

HAWKESBURY DEVELOPMENT CONTROL PLAN 2023

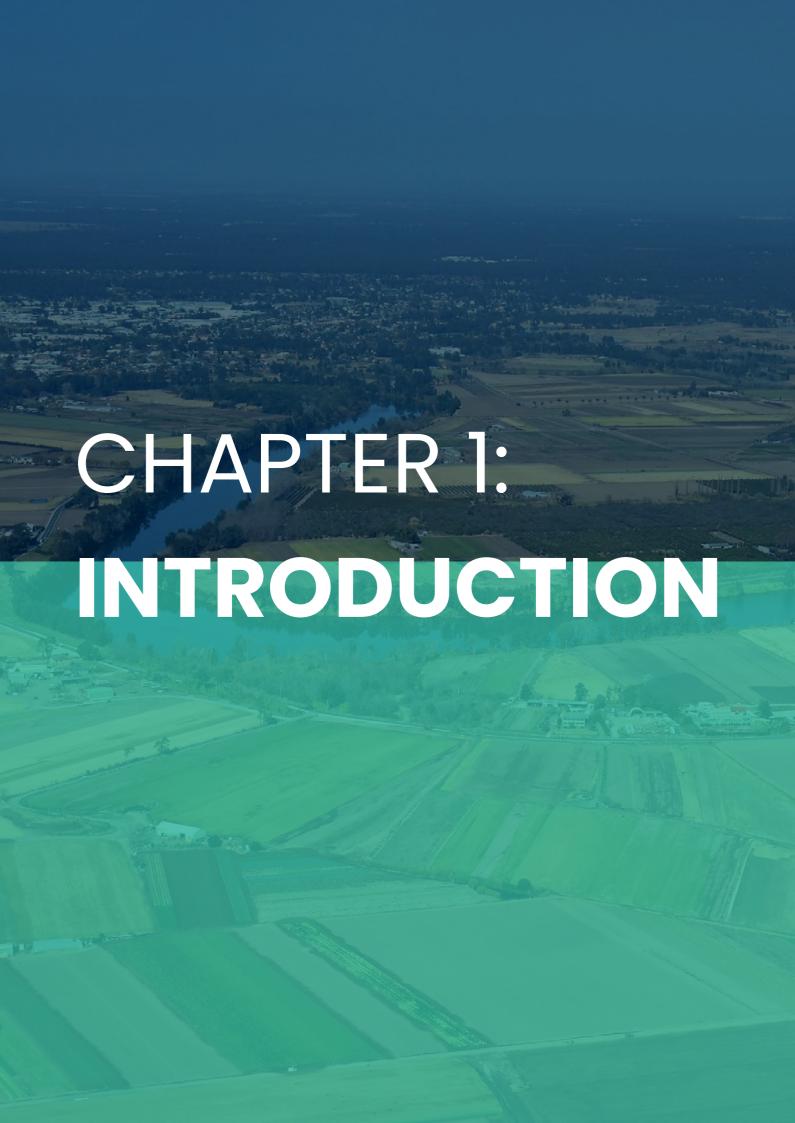
hawkesbury.nsw.gov.au











- PRELIMINARY

1.1 WHAT IS THE NAME OF THIS DEVELOPMENT CONTROL PLAN?

Hawkesbury Development Control Plan 2023.

1.2 WHAT DATE DID THIS DEVELOPMENT CONTROL PLAN COMMENCE?

This Development Control Plan was adopted by Council on 22 November 2022, and commenced on 24 July 2023.

1.3 WHERE DOES THIS DEVELOPMENT CONTROL PLAN APPLY?

This Development Control Plan applies to all land within the Hawkesbury Local Government Area and zoned under Hawkesbury Local Environmental Plan 2012. The Development Control Plan does not apply to land zoned under State Environmental Planning Policy (Sydney Region Growth Centres) 2006, unless referred to within the respective Development Control Plans. (At the time of adoption of this Development Control Plan the exclusion covers Stage 1 of the Vineyard Precinct).

1.4 WHAT ARE THE OBJECTIVES OF THIS DEVELOPMENT CONTROL PLAN?

The objectives of this Development Control Plan are:

- a)To provide a comprehensive document that contains detailed performance criteria and acceptable solutions for development which meets community expectations and addresses the key environmental planning issues of the Hawkesbury Local Government Area
- b)To promote economically, socially and environmentally sustainable development within the Hawkesbury Local Government Area
- c) To enable aesthetically pleasing, well designed and functional development that sympathetically relates to adjoining and nearby development
- d)To maintain and enhance the environmental and cultural heritage of the Hawkesbury Local Government Area
- e) To ensure that development will respond to its context and not detrimentally affect the surrounding development
- f) To promote the Ecologically Sustainable Development principles including water sensitive urban design, climate responsive building design, energy efficiency, sustainable transport and selection/use of recycled materials.

1.5 RELATIONSHIP BETWEEN THIS DEVELOPMENT CONTROL PLAN AND HAWKESBURY LOCAL ENVIRONMENTAL PLAN 2012

This Development Control Plan is to be read in conjunction with Hawkesbury Local Environmental Plan. In the event of an inconsistency between the provisions of the two documents, the provisions of Hawkesbury Local Environmental Plan 2012 will prevail to the extent of the inconsistency.

1.6 RELATIONSHIP BETWEEN THIS DEVELOPMENT CONTROL PLAN AND RELATED DOCUMENTS LISTED IN PART F OF THE DEVELOPMENT CONTROL PLAN

This Development Control Plan must be read in conjunction with the Related Documents listed in Part F of the Development Control Plan (save for any requirements specifically varied by the Development Control Plan), including the Western Sydney Engineering Design Manual and Council's Construction Specifications.

1.7 REVOCATION OF HAWKESBURY DEVELOPMENT CONTROL PLAN 2002

Pursuant to Section 3.43(4) of Environmental Planning and Assessment Act, the Hawkesbury Development Control Plan 2023 revokes the following Chapters of Hawkesbury Development Control Plan 2002:

Part C

- Car Parking and Access
- Effluent Disposal
- Heritage Conservation

Appendix E - Civil Works Specification (Part 1 Design Specification)

which covered land for which this Development Control Plan now applies.

1.8 STRUCTURE OF THIS DEVELOPMENT CONTROL PLAN

This Development Control Plan is structured into 6 parts (A – F) containing performance criteria and acceptable solutions, and includes site specific controls for a number of geographic areas. In the event of an inconsistency between a site specific control in Part D, and the performance criteria and acceptable solutions in Parts B and C of this Development Control Plan, the site specific controls in Part D prevail.

PART	SUMMARY
A - Introduction	Sets out the aims and objectives of the Development Control Plan, identifies the land to which the Development Control Plan applies, explains the structure of the document and the relationship of the Development Control Plan to other planning documents.
B - General requirements for all development	Sets out the performance criteria and acceptable solutions that apply to all development types in the Hawkesbury Local Government Area.
C - Specific land use requirements (To Be Added)	Provides performance criteria and acceptable solutions to guide the development of a wide range of uses including residential, commercial/retail, industrial, rural, tourism, infrastructure and subdivision.

D - Site specific requirements (To Be Added)	Provides specific controls which apply to a specific geographic area.
E - Appendix - Glossary (To Be Added)	Explains/defines the terms used in the Development Control Plan.
F - Related documents	Documents that contain supplementary technical and other requirements which also need to be complied with unless otherwise stated in the main body of the Development Control Plan e.g. Western Sydney Engineering Design Manual.

Each part is subdivided into sections and subsections. Generally the sections are broken down into:

- Preamble introductory statement about the section
- Other relevant sections reference to related sections of the Development Control Plan
- Objectives represent the broad outcomes that are to be achieved by the development
- Development outcomes stated as performance criteria and acceptable solutions
- The performance criteria provide the benchmarks which a development will be assessed against
- The acceptable solutions provide a means by which the intended outcomes can be achieved. By
 complying with the acceptable solutions it would be expected that any proposed development will
 be consistent with the performance criteria and the objectives for that type of development.

Each part is subdivided into sections and subsections. Generally the sections are broken down into:

- Preamble introductory statement about the section
- Other relevant sections reference to related sections of the Development Control Plan
- Objectives represent the broad outcomes that are to be achieved by the development
- Development outcomes stated as performance criteria and acceptable solutions
- The performance criteria provide the benchmarks which a development will be assessed against
- The acceptable solutions provide a means by which the intended outcomes can be achieved. By
 complying with the acceptable solutions it would be expected that any proposed development will
 be consistent with the performance criteria and the objectives for that type of development.

1.9 HOW TO USE THIS DEVELOPMENT CONTROL PLAN

Table 01 summarises the Parts of the Development Control Plan that apply to the main types of development that are permissible under Hawkesbury Local Environmental Plan 2012.

Table 01 – How to Use this Development Control Plan

Relevant Development Control Plan Parts	Dwellings and Dual Occupancy	Multi-Dwelling Housing, Residential Flat Buildings, Shop Top Housing	Retail/ Commercial Development	Industrial Development	Subdivision	Agriculture	Tourism and Other Development
Part A	All sections	All sections	All sections	All sections	All sections	All sections	All sections
Introduction							
Part B	All sections	All sections	All sections	All sections	All sections	All sections	All sections
General Controls							
Part C	1.1	1.1	1.2	1.3	1.4	1.5	1.6 & 1.7
Specific Land Use Controls							
Part D Site Specific Controls	Check if applicable to the site	Check if applicable to the site	Check if applicable to the site	Check if applicable to the site	Check if applicable to the site	Check if applicable to the site	Check if applicable to the site
Part E	All sections	All sections	All sections	All sections	All sections	All sections	All sections
Appendices							
Part F	All sections	All sections	All sections	All sections	All sections	All sections	All sections
Related Documents							

1.10 VARIATIONS TO THIS DEVELOPMENT CONTROL PLAN

Council acknowledges that it is not possible for its Development Control Plan to account for all possible situations and development scenarios. Council will consider variations to the acceptable solutions set out in the Development Control Plan where a proposed development can demonstrate that it achieves the applicable planning objectives and achieves a better outcome than would have been achieved by complying with the acceptable solution. The determination of whether the objectives and performance criteria are satisfied is the subject of Councilassessment.

1.10.1 IN CASES WHERE A VARIATION TO AN ACCEPTABLE SOLUTION IN THIS PLAN IS SOUGHT OR WHERE AN INNOVATIVE APPROACH IS PROPOSED, A WRITTEN REQUEST TO VARY THE ACCEPTABLE SOLUTION IS REQUIRED WHICH:

- a) Identifies the acceptable solution being varied
- b) Details the extent of the non-compliance with the acceptable solution
- c) Provides reasons and justification for the non-compliance
- d) Outlines how the development meets all of the relevant objectives of the Development Control Plan
- e)Demonstrates why compliance with the provisions of the Development Control Plan is unreasonable or unnecessary in the particular circumstances
- f) Demonstrates how the variation will not adversely impact on local amenity.

Council may require additional supporting information to justify the request for variation including specialist reports, plans and photomontages.

1.10.2 COUNCIL MUST BE SATISFIED THAT THE VARIATION MEETS AT LEAST ONE OF THE FOLLOWING PRINCIPLES BEFORE ISSUING CONSENT FOR THE DEVELOPMENT:

- a)The objectives of the Development Control Plan contained in the relevant chapter(s) are achieved not withstanding non-compliance with the acceptable solution
- b) The underlying objective or purpose of the acceptable solution is not relevant to the development and therefore compliance is unnecessary
- c) The underlying objective or purpose of the control would be defeated or thwarted if compliance was required and therefore compliance is unreasonable
- d)The zoning of the particular land is unreasonable or inappropriate so that an acceptable solution appropriate for that zoning is also unreasonable and unnecessary as it applies to the land and compliance with the acceptable solution would be unreasonable or unnecessary.

1.11 GLOSSARY OF TERMS/DEFINITIONS - REFER PART E

1.12 SAVINGS AND TRANSITIONAL PROVISIONS

This Development Control Plan does not apply to an application under Environmental Planning and Assessment Act which was lodged with Council but not finally determined before the commencement of this Development Control Plan. Any application lodged before the commencement of this Development Control Plan will be assessed in accordance with any relevant previous Development Control Plans or other Council policies which applied at the time of application lodgement.

1.13 AMENDMENT SCHEDULE

AMMENDMENT NUMBER	ADOPTED DATE	DESCRIPTION OF CHANGES
Original	22 November 2022 and commenced on 24 July 2023.	Hawkesbury Development Control Plan 2023 came into effect.

CHAPTER 2: Site Analysis

1. INTRODUCTION	12
1.1 APPLICATION/PREAMBLE	12
2. OTHER RELEVANT CHAPTERS	12
3. OBJECTIVES (PRIMARY)	12
4. DEVELOPMENT OUTCOMES	13
4.1 SITE ANALYSIS PLAN	13

1. INTRODUCTION

1.1 APPLICATION/PREAMBLE

Site analysis is the foundation of good design and is carried out before the design phase commences. Development proposals need to demonstrate how design decisions have been based on analysis of site conditions and their context, taking into account all environmental, physical and man-made constraints and opportunities as they relate to the unique features of the site and nearby land.

This Chapter of the Development Control Plan provides the objectives, performance criteria and acceptable solutions for undertaking a site analysis.

2. OTHER RELEVANT CHAPTERS

All other Chapters of the Development Control Plan are relevant to site analysis.

