Lake Macquarie City Council

Lake Macquarie Development Control Plan 2014 – Revision 25

Adopted by Council 28 September 2020

LAKE MACQUARIE CITY

DISCLAIMER

When preparing and assessing development applications, the summarised changes outlined in the revision history to this Development Control Plan (DCP) and their implications for development must be read in conjunction with the provisions contained within the whole of Lake Macquarie Development Control Plan 2014 and the provisions of Lake Macquarie Local Environmental Plan 2014.

REVISION HISTORY

Rev No.	Date Changed	Modified by	Details/Comments
25	September 2020	Integrated Planning	General Amendment that covers: Part 1 – reversing the order of the Revision History for improved readability, Parts 2 to 8 - Updates side setbacks in environmental zones. Introduces references to Geotechnical Guidelines.
24	March 2020	Integrated Planning	Part 12 – Precinct Area Plans – Inclusion of new Windale Area Plan
23	April 2020	Environmental Systems	Amendments to Contaminated Land Controls General (parts 2 – 7) including the introduction of Standard Remedial Action Plans for residential development within the Pasminco Lead Abatement Strategy Area, and management of Pasminco Black Slag wherever it occurs in the City.
22	February 2020	Integrated Planning	Part 12 – Precinct Area Plans – Mount Hutton Precinct Area Plan updated.
21		Waste Services (Strategic Waste)	General amendments to Waste Management Objectives and Controls in Parts 2-7 (zones), 8 (subdivisions), and 9 (specific land uses) and general amendments to Waste Management Guidelines including the Waste Management Plans and Residential Application Checklist
		Environmental Systems	Include reference to the Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies to Sections 2.2.10; 3.2.10; 4.2.11; 5.2.10; 6.2.11;7.2.10; 8.2.11;
		Integrated Planning	Part 12 – Precinct Area Plans – Inclusion of new Edgeworth Area 3 Area Plan
20	October 2018	Integrated Planning	Part 10 – Area Plans – Mount Hutton Town Centre – whole section updated.
19	June 2018	Integrated Planning	Part 9 Specific Land Uses - Dual Occupancy – whole section updated
18	June 2018	Integrated Planning	General Amendment that covers some sections within; Part 1, Part 2, Part 3, Part 4, Part 5, Part 6, Part 7, Part 8, Part 9.5 - Dwelling House in Rural and Environmental Zones, and Part 9.17 - Signage; Part 9.4 - Child Care Centres (repealed); Part 11 - Heritage Area Plans - Cooranbong Seventh-day Adventist Site Heritage Area Plan updated.

Rev No.	Date Changed	Modified by	Details/Comments
17	March 2018	Integrated Planning	Part 12 – Precinct Area Plans – Inclusion of new Lake Road Swansea Area Plan EP&A Act Section references updated as per EP&A Act Amendment 2018
16	July 2017	Integrated Planning	Part 12 – Precinct Area Plans – Inclusion of new Edgeworth Area 2 Area Plan
15	June 2017	Integrated Planning	General Amendment that covers some sections within Part 1; Part 2; Part 3; Part 4; Part 5; Part 6; Part 7; Part 8; Part 9 – Child Care Centres; Part 9 – Dual Occupancy Development; Part 9 – Foreshore and Waterway Development and Tree Preservation and Management Guidelines.
14	April 2017	Integrated Planning	Replacement of the existing Dora Creek Flood Prone Land Precinct Area Plan in Part 12.8 with the newly titled, Precinct Area Plan - Dora Creek Township Flood Prone Land, being consistent with the Dora Creek Floodplain Risk Management Study and Plan adopted by Council in 2015.
13	March 2017	Integrated Planning	Inclusion of Marks Point Belmont South Area Plan into Part 12 – Precinct Area Plans Part 12 – Belmont South - Foreshore Precinct Area Plan - Repealed
12	December 2016	Integrated Planning	Inclusion of Buttaba Hills South Area Plan into Part 12 – Precinct Area Plans
11	August 2016	Integrated Planning	Inclusion of Appletree Grove Estate controls into Part 11.2 West Wallsend/Holmesville Heritage Precinct
10	May 2016	Integrated Planning	Inclusion of Ada Street Cardiff Area Plan into Part 12 – Precinct Area Plans
9	May 2016	Integrated Planning	Inclusion of Edgeworth Area 1 Area Plan into Part 12 – Precinct Area Plans
8	April 2016	Integrated Planning	Inclusion of Munibung Hill Speers Point Quarry into Part 12 – Precinct Area Plans
7	February 2016	Integrated Planning	Part 11 – Heritage Area Plans – Wangi Power Station Complex Area Plan added. Added '*Tree Preservation and Native Vegetation Management Guidelines – STR Item No. 0088 removed from in the Significant Tree Register*' to the comments section of DCP Revision History – Revision 5. Text omitted at the time. Removed '*Tree Preservation and Native Vegetation Management Guidelines – amendments to Sections 2.2 and 2.3*' from comments section of DCP Revision History – Revision 6. Changes were not made to guidelines.
6	December 2015	Integrated Planning	Part 3 – Corrections made to sequencing of section numbers and minor editing to correct spelling.

Rev No.	Date Changed	Modified by	Details/Comments
			Part 10 – Town Centre Area Plans – Glendale Regional Centre Area Plan added. Part 12 – Precinct Area Plans – Wyee West Area Plan added.
5	August 2015	Integrated Planning	General Amendment that covered some sections within Part 1; Part 2; Part 3; Part 4; Part 5; Part 6; Part 7; Part 8; Part 9 – Attached Dwellings; Part 9 – Child Care Centres; Part 9 – Dwelling Houses in Rural and Environmental Zones; Part 9 – Dual Occupancy Development; Part 9 – Foreshore and Waterway Development; Part 9 – Multi Dwelling Housing; Part 9 – Residential Flat Buildings; Part 9 – Secondary Dwellings, Part 9 – Housing on Small and Narrow Lots; Part 10 – Pambulong Forest; Part 11 – Morisset Hospital Grounds Heritage Precinct; Part 12 – Lawson Road Precinct; Part 12 – North Buttaba Hills Estate Precinct; Part 12 – North Morisset Precinct; Part 12 – North Wallarah Peninsula; Part 13 – Dictionary Tree Preservation and Native Vegetation Management Guidelines – STR Item No. 0088 removed from in the Significant Tree Register
4	May 2015	Integrated Planning	DCP Revision adopted by Council 11 May 2015 – not effective until LMLEP 2014 Amendment published
3	February 2014	Integrated Planning	Parts 1 to 7 amended to reference the Development Guidelines for Resilient Housing for Lake Macquarie Development Guidelines for Resilient Housing for Lake Macquarie added to supporting Guidelines of DCP 2014.
1	August 2013	Integrated Planning	Part 1 – Table of Contents – addition of *Development Guidelines for Resilient Housing for Lake Macquarie* Part 1 – Introduction - Section 1.7– addition of *Development Guidelines for Resilient Housing for Lake Macquarie* to list of Guidelines to DCP 2014 Parts 2-7 – Lake flooding and tidal inundation section – add control referencing *Development Guidelines for Resilient Housing for Lake Macquarie*
Master	June 2013	Integrated Planning	Adopted by Council 11 June 2013

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Morisset Hospital Grounds and Farm Area Plan

Catherine Hill Bay Heritage Conservation Area Plan

Cooranbong - Seventh Day Adventist Community Area Plan

Wangi Power Station Complex Area Plan

Part 12 Precinct Area Plans

Lawson Road Macquarie Hills Area Plan (*Repealed*)

North Buttaba Hills Estate Area Plan (*Repealed*)

Thompson Road Speers Point Area Plan

Martinsville Area Plan

East Munibung Hill Area Plan

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Guidelines to Lake Macquarie DCP 2014

- Flora and Fauna Survey Guidelines 2013
- Tree Preservation and Native Vegetation Management Guidelines
- Energy Efficiency Design Guidelines for Commercial and Industrial Development
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- Development Guidelines for Resilient Housing for Lake Macquarie
- Engineering Guidelines – Part 5 Batter Slope Treatments
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Lake Macquarie Development Control Plan 2014 – Revision 25

Part 1 – Introduction

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1 INTRODUCTION

1.1 NAME OF THIS PLAN

The name of this Plan is Lake Macquarie Development Control Plan 2014 (abbreviated as LM DCP 2014).

1.2 LAND TO WHICH THIS PLAN APPLIES

LM DCP 2014 applies to the Local Government Area of Lake Macquarie City Council as covered by Lake Macquarie Local Environmental Plan 2014 (abbreviated as LMLEP 2014) and any other LEP still operating in the Lake Macquarie LGA.

1.3 DATE OF COMMENCEMENT

LM DCP 2014 – Revision 25 was adopted by Council on 28 September 2020. LM DCP 2014 commenced on 4 January 2020.

1.4 OBJECTIVES OF THIS PLAN

The purpose of LM DCP 2014 is to implement Council's Lifestyle 2030 Strategy (LS 2030 Strategy) and LMLEP 2014 by facilitating ecologically sustainable development.

The overall objectives of LM DCP 2014 are to:

- Promote ecologically sustainable and quality development in the City,
- Elaborate on the requirements of LMLEP 2014, as a key tool in the LEP's implementation,
- Provide detailed guidance to a range of stakeholders (including applicants and the general public) of Council's requirements for building, subdivision, and land development, and
- Provide detailed criteria to assist Council in assessing Development Applications (as required by Section 4.15 (1)(a) of the *Environmental Planning and Assessment Act, 1979*) (EP&A Act).

1.5 RELATIONSHIP TO OTHER DOCUMENTS

LM DCP 2014 must be read in conjunction with and development must comply with:

- LM LEP 2014,
- other relevant Environmental Planning Instruments, such as a State Environmental Planning Policy (SEPP).
- Council policies, guidelines and Plans of Management,
- Commonwealth and State legislation,
- Government publications and
- Relevant Australian Standards.

These documents provide additional information and/or criteria required to be considered during the development process. Where there is an inconsistency between LM DCP 2014 and any Environmental Planning Instrument (such as LMLEP 2014) applying to the same land, then the provisions of the Environmental Planning Instrument shall prevail.

1.6 STATUTORY CONTEXT

The DCP is titled "Lake Macquarie Development Control Plan 2014". LM DCP 2014 is a development control plan prepared under Section 3.43 of the *Environmental Planning and Assessment Act 1979* and *Environmental Planning and Assessment Regulations 2000*. For the purposes of interpreting certain clauses in the LMLEP 2014, reference in Section 4.15 (1)(a)(iii) of the *EP&A Act* requires Council (or any other consent authority) to consider this DCP when determining development applications that are covered by this DCP.

1.7 LAKE MACQUARIE DCP 2014 STRUCTURE

LM DCP 2014 consists of a written document and associated maps that contain the detailed planning controls for the use of land across the Lake Macquarie LGA. Together, the strategic direction of Council's LS 2030 Strategy, the statutory provisions of LMLEP 2014 and LM DCP 2014 represent the blueprint for development in Lake Macquarie.

LM DCP 2014 is divided into a number of parts based on landuse zone groups identified in LMLEP 2014 and within each part, there are sections that provide the controls for development in the city. The following provides an overview of each part of LM DCP 2014:

Part 1- Introduction. This part contains information on how to use the plan, land to which the plan applies, commencement, details of LM DCP 2014 structure, interpretation of provisions, variations from controls, relationship to other documents and notification requirements among other procedural matters.

Part 2 - Development in Rural Zones. This part applies to all development in the RU2, RU3, RU4 and RU6 zones under LMLEP 2014.

Part 3 - Development in Residential Zones. This part applies to all development in the R2 and R3 zones under LMLEP 2014.

Part 4 - Development in Business Zones. This part applies to all development in the B1, B2, B3 and B4 zones under LMLEP 2014.

Part 5 - Development in Industrial, Business Park and Infrastructure Zones. This part applies to all development in the IN1, IN2, IN4, B7, SP1 and SP2 zones under *LM LEP2014*.

Part 6 - Development in Recreation and Tourist Zones. This part applies to all development in the RE1, RE2 and SP3 zones under LMLEP 2014.

Part 7 - Development in Environment Protection Zones. This part applies to all development in the E2, E3 and E4 zones under LMLEP 2014.

Part 8 - Subdivision Development. This part applies when subdivision is proposed (excluding strata subdivision) in all land use zones. All subdivision must refer to this part.

Part 9 - Specific Land Uses. This part contains specific controls for particular land uses. The provisions in individual land uses are in addition to the provisions in the relevant DCP part and apply when a particular land use is proposed. Where inconsistencies arise, the controls in this part prevail over controls in parts 2 to 8 of this DCP. The uses covered in this part include:

• Attached Dwellings	• Multi Dwelling Housing
• Bed and Breakfast / Farm Stay Accommodation	• Places of Public Worship
• Caravan Parks and Manufactured Homes	• Residential Flat Buildings
• Dual Occupancy	• Secondary Dwelling
• Dwelling House in Rural and Environmental Zones	• Service Stations
• Foreshore and Waterway Development	• Sex Services Premises
• Health Consulting Rooms	• Signage
• Home Business and Home Industry	• Tourist and Visitor Accommodation
• Intensive Agriculture	• Housing on Small and Narrow Lots

Part 10 – Town Centre Area Plans. This part contains specific development controls applying to Town Centres. The provisions in the area plans are in addition to the provision in part 2 to 9 and apply when development is proposed in an area covered by an area plan. Where inconsistencies arise, the controls in area plans prevail over controls in parts 2 to 9 of this DCP. The Town Centre Area Plans include:

- Charlestown Regional Centre Area Plan
- Belmont Town Centre Area Plan
- Warners Bay Town Centre Area Plan
- Toronto Town Centre Area Plan
- Morisset Town Centre Area Plan
- Mount Hutton Town Centre Area Plan
- Pambulong Forest Area Plan ***(repealed)***
- Glendale Regional Centre Area Plan

Part 11 – Heritage Area Plans. This part contains specific development controls applying to Council's Heritage precincts. The provisions in the area plans are in addition to the provision in part 2 to 9 and apply when development is proposed in an area covered by an area plan. Where inconsistencies arise, the controls in area plans prevail over controls in parts 2 to 9 of this DCP. The Heritage area plans include:

- Boolaroo - Heritage Precinct Area Plan
- West Wallsend / Holmesville - Heritage Precinct Area Plan
- Teralba - Heritage Precinct Area Plan
- Toronto - Heritage Precinct Area Plan
- Rathmines - RAAF Base Area Plan
- Dudley Area Plan
- Morisset Hospital Grounds and Farm Area Plan
- Catherine Hill Bay Heritage Conservation Area Plan
- Cooranbong Seventh Day Adventist Heritage Precinct
- Wangi Power Station Complex Area Plan

Part 12 – Precinct Area Plans. This part contains site or area specific development controls. The provisions in the area plans are in addition to the provision in part 2 to 9 and apply when development is proposed in an area covered by an area plan. Where inconsistencies arise, the controls in area plans prevail over controls in parts 2 to 9 of this DCP. The precinct area plans include:

- Lawson Road Macquarie Hills Area Plan ***(repealed)***
- North Buttaba Hills Estate Area Plan ***(repealed)***
- Thompson Road Speers Point Area Plan
- Martinsville Area Plan
- East Munibung Hill Area Plan
- Mount Hutton Precinct Area Plan
- North Morisset Area Plan
- Dora Creek Township Flood Prone Land
- Gimberts Road Morisset Area Plan

- Coorumbung Road Dora Creek Area Plan
- Belmont South - Foreshore Precinct Area Plan (repealed)
- North Cooranbong Area Plan
- Lake Macquarie Coastline
- Highland Avenue Cooranbong Area Plan
- Pasminco Area Plan
- North Wallarah Peninsula Area Plan
- Wyee West Area Plan
- Munibung Hill Speers Point Quarry
- Edgeworth Area 1 Area Plan
- Ada Street Cardiff Area Plan
- Buttaba Hills South Area Plan
- Marks Point Belmont South Area Plan
- Edgeworth Area 2 Area Plan
- Lake Road Swansea Area Plan
- Edgeworth Area 3 Area Plan

Part 13 - Dictionary. This part contains the meanings of key words used in LM DCP 2014.

