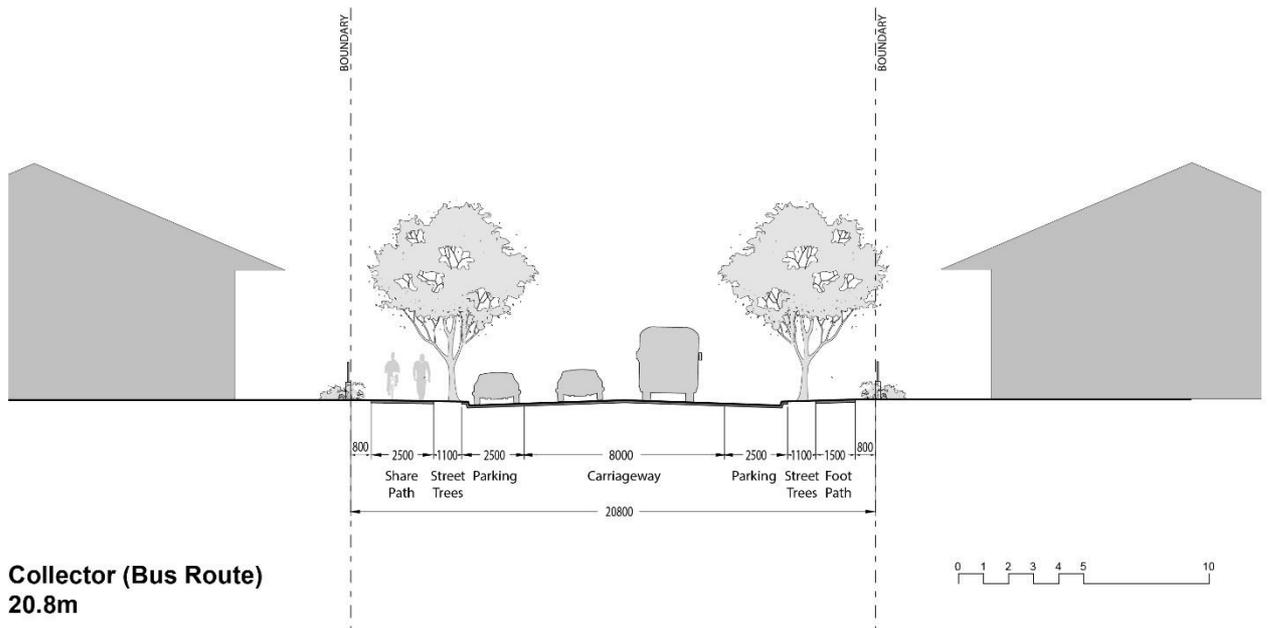
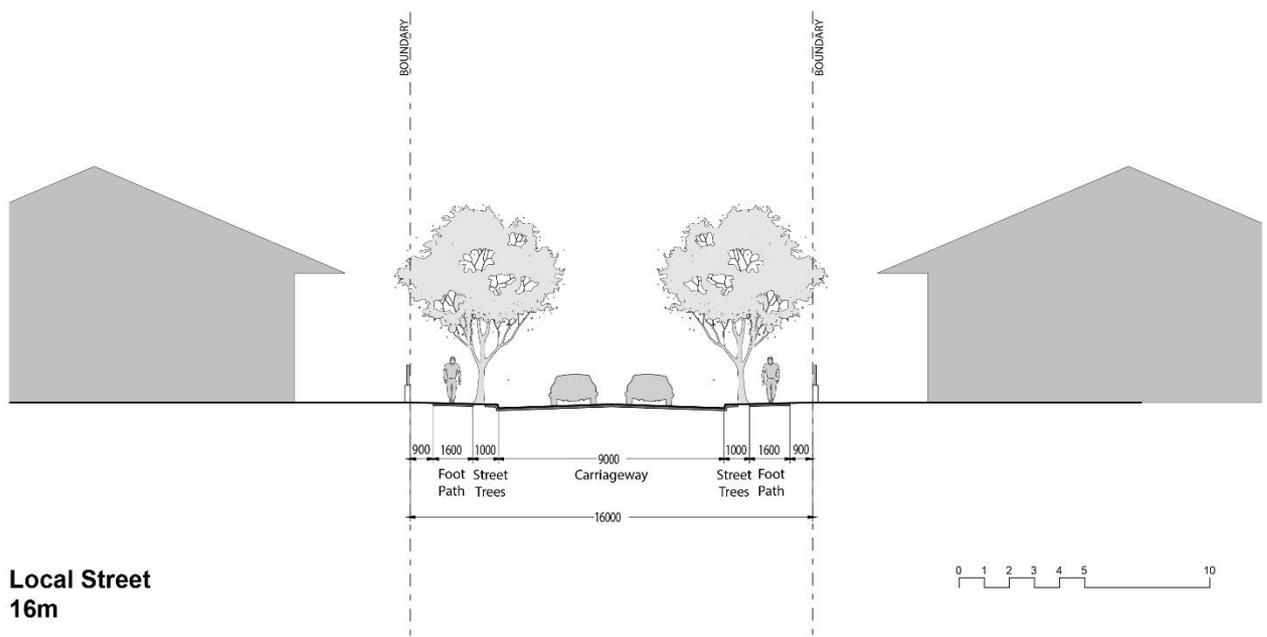


Figure 4-11 Precinct Road Hierarchy



**Figure 4-12** Typical collector road



**Figure 4-13** Typical local street

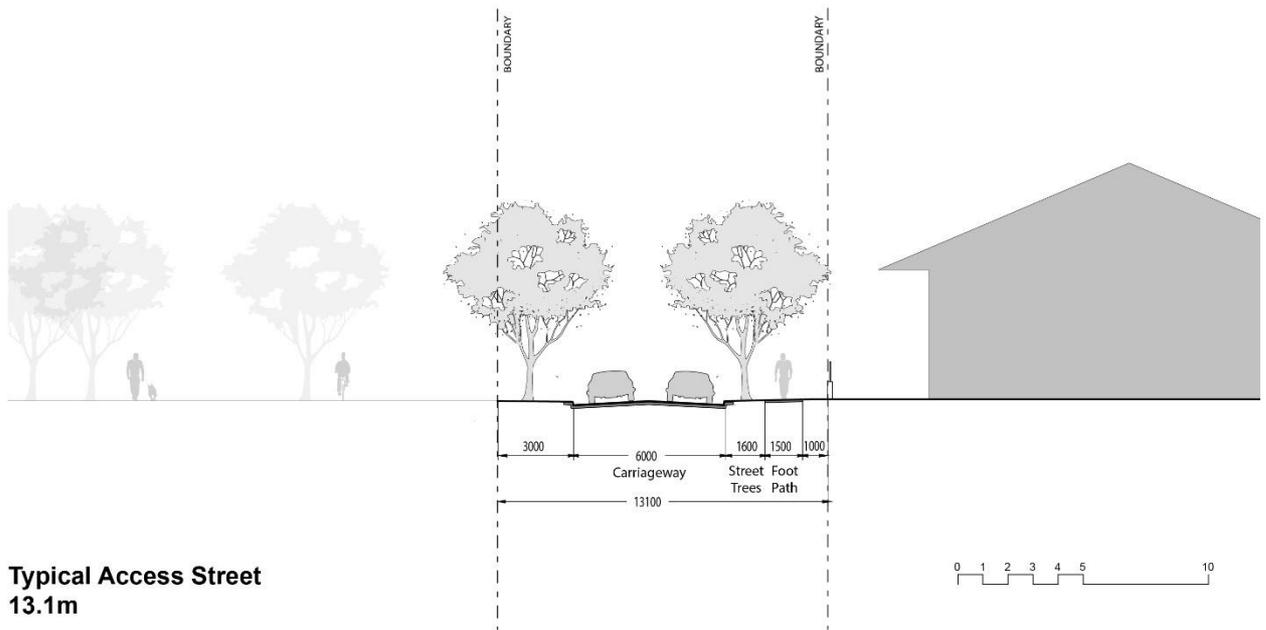


Figure 4-14 Typical access street

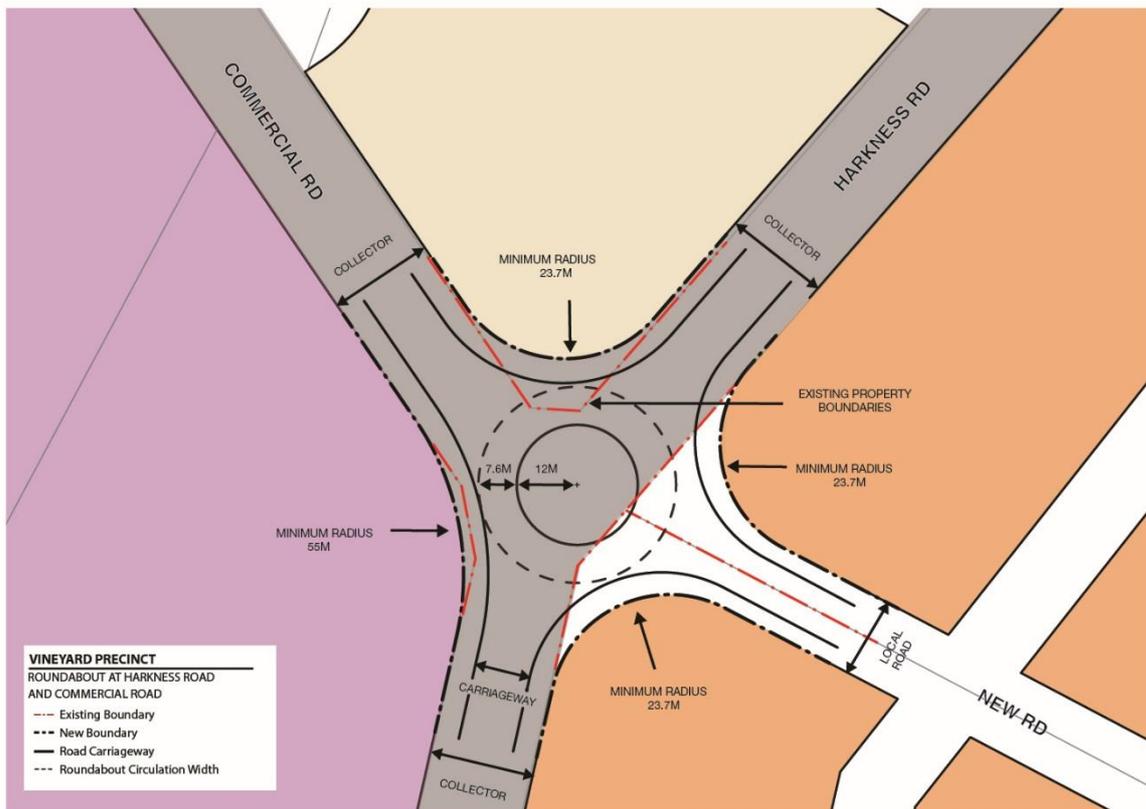
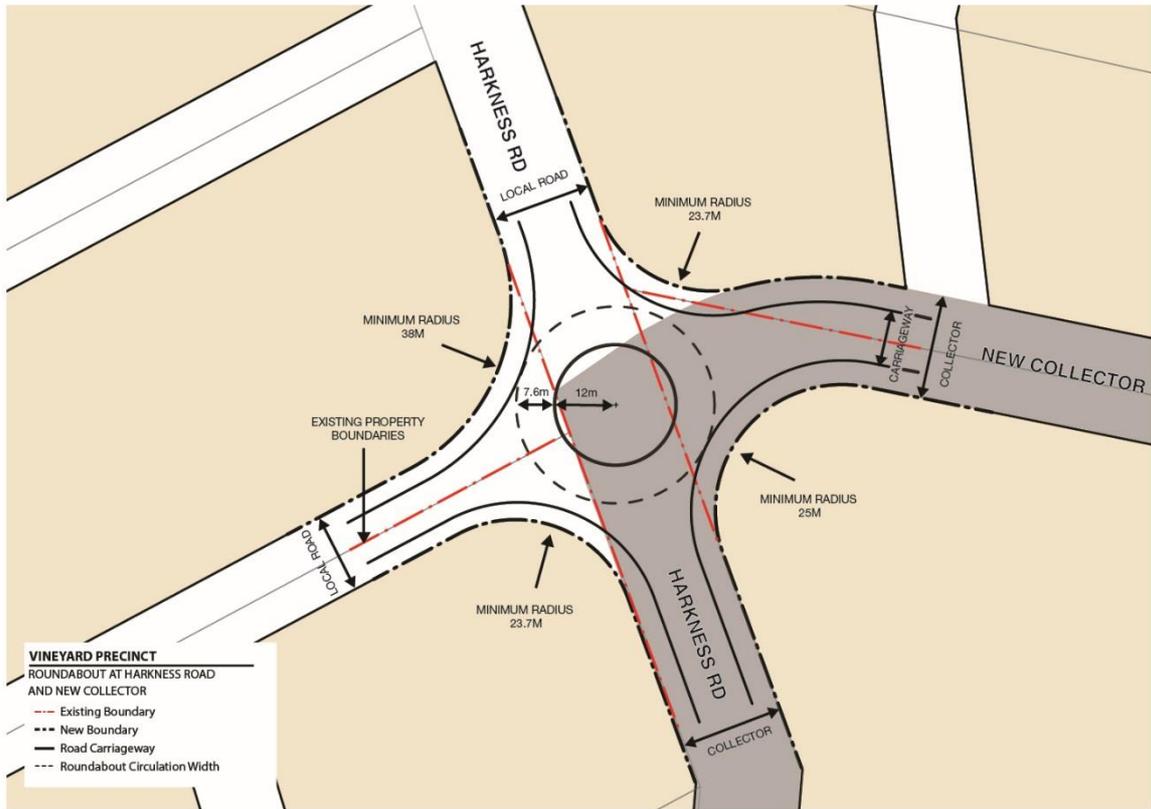
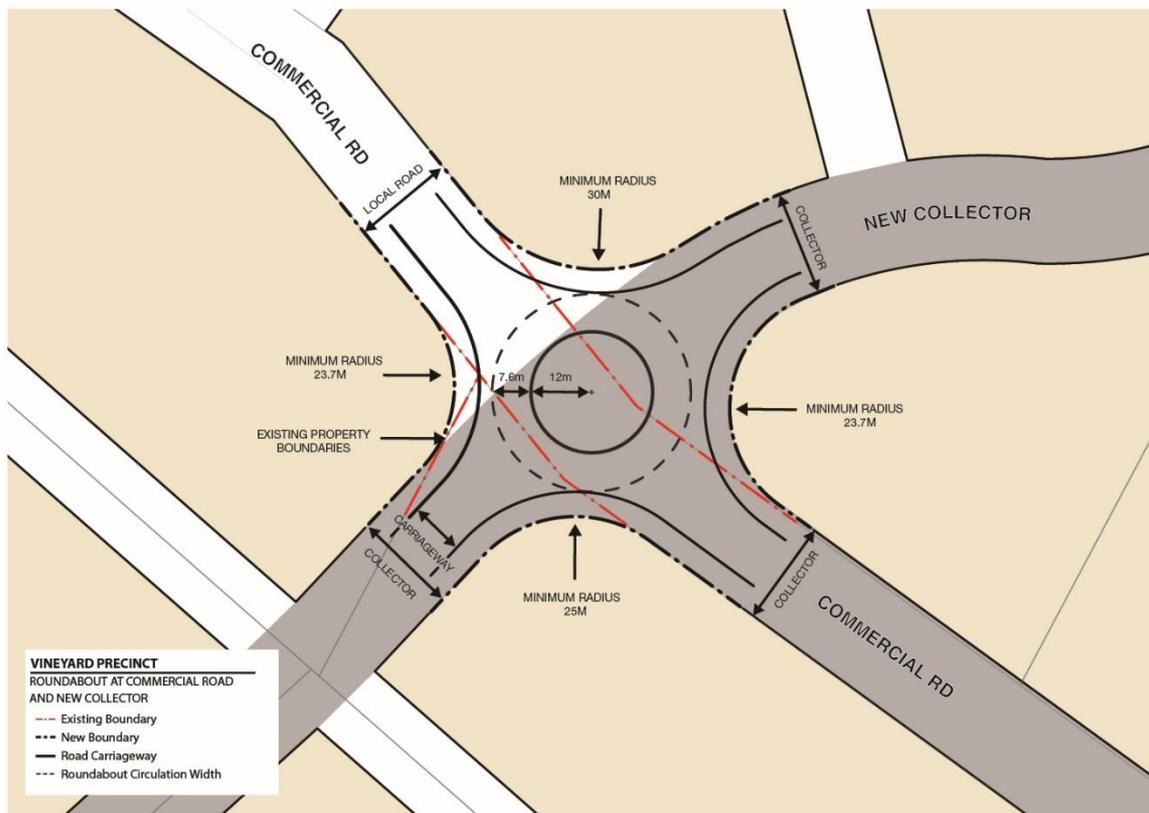


Figure 4-15 Indicative location and design of roundabout at Harkness Road and Commercial Road



**Figure 4-16** Indicative location and design of roundabout at Harkness Road and new collector road



**Figure 4-17** Indicative location and design of roundabout at Commercial Road and new collector road

**Note: Figures 4-15 to 4-17** are indicative only and are subject to further detailed design at DA stage. The detailed design is to consider matters such as vehicle type and speed, roundabout location and geometry, deflection, sight distances and adequacy of road reserve widths.



**Figure 4-18** Indicative location of off road shared pedestrian and bicycle pathways

#### 4.4.2 Laneways

Laneways are public roads that are shareways, utilitarian thoroughways of the street network that provide rear vehicular access to compact or restricted access lots. The primary purpose of rear laneways is to create attractive front residential streets by removing garages and driveway cuts from the street frontages, improving the presentation of houses and maximising on street parking spaces and street trees. Laneways are a ‘sacrificial’ network device: while they should be neat and tidy, they should not be confused with streets in width, character or function.

A laneway is a shareway, designed to be shared by all users whether they are pedestrians, cyclists or drivers. Equal priority between all users reinforces the distinctive, slow speed environment for drivers.