3. OBJECTIVES (PRIMARY)

The primary objectives of this Chapter are to:

- a) Identify the constraints and opportunities of a development site
- b) Provide an understanding of how the development relates to the site
- c) Identify the capability and suitability of the site for development, and determine the most appropriate built form that the site can accommodate
- d)Inform the architectural style of the development, to direct a suitable design outcome that is consistent with and responsive to the predominant context or streetscape character
- e) Reduce adverse amenity impacts and improve sustainability outcomes of development
- f) Protect the scenic value of Hawkesbury's natural and built environment.

4. DEVELOPMENT OUTCOMES

Performance criteria and acceptable solutions for preparing a site analysis.

4.1 SITE ANALYSIS PLAN

Performance Criteria	Acceptable Solutions
Site Analysis Plan	
P1.1 A Site analysis plan must be submitted for construction of any building, external alterations to existing buildings and Torrens	D1.1 Provision of a Site Analysis Plan with all Development Applications that includes:
title subdivision of land, and must address all matters identified in the acceptable solutions column.	Scaled plan drawing with a title block showing property address, date and plan number true north point and scale.
The scope of the site analysis will depend on the scale and nature of the development, the sensitivity of the site and the extent of the	Lot boundaries including adjacent lots (based on a (registered surveyor) survey.
area that may be affected by the proposed development.	Site area and dimensions.
The site analysis must clearly demonstrate	Contours and levels to AHD.
an appreciation of the site and its context, and the opportunities and constraints on the layout and design of the site.	Adjacent road reserves, identified road widening, site access points, parking and traffic management devices.
The site must demonstrate that the development will integrate within the streetscape or context when considering scale, proportion and massing.	Existing, trees, landscaping and vegetation on and adjacent to the site, with size and species identified where possible.
	Nomination of trees to be removed or retained.
	Hydraulic features, drainage lines, watercourses and features.
	All existing buildings and structures and their use, including tanks and fences.
	Easements, right of ways, services, existing infrastructure, and utilities.
	Inherent natural and other hazards such as flooding and bushfire, acid sulphate soils, contamination, landfill and slope instability.
	Adjoining buildings including locations of windows and other openings.

Performance Criteria	Acceptable Solutions
Site Analysis Plan	
	Solar orientation, overshadowing and prevailing winds.
	Streetscape analysis.
	Special environmental features such as threatened species habitat, endangered ecological communities and wetlands.
	Any items or places of heritage or archaeological significance.
	A site analysis may be supplemented by other graphical information such as photographs and photomontages.



I. INTRODUCTION	17
1.1 PREAMBLE	17
1.2 APPLICATION	19
2. OTHER RELEVANT CHAPTERS	19
3. OBJECTIVES	20
4. PLANNING CHANGES TO A HERITAGE PLACE	20
5. HERITAGE MANAGEMENT DOCUMENTS	23
6. DEVELOPMENT OUTCOMES	25
6.1 CONSERVATION AND MAINTENANCE	26
6.2 ADAPTIVE REUSE	28
6.3 ALTERATIONS AND ADDITIONS	29
6.4 FINISHES, MATERIALS AND COLOURS	31
6.5 NEW DEVELOPMENT WITHIN THE	
CURTILAGE OF A HERITAGE ITEM	33
6.6 DEVELOPMENT WITHIN A HERITAGE CONSERVATION AREA	34
6.7DEVELOPMENT IN THE VICINITY OF A HERITAGE ITEM OR	
CONSERVATION AREA	35
6.8 DEVELOPMENT OF ARCHAEOLOGICAL SITES	37
6.9 SUBDIVISION	38
6.10 LANDSCAPING	40
6 11 SIGNAGE	42

1. INTRODUCTION

1.1 PREAMBLE

The Hawkesbury Local Government Area is unique in the Sydney Metropolitan context due its very rich heritage character influenced by its diverse and distinctive Aboriginal, European and natural heritage items and places ranging from town squares, grand mansions, churches, workers cottages, parks, cemeteries, relics and significant trees.

The special character of the Hawkesbury derives from its unique historical background and the expression of this background in its interrelationship of buildings and places of heritage significance, their settings and landscapes. These irreplaceable and precious heritage items not only provide a window to the past and to the very origins of the Hawkesbury community but also add character, appeal and interest to Hawkesbury. Therefore, Council continues with its leadership role in protecting and conserving these items.

Conservation involves identifying, assessing, protecting and maintaining cultural and heritage values of landscapes, resources, places, items, customs and traditions so that the community and future generations can enjoy, learn from them, and appropriately manage these values.

It is recognised that heritage is an integral component of the future character of the Hawkesbury LGA that will need to be built through the integration of this environmental heritage to create a pleasant living and working environment for Hawkesbury community and attract visitors and tourists into the area.

This Chapter of the Development Control Plan provides the objectives, performance criteria and acceptable solutions for development of items of heritage significance, or in proximity to such items, to achieve these goals.

Heritage Significance

The heritage significance of an item includes all the values that make it special to past, present and future generations. Forming an understanding of significance is the first step in the management of a heritage place or object. The NSW Heritage Council has established criteria for assessing heritage significance. An item (including a building, place, area, archaeological site, object or relic) is considered to have heritage significance if it meets one or more of the following NSW Heritage Council criteria:

a) Historical Significance

An item is important in the course, or pattern, of NSW's cultural or natural history (State significance); or

An item is important in the course, or pattern, of the local area's cultural or natural history (local significance)

b) Associative Significance

An item has strong or special association with the life or work of a person, group of persons, of importance in NSWs cultural or natural history (State significance); or An item has strong or special association with the life or works of a person, or group of persons, of importance in the cultural or natural history of the local area (local significance)

c) Aesthetic Significance

An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement I NSW (State significance); or An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the local area (local significance)

d) Social significance

An item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons (State significance); or An item as strong or special association with a particular community or cultural group in the local area for social, cultural or spiritual reasons (local significance)

e) Research Potential

An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (State significance); or An item has the potential to yield information that will contribute to an understanding of the area's cultural or natural history (local significance)

f) Rarity

An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (State significance); or

An item possesses uncommon, rare or endangered aspects of the area's cultural or natural history (local significance)

g) Representative

An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or environments (State significance); or An item is important in demonstrating the principal characteristics of a class of the area's cultural or natural places or environments (local significance).

Other Information

The following heritage resources are recommended for owners of heritage properties or applicants planning changes to a heritage place.

- The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance 2013, Australia International Council for Monuments and Sites, 2013, australia.icomos.org/publications/burra-charter-practice-notes/#bc
- Assessing Heritage Significance, NSW Heritage Office, 2001 heritage.nsw.gov.au/assets/ Uploads/a-z-publications/a-c/Assessing-Heritage-Significance.pdf
- How to carry out work on heritage buildings and sites, NSW Heritage Office, 2002.
- Statements of Heritage Impact, NSW Heritage Office and Department of Planning, 1996.
- Local Government Heritage Guidelines, NSW Heritage Office, 2002. heritage.nsw.gov.au/assets/Uploads/a-z-publications/j-I/localgovernmentheritageguidelines.pdf
- Conservation Management Documents, NSW Heritage Office and Department of Planning, 2002. heritage.nsw.gov.au/assets/Uploads/a-z-publications/a-c/Conservation-Management-Documents.pdf
- Heritage Curtilages, Heritage Office and Department of Urban Affairs & Planning, 1996.
 heritagensw.intersearch.com.au/heritagenswjspui/retrieve/72c8c9d1-4659-46e5-afd7-7454ld4ea19d/H04282%20-%20HERI.pdf
- Maintenance Series, NSW Heritage Office.
- The Conservation Plan, J.S. Kerr, 7th Edition, Australia ICOMOS, 2013, australia.icomos.org/ wp-content/uploads/The-Conservation-Plan-7th-Edition-reduced-file-size.pdf

1.2 APPLICATION

Development controls for heritage items and heritage conservation areas listed in Schedule 5 – 'Environmental Heritage' of the Hawkesbury Local Environmental Plan, and any development on land adjacent to or within the vicinity of a heritage item or heritage conservation area as follows.

2. OTHER RELEVANT CHAPTERS

All other Chapters of the Development Control Plan are relevant to this Chapter.

3. OBJECTIVES

The objectives of this Chapter are to:

- a) Promote and protect Hawkesbury's natural and cultural heritage as a valuable resource that must be conserved for future generations
- b) Consider the potential heritage significance of all properties identified in the LEP Heritage Map and other applications as a matter to be taken into account in the assessment of DAs affecting those properties
- c) Integrate conservation issues and management into the planning and development control process
- d) Ensure that any development with respect to a heritage site is undertaken in a manner that is sympathetic to, and does not detract from, the identified significance of the site
- e) Encourage innovative approaches to the conservation of Hawkesbury's heritage and to provide incentives for good management practice.

4. PLANNING CHANGES TO A HERITAGE PLACE

Council provides a free heritage advisory service. If you are thinking about planning works to a heritage place, including repairs or new works, contact Council for a free consultation with Council's heritage advisor to discuss your property.

When considering making changes to a heritage place or building, the first step is to gain an understanding of the significance of the place, including physical examination of the place, building or relic(s), as well as a review of documentary evidence (including review of historic architectural plans, photographs, subdivision plans, maps, etc.).

The significance of the building or place should be assessed in accordance with the NSW Heritage Council criteria. The assessed heritage significance of a place, building or element should be taken as the guiding framework for planning change. This assessment of significance should be presented to Council and agreed upon prior to planning any changes to the site.

A range of options should be explored for the proposed works in order to seek the option which minimises any reduction of cultural significance. These options should be documented as part of the design process and should be discussed in the heritage impact statement. The best option is considered to be the one with the least impact on heritage significance. The extent of proposed change should respect the heritage significance of the item, building site, streetscape and/or area.

As part of the planned works, the owner/applicant should consider opportunities to improve the understanding and appreciation of significance should be explored. The following flow chart illustrates the appropriate process which should be undertaken when planning changes to a place of heritage significance:

PLANNING CHANGES TO A HERITAGE PLACE

Step 1: Check Heritage Listings

- Is the property a heritage item, in a conservation area, or in the vicinity of a heritage item or conservation area?
- Is the heritage item locally listed under the Hawkesbury LEP or State Listed under the Heritage Act 1977?

Step 2: Investigate Heritage Significance

- If the item is listed, look up the heritage inventory form on the State Heritage Inventory (heritage.nsw.gov.au/search-for-heritage/search-for-nsw-heritage)
- Undertake historic research on the property (architectural plans, maps, historic photos, etc.)
- Review physical evidence of the item, including analysis of existing building fabric, original features and later modifications, as well as its setting, curtilage, views, relationship to surrounding sites, natural features, etc.
- Consider the condition and integrity of the item
- Undertake assessment of significance in accordance with the NSW heritage assessment criteria.

Note: It is recommended to engage an experienced heritage professional at this stage.

Note: The local history section of the Hawkesbury Council Library is a good resource when carrying out historic research.

Step 3: Consult with Council/ Approval Authority

The identified significance of the item should be agreed upon as the guiding framework for planning ad carrying out changes to a heritage place.

Note: Council may request more thorough heritage assessment, such as the development of a Conservation Management Plan (CMP).

Step 4: Commence design development phase.

Consider and document a range of options for the works with a view to exploring how to best minimise impacts on heritage significance while also meeting the needs of the owner/occupant.

Step 5: Attend Pre-Development Application meeting with Council/Approval Authority.

Step 6: Carry out further investigation and amend design, as required, to address any issues raised by Council / Approval Authority in pre-DA Phase.

Note: If the planned works are not considered to be appropriate for the site, the applicant may be advised to carry out further investigations (Step 2).

Step 7: Prepare documentation for Development Application.

For proposals affecting heritage items, buildings in a conservation area or in the vicinity of a heritage item or conservation area, the Development Application documentation is to include a Heritage Impact Statement.

All options for the proposed works should be documented as part of the Development Application submission and these options should be discussed in the Heritage Impact Statement.

Step 8: Lodge Development Application with Council/Approval Authority.

Step 9: Council/Approval Authority determines application.

5. HERITAGE MANAGEMENT DOCUMENTS

In accordance with section 5.10 of the Hawkesbury Local Environmental Plan 2012, Council may require a heritage management document to be prepared to assess the extent to which the carrying out of proposed works would impact on the heritage significance of the item or area concerned.

There are a number of different types of heritage management documents which Council may require for development assessment, and/or for the long-term management of heritage properties.

Types of heritage management documents include Heritage Impact Statement, Conservation Management Plan, Heritage Interpretation Strategy, Photographic Archival Recording, and Long Term Costed Maintenance Plan.

Heritage Impact Statements

For development proposals affecting a heritage item, conservation area or sites in the vicinity of a heritage item or conservation area, the applicant will be required to prepare a Heritage Impact Statement in order to assess the impact of the proposed works on the heritage significance of the heritage item(s) and/or conservation area concerned. Heritage Impact Statements should be prepared in accordance with the Australia ICOMOS Burra Charter 2013 and NSW Heritage Office Guidelines Statements of Heritage Impact.