Appendix A – Local Road Reservations Map. This map shows the location of future roads that are required to facilitate orderly development.

Guidelines to DCP 2014. Guidelines are provided to supply detailed information on the technical requirements for specific matters. The guidelines to LM DCP 2014 are outlined below:

• Flora and Fauna Survey Guidelines 2013	• Engineering Guidelines – Part 5 Batter Slope Treatments
• Native Vegetation and Tree Preservation Guidelines	• Engineering Guidelines – Part 6 Standard Drawings
• Energy Efficiency Design Guidelines for Commercial and Industrial Development	• Economic Impact Assessment Guidelines
• Foreshore Stabilisation and Rehabilitation Guidelines	• Non-Discriminatory Access Audit Guidelines
• Heritage Guidelines	• Subdivision Guidelines
• Scenic Quality Guidelines	• Flood Management Guidelines
• Landscape Design Guidelines	• Erosion and Sediment Control Guidelines
• Waste Management Guidelines	• CPTED Guidelines
• Water Cycle Management Guidelines	• Vegetation Management Plan Guidelines

• Lake Macquarie *Tetratheca juncea* CMP, Nov 2004	• Natural Heritage Guidelines
• Engineering Guidelines – Part 1 Design Specification	• Estuarine Creekbank Stabilisation and Rehabilitation Guidelines
• Engineering Guidelines – Part 2 Construction	• Traffic Impact Statement and Vehicle Access Guidelines
• Engineering Guidelines – Part 3 SQID Guidelines	• Site Analysis Guidelines
• Engineering Guidelines – Part 4 Handbook of Drainage Design Criteria	• Social Impact Assessment Guidelines
• Development Guidelines for Resilient Housing for Lake Macquarie	• Geotechnical Slope Stability Guidelines

1.8 HOW TO USE THIS PLAN

LM DCP 2014 is one of the primary documents used by Council's development assessment and compliance staff to assess development applications. Applicants will need to:

1. Determine the land use zone that applies to the development site (refer to LMLEP 2014).
2. Refer to the Part of LM DCP 2014 that contains controls for the zone where the development is proposed (Parts 2 to 7).
3. Refer to Part 8 – Subdivision development if the subdivision of land is proposed (excluding strata subdivision).
4. Check if specific land use provisions apply to the proposed development (Part 9).
5. Check if an Area Plan applies to the proposed development site (Parts 10, 11 or 12).

The development controls contained within each part and section, seek to achieve desired land use, conservation and/or built outcomes consistent with corresponding LMLEP 2014 zone objectives and aims in each part of LM DCP 2014.

Each part of LM DCP 2014 is structured to promote a development process where the site and context analysis informs the design of the development. Parts 2 to 8 of this DCP generally have the following main headings:

- **Introduction** – provides information about the particular part of the DCP, how to use the DCP and aims for development within the particular zone group.
- **Context and Setting** – outlines the site issues and environmental opportunities and constraints that need to be addressed in the development application.
- **Development Design** - provides Council's detailed design related requirements.
- **Operational Requirements** – provides Council's detailed requirements associated with the construction and ongoing operation of the development.

The detailed provisions of each subsection in each part of LM DCP 2014 are presented as follows:

- **Objectives -** state what outcomes Lake Macquarie City Council is seeking new development to achieve along with providing the intent behind the controls, and
- **Controls -** advise the requirements for achieving outcomes and the desired future character identified by the aims and objectives.

Additionally, parts 2 to 8 contain specific aims, which LM DCP 2014 seeks to achieve. Where specific controls are not provided, the Aims of the part will be used to provide direction for a merits based assessment of a development application.

1.9 HOW TO INTERPRET THE PROVISIONS OF LM DCP 2014

Council must take the provisions of LM DCP 2014 into consideration in determining development applications. However, compliance with the provisions of LM DCP 2014 does not necessarily imply that Council will consent to an application. Council must consider the full range of matters listed under Section 4.15 of the *EP&A Act 1979*. Each application will be considered on its merits, taking into account a site's characteristics and surrounds.

1.10 DEPARTURES AND VARIATIONS FROM THE PROVISION OF LM DCP 2014

Council acknowledges that it is not possible for LM DCP 2014 to account for all possible situations and development scenarios. Any proposed departure from the DCP controls, or any proposal not catered for by this document, should be discussed at the earliest possible stage with Lake Macquarie City Council development assessment and compliance staff at a development concept or pre-lodgement meeting (see section 1.13 for further information). This will clarify procedural requirements and facilitate assessment of your development proposal.

Variations to a DCP control may be considered where the variation meets the relevant objective(s) and results in a better outcome than would have been achieved by complying with the control. Any application seeking a variation to a control must be in writing and should:

1. Identify the specific control which is proposed to be varied, and the extent of the proposed variation;
2. Outline the reasons for the variation to the control;
3. Outline how the proposed variation satisfies the objectives of that section and the aims of that part of the plan;
4. Identify the benefits to the streetscape, surrounding properties and the development that will result from the proposed variation;
5. Demonstrate the above benefits using relevant models, photomontages, plans, sections, and/or specialist reports where required; and
6. Identify any adverse impacts of the proposed variation on the proposed development or surrounding properties and demonstrate how these adverse impacts have been minimised.

This variation can be justified in the Statement of Environmental Effects accompanying the development application.

1.11 PLANNING PRINCIPLES

The Land and Environment Court (LEC) has established a series of planning principles that are considered best practice when dealing with specific planning matters. This DCP incorporates or refers to specific planning principles within its provisions.

A planning principle is a statement of a desired outcome based on a chain of reasoning aimed at reaching a list of appropriate matters to be considered in making a planning decision. While planning principles are stated in general terms, they may be applied to particular cases to promote consistency in making a planning decision.

The full list of planning principles can be found on the LEC Website.

1.12 DEVELOPER CONTRIBUTIONS

Section 7.11 of the *EP&A Act 1979* allows councils to levy new development a contribution towards the provisions of local infrastructure and community facilities required to meet the demands generated by the development. When undertaking new development (including, but not limited to, dwelling house,

subdivision, mixed use development and industrial development) the applicant is required to pay a contribution towards local infrastructure and community facilities as set out in the relevant Lake Macquarie City Council section 7.11 developer contributions plan. Please refer to the relevant section 7.11 contributions plan for the contribution required for different types of development or contact Council's developer contributions officers.

Council will not reduce or provide a concession on the section 7.11 contribution payable by a development because of infrastructure or services that are a requirement of that development. For example, a development may require the provision of private open space, footpath upgrades or road works. The only circumstances where Council will entertain a reduction or concession on the section 7.11 contribution payable will be where the applicant provides works in kind, dedication of land or a planning agreement that delivers something identified in the applicable section 7.11 contributions plan.

In addition to the contribution towards local infrastructure and community facilities, an applicant may be required to contribute towards state and/or regional infrastructure depending on the scale of the proposed development.

Additionally, other means of contributing towards the provision of local infrastructure and community facilities may be accepted. These include conditions of consent, works in kind, dedication of land and planning agreements.

1.13 DEVELOPMENT CONCEPT AND PRE – LODGEMENT MEETINGS

In order to improve the quality of a development application and expedite the assessment of development applications, Council offers and strongly encourages applicants to use development concept meetings and pre-lodgement meetings.

Development Concept Meeting:

The meeting aims to provide site constraints and preliminary discussion for a proposed development. The meeting is informal with no fixed agenda and no detailed plans are required. Applicants are encouraged to use this service early in their development process. If you have preliminary sketches or plans you wish to discuss in the meeting, you should lodge these at the time of booking. Details of the key issues you would like to address in the meeting should be given to the booking officer. This assists us to ensure the appropriate technical officers attend your meeting.

Key points from the meeting will be documented and distributed to attendees. This information will assist applicants develop the application to pre-lodgement stage. The concept meeting should be used as a pre-cursor to a pre-lodgement meeting. More detailed advice is available during a pre-lodgement meeting.

Pre - Lodgement Meeting:

Lake Macquarie City Council's pre-lodgement meeting service enables applicants to meet with the relevant council officers to discuss their development prior to lodging a development application.

The purpose of these meetings is to assist the applicant to prepare a full and detailed development application. Council recommends using its Development Planning service to first research and obtain preliminary application requirements and planning controls for your proposal. These will be used at your pre-lodgement meeting.

Council cannot guarantee a favourable determination for your development application however, a pre-lodgement meeting is beneficial as council officers can provide early comments on your proposal and specific investigations, and highlight any major concerns/issues that you need to address prior to lodging an application.

Please refer to Council's website (www.lakemac.com.au) or contact Council's Development Assessment and Compliance department for fees, further information on documentation required to be submitted prior to the meeting and to make an appointment.

1.14 APPLICATION SUBMISSION REQUIREMENTS

Schedule 1 of the *Environmental Planning and Assessment Regulation 2000*, sets out the minimum submission requirements. Studies, reports or assessments conducted by suitable qualified professional are to be submitted with development applications where required by relevant Controls contained in parts 2 to 12 of LM DCP 2014, in LMLEP 2014 or when requested by Council. The detail of these documents will depend on the scale and complexity of the proposal. These documents may include, but are not limited to:

- Statement of Environmental Effects,
- Site Analysis Plan,
- Flora and Fauna Assessment, a Species Impact Statement and a Significance Test where applicable,
- Visual Impact Assessment,
- Bushfire Risk Assessment and Bushfire Management Plan,
- Flood Study,
- Geotechnical Report,
- Preliminary Acid Sulphate Soil Assessment and Management Plan,
- Erosion and Sediment Control Plan,
- Contamination Assessment,
- Acoustic Assessment,
- Waste Management Plan,
- Social Impact Assessment,
- Crime Risk Assessment,
- Economic Impact Assessment,
- Heritage Report and/or Aboriginal Archaeology Report,
- Water Quality and Stormwater Management Plan,
- Traffic and Transport Study,
- Landscape Plan, and
- Engineering Design Plans.

1.15 DEVELOPMENT NOTIFICATION REQUIREMENTS

1.15.1 WHEN NOTIFICATION IS REQUIRED

Council notification is required for all Development Applications, except:

1. Designated Development;
2. State Significant Development;
3. Integrated Development;
4. Advertised Development, which includes the demolition of a building, work, tree or place listed as a scheduled Heritage Item as identified and/or located within a Heritage Conservation Area; and
5. Complying Development.

Designated, State Significant, Integrated and Advertised development types have specific notification and consultation requirements that are detailed in the *EP&A Act 1979*, and are above and beyond Council's notification requirements.

1.15.2 NOTIFICATION PROCESS

1. The notification period shall be a minimum of 14 calendar days.
2. Written notice of the application is to be sent to the person(s) as appear to:
    i. own land that adjoins the land to which the development application relates; or
    ii. own land that in the opinion of the consent authority may be affected by the development application.

Note – Where the land is a parcel created under the Community Land Development Act, Strata Titles, or Strata Titles (Leasehold) Acts, a written notice to the Governing Association is taken to be the owner. Where more than one person is listed as the owner, a written notice to one of the owners is taken to be a notice to the owner.

3. Notice of a development application shall include:
    i. Where applicable a site plan (notification plan) of the proposed work. (Note: the provision of a notification plan may be in the form of advising where the plan can be viewed rather than providing a physical copy. A physical copy will be provided for free upon request.)
    ii. The address of the land on which the development is proposed.
    iii. A description of the proposed development.
    iv. A statement that the plans may be inspected at Council during ordinary office hours, free of charge.
    v. The period during which a submission may be made.
    vi. A statement that if a submission is to be made by way of objection, it must be in writing and include the grounds for the objection.

1.15.3 NOTIFICATION REQUIREMENTS

A Notification plan must include a site plan and elevation plans.

Site plan requirements:

A site plan for notification purposes must be provided as part of any development application by the applicant and incorporates:

- The dimensions of the subject land,
- The distance between each part of the development and the boundary,
- The position of buildings on adjoining properties to the subject land,
- A north point, an indication of views and prevailing breezes,
- Means of access,
- Position of easements
- Existing buildings, trees, landscaping, retaining walls and fencing.

Elevation plan requirements:

An elevation plan(s) for notification purposes must be provided as part of any development application by the applicant and incorporate an elevation of each side of the proposed development indicating:

- The gradient of the land adjacent to the elevation and the existing ground surface,
- The overall height of the walls measured from existing ground surface,
- The height of the proposed roof measured from the top of the wall to the ridgeline or highest point,
- The size, position and shape of any openings, windows and doors,
- The position, size and shape of verandahs, landings, decks and outdoor living areas.

Note – The applicant is required to provide at least one notification plan at lodgement of the DA.

1.15.4 CIRCUMSTANCES FOR DISPENSING WITH NOTIFICATION REQUIREMENTS

Notification may be dispensed with, except in relation to Heritage Items or Heritage Conservation Areas, when:

1. Council is of the opinion that an amended or substituted application (including applications under s4.55 or s8.3 of the Environmental Planning and Assessment Act 1979) varies in a minor respect from the original application that was previously notified.
2. Council is of the opinion that the proposed development is of a minor nature that will not adversely affect the amenity of adjoining land or the locality.
3. The application is for a Temporary Use as detailed in LMLEP 2014 - Temporary Use of Land and in the opinion of Council will not adversely affect the amenity of the locality.
4. Development is for a new residential dwelling house or additions to a residential dwelling house, provided the development: ~~and/or ancillary development to a~~ provided the development:
    a. is a maximum of two storeys; and
    b. has a maximum height of 8.5m measured from the existing ground level; and
    c. the external wall of the building is not built within 900mm of the lot boundary.
5. Development is for a new attached or detached ancillary development to a residential dwelling house, provided the development:
    a. has a maximum height of 4.5m measured from the existing ground level; and
    b. the external wall of the building is not built within 900mm of ~~to~~ the lot boundary

1.15.5 EXTENSION OF NOTIFICATION PERIOD

Council may extend the notification period without further notification to those already notified.