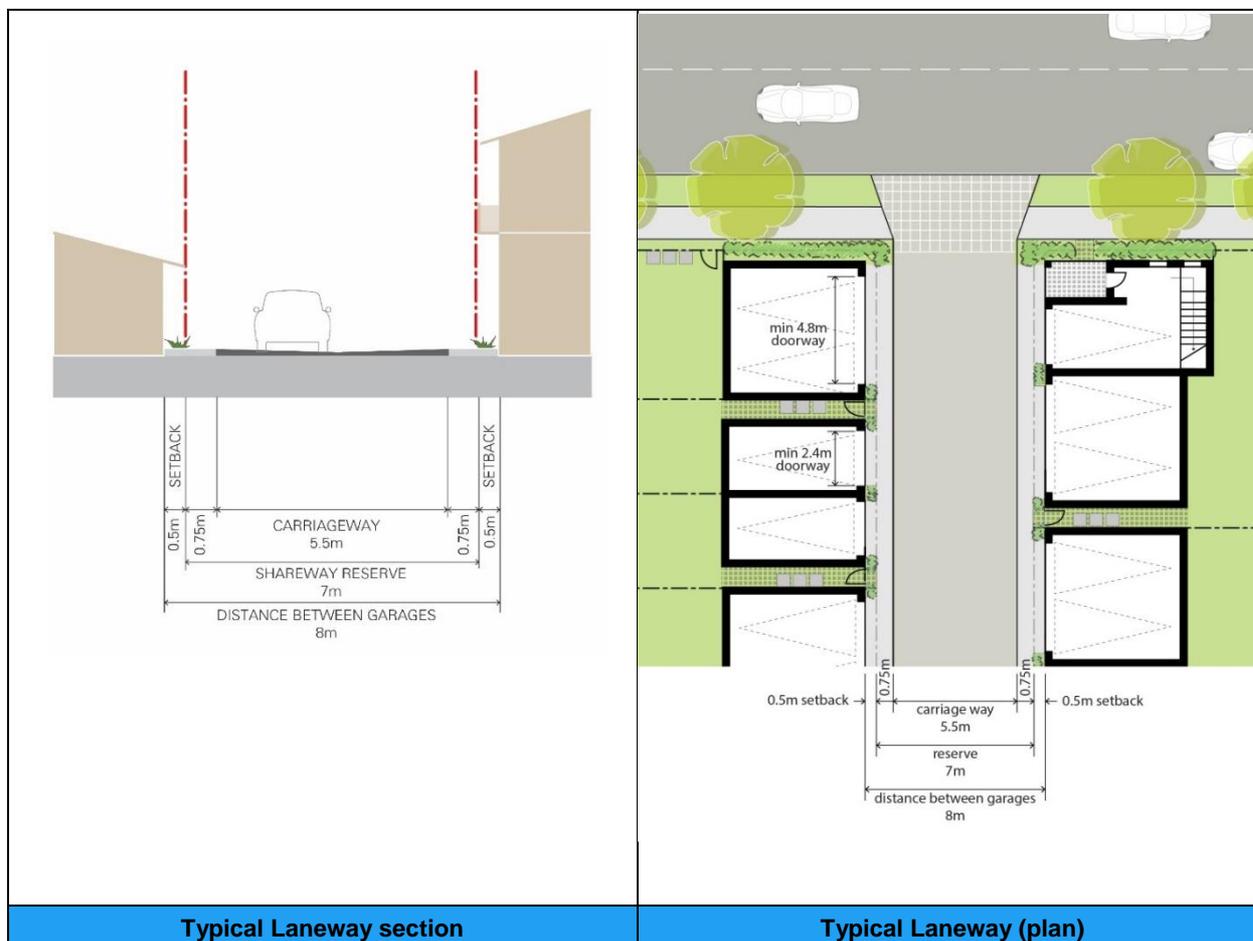
In the design and subdivision of lots, laneways should be provided with casual surveillance from available second floor rooms and balconies over garages. Various building forms can provide this casual surveillance along the lane such as studio dwellings, secondary dwellings and rooms of the principal dwelling or lofts over garages. Separate titling of studio dwellings may affect servicing requirements. Generally there will be no underground services in the laneway (except for streetlights) as the studios will be strata titled so power, water, gas, sewer and communications will be located in the front street and reticulated from the front of the allotment through the lot to the rear studio.

## Objectives

- a. To provide vehicular access to the rear or side of lots where front access is restricted or not possible, particularly narrow lots where front garaging is not permitted.
- b. To reduce garage dominance in residential streets.
- c. To maximise on-street parking spaces and landscaping in residential streets.
- d. To provide opportunities for affordable housing options.
- e. To reduce vehicular conflict through reduced driveway cross overs and focusing of traffic to known points.
- f. To enable garbage collection.
- g. To facilitate the use of attached and narrow lot housing to achieve overall higher neighbourhood densities.
- h. To create a slow speed shared zone requiring co-operative driving practices for the very low volume and frequency of vehicle movements that is distinctly different in character and materials to residential streets.

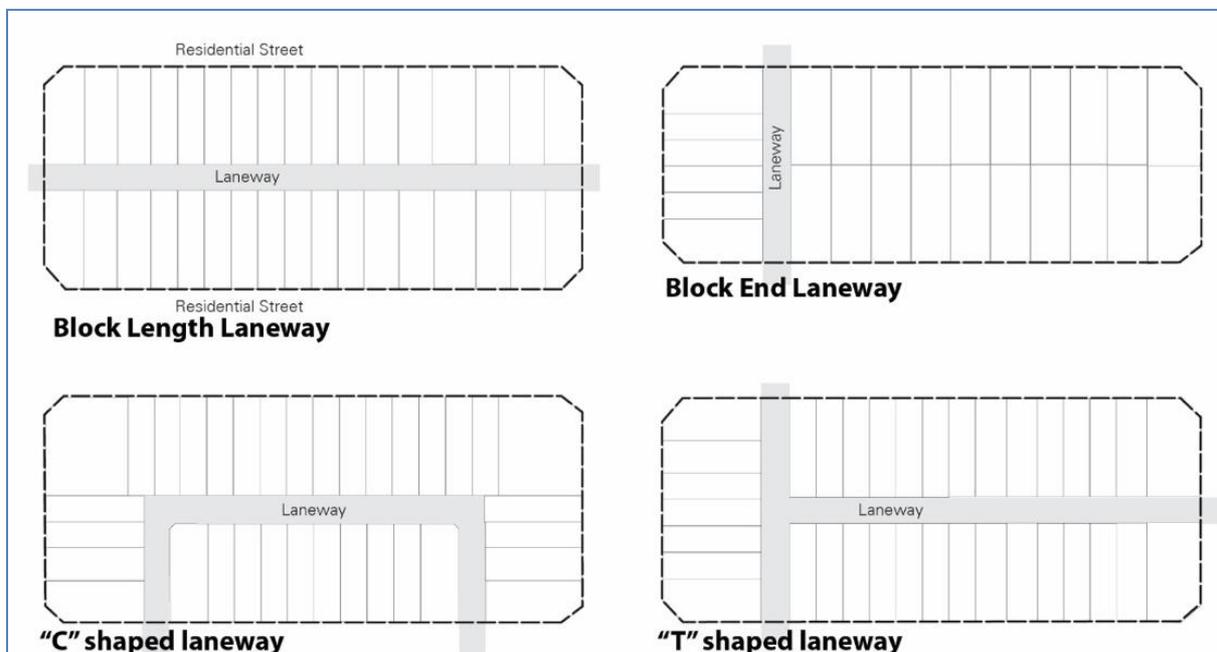
## Controls

- 1) The design and construction of laneways is to be consistent with **Figure 4-19**. Laneways are to be designed in accordance with RMS technical direction *TTD2016/001 Design and Implementation of Shared Zones Including Provision for Parking*.
- 2) The laneway is a public "shareway" as the paved surface is for cyclists, pedestrians, garbage collection, mail deliveries, cars etc., with a 10 km speed limit and driveway-style crossovers to the street rather than a road junction.
- 3) The minimum garage doorway widths for manoeuvrability in this laneway section are 2.4m (single) and 4.8m (double).



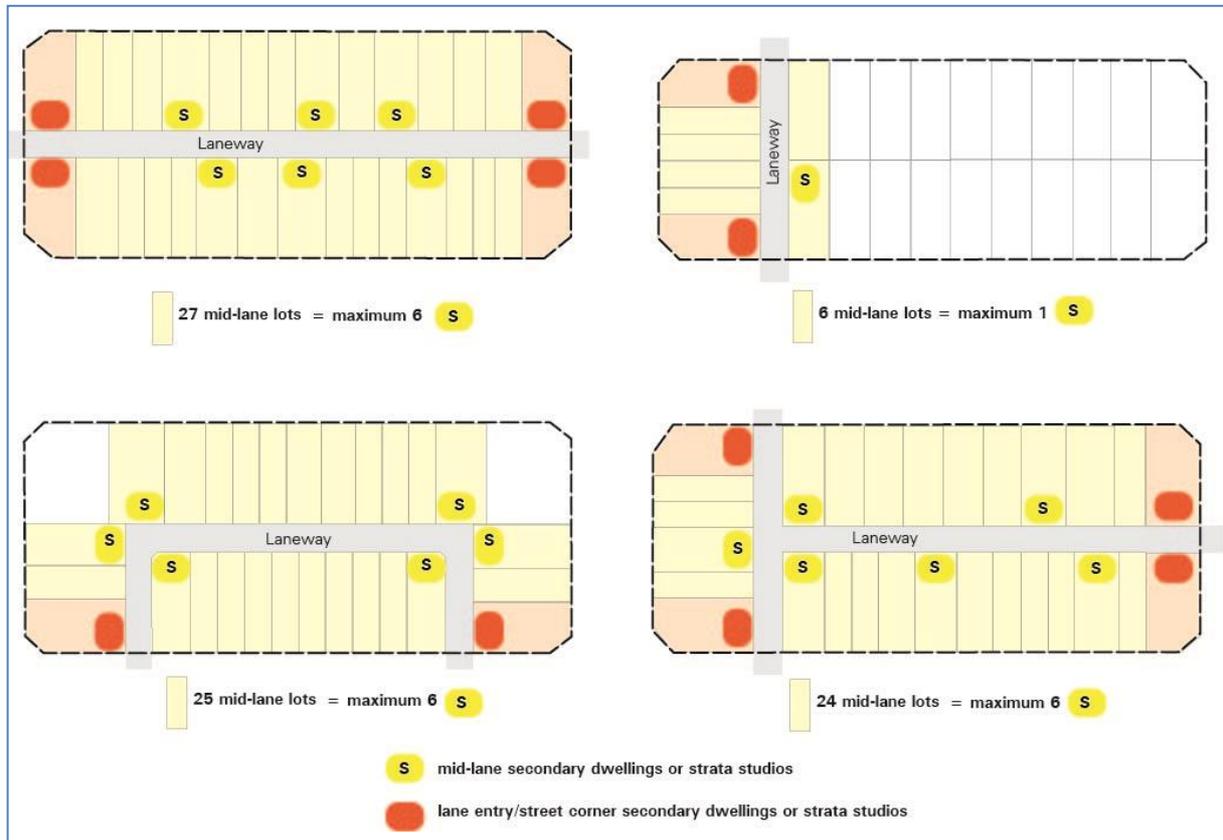
**Figure 4-19** Laneway principles

- 4) The configuration of the laneway, associated subdivision and likely arrangement of garages arising from that subdivision should create ordered, safe and tidy laneways by designing out ambiguous spaces and unintended uses such as casual parking, the storage of trailers, bin stacking etc.
- 5) The layout of laneways should take into account subdivision efficiency, maximising favourable lot orientations, intersection locations with streets, topography, opportunities for affordable housing, legibility and passive surveillance.
  - Generally, straight layouts across the block are preferred for safety and legibility, but the detailed alignment can employ subtle bends or secondary or studio dwellings over garages to add visual interest and avoid long distance monotonous views. "C" shaped layouts with the laneway length parallel to the front street can limit the views of laneways from residential streets to short sections. However, if the laneway is used for garbage collection, any bends or intersections are to be sized for garbage truck movements. Suggested layouts are shown on **Figure 4-20**.
  - Lanes on sloping land with significant longitudinal and/or cross falls require detailed design consideration to demonstrate functionality.



**Figure 4-20** Sample lane layouts

- 6) Laneways that create a 'fronts to backs' layout (front addressed principal dwellings on one side and rear accessed garages on the other side) are to be avoided.
- 7) All lots adjoining a laneway should utilise the laneway for vehicular/garage access.
- 8) Passive surveillance along the laneway from the upper storey rooms or balconies of secondary dwellings, studio dwellings, principal dwelling or lofts over rear garages is encouraged. Ground floor habitable rooms on laneways are to be avoided unless they are located on external corners (laneway with a street) and face the street to take advantage of the residential street for an address, shown in **Figure 4-21** as lane entry/street corner lots.
- 9) **Figure 4-21** indicates mid-lane lots and internal corner locations (lane with another lane) where ground floor habitable rooms in secondary dwellings or strata studios (marked 'S') are to be avoided.
- 10) A continuous run of secondary dwellings or strata studios along the lane is to be avoided, as it changes the character, purpose and function of the lane. No more than 25% of the lots adjoining lanes (excluding street corner lots with studio at the lane entry) are to have secondary dwellings or strata studios. See **Figure 4-21**.



**Figure 4-21** Sample laneways showing maximum number of secondary dwellings or strata studios

- 11) All lot boundaries adjoining the lane are to be defined by fencing or built form. The garage setback to the lane is minimal (0.5m) to allow overhanging eaves or balconies to remain in the lot without creating spaces where people park illegally in front of garages and/or on the laneway. Deeper balconies requiring larger garage setbacks (up to 2m) may be permitted occasionally along the laneway provided the application demonstrates how the setback space will not create an opportunity for illegal parking, such as the presence of a supporting post or bollard.

#### 4.4.3 Shared Driveways

Shared driveways are privately owned and maintained driveways that serve two or more dwellings through a titling arrangement such as a reciprocal right of way or community title. Shared driveways are usually of minimal dimensions for vehicle access to lots with only a single access to the street network. Garbage collection is not a function. Shared driveways are a useful subdivision device for a small number of dwellings with otherwise difficult access or unavoidable block configurations, but are not a substitute in blocks designed with significant numbers of dwellings requiring rear access by laneways.

##### Objectives

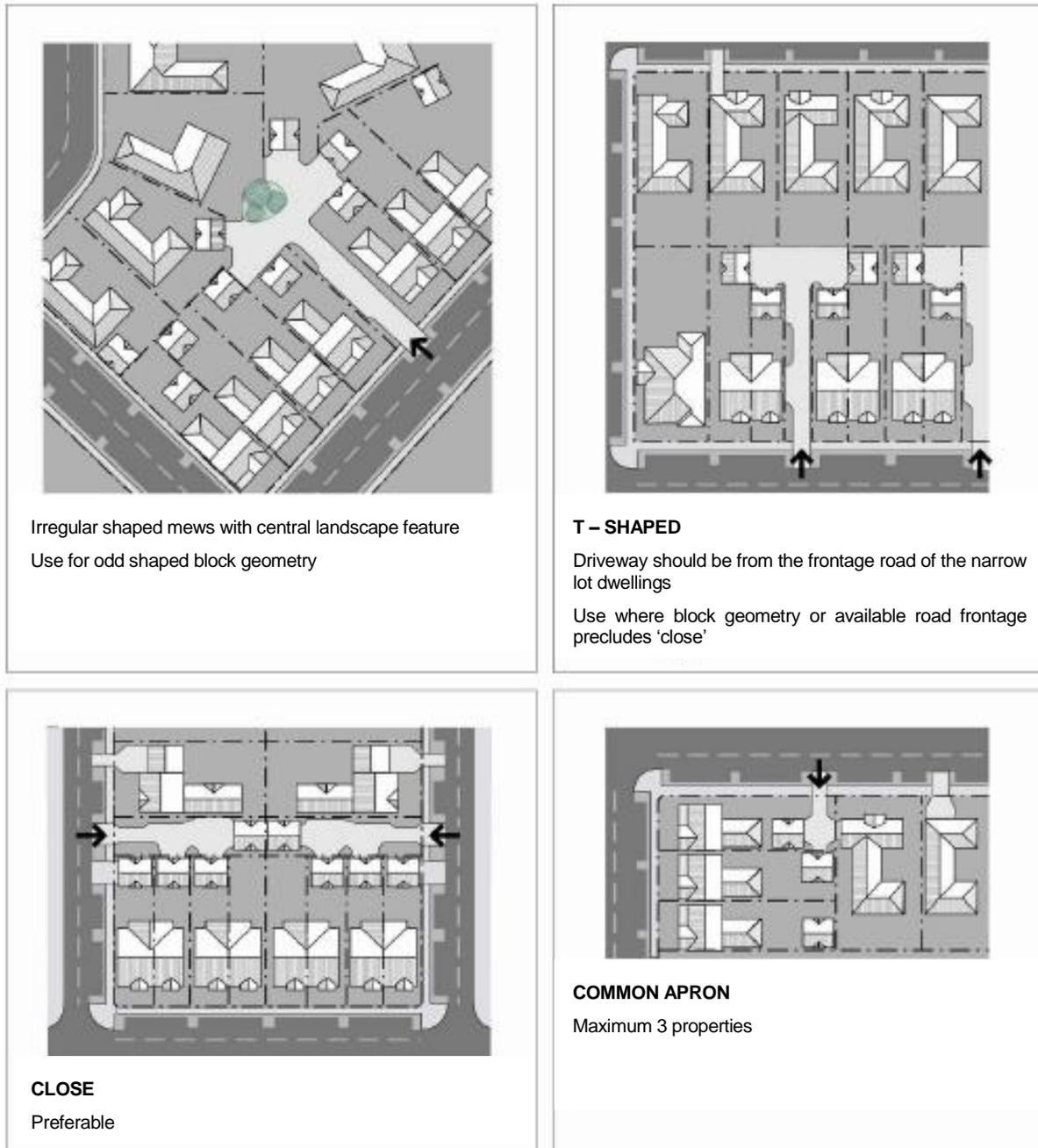
- a. To minimise the impact of vehicle access points on the quality of the public domain and pedestrian safety.
- b. To provide safe and convenient access to garages, carports and parking areas.
- c. To clearly define public and private spaces, such that driveways are for the sole use of residents.
- d. To permit casual surveillance of private driveways from dwellings and from the street.

##### Controls

- 1) Shared driveways are to be constructed as one of four general types, depending on block geometry

and garages to be accessed. Refer to examples in **Figure 4-22**.

- 2) Shared driveways are to have the smallest configuration possible to serve the required parking facilities and vehicle turning movements.
- 3) The driveway crossing the verge between the property boundary and the kerb is to have a maximum width of 5.4 metres.
- 4) The location of driveways is to be determined with regard to dwelling design and orientation, street gully pits and tree bays and is to maximise the available on-street parking.
- 5) The design of subdivisions incorporating shared driveways must ensure that suitable and convenient garbage collection areas on the street are available for each new lot.
- 6) Access to allotments in the vicinity of roundabouts and associated splitter islands shall not be provided within 10m of the roundabout.
- 7) Driveways are not to be within 1m of any drainage facilities on the kerb and gutter.
- 8) Shared driveways are to have soft landscaped areas on either side, suitable for infiltration.