Heritage Impact Statements should address the following:

- The heritage listings that apply to the site or area
- A historical overview of the area and site
- Physical analysis of the site and its context, with consideration of the curtilage, setting, streetscape
- The heritage significance of the item or area concerned (note the assessed heritage significance of the site should be presented to Council in the early phases of planning works to a heritage place)
- An overview of the proposed works
- The impact of the proposed development on the heritage significance of the item and its setting, including, where relevant, any landscape or horticultural features
- Analysis of options explored for the proposed works, noting that the best option is the one
 which minimises impact on heritage significance whilst meeting the ongoing needs of the
 owners/occupants of the site
- Proposed measures to conserve heritage significance and mitigate heritage impacts of the proposed development.

Conservation Management Plans

A Conservation Management Plan is a document which sets out what is significant about a place and, consequently, what policies are appropriate to enable that significance to be retained in its future use and development.

Council may request the preparation of a Conservation Management Plan for highly significant sites, large or complex sites, or where major works are planned. Where a Conservation Management Plan is required, the Conservation Management Plan should be prepared as the first step, prior to developing a plans to undertake work.

Conservation Management Plans should be prepared by appropriately skilled heritage professionals in accordance with The Burra Charter 2013, J.S. Kerr's The Conservation Plan, and the NSW Heritage Council Guidelines on *Conservation Management Documents*.

The level of detail and scope required for a Conservation Management Plan may vary depending on the significance and complexity of the site. It is a good idea to discuss the requirements for a Conservation Management Plan with Council's Heritage Advisor.

Heritage Interpretation Strategy and Heritage Interpretation Plan

A Heritage Interpretation Strategy is a document which explores opportunities to communicate the significant values of a heritage place to the community. A Heritage Interpretation Strategy may be required at the Development Application stage for highly significant sites or largescale developments affecting heritage items.

Following approval of the Development Application, a Heritage Interpretation Plan should be prepared and presented to Council for approval. A Heritage Interpretation Plan details (such as locations, sizes, materials, content, text, graphics, design, etc) for the implementation of heritage interpretation for the site. Heritage Interpretation must be implemented prior to the issue of an Occupation Certificate.

Photographic Archival Recording

A photographic archival recording is a record of a heritage place or object, to document the condition of a place or object for the future, before it is changed. Council may request a photographic archival recording for development proposals involving demolition, major works, or even for extensive repairs. Photographic Archival Recordings should be prepared in accordance with the NSW Heritage Office Heritage Information Series Photographic Recording of Heritage Items using Film or Digital Capture.

Long Term Costed Maintenance Plans

A long term costed maintenance plan is a document which sets out the required maintenance and associated costs of carrying out maintenance of a building or heritage asset in the long term. Maintenance plans should address all aspects of the building and site that requires maintenance, a schedule of inspections and the associated costs of carrying out maintenance works. The main advantage is that building maintenance is planned and budgeted for and carried out systematically rather than in an ad hoc (and often more costly) manner. A long term costed maintenance plan should be prepared for a minimum period of 25 years and should all types of maintenance works, including corrective maintenance, planned maintenance and emergency corrective maintenance.

Refer to the Hawkesbury City Council Fact Sheet on Maintenance for further information on the requirements for long term costed maintenance plans.

6. DEVELOPMENT OUTCOMES

This Section provides objectives, performance criteria and acceptable solutions for development involving items of heritage significance, under the following subsections:

- 6.1 Conservation and Maintenance
- 6.2 Adaptive Reuse
- 6.3 Alterations and Additions
- 6.4 Finishes, Materials and Colour
- 6.5 New development within the Curtilage of a Heritage Item
- 6.6 Development within a Heritage Conservation Area
- 6.7 Development in the Vicinity of a Heritage Item or Conservation Area
- 6.8 Development of Archaeological Sites
- 6.9 Subdivision
- 6.10 Landscaping
- 6.11 Signage

6.1 CONSERVATION AND MAINTENANCE

Performance Criteria | Acceptable Solutions

Conservation and Maintenance

- P1 The heritage significance of a building is to be conserved through the retention of original features, design and fabric, and through the use of original construction techniques.
- **D1.1** Heritage buildings and buildings in conservation areas should be appropriately maintained to ensure their long-term conservation.
- **D1.2** Conservation works should be guided by suitably qualified consultants and tradespersons with experience in heritage conservation, including heritage architects, heritage engineers.

In accordance with Clause 5.10(3) of the Hawkesbury Local Environmental Plan 2012, applicants must formally notify Council prior to undertaking routine maintenance work. Council may provide exemption to carry out the work without approval, where appropriate. Sufficient information of the nature of the maintenance work must be provided.

Seek early advice from Hawkesbury City Council's free Heritage Advisory Service when planning major maintenance or conservation works.

- **D1.4** Maintenance works have the potential to create a cumulative impact on the heritage significance of a building. Maintenance works should be considered in a holistic manner.
- **D1.5** Development applications for alterations and additions should also include measures for the conservation and maintenance of the heritage elements which are to be retained.
- **D1.6** Original garden elements including outbuildings, fences, stonework, pathways and other like features are to be identified and where appropriate retained, especially if the element is of high heritage significance. Occasionally, replacement of items of lower heritage significance may be acceptable where the element has deteriorated. This must be agreed upon and approved by Council. In this case, the replacement is to match as closely as possible with the original style, design, materials, colour and height of that garden element. Old photographs or careful inspection of remaining fabric can often reveal the original design features and style of the item.
- **D1.7** Original features are to be repaired, rather than be replaced.
- **D1.8** The reconstruction of original lost details is to be based on documentary or physical evidence such as historic photographs, architectural plans or existing building details and should be agreed upon by Council. This should be considered in accordance with the provisions of the 'Burra Charter'.
- **D1.9** Any features that are considered valuable in reflecting the history and maintaining the character of the item are to be retained.

Performance Criteria	Acceptable Solutions
	D1.10 The removal of original detailing or the enclosure of verandahs on the front façade of a heritage item will generally not be permitted.
	D1.11 New decorative features are not to be used on a heritage item unless documentary, physical or other evidence indicate that it once existed.
	D1.12 Intrusive security measures such as roller shutters, window bars and the like are not to be introduced to the heritage item or within heritage conservation areas.
	D1.13 Construction techniques are to be compatible and reflect original building techniques where possible, such as the use of lime based mortars for re-pointing bricks rather than the use of cement based mortars.
	D1.14 Original or early unpainted brick or stone walls must not be rendered, plastered, painted or coated.
	D1.15 External fixtures such as solar panels, skylights, rainwater tanks, air conditioning units or other like utility installations are not to be installed on the front façade of the heritage item or any other elevation readily visible from a public road or place.

NOTE: Colour coated steel roofing (Colorbond) is not considered to be a suitable replacement material for galvanised iron, galvanised steel, slate or tile roofing. Construction techniques should be compatible and reflect original building techniques where possible, such as the use of lime based mortars for re-pointing bricks rather than the use of cement based mortars.

6.2 ADAPTIVE REUSE

Performance Criteria	Acceptable Solutions
Use of Heritage Items	
P2 The use of a heritage item is to be compatible with the existing structure and layout of the item so as to minimise alterations to the building.	 D2.1 The adaptive reuse of a heritage item or a change of use is to demonstrate that: The new use requires minimal alterations to significant fabric and building elements, and that any changes to these are reversible or have minimal impact on the heritage significance of the item. Any internal changes do not compromise the heritage significance of the external appearance of the item. Alterations and/or additions required to support the new use do not obscure the understanding of the item's significant use. The introduction of new services will not have a detrimental impact on significant fabric or spaces. The new use is consistent with the agreed conservation policy identified in the conservation management plan.

6.3 ALTERATIONS AND ADDITIONS

Performance Criteria

Acceptable Solutions

Scale, Form and Siting

P3 The scale, form and siting of alterations or additions to a heritage item are not to diminish the heritage significance of a heritage building or place.

D3.1 In order to ensure that the scale and form of the proposed development will not dominate the heritage item, especially when viewed from a public road or place, additions and alterations are to:

- a) Be located along the least significant elevation or in the least significant part of the setting
- b) Not obscure the street elevation of the heritage item
- c) Be setback further from the street elevation of the heritage item (see Figure 1).

D3.2 In siting alterations and additions, site features that are considered significant are to be identified and retained, including gardens, fences, outbuildings, mature vegetation or archaeological sites.

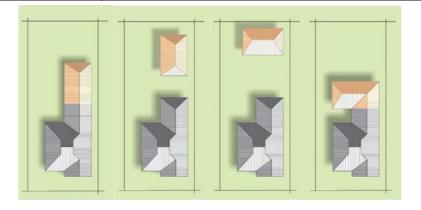


Figure 1: New Additions/Extensions

- **D3.3** The scale and form of new additions should not overwhelm the scale and form of the original building. In general, new additions should be smaller than the scale and footprint of the original building.
- **D3.4** First floor alterations and additions to a heritage item are often not appropriate on heritage buildings.
- **D3.5** Where possible, the garages/carports are to be located at the rear of the property with rear access. If rear access is not feasible, then the garage located to the rear or side of the building, may be acceptable.

Performance Criteria

Acceptable Solutions

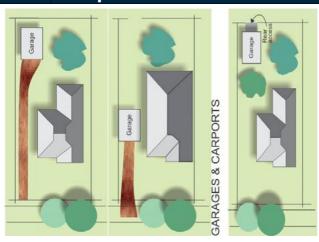


Figure 2: Location of garages

Built Form and Character

P4 The built form and character of alterations or additions to a heritage item are not to diminish the heritage significance of a heritage building or place.

- **D4.1** Alterations and additions are to be consistent with the existing building form with respect to roof type, pitch and eaves, verandah, façade rhythms, geometry of bay dimensions and the size, proportions and position of windows, doors and other openings. However it should avoid complete mirror image of the original design.
- **D4.2** Alterations and additions are to be designed to complement the existing period style and character of the heritage item.
- **D4.3** Alterations and additions are to be visually recessive and easily identified as being later work. Measures to achieve this include:
 - a) The side walls of the addition are to be setback or recessed to establish a break or rebate between the two
 - b) The use of a lower roofline on the additions to the building
 - c) The use of different but complimentary building materials and colours
 - d) The use of 'lighter' building materials and construction for the new additions to the building (e.g. timber extension to brick/stone dwelling).



Figure 3: Possible forms for rear additions to single storey dwellings

D4.5 When adding a new garage to a heritage item, opensided carports are generally more acceptable and less intrusive than solid structures as they do not affect the fabric and streetscape appearance of the heritage item.

6.4 FINISHES, MATERIALS AND COLOURS

Performance Criteria	Acceptable Solutions	
Character and Appearance		
P4 The materials, finishes and colours of works to a heritage item or within the vicinity of a heritage item are not to diminish the heritage significance of the heritage building or place.	D4.1 Additions are to use recessive colours and should not visually dominate the existing building, particularly when viewed from the street.	
Theritage ballaring of place.	D4.2 New materials are to be compatible with the colour, finishes and proportion of existing materials, and they are to be easily recognised as being new without detracting from the character and heritage significance of the existing building.	
	The use of Colorbond or zincalume for roof sheeting, flashing, guttering and downpipes on heritage buildings is not permitted. Instead, recycled or new galvanised steel custom orb sheeting and lead flashing is to be used as a conservation technique for buildings which originally had a corrugated iron roof.	
	D4.3 New decorative elements (such as finials, barge boards, or verandah brackets) are to be avoided (unless documentary, physical or other forms of evidence indicate it once existed), as this can affect the integrity of the heritage item and/or the heritage conservation area. Also, decorative elements of new additions are not to attempt to replicate the architectural or decorative detail of the original, so as to maintain a distinction between old and new.	
	D4.4 The brick laying pattern of alterations and additions is to match that of the existing building.	
	D4.5 Exterior face brick or stone walls and unpainted surfaces are not to be painted, plastered or coated except in exceptional circumstances where this is considered an appropriate conservation measure.	
	D4.6 Original plaster or render is not to be removed. Where repairs or replacement is necessary, this should be undertaken using materials consistent with original render.	
	D4.7 Later cement render to buildings are not to be removed where its removal will damage the face brick or stone.	

Performance Criteria	Acceptable Solutions
	D4.8 Original roofing materials are to be retained wherever possible and repaired as necessary with compatible materials. However, if it can be demonstrated that the roofing needs to be replaced, then the new roofing material is to match as closely as possible, the colour, texture and profile of the original material.
	D4.9 Large areas of concrete driveways are to be avoided, and where possible the use of alternative materials such as gravel, pavers or grass-crete should be explored.
	D4.10 Colour schemes for heritage buildings are to closely resemble the original colour scheme, or if this is not known, be compatible with the particular architectural period of the building and based on research of the original finishes. Careful paint scrapings may identify the original colours that were used.
	hand bricks to match the original; if not brick provide new bricks which will closely match the
	D4.11 Garage or carport designs are to use design detailing, materials and colours that complement the heritage item. However, new garages or carports are to be:
	a) Be separate from the heritage item where possible
	b) Preferably be of a 'lightweight' construction such as timber with metal roofing
	c) Avoid replication of decorative detail or finishes found on the heritage item
	d) Be more simple and contemporary in design
	e) Consider incorporating landscaping elements, where appropriate, such lattice screens with climbing plants in order to soften the appearance of the structure.