Lake Macquarie Development Control Plan 2014 – Revision 25

Part 2 – Development in Rural Zones

Adopted by Council 28 September 2020

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1 INTRODUCTION

Part 2 - Development in Rural Zones applies to all development in the RU2 Rural Landscape, RU3 Forestry, RU4 Primary Production Small Lots and RU6 Transition land use zones.

This part is to be read in conjunction with Part 1 (Introduction) of DCP 2014, which outlines Council's general requirements for all developments and provides advice on the lodgement requirements for a Development Application. Part 1 also contains requirements for when an application seeks to vary a development control. Additionally, controls for specific land uses may apply, depending on the type of development proposed. These controls can be found within Part 9 of this DCP.

Furthermore, an Area Plan may apply, depending on the location of the development. Area Plans contain area specific controls that need to be considered. They can be found in Parts 10, 11 and 12 of this DCP.

1.1 HOW TO USE THIS PLAN

LMDCP 2014 is the primary document used by Council's development assessment staff to assess development applications. Proponents of development will need to:

1. Determine the land use zone that applies to the development site (refer to LM LEP 2014);
2. Refer to the Part of LMDCP 2014 that contains controls for the zone where the development is proposed (Parts 2 to 7);
3. Check if specific land use provisions apply to the proposed development (Part 9); and
4. Check if an Area Plan applies to the proposed development site (Parts 10, 11 or 12).

The development controls contained within each part and section seek to achieve desired land use, conservation and/or built outcomes consistent with corresponding LM LEP 2014 zone objectives, and the aims in each part of LMDCP 2014.

Each part of LMDCP 2014 is structured to promote a development process where the site and context analysis informs the design of the development. Parts 2 to 8 of this DCP generally have the following main headings:

- **Introduction** – provides information about the particular part of the DCP, how to use the DCP and aims for development within the particular zone group.
- **Context and Setting** – outlines the site issues, and environmental opportunities and constraints that need to be addressed in the development application.
- **Development Design** – provides Council's detailed design related requirements.
- **Operational Requirements** – provides Council's detailed requirements associated with the construction and ongoing operation of the development.

The detailed provisions of each subsection in each part of LMDCP 2014 are presented as follows:

- **Objectives** – state what outcomes Lake Macquarie City Council is seeking new development to achieve along with providing the intent behind the controls, and
- **Controls** – advise the requirements for achieving outcomes and the desired future character identified by the aims and objectives.

Additionally, Parts 2 to 8 contain the specific aims that LMDCP 2014 seeks to achieve. Where specific controls are not provided, the aims of each part will be used to provide direction for a merits based assessment of a development application.

For more information on how to use this document, please consult Part 1 – Introduction.

1.2 ADDITIONAL CONTROLS FOR SPECIFIC LAND USES

If the development application relates to any of the following land uses, additional specific development controls must be considered in conjunction with controls in this part of the DCP. The detailed controls for

these uses can be found in Part 9 of this DCP. Where a conflict exists between the controls within this part and a specific land use, the specific land use section prevails.

• Bed and Breakfast / Farm Stay Accommodation	• Health Consulting Rooms
• Dual Occupancy	• Home Business and Industry
• Dwelling House in Rural and Environmental Zones	• Intensive Agriculture
• Foreshore and Waterway Development	• Signage

1.3 AIMS FOR DEVELOPMENT IN RURAL ZONES

Where controls are not provided for a particular circumstance, the following aims will be used to provide direction for a merits based assessment of a development application.

The aims of LMDCP 2014 for development in rural zones are:

1. To ensure that the amenity of rural areas and natural landscapes are maintained.
2. To ensure that rural housing and lifestyle development is integrated effectively with agricultural productivity and reduces land use conflict.
3. To ensure that development occurs in an ecologically sustainable manner, and is energy efficient in terms of design and layout, consumption and materials.
4. To maintain the amenity and natural character of the landscape.
5. To promote the orderly economic development which maintains the viability of rural lands.

2 CONTEXT AND SETTING

2.1 SITE ANALYSIS

Objective

a. To encourage good site planning, built form and landscape outcomes informed by an understanding of the site and its context.

b. To illustrate how a development responds to a site and its relationship with the locality.

c. To identify the opportunities and constraints of sites, and the prevailing characteristics of a locality.

Controls

1. A Site Analysis Plan must be submitted that identifies the existing conditions relating to the subject site, and the surrounding land that may influence the design process.
2. The Site Analysis Plan must address:
   i. All relevant items as set out in the *Site Analysis Guidelines*; and
   ii. All relevant matters outlined below in section 2.2 to 2.18.
3. The Site Analysis Plan must provide a comprehensive view of the constraints and opportunities of the development site that will guide the design process.
4. The development application must clearly show that the constraints and opportunities identified in the Site Analysis Plan have been used to inform and resolve the development design. .
5. An electronic 3D block model must be submitted for any development that is three or more storeys, or that has a Gross Floor Area of 2000m^2 or more. The model must clearly show the scale and form of the proposed development and its setting, from viewing points along the street, and from public open space, waterways and other significant vantage points.
6. Council may require an electronic model for smaller developments on sites with potentially high visual or physical impacts on the public realm.

Note: The detail of the Site Analysis Plan should be tailored to the site, and the complexity of the proposed development.

2.2 SCENIC VALUES

The **Landscape Settings and Significant Natural Landscape Features Maps** identify the Landscape Setting boundaries and the relevant Scenic Management Zone for each Landscape Setting. The maps are a guide to the scenic quality associated with lands within the City of Lake Macquarie and are contained within the *Scenic Management Guidelines*. The *Scenic Management Guidelines* provide supporting documentation to this DCP.

Objectives

a. To ensure that the scenic values of the City are protected and enhanced.

b. To ensure that developments visible or adjoining the coastline, Lake Macquarie or ridgelines maintain and enhance the scenic value of these features.

Controls

1. A landscape and visual impact assessment is required for development identified in Table 1 unless specified by Council. A landscape and visual impact assessment must be prepared in accordance with section 7.3 of the Scenic Management Guidelines.

Table 1 - Development requiring a landscape and visual impact assessment

Type, category or impact of development: • Any designated or SEPP 14 development • Any new development or alterations and additions resulting in a building or structure equivalent to 4 storeys or more (in any zone), or a car park of 2 or more storeys (in any zone) • Camping grounds • Telecommunication towers • Substantial loss of native tree cover (land parcels of one hectare or greater) • Subdivisions (in any zone with 10 or more lots proposed) • Tourist and visitor accommodation • Eco-tourist facilities • Waste or resource management facilities • Cemeteries • Freight transport facilities • Removal of any tree on the Significant Tree Register • Seniors living developments and hospitals with more than 30 beds • Educational facilities • Any industrial or commercial buildings being more than 50 metres long on any side, or being over 10 metres high
Location of development: • Any development that is; within 300m of the Mean High Water Mark of the lake or coastal edge, or on a ridgeline and involves two or more of the following: o height equivalent to 3 or more storeys, or o sloping site (10% or more), or o requiring a combined cut and fill exceeding 2 metres, or o a development footprint exceeding 2000m^2. • Any building or structure in a public reserve having a footprint exceeding 100m^2 or being over 10 metres high. • Any development on a heritage item and/or development within a heritage conservation area (apart from alterations and additions to existing houses or new complying development houses) • Any development within 300m of the Sydney-Newcastle Freeway (apart from alterations and additions to existing houses or new complying development houses)

2. Developments must be designed and sited to complement their location through:
   i. the retention of existing vegetation,
   ii. incorporating appropriate landscaping,
   iii. minimising cut and fill,
   iv. building design and articulation compatible with natural context, and
   v. colour and material selection,
3. For developments visible from the coastline, Lake Macquarie, and adjacent waterways, or from significant ridgelines, external finishes should be non-reflective and muted in tone.

2.3 GEOTECHNICAL

Objectives

a. To minimise potential damage to buildings/structures resulting from land movement and instability.

b. To provide guidance on the preparation of geotechnical reports required to support a development application.

Controls

1. The following development types do not require submission of a Slope Stability Assessment with a development application:
    - Minor development such as garages, carports, decks and the like, pergolas, fiberglass swimming pools and cut/fill not exceeding 1 metre high/deep.
    - Development in Geo_4, Geo_5 or Geo_6 zone that consists of less than 3 storeys and less than 1000m^2 gross floor area and are not sensitive use facilities as defined by the Geotechnical Slope Stability Guidelines.
    - Subdivision consisting of:
        - 4 or less lots; and
        - Not including any new public road; and
        - Within a Geo_4, Geo_5 or Geo_6 zone.
2. A geotechnical report prepared by a geotechnical engineer must accompany an application for all other development as specified in Council's *Geotechnical Slope Stability Guidelines*. The report must be prepared in accordance with these Guidelines.

Note: After lodgement of a development application, Council may still require the submission of Geotechnical Report for the development types identified at (1) following a site inspection.

2.4 MINE SUBSIDENCE

Objectives

a. To minimise risks to buildings and structures associated with potential mine subsidence.

Controls

1. Where an application is made for the construction of a structure or building within a Mine Subsidence District, written concurrence must be obtained from the Mine Subsidence Board. Written concurrence should be obtained prior to the application being submitted to Council.
2. Written concurrence from the Mine Subsidence Board is not required for certain works that have deemed approval under the Mine Subsidence Board's publication 'A Guide for Council Staff'.

***Note*:** Please refer to the Mine Subsidence Board's 'Surface Development Guidelines' for important information.

2.5 CONTAMINATED LAND

Objectives:

a. To ensure that contaminated land is identified through appropriate investigations

b. To ensure that contaminated land at a site is appropriately and effectively remediated prior to development taking place.

c. To ensure that changes to land use will not increase the risks to public health or the environment as a result of contamination land on site, or adjacent properties.

Controls:

1. Where development is proposed on land identified as being potentially contaminated, a Preliminary Site Investigation Report must be prepared and submitted with the application for development. Refer to Council's *Policy for Managing Contaminated or Potentially Contaminated Land* for further information.
2. Where contaminants are found within the site, a Detailed Site Investigation Report must be prepared and lodged with the development application.
3. Where a Detailed Site Investigation Report identifies the need for remediation, a Remedial Action Plan must be prepared and submitted with the application.
4. The site must be validated as suitable for its intended use prior to the issue of an occupation certificate.

Note: At discretion, Council may request a formal audit of contamination documentation by a site auditor accredited with the NSW Environment Protection Authority under the *Contaminated Land Management Act* 1997.

Note: Refer to SEPP 55 and the NSW State Governments '*Managing Land Contamination: Planning Guidelines*' for more information.

2.6 ACID SULFATE SOILS

Objectives

a. To ensure that disturbance of Acid Sulfate Soils or Potential Acid Sulfate Soils is minimised, to prevent adverse environmental impact on soil conditions.
b. To ensure that water quality and associated receiving waters are not detrimentally affected by the effects of Acid Sulfate Soils.
c. To ensure that habitat is not detrimentally affected by the effects of Acid Sulfate Soils.
d. To ensure that built structures and infrastructure are not detrimentally affected by Acid Sulfate Soils.

Controls

1. Development should be sited or designed to avoid the disturbance of Acid Sulfate Soils or potential Acid Sulfate Soils.
2. Where the disturbance of Acid Sulfate Soils is unavoidable, a Preliminary Acid Sulfate Soil Assessment report must be submitted with the development application, in accordance with the *NSW Acid Sulfate Soils Planning Guidelines*.
3. Where a Preliminary Acid Sulfate Soil Assessment report identifies potential adverse impacts, a detailed assessment report and management plan must be submitted, in accordance with the *NSW Acid Sulfate Soils Planning Guidelines*.
4. Any Acid Sulfate Soils must be identified on the site analysis plan.

***Note*:** Refer to Lake Macquarie Council's Acid Sulfate Soil planning maps showing classes of land containing potential or actual Acid Sulfate Soils. These maps are available at Council's Customer Service Centre, Speers Point.

2.7 STORMWATER MANAGEMENT

Objectives

a. To ensure that development does not adversely affect water quality or availability, including ground water.
b. To ensure that watercourses and associated riparian vegetation are maintained so as to contribute to water quality, and to mitigate sedimentation of the Lake Macquarie waterway.
c. To minimise any adverse impacts on downstream built or natural environments, or on nearby land due to increased development.

d. To incorporate Water Sensitive Urban Design techniques into all new developments.
e. To minimise the volume and rate of stormwater leaving a development site.

Controls

1. A *Water Cycle Management Plan* must be submitted for all development except single dwelling houses and dual-occupancy developments. The *Water Cycle Management Plan* must provide details of the management of stormwater, and the measures proposed to mitigate the effects of stormwater on adjoining or downstream sites in accordance with Council's *Water Cycle Management Guidelines*.
2. A *Site Stormwater Drainage Plan* must be submitted for all single dwelling houses and dual-occupancy development proposals. The *Site Stormwater Drainage Plan* must be prepared in accordance with Council's *Water Cycle Management Guidelines*.
3. On-site measures must be implemented to maintain water quality, and to minimise the volume of stormwater run-off and the rate at which stormwater leaves the site.
4. A maximum of 10% of run-off from built impermeable surfaces may be discharged directly to the drainage system. The remaining 90% of run-off must be captured for reuse, or managed through infiltration and retention measures prior to being discharged to the drainage system.
5. Stormwater management systems should be visually unobtrusive and integrated within site landscaping, car parks or building structures.
6. All developments (except dwelling house or dual occupancy) that involve the re-use of stormwater or the use of recycled water must demonstrate compliance with the Australian Guidelines for Water Recycling and the licensing requirements of the *Water industry Competition Act 2006*.
7. Stormwater management systems must be designed in accordance with the *Water Cycle Management Guidelines.*

2.8 CATCHMENT FLOOD MANAGEMENT

This section applies to land in the various creek catchments in Lake Macquarie that are shown as 'Lots Affected by Catchment Flooding Controls' on Council's 'Flood Control Lots' map.

The map is indicative only and property information should be checked to confirm if a lot is a catchment flood control lot.

Some lots are affected by both catchment flooding and Lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Further information on flood risk and flood planning levels (floor levels) for particular lots can be obtained by applying for a Flood Certificate from Council.

Provisions regarding Lake flooding are contained in section 2.9 of this Part of DCP 2014.

Where inconsistencies arise, the controls in area plans prevail over controls in parts 2 to 9 of this DCP.

Objectives

a. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties.
b. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding, and manage risks to property and life from flood events.

Controls

1. Development must be consistent with the current version of the *NSW Floodplain Development Manual*, and any relevant local flood study, floodplain management study or plan applying to the land that has been endorsed by Council.
2. The proposed development must consider and respond to flooding hazards. It must also mitigate risks to life and/or property through design and positioning of development.