**Figure 4-22** Indicative examples of shared driveways

#### 4.4.4 Access to arterial and sub-arterial roads

##### Objectives

- a. To restrict direct property access to higher order roads to provide for the safe and efficient movement of vehicles on these roads.

##### Controls

- 1) Vehicular access to arterial roads and sub-arterial roads shown on **Figure 4-11** may only be made by way of another road.
- 2) Persons creating allotments adjoining arterial or sub-arterial roads are required to create restrictions on the use of land under Section 88B of the *Conveyancing Act 1919* to legally deny direct vehicular access to allotments from the arterial or sub-arterial road.
- 3) To enable the development of land, such as in situations where access across adjoining properties

is required but not yet able to be provided, Council may allow temporary access to arterial or sub-arterial roads where:

- the development complies with all other development standards;
  - subdivisional roads generally conform with the road pattern shown on the ILP; and
  - Council is satisfied that the carrying out of the development will not compromise traffic safety.
- 4) Where Council grants such consent, the temporary access must be constructed to Council's standards and conditions will be imposed that access to the designated road by way of the temporary access shall cease when alternative access becomes available.
  - 5) Access to the residential land fronting Windsor Road may only occur via the local road network. No new direct access off Windsor Road will be permitted.

**Note:** Approval from the RMS may also be required for any temporary access to a classified road.



***5. Development in the  
Residential and  
Environment  
Protection Zones***

## 5. Development in the Residential and Environment Protection Zones

### 5.1. Dwelling design controls

Under the provisions of the Vineyard Precinct Plan, development consent is generally required for all dwellings in all residential and environment protection zones, except where applications meet the criteria for complying development. This part of the DCP establishes objectives and controls for the following types of residential accommodation as defined in the Growth Centres SEPP:

- dwelling houses;
- semi-detached dwellings;
- attached dwellings;
- multi-dwelling housing;
- dual occupancy dwellings;
- manor homes;
- residential flat buildings;
- secondary dwellings; and
- studio dwellings.

Additional controls for attached dwellings, secondary dwellings, studio dwellings, dual occupancies, multi-dwelling housing, manor homes, residential flat buildings and shop top housing are contained in **Parts 5.2.2, 5.2.3, 5.2.4 and 5.2.5.**

It is acknowledged that innovative dwelling designs are evolving particularly on lots <300m<sup>2</sup>, and design solutions may be developed that meet the objectives but do not comply with the relevant controls. In density bands ≥20dw/Ha, there is the opportunity to vary the dwelling design controls where agreed to as part of an integrated housing DA at subdivision approval.

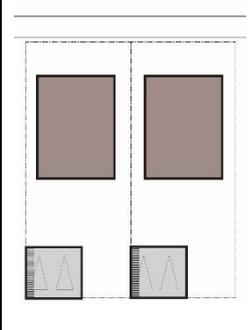
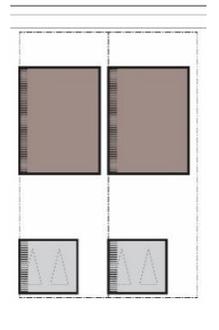
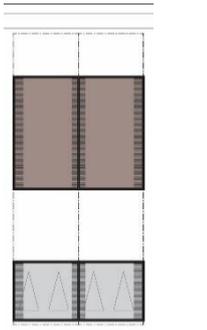
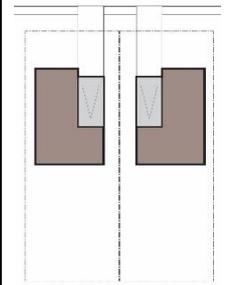
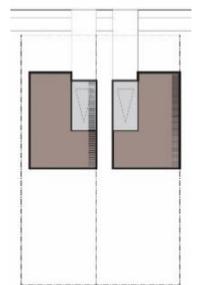
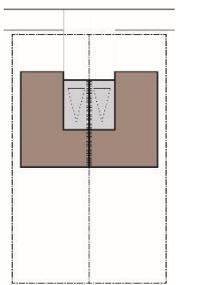
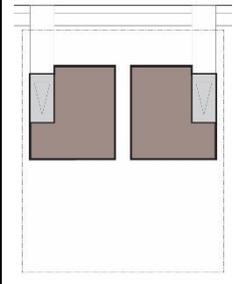
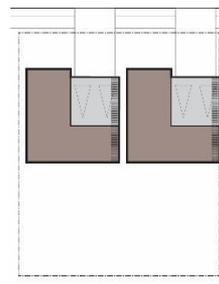
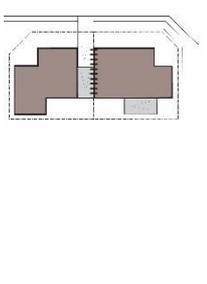
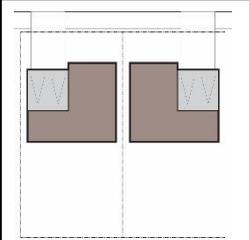
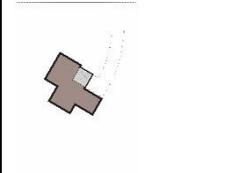
**Note:** Reference should be made to the **Glossary (Appendix A)** for descriptions of the various dwelling types, and to the Vineyard Precinct Plan for statutory definitions of land uses.

#### 5.1.1 Summary of Key Controls

The following **Table 5-1** summarises the types of lots and housing. **Table 5-1** is diagrammatic only and directs readers to the relevant **Table 5-2 to Table 5-6** containing the main development controls.

The key controls should be read in conjunction with the controls in the parts that follow.

**Table 5-1** Summary of lot and dwelling types

| Access       | Lot Width                 | Detached  | Zero lot   | Attached   | Controls Table |
|--------------|---------------------------|---|--|--|----------------|
| Rear access  | ≥4.5m                     |    |   |   | Table 5-2      |
| Front access | 7>9m                      |    |   |   | Table 5-3      |
|              | ≥9≥15m                    |   |  |  | Table 5-4      |
|              | >15m                      |  |  |  | Table 5-5      |
|              | Environmental Living Zone |  |  |  | Table 5-6      |

**Table 5-2** Summary of key controls for lots with frontage width  $\geq 4.5\text{m}$  for rear accessed dwellings

| Element  | Control  |  |
|--|--|--|
| Front setback (minimum)                        | In density range 15-18dw/ha:<br>4.5m to building facade line<br>3.5m to building façade fronting open space<br>3m to articulation zone<br>2m to articulation zone fronting open space  | In density range 20-30dw/ha:<br>3m to building façade line<br>1.5m to articulation zone  |
| Side setback (minimum)                         | Zero Lot or Attached Boundary (benefited lot)<br>Ground floor: 0m<br>Upper floor: 0m   | Detached Boundary: 0.9m.<br>If lot burdened by zero lot boundary, side setback must be within easement:<br>0.9m (single storey zero lot wall)<br>1.2m (double storey zero lot wall)  |
|  | Where a boundary adjoins Public Recreation or Drainage land: 3m  |  |
| Maximum length of zero lot line on boundary    | Attached house:<br>15m upper levels only (excludes rear loaded garages)<br>No limit to ground floor  | Zero lot house:<br>15m (excludes rear loaded garages)  |
| Rear setback (minimum)                         | 0.5m (rear loaded garages to lane)   |  |
| Corner lots secondary street setback (minimum) | 1m   |  |
| Building height, massing and Siting            | In density range 15-18dw/ha:<br>2 storeys maximum (3rd storey subject to Part 5.1.5)   | In density range 20-30dw/ha:<br>3 storeys maximum  |
| Site Coverage                                  | Upper level no more than 40% of lot area   |  |
| Soft landscaped area                           | Minimum 15% of lot area<br>The first 1m of the lot measured from the street boundary (excluding paths) is to be soft landscaped  |  |
| Principal Private Open Space (PPOS)            | In density range 15-18dw/ha:<br>Minimum 16m <sup>2</sup> with a minimum dimension of 3m  | In density range 20-30dw/ha:<br>Minimum 16m <sup>2</sup> with a minimum dimension of 3m<br>10m <sup>2</sup> per dwelling if provided as balcony or rooftop with a minimum dimension of 2.5m  |
| Solar access                                   | In density range 15-18dw/ha:<br>At least 3 hours of sunlight between 9am and 3pm at the winter solstice (21 June) to at least 50% of the required PPOS of both the proposed development and the neighbouring properties  | In density range 20-30dw/ha:<br>At least 3 hours of sunlight between 9am and 3pm at the winter solstice (21 June) to at least 50% of the required PPOS of:<br><ul style="list-style-type: none"> <li>all affected neighbouring properties and</li> <li>at least 70% of the proposed dwellings</li> </ul> |
|  | For alterations and additions to existing dwellings in all density areas, no reduction in the existing solar access to PPOS of the existing neighbouring properties  |  |
| Garages and car parking                        | Rear loaded garage or car space only for lots of this type<br>Minimum garage width 2.4m (single) and 4.8m (double)<br>All parking spaces are to have a minimum depth of 5.5m<br>Maximum garage door width 2.4m (single) and 4.8m (double)<br>1-2 bedroom dwellings will provide at least 1 car space<br>3 bedroom or more dwellings will provide at least 2 car spaces |  |

**Table 5-3** Summary of key controls for lots with frontage width  $\geq 7\text{m}$  and  $< 9\text{m}$  for front accessed dwellings

| Element  | Control  |  |
|--|--|--|
| Front setback (minimum)                        | 4.5m to building facade line<br>3.5m to building façade fronting open space<br>3m to articulation zone<br>2m to articulation zone fronting open space<br>5.5m to garage line and minimum 1m behind the building line   |  |
| Side setback (minimum)                         | Zero Lot or Attached Boundary (benefited lot)<br>Ground floor: 0m<br>Upper floor: 0m   | Detached Boundary: 0.9m.<br>If lot burdened by zero lot boundary, side setback must be within easement:<br>0.9m (single storey zero lot wall)<br>1.2m (double storey zero lot wall)  |
|  | Where a boundary adjoins Public Recreation or Drainage land: 3m  |  |
| Maximum length of zero lot line on boundary    | 15m  |  |
| Rear setback (minimum)                         | 4m (ground level) and 6m (upper levels)  |  |
| Corner lots secondary street setback (minimum) | 1m   |  |
| Building height, massing and siting            | In density range 15-18dw/ha:<br>2 storeys maximum (3rd storey subject to Part 5.1.5)   | In density range 20-30dw/ha:<br>3 storeys maximum  |
| Site Coverage                                  | Upper level no more than 50% of lot area   |  |
| Soft landscaped area                           | Minimum 15% of lot area<br>The first 1m of the lot measured from the street boundary (excluding paths) is to be soft landscaped  |  |
| Principal Private Open Space (PPOS)            | In density range 15-18dw/ha:<br>Minimum 16m <sup>2</sup> with a minimum dimension of 3m  | In density range 20-30dw/ha:<br>Minimum 16m <sup>2</sup> with a minimum dimension of 3m<br>10m <sup>2</sup> per dwelling if provided as balcony or rooftop with a minimum dimension of 2.5m  |
| Solar access                                   | In density range 15-18dw/ha:<br>At least 3 hours of sunlight between 9am and 3pm at the winter solstice (21 June) to 50% of the required PPOS of both the proposed development and the neighbouring properties   | In density range 20-30dw/ha:<br>At least 3 hours of sunlight between 9am and 3pm at the winter solstice (21 June) to at least 50% of the required PPOS of:<br><ul style="list-style-type: none"> <li>all affected neighbouring properties and</li> <li>at least 70% of the proposed dwellings</li> </ul> |
|  | For alterations and additions to existing dwellings in all density areas, no reduction in the existing solar access to PPOS of the existing neighbouring properties  |  |
| Garages and car parking                        | Single width garage or car space only<br>Minimum garage internal width 3m<br>Minimum garage internal depth 5.5m<br>Maximum garage door width not to exceed 3m<br>The garage must be less than 40% of the total area of the front façade<br>1-2 bedroom dwellings will provide at least 1 car space<br>3 bedroom or more dwellings will provide at least 2 car spaces |  |
| Layout   | Driveway locations must be paired to preserve on-street parking spaces in front of lots<br>In density range 15-18dw/ha, total lot frontage of this lot type is not to exceed 20% of the block length due to garage dominance and on-street parking impacts   |  |

**Table 5-4** Summary of key controls for lots with frontage width  $\geq 9\text{m}$  and  $\leq 15\text{m}$  for front accessed dwellings

| Element  | Control  |  |
|--|--|--|
| Front setback (minimum)                        | 4.5m to building facade line<br>3.5m to building façade fronting open space or drainage land<br>3m to articulation zone<br>2m to articulation zone fronting open space or drainage land<br>5.5m to garage line and 1m behind the building line               |  |
| Side setback (minimum)                         | Detached boundary:<br>Ground Floor: 0.9m<br>Upper Floor: 0.9m  | Lots with a zero lot boundary:<br>Ground Floor: 0m (Side A), 0.9m (Side B)<br>Upper Floor: 1.5m (Side A), 0.9m (Side B)  |
|  | Where a boundary adjoins Public Recreation or Drainage land: 3m  |  |
| Length of zero lot line on boundary            | 11m  |  |
| Rear setback (minimum)                         | 4m (ground level) and 6m (upper levels)  |  |
| Corner lots secondary street setback (minimum) | 2m   |  |
| Building height, massing and Siting            | 2 storeys maximum (3rd storey subject to Part 5.1.5)   |  |
| Site coverage                                  | Single storey dwellings: 60%<br>Lot $\leq 375\text{sqm}$ , upper level no more than 40% of lot area<br>Lot $> 375\text{sqm}$ , upper level no more than 35% of lot area  |  |
| Landscaped area                                | Minimum 25% of allotment area  |  |
| Principal Private Open space (PPOS)            | Minimum 20m <sup>2</sup> with a minimum dimension of 4m<br>50% of the area of the required PPOS (of both the proposed development and adjoining properties) should receive at least 3 hours of sunlight between 9am and 3pm at the winter solstice (21 June) |  |
| Garages and car parking                        | Lots $\geq 9\text{m}$ and $< 12.5\text{m}$ : <ul style="list-style-type: none"> <li>where front accessed, single width garages only</li> <li>rear lane or side street accessed single or double garage width permitted</li> </ul>                            | Lots $\geq 12.5\text{m}$ and $\leq 15\text{m}$ : <ul style="list-style-type: none"> <li>front or rear accessed single, tandem or double garages permitted</li> <li>triple garages are not permitted</li> </ul> |
|  | Minimum garage internal width 3m (single) and 6m (double)<br>Minimum garage internal depth 5.5m per car space<br>Maximum carport and garage door width not to exceed 3m (single) and 4.8m (double).  |  |
|  | 1-2 bedroom dwellings will provide at least 1 car space<br>3 bedroom or more dwellings will provide at least 2 car spaces  |  |

**Table 5-5** Summary of key controls for lots with frontage width > 15m for front accessed dwellings

| Element  | Control   |
|--|---|
| Front setback (minimum)                        | 4.5m to building facade line<br>3.5m to building façade fronting open space or drainage land<br>3m to articulation zone<br>2m to articulation zone fronting open space or drainage<br>5.5m to garage line and 1m behind the building line   |
| Side setback (minimum)                         | Ground Floor: 0.9m (Side A), 0.9m (Side B)<br>Upper Floor: 0.9m (Side A), 1.5m (Side B)<br>Where a boundary adjoins Public Recreation or Drainage land: 3m  |
| Rear setback (minimum)                         | 4m (ground level) and 6m (upper levels)   |
| Corner lots secondary street setback (minimum) | 2m  |
| Building height, massing and Siting            | 2 storeys (3rd storey subject to Part 5.1.5)  |
| Site coverage                                  | Single storey dwellings: 50%<br>Two storey dwellings: 50% at ground floor and 30% at upper floor  |
| Landscaped area                                | Minimum 30% of the allotment area   |
| Principal Private Open Space (PPOS)            | Minimum 24m <sup>2</sup> with a minimum dimension of 4m<br>50% of the area of the required principal private open space (of both the proposed development and adjoining properties) should receive at least 3 hours of sunlight between 9am and 3pm at the winter solstice (21 June)  |
| Garages and car parking                        | Front or rear loaded double and tandem garages permitted<br>Minimum garage internal width 3m (single) and 6m (double)<br>Minimum garage internal depth 5.5m per car space<br>Maximum garage door width not to exceed 3m (single) and 6m (double)<br>Triple garages are not permitted<br>1-2 bedroom dwellings will provide at least 1 car space<br>3 bedroom or more dwellings will provide at least 2 car spaces |

**Table 5-6** Summary of key controls for lots in the Environmental Living Zone

| Element  | Control   |
|--|---|
| Front setback (minimum)                        | 4.5m to building facade line<br>Façade articulation is to be behind the front setback<br>Garage setback 1m behind the building façade line  |
| Side setback (minimum)                         | Ground Floor: 1.5m<br>Upper Floor: 1.5m (Side A), 3m (Side B)<br>Where a boundary adjoins Public Recreation or Drainage land: 4.5m  |
| Rear setback (minimum)                         | 10m   |
| Corner lots secondary street setback (minimum) | 4.5m  |
| Building height, massing and Siting            | 2 storeys (3rd storey subject to Part 5.1.5)  |
| Site coverage                                  | Single storey dwellings: 35%<br>Two (or more) storey dwellings: 25% ground floor and 15% upper floors   |
| Landscaped area                                | Single storey dwellings: Minimum 55% of the allotment area<br>Two or more storey dwellings: Minimum 60% of the allotment area   |
| Principal Private Open Space (PPOS)            | Minimum 24m <sup>2</sup> with a minimum dimension of 4m<br>50% of the area of the required principal private open space (of both the proposed development and adjoining properties) should receive at least 3 hours of sunlight between 9am and 3pm at the winter solstice (21 June)  |
| Garages and car parking                        | Front or rear loaded double and tandem garages permitted<br>Minimum garage internal width 3m (single) and 6m (double)<br>Minimum garage internal depth 5.5m per car space<br>Maximum garage door width not to exceed 3m (single) and 6m (double) where garages front a public road<br>Triple garages permitted where at least one garage door is not visible from the street or where the total width of the garages is less than 50% of the total width of the building façade<br>1-2 bedroom dwellings will provide at least 1 car space<br>3 bedroom or more dwellings will provide at least 2 car spaces. |

### 5.1.2 Streetscape and architectural design

Growth Centres neighbourhoods will be composed of a variety of streets with different but equally appealing characters and built form intensity. In low density areas, suburban streetscapes will be most common but there will also be some streets with a more urban village character. In higher density areas, urban village streets will be more common but there will also be some suburban streetscapes. The objective is to avoid a monoculture of the one type of street which is neither a successful suburban or urban street.