6.5 NEW DEVELOPMENT WITHIN THE CURTILAGE OF A HERITAGE ITEM

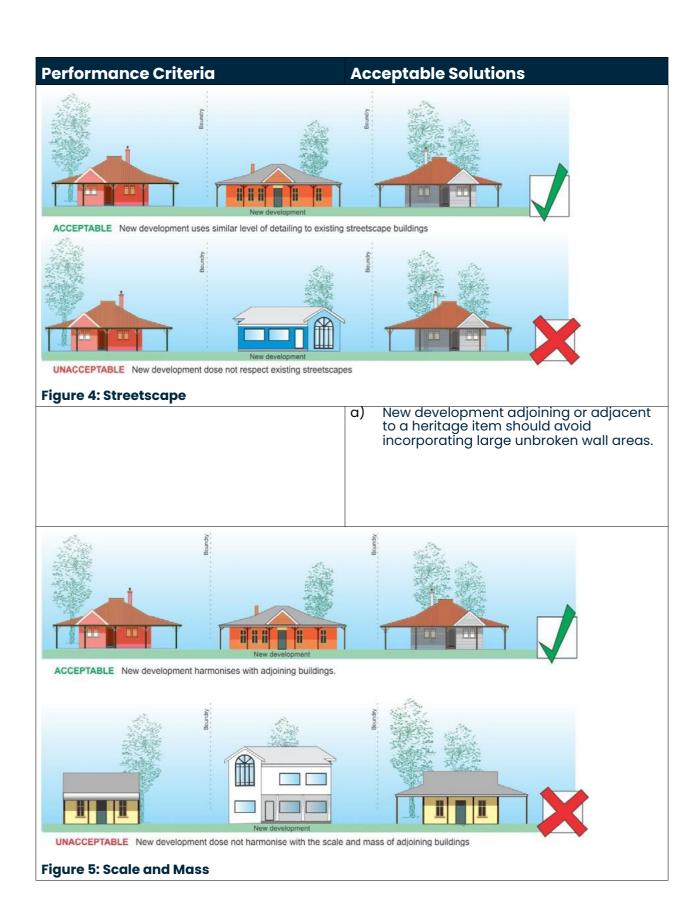
Performance Criteria	Acceptable Solutions
Design, Scale, Bulk and Siting	
P5 Any development within the curtilage of a heritage item is to be designed and sited so that the heritage significance of the item is conserved.	D5.1 The development is not to be sited in front of the front building line of the existing heritage item.
	D5.2 Where a development is within the curtilage of a heritage item, it is to be appropriately designed and located to complement the scale, proportions and geometric alignments of the existing heritage item and ensure the visual prominence of the heritage item is retained.
	D5.3 The bulk and scale of development is not to dominate its' surroundings. In order to minimise bulk, new development should be consistent with the predominant height in the street. If it is difficult to determine the predominant height, then it should be consistent with the adjoining buildings.
	D5.4 Where there is an established pattern of side setbacks that contribute to the character of the streetscape this is to be also reinforced by new development.
	D5.5 A reasonable "buffer" space is to be provided between the heritage item and the new development to ensure that there will be no adverse impact upon the heritage item.
	D5.6 Any new development is to ensure consistency with the character and the heritage significance of the established streetscapes.

6.6 DEVELOPMENT WITHIN A HERITAGE CONSERVATION AREA

Performance Criteria	Acceptable Solutions	
Design and Siting		
P6 Any development within a Heritage Conservation Area is to be designed and sited so that the heritage significance of the Conservation Area is conserved.	D6.1 Existing heritage buildings in Heritage Conservation Areas are to be retained and conserved. Buildings in Heritage Conservation Areas often have significant internal features which should be retained.	
	D6.1 New development is to be sited and designed so as not to adversely impact upon the heritage significance of the area.	
	D6.2 Development is to be compatible with the surrounding built form and pattern of development by responding sympathetically to:	
	 a) Existing form, massing, setbacks, scale and architectural style b) The design and pitch of the roof (if any) c) Site topography and landscape d) Surrounding neighbourhood character and streetscape e) The style, size, proportion and position of theopenings for windows and doors (if any) f) Colour, texture, style, size and type of finish of the materials to be used on the exterior of the building g) Existing landscape character (i.e. new development in a conservation area should seek to maintain the landscape character of the area. 	
	D6.3 New development in a heritage conservation area must include adequate landscaped area to accommodate deep rooted trees and vegetation to provide a buffer between the new development and the surrounds.	

6.7 DEVELOPMENT IN THE VICINITY OF A HERITAGE ITEM OR CONSERVATION AREA

Performance Criteria	Acceptable Solutions
Considerations	
P7 Any development within the vicinity of a heritage item or heritage conservation area is to be designed and sited so that the heritage significance of the item is conserved.	D7.1 Where development is proposed on land adjacent to or within the vicinity of a heritage item or a heritage conservation area the following is to be taken into consideration to ensure that it will complement the identified significance or setting of the heritage item or the heritage conservation area: a) The character, siting, bulk, scale, height and external appearance of the development b) The visual relationship between the proposed development and the heritage item or heritage conservation area c) The potential for overshadowing of the adjoining heritage item or any building within a heritage conservation area d) The colours and textures of materials proposed to be used in the development e) The landscaping and fencing of the proposed development f) The location of car parking spaces and access ways into the development g) The impact of any proposed advertising signs or structures h) The maintenance of the existing streetscape, where the particular streetscape has significance to the heritage item i) The impact the proposed use would have on the amenity of the heritage item i) The impact the construction phase will have on the wellbeing of a heritage item k) Avoid making a replica of a heritage building for infill development l) Incorporate sufficient landscaped area to accommodate deep rooted trees and vegetation to provide screening between the new development and the heritage item or conservation area



6.8 DEVELOPMENT OF ARCHAEOLOGICAL SITES

Performance Criteria	Acceptable Solutions
Approvals	
P8 Any development within or near an archaeological site is to be designed and sited so that the archaeological site is conserved.	D8.1 Obtain an Archaeological Assessment prior to planning works which are likely to affect an archaeological site or deposit.
	New development is to be designed to minimise impacts unknown archaeological sites.
	D8.2 Any development that involves the disturbance of archaeological sites cannot proceed without the appropriate approvals under the NSW Heritage Act 1977. The applicant is to seek advice from the Heritage Branch of the Office of Environment & Heritage and Council's Heritage Officer in relation to these requirements.
	D8.3 Archaeological investigations must be carried out according to Office of Environment and Heritage's Code of practice for archaeological investigation of Aboriginal objects in NSW, available at www.environment.nsw.gov.au/ licences / archinvestigations.htm.

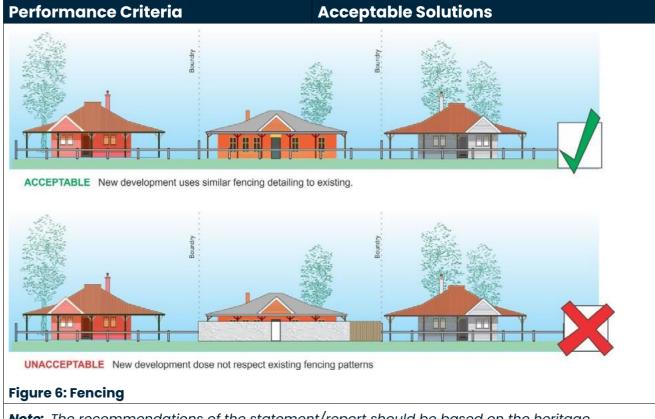
6.9 SUBDIVISION

Performance Criteria	Acceptable Solutions
Lot Layout and Design	
P9 Any subdivision of land containing a heritage item is to be designed and sited so that the heritage significance of the item is conserved.	D9.1 Where a subdivision proposal contains a heritage item, the heritage item and any other associated outbuildings is to be retained on the same allotment.
	D9.2 An appropriate setting or curtilage for the heritage item is to be defined whilst taking the following into consideration:
	a) The original form and function of the heritage item
	b) Any outbuildings, gardens, trees, fencing, gates and archaeological sites
	c) Adjoining development and allotments
	d) Access points and orientation
	e) Any visual links to other related sites, natural features, landmarks, (for example, the visual relationship between a heritage listed homestead on a rural property and surrounding landforms and natural features)
	f) The significance of the historic subdivision patterns.
	D9.3 Subdivision of rural allotments containing heritage items should maintain sufficient curtilage around the heritage building to allow the rural character and setting of the heritage item to be interpreted.
	D9.4 In order to determine whether the proposed curtilage of the heritage item is appropriate, the subdivision plan is to show the proposed building envelops for each proposed allotment.
	D9.5 Where practicable, any visual linkages and the original access arrangements to the heritage item is to be retained.
	D9.6 The amalgamation of sites is discouraged in heritage conservation areas because it obscures the original subdivision patterns and can result in unsympathetic development, particularly in terms of form and scale.

Performance Criteria	Acceptable Solutions
	D9.7 Lot boundary changes within heritage conservation areas must demonstrate that:
	 a) The setting of an existing significant building on the site or the setting of development on adjoining sites is not compromised
	 Significant features of the existing site or adjoining sites, including streetscape and landscape features, trees, fences, outbuildings and gardens are not adversely impacted
	c) The change to lot layout is in keeping with the character of the area.

6.10 LANDSCAPING

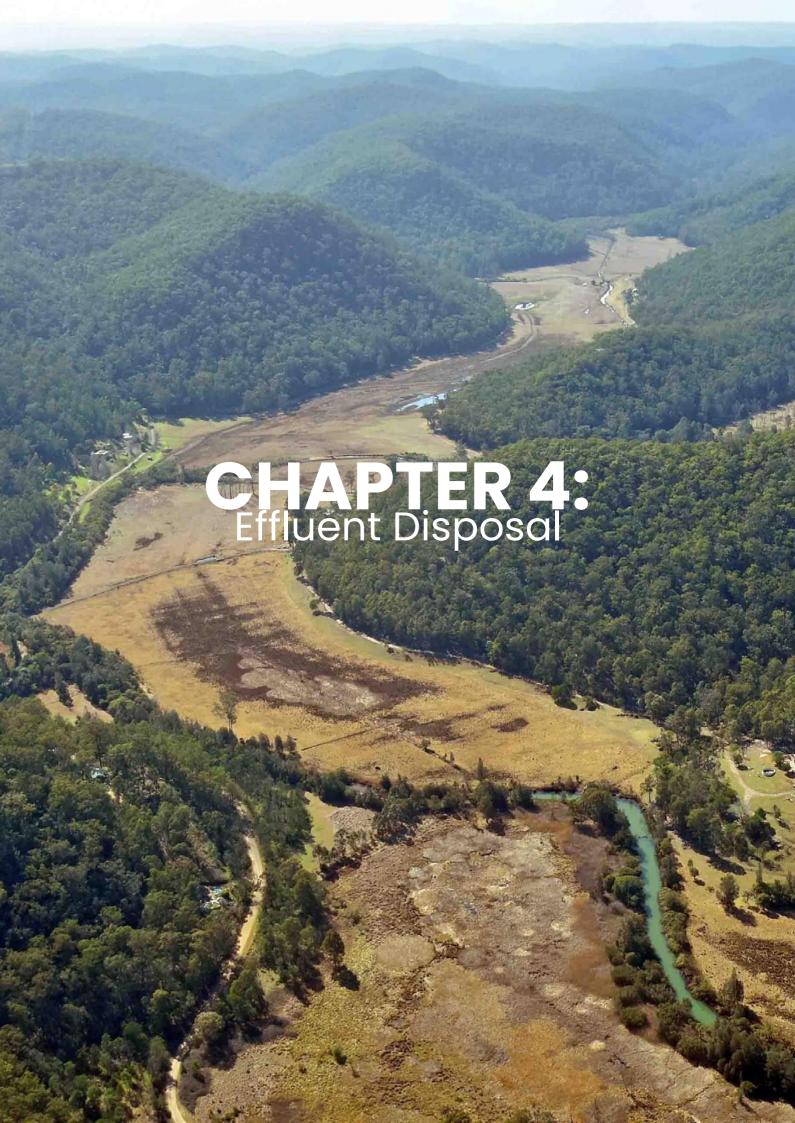
studio Calutiana
otable Solutions
ny landscaping works including re-planting e introduction of new garden features and that contains a heritage item is to be thetic to the original garden setting and nificance of existing individual elements garden curtilage surrounding the heritage g.
xisting trees and other vegetation with imental heritage values are to be retained.
/here edging is required to separate paths, beds and gardens from areas or lawn, anal brick or tile edging is to be used.
xisting fences which have been identified ificant or that contribute to the overall or character of a heritage item are to be d or repaired, rather than replaced.
any new fences are proposed these are ch as closely as possible with the original g, or if the original fence type is not known, elate to the architectural character and of the existing heritage item with respect to materials, colour and height.
ligh, solid concrete or masonry fences be permitted along the front property ary of land containing a heritage item or thin a heritage conservation area, or in nity of a heritage item or conservation /here it is required to reduce traffic noise aintain residential amenity, alternative res other than solid fences such as -glazing, internal room layout and/or aping should be investigated.
roperty owners are encouraged to develop scape masterplan for the whole site to tand the significance, condition and n of trees. Refer to Hawkesbury City Council leet on Fencing.



Note: The recommendations of the statement/report should be based on the heritage significance of the item, not on the development potential of the land it is situated.