3. Buildings must not be located in an identified floodway
4. Buildings and other structures, including fences, must be designed so as not to impede the flow of floodwaters or entrap debris.
5. Habitable rooms must have a finished floor height at least 500mm above the 100 year probable ARI (1% AEP) event. Where probability flood levels are not available, habitable rooms must have a finished floor height at least 500mm above the highest observed flood level for the development site.
6. Non-habitable rooms must have a finished floor height at or above the 20 year probable ARI (5% AEP) event. Where probability flood levels are not available, non-habitable rooms must have a finished floor height at or above the highest observed flood level for the site, except where this would result in a floor level more than 500mm above the existing ground level. In this case, a floor level of at least 500mm above existing ground level must be achieved.
7. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area , or within the extent of the 100 year probable ARI (1% AEP) flood event
8. Lesser provisions may be acceptable where the applicant can demonstrate that the type of development or the proposed use poses no significant risk to life or property by flooding.
9. Any use of fill associated with development must not substantially impede the flow of floodwater, and must not contribute to flooding or ponding of water on any other property.
10. Additions or alterations to existing development will be assessed on the merits of the situation, having regard to meeting an acceptable level of risk of flood damage.
11. Development on designated flood prone land should incorporate the floodplain risk management measures, as recommended by a local flood study, floodplain management study or plan which identifies and addresses appropriate actions in the event of flooding.
12. Development on land subject to flooding must use flood compatible materials that will minimise damage by flooding.
13. Development on lots adjoining areas affected by a 100 year probable ARI event will be subject to floor height requirements, even when the site may not be subject to flooding from the 100 year probable ARI event. This requirement is not applicable for land higher than 500mm above the 100 year probable ARI, as calculated for the relevant site.
14. Development where 100 year probable ARI levels are not available, and which could be flood liable, should be designed to meet an acceptable level of risk from flood damage. This may require the preparation of a Local Flood Study that considers cumulative impact issues, and demonstrates negligible impacts on other lands.

Note: Refer to Council's *Flood Management Guideline* for further information on the *NSW Floodplain Development Manual*, completed floodplain management plans, and on Council's requirements for flood studies.

Table 2 - Flood Planning Levels and floor height requirements in areas affected by catchment flooding and covered by a Floodplain Management Study and Plan

Development Type (including extensions)	Minimum Height Requirements
Dwellings	
Habitable rooms	1 in 100 year probable flood level + 500mm freeboard (post and beam rather than slab on ground preferred)
Non-habitable rooms and garages	1 in 20 year probable flood level
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement
Unsealed electrical installations	
Medium and High density residential development	
Habitable rooms	1 in 100 year probable flood level + 500mm freeboard

Development Type (including extensions)	Minimum Height Requirements
Non-habitable rooms and garages	1 in 20 year probable flood level
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Commercial and Retail	
Internal floor height	1 in 100 year probable flood level + 500mm freeboard
Basement car parking Also includes Places of Public Worship, restaurants, clubs, entertainment facilities, warehouses, and bulky goods showrooms etc.	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Mixed Use development	
Internal floor height	1 in 100 year probable flood level + 500mm freeboard
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Industrial	
Internal floor height	1 in 100 year probable flood level
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Sensitive Uses (Residential care facilities, hospitals, etc.)	
Internal floor height	Probable maximum flood level
Unsealed electrical installations	Probable maximum flood level

2.9 LAKE FLOODING AND TIDAL INUNDATION (INCORPORATING SEA LEVEL RISE)

This section applies to land on and near the Lake Macquarie foreshore that is shown as 'Lots Affected by Lake Flooding Controls' on Council's 'Flood Control Lots' map. The map is indicative only and property information should be checked to confirm if a lot is a Lake flood control lot.

Some lots are affected by both catchment flooding and Lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Provisions regarding Catchment Flooding are contained in section 2.8 of this Part of DCP 2014.

The floor height requirements in Table 3 below must only be used for development on lots shown as 'Lots Affected by Lake Flooding' on Council's 'Flood Control Lots' map.

Council completed the Lake Macquarie Waterway Flood Study and Risk Management Plan in 2012. This flood study and risk management plan incorporated the implications of predicted sea level rise.

Predicted sea level rise is based on expert advice from NSW Government agencies and expert scientific agencies, namely that projections of sea level rise along the NSW coast are for a rise relative to 1990 mean sea levels of 40cm by 2050 and 90cm by 2100.

The controls contained in this section prevail where there is an inconsistency with other development requirements. This is particularly relevant to cut and fill controls.

Objectives

a. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties.
b. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding, and manage risks to property and life from flood events.
c. To ensure that development adequately considers and responds to sea level rise projections, and the predicted effects on inundation, flooding, coastal and foreshore recession, and on groundwater levels.
d. To ensure that development on land vulnerable to sea level rise is situated and designed to minimise the risk from future inundation, flooding, coastal and foreshore recession, and from rises in groundwater levels during the expected life of the development.
e. To ensure that development is designed to enable future adaptation if projections are realised, or that measures are implemented to mitigate any adverse impacts of climate change or sea level rise
f. To encourage innovative responses to sea level rise impacts.

Controls

1. Development must implement measures to mitigate the adverse effects of projected sea level rise and increases in flood levels on the development.
2. Development should be designed and situated to reduce the risk from the effects of sea level rise. For example, structures should be located on the highest part of the lot and/or located as far back from the foreshore or coastline as possible, while still meeting other controls and objectives of the DCP.
3. Development should not be located in areas predicted to be permanently inundated during the life of the asset. The assumed asset life is 100 years for residential care facilities and seniors housing, hospitals, mixed use development and for medium and high density housing, and 50 years for other developments.
4. Notwithstanding the provisions for Cut and Fill in section 3.14, special consideration may be given to increased fill allowances in areas affected by sea level rise provided that:
   i. Additional fill does not adversely affect stormwater management, drainage, or the flow of water from roads, natural or constructed watercourses, foreshore areas or adjoining properties; and
   ii. The filled area maintains functional connections to adjoining footpaths, roads, neighbouring blocks and other local features.
5. Development identified within Table 3 should comply with the floor height provisions. Where the development proposed is not contained within Table 3, or an alternative to the provisions contained within Table 3 is proposed, a Flood Safety Audit and Management Plan must be submitted with the application, which is to include:
   i. Current 100 year ARI flood levels and velocity, as well as at 2050 and 2100 ;
   ii. Analysis of potential and likely risk of flooding, and/or potential threat to life and/or property now, and at 2050 and 2100;

iii. Analysis of the potential effects of permanent inundation, foreshore recession and rising groundwater;

iv. Where flood-proof materials are proposed, evidence of the flood-proof characteristics of those materials must be provided;

v. Where an innovative of adaptable building design is proposed, it meets the principles and performance criteria set out in the Development Guidelines for Resilient Housing for Lake Macquarie, and

vi. Any other alternative adaptive measure must be justified.

6. The assessing officer may determine that the development proposal is of a minor nature, and that there is no need for a Flood Safety Audit and Management Plan. In these circumstances, the assessing officer must be satisfied that the proposed development adequately addresses projected sea level rise and increases in flood levels.

Table 3 - Floor height requirements for land affected by Lake Flooding and Tidal Inundation requirements

Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
Dwellings		
Habitable rooms	1 in 100 year probable flood level for 2050 + 500mm freeboard (post and beam rather than slab on ground preferred)	2.36 m AHD
Non-habitable rooms and garages	1 in 20 year probable flood level for 2050	1.61 m AHD
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement	
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Medium and High density residential development		
Habitable rooms	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Non-habitable rooms and garages	1 in 20 year probable flood level for 2100	2.10 m AHD
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement	
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2100 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.82 m AHD

Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
Unsealed electrical installations	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Commercial and Retail		
Internal floor height	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Basement car parking Also includes Places of Public Worship, restaurants, clubs, entertainment facilities, warehouses, and bulky goods showrooms etc.	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2050 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.36 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Mixed Use development		
Internal floor height	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2100 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.82 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Industrial		
Internal floor height	1 in 100 year probable flood level for 2050	1.86 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Sensitive Uses (Residential care facilities, hospitals, etc.)	Probable maximum flood level for 2100	3.27 m AHD
Unsealed electrical installations	Probable maximum flood level for 2100	3.27 m AHD

2.10 NATURAL WATER SYSTEMS

Definition

A **natural water system** is a naturally occurring watercourse, waterway, lake, wetland, lagoon, estuary, and/or other waterbody.

Objectives:

a. To protect and maintain the water regime of natural water systems.
b. To ensure that development does not adversely affect aquatic fauna.
c. To ensure that development does not adversely affect water quality or availability, including ground water.
d. To ensure that watercourses and associated riparian vegetation are maintained to contribute to water quality, and to mitigate sedimentation of the Lake Macquarie waterway.
e. To ensure that natural water systems and associated vegetation and landforms are protected to improve the ecological processes and ensure that land is adequately buffered from development.
f. To ensure that the pre-development water quality of receiving waters is maintained or improved.

Controls:

1. Natural water systems must be maintained in a natural state, including the maintenance of riparian vegetation and habitat such as fallen debris.
2. Where a development is associated with, or will affect a natural water system, rehabilitation must occur to return that natural water system – as much as possible – to a natural state. The Rehabilitation Plan must be prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies*.
3. Rehabilitation should occur where a development site includes a degraded watercourse, water body, or wetland. Rehabilitation is to be carried out following the completion of a Rehabilitation Plan, This Plan must prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies.*
4. Stormwater must be managed to minimise nutrient and sediment run-off entering constructed drainage lines, natural watercourses, or waterways.
5. Development within a Core Vegetated Zone (VRZ), as shown in Figure 2 – Vegetated Riparian Zones, should be avoided where possible to retain its ecological processes. Where development is unavoidable within the VRZ, it must be demonstrated that potential impacts on water quality, aquatic habitat, and riparian vegetation will be negligible.
6. A Plan of Management must be submitted in accordance with State Government guidelines for development proposed within a VRZ.
7. Asset Protection Zones must not be located within the Vegetated Riparian Zone.

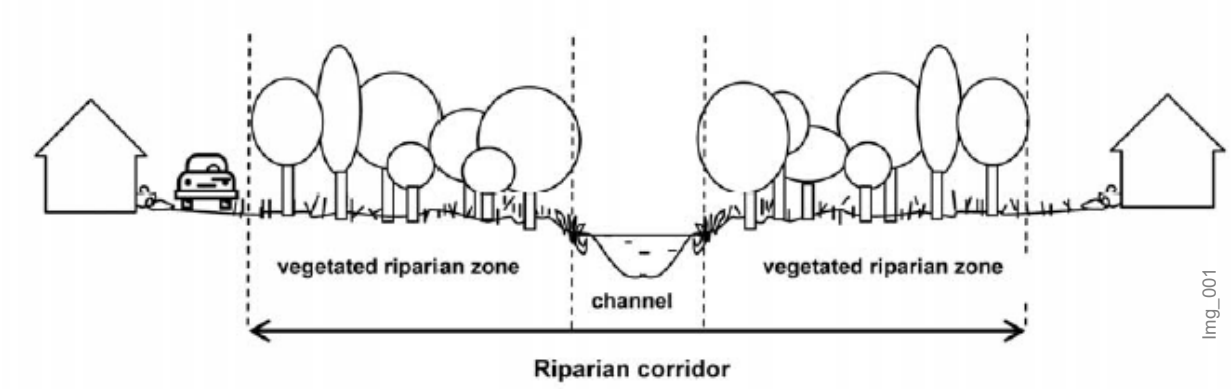


Figure 1 - Vegetated Riparian Zones

Types of Watercourses	VRZ Width[2] (Each side of watercourse	Total Riparian Corridor Width
Any first order[1] watercourse	10 metres	20m + channel width
Any second order[1] watercourse	20 metres	40m + channel width
Any third order[1] watercourse	30 metres	60m + channel width
Any fourth order[1] watercourse or greater (includes estuaries, wetlands and any parts of rivers influenced by tidal waters)	40 metres	80m + channel width

[1] As classified under the Strahler System of ordering watercourses.

[2] Bushfire Asset Protection zones will not be permitted in the Vegetated Riparian Zone. Additional areas may need to be protected to support ecological processes.

2.11 BUSHFIRE

This section only applies to land identified on Council's Bushfire Prone Land Map.

Objectives:

a. To ensure that risks associated with bushfire are appropriately and effectively managed on the development site.
b. To ensure that bushfire risk is managed in connection with the preservation of the ecological values of the site and adjoining lands.

Controls:

1. Development must comply with the *NSW Planning for Bushfire Protection Guidelines*.
2. Asset Protection Zones must:
   i. Be incorporated into the design of the development;
   ii. Be as low maintenance as possible;
   iii. Be located outside areas of ecological value and the buffers necessary to protect them; and
   iv. Not occur on adjoining environmental zoned land.
3. Bushfire prone areas and Asset Protection Zones must be identified on the Site Analysis Plan. Refer to Council's Bushfire Prone Land Map.
4. Clearing for the purposes of Asset Protection Zones should be avoided on ridgelines and slopes of 1:5 or greater.
5. Clearing of vegetation must be limited to that necessary to meet the *NSW Planning for Bushfire Protection Guidelines*.
6. Clearing of native vegetation or trees for the purposes of reducing bushfire risk must be consistent with the current Bushfire Risk Management Plan prepared under the *Rural Fires Act 1997*.

Note: Development Consent is not required for clearing for the purpose of bushfire hazard reduction if the clearing is consistent with the current Bushfire Risk Management Plan, and is undertaken in accordance with a current hazard reduction certificate issued by the Rural Fire Service or other certifying authority.

2.12 FLORA AND FAUNA

Objectives

a. To avoid and minimise impacts on native flora and fauna.
b. To protect and enhance significant flora and fauna, vegetation communities and significant habitat on the site, and on surrounding development sites.
c. To protect and enhance ecological corridors and increase the connections between habitats.
d. To ensure rehabilitation of degraded areas.
e. To protect and manage the health and ecological integrity of natural areas.