**Figure 5-1** illustrates how the designed combination of built form, lot size, setbacks, garaging and landscaping can create distinctive streetscape characters ranging from the low intensity ‘garden suburban’ character based on landscaped private space around buildings to the built form intensity and public landscapes of urban streets.



**Garden Suburban**



**Suburban**



**Urban**

**Figure 5-1** The combination of built form, lot size, garaging and landscaping creates different streetscapes

## Objectives

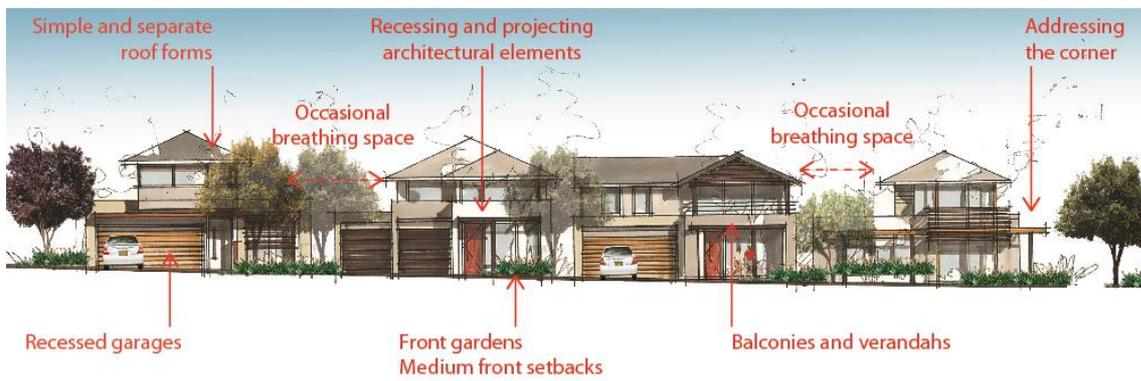
- a. To ensure that buildings are designed to enhance the built form and character of the neighbourhood by encouraging innovative and quality designs that contribute to unified streetscapes.
- b. To encourage a diversity of housing types.
- c. To provide a clear distinction between private and public space and to encourage casual surveillance of the street.
- d. To reinforce significant street intersections particularly on open space and other key strategic areas through articulation of corner buildings.

## Controls

- 1) The primary street facade of a dwelling should address the street and must incorporate at least two of the following design features:
  - entry feature or porch
  - awnings or other features over windows
  - balcony treatment to any first floor element
  - recessing or projecting architectural elements
  - open verandah
  - bay windows or similar features
  - verandahs, pergolas or similar features above garage doors.
- 2) Corner lot development should emphasise the corner. The secondary street facade for a dwelling on a corner lot should address the street and must incorporate at least two of the above design features. Landscaping in the front setback on the main street frontage should also continue around into the secondary setback.
- 3) Modulation of the façade should be integral to the design of the building, rather than an unrelated attached element.
- 4) Eaves are to provide sun shading and protect windows and doors and provide aesthetic interest. Except for walls built to the boundary, eaves should have a minimum of 450mm overhang (measured to the fascia board). Council will consider alternative solutions to eaves so long as appropriate sun shading is provided to windows and display a high level of architectural merit.
- 5) The pitch of hipped and gable roof forms on the main dwelling house should be between 22.5 degrees and 35 degrees. Skillion roofs, roofs hidden from view by parapet walls, roofs on detached garages, studios and ancillary buildings on the allotment are excluded from this control.
- 6) Light coloured roofs are encouraged to reduce heat build-up within dwellings and urban heat island effects.
- 7) Front facades are to feature at least one habitable room with a window onto the street.
- 8) Carports and garages are to be constructed of materials that complement the colour and finishes of the main dwelling.
- 9) Streets should be fronted with similar housing types to create a consistent street character. For example, a 'garden suburban' street character will be created where most dwellings are detached on lot widths  $\geq 15\text{m}$ , perhaps with deeper lots allowing for larger front setbacks and generous landscaping around dwellings. A suburban street character will be created where most dwellings are front loaded, detached or zero lotted on lot widths between 9-15m. An urban street character will be created where most dwellings are zero lotted, attached on lot widths less than 9m with rear garages. Streetscape design principles are illustrated at **Figure 5-2**.



**Garden Suburban streetscape principles**



**Suburban streetscape principles**



**Urban streetscape principles**

**Figure 5-2** Streetscape design principles

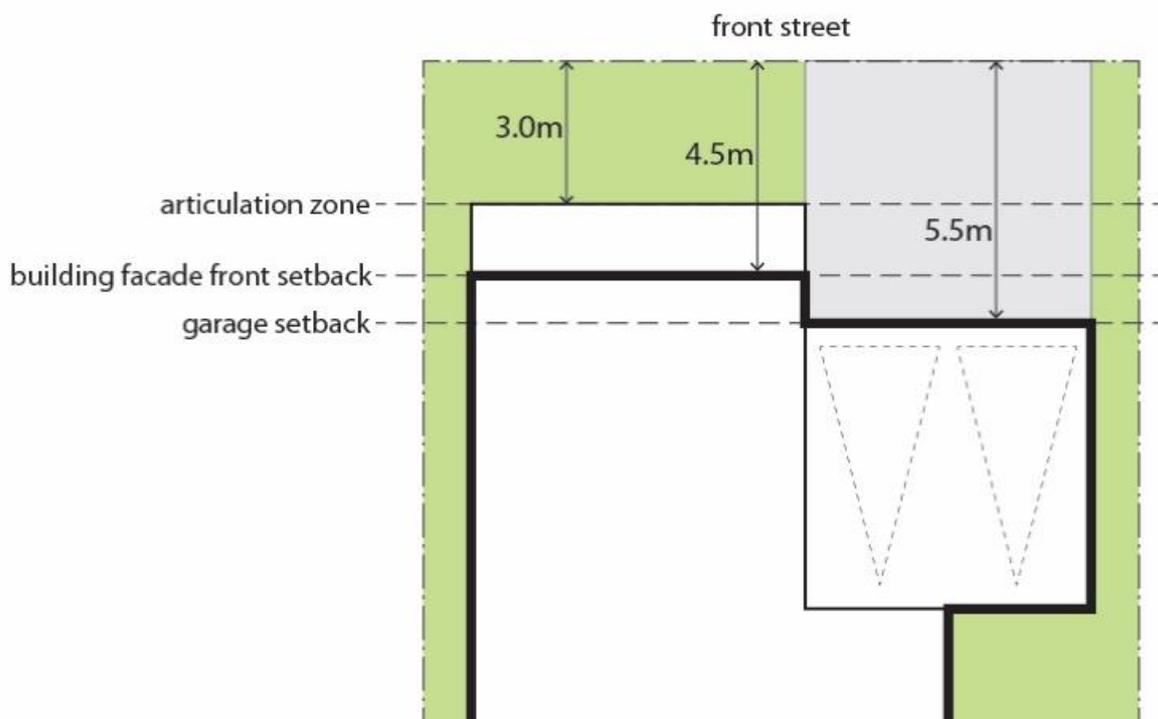
### 5.1.3 Front setbacks

#### Objectives

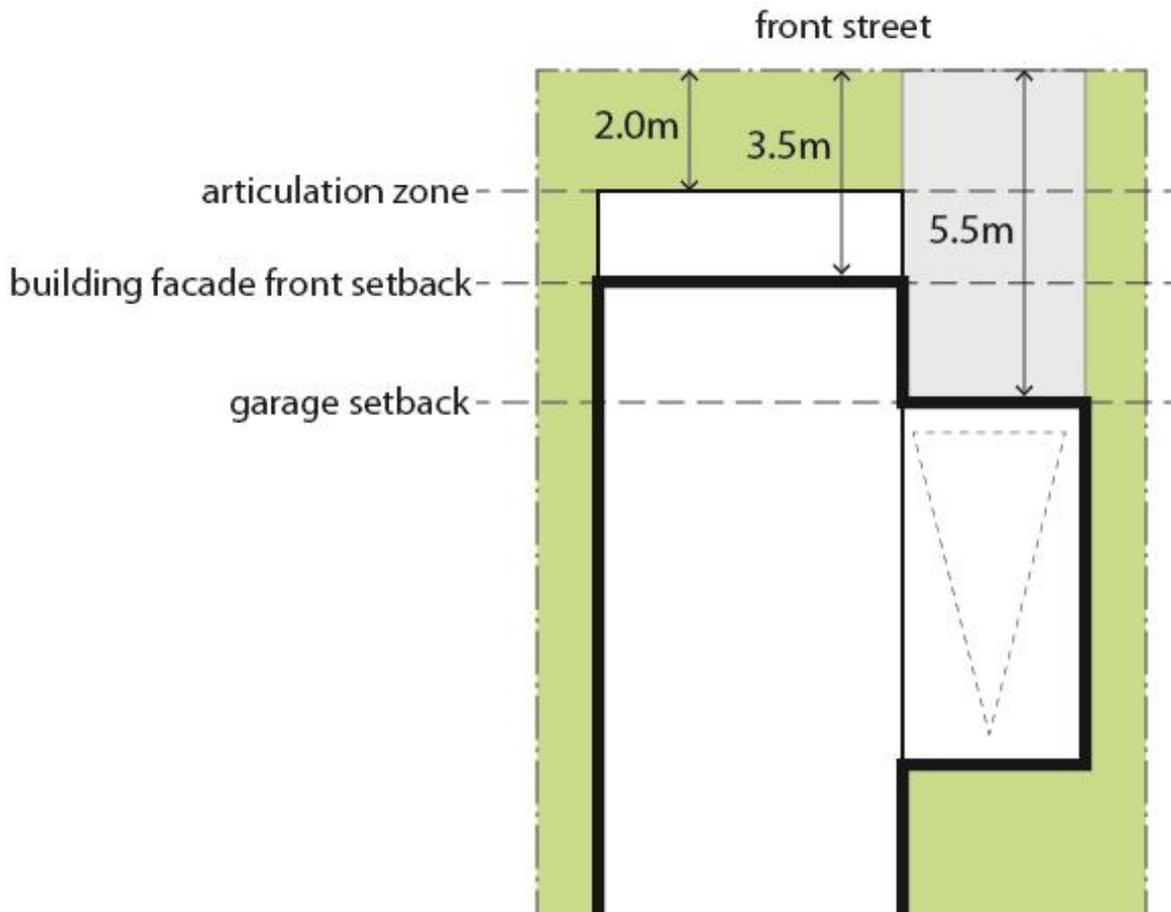
- a. To enable the integration of built and landscape elements to create an attractive, visually consistent streetscape.
- b. To encourage simple and articulated building forms.
- c. To ensure garages do not dominate the streetscape.

#### Controls

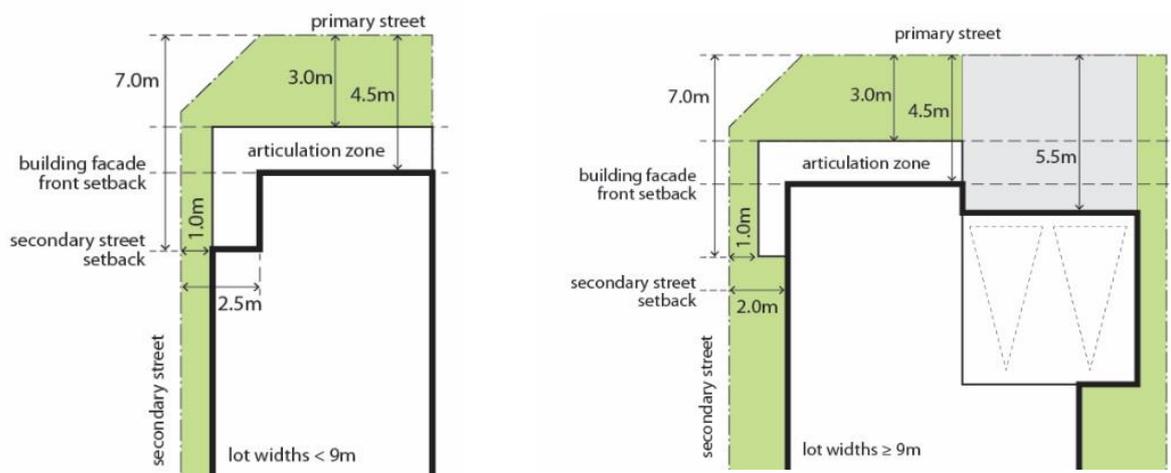
- 1) Dwellings are to be consistent with the front setback controls and principles in **Table 5-2 to Table 5-6** and **Figure 5-3** and **Figure 5-4**.
- 2) On corner lots, front setback controls are to be consistent with **Figure 5-5**.
- 3) To achieve a desired streetscape character, the building façade front setback for a series of lots can be more or less than the setbacks shown in **Table 5-2 to Table 5-6** where agreed to as part of the preparation of a Building Envelopes Plan or integrated housing DA at subdivision approval and the front setbacks are attached to the lot titles. However, the front setback to garages must be a minimum of 5.5m.
- 4) Elements permitted in the articulation zone (shown on **Figure 5-3 to Figure 5-6**) include those items listed in control 5.1.2 (1).
- 5) Except for rear loaded garages, the garage line is to have a front set back that is at least 1m behind the building front facade line.



**Figure 5-3** Minimum front setback distances



**Figure 5-4** Minimum front setbacks for dwellings fronting open space or drainage land



**Figure 5-5** Minimum setbacks for corner lot dwellings

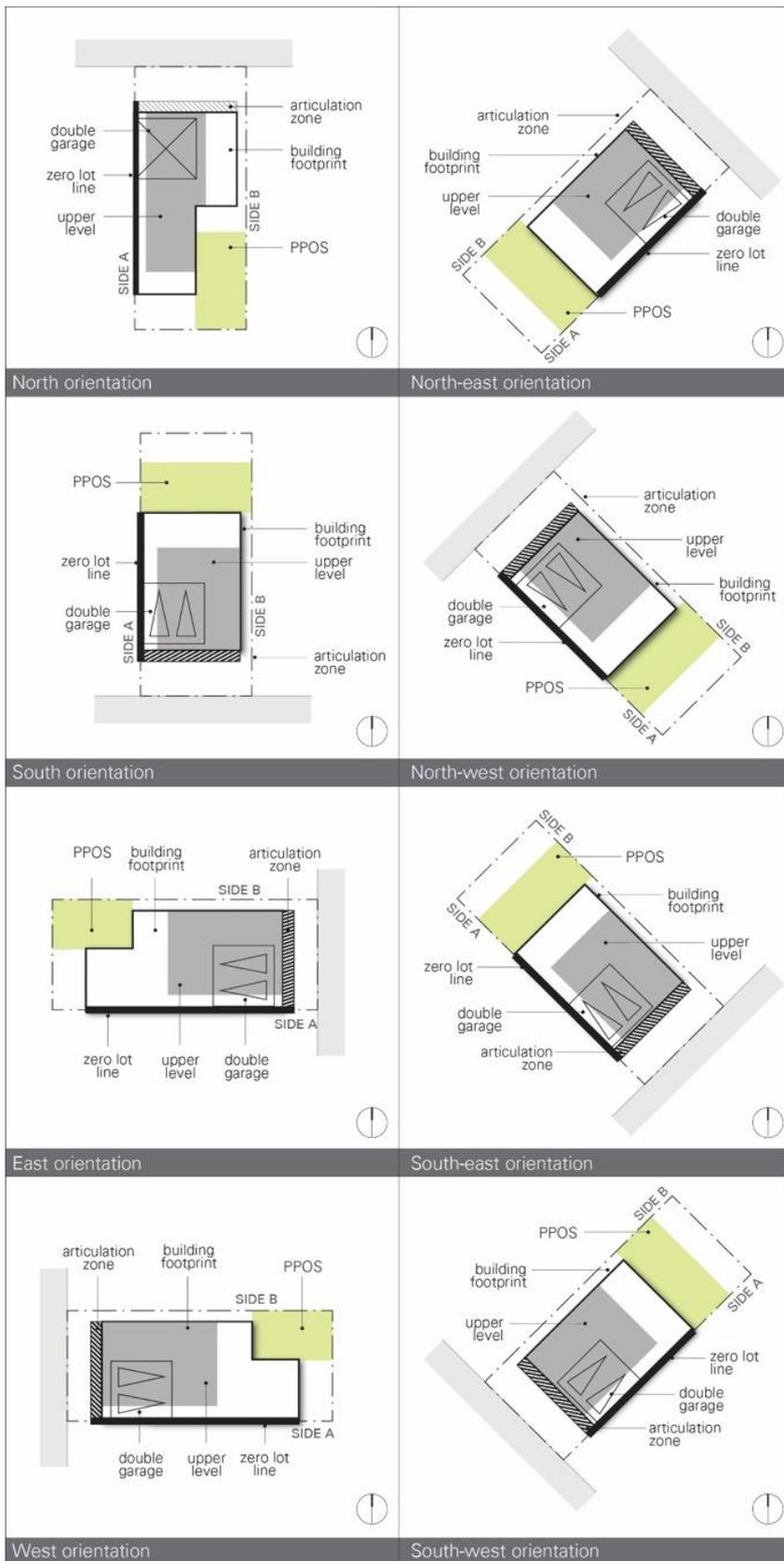
## 5.1.4 Side and rear setbacks

### Objectives

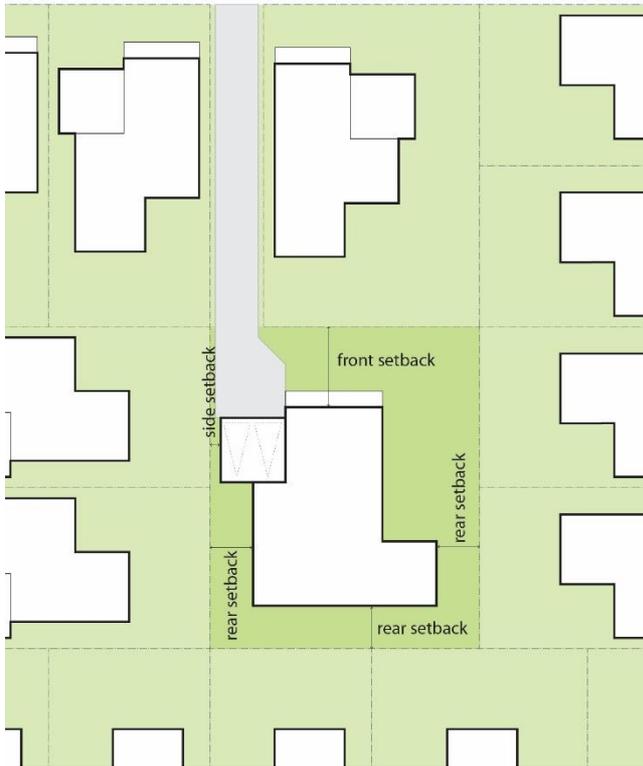
- a. To create an attractive and cohesive streetscape that responds to the character areas.
- b. To minimise the impacts of development on neighbouring properties.
- c. To provide appropriate separation between buildings.
- d. To create opportunities for articulation on the side walls.