6.11 SIGNAGE

Performance Criteria	Acceptable Solutions
P11 Signs located on or in the vicinity of a heritage item or heritage conservation area are to be designed and located so that they do not detract from the heritage significance of the building, place or streetscape.	D11.1 In addition to other Development Control Plan provisions relating to signage, development is to comply with the following:
	New signage should not detract from the heritage significance or architectural form of any heritage items or buildings in heritage conservation areas.
	Signage should not obscure any significant original or early building details.
	The number, size, type and design of signs should not overwhelm the design of heritage buildings and should not result in visual clutter.
	Signage should be of a limited colour palette. The colour of new signage should be compatible with the predominant materials and colours of the heritage building or buildings in the conservation area.
	The number of signs for each building should be limited to specify appropriate number and type of sign - awning sign, under-awning sign, window sign, banner sign, a-frame, building identification sign.
	New signage should not conceal earlier significant signage that relates to a significant early use of the building.



I. INTRODUCTION	45
I.I. APPLICATION/PREAMBLE	45
2. OTHER RELEVANT CHAPTERS	47
3. OBJECTIVES	47
4. DEVELOPMENT OUTCOMES	48
4.1 DESIGN AND SITING REQUIREMENTS	
FOR EFFLUENT DISPOSAL SYSTEMS	50

I. INTRODUCTION

1.1. APPLICATION/PREAMBLE

This Chapter of the Development Control Plan provides the objectives, performance criteria and deemed-to-satisfy controls for the design, installation, operation and maintenance of onsite sewage management facilities that hold, process, re-use or otherwise dispose of sewage or sewage bi-products. These facilities include but are not limited to the following:

Septic tanks

A septic tank is a single or multiple chambered tank through which wastewater is allowed to flow slowly to permit suspended solid matter to settle and be retained, so that organic matter contained therein can be decomposed (digested) by anaerobic bacterial action in the liquid (see Figure 1 below).

Generally these tanks are used to treat all waste, grey-water (wastes from baths, showers, basins, laundries and kitchen) and/or black-water (from a toilet or bidet).

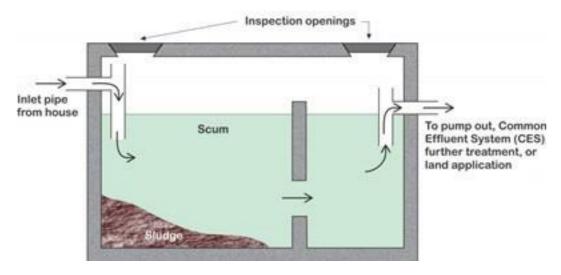


Figure 1: Cross Section of a Septic Tank

Waterless composting toilet

A waterless composting toilet is a waterless system which relies on the principles of composting by micro-organisms to decompose human waste into humus. Generally these systems are suited for sites with restricted water supply or sites rely on tank water. These systems do not treat grey-water, and there are two types of systems. One is the Continuous System which contains only one chamber (see Figure 2). The other system known as the Batch System contains several bins, with rotation occurring after each bin is filled. In both systems, chambers or bins are installed below floor level.

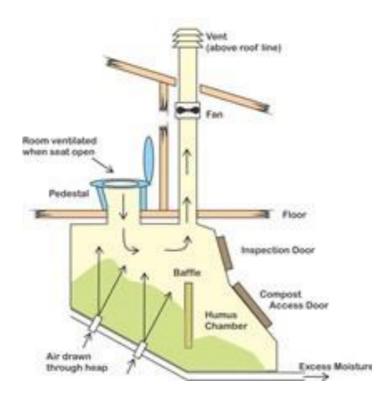


Figure 1: Cross Section of a Septic Tank

Aerated Wastewater Treatment System (AWTS)

An Aerated Wastewater Treatment System (AWTS) is a purpose built system used for the treatment of sewage and liquid wastes from a single household or multiple dwellings. It consists of a series of treatment chambers combined with an irrigation system (see Figure 3). Typically the water from the AWTS is reused by irrigation on the site.

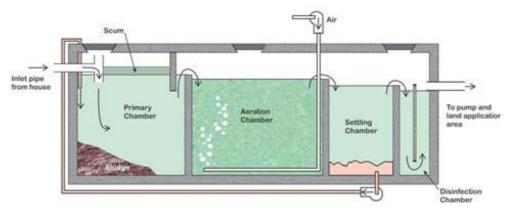


Figure 3: Aerated Wastewater Treatment System

Pump-out system

A traditional pump-out system comprises of a septic tank and a collection well. The content of the holding well is regularly pumped out by a road tanker for disposal off site.

- (i). NSW Department of Health Accreditation Guidelines for on-site sewage management systems:
- Septic Tank and Collection Well Accreditation Guideline December 2001
- Sewage Management Facility, Sewage Treatment Accreditation Guideline (incorporating AWTS and Sand Filters), May 2005
- Waterless Composting Toilet Accreditation Guideline, May 2005
- Greywater Reuse in Single Domestic Premises April 2000
- Domestic Greywater Treatment Systems Accreditation Guidelines Feb 2005.
- (ii). Hawkesbury City Council's Onsite Sewerage Management Strategy 2007 (Revised)
- (iii). Australian Standards (AS)/New Zealand Standards (NZS):
- 1546.1 2008: On-site Domestic Wastewater Treatment units- Septic tanks
- 1546.2 2008: On-site Domestic Wastewater Treatment units Waterless composting toilets
- 1546.3 2008: On-site Domestic Wastewater Treatment units AWTS
- 1547:2012: On-site domestic wastewater management
- 3500.5:2000: National plumbing and drainage Domestic Installations
- (iv). Plumbing Code of Australia

2. OTHER RELEVANT CHAPTERS

Other Chapters of the Development Control Plan that are relevant to development for the purposes of Effluent Disposal include:

- Environmental Management and Protection
- Site Development and Management
- Residential
- Subdivision

3. OBJECTIVES

The primary objectives of this Chapter are to:

- a) Ensure that the on-site disposal of waste water can be achieved without significantly affecting public health, the environment, surrounding properties, environmentally sensitive areas, ground or surface waters, or significant vegetation
- b) Ensure that the selection and design of any proposed on-site sewage management facility represents the best management practice for wastewater on the site over the

- expected life of the system
- c) Minimise the cost of on-site sewage management facilities without compromising the achievement of environmental and public health objectives
- d) Ensure that on-site sewage management facilities are capable of being operated and managed in the long term and provide for on going risk minimisation
- e) Identify special provisions relating to connection to reticulated sewerage systems and development within the rural and environmental zones
- f) Set out the limited circumstances where Council may agree to removal of sewage by pump out or tanker removal
- g) Encourage consideration and use of the variety of NSW Health approved sewerage management facilities
- h) Set out the minimum requirements for development requiring or relying the installation of an on-site sewage management facilities and provide a framework for improved management of on-site sewage/wastewater management systems.



DEVELOPMENT OUTCOMES

This Section provides objectives, performance criteria and acceptable solutions controls for Effluent Disposal. The following common development controls to apply to all types of on-site sewage management facilities:

- a) The following issues need to be taken into consideration when deciding a suitable on-site sewage management facility, and its size and location within the land:
 - (i). Site conditions, soil type, climate and surrounding development
 - (ii). Proximity to water courses, dams and surface drains
 - (iii). The likely impacts of the system on the amenity of the area
 - (iv). The cumulative public health and environmental impacts of present and possible future on-site sewage management systems within the catchment
 - (v). The number of future users/occupants and the nature of the development
 - (vi). The type of available water supply.

- b) The land on which the on-site sewage management facility is proposed should be large enough to accommodate:
 - (i). Sewage management system, including treatment system, dedicated land application areas and reserve or setback areas
 - (ii). Buffer distances
 - (iii). A dwelling(s) and associated structures and recreation areas
 - (iv). Vehicular and pedestrian access areas
 - (v). The on-site sewerage system is to be designed and constructed to minimise any adverse impact on the amenity of the area and particular attention should be given to the noise and odours generated. The system needs to ensure effluent does not enter surface waters or contaminate ground water
 - (vi). On-site systems must not be installed on land that shows evidence of significant erosion, or that has potential for mass movement or slope failure
 - (vii). Any electrical components, vents and inspection openings of wastewater treatment devices should be sited above the 1 in 100 year flood level
 - (viii). Appropriate water saving devices should be fitted into the system
 - (ix). Any run off from any roof, driveway and other impermeable surfaces is to be directed away from the land application area.

4.1 DESIGN AND SITING REQUIREMENTS FOR EFFLUENT DISPOSAL SYSTEMS

Performance Criteria	Acceptable Solutions
Septic Tanks and Collection Wells	
P1 Septic Tanks and Collection Wells are to be designed, constructed and maintained in accordance with relevant standards.	D1.1 All septic tanks and collection wells are to be designed and constructed in accordance with AS/NZS1546.1:2008.
	D1.2 To ensure the structural integrity of surrounding buildings and the septic tank installation, the tank and collection well should not be installed within 1.5m of a building. Adequate access should be provided for maintenance, desludging and ventilation.
	D1.3 The capacity of a collection well should cater for at least fourteen times the daily flow.
	D1.4 Structures, including decking, must not be erected over septic tanks unless there is a means of access to the septic tank and collection well.
Waterless Composting Toilets	
P2 Waterless Composting Toilets are to be designed, constructed and maintained in accordance with relevant standards.	D2.1 Waterless composting toilet systems are to be designed and constructed in accordance with AS/NZS1546.2: 2008.
Aerated Wastewater Treatment System	
P3 Aerated Wastewater Treatment Systems are to be designed, constructed and maintained in accordance with relevant standards.	D3.1 Aerated Wastewater Treatment Systems are to be designed and constructed in accordance with AS/NZS1546.3: 2008.
	D3.2 Aerated Wastewater Treatment Systems are to be provided with an alarm that has visual and audible components to indicate mechanical and electrical equipment malfunctions. The alarm should have one signal next to it and one in a suitable position attached to the associated dwelling(s)/building(s). The alarm is to incorporate a warning lamp, which may be reset only by the service agent.

Performance Criteria	Acceptable Solutions
Pump-Out Systems	
P4 Pump Out Systems are to be designed, constructed and maintained in accordance with relevant standards.	D4.1 Pump-out systems should only be considered as a last resort, and only where land is unsewered and on-site systems are not feasible. The development of unsewered lands may only be permitted for the following developments:
	 Single dwelling houses Light industry and single shops which do not require a water supply greater than that which can be delivered via a normal domestic connection without onsite storage or which are not connected to a reticulated water supply Subdivision of unsewered land that will
	rely on pump-out system is not permitted.
	D4.2 The collection well is to be sized to contain a minimum fourteen (14) daily flow for a fortnightly pump-out.
	D4.3 The collection well is to be provided with a graduated dipstick and a lockable gate valve at the property boundary. Sufficient and appropriate access and standing area should be provided for the pump-out vehicle.
	D4.4 In extreme situations, such as adverse site contours, the installation of the collection well below the septic tank with a suitable device to pump the effluent to another collection well near the boundary or to pump to boost pressure to help the suction pump on the tanker may be considered.

Performance Criteria Acceptable Solutions D4.5 In areas where Council's sullage contractor doesn't service and a pump-out system is the only option for effluent disposal, the owner of the property will need to engage their own sullage contractor, and inform Council in writing who the Contractor is and what collection regime will be undertaken. The system will be put on either a Prevention Notice or Approval to Operate which will detail the particular conditions that the system will need to be operated under (depending upon the risk the system poses to the environment, the public and the occupants of the property), after approval to install the system is given by Council **Absorption Trench and Land Application Areas** P5 Absorption Trenches and Land **D5.1** Absorption trenches and land Application Areas are to be designed, application area should be designed in constructed and maintained in accordance accordance with the requirements of AS/ with relevant standards. NZS 1547:2012 by a specialist or a suitably qualified and experienced professional. **D5.2** Soil tests should be undertaken to determine the type of absorption system and how large the trench/area should be. **D5.3** Where possible, a dual trench/land application area should be provided so the separate trenches/areas can be rested alternately, perform better and last much longer. **D5.4** Absorption trenches should not be located in areas with shallow soils, sandy soils, near creeks or where the groundwater is close to the surface. **D5.5** Where soil conditions are less suitable for absorption trenches and where evaporation and transpiration rates normally exceed rainfall, evaporation beds are an appropriate alternative. **D5.6** Where the percolation rates or high water table don't allow for an absorption system to be installed, a mound system or an evapotranspiration system may be provided as an alternative. However, such systems

may not be appropriate on flood prone land.

Performance Criteria	Acceptable Solutions
	D5.7 Appropriate buffer zones should be introduced between on-site sewage management facilities and features like driveways, buildings, swimming pools, traffic areas, property boundaries, both vehicular and pedestrian and sensitive environments such as National Parks and wetlands. Table 1 below shows appropriate buffer zones:
	D5.8 Minor structures such as clotheslines, sandpits and BBQ areas should not be built on the absorption trench or within the land application area.
	D5.9 Provision of a small earth bund wall (a small ridge) about 15cm high that is longer than, and uphill from the trench area may be required to divert surface runoff water around it. This will help to reduce the load on the trench in wet weather.
	D5.10 In order to facilitate the distribution of wastewater evenly trenches should be designed with a level top and parallel to the contour.
	D5.11 Absorption trenches and land application areas should be appropriately landscaped and sloped to avoid run-off and ponding of effluent.
	In particular:
	a) Water-loving and shallow rooted plants, such as small tropical palms, banana palms, poplars and wetland plants should be planted within the vicinity of trenches to absorb effluent b) Small trees may be planted at least 5m away from trenches, large trees should be at least 20m away from trenches, if not the roots will harm the trench c) Shrubs, ground covers, sedges and grasses that grow to 0.5 - 1m are appropriate to plant in land application areas.
	D5.12 Sun and wind exposure to trenches and land application areas should be maximised to enhance evaporation and pathogen breakdown.
	D5.13 Surface irrigation should only occur with disinfected effluent from an aerated system.