Controls

1. Where the proposed development is likely to have an impact on native vegetation or fauna habitat, or where five or more native trees are proposed to be removed, a flora and fauna assessment must be submitted with the development application. The flora and fauna assessment must be prepared in accordance with Council's *Flora and Fauna Survey Guidelines*.
2. The flora and fauna assessment must be sufficient to adequately identify and assess all the impacts of the proposed development. This includes cumulative, direct and indirect impacts, as well as the impacts of Asset Protection Zones, provision of services (water and sewer, etc) and stormwater management.
3. Where a proposed development site is within a vegetation corridor identified on Council's Native Vegetation and Corridors Map, or identified as part of a site specific flora and fauna assessment, the corridor must be surveyed. Within the survey, the appropriate corridor width must be determined with reference to core habitat areas and potential edge effects and fragmentation. The proposed development should be located and designed to avoid impacts on the identified vegetation corridor. Where this is not possible, the development should be designed to minimise impacts.
4. Development should be designed to avoid impacts on native flora and fauna, and minimise any unavoidable impacts. Significant flora and fauna species, vegetation communities and habitat should be protected and enhanced through appropriate site planning, design and construction.
5. A Site Vegetation Plan must be submitted clearly indicating the location of the proposed development in relation to vegetation communities, significant flora and fauna species and vegetation, and significant habitat and corridors on the site.
6. Native vegetation buffers must be provided between development and areas containing threatened flora and fauna species or their habitat, threatened vegetation communities and native vegetation corridors. The width of the buffer should be determined with reference to the function of the habitat, the threat of sea level rise and the type of development proposed. The buffer should be designed to keep the area of significance in natural condition.
7. A suitable barrier such as a perimeter road should be provided between development, (including landscaped areas) and native vegetation or significant habitat features, to minimise edge effects
8. Where a proposed development is likely to impact on an area of native vegetation, it must be demonstrated that no reasonable alternative is available. Suitable ameliorative measures must also be proposed (eg: weed management, rehabilitation, nest boxes).
9. Rehabilitation of degraded areas of the development site should include local native species to establish a self-maintaining ecosystem as close as possible to the natural state.
10. Buildings and structures, roads, driveways, fences, dams, infrastructure, drainage and asset protection zones should be located outside of areas with significant flora and fauna, native vegetation corridors and buffers.
11. An application for removal of native vegetation will only be considered where it is ancillary to, and necessary for conducting an approved use of the land (ie: an application for clearing alone will not be supported).

12. Where retention or rehabilitation of native vegetation and/or habitat is required, a vegetation management plan must be prepared in accordance with Council's *Vegetation Management Plan Guidelines*. This must detail how vegetation will be protected, rehabilitated and managed before, during and after construction.
13. Long-term protection and management of areas set aside for ecological reasons is encouraged through secure tenure with appropriate conservation management. This may be achieved through a Planning Agreement.
14. Development should be consistent with the effective conservation of land within any adjacent Environmental or Waterway zone and its protection from adverse impacts. It should include, but not be limited to weed invasion, erosion and sedimentation, pollution, chemicals, nutrients, stormwater run-off, feral and domestic animals.

Note: Council may require a bond to ensure that native vegetation is protected and any ameliorative measures are undertaken.

2.13 PRESERVATION OF TREES AND VEGETATION

Objectives:

a. To ensure that trees listed on Council's Significant Tree register are not adversely affected by development.
b. To maintain and enhance the natural bushland or vegetated character of the city.
c. To retain trees for the urban amenity, microclimate, scenic, air and water quality, and the social benefits that they provide.

Controls:

1. For the purposes of Clause 5.9 in LMLEP 2014, development consent is required to ring bark, cut down, top, lop, remove, injure, wilfully destroy or clear:
   i. Any species of vegetation that existed in the State of New South Wales before European Settlement;
   ii. A tree which is listed in Council's Significant Tree Register;
   iii. Tree(s) or native vegetation listed as heritage items or located within a Heritage Conservation Area; or
   iv. A Norfolk Island Pine Tree (*Araucaria heterophylla*) that is greater than three metres in height, or that has a trunk diameter of 75mm or greater, measured at ground level.

Note: This clause includes Native Vegetation defined in the *Native Vegetation Act 2003* and marine vegetation covered by section 205 of the *Fisheries Management Act 1994*.

2. Except in the E2 Zone, development consent is not required to remove, injure, wilfully destroy or clear native vegetation (excluding native trees and shrubs over 3m in height), only if:
   i. The work is for the purpose of landscaping understorey vegetation and lawn areas where the area to be cleared is less than 600m² (in total), and is on the same allotment as, and within the curtilage of an approved dwelling;
   ii. The soil surface exposed in any period of 90 consecutive days is less than 250m^2;
   iii. The slope of the land is less than 15 degrees;
   iv. The area is not subject to a development consent that requires the native vegetation to be retained; and
   v. The work does not involve the disturbance of habitat for threatened species.
3. Development consent is not required to ring bark, cut down top, lop, remove, injure, wilfully destroy or clear a tree or native vegetation, if:
   i. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
   ii. The tree or native vegetation is not required to be retained by a development consent, and

iii. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or

iv. The tree or native vegetation is within one metre of a sealed driveway to a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or

v. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) on an adjoining allotment as the building and owners of both properties reach a written agreement that is submitted to Council prior to removal.

Note: For the purposes of clause 3 the distance must be measured from the trunk of a tree or shrub measured at ground level to the outer most projection of the building.

***Note*:** A sealed driveway is a driveway or car park with an impervious surface such as concrete, pavers, or bitumen. A gravel driveway is not classed as a sealed driveway.

***Note*:** A lawfully used building does not include drainage, excavation, a garden shed or jetty, but does include an underground water storage structure or septic tank.

4. Development consent is not required for removal of a tree or native vegetation if Council is satisfied beforehand that the tree or native vegetation:

   i. Is dead and is not required as habitat for native fauna or

   ii. Is a risk to life or property.

***Note*:** Evidence to support removal should be forwarded to Council in accordance with requirements outlined in Council's *Tree Preservation and Native Vegetation Management Guidelines*. Council's Tree Assessment Officer may undertake a site inspection to verify that these conditions are satisfied.

***Note*:** Habitat required for native fauna includes native vegetation and trees (including dead or dying trees) support hollows, spouts, splits, nests and roosts.

5. Development consent is not required for removal of a tree or native vegetation if:
   i. The tree or native vegetation is in danger of imminent failure and there is risk to life or property; and
   ii. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
   iii. Evidence to support its removal is forwarded to Council following the removal, in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.
6. Development consent is not required for removal of a NSW native tree if the tree is:
   i. not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
   ii. not located within other native vegetation and,
   iii. less than three metres in height and
   iv. has a trunk diameter at ground level of less than 75mm.
7. An application for removal of tree(s) and native vegetation will be considered only where it is necessary for conducting an approved use of the land. An application for clearing alone will not be supported.
8. A report from a suitably qualified arborist must be submitted to support:
   i. Any application that may have an impact on a tree listed in Council's Significant Tree Register, or on tree(s) or native vegetation listed as heritage items or located within a heritage conservation area;
   ii. Any request to review Council's determination of an application for tree pruning or removal; or
   iii. Any application that Council determines may cause significant impacts on native trees or native vegetation.
9. An arborist report must include a plan to scale that clearly shows:

i. The location of the proposed development;
ii. The location, diameter, canopy spread, condition and species of each tree on the site;
iii. All trees to be removed;
iv. All trees to be retained;
v. All trees with habitat hollows;
vi. Tree protection zones for all trees to be retained; and
vii. Any asset protection zones.

10. Habitat trees must be assessed by a suitably qualified flora and fauna specialist.
11. Measures must be implemented to protect native vegetation and trees to be retained during construction works. Such protection measures must be specified in the development application, and should be compiled in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.
12. Where habitat trees are removed, measures (such as nest boxes) must be implemented to mitigate against injury or loss of native fauna and habitat. Such measures must be specified in the development application.
13. Boundary fences must be located, designed and constructed to avoid removing or damaging native trees that have a diameter of 200mm or greater, measured at ground level.

Note: Refer to Council's *Tree Preservation and Native Vegetation Management Guidelines* for further details and the Significant Tree Register.

***Note*:** Where the removal of five or more native trees is proposed, an arborist report may be required in addition to a Flora and Fauna Assessment prepared in accordance with Council's *Flora and Fauna Survey Guidelines*.

2.14 EUROPEAN HERITAGE

Objectives

a. To protect and maintain European heritage items and their facades.
b. To retain, preserve and promote the adaptive re-use of heritage-listed buildings and contributory buildings in particular, and other buildings that contribute to the heritage character of the locality.
c. To appropriately manage demolition of items of heritage significance, when all other alternatives to demolition have been fully investigated.
d. To ensure that development is sympathetic to heritage items and contributory buildings.

Controls

1. A Heritage Assessment and Statement of Heritage Impact must be submitted to Council where a proposed development:
   i. incorporates, or is adjacent to an item of heritage significance;
   ii. is located within a heritage conservation area, or,
   iii. has been identified by Council to have particular circumstances that warrant it.

Note: Council officers will use the following criteria to determine the need for Heritage Assessment and Statement of Heritage Impact is required under control 1(iii) above:

- The subject site includes a building erected prior to 1950 whether or not it is identified as being of a particular architectural style,
- The development is considered in conflict with its heritage context , streetscape, or heritage precinct,
- The subject site includes a potential heritage item.

2. The impact of development on an item of heritage significance must be minimised by:
   i. Restricting the extent of development to that which is necessary;

ii. Conserving what is significant about the item;

iii. Clearly differentiating new development from the existing significant fabric;

iv. Ensuring that development is of a scale, form, mass, proportion and finish that is sympathetic with the heritage item; and

v. Ensuring that development is sufficiently separated from the heritage item, so as not to compromise the existing level of visibility.

3. For development involving demolition of an item of heritage significance, a heritage assessment and Statement of Heritage Impact must be prepared and lodged. It must verify that all alternative options to demolition have been fully investigated, and demonstrate the replacement building's compatibility with the physical context. The Statement of Heritage Impact must include details of the:

   i. Structural condition;

   ii. Overall extent of the remaining fabric;

   iii. Potential retention and adaptive reuse; and

   iv. Comparative costings.

4. Where demolition of the whole of a heritage item is proposed, approval must be sought concurrently for the replacement building.

5. Alterations and additions to items of heritage significance must where possible:
   i. Occur at the rear of the building;
   ii. Maintain the established building line;
   iii. Maintain an existing driveway access to the rear of the property;
   iv. Incorporate or retain elements such as chimneys, windows and gables;
   v. Maintain established patterns of buildings and garden; and
   vi. Not overwhelm or dominate the existing building.
6. Alterations and additions to items of heritage significance must be recognisable, on inspection, as new work. They must not mimic the design, materials or historic details of the heritage item.
7. Garages, sheds, carports, external utilitarian structures and the like must be detached and located at the rear, or set back at least two metres behind the heritage item.
8. Utilitarian structures must be constructed of the same material as the heritage listed building.

Note: Refer to Council's Heritage Guidelines for further information.

2.15 ABORIGINAL HERITAGE

Objectives:

a. To protect and conserve Aboriginal cultural, spiritual, and sacred sites within the City.
b. To ensure the impact of a proposed development on the heritage significance of an Aboriginal place or object is considered by adequate investigation and assessment.

Controls

2 Where a development will disturb the ground surface and the natural ground surface has not been significantly disturbed, the development application must demonstrate that adequate due diligence has been undertaken. This includes (but is not limited to) submitting the following documentation in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*. This includes submitting the following documentation:
   i. A statement and results of a basic 200m Aboriginal Heritage Information Management System (AHIMS) search. Where a site is identified within 200m of the development site, a statement and results of a 50m AHIMS search must be included.
   ii. Identify whether the development site is partially or wholly within the Sensitive Aboriginal Landscape map under the LMLEP2014 and whether the exemptions under the Excluded Development Criteria (Table 4) apply.
   iii. A statement indicating whether there are landscape features that indicate the potential presence of Aboriginal objects.

Note: landscape features include: foreshore areas, creek lines, rocky areas, wetlands, ridge tops, ridgelines, headlands, sand dunes, caves.

3 A Due Diligence Assessment must be prepared by a suitably qualified person to determine whether the proposed development is likely to harm Aboriginal objects and identify whether an Aboriginal Heritage Impact Permit is required where:
   i. An AHMS search has identified the likelihood of an Aboriginal item within 200m of the development site, and/or
   ii. The site is identified on the Sensitive Aboriginal Landscape map and the Excluded Development Criteria do not apply.

4 The Due Diligence Assessment must include an assessment of the cultural significance of the place to the Aboriginal Community.

Note: Clause 5.10(8) – Heritage Conservation of the LMLEP 2014 and the Lake Macquarie Aboriginal Heritage Management Strategy requires assessments to be forwarded to the Local Aboriginal Land Council for comment for a 28 day period.

5 An aboriginal Cultural Heritage Assessment Report should be prepared where:
   i. A Due Diligence assessment has identified the potential for the site to contain an Aboriginal object or contains a place of significance, or
   ii. The development will have an impact on a known Aboriginal object or place.

Table 4 - Excluded Development Criteria for Development in Sensitive Aboriginal Landscape Map

Excluded Development	**Land on which excluded development may not be carried out**
All development on sites having a combined/total area less than 800m^2	Within 200m of an AHIMS site Setback from DP High Water mark does not exceed 50m.
Exempt development under the SEPP (Exempt and Complying Development CODES) 2008 on sites having a total area greater than 800m^2 subject to: • 75% of combined/total site area already disturbed; or • Works do not exceed existing disturbed footprint; or • Site has previously been assessed for Aboriginal heritage such as subdivision applications post 1997 development consent.	

Note: The SEPP (Exempt and Complying Development Codes) 2008 does not apply to land within the Sensitive Aboriginal Landscape area. However, exempt development within this SEPP may not require further Aboriginal assessment if it fulfills the requirements of the Excluded Development Criteria Table.

6 Where required, the Aboriginal Heritage Impact Statement must be prepared in accordance with the Lake Macquarie Aboriginal Heritage Management Strategy and the Office of Environment and Heritage *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW,* which includes consultation with the Aboriginal community.

7 Where a proposal seeks to destroy, remove or impact on an Aboriginal object, any development will be Integrated Development and will also require a permit from the Office of Environment and Heritage.

2.16 NATURAL HERITAGE

Objectives:

a. To ensure the protection of items of natural heritage significance.

b. To ensure that insect fossil beds and fossilised trees are maintained, along with features of scientific interest in their natural state.

c. To facilitate public appreciation and scientific investigation of insect fossil beds and geological features of scientific interest, without destruction or damage.

Controls:

1. Where development is proposed on land within 50 metres of an item of natural heritage significance identified in the Lake Macquarie Local Environmental Plan 2014, a Heritage Impact Assessment must be prepared in accordance with the *Natural Heritage Guidelines*.
2. The likely impact of development proposals on the insect fossil beds and geological features of scientific interest should be identified through a report by a palaeontologist or geologist, which establishes the significance of the site. Such a report should include management strategies before, during, and after construction.
3. The development should be designed to avoid natural heritage items.
4. Where it is not reasonable to avoid natural heritage items, the item must be protected and incorporated into the design. Reasonable access to the construction site and any excavated material should be provided to researchers and/or palaeontologists from the Australian Museum or other research institution.
5. Any natural heritage items extracted should be fully documented and catalogued prior to being forwarded to the Australian Museum. Documentation and cataloguing must be undertaken to museum standards.

2.17 SOCIAL IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the social impact of a proposal when assessing a specific development application.