### Controls

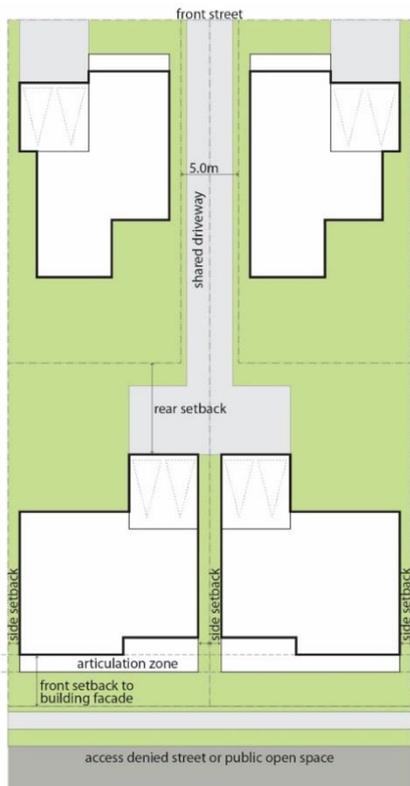
- 1) All development is to be consistent with the side and rear setback controls in the relevant **Table 5-2** to **Table 5-6**.
- 2) The location of a zero lot line (Side A) is to be determined primarily by topography and should be on the low side of the lot to minimise water penetration and termite issues. Other factors to consider include dwelling design, adjoining dwellings, landscape features, street trees, vehicle crossovers and the lot orientation as illustrated at **Figure 5-6**.
- 3) For attached or semi-detached dwellings the side setback only applies to the end of a row of attached housing, or the detached side of a semi-detached house.
- 4) Pergolas, swimming pools and other landscape features/structures are permitted to encroach into the rear setback.
- 5) For dwellings with a minimum 900mm side setback, projections permitted into the side setback areas include eaves (up to 450 mm wide), fascias, sun hoods, gutters, down pipes, flues, light fittings, electricity or gas meters, rainwater tanks and hot water units.
- 6) No overhanging eaves, gutters or services (including rainwater tanks, hot water units, air-conditioning units or the like) of the dwelling on the benefited lot will be permitted within any easement. Any services and projections permitted under by control 5.1.4 (5) (above) within the easement to the burdened lot dwelling should not impede the ability for maintenance to be undertaken to the benefitted lot.
- 7) For battle-axe lots without a street facing elevation setbacks are to be determined in the context of surrounding lots, built form and the location of private open space. An example is shown in **Figure 5-7**.
- 8) The upper floor of dwellings on battle-axe lots must be setback so as not to impact adversely on the existing or future amenity of any adjoining land on which residential development is permitted, having regard to overshadowing, visual impact and privacy.
- 9) For a battle-axe lot with direct frontage to land zoned for a public purpose or a street facing elevation (such as access denied lots), the front setback controls in **Part 5.1.3** are to apply to the lot boundary adjoining the public purpose zone, and side and rear setbacks are to apply to lot boundaries determined relative to the front setback boundary as shown in **Figure 5-8**.
- 10) For corner lots >15m lot width with shallow depths (i.e. approximately square corner lots) the rear setback can be varied to be consistent with the side setbacks in **Table 5-5** and **Table 5-6** provided the minimum private open space and solar access requirements to the proposed and adjoining properties are met.



**Figure 5-6** Dwelling and open space siting principles for different lot orientations



**Figure 5-7** Battle axe lot without any street frontage setbacks



**Figure 5-8** Battle axe lot fronting access denied road setbacks

### 5.1.5 Dwelling Height, Massing and Siting

#### Objectives

- a. To ensure development is of a scale appropriate to protect residential amenity.
- b. To ensure building heights achieve built form outcomes that reinforce quality urban and building design.

#### Controls

- 1) Dwellings are to be generally a maximum of 2 storeys in height. Council may permit a 3rd storey if it is satisfied that:
  - the dwelling is located on a prominent street corner; or
  - the dwelling is located adjacent to a neighbourhood or local centre, public recreation or drainage land, a golf course, or a riparian protection area; or
  - the dwelling is located on land with a finished ground level slope equal to or more than 15%, and is not likely to impact adversely on the existing or future amenity of any adjoining land on which residential development is permitted, having regard to overshadowing, visual impact and any impact on privacy; or
  - the third storey is within the roof line of the building (i.e. an attic).

**Note:** Reference should be made to clause 4.3 of the Vineyard Precinct Plan under the Growth Centres SEPP for statutory height limits.

- 2) All development is to comply with the maximum site coverage as indicated in the relevant **Table 5-2 to Table 5-6**.
- 3) The ground floor level shall be no more than 1m above finished ground level.
- 4) Dwellings on a battle-axe-lot without public open space or street frontage are to be a maximum of 2 storeys in height.

### 5.1.6 Landscaped Area

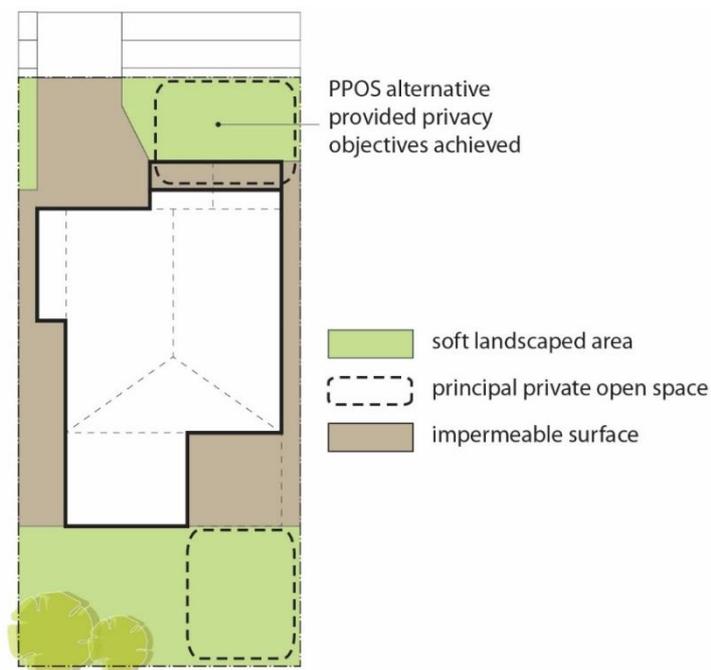
#### Objectives

- a. To encourage the use of native flora species and low maintenance landscaping.
- b. To contribute to effective stormwater management, management of micro-climate impacts and energy efficiency.
- c. To ensure a balance between built and landscaped elements in residential areas.
- d. To create the desired street character.

#### Controls

- 1) The minimum soft landscaped area within any residential lot is to comply with the controls and principles in the relevant **Table 5-2 to Table 5-6**. **Figure 5-9** illustrates areas of a lot that can contribute towards the provision of soft landscaped area and principal private open space.
- 2) A concept landscape plan must be submitted with the DA, and must indicate the extent of landscaped area and nominate the location, species, number and size of any trees or vegetation to be retained or planted.
- 3) Surface water drainage shall be provided as necessary to prevent the accumulation of water.
- 4) Use of low flow watering devices is encouraged to avoid over watering. Low water demand drought resistant vegetation is to be used for the majority of landscaping, including native salt tolerant trees.
- 5) The selection of trees and other landscaping plants is to consider:
  - the preferred species listed in **Appendix D** to this DCP;

- the use of indigenous species of local provenance for at least 50% of the landscaping; and
- the contribution to the management of soil salinity, groundwater levels and soil erosion.



**Figure 5-9** Soft landscaped area and principal private open space

### 5.1.7 Private Open Space

#### Objectives

- To provide a high level of residential amenity with opportunities for outdoor recreation and relaxation.
- To enhance the spatial quality, outlook, and usability of private open space.
- To facilitate solar access to the living areas and private open spaces of the dwelling.

#### Controls

- Each dwelling is to be provided with an area of Principal Private Open Space (PPOS) consistent with the requirements of the relevant **Table 5-2** to **Table 5-6**.
- The location of PPOS is to be determined having regard to dwelling design, allotment orientation, adjoining dwellings, landscape features and topography.
- The PPOS is required to be conveniently accessible from the main living area of a dwelling or alfresco room and have a maximum gradient of 1:10. Where part or all of the PPOS is permitted as a semi-private patio, balcony or rooftop area, it must be directly accessible from a living area.
- Open space at the front of the dwelling can only be defined as PPOS where this is the only means of achieving the solar access requirements of **Table 5-2** to **Table 5-6**. PPOS at the front of a dwelling must be designed to maintain appropriate privacy (for example raised level above footpath or fencing or hedging) and be consistent with the streetscape design controls in **Part 5.1.2**.

## 5.1.8 Garages, Site Access and Parking

### Objectives

- a. To control the number, dimensions and location of vehicle access points. To reduce the visual impact of garages, carports, and parking areas on the streetscape.
- b. To provide safe, secure and convenient access to parking within garages, carports and parking areas, with casual surveillance of private driveways from dwellings and from the street.
- c. To minimise conflict between pedestrians and vehicles at the junction of driveways and footpaths.
- d. To provide predominantly on-site parking for residents.

### Controls

- 1) Dwellings with 1-2 bedroom will provide at least one car space.
- 2) Dwellings with 3 bedrooms or more will provide at least two car spaces.
- 3) At least one car parking space must be located behind the building façade line where the car parking space is accessed from the street on the front property boundary.

**Note:** A car space may include a garage, carport or other hard stand area constructed of materials suitable for car parking and access. The required car parking spaces specified above may be provided using a combination of these facilities, including use of the driveway (within the property boundary only) as a parking space.

- 4) Driveways are to have the smallest configuration a practical (particularly within the road verge) to serve the required parking facilities and vehicle turning movements and shall comply with AS2890.
- 5) The location of driveways is to be determined with regard to dwelling design and orientation, street gully pits and trees and is to maximise the availability of on-street parking.
- 6) Car parking and vehicle manoeuvring areas for all forms of residential development on battle axe lots and/or lots accessed from collector roads are to be designed so that vehicles can enter and exit in a forward direction.

**Note:** Part 4.2 requires plans of subdivision to nominate driveway locations and preferred building envelopes. The design of dwellings should refer to the approved subdivision plans and be consistent with the nominated driveway locations to the greatest practical extent.

- 7) Controls for driveways and access to corner lots are contained in **Part 4.1.4**.
- 8) Driveways are not to be within 1m of any drainage facilities on the kerb and gutter.
- 9) Planting, fencing and walls adjacent to driveways must not block lines of sight for pedestrians, cyclists and motorists.
- 10) Driveways are to have a soft landscaped area on the low side a minimum of 1m wide, suitable for water infiltration.
- 11) Garages are to be designed and located in accordance with the controls in relevant **Table 5-2** to **Table 5-6**.
- 12) Garage design and materials are to be consistent with the dwelling design.

### For front loaded garages:

- 13) Garage doors are to be visually recessive through use of materials, colours, and overhangs such as second storey balconies.
- 14) Three car garages are only permitted in the Environmental Living zone where:
  - at least one of the garage doors is not directly visible from a public road; or
  - one of the car spaces is in a stacked configuration; or
  - the total width the garage is not more than 50% of the length of the building facade.

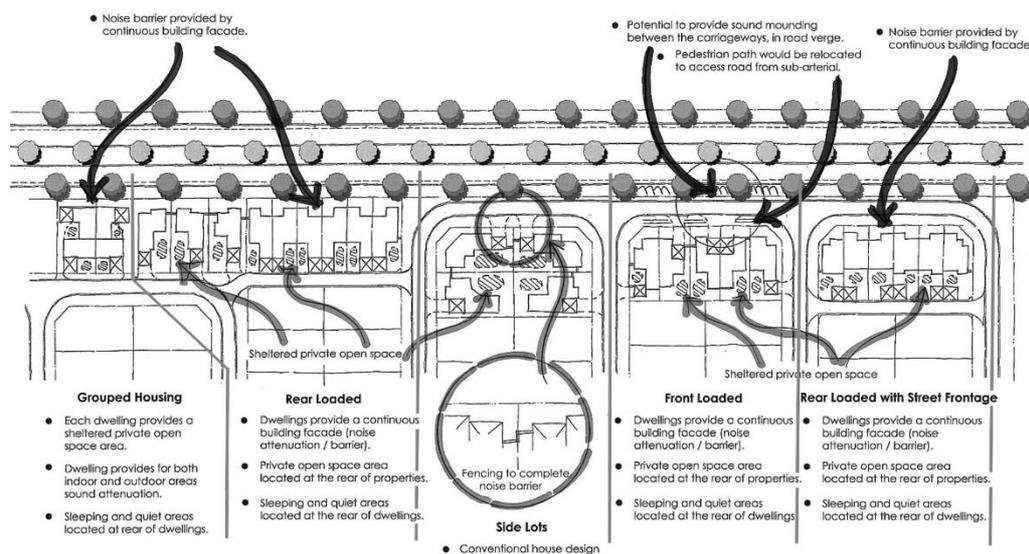
## 5.1.9 Visual and acoustic privacy

### Objectives

- a. To site and design dwellings to provide for visual and acoustic privacy and minimise the visual and acoustic impacts of development on adjoining properties.
- b. To minimise the impact of noise from other non-residential uses such as parking and sport areas, restaurants and cafes and waste collection and goods deliveries.

### Controls

- 1) **Figure 5-10** provides guidance to applicants on measures to mitigate the impacts of rail and traffic noise within the Precinct.



**Figure 5-10** Measures to attenuate noise

- 2) DAs will require an accompanying acoustic report where proposed development is:
  - adjacent to a railway line, arterial or sub-arterial roads
  - potentially impacted upon by a nearby industrial / employment use or area
  - a subdivision or noise sensitive development within 300m of Windsor Road
  - within the vicinity of 172 Commercial Road, Vineyard.

Acoustic reports submitted with DAs for subdivision of land are to demonstrate that the subdivision has been designed to minimise acoustic treatments of future buildings on the proposed lots. The report is to nominate noise mitigate requirements for future buildings. These requirements are to be included as a Section 88B restriction as to user for the subdivision so as to inform future owners.

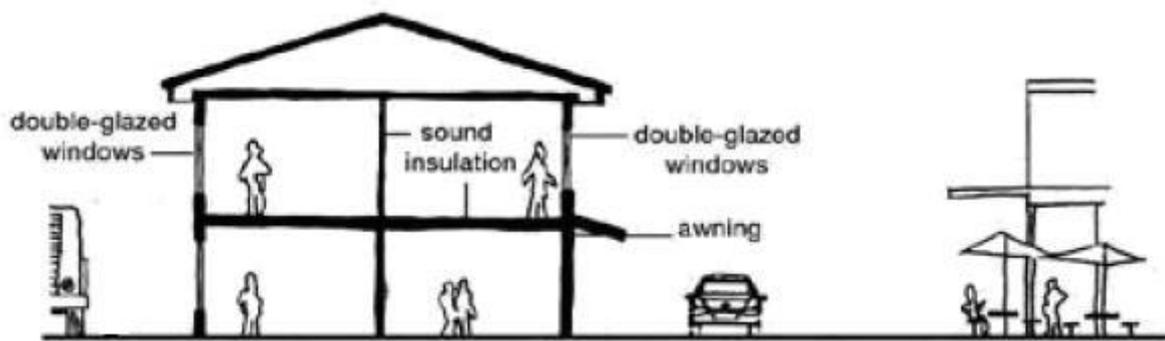
- 3) Direct overlooking of main habitable areas and the private open spaces of adjoining dwellings should be minimised through building layout, window and balcony location and design, and the use of screening devices, including landscaping.
- 4) Living area windows with a direct sightline to PPOS of the habitable room windows in an adjacent dwelling within 9 metres are to:
  - be obscured by fencing, screens or appropriate landscaping; or
  - be offset from the edge of one window to the edge of the other by a distance sufficient to limit views into the adjacent window; or

- have sill height of 1.5 metres above floor level; or
  - have fixed obscure glazing in any part of the window below 1.5 metres above floor level.
- 5) The design of dwellings must minimize the opportunity for sound transmission through the building structure, with particular attention given to protecting bedrooms and living areas.
  - 6) In attached and semi-detached dwellings, bedrooms of one dwelling are not to share walls with living spaces or garages of adjoining dwellings, unless it is demonstrated that the shared walls and floors meet the noise transmission and insulation requirements of the Building Code of Australia.
  - 7) No electrical, mechanical or hydraulic equipment or plant shall generate a noise level greater than 5dBA above background noise level measured at the property boundary during the hours 7.00am to 10.00pm and noise is not to exceed background levels during the hours 10.00pm to 7.00am.
  - 8) Dwellings along major roads (see **Figure 4-11**), or any other noise source, shall be designed to minimise the impact of traffic noise.
  - 9) The internal layout of residential buildings, window openings, the location of outdoor living areas (i.e. courtyards and balconies), and building plant should be designed to minimise noise impact and transmission.
  - 10) Noise walls are not permitted.
  - 11) Development affected by noise from rail or road traffic noise is to comply with *State Environmental Planning Policy (Infrastructure) 2007* and NSW Department of Planning (2008) *Development Near Rail Corridors and Busy Roads – Interim Guideline*.
  - 12) Residential development impacted by traffic and rail noise shall comply with the criteria in **Table 5-7**. **Figure 5-11** provides guidance on measures to manage internal noise levels.

**Table 5-7** Noise levels permitted within habitable rooms for residential premises impacted by traffic and rail noise

|   | Sleeping areas   | Living areas   |
|---|--|--|
| Naturally ventilated/ windows open to 5% of the floor area (Mechanical ventilation or air conditioning systems not operating) | LAeq 15 hours (day): 50dBA<br>LAeq 9 hour (night): 45dBA | LAeq 15 hours (day): 50dBA<br>LAeq 9 hour (night): 45dBA |
| Doors and windows shut (Mechanical ventilation or air conditioning systems are operating)                                     | LAeq 15 hours (day): 40dBA<br>LAeq 9 hour (night): 35dBA | LAeq 15 hours (day): 40dBA<br>LAeq 9 hour (night): 40dBA |

**Note:** These levels correspond to the combined measured level of external sources and the ventilation system operating normally. Where a naturally ventilated/windows open condition cannot be achieved, it is necessary to incorporate mechanical ventilation compliant with AS1668 and the Building Code of Australia. LAeq 1 hour noise levels shall be determined by taking as the second highest LAeq 1 hour over the day and night period for each day and arithmetically averaging the results over a week for each period (5 or 7 day week, whichever is highest).