Note: Evaporation may be reduced by up to two-thirds in some locations by a poor aspect or overshadowing and sheltering by topography, buildings or vegetation

Table 1: Buffer Zones

System	Recommended Buffer Distances
All land application systems	 100m away from any permanent watercourse (eg river, stream, lake, creek, lagoon, pond etc) 250m away from domestic groundwater well 100m away from any environmentally sensitive area 40m to other waters (eg farm dams, intermittent waterways and drainage channels, etc).
Surface spray irrigation	 6m if area up-gradient and 3m if area down-gradient of driveways and property boundaries 15m to dwellings 3m to paths and walkways 6m to swimming pools.
Surface drip and trickle irrigation	6m if area up-gradient and 3m if area down-gradient of swimming pools, property boundaries, driveways and buildings.
Subsurface irrigation	6m if area up-gradient and 3m if area down-gradient of swimming pools, property boundaries, driveways and buildings.
Absorption system	 12m if area up-gradient and 6m if area down-gradient of property boundary 6m if area up-gradient and 3m if area down-gradient of swimming pools, driveways and buildings.

Submission Requirements

The following information may be required.

Waste Water Feasibility Study

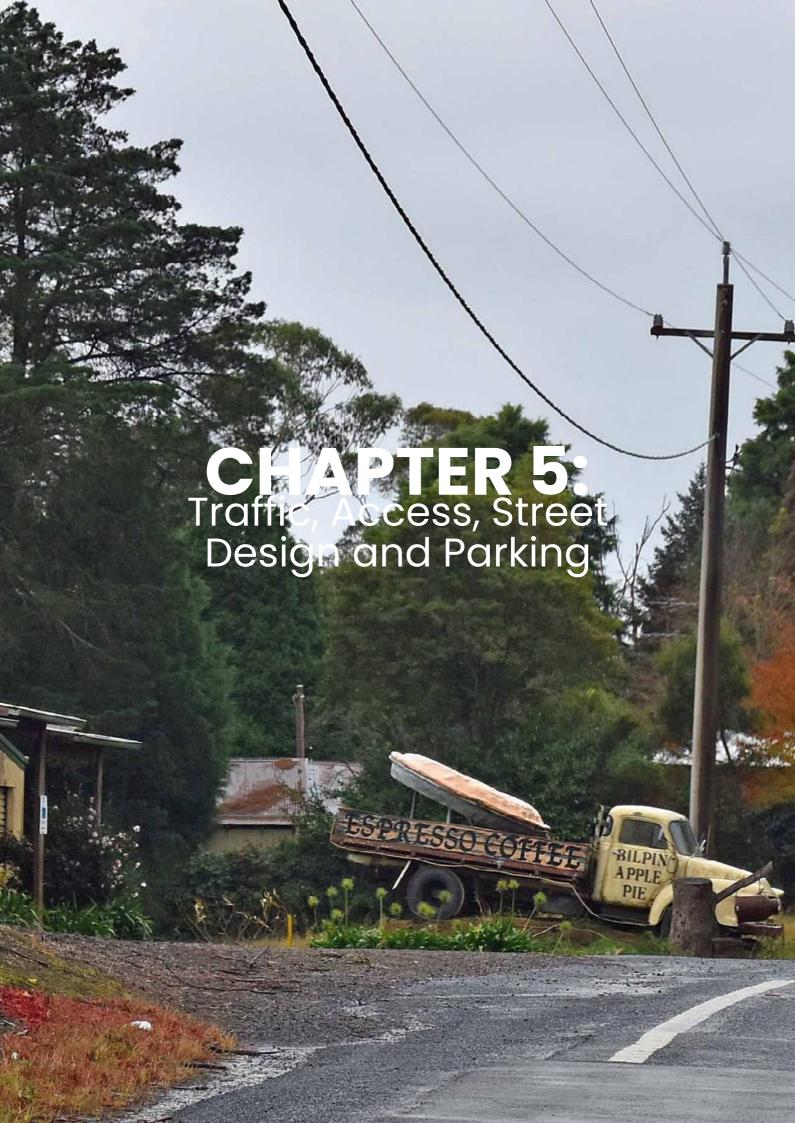
With the exception of single dwellings in low risk areas as defined by Council's Septic Safe
Program or a toilet, shower and/or hand basin within a shed, garage or other outbuilding
used in association with an existing approved development in a low risk area as defined
by Council's Septic Safe Program, all developments requiring or relying on an existing
or proposed on-site sewage management facility should be accompanied by a Waste
Water Feasibility Study (or similar) prepared by a suitably qualified and experienced
expert.

The Waste Water Feasibility Study should contain the following information:

- Description of the proposed development and a Site plan showing the following:
 - any dams, watercourses, drainage line or pipe work, vegetation, environmentally sensitive areas within 100 metres of the sewage management facility or land application area
 - any existing buildings within 250m of the sewage management facility or land application area.
- Site analysis
- Run on and upslope seepage and erosion potential
- Soil assessment to identify depth, colour, texture, permeability, salinity and sodicity, instability, cation exchange capacity, mobility of nutrients, fertility, Ph and potential to overcome soil limitations and groundwater table
- Climate data obtained from the nearest Bureau of Meteorology of Australia weather station or from their Silo data set whichever is the closest
- Assessment of the performance of any existing systems and feasibility of connection to any reticulated sewage system in the vicinity of the site
- Assessment and recommendation of suitable systems, including:
 - Estimations of the number of occupants and expected peak and averaged volume of waste water generated by the development
 - Calculations for nitrogen and phosphorus balances
 - Water balance calculations (based on a daily data set) for land application areas.
 - The suitability of a various systems (such systems may include conventional septic tanks, aerobic wastewater treatment systems, amended soil mound systems and composting toilets)
 - Identification of land application areas and the suitability of the application area to receive waste water
 - Methods of disposal and concept design plans of disposal lines/trenches and full specification
 - Using daily water balance calculations, an assessment of the need for wet weather storage
 - Assessment of the need or advantages gained by primary tank outflow filters
- Identification of recommended buffer distances/zones
- Details of recommended system(s)
- The operation and maintenance requirements for the proposed sewage management facility
- The proposed operation, maintenance and servicing arrangements intended to meet those requirements

- Actions to be taken in the event of a breakdown in, or other interference with, its operation
- The estimated operational life of the system and options for system restoration/renewal at the end of the operational life of the system
- Specifications, including (where applicable) details such as pump sizes, air pump capacities, cross sectional details of the proposed system and a technical description of the processes used
- Information as to the expected quality of effluent to be disposed on-site with specific reference to the following:
 - Biological Oxygen Demand (mg/L)
 - Suspended Solids (mg/L)
 - Total Nitrogen (mg/L)
 - Total Phosphorus (mg/L)
 - Faecal Coliform (cfu/100ml)
 - pH
 - Dissolved Oxygen (mg/L)
 - Residual Chlorine (mg/L).
- The report is to certify that all site and soil investigations, water balance reports, proposed sewage management facilities and land application areas, and construction, installation and maintenance recommendations comply with the relevant provisions of Australian Standard 1547: 2000 On site domestic waste water management, Standards Australian/ Standards New Zealand; On-Site Sewerage Risk Assessment System, NSW Department of Local Government; On-Site Sewage Management for Single Households, NSW Department of Local Government; and relevant NSW Health accreditations.
- Odour Management Plan.

An Odour Management Plan consistent with the provisions of Assessment and management of odour from stationary sources in NSW, 2006 may be required.



1. INTRODUCTION	59
1.1 APPLICATION/PREAMBLE	59
2. OTHER RELEVANT CHAPTERS	59
3. OBJECTIVES	59
4. DEVELOPMENT OUTCOMES	60
4.1 OFF STREET PARKING RATES	60
4.2 PARKING DESIGN REQUIREMENTS	63
4.3 ROAD/ACCESS DESIGN REQUIREMENTS	67
4.4 ROAD DESIGN REQUIREMENTS FOR RURAL ROADS	70

1. INTRODUCTION

1.1 APPLICATION/PREAMBLE

This Chapter of the Development Control Plan outlines Council's requirements for the design and provision of roads, car parking, motor cycle parking, bicycle parking and storage, and loading facilities for specific developments. All development must make provision for off- street parking to cater for the needs of residents, visitors, employees and service vehicles.

2. OTHER RELEVANT CHAPTERS

Other Chapters of the Development Control Plan that are relevant to traffic, access and parking include:

- Residential
- Retail
- Industry
- Agriculture and Rural

3. OBJECTIVES

The primary objectives of this Chapter are to:

- (a) Ensure pedestrian and traffic safety and achieve a balance between the needs of proposed development and the needs of vehicular and pedestrian traffic and cyclists
- (b) Provide streets that are safe, functional and comfortable for all users (vehicles, cyclists and pedestrians)
- (c) To integrate parking facilities within the design of the development to ensure adequate traffic safety and management, integration with the streetscape and acceptable environmental and sustainability outcomes
- (d) Ensure that adequate provision is made for off-street parking and loading of passenger and service vehicles generated by new developments and redevelopments, including visitor parking
- (e) Ensure the provision of sufficient and suitably located parking for persons with a disability, cyclists, and motorcyclists within developments
- (f) To protect neighbourhood amenity and safety in the design and operation of all parking, loading and service facilities

- (g) To ensure streets and related infrastructure are designed for a high level of convenience for all users, and economy of construction and maintenance
- (h) To encourage use of sustainable forms of transport, including public transport
- (i) To ensure that all road safety measures are considered and accounted for in the design of the development.

4. DEVELOPMENT OUTCOMES

This Section provides objectives, performance criteria and acceptable solutions for Traffic, Access and Parking for developments.

4.1 OFF STREET PARKING RATES

Performance Criteria	Acceptable Solutions
Off street parking rates	
P1.1 Provide off street car, bicycle and motorcycle parking requirements to meet the needs of the development	D1.1.1 Parking is to be provided in accordance with Table 01. Uses not referred to in the Table 01 will be assessed on merit for bicycle, motor cycle and car parking. Note: In the circumstances where the car parking and/or other requirements are not defined by this chapter for a particular land use or where a development may cause a potential significant impact on the surrounding road network and properties, a detailed Car Parking and Traffic Impact Assessment Study and Road Safety Audit may be required to be prepared for the proposed development to substantiate proposed parking provisions.
	D1.1.2 Tandem parking is not acceptable for any development except residential development containing 2 or less dwellings. D1.1.3 When calculating the number of spaces required any part spaces must be rounded up to the nearest whole number.
P1.2 Provide Service vehicle facilities	D1.2.1 All loading and unloading areas are to be provided on site. Service vehicle parking is to be provided in accordance with Table 01. D1.2.2 Loading docks/facilities must be designed to accommodate the type of delivery/service vehicles associated with the development (including vehicles associated with waste management) and potential uses of the development).

Performance Criteria	Acceptable Solutions
	D1.2.3 For those land uses not referred to in Table 01, the proposed loading facilities must satisfy the objectives of this chapter.
	D1.2.4 When calculating the number of service vehicle spaces required any part spaces must be rounded up to the nearest whole number.
P1.3 Application of parking credits	D1.3.1 Where the use of an existing building is to be changed and the new use has a higher parking demand or generation, additional parking must be provided on the basis of the difference between the rates for the proposed use and the existing lawful use.
	D1.3.2 Credits are not granted where a site is being fully redeveloped, that is the existing building is being removed and another rebuilt, or extensively changed.
	D1.3.3 Credits may not be allowed if the building has been vacant for more than 12 months. When this is the case it effectively removes the justification that the parking demand is currently being catered for on-street.

Performance Criteria	Acceptable Solutions
P1.4 Application of monetary contributions in lieu of off street parking	D1.4.1 In certain circumstances Council may accept a monetary contribution pursuant to Section 7.11 of the EP&A Act, in lieu of offstreet parking being provided as part of the development. Details are set out in the relevant Contributions Plan. The acceptance of a monetary contribution in lieu of offstreet parking is not guaranteed and will be at Council's discretion. The amount of contribution will be in accordance with the rate fixed from time to time in the Contributions Plan.
P1.5 Calculation of the number of parking spaces	D.1.5.1 Calculations for the number of spaces are based on the gross floor area (GFA) unless otherwise stated.
P1.6 Use of car parking mechanical stackers	D1.6.1 Council does not support the use of mechanical stackers for car parking. However in extenuating circumstances Council may consider mechanical stacker parking. If proposed, a detailed Plan of Management that addresses streetscape, safety, operation and maintenance must be submitted. Any approved Plan of Management for a mechanical stacker parking system must be registered as a positive covenant on the title of the land.