Social Impact Assessment focuses on the human dimension of a locality. It seeks to address the question "what will be the impact of a project/development on people?" and to anticipate outcomes that may flow from a proposed development which are likely to affect people's way of life, their culture and/or their community. Social Impact Assessment is not a tool to stop development, but is to assist in the assessment of development proposals so that the best development results.

Objectives

a. To ensure that development takes into consideration the likely social impacts that may arise, including any effects on equity, access, participation and rights.

b. To ensure that development occurs in appropriate locations, and is supported by adequate services and facilities to support the community and its needs.

c. To ensure that services and facilities are accessible to all members of the community.

d. To facilitate availability of active and passive recreation, natural landscapes, educational opportunities, employment opportunities, health services, public transport, and neighbouring centres, as well as maintaining or enhancing the aesthetics and amenity of the area.

Controls

- A Social Impact Assessment (SIA) must be prepared in accordance with Council's *Social Impact Assessment Guidelines*, and submitted with the development application in the following circumstances:

i. the development is identified in table 5, or

ii. the development is valued at $5,000,000 or greater, or

iii. the development has a floor area greater than 3000m^2, or

iv. where Council identifies that particular circumstances warrant it.

Note: Council officers will use the following criteria to determine if a SIA is required under control 1(iv) above:

- The development is targeted at a particular socio-economic or demographic group,
- The development is considered in conflict with its locality, and
- The development has, or is anticipated to generate, significant levels of community opposition.

2. Potential adverse impacts identified by a SIA must be mitigated through redesign, whilst positive impacts should be enhanced by the design or other actions.

Note: The scope, complexity and requirements of a SIA will be commensurate with the scale of the proposed development. Applicants are advised to consult with Council's Social Planner regarding specific requirements.

Table 5 - Uses requiring Social Impact Assessment

• Airport • Animal Training and Boarding Establishments • Community facility • Crematorium • Designated Development • Education Establishment • Expansion or Modification of an existing use that would otherwise be prohibited under the LEP • Freight Transport Facility • Funeral Chapel / Funeral Home • Group Home • Health consulting rooms • Health Service Facilities • Helipad	• Home-based child care • Hospital (not including a day surgery facility – refer to medical centres) • Information and education facility • Licensed Premises (Hotels, Taverns and Bottle Shops) • Medical centre • Mortuary • Passenger Transport Facilities • Recreation Areas • Recreation facilities (outdoor) • School • Seniors Housing • Sewage Treatment plants • Waste Facilities • Water System / Facilities

2.18 ECONOMIC IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the economic impact of a proposal when assessing a specific development application.

Economic Impact Assessment focuses on the economic dimensions of a locality. It seeks to identify how a proposal will contribute to the economic growth of the locality and City through locating development in appropriate areas, supporting existing development in the area and through the creation of employment opportunity and other economic benefits.

Objectives:

a. To ensure that development supports the Lake Macquarie hierarchy of centres and positively contributes to the City by supporting existing development in the locality and the community through the creation of employment opportunities.

b. To ensure development contributes through additional local employment and economic benefits.

Note: Refer to Council Economic Impact Assessment Guideline for further information and guide to the economic considerations for specific types of development**.**

Controls

1. An economic impact assessment must be prepared and submitted to Council at the discretion of the assessing officer under the following circumstances:
   i. Where development is valued at $5,000,000 or greater, or
   ii. Where the proposed development has a floor area greater than 5000m^2, or
   iii. Where the development is inconsistent with the zone objectives.

3 DEVELOPMENT DESIGN

3.1 STREET SETBACK

Objectives

a. To ensure that the development complements the existing or desired future setback pattern in the locality.

b. To permit flexibility for developments that may be vulnerable to the impacts of flooding.

Controls

1. Where there are existing neighbouring buildings within 40 metres, front setbacks should be the average of the front setbacks of the nearest four neighbouring buildings.
2. Where the adjoining setbacks vary by more than three metres, the proposed development should be set back the same distance as one of the adjoining buildings.
3. Where there are no existing (or approved) buildings within 40 metres of the lot, the front setback should be a minimum of 20 metres.
4. Where the site is identified as being vulnerable to flooding or expected sea level rise, front setbacks may be reduced to ensure that developments are adequately set back from the shoreline.
5. Where the site is part of a community title development, the front setback must be a minimum of 4 metres from the front boundary

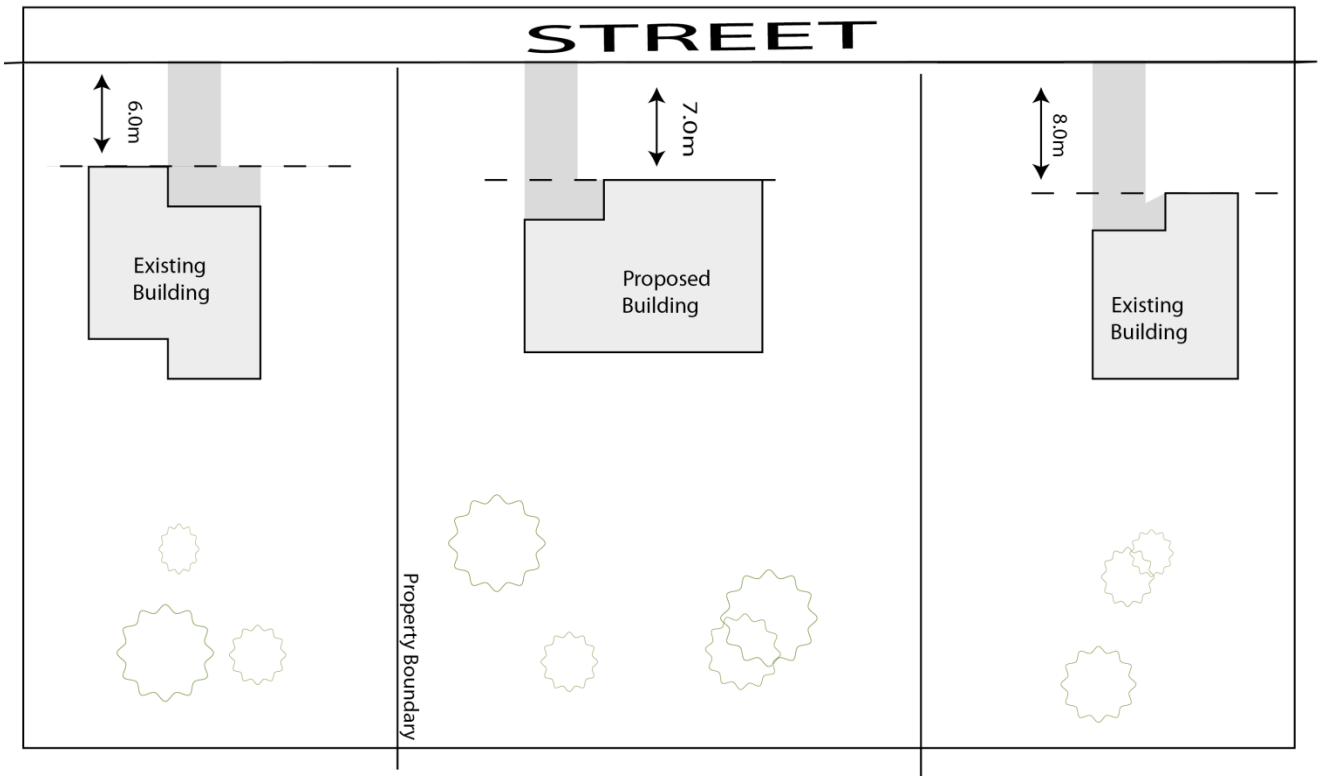


Figure 2 - Street Setback where adjoining buildings are present

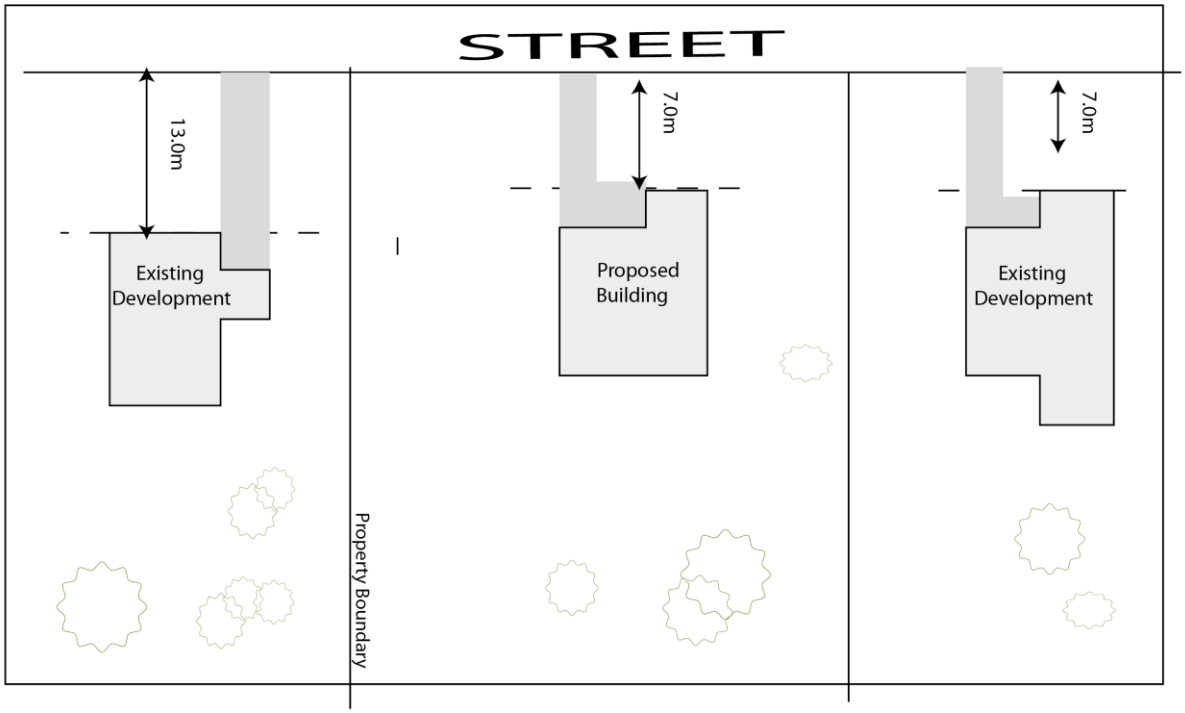


Figure 3 - Street Setback - similar to adjoining development

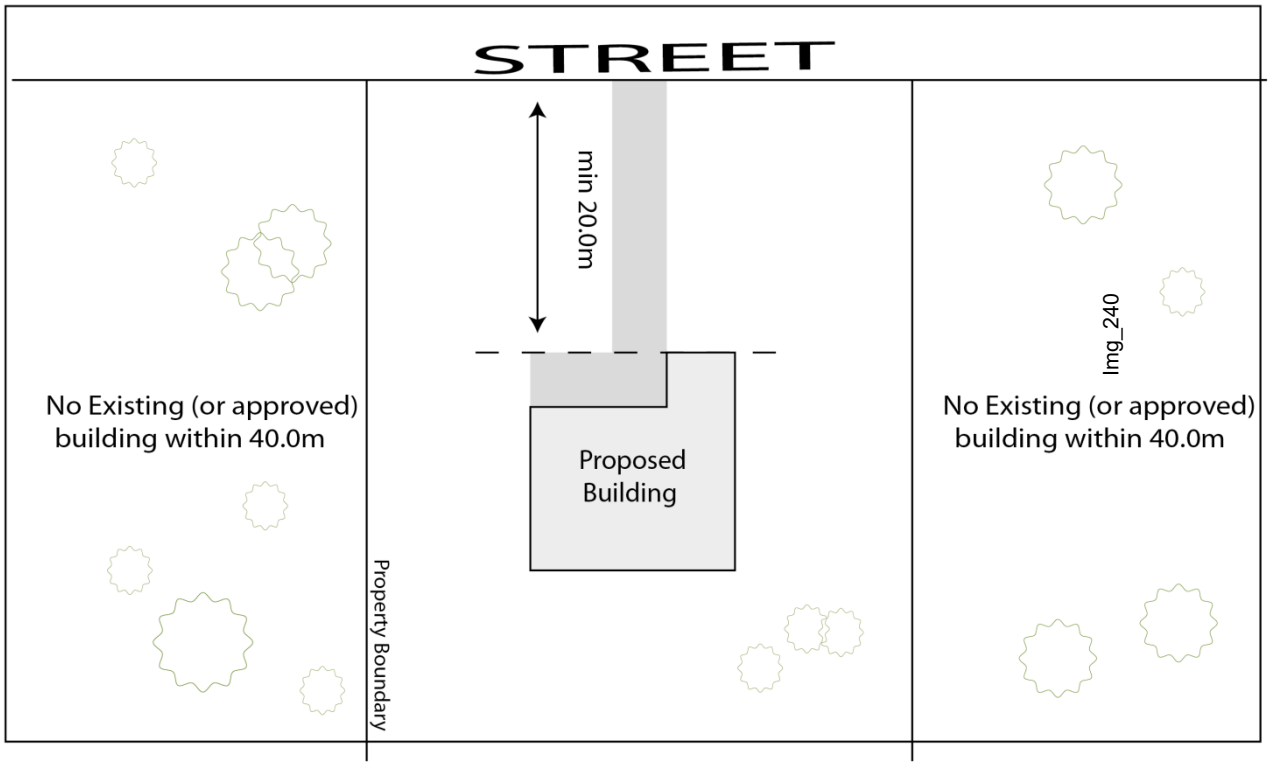


Figure 4 - Street Setback – no existing adjoining buildings

3.2 SIDE AND REAR SETBACK

Objectives

a. To provide adequate separation between buildings to ensure that a reasonable level of privacy, amenity and solar access is maintained.

b. To provide a visual separation between buildings to ensure that the rural landscape character is maintained.

c. To provide opportunities for the planting of vegetation.

Controls

1. Buildings must be setback a minimum of five meters from side and rear boundaries.
2. Where the site is part of a community title development, buildings must be setback a minimum of:
   i. 3 metres from a side boundary and;
   ii. 10 metres from the rear boundary for RU2 zoned sites, or
   iii. 5 metres from the rear boundary for RU4 zoned sites.