**Figure 5-11** Strategies for minimising noise transmission

### 5.1.10 Fencing

#### Objectives

- a. To ensure boundary fencing is of a high quality and does not detract from the streetscape.
- b. To encourage the active use of front gardens through provision of a secure area.
- c. To ensure that rear and side fencing will assist in providing privacy to private open space areas.
- d. To ensure that fence height, location and design will not affect traffic and pedestrian visibility at intersections.

#### Controls

- 1) Front fencing shall be a maximum of 1.2m high.
- 2) Front fences and walls are not to impede safe sight lines for traffic.
- 3) Side and rear fences are to be a maximum of 1.8m high.
- 4) Side fences not on a street frontage are to be a maximum of 1.2m high to a point 2m behind the primary building façade.
- 5) On corner lots or lots that have a side boundary that adjoins open space or drainage, the front fencing style and height is to be continued along the secondary street or open space/drainage land frontage to at least 4m behind the building line of the dwelling. Principles for corner lots are illustrated at **Figure 5-12**.
- 6) On boundaries that adjoin open space or drainage land, fencing is to be of a high quality material and finish. The design of the fencing is to permit casual surveillance of the public space by limiting fence height to 1.2m or by incorporating see through materials or gaps for the portion of the fence above 1.2m in height.
- 7) Pre-painted steel or timber paling or lapped/capped boundary fencing is not permitted adjacent to open space or drainage land or on front boundaries.
- 8) Fencing that adjoins mews or rear access ways is to permit casual surveillance.

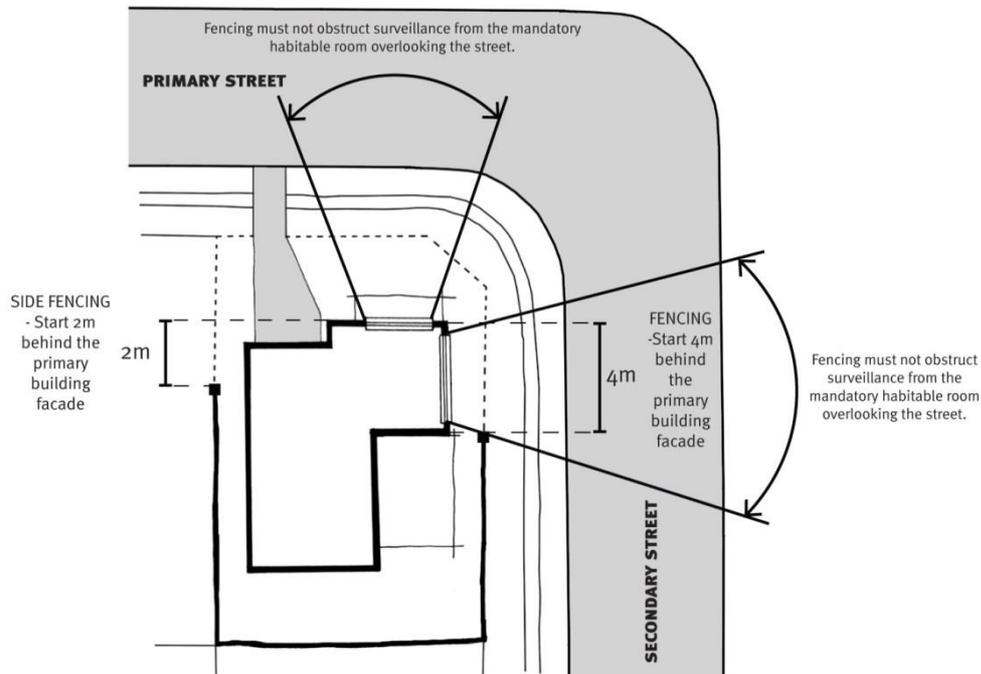


Figure 5-12 Fencing design for corner lots

## 5.2. Additional controls for certain dwelling types

### 5.2.1 Residential development adjacent to transmission easements

#### Objectives

- a. To minimise the visual and amenity impacts of transmission lines on surrounding residential areas.
- b. To provide for passive surveillance of the public lands within and adjacent to the transmission easement.
- c. To maintain the privacy of dwellings adjacent to the easements.

#### Controls

- 1) Dwellings are to be set back as far as possible from the transmission easement.
- 2) Landscaping is to permit views into the easement at ground level.
- 3) The orientation of dwellings is to permit casual surveillance of the easement, while maintaining the privacy of occupants.

### 5.2.2 Attached dwellings

Additional controls for attached dwellings are outlined below, and should be read in conjunction with those in **Part 5.1**.

#### Objectives

- a. To ensure that the development of attached dwellings creates an architecturally consistent street character.

#### Controls

- 1) It is preferred that garages for attached dwellings are located at the rear of the lot. Where attached dwellings have frontage to a collector road, all vehicle access and parking is to be located at the rear of the lot.
- 2) Attached dwellings should have a consistent and logical rhythm and order when seen together as a group, rather than appearing as a random arrangement of competing dwellings. Each dwelling

should benefit from the unified design of the whole form, a co-ordinated style and base colour palette. Individuality can be added as small details or accent colours, rather than strikingly different forms.

### 5.2.3 Secondary dwellings, studio dwellings and dual occupancies

Controls for secondary dwellings, studio dwellings or dual occupancies are in part determined by whether the secondary dwelling, studio dwelling or dual occupancy dwelling is proposed at the time of the application or at some point in the future to be strata subdivided. Strata subdivisions create the need for separate or common property dwelling entries, parking and open space to service each dwelling.

The **Glossary** of this DCP (**Appendix A**) provides further explanation and examples of secondary dwelling, studio dwellings or dual occupancy types. The controls that follow apply to all forms of secondary dwellings, studio dwellings and dual occupancies.

#### Objectives

- a. To enable the development of a diversity of dwelling types.
- b. To contribute to the availability of affordable housing.
- c. To promote innovative housing solutions that are compatible with the surrounding residential environment.
- d. To provide casual surveillance to rear lanes.

#### Controls - Secondary dwellings and studio dwellings

- 1) Secondary dwellings and studio dwellings are to comply with the controls in **Part 5.1**, except where the controls in this Part differ, in which case the controls in this Part take precedence.
- 2) Secondary dwellings and studio dwellings are to comply with the key controls in **Table 5-8**.
- 3) The maximum site coverage control for upper floors in the relevant **Table 5-2** to **Table 5-6** may be exceeded by the combined upper floor coverage of the secondary or studio dwelling and principal dwelling, provided that:
  - the privacy of the principal dwelling and dwellings on adjoining land is not compromised; and
  - solar access to the principal private open space of neighbouring lots is not significantly reduced.
- 4) The maximum gross floor area of a studio dwelling is 60m<sup>2</sup>.
- 5) The design of the secondary dwelling or studio dwelling is to be consistent in construction features, external finishes, materials and colours with the principal dwelling.
- 6) For secondary dwellings, windows and private open spaces must not overlook the private open space of any adjacent dwellings. For studio dwellings, windows and private open spaces must not overlook the private open space of any adjacent dwellings including the principal dwelling. Windows that potentially overlook adjacent lots must either have obscured glazing, be screened or have a minimum sill height of 1.5m above floor level.
- 7) Secondary or studio dwellings and associated garages may have a zero lot setback to one side boundary and may be attached to another garage/secondary dwelling on an adjoining lot, particularly where the secondary or studio dwelling is associated with an attached or semi-detached dwelling.

**Table 5-8** Key controls for secondary dwellings and studio dwellings

| Element                      | Secondary Dwelling   | Studio Dwelling (strata)  |
|------------------------------|--|---|
| On-site car parking          | No additional car parking space required.                                    | One additional dedicated on-site car parking space.<br>Car parking space to be located behind building facade line of principal dwelling.<br>Car parking space not to be in a stacked configuration.  |
| Principal Private open space | No separate private open space required.                                     | Balcony accessed directly off living space having minimum size of 8m <sup>2</sup> with minimum dimension of 2m.   |
| Subdivision                  | Subdivision from principal dwelling not permitted.                           | Strata title subdivision only from the principal dwelling on the land   |
| Access                       | Separate direct access to a street, laneway or shared driveway not required. | Access to be separate from the principal dwelling and is to front a public street, lane or shared private access way or<br>Combined access for the principal dwelling and studio dwelling to be through communal land as shown on the strata plan.  |
| Services and facilities      | No separate services or facilities required.                                 | Provision for separate services, such as mail delivery and waste collection, and an on-site garbage storage area so that bins are not visible from public street or laneway. To be located on a street address that is able to be accessed by garbage collection and mail delivery services.<br>May be serviced from the front residential street via the principal dwelling lot. |

- 8) Where the secondary or studio dwelling is built to a zero lot line on a side boundary, windows are not to be located on the zero lot wall unless that wall adjoins a laneway, public road, public open space or drainage land.
- 9) Studio dwellings are to have balconies or living areas that overlook laneways for casual surveillance.
- 10) Rear garages with secondary or studio dwellings may have first level balconies facing the lane provided the balcony remains within the lot boundary. Where 2m deep, overhanging balconies for private open space requirements of studio dwellings are located along a lane, the application must demonstrate how garages setback underneath avoid creating an overly wide lane and ambiguous space opportunities for illegally parked cars, trailers, bins etc.
- 11) Where a secondary or studio dwelling is built over a rear garage and separated from the upper levels of the principal dwelling, there must be a minimum separation of 5m between the upper floor rear façade of the principal dwelling and the secondary or studio dwelling.
- 12) Studio dwellings are to be located at the rear of the lot only where the lot has access from a rear lane or secondary street on a corner lot.
- 13) Studio dwellings are not permitted where the principal dwelling is an attached dwelling, unless:
  - the studio dwelling is located above a rear loaded garage; and
  - the studio dwelling has direct access to a public road or laneway; and
  - garbage and mail facilities are accessible by residents and by service vehicles.

#### Controls – Dual occupancies

- 14) Dual occupancies are to comply with the controls in **Part 5.1**, except where the controls in this Part differ, in which case the controls in this Part take precedence.
- 15) The maximum site coverage control for second storeys in the relevant **Table 5-2** to **Table 5-6** may be exceeded by the combined 2nd storey coverage of both dwellings in a dual occupancy, providing that:
  - the privacy of the principal dwelling and dwellings on adjoining land is not compromised; and

- solar access requirements for the principal private open space can be met for the principal dwelling and dwellings on adjoining lots.
- 16) The design of both dwellings in a dual occupancy development is to be consistent in construction features, external finishes, materials and colours.
  - 17) Detached dual occupancy dwellings are not to include zero lot lines for the second dwelling where the second dwelling is located at the rear of the lot.
  - 18) Dual occupancy development is not permitted on a lot that contains an attached dwelling.
  - 19) Dual occupancy dwellings are permitted at the rear of lots (i.e. behind a dwelling that has frontage to a principal street, whether attached or detached to that dwelling) only where:
    - each dwelling has direct pedestrian and vehicle access to a public road; and
    - garbage and mail facilities are accessible by service vehicles and by the occupants of the dwellings.
  - 20) Dual occupancy development referred to in control 19 above is preferred to be located on corner lots.
  - 21) For dual occupancies on corner lots, the rear setback can be varied to be consistent with the side setbacks in **Part 5.1.4** provided the minimum private open space and solar access requirements to the proposed and adjoining properties are met.
  - 22) Where the dual occupancy dwellings are to be strata subdivided:
    - private open space is to be provided for each dwelling in accordance with the relevant controls in **Table 5-2** to **Table 5-6**, or
    - shared private open space is to be provided equivalent to 15% of the site area and shown as communal space on the strata plan, and a minimum area of private open space of 10m<sup>2</sup> with a minimum dimension of 2.5m is to be provided for each dwelling.
  - 23) The minimum landscaped area on a lot containing a dual occupancy development is to be 20% of the site area.
  - 24) Where practical for front loaded driveway access, shared driveway crossings of the nature strip are to be provided to service both dwellings.

## 5.2.4 Multi dwelling housing

### Objectives

- a. To ensure that the design of multi-dwelling housing is consistent with the character of residential areas within the Precinct.
- b. To ensure the quality of multi-dwelling housing is of a high quality and contributes to the amenity of residents.

### Controls

- 1) Multi-dwelling housing sites are to have direct frontage to a public road (i.e. not on battle-axe lots).
- 2) Multi-dwelling housing is to comply with the controls in **Table 5-9**.
- 3) In all multi-dwelling housing developments containing 10 dwellings or more, a minimum of 1 per each 10 dwellings are to be designed to be capable of adaption. Adaptable dwellings are preferably to be single level accommodation at ground level and be located on the street frontage and are to be designed in accordance with *Australian Standard AS 4299-1995 Adaptable Housing*.
- 4) A landscape plan is to be submitted with every application for multi-dwelling housing.
- 5) Where a multi dwelling housing development includes a studio dwelling with rear lane vehicle access, the controls for a studio dwelling shall apply to the studio dwelling component of the

development.

- 6) Car parking and vehicle manoeuvring areas shall be designed so that vehicles can enter and exit in a forward direction.

**Table 5-9** Key controls for multi dwelling housing

| Element   | Controls   |
|---|--|
| Site coverage (maximum)                         | 50%  |
| Landscaped area (minimum)                       | 30% of site area   |
| Principal Private open space (PPOS)             | Minimum 16m <sup>2</sup> with a minimum dimension of 3m.<br>10m <sup>2</sup> per dwelling if provided as balcony or rooftop with a minimum dimension of 2.5m.  |
| Front setback (minimum)                         | 4.5m to building façade line; 3m to articulation zone  |
| Corner lots secondary street setback (minimum)  | 2m   |
| Side setback (minimum)                          | Ground floor 0.9m. Upper floor 0.9m  |
| Rear setback (minimum)                          | 4m (excluding rear lane garages or studio dwellings)<br>0.5m to rear lane (garages or studio dwellings)  |
| Zero lot line (minimum)                         | Not permitted on adjacent lot boundaries (except rear lane garages and studio dwellings)   |
| Internal building separation distance (minimum) | 5m (unless dwellings are attached by a common wall)  |
| Car parking spaces                              | 1-2 bedroom dwellings will provide at least 1 car space.<br>3 bedroom or more dwellings will provide at least 2 car spaces.<br>1 visitor space per 5 dwellings.<br>Car parking spaces to be behind building line. Garages fronting the street are to be set back a minimum of 1m from the building setback<br>Where garages front the street, the maximum width of a garage door is 6m and each garage is to be separated by a dwelling façade or landscaped area. |
| Garages and car parking dimensions (minimum)    | Covered: 3m x 5.5m (single) 5.6m x 5.5m (double)<br>Uncovered: 2.5m x 5.2m<br>Aisle widths must comply with AS 2890.1  |

### 5.2.5 Residential flat buildings, manor homes and shop top housing

The controls in **Part 5.2.4** do not apply to residential flat buildings, manor homes and shop top housing, unless specifically referenced in the provisions that follow. The following parts set out the controls for these types of housing. Additional controls for residential flat buildings and shop top housing may be contained in *State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development*.

#### Objectives

- a. To establish a high quality residential environment where all dwellings have a good level of amenity.
- b. To encourage a variety of housing forms within residential areas.
- c. To ensure the provision of housing that will, in its adaptable features, meet the access and mobility needs of any occupant.

#### Controls

- 1) Manor homes may only be located on corner lots.
- 2) Residential flat buildings are to:
  - be located on sites with a minimum street frontage of 30m;
  - have direct frontage to an area of the public domain (including streets and public parks), and
  - not adversely impact upon the existing or future amenity of any adjoining land upon which residential development is permitted with respect to overshadowing impact, privacy impact or visual impact.

- 3) All residential flat buildings are to be consistent with:
  - the guidelines and principles outlined in *State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development*, and
  - the primary controls set out in **Table 5-10**.
- 4) In all residential flat building developments containing 10 dwellings or more, a minimum of 10% of all apartments are to be designed to be capable of adaptation for access by people with all levels of mobility. Dwellings must be designed in accordance with the *Australian Standard AS 4299-1995 Adaptable Housing*.
 

Where possible, adaptable dwellings are to be located on the ground floor. Dwellings located above the ground level of a building may only be provided as adaptable dwellings where lift access is available within the building. The lift access must provide access from the basement to allow access for people with disabilities.
- 5) The DA must be accompanied by certification from an accredited 'Access Consultant' confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the *Australian Standard AS 4299-1995 Adaptable Housing*.
- 6) Car parking and garages allocated to adaptable dwellings must comply with the requirements of Australian Standards for disabled parking spaces.
- 7) Car parking and vehicle manoeuvring areas shall be designed so that vehicles can enter and exit the property in a forward direction.
- 8) A landscape plan is to be submitted with every application for residential flat buildings.