4.2 PARKING DESIGN REQUIREMENTS

Performance Criteria	Acceptable Solutions
Parking design requirements	
P2.1 Adoption of relevant standards and guidelines	 D2.1.1 The following standards and guidelines must be complied with: AS 2890.1 Part 1: Parking Facilities: Offstreet Car Parking; AS 2890.2 Part 2: Parking Facilities: Offstreet Commercial Vehicle Facilities; AS 2890.3 Part 3: Bicycle Parking Facilities; AS 2890.5 Part 5: On-street parking; and AS 2890.6 Part 6: Disabled parking. Planning for Bushfire Protection 2019 Austroads Guide to Traffic Management Part 11: Parking Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development Western Sydney Engineering Design Manual (Version April 2021) Western Sydney Street Design Guidelines Cycling Aspects of Austroads Guide Council's Construction Specifications and a related table (under development) D2.2.1 Other than for single dwellings fronting onto local streets, for all other dwellings, dual occupancies and secondary dwellings, access arrangements must be designed so all vehicles can enter and leave the site in a forward direction. Note: If a development is located on a battle-axe allotment the vehicle access must be designed so that vehicles can enter and leave in a forward direction for all types of development including single dwellings, dual occupancies and secondary dwellings.

Performance Criteria	Acceptable Solutions
	D2.2.2 Where a corner site has a dual frontage, vehicle access must be from the secondary road.
	D2.2.3 Driveways are to be located in accordance with Figure 11 in Section 4.11 and standard drawing SD-R58 referred to in the Western Sydney Engineering Design Manual and AS 2890.1 - Off street parking
	D2.2.4 Driveways are to be located at least 1 metre from adjoining property boundaries and provided with landscaping within the setback, to provide for privacy and maintain amenity of the adjoining developments.
	D2.2.5 All driveways, vehicle manoeuvring, car parking spaces, loading and unloading areas are to be designed, constructed, graded, drained and sealed with suitable impervious materials in accordance with the Western Sydney Engineering Design Manual and Council's Construction Specifications.
P2.3 Access and Circulation - service vehicles	D2.2.6 For any public or shared/communal parking areas provision of suitable traffic calming devices, pedestrian paths and crossings, barriers, line makings and directional and safety signage is required in accordance with the Western Sydney Engineering Design Manual.
	D2.2.7 All carparking circulation must be provided within the site, and not include the public road network.
	D2.3.1 Standing areas for service vehicles must ensure adequate space for queuing on site commensurate with the demand associated with the use.
	D2.3.2 The use of loading and unloading areas must not conflict with the safe efficient circulation of pedestrians and other vehicles.

Performance Criteria	Acceptable Solutions
	D2.3.3 Loading areas must be designed and located so as not to affect the amenity of any adjoining uses.
	D2.3.4 Loading docks are to be located either internally within the building(s) or in the rear or side setbacks. Any visible loading docks must be suitably screened.
	D2.3.5 All carparking circulation must be provided within the site, and not include the public road network.
	D2.3.6 A Plan of Management is required demonstrating how it is proposed to manage the operation of all loading and service facilities.
P2.4 Landscaping	D2.4.1 All carparking areas are to include appropriate landscaping for shade, to lessen the visual impact of large paved areas and to provide screening.
	D2.4.2 Landscaped areas must be provided in the form of tree planting, garden beds, mounding, lawns, water sensitive urban design features and the like in accordance with the Landscaping Chapter of this DCP and the following additional requirements:
P.2.5 Visitor parking	 a) A minimum of one shade tree must be planted per 4 spaces within a landscaped bay designed for deep soil planting; and b) A minimum 1 metre wide landscaping strip must be provided at the end of parking aisles; and c) A minimum 1 metre landscaped strip to be provided along the side and rear boundaries and a minimum 2 metres landscaped strip to be provided along the front boundary(primary frontage).
	D2.5.1 Visitor parking spaces must be appropriately signposted and line marked, accessible and conveniently located to encourage their use.

Performance Criteria	Acceptable Solutions
P2.6 Disabled parking access	D2.6.1 Design of off-street parking for people with a disability must comply with AS 2890.6 and the Commonwealth Disability Discrimination Act (1992).
	D2.6.2 A continuous accessible path of travel must be provided between designated car parking spaces for people with a disability and lift lobby or access points servicing the development.
	D2.6.3 The designated car parking spaces for people with a disability must be appropriately signposted and line marked.
P2.7 Lighting and surveillance	D2.7.1 Carpark design must incorporate lighting in accordance with the current relevant Australian Standards.
P2.8 Drop off for buses/other vehicles	D2.8.1 For developments that require set down areas these must be provided on site close to pedestrian entry points with consideration given to building design, streetscape and traffic safety.
P2.9 Bicycle parking	D2.9.1 Bicycle parking should be located in close proximity to building entrances and accessible to the street/footpath.
	D2.9.2 Bicycle parking facilities should not impede pedestrian or vehicular circulation.
	D2.9.3 For any non-residential development where bicycle parking is required or provided, access to at least one shower facility (for each sex) for bicycle riders is also required on-site.
P2.10 Electric vehicle charging stations and ebikes	D2.10.1 All multi-unit residential car parking must provide an EV ready connection to each resident parking space.
	D2.10.2 One shared EV connection must be provided in all other developments where more than 25 car parking spaces are required on site.

Performance Criteria	Acceptable Solutions
P2.11 Car share in private developments	be an opportunity to provide dedicated onsite parking spaces for car share vehicles. They are also most effective where car share vehicles can be accessed at any time by residents and business operators on the site, as well as those in the surrounding precinct. Council may look favourably on proposed reductions from the rates specified in car parking provision in Table 01 if a car share scheme is provided on the site, subject to evidence of an appropriate arrangement with a car share scheme provider.

4.3 ROAD/ACCESS DESIGN REQUIREMENTS (EXCLUDING RURAL ROADS - REFER 4.4)

Performance Criteria	Acceptable Solutions
Road design requirements	
P3.1 Street geometric design	D3.1.1 Compliance with Section 4.3 of the Western Sydney Engineering Design Manual.
	For street geometry , the requirements in Table 7 apply in the event of inconsistencies with other sections of the Manual and subject to the following amendments:
	 Table 7 ID 1 Longitudinal grade maximum - Local streets for short lengths up to 150m shall be 16%. Section 4.3.2 (Design Notes) Point 21 A Road Safety Audit shall be undertaken to address all new and existing traffic management measures for all road users. Deceleration and acceleration lanes may be necessary where a traffic generating development is proposed. This shall be considered and documented in a Traffic Report or Road Safety Audit and / or the Design Report submitted at DA stage.

Performance Criteria	Acceptable Solutions
P3.1 Street geometric design	D3.2.1 Compliance with Section 4.4 of the Western Sydney Engineering Design Manual.
	D3.2.2 Compliance with Section C2.1-2.4 of the Western Sydney Street Design Guidelines
	D3.3.1 Compliance with Section 4.5 of the Western Sydney Engineering Design Manual.
	D3.4.1 Compliance with Section 4.6 of the Western Sydney Engineering Design Manual.
	D3.5.1 Compliance with Section 4.7 of the Western Sydney Engineering Design Manual. Note: where half street construction is necessitated a minimum width of 6 metres must be provided.
	D3.6.1 Compliance with Section 4.8 of the Western Sydney Engineering Design Manual.
	D3.7.1 Compliance with Section 4.13 of the Western Sydney Engineering Design Manual.
	D3.8.1 Compliance with Section 4.14 of the Western Sydney Engineering Design Manual.
Footpath design requirements	
P4.1 Footpaths	D4.1.1 Compliance with Section 4.9 of the Western Sydney Engineering Design Manual.
	D4.1.2 Compliance with Section C5 of the Western Sydney Street Design Guidelines
P4.2 Cycleways/shared paths	D4.2.1 Compliance with Section 4.10 of the Western Sydney Engineering Design Manual.
	D4.2.2 Compliance with Section C5 of the Western Sydney Street Design Guidelines
Driveways and private access handles	
P5.1 Driveways and private access handles	D5.1.1 Compliance with Section 4.11 and 4.12 of the Western Sydney Engineering Design Manual and subject to the following amendments:
	 Minimum width for a single driveway is 3.0m, and Minimum width for a double driveway is 5.5m
	D5.1.2 Compliance with Table 6.13.

Performance Criteria	Acceptable Solutions
Pavements	
P6.1 Pavement design	D6.1.1 Compliance with Section 4.15 of the Western Sydney Engineering Design Manual.
	D6.1.2 For off street carparking compliance with Section 4.16 of the Western Sydney Engineering Design Manual.
Utilities	
P7.1 Services/utilities	D7.1.1 Utilities should be provided on one side of streets to increase tree planning opportunities. Subject to service providers standards - refer Figure 19 of the Western Sydney Engineering Design Manual.
	D7.1.2 Compliance with Section C9 of the Western Sydney Street Design Guidelines
	D7.1.3 Shared trenches should be provided where possible (in compliance with Section 4.17.1 of the Western Sydney Engineering Design Manual).
	D7.1.4 Multi function poles should be provided where possible (in compliance with Section 4.17.2 of the Western Sydney Engineering Design Manual).
	D7.1.5 Street lighting - electrical designers need to consult with Council to ascertain the street lighting categories. Designers are to consider location of light poles with respect to lighting of paths, street trees, roadside and pedestrian safety, property boundaries etc.
	Compliance with AS/NZS 1158 and AS 4282 - 'Control of the Obtrusive Effects of Outdoor Lighting is required.
Bridges, culverts and retaining walls (public	assets)
P8.1 Bridges, culverts and retaining walls	D8.1.1 Compliance with Section 4.19 of the
	Western Sydney Engineering Design Manual.
Other	
P9.1 All traffic islands	D9.1.1 All new traffic islands (in particularly at a high-risk area or greenfield subdivision) shall be constructed as keyed in (not dowelled as shown in the Western Sydney Street Design Manual Appendix G Standard drawings).

Performance Criteria	Acceptable Solutions
P10.1 Defects liability period	D10.1.1 The defects liability period shall have a duration of at least twelve (12) months.
	D10.1.2 For subdivision works, the defects liability period shall commence from the release of the final plan of subdivision (i.e. from the date of registration of the plan of subdivision at Land Registry Services, upon which the subdivision road and associated infrastructure is dedicated to Council).
	D10.1.3 For all other development related civil works (e.g. approvals under the Roads Act, or \$68 of the Local Government Act, the defects liability period shall commence from the release of the Construction Compliance Certificate /Construction Completion Certificate.

4.4 ROAD DESIGN REQUIREMENTS FOR RURAL ROADS

Performance Criteria	Acceptable Solutions
Rural roads	
P11.1 Geometric design of rural roads	D11.1.1 Compliance with Section 5.2 of the Western Sydney Engineering Design Manual including the Design Data Rural Roads (Table 15).
	D11.1.2 Geometric design of rural roads shall generally be in accordance with the Austroads Guides, where not covered by the Engineering Design Manual. (Austroads Guide to Road Design Part 3: Geometric Design" and Guide to Road Design Part 6: Roadside Design, Safety and Barriers are to be used).

Table -1 - Parking Rates

Land Use	DCP Rate
Residential	
Dwelling house, dual occupancy, semi detached dwelling, attached dwellings, multi-dwelling housing and residential flat development:	1 covered car parking space for studios, 1 and 2 bedroom dwellings. 2 covered car parking spaces for dwellings with more than 2 bedrooms.
Multi dwelling housing and attached dwellings	1 car parking space per dwelling, plus 0.2 parking spaces per 2 bedroom dwelling, plus 0.5 parking spaces per 3 or more bedroom dwelling.
Residential flat buildings and shop top housing	1 car parking space per unit, plus 0.2 parking spaces per 2 bedroom unit, plus 0.5 parking spaces per 3 or more bedroom unit.
Visitor parking - Residential flat buildings, multi dwelling housing, shop top housing and attached dwellings	1 space per 5 units or dwellings.
Bicycle parking - Residential flat buildings, multi dwelling housing, shop top housing and attached dwellings	1 space per 3 units or dwellings.
Secondary dwelling under ARHSEPP	Compliance with any applicable parking requirements under SEPP Affordable Rental Housing 2009 or any SEPP that replaces it.
Rural workers dwellings	1 car parking space for studios, 1 and 2 bedroom dwellings. 2 parking spaces for dwellings with more than 2 bedrooms.
Seniors housing (including housing for people with a disability) - hostels	Compliance with rates under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 or any SEPP that replaces it (irrespective of whether application is made under the SEPP). Note: Current rates are at least 1 per 5 dwellings and 1 per each 2 persons employed and on duty at any one time and 1 parking space suitable for an
	ambulance.

Seniors housing - residential care facilities	Compliance with rates under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 or any SEPP that replaces it (irrespective of whether application is made under the SEPP). Note: Current rates are at least 1 parking space for each 10 beds in the residential care facility (or 1 parking space for each 15 beds if the facility provides care only for persons with dementia), and 1 parking space for each 2 persons to be employed in connection with the development and on duty at any one time, and 1 parking space suitable for an ambulance.
Seniors housing (including housing for people with a disability) - self contained dwellings	Compliance with rates under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 or any SEPP that replaces it (only if application is made under the SEPP). For applications in zones where the SEPP does not apply: 0.5 space per 1 bedroom dwelling 0.85 space per 2 bedroom dwelling 1 space per 3 or more bedroom dwelling
Bed and breakfast accommodation	Dwelling house rate (based on number of bedrooms in the host dwelling not used for guests) plus 1 car parking space for each guest bedroom.
Boarding houses and hostels	Boarding Houses Compliance with rates under SEPP Affordable Rental Housing 2009 or any SEPP that replaces it. Note: Current rates are at least at least one parking space will be provided for a bicycle, and one will be provided for a motorcycle, for every 5 boarding rooms. Hostels At least 1 per 5 dwellings and 1 per each 2 persons employed and on duty at any one time and 1 parking space suitable for an ambulance.