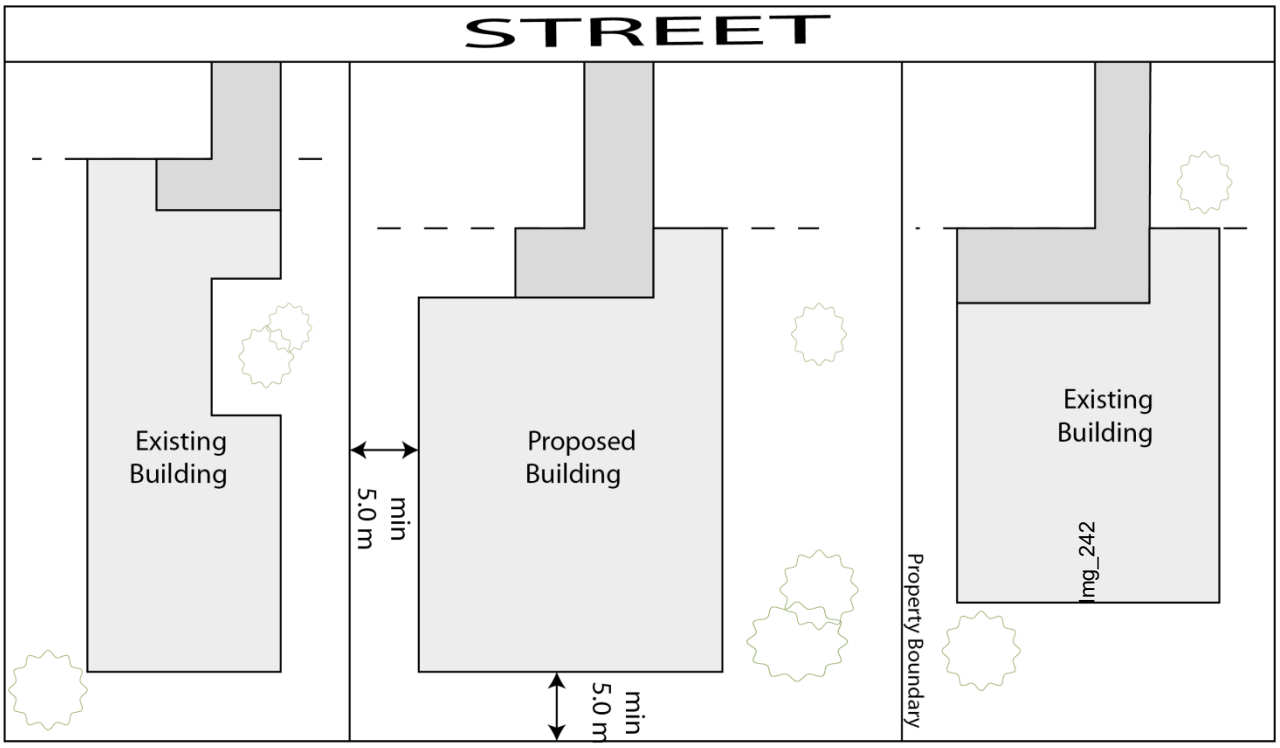


Figure 5 - Side and Rear Setback

3.3 BUILDING BULK

Objectives

a. To encourage good design and innovative architecture to improve the built form.

b. To minimise the visual impact of development when viewed from adjoining properties, the street, waterways and land zoned for public recreation purposes.

c. To preserve amenity by providing adequate building separation, minimising overshadowing, and maximising privacy, view sharing, and opportunities for solar access.

Controls

1. Large areas of continuous wall planes must be avoided. This can be achieved by varying building setbacks and using techniques to provide visual relief.
2. Walls longer than 15 metres must be articulated, landscaped or otherwise treated to provide visual relief.
3. Building height and scale must relate to the topography and the existing site conditions.
4. Verandas, recesses, surface treatments and variations in material selection and colour should be utilised to reduce building bulk.
5. Landscaping should be incorporated in the design of the development to reduce the visual bulk of buildings.
6. Walls higher than four metres must be articulated, landscaped or otherwise treated to provide visual relief.
7. Developments should not use high reflective materials.

3.4 SOLAR ACCESS AND ORIENTATION

Objectives

a. To ensure that reasonable access to sunlight is maintained.

b. To ensure that the design for solar access is not outweighed by the desire for views.

c. To promote passive solar design, and the use of thermal energy to encourage energy efficient buildings.

Controls

1. Developments must provide for the reasonable access to sunlight in accordance with the Planning Principle established by the Land and Environment Court in *The Benevolent Society v Waverley Council* [2010] NSWLEC 1082 and *Davies v Penrith City Council* [2013] NSWLEC 1141.
2. Development should avoid overshadowing of existing solar collectors for hot water or electricity.
3. Development must minimise overshadowing of public open space.
4. Openings on western elevations should be minimised to avoid the extremes of solar access. Where openings are unavoidable on a western elevation, they should be shaded by devices, eaves, landscaping or located higher on the façade.
5. At least 50% of the required area of private open space of each development, and at least 50% of the required area of private open space of adjoining development must receive a minimum of three hours of sunlight between 9am and 3pm on June 21.
6. Where adjacent existing developments and their open space receive less than the minimum requirements, any new development must seek to maintain or enhance that solar access.
7. Where lot orientation allows, developments should be designed so that the long axis of the development is running east-west.
8. Building openings on the western elevations should be minimised. Where openings are unavoidable, they should be located higher on the façade and shaded by eaves or landscaping or similar.

Note: The shadow cast by fences, roof overhangs, and changes in level are to be considered and should be indicated on any shadow diagrams submitted.

3.5 ENERGY EFFICIENCY AND GENERATION

Objectives

a. To ensure building orientation maximises solar access and natural cross ventilation.

b. To ensure energy efficiency is achieved in all developments.

c. To allow opportunities for future installation of renewable energy generation and low carbon technology.

d. To minimise the economic impacts of increasing electricity costs and any requirements to disclose energy efficiency when selling or leasing a property.

e. To promote increased levels of energy efficiency in large-scale developments.

Controls

1. Buildings must be oriented to provide efficient use of solar energy and natural ventilation wherever possible.
2. Designs must consider future potential for renewable energy generation and low carbon technology.
3. Development design for detached and semi-detached homes should achieve a higher than compliant SEPP BASIX rating to reduce future energy costs.
4. Developments in excess of 2,000m² gross floor area should achieve the equivalent of a minimum 4 Star Rating under the Green Building Council of Australia's Green Star Rating tool.

Note: These controls are in addition to the requirements of SEPP BASIX and Section J of the Building Code of Australia. Formal certification of Green Star Rating under the Green Building Council of Australia is not required. Justification that the design would achieve the Green Star rate or an equivalent rating under a difference system is only required.

3.6 LANDSCAPE DESIGN

Objectives

a. To integrate site landscape design with the surrounding landscape features.

b. To provide quality site landscaping appropriate to the nature and scale of the development.

c. To conserve native vegetation and landscape features where possible.

d. To use predominantly local native species in the landscape design.

e. To enhance the amenity of the proposed development.

Controls

1. Appropriate landscape documentation must be prepared and submitted in accordance with Table 6 – Landscape Development Type and Requirements and Council's *Landscape Design Guideline*s.
2. Appropriately qualified professionals must prepare landscape documentation. For Category 3 development, a qualified landscape architect should prepare landscape documentation. For Category 2 development, a landscape architect, landscape designer, or horticulturist should prepare landscape documentation.
3. The landscape consultant's declaration must be signed and submitted with the relevant landscape documentation.
4. Landscaping in bushfire prone areas are to meet the requirement of planning for bushfire protection and should select species appropriate for the site that assist to guard against bushfire (from the Landscape Design Guidelines schedule 1).

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements.

Table 6 - Landscape development type and requirements.

Development Type and Category	Landscape Documentation	
	Landscape Concept Plan at DA stage	Landscape Masterplan and Report at DA stage
Category 3: **Large Scale** • Development with an estimated value exceeding $2m, or • Development of 10 or more dwellings, or • Designated development, or • Childcare facilities, community facilities, educational establishments, seniors housing, health services facilities, or tourist accommodation, or. • Development in areas of high scenic quality, adjacent to the lake or pacific highway, in or adjacent to an environmental zone, on visually dominant ridgelines, or in a heritage conservation area.	Yes	Yes
Category 2: **Medium Scale** • Development with an estimated value exceeding $1m, or • dual occupancy development • Development for 3-9 dwellings, or • Any development in a business zone.	No	Yes
Category 1: Small Scale • Single dwellings , or • Development that will have little impact on the existing environment.	No	No

Note: If a development type is not detailed in this table, or you are unsure of the category and requirements, seek advice from Council.

3.7 LANDSCAPING AND TREE PLANTING IN CAR PARKS

Objectives:

a. To provide broad-canopy tree cover in car parks for shade and shelter.

b. To reduce the visual impact of car parking areas.

c. To maintain sightlines below the tree canopy.

Controls:

1. Development must include supply, installation and maintenance of at least one advanced clear-trunked broad-canopy tree for every six at-grade car parking spaces.
2. Each landscape planting area must include at least one medium to large tree species, with suitable ground covers or low shrubs below.
3. Each landscape planting area must have a minimum width of two metres.
4. The root volume for each tree must be a minimum of 3m x 2m x 1 metre deep.
5. The root volume must be either existing deep soil or an equivalent volume of gap-graded (load bearing) soil with a porous vehicle pavement on top that is installed to manufacturer's specifications.

6. Each area allocated to tree planting must have a corresponding clear air space that is at least eight metres high and six metres in width.
7. All trees installed must be advanced stock and at least 75L container size.
8. All trees installed must be established and maintained for the life of the development. Any failed trees must be replaced immediately.

Note: Advice on recommended canopy trees for car parking areas should be requested from Council.

3.8 FENCING

Objectives

a. To ensure that fencing does not detract from the rural character of the landscape, inclusive of fencing design, materials and height.

Controls

1. Fencing must be consistent with the rural character of the landscape. Acceptable forms of fencing include post and wire, or post and rail fences.
2. Other types of fencing will only be permitted where the fencing does not have a detrimental impact on the scenic quality or rural character of the locality.
3. Opaque fencing (including Colorbond) must not be used within rural areas, except for entrance features constructed of masonry.

3.9 TRAFFIC AND TRANSPORT

Note: Several Australian Standards are specifically relevant to this section. All designs and development must be in accordance with the relevant Australian Standard.

Objectives

a. To provide effective, efficient, and safe movement within rural areas for pedestrians, bicyclists and motor vehicles.
b. To ensure that vehicles can enter and leave a development site in a forward direction, unless otherwise justified to council's satisfaction.

Controls

1. A Traffic Impact Statement must be prepared and submitted with any commercial/retail or industrial application for development of an area greater than 1000m², or where access to the site will be via an arterial or sub-arterial road.
2. Access points to a site must be kept to a minimum, and should be kept to one where possible.
3. Direct access to arterial and sub-arterial roads must be minimised to maintain the efficient flow of traffic on those roads. Alternative access is encouraged where available.
4. Driveways must be located as far as possible from intersections.
5. All driveways must be designed and constructed to provide adequate sightlines.
6. Driveways and internal road circulation must be designed to cater for safe manoeuvring and queuing so as not to disturb traffic operations on external roads.
7. The design and layout of the development is to reflect the type of vehicles that will need to access the site/development. It must also ensure that vehicles can enter and leave the site in a forward direction.
8. Driveways must be of a type, construction and width suitable to the proposed development, and must be designed so as not to detract from the streetscape.

Note: refer to Councils Traffic Impact Statement and Vehicle Access Guideline for further details and requirements.

3.10 DESIGN OF PARKING AND SERVICE AREAS

Objectives

a. To ensure that on-site parking and driveways do not dominate or detract from the appearance of the development or the local environment.

b. To maximise pedestrian safety and amenity.

c. To ensure the safe and efficient movement of vehicles within, entering and leaving the site.

Controls

1. Parking and service areas must be located to the side or rear of the development.
2. The design of parking areas must include direct, safe and well marked pedestrian routes from the parking area to building entries.
3. Car park design must not result in dead-end aisles.
4. Parking aisles must be orientated at right angles to the main building frontage.
5. The design of parking areas must include appropriate lighting for safe pedestrian movement and security.
6. Car parks must be screened from the street with landscape planting or with high quality façade screening that allows natural lighting and ventilation.

Note: The design of parking areas must comply with the provisions of AS2890 Parking Facilities.

3.11 CAR PARKING RATES

Objectives

a. To ensure that the number of car parking spaces is sufficient to support the intended use.

b. To ensure that the number of car parking spaces does not discourage the use of public transport or other modes of transport.

Controls

1. The number of car parking spaces provided must be consistent with the specifications of Table 6: Car Parking Rates.
2. Where vehicle parking requirements are not specified in Table 7, justification must be provided that supports the proposed vehicle parking provisions, such as:
   i. Survey data from comparable facilities; and
   ii. Survey data from existing operations where expansion is proposed.
3. Where the floor area of an existing development is being increased, the required car parking should be calculated for the additional floor area only.
4. Where the proposed number of car parking spaces is **less than** or **greater than** specified in Table 7, a justification must be provided to support a variation , such as:
   i. Survey data from comparable facilities;
   ii. Survey data from existing operations where expansion is proposed; and
   iii. A proposal for dual use of parking spaces.
5. A reduction to the car parking rate must not exceed 20% or 20 spaces, whichever is the lesser.

Note: Where the required parking cannot be entirely provided on-site, alternative provisions for car parking may be made in accordance with the relevant *Section 7.11 Contributions Plan(s*) and/or *Council's Voluntary Planning Agreement Policy*.

Note: 'Amenities' and 'storage space' must not be included when calculating Gross Floor Area (GFA) for car parking purposes.

Table 7 - Car parking rates table for development in rural zones

Development Type	Car Parking Rate
Disability parking rate	One space per 50 spaces. Where the requirement is between 5 and 50 spaces, at least 1 space is to be provided for persons with a disability. All disabled parking must comply with the relevant Australian Standard.
Dual occupancies (attached)	One undercover space and 1 space as single file parking per dwelling of the dual occupancy.
Dwelling house	One undercover space and 1 space as single file parking.
Home business or industry *Where vehicles are an intrinsic component of the business or industry*	As per Dwelling - ie: 1 undercover space and 1 space as single file parking per dwelling. As per dwelling, plus 2 spaces
Home occupations	As per Dwelling - ie: 1 undercover space and 1 space as single file parking.
Bed and breakfast establishment	As per dwelling house, plus 1 space per guestroom. May be provided as single file parking where guest parking is provided behind dwelling parking.
Camping grounds	One space per tent site
Eco-tourist facilities (not including a motel or hotel) *Where Serviced Apartments* *Where Backpackers Hostel* *Where a Camping Ground*	 One space per unit, plus 1 space per 50m² GFA for any dining room provided as part of the development, One space per 100m² GFA and parking for a mini-bus 1 space per tent site
Funeral homes	One space per employee plus 1 space per 3 seats in chapel(s)
Neighbourhood Shops *Where the total area is less than 5000m2 GFA* *Where the total area is greater than 5000m2 GFA*	 One space per 25m² GFA One space per 40m² GFA
Veterinary hospitals	One space per practitioner, plus 0.5 per full-time employee, plus 3 visitor spaces
Rural industries	One space per 100m² GFA, plus 1 space per 50m² ancillary office space
Freight transport facilities	Two spaces, plus 1 space per vehicle, plus 0.5 spaces per full-time employee
Passenger transport facilities	Two spaces, plus 1 space per vehicle, plus 0.5 spaces per full-time employee
Education establishments	

Development Type	Car Parking Rate
Where pre-school with normal school Hours	One space per 4 children, plus 1 space per 1.5 full-time staff.
Where primary or secondary school	One space per 1.5 full-time staff, plus 1 space per 50 students
Above secondary school	One space per 1.5 full-time staff, plus 1 space per 8 students
Medical centres	
Where a health centre or diagnostic technology centre	One space per on-duty practitioner, plus 1 space per 2 full-time equivalent employees, plus 1.5 spaces per consulting room, plus 1 space for delivery and collection service
Where a day surgery	As above, plus 1 space per 2 operating theatres
Where a collection Centre	One space, plus 1 space per collection room, plus 1 space for delivery and collection service
Where a laboratory	Two spaces, plus 1 space per 50m^2 GFA Note – Where a mixture of these activities occurs calculate vehicle parking requirements based on the activity mix
Health consulting rooms	One space per on-duty practitioner, plus 1 space per 2 full-time equivalent staff, plus 2 spaces per consulting room.
Community facilities	Five spaces, plus 1 space per 40m² GFA
Recreation facilities (outdoor)	
Football	Thirty spaces per field, plus 1 space per 3 seats, where spectator seating is provided.
Lawn Bowls	Thirty spaces for the first green then 15 spaces for each additional green
Swimming	Fifteen spaces, plus 1 space per 100m² of site area
Tennis	Three spaces per court

3.12 NON-DISCRIMINATORY ACCESS

Objectives

a. To ensure that development accommodates all people regardless of mobility.
b. To ensure universal design that provides non-discriminatory access and equitable use.
c. To minimise the scale and visual impact of ramp structures on the footpath and building façade.
d. To ensure that design for flooding and sea level rise does not preclude non-discriminatory access.