**Table 5-10** Key controls for residential flat buildings, manor homes and shop top housing

| Element                             | Shop top housing  | Residential flat buildings   | Manor homes  | Residential flat buildings and shop top housing in Business zones   |
|-------------------------------------|---|--|--|---|
| Site coverage (maximum)             | 50% of site area  | 50%  | 50% of site area   | N/A   |
| Landscaped area (minimum)           | 30% of site area  | 30% of site area   | 30% of site area   | N/A   |
| Communal open space                 | 15% of site area where the development includes 4 or more dwellings | 15% of site area   | Not required   | 15% of site area - this control is able to be varied where the applicant demonstrates the development has good access to public open space or where the area of private open space is more than the minimum specified below |
| Principal Private open space (PPOS) | Minimum 8m <sup>2</sup> per dwelling with a minimum dimension of 2m | Minimum 10m <sup>2</sup> per dwelling with a minimum dimension of 2.5m | Minimum 16m <sup>2</sup> per dwelling with a minimum dimension of 3m; or<br>Minimum 8m <sup>2</sup> per dwelling with a minimum dimension of 2m if provided as balcony or rooftop. | Minimum 8m <sup>2</sup> per dwelling with a minimum dimension of 2m   |

| Element  | Shop top housing   | Residential flat buildings   | Manor homes  | Residential flat buildings and shop top housing in Business zones  |
|--|--|--|--|--|
| Front setback (minimum)  | Determined by ground floor setback   | 6m<br>Balconies and other articulation may encroach into the setback to a maximum of 4.5m from the boundary for the first 3 storeys and for a maximum of 50% of the façade length  | 4.5m to building façade line<br>3m to articulation zone<br>5.5m to garage line and 1m behind the building line                 | <i>Residential flat buildings:</i><br>4.5m to building façade line<br><i>Shop top housing:</i><br>0m for first floor<br>4m for floors above first floor  |
| Corner lots secondary street setback (minimum)   | 3m   | 6m   | 2m   | <i>Residential flat buildings:</i><br>4.5m to building façade line<br><i>Shop top housing:</i><br>0m for first floor<br>4m for floors above first floor  |
| Side setback (minimum)   | 2m   | Buildings up to 3 storeys: 3m<br>Buildings above 3 storeys: 6m   | Buildings up to 2 storeys 1.5m   | Refer to Part 6 Centres Controls   |
| Rear setback (minimum)   | 4m (excluding garages)   | 6m   | 4m (excluding rear garages)  | 8m   |
| Zero lot line (minimum)  | Not permitted  | Not permitted  | Not permitted to adjacent lots   | Permitted on side boundaries only  |
| Habitable room/balcony separation distance (minimum) for buildings 3 storeys and above | 12m  | 12m  | N/A  | Refer to Part 6 Centres Controls   |
| Car parking spaces   | 1-2 bedrooms: 1 space (minimum)<br>3 bedrooms or more: 2 spaces (minimum) – may be provided in a 'stack parking' configuration<br>Garages to be set back 1m behind the building line | 1 space per dwelling, plus 0.5 spaces per 3 or more bedroom dwelling - may be in a 'stack parking' configuration<br>Car parking spaces to be located below ground or behind building line<br>1 visitor car parking space per 5 apartments<br>Bicycle parking spaces: 1 per 3 dwellings | 1-2 bedrooms: 1 space (minimum)<br>3 bedrooms or more: 2 spaces (minimum) – may be provided in a 'stack parking' configuration | 1 space per dwelling, plus 0.5 spaces per 3 or more bedroom dwelling - may be in a 'stack parking' configuration<br>Car parking spaces to be located below ground or behind the building<br>1 visitor car parking space per 5 dwellings (may be above ground)<br>Bicycle parking spaces: 1 per 3 dwellings |
| Garage Dominance   | N/A  | A maximum of two garage doors per 20m of lot frontage facing any one street frontage   | A maximum of two garage doors facing any one street frontage   | N/A  |
| Garages and car parking dimensions (minimum)   | Covered: 3m x 5.5m<br>Uncovered: 2.5m x 5.2m<br>Aisle widths must comply with AS 2890.1  |  |  |  |

### 5.3. Other development in residential and environment protection zones

The residential and environment protection zones within the Vineyard Precinct Plan under the Growth Centres SEPP permit a range of non-residential land uses that, depending on their scale, suitability, location and design, may be compatible with adjoining residential uses. Reference should be made to the Precinct Plan for the permissibility of specific non-residential uses in each zone, including the zoning table in Part 3 and the local provisions in Part 6. For some land uses, the local provisions in Part 6 specify additional requirements that must be met for Council to grant consent to these uses.

The Precinct Plan recognises that allowing non-residential development in the residential and environment protection zones is appropriate providing controls are in place to minimise the negative impacts of noise, loss of privacy, traffic, parking and other nuisances on local residential amenity.

The controls for non-residential development consist of:

- general requirements, which apply to all non-residential development in the residential and environment protection zones; and
- specific provisions covering land uses such as child care centres, neighbourhood shops, educational establishments and places of public worship, in addition to, or overriding, the general requirements.

**Notes:** In the event of an inconsistency between the general and specific provisions in this part of the DCP, the specific controls will prevail.

These controls are not intended to apply to non-residential uses that are carried on in dwellings, such as home occupations and home businesses.

Council may require the submission of additional information to demonstrate that the development will not adversely affect the existing or future amenity of the surrounding residential area. Such information may include a noise impact assessment, advice on traffic generating potential and parking provision, solar access and evidence that the proposed land use will contribute to the amenity, character and liveability of the residential area in which it is to be located. Applicants should consult with Council prior to submitting a DA to determine specific information requirements.

#### 5.3.1 General requirements

##### Objectives

- a. To establish appropriate controls to minimise the adverse effects of non-residential development on surrounding residential development.
- b. To maintain consistency in development standards between non-residential and residential land uses and ensure that buildings are similar in height, bulk and scale to surrounding buildings.
- c. To ensure that non-residential development is appropriately located.
- d. To avoid concentrations of non-residential uses in any particular area where the cumulative impact on residential amenity would be unacceptable.

##### Controls

- 1) Site analysis information as required by **Part 2** of this DCP is to be submitted with all applications for non-residential development in residential or environment protection zones.
- 2) Except as provided for in the specific controls below, non-residential development in residential or environment protection zones land is to be located on allotments that have a frontage width of greater than 15 metres.

- 3) Non-residential development in residential or environment protection zones is to comply with the requirements of **Part 2 and Parts 5.1.9 and 5.1.10** of this DCP in relation to residential amenity and sustainable building design.
- 4) For all non-residential development, the controls relating to lots with frontages greater than 15 metres in the following parts of this DCP apply:
  - Part 5.1.3 Front setbacks;
  - Part 5.1.4 Side and rear setbacks;
  - Part 5.1.5 Dwelling height, massing and siting; and
  - Part 5.1.8 Garages, site access and parking.
- 5) The maximum site coverage of buildings is 60% of the total site area.
- 6) The minimum landscaped area for non-residential development is 20% of the total site area of the allotment.
- 7) Provision of car parking for non-residential uses will be assessed by Council on an individual basis but must be sufficient to meet demand generated by staff and visitors.
- 8) Car parking and vehicle manoeuvring areas shall be designed so that vehicles can enter and exit the property in a forward direction.
- 9) Where there is an inconsistency between the general requirements of this Part and the specific controls, **Parts 5.3.2 to 5.3.5** prevail.
- 10) Council will have particular regard to the effects of non-residential development in the residential and environment protection zones. Council will consider whether:
  - the proposed development will be out of character with surrounding residential development, particularly in relation to the height and/or scale of any proposed buildings;
  - the proposed development will contribute to an undesirable clustering of that type of development, or non-residential uses in general, in the area;
  - an undesirable effect on the amenity of the surrounding area will be created;
  - the proposed use will draw patronage from areas outside of the surrounding neighbourhood, and the extent to which that patronage might impact on the amenity of residents through factors such as traffic generation, noise or the overall scale of the non-residential use;
  - a noise nuisance will be created;
  - the development will generate traffic out of keeping with the locality;
  - adequate facilities are provided for the purposes of parking, loading and deliveries; and
  - adequate provision is made for access by disabled persons.
- 11) Non-residential development in residential or environment protection zones should be similar in bulk, scale, height and siting to the surrounding buildings.
- 12) Finishes, materials, paving and landscaping are to be consistent with those of surrounding residential development.

### **5.3.2 Educational Establishments and Places of Worship**

#### **Objectives**

- a. To ensure appropriate provision and equitable distribution of education establishments and places of public worship within the Precinct.
- b. To ensure that buildings are not out of character with the type, height, bulk and scale of surrounding buildings.
- c. To encourage the appropriate location of facilities to create community focal points, centres of

neighbourhood activity and enhance community identity.

- d. To mitigate the impacts of noise, privacy, increased traffic and nuisance on surrounding residential development.
- e. To foster iconic and landmark building design within each Precinct.

### Controls

- 1) Places of worship are to be located within centres or co-located with other community facilities in residential areas so as to create a community focal point, to share facilities such as parking, and to minimise impacts on residential areas.
- 2) Places of public worship and educational establishments are preferably to be located on land with frontage to a collector road. Corner sites are preferred.
- 3) In assessing applications, Council will consider the following:
  - the privacy and amenity of adjoining developments;
  - the need and adequacy for provision of buffer zones to surrounding residential development;
  - urban design;
  - location;
  - the size of the land where the development is proposed;
  - traffic generation and the impacts of traffic on the road network and the amenity of nearby residents;
  - the availability of parking;
  - the scale of buildings and their capacity; and
  - hours of operation and noise impacts.
- 4) A traffic and transport report/statement is to accompany the DA addressing the impact of the proposed development on the surrounding road system and defining car parking requirements.

**Note:** Due to the high level of traffic generation and peak nature of traffic volumes accessing these types of land uses, assessment of traffic impacts and pedestrian requirements is required and mitigation measures may need to be incorporated in the design. Such measures may include pedestrian crossings, speed control devices, pedestrian refuges on streets to which the development fronts and the provision of bus and drop off bays. School zones will require additional safety measures such as school crossings, 40 km/h school speed zones and flashing lights in accordance with RMS requirements.

- 5) A landscape plan and associated documentation is to be submitted with the DA identifying existing vegetation and community plant species and/or existing design elements of the site layout, and the proposed landscaping treatment of the development.
- 6) Car parking spaces shall be provided on site in accordance with **Table 5-11**.

**Table 5-11** Car parking requirements for places of public worship and educational establishments

| Land use                                      | Parking requirement  |
|---|--|
| Places of Public Worship                      | 1 space per 4 seats<br>or<br>1 space per 10m <sup>2</sup> of seating area (whichever is greater) |
| Primary and Secondary Schools                 | 1 space per staff member<br>plus<br>1 space per 100 students                                     |
| Senior High School                            | 1 space per staff member<br>1 space per 5 students in Year 12                                    |
| Tertiary and Adult Educational Establishments | 1 space per 5 seats<br>or<br>1 space per 10m <sup>2</sup> of floor area (whichever is greater)   |

- 7) For certain uses, the provision of overflow parking may be necessary particularly where such developments incorporate halls used for social gatherings. Overflow parking areas could be provided on open grassed areas and need not be formally sealed or line-marked. Proposed overflow parking areas are to be clearly shown on plans submitted with the DA.
- 8) Development must comply with the noise guidelines contained in **Part 5.1.9**.
- 9) Where appropriate, buffers should be put in place to limit noise impacts on the surrounding area.
- 10) Sources of noise such as garbage collection, machinery, parking areas and air conditioning plants are sited away from adjoining properties and screened/ insulated by walls or other acoustic treatment. Noise levels are not to exceed specified limits at the most affected point of the property boundary.

### 5.3.3 Neighbourhood Shops

#### Objectives

- a. To ensure the appropriate provision of retail uses to serve the needs of the local community.
- b. To minimise the impacts of retail activities on surrounding residential areas.
- c. To ensure that retail activities in residential areas do not detract from the function or viability of nearby centres.
- d. To ensure the appropriate location of neighbourhood shops.

#### Controls

- 1) Neighbourhood shops in residential zones may only be developed on an allotment of land with a minimum frontage width of 10 metres or more.
- 2) Neighbourhood shops in residential zones are to be located:
  - adjoining land zoned RE1 Public Recreation or SP2 Infrastructure or that is separated from land zoned RE1 Public Recreation or SP2 Infrastructure only by a public road, or
  - with frontage to a collector road, or
  - within 90 metres of public transport stop, or
  - adjoining an educational establishment or a community facility or separated from an educational establishment or a community facility only by a public road.
- 3) The minimum site area for neighbourhood shops is 500m<sup>2</sup>.
- 4) For neighbourhood shops, the controls relating to lots with frontages greater than 9 metres in the following parts of this DCP apply:

- Part 5.1.2 Streetscape and architectural design;
  - Part 5.1.3 Front setbacks;
  - Part 5.1.4 Side and rear setbacks;
  - Part 5.1.5 Dwelling height, massing and siting; and
  - Part 5.1.8 Garages, site access and parking.
- 5) Shops fronts are to encourage active and interactive street frontages that are sympathetic to the streetscape with similar materials to adjoining buildings to be used.
  - 6) Any area of land between the front property boundary and the building alignment, exclusive of approved driveways and parking areas, is to be landscaped.
  - 7) Address and entry points for any residential use on the same allotment of land are to be separate from the retail use access points and be readily identifiable.
  - 8) Design of the building frontage, front and side setbacks are to include safe and convenient pedestrian facilities such as weather protection, shade, seating and landscaping.
  - 9) On corner sites, shop fronts are to wrap around the corner and zero setbacks are permitted.
  - 10) Entrances are to be readily visible from the street and well lit.
  - 11) The site should not gain direct access to:
    - a road with clearway or other parking restrictions; or
    - a restricted access road (sub-arterial or arterial).
  - 12) At least 3 car parking spaces are required to be provided on site in addition to parking required for the dwelling (if applicable). The design of the building and parking areas is to provide suitable access for deliveries. Parking areas, loading/unloading areas, and vehicle manoeuvring areas shall be designed so that vehicles can enter and exit the site in a forward direction.
  - 13) Bicycle parking must be provided in a location that is secure and accessible with weather protection for employees.
  - 14) Car parking must be clearly signposted to indicate its availability from the street.
  - 15) Plant and equipment (particularly cooling or heating plant), is to be located so as to not cause noise annoyance to neighbours.
  - 16) Waste storage areas must be designed to minimise visual impact and should be screened and properly positioned so as to not to attract pests and cause odour problems for neighbours.
  - 17) External storage areas are not permitted unless adequately screened from view.

### 5.3.4 Seniors Housing

#### Objectives

- a. To ensure that the design of seniors housing is consistent with the character of surrounding residential areas.

#### Controls

- 1) Applications for seniors housing are to comply with the controls in *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*.

### **5.3.5 Farm Buildings and Outbuildings**

“Farm Buildings” are structures which are ancillary to an agricultural use of the land on which it is situated and includes hay sheds, stocks holding yards, machinery sheds, shearing sheds, silo, storage tank, outbuildings or other forms of structure used for storing agricultural machinery, farm produce and supplies.

“Outbuildings” are buildings that are used for the storage of possessions of the owners/occupiers of the land and are considered as structures which are ancillary to an existing land use. These buildings are generally ancillary to a dwelling house and are associated with the normal domestic use of the land.

Outbuildings are not commercial in nature and are typically used by the land owners/occupiers for:

- the storage of equipment used to maintain the property
- hobbies
- parking of non-commercial vehicles.

#### **Objectives**

- a. To ensure that farm buildings and outbuildings are consistent with the character of the Environmental Living area.

#### **Controls**

- 1) Development for farm buildings and outbuildings are to comply with the controls contained within the relevant chapter of the Hawkesbury Development Control Plan 2002 or such other Development Control Plan (or equivalent) that might replace it.



## ○ ***6. Centres Controls***

## 6. Centres Controls

### 6.1 Introduction

This Part of the DCP outlines principles, objectives and design controls to achieve quality, consistency and coordination in the development of the business or mixed use zones. It applies to land identified in **Figure 6-1**.

The objectives of the controls in this Part of the DCP are to:

- a. create a vibrant centre that functions as the heart of the community within the Precinct;
- b. establish design principles that achieve high quality coordinated urban design outcomes and high standards of amenity;
- c. encourage social interaction and the development of places that are safe and desirable for all users;
- d. provide flexible controls to accommodate change within the centre over time; and
- e. ensure that development in the centre takes advantage of access to public transport.

### 6.2 Development controls

#### 6.2.1 Streetscape and architectural design

##### Objectives

- a. To achieve high standards of streetscape amenity and building design.
- b. To encourage pedestrian activity in the streets of the centre and other public spaces.
- c. To clearly define the character of the main street and other elements of the public domain.

##### Controls - active frontage and street address

- 1) Active street fronts, built to the street boundary, are required on the ground level of all retail and commercial development fronting the main streets.
- 2) Residential, commercial and retail uses on the upper floors are to be designed to overlook streets and other public places to provide casual surveillance.
- 3) The ground and first floor of all buildings on active street frontages are to be built to the front property boundary (i.e. a zero front setback) to define the street edge. If the first floor contains residential uses, internal spaces may be set back where balconies are built to the property boundary.
- 4) The primary means of pedestrian access to retail, commercial and upper floor residential uses is to be from the street rather than from the rear or internal areas of the building.

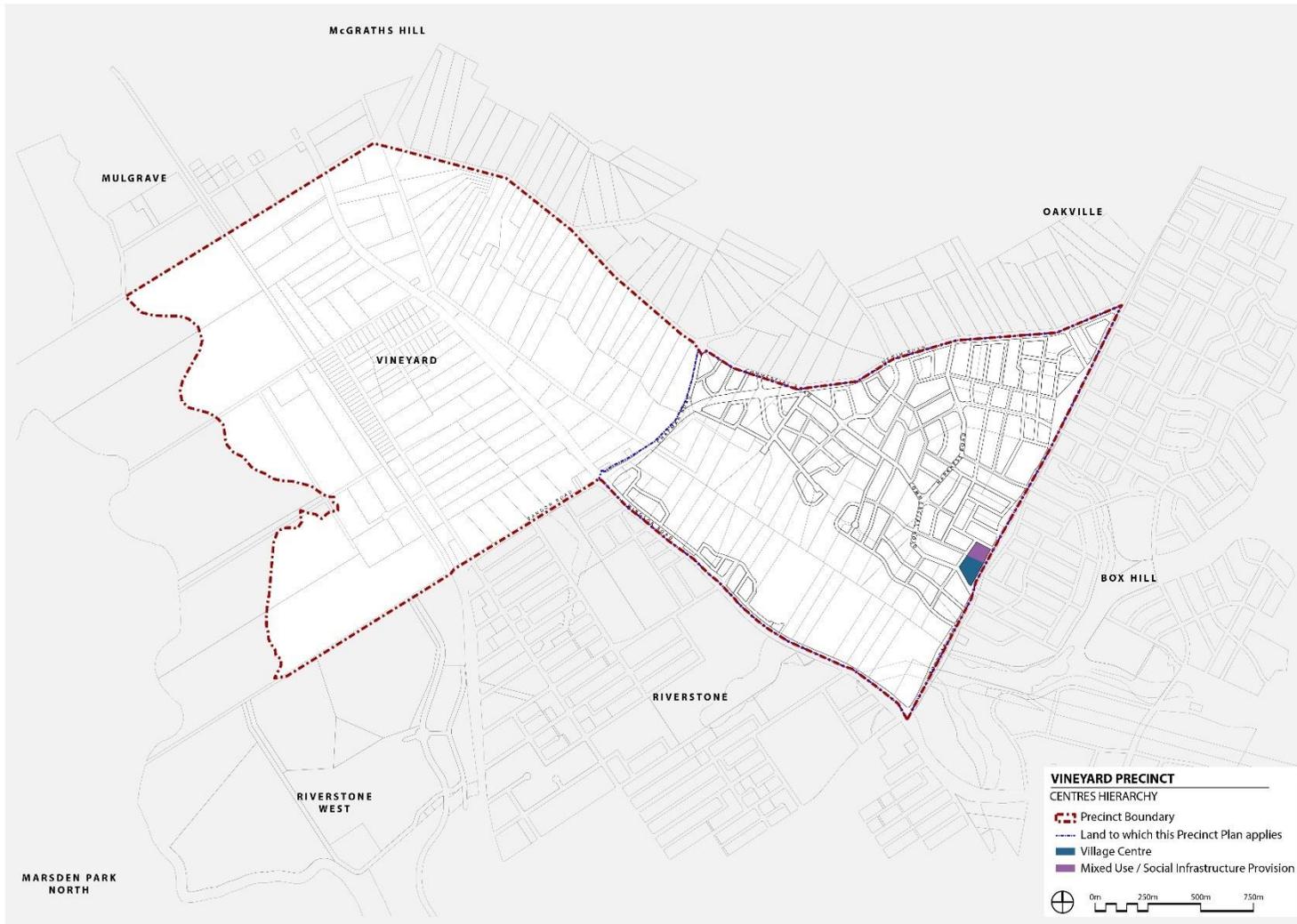


Figure 6-1 Centres Hierarchy

- 5) Vehicle access to basement level parking or parking located behind buildings is not to be from active street frontages.
- 6) Blank walls on primary and secondary building elevations visible from the public domain are to be avoided.
- 7) Retail shops are to have a variety of shop frontage widths.
- 8) Restaurants, cafes and the like are encouraged to provide openable shop fronts.
- 9) On corner sites, active shop fronts are to wrap around the corner and address both street frontages.
- 10) Developments that have multiple street frontages are to provide entrances to internal/upper floor uses on each street frontage.
- 11) In mixed-use buildings, separate access from the street is required for retail, commercial and residential uses.
- 12) Entrances are to be readily visible from the street and well lit.
- 13) Only open grill and transparent security shutters (at least 80% open/visually transparent) are permitted to retail and commercial frontages.
- 14) All buildings on active street frontages are to include awnings above the ground floor for the full length of the street frontage.
- 15) Parking is to be screened by buildings, from the main street and other streets with active frontages, or be below ground.