Group Homes permanent and Group Homes transitional	Compliance with rates under SEPP Affordable Rental Housing 2009 or any SEPP that replaces it.
	Note: Current rates are at least 2 off-street car parking spaces (may be an open hard stand space or a carport or garage, whether attached or detached from the group home).
Hospitals, nursing homes and convalescent homes. Note in 2012 controls are expanded to cover "Hospitals (including convalescent homes, psychiatric care centres, counselling services provided by healthcare professionals and ancillary facilities")	On merit. Traffic and parking study may be required depending on scale of the development, taking into consideration the proposed uses and equivalent rates for similar uses.
Home business, home industry, home occupation and home occupation (sex premises)	Dwelling House rate plus 1 parking space per staff member other than permanent residents.
	Note: Additional car parking spaces may be required for visitors depending on the nature of the business.
Commercial	
Bulky good premises and hardware and building supplies Note: now called specialised retail premises under Standard Instrument	Specialised retail premises 1 space per 40m2 of GFA.
Garden centres, landscape supplies, hardware and building supplies, timberyards	15 car spaces or 1 per 200 sqm of site area (whichever is greater) plus rate for any ancillary uses (such as cafes) in accordance with relevant DCP rates. 1 bicycle space per 25 car parking spaces in excess of the first 25 car parking spaces and 1 motorcycle space per 50 car parking spaces in excess of the first 50 spaces.

Business/office premises - these include Office premises and business premises 1 parking space per 40m2 of GFA medical centres, health consulting rooms, hair dressers, banks and travel agents 1 bicycle space per 25 car parking spaces in excess of the first 25 spaces; and 1 motorcycle space per 50 car parking spaces in excess of the first 50 spaces. <u>Health Services Facility/medical centre</u> 1 per 30m2 of GFA 1 bicycle space per 25 car parking spaces in excess of the first 25 spaces; and 1 motorcycle space per 50 car parking spaces in excess of the first 50 spaces <u>Health Consulting Rooms</u> 3 spaces per consulting room and 1 parking space per 2 employees. A reduction in the parking requirement will be considered if it can be shown that not all consulting rooms will be in concurrent operation and/or if convenient on-street parking is available, providing that the use of such parking does not adversely affect the amenity of the immediate area. Food and drink premises - includes Food and drink premises in business restaurants, cafes, take away food and zones (except freestanding drive-through restaurants, pubs) 1 space per 30m2 of drink premises and milk bars Food and drink premises in all other zones (except freestanding drive-through restaurants, pubs) 1 space per 20m2 of GFA or 1 space per 3 seats whichever is greater. Freestanding restaurants 1 space per 6m2 of service area or 1 space per 3 seats, whichever is greater, plus 1 space per 2 employees, plus queuing area for 5 to 12 cars per ordering lane if a drive through is included (provision must be justified on basis of site configuration. For all food and drink premises 1 bicycle space per 25 car parking spaces in excess of the first 25 car parking spaces; and 1 motorcycle space per 50 car parking spaces in excess of the first 50 car parking spaces. Food and drink premises (except 1 space per 20m2 of GFA or 1 space per 3 freestanding drive-through restaurants, seats whichever is greater. pubs) in all other zones

Hotels, registered clubs, night clubs and pubs	Any public service/bar area including entertainment/function/reception room/beer garden/restaurant - 1 space per 20m2 Accommodation - 1 space per bedroom or motel type unit. 1 bicycle space per 25 car parking spaces in excess of the first 25 car parking spaces; and 1 motorcycle space per 50 car parking spaces in excess of the first 50 car parking spaces in excess of the first 50 car parking spaces. Provision for coaches to pick up and set down may be required.
Entertainment facilities - include theatres, cinemas, music halls and dance halls	Cinemas 1 parking space per 6 seats All other entertainment facilities On merit. Traffic and parking study may be required depending on scale of the development taking into consideration the proposed uses and equivalent rates for similar uses.
Function centres	1 space per 30m2 of GFA in business zones, 1 space per 20m2 of GFA in other permissible zones or 1 space per 3 seats whichever is greater. 1 bicycle space per 25 car parking spaces in excess of the first 25 car parking spaces; and 1 motorcycle space per 50 car parking spaces in excess of the first 50 car parking spaces.
Shops, neighbourhood shops and kiosks	Shops, neighbourhood shops, neighbourhood supermarkets and kiosks 1 parking space per 20m2 of GFA. Shoptop housing Same as retail premises plus residential rates apply to the housing component. 1 bicycle space per 25 car parking spaces in excess of the first 25 spaces; and 1 motorcycle space per 50 car parking spaces in excess of the first 50.
Service stations	5 spaces per work bay, plus 1 space per 30m2 of ancillary retail floor space. If eat in food and drink premises are provided add parking to comply with the applicable rate for the additional use.

for sex er two e on the is to be ity. oer bay if
ind 1 us 15 of unction/ g space
spaces spaces; parking parking
ind 1 us 15 of unction/ nichever
spaces spaces; parking parking
ng or 1 ater.
l car nichever oace per
spaces spaces; parking parking

Shopping centre	On merit. Traffic and parking study may be required depending on scale of the development, taking into consideration the proposed uses and equivalent rates for similar uses.
Markets	On merit. Traffic and parking study may be required depending on scale of the development, taking into consideration the proposed uses and equivalent rates for similar uses and must demonstrate adequate provision for loading (bump in and bump out).
Veterinary hospital	3 spaces per consulting room plus 1 space per 10 cats or dogs accommodated overnight.
Animal boarding or training	I space per employee on site at any time plus one space per visitor space.
Restricted premises	1 parking space per 20m2 of GFA
Farm gate activities (new definition anticipated to include road side stalls as a subset)	Road side stalls 5 car parking spaces Farm gate activities Use applicable DCP rate for each component area (e.g. farm gate stall, restaurant, industry etc) combined together.
Farm events (new definition)	On merit. Traffic and parking study may be required depending on scale of the development, taking into consideration the proposed uses and equivalent rates for similar uses.
Industrial, Recreation & Other	
Boat building and repair facility	1 car parking space per work bay and 1 car parking space per 2 employees.

General Industry light industry factory	For general industry, heavy industry and
General Industry, light industry, factory units, warehouse or distribution centre	light industry 4 spaces per each unit/development up to 300m2 of GFA, then 1 space for each 90m2 of GFA or part thereof, in excess of 300m2. 1 bicycle space per 25 car parking spaces in excess of the first 25 car parking spaces; and 1 motorcycle space per 50 car parking spaces in excess of the first 50 car parking spaces.
	The parking provision rate is increased when: Retailing is permitted on-site. The rate for Industrial retail outlets is applied for this component of the development. The office space component is in excess of 20% of the floor area. The rate for office premises and business premises applies for the amount of this floor space in excess of 20% of GFA.
Rural Industry	On merit. Traffic and parking study may be required depending on scale of the development taking into consideration the proposed uses and equivalent rates for similar uses.
Resource recovery facility, waste disposal facility, management facility, waste or resource transfer station	On merit. Traffic and parking study may be required depending on scale of the development, taking into consideration the proposed uses and equivalent rates for similar uses.
Transport depot	On merit. Traffic and parking study may be required depending on scale of the development, taking into consideration the proposed uses and equivalent rates for similar uses.
Vehicle body repair workshop and vehicle repair station	5 spaces per work bay.

Warehouse or distribution centre	4 spaces per each unit/development up to 300m2 of GFA, then 1 space for each 90m2 of GFA or part thereof, in excess of 300m2. 1 bicycle space per 25 car parking spaces in excess of the first 25 car parking spaces; and 1 motorcycle space per 50 car parking spaces in excess of the first 50 car parking spaces.
Industrial retail outlet	1 space per 30m2 of GFA.
Artisan food and drink industry	Use applicable DCP rate for each component area (e.g. retail, restaurant, industry etc) combined together.
Self storage units	1 space per 40m2 of GFA for the office area, plus 1 space per 300m2 storage area.
Wrecking yard	1 space per 200m2 of site area. When largely contained within a building requirement is 1 space per 40m2 of GFA.
Recreation facility (indoor)	For any type of recreation facility (indoor) except Fitness Centres and Gyms (that are subject to specific rates) parking rate is determined on merit. Traffic and parking study may be required depending on scale of the development taking into consideration the proposed uses and equivalent rates for similar uses.
Gymnasiums and Fitness Centres	5 spaces per 100m2 GFA 1 bicycle space per 25 car parking spaces in excess of the first 25 car parking spaces and 1 motorcycle space per 50 car parking spaces in excess of the first 50 car parking spaces.
Squash courts	For any type of recreation facility (indoor) except Fitness Centres and Gyms (that are subject to specific rates) parking rate is determined on merit. Traffic and parking study may be required depending on scale of the development taking into consideration the proposed uses and equivalent rates for similar uses.

Table tennis	For any type of recreation facility (indoor) except Fitness Centres and Gyms (that are subject to specific rates) parking rate is determined on merit.
	Traffic and parking study may be required depending on scale of the development taking into consideration the proposed uses and equivalent rates for similar uses.
Ten pin bowling	For any type of recreation facility (indoor) except Fitness Centres and Gyms (that are subject to specific rates) parking rate is determined on merit.
	Traffic and parking study may be required depending on scale of the development taking into consideration the proposed uses and equivalent rates for similar uses.
Recreation facility (outdoor)	For any type of recreation facility (outdoor) except tennis courts and lawn bowling greens (that are subject to specific rates) parking rate is determined on merit. Traffic and parking study may be required depending on scale of the development taking into consideration the proposed uses and equivalent rates for similar uses.
Tennis courts	5 spaces per court. 1 bicycle space per 25 car parking spaces in excess of the first 25 car parking spaces and 1 motorcycle space per 50 car parking spaces in excess of the first 50 car parking spaces.
Lawn bowling green	30 spaces for first green and 15 spaces for each additional green.
Caravan parks	1 space per caravan/camping site plus 1 visitor space per 10 sites or part thereof.
Place of public worship, funeral chapel, funeral homes and mortuary	Funeral home or funeral chapel 1 space per 5 seats or 1 space per 6m2 of GFA whichever is greater. Depending on the scale and operational details, a detailed traffic and parking assessment may be required identifying impacts of overflow parking on surrounding land uses and the road system. 1 bicycle space per 25 car parking spaces in excess of the first 25 car parking spaces and 1 motorcycle space per 50 car parking spaces in excess of the first 50 car parking spaces.
Childcare centres/Kindergartens/After school care facilities	1 space per 4 children plus 1 space per employee
Home based child care	Residential rates apply plus adequate provision for pickup and drop off.

Educational establishments other than schools	Educational establishment - tertiary institution 1 car parking space per 5 seats or 1 space per 10m2 GFA, whichever is the greater.
Educational establishments - primary and secondary schools	1 car parking space per full time equivalent staff member, plus 1 car parking space per 100 students for visitor parking, plus 1 car parking space per 5 students in Year 12 where appropriate. Adequate space is also required for delivery vehicles, a drop off / pick up area and buses as appropriate. 1 bicycle space per 5 pupils over year 4.
Exhibition home/village	2 visitor car parking spaces per exhibition home to be provided in a separate car park within walking distance to the exhibition homes (800 metres). Where it can be demonstrated that the use of onstreet parking within the village for visitors will not adversely affect traffic flows and the operation of the display village, then the on-street parking may be treated as a credit against the overall requirement for a separate car park. A detailed assessment identifying all on street parking spaces proposed to allocate to visitors will be required to obtain this concession. Exhibition homes are to be designed to ensure they will provide the required amount of off-street car parking for when they are converted into dwelling houses.
Public administration buildings and community facilities	On merit. Traffic and parking study may be required depending on scale of the development, taking into consideration the proposed uses and equivalent rates for similar uses.
Information and education facility	1 space per 25m2 GFA.
Industrial training facility	On merit. Traffic and parking study may be required depending on scale of the development, taking into consideration the proposed uses and equivalent rates for similar uses.
Emergency services facility	On merit. Traffic and parking study may be required depending on scale of the development, taking into consideration the proposed uses and equivalent rates for similar uses.

Service Vehicles	
All uses	If private waste collection is proposed, space suitable to accommodate the garbage collection vehicle in addition to any other service vehicle requirements below.
Supermarkets, shops and restaurants/cafes	1 space for loading per 400m2 GFA or part thereof (50% of spaces adequate for trucks).
Department stores	1 space for loading per 1500m2 or part thereof (all spaces adequate for trucks).
Business, office premises	1 space for loading per 2000m2 or part thereof (50% of spaces adequate for trucks).
Wholesale, industrial, warehouse	1 space per 800m2 GFA or part thereof (all spaces adequate for trucks).
Other uses	On merit. Traffic and parking study may be required depending on scale of the development, taking into consideration the proposed uses and equivalent rates for similar uses.



Hawkesbury City Council 366 George Street (PO BOX 146) Windsor NSW 2756 (02) 4560 4444 | (02) 4587 7740 (02) 4560 4444 | (02) 4587 7740 | DX 8601 WINDSOR council@hawkesbury.nsw.gov.au www.hawkesbury.nsw.gov.au