#### **Controls – building facades**

- 16) Building facades at street level are to have a minimum of 80% glazing and be open to the street.
- 17) At night, internal lighting is to fall onto the footpath, or under-awning lighting is to be provided.
- 18) Solid elements are preferably to be finished with rendered masonry, tiles or face brick.
- 19) Coordinated colour schemes are required, and colours and materials are to be consistent with adjoining buildings and the general character of the street.
- 20) Façade articulation is encouraged above the ground floor through the incorporation of balconies, openings and other design elements that modulate the façade, providing rhythm and interest.
- 21) Articulated corners are to be provided to building facades on active street frontages. Articulated elements may include verandahs, awnings, upper level balconies, use of materials or roof designs that accentuate the corner. Articulation elements are to address both street frontages.
- 22) Design of corner buildings on the ground floor is to facilitate free pedestrian movement. Open corners at ground level are encouraged.
- 23) Building height, massing, materials and parapet/roof expression should be used to accentuate corner elements.

#### **Controls – Landscape design and public spaces**

- 24) DAs that propose works in public streets to be undertaken by the developer are to be consistent with any relevant public domain landscape or urban design plans prepared by Council or on behalf of Council.
- 25) All signage and advertising is to be designed in a co-ordinated manner (refer to **Part 6.2.3** for detailed controls).
- 26) Plant selection is to take into account the following:
  - the preferred trees in **Appendix D** to this DCP;
  - species that complement remnant native vegetation;
  - level of on-going maintenance;
  - potential impacts on road and footpath pavements;

- focus on hardy, drought tolerant, easily maintained species;
  - scale in relation to the function of the area; and
  - contribution to the character of the local centre.
- 27) Street tree and open space planting is to provide generous shade for pedestrians in summer and allow for sunlight penetration to street level in winter.
  - 28) All paving materials must conform to relevant standards for durability, non-slip textures, strength and surface treatment to withstand use by light automobiles, service vehicles, pedestrians and bicycles.
  - 29) Paving materials are to be certified colour stable for a period of at least 20 years to ensure a reasonable match to existing paving when damaged sections are replaced.
  - 30) All paved areas are to be adequately drained and follow 'best practises' in installation, including sub-surface preparation and stormwater management.
  - 31) All paved areas must be designed to facilitate use by older people and people with a disability.

### Controls – solar access and weather protection

- 32) Continuous awnings are required to be provided along the ground floor street frontages in accordance with **Figure 6-2** and all buildings fronting public open space or plazas.
- 33) Awnings should be a minimum height of 2.7m (3.2m desirable) above footpath level.
- 34) The front fascia of the awning is to be set back a minimum of 500mm from the kerb of the street carriageway, including at street corners.
- 35) Awnings are generally to project horizontally from the building façade and be horizontal along the length of the façade. Stepped awnings are appropriate on sloping streets.
- 36) The design of awnings is to be consistent with adjoining buildings. Awnings that are significantly different in terms of materials, finishes and dimensions will not be permitted.
- 37) Under awning lighting is to be provided to enhance pedestrian amenity and safety.
- 38) The placement of any awning must not obstruct the line of sight for motorists to traffic control signals, driveways, regulatory signposting or critical road infrastructure. Awnings in the vicinity of traffic control signals may have additional setback requirements imposed to ensure a clear line of sight for motorists to traffic control signals are maintained.

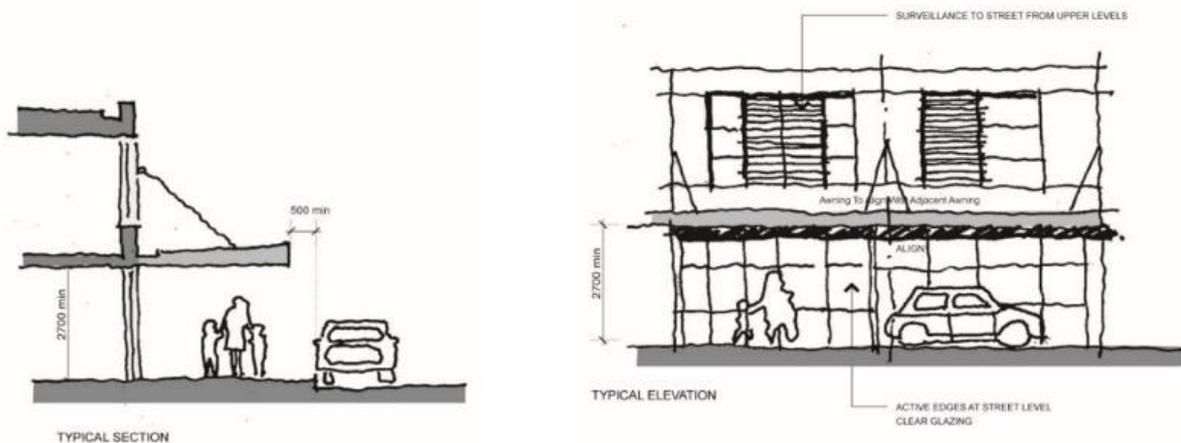


Figure 6-2 Awnings

## 6.2.2 Building bulk, scale and design

### Objectives

- a. To ensure a high standard of building design.
- b. To ensure that buildings are appropriate to the scale and character of the centre.
- c. To provide for appropriate air circulation and solar access, and to maintain view corridors to and through the centre.

### Controls

- 1) The maximum allowable depth of residential building envelopes is 22m (maximum 18m glass line to glass line).
- 2) Floors above the second floor are to be set back a minimum of 4 metres from the boundary of the property with any public street.
- 3) Larger upper floor setbacks from the street may be required to:
  - achieve adequate solar access at street level;
  - maintain the privacy of dwellings;
  - maintain view corridors; and
  - minimise the bulk of the building.
- 4) Zero side setbacks are required on the ground floor and first floor and the side wall shall contain no windows or other openings (except where the side setback is to a public street, where the façade controls in Part 6.2.1 apply).
- 5) Zero side setbacks are permitted for the upper floors providing the side wall contains no windows or other openings (except where the side setback is to a public street, where the façade controls in Part 6.2.1 apply).
- 6) Where windows, balconies or other openings are to be provided on upper floors, the minimum side setback for upper floors is 6 metres from the side property boundary and the minimum separation distance between habitable rooms or balconies between buildings is 12 metres.
- 7) For floors above the fourth floor, the minimum separation distance between buildings is to be 18 metres.
- 8) Buildings are to include distinctive roof forms that contribute to the architectural design of a building. Elements such as parapets, skillion roofs and eaves should be utilised where appropriate.
- 9) Roof forms should not result in excessive bulk or overshadowing.
- 10) All plant and lift over-runs are to be concealed within roof forms to minimise visual impact.
- 11) The use of roof areas for private / communal open space and gardens is encouraged. Such spaces should be designed to minimise privacy impacts on neighbours.
- 12) For development in close proximity to a rail corridor, balconies and windows are to be designed so as to prevent objects being thrown onto Railcorp's facilities (refer to the relevant Building Code of Australia standards and the Railcorp Electrical Standards).
- 13) Ground floors are to have a minimum floor to ceiling height of 3.3 metres.
- 14) First floor commercial and retail spaces are to have a minimum floor to ceiling height of 3 metres.

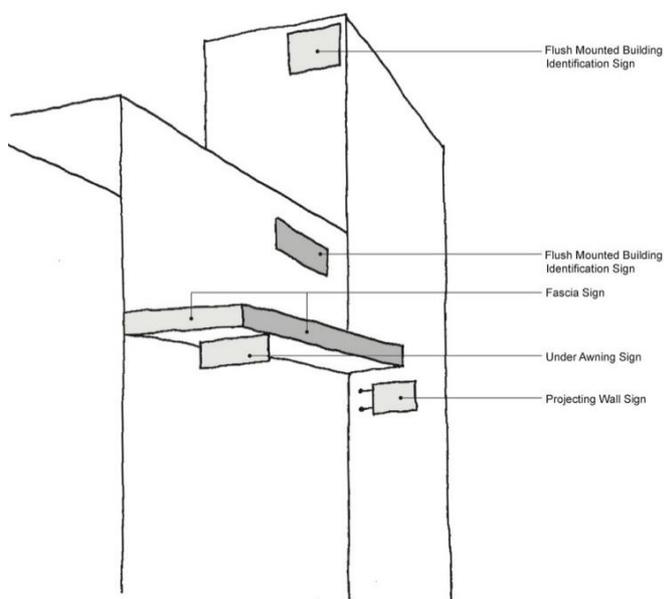
## 6.2.3 Signs

### Objectives

- a. To ensure that signs and advertising structures are unobtrusive and coordinated in their appearance and design, and complement buildings and the streetscape.
- b. To limit the purposes for which signs may be erected to those that identify businesses and buildings.

### Controls

- 1) Signs are permitted within centres where they advertise the business carried on at a particular property or identify the name of a building.
- 2) Signs are to be designed and located to:
  - be visually interesting and have a high level of design quality;
  - be integrated with the architecture and structure of the building on which they are located;
  - be consistent with the scale of the building or the property on which they are located;
  - consider existing signs on the building, adjoining buildings or elsewhere in the streetscape, and not obscure views of existing signs or the potential for signs to be viewed on adjoining premises;
  - cover no more than 25% of glazed surfaces; and
  - project minimally from the building.
- 3) Signs are not to be supported from, hung from or placed on other signs.
- 4) The preferred locations for business or building identification signs are shown on **Figure 6-3** and include:
  - fascia signs, located on the front or side fascia of an awning;
  - under-awning signs;
  - flush wall mounted signs (e.g. above windows or doors); and
  - projecting wall signs, where there is no awning or the fixture of the sign to the awning is not appropriate due to the style of the awning.
- 5) Awning fascia signs are not to project within 500mm of the kerb.
- 6) The minimum clearance from the footpath to the bottom of any sign (apart from flush mounted wall signs) is 2.4 metres.
- 7) Projecting wall signs and under-awning signs are to be perpendicular to the building façade and horizontal.
- 8) Above awning signs are not permitted.
- 9) Flush mounted building identification signs are permitted above the first floor on the building parapet only where they are integrated with the design of the building and where they do not project more than 100mm from the building. The maximum area of the sign face is 3m<sup>2</sup>.
- 10) Under-awning or projecting wall signs are to be a minimum of 3.5 metres apart.
- 11) Free standing signs (signs that are not affixed to a building) are not permitted on active street frontages.
- 12) Flashing, animated or bright neon signage is not permitted.
- 13) All buildings are to have clearly displayed and legible street numbering.
- 14) The location of signs is not to obscure views of traffic signs or traffic signals, or have the potential to cause confusion with traffic signs or signals (e.g. signs that look like traffic signals or stop signs located near a public road).



**Figure 6-3** Preferred locations for signs

## 6.2.4 Acoustic and visual privacy

### Objectives

- a. To ensure that appropriate standards of amenity and privacy are maintained for residents in the centre.
- b. To ensure that noise sources such as road and rail traffic do not impact on the amenity of residents or detract from the character of the centre.

### Controls

- 1) Development in the centres must comply with NSW EPA's noise attenuation requirements and the controls for visual and acoustic privacy in **Part 5.1.9**.
- 2) A combination of the following measures is to be used to mitigate the impacts of rail or road traffic noise within centres:
  - setbacks and service roads;
  - internal dwelling layouts that are designed to minimise noise in living and sleeping areas;
  - changes in topography;
  - higher than standard fencing constructed with a suitably solid mass; and
  - locating courtyards and principal private open space areas that will comply with the criteria in **Part 5.1.9** away from the noise source.

## 6.2.5 Safety, surveillance and maintenance

### Objectives

- a. To provide for a safe and attractive local centre with high levels of activity and amenity.
- b. To ensure that the design quality and amenity of the centre is maintained.

### Controls

- 1) The principles of Crime Prevention through Environmental Design (CPTED) are applicable to all development within centres. An assessment of the development's consistency with these principles must be submitted with any DA.
- 2) Balconies, terraces and other private open spaces are to be oriented to public open spaces to

optimise casual surveillance.

- 3) The design of all buildings, fences and landscape elements shall take sight lines, both horizontal and vertical, into consideration to minimize blind spots and promote a sense of security.
- 4) Lighting is to be installed on all circulation routes and major pedestrian thoroughfares.
- 5) Large open areas such as parking lots and public open spaces are to be floodlit.
- 6) Lights should be positioned so that they highlight landmarks and other special building features.
- 7) Lighting fixtures must be sturdy, durable, vandal resistant and easily maintained.
- 8) Fixtures on primary and secondary building elevations that are visible from the public domain are to be mounted at a height of at least 2.7 metres, and their appearance should complement the architectural and landscape character of the location.
- 9) The installation of lighting is to take into account and minimise its impacts on surrounding commercial premises and residential properties.
- 10) Durable and easily cleaned materials are to be selected in all areas exposed to the public, and all masonry surfaces to a height of 3 metres should be protected with an approved anti-graffiti treatment.
- 11) Fencing and street plantings are to be designed to achieve a balance between screening and security/surveillance.
- 12) Traffic calming measures are to be installed to ensure pedestrian safety.
- 13) Safety features such as tactile surfaces and handrails are to be provided in appropriate locations.

## **6.2.6 Site servicing**

### **Objectives**

- a. To ensure that servicing of premises within the centre is efficient.
- b. To minimise the amenity impacts of servicing activities including loading/unloading, waste storage and collection.

### **Controls**

- 1) Services and structures such as transformers, waste collection, storage and deposit areas, and loading bays are generally to be located to the rear of the property. Where this cannot be achieved services must be integrated into the overall design of buildings and landscaping of the street front through screening measures.
- 2) Service areas are not permitted on active street frontages.
- 3) The following controls relate to the screening of services:
  - all services, transformers, storage and deposit areas, and wheeled rubbish bins must be effectively screened from view;
  - screening walls or plant masses shall be at least 2.4 metres high;
  - all screening shall be designed to allow free and easy access to the facilities, as required to permit maintenance and checking by all relevant parties, including service authorities, Council officials, tenants and property owners; and
  - screening wall materials and plants shall be selected which have no adverse impacts on the operation of the facilities.
- 4) Service access is permitted from rear lanes, side streets and right of ways for the use of parking, loading docks and waste collection areas.
- 5) Adequate space should be provided for the unloading and loading of service vehicles in accordance with the relevant Australia Standard.
- 6) Structures shall be painted according to the required standards of the relevant service authority, in

colours that limit their visual impact.

- 7) All air conditioners must be located in areas where any noise and dripping condensation will have minimal impact on the public domain. No roof or wall mounted air conditioners on primary and secondary building elevations shall be visible from the public domain.
- 8) Television antennas and other telecommunication devices on primary and secondary building elevations are not to be visible from the public domain.

## 6.2.7 Traffic circulation, parking and access

### Objectives

- a. To ensure that vehicular traffic (including cars, public transport and service vehicles) is able to access the centre, including retail destinations, service areas and railway stations or other transport interchanges.
- b. To minimise conflicts between the pedestrian oriented areas of the centre and those areas required for vehicular traffic.
- c. To minimise the land area required for car parking and to encourage the efficient utilisation of car parking for multiple purposes.

### Controls

- 1) On-site car and bicycle parking is to be provided in accordance with the standards set out in **Table 6-1**.

**Table 6-1** Parking requirements in centres

| Land use  | Car parking requirements  |
|---|---|
| Commercial/office premises                                  | 1 space per 40m <sup>2</sup> GFA  |
| Retail shops/showrooms (less than 200m <sup>2</sup> GFA)    | 1 space per 30m <sup>2</sup> GFA  |
| Retail shops/showrooms (greater than 200m <sup>2</sup> GFA) | 1 space per 22m <sup>2</sup> GFA  |
| Restaurants/cafes   | 1 space per 10m <sup>2</sup> of dining area<br>1 space per 3 employees  |
| Residential development                                     | Refer to <b>Part 5.2.5</b>  |
| Bicycle parking   | Bicycle parking facilities must be provided in accordance with <i>Australia Standard AS 2890.3 Parking Facilities - Bicycle parking</i> |

- 2) Opportunities for shared parking provision for complementary uses within centres are to be provided.
- 3) In mixed developments, dedicated onsite parking is to be provided for the residential component of the development in accordance with the controls in **Part 5.2.5**.
- 4) Rear lanes and right of ways are to be used to provide access to parking areas, loading docks and waste collection areas. Lanes will need to accommodate heavy vehicles where access to loading areas and waste collection is required.
- 5) On-street parking is to be provided on all streets to create a buffer between pedestrian and street traffic and promote casual surveillance.
- 6) Basement, semi-basement or decked parking is preferred over large expanses of at-grade parking.
- 7) At grade or decked parking areas are to be located behind building lines. Notwithstanding this, Council will consider transitional arrangements for parking where an application is supported by a staging plan that indicates compliance with the above desired parking location principles upon ultimate development.
- 8) Outdoor parking areas are to be screened and landscaped to minimise their visual dominance

within the centre.

- 9) At grade car parks must contain shade tree plantings so that trees shade 50% of the car space surface area within 10 years.
- 10) Car parking and vehicle manoeuvring areas shall be designed so that vehicles can enter and exit the property in a forward direction.
- 11) Bicycle parking is to be in secure and accessible locations. Bicycle parking for employees is to have weather protection.

## **6.2.8 Residential flat buildings, manor homes and shop top housing**

Refer to the Part 5.2.5 of this DCP.