Controls

1. The design and construction of development must ensure that non-discriminatory access is provided to enable all users of that development to access the same level of service and use.
2. Building entries must be located where there is the smallest level change from the public footpath to the ground floor interior.
3. Where floor levels are raised to accommodate flooding or projected sea level rise, the design of non-discriminatory access must incorporate an external terrace or internal floor space set at an intermediate level between the footpath and general ground floor level of development.
4. Where development is listed in Table 8, a Disability Access Audit must be prepared in accordance with Council's *Non-discriminatory Access Guideline* and submitted to Council. The Disability Access Audit must be prepared by an accredited access consultant.

Note: Refer to Council's *Non-discriminatory Access Guideline* for further information.

Note: The requirement for an audit may be waived at the discretion of the assessing officer for some Change of Use proposals.

Table 8 - Development types requiring a Disability Access Audit

Amusement centres with a total floor area of 500m^2 or more	Markets with a total floor area of 500m^2 or more
Backpackers' accommodation with 20 or more bedrooms	Manufactured home estate/caravan park
Boarding House with more than 20 rooms	Medical centre
Business/commercial premises with a total floor area of 500m^2 or more	Mixed use development with a total floor area of 500m^2 or more
Child care centre	Multi-dwelling housing with 10 or more dwellings
Community facility	Nightclub
Educational establishment	Passenger transport facilities
Entertainment facility	Place of public worship
Function centre	Recreation facilities – indoor, outdoor and major
Group home	Registered club
Health consulting rooms with four or more consulting rooms	Retail premises with a total floor area of 500m^2 or more
Health services facilities	Residential care facility
Hospital	Residential flat building with 10 units or more
Hotel or motel accommodation	Seniors housing
Information and education facility	Tourist accommodation with 20 units or more
Licensed premises	Change of Use

3.13 SAFETY AND SECURITY

Objectives

a. To ensure that development mitigates opportunities for crime, and perceived opportunities for crime.

Controls

1. Developments must ensure that the following Crime Prevention Through Environmental Design (CPTED) principles have informed the design of the proposed development:

   i. Surveillance – Developments must be designed and managed to maximise the potential for passive surveillance;

   ii. Access Control – Developments must be designed so as to make them legible for users without losing the capacity for variety and interest;

   iii. Territorial Reinforcement – Developments must be designed to define clearly legitimate boundaries between private, semi private and public space; and

   iv. Space Management – Developments must be designed and detailed to minimise damage and the need for undue maintenance, without undermining the aesthetic and functional qualities of the building.

Note: Refer to Council's *Crime Prevention Through Environmental Design Guideline* for further information on CPTED principles.

2. Where development:

   i. is listed in Table 9, or

   ii. is valued at $5,000,000 or more, or

   iii. has a gross floor area greater than 5,000m^2, or

   iv. will be open to the public between the hours of 9pm and 6am, a Crime Risk Assessment must be prepared and submitted to Council.

3. The Crime Risk Assessment should be prepared by a person who has undertaken the NSW Police Service 'Safer by Design' course (or equivalent) and must:

   i. Analyse the types of crime that may be prevalent in the area, and to which the development may be susceptible;

   ii. Provide information as to how the design was informed by the CPTED principles; and

   iii. Inform the design, construction or future management practises of the development (eg: building materials, signage, lighting, landscaping, security patrols, maintenance and graffiti removal practices).

4. Any recommendations or shortfalls identified by a Crime Risk Assessment are to be implemented into the design of the development to the satisfaction of the assessing officer.

Note: Refer to Council's *Crime Prevention Through Environmental Design Guideline* for further information on what needs to be covered in a Crime Risk Assessment.

Table 9 - Development types requiring a Crime Risk Assessment

Air transport facilities	Information and education facilities
Development involving the provision of publicly accessible open space	Passenger transport facilities
Eco-tourist facilities	Freight transport facilities
Function centre	Seniors living developments with more than 30 beds
Community facilities	Recreation facilities (outdoor)

3.14 CUT AND FILL

Objectives

a. To minimise land shaping, particularly outside the building footprint.

b. To ensure development is on a stable site.

c. To minimise the impact on groundwater flow.

d. To ensure that development does not concentrate surface water flows to adjoining properties.

e. To minimise the extent of earthworks, stormwater infrastructure and retaining structures and the associated costs.

Controls

1. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area , or within the extent of the 100 year probable ARI (1% AEP) flood event.
2. Cut and fill associated with a development must only occur within the building and carpark footprint
3. Cut and fill associated with a dwelling development must comply with the provisions in Table 10 and Figure 2.
4. Where the ground level change across the proposed footprint of a dwelling, measured in any direction, exceeds 2m, the dwelling design must include one or more of the following:
   i. split level design
   ii. 2 storey design with the garage below habitable floorspace
   iii. drop edge beam or suspended slab on a footing wall
   iv. pier and beam construction.
5. Cut and fill associated with all other development must comply with the provisions in Table 11.
6. Retaining structures greater than 1m in height must be designed by an engineer, and the certification details lodged with the development application.
7. Batter slopes must not exceed a gradient of 1:4, unless stabilised by dense planting.
8. Fill must not contribute to unreasonable impacts on amenity or the redirection of water onto adjoining properties.
9. Any fill used must be certified Virgin Excavated Natural Materials, certified Excavated Natural Material or uncontaminated engineered fill.

Table 10 - Requirements for cut and fill works for a dwelling

Location	Type of Works	Requirement	Other Requirement
within building footprint	cut and/or fill - retained	c =3 m max	
outside building footprint	cut and/or fill - retained	1.0m max	
near common boundary	cut and/or fill - retained	a =1m min* b =1m max	landscape planting to area between boundary fence and retaining wall
near common boundary	fill – unretained batter	e =400 min	side and rear fences built on existing ground level
remainder of site	cut and/or fill - retained	1.0m max	retaining walls on or near a front boundary do not exceed 1.0m.
all of site	fill – unretained batter	d = 600mm max	batter slope not to exceed 1:4

Note *: distance to a boundary is measured from the face of the retaining wall

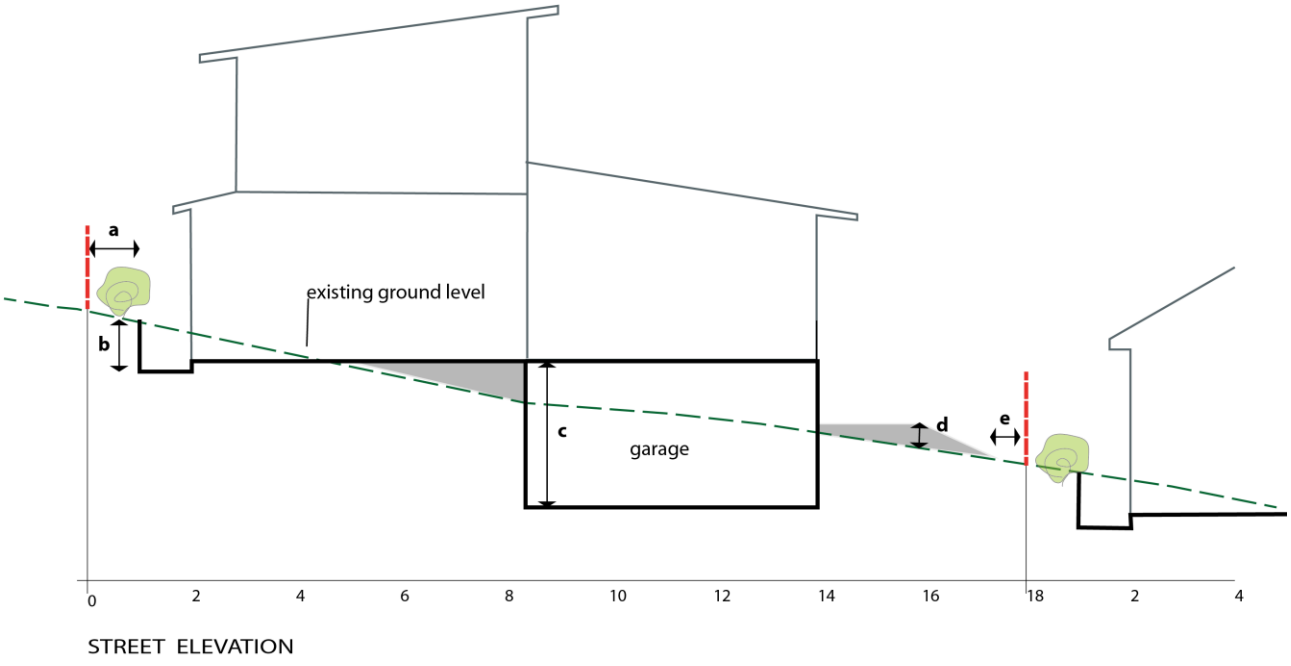


Figure 6 - Cut and fill for a dwelling

Table 11 - Requirements for cut and fill works generally

Location	Type of Works	Requirement	Other Requirement
within building footprint	cut and/or fill - retained	4m max	
within 2m of a boundary*	cut and/or fill - retained	not permitted	landscape planting to area between boundary and retaining wall
within car park footprint	cut and/or fill - retained	1.0m max	.

Note *: distance to a boundary is measured from the face of the retaining wall

4 OPERATIONAL REQUIREMENTS

4.1 DEMOLITION AND CONSTRUCTION WASTE MANAGEMENT

Objectives:

a. To reduce demolition waste by maximising beneficial reuse of infrastructure, buildings and materials onsite.
b. To avoid creating construction waste wherever possible.
c. To enable maximum diversion of demolition and construction waste to reuse, recycling or composting.
d. To ensure that waste management is planned across all demolition and construction stages so that reusable resources and waste can be appropriately and effectively stored and removed safety from site without adverse impacts on local amenity.

Controls:

1. Applications must provide, with the development application, a completed Demolition Waste Management Plan (WMP) (where there are demolition works) and a Construction WMP (for all construction works), in accordance with Chapter 2 (for Demolition) and Chapter 3 (for Construction) of the Lake Macquarie City Council Waste Management Guidelines Guidelines for all identified in Table 12, in other parts of this Development Control Plan or when Council identifies that particular circumstances warrant it.

Table 12 - Uses requiring an Operational Management Plan

• Dwellings • Commercial and retail, recreation and tourism facilities • Industrial developments and infrastructure • Events • Subdivisions

2. The Demolition and Construction WMP must describe how the proposal avoids creating waste and how it maximises the reuse and recycling of demolition and construction materials.
3. The following must be shown on scaled plans to be submitted with the development application for demolition and construction stages:
   i. waste storage area(s) with bins and equipment shown to scale;
   ii. waste collection area(s) with bins shown to scale (if different from storage areas);
   iii. waste carting route(s) from buildings to waste storage area(s);
   iv. bin carting route(s) from waste storage to collection point(s) (if different from storage areas); and
   v. for developments proposing onsite collection, the waste collection vehicle route, swept path and clearances.

4.2 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure that waste management infrastructure and operational procedures are an integral part of the development's design and ongoing management.
b. To ensure sufficient volume of equitably accessible, safe, hygienic and aesthetically appropriate waste storage is provided on the property to minimise negative impacts of waste management on occupants and neighbours.

c. To enable maximum opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins.
d. To provide unobstructed, safe access to move waste between buildings and waste storage points.
e. To provide flexibility to expand or reconfigure waste separation systems, so that owners and occupants have options to access a range of waste services.
f. To ensure secure separation of commercial waste from residential waste storage and collection.
g. To provide unobstructed waste collection point(s) that are safely and efficiently accessible by Council waste collection vehicles wherever possible.
h. To provide unobstructed, safe access to move bins and bulk waste (such as furniture and whitegoods) between storage and collection points.

Controls

1 An Operational Waste Management Plan (WMP) must be prepared in accordance with the Lake Macquarie Waste Management Guidelines and submitted with the development application for all identified in Table 12 – Section 2.4.1, in other parts of this Development Control Plan or when Council identifies that particular circumstances warrant it..

2 The Operational WMP must address all wastes that will be generated from the operation of the premises. The plan must maximise opportunity for separation from general waste of reusable, recyclable and compostable materials for reuse, recycling and composting wherever possible.

3 The development application must demonstrate - in the Operational WMP and on plans with bins, equipment, waste collection vehicle swept paths and clearances all shown to scale - that the development has sufficient and usable:

i. Bin type, sizes, numbers and collection frequency; and
ii. internal storage within premises; and
iii. waste carting route(s) from premises to external waste storage area(s); and
iv. external waste storage areas; and
v. bin carting route(s) from waste storage to waste collection point(s); and
vi. waste collection point(s);
vii. for developments proposing onsite collection, the waste collection vehicle route(s), swept paths and clearances; and
viii. waste management information guide for owners and occupants.

4 For developments with the following specific land uses, the development and Operational WMP must address other matters as identified in the Lake Macquarie Waste Management Guidelines:

i. Boarding and hostels; group homes; short-term rental accommodation; social housing; and seniors' living developments
ii. Commercial and retail premises
iii. Veterinary hospitals
iv. Aged care facilities
v. Child care centres
vi. Service stations
vii. Public and private recreation; and amusement and functions centres and entertainment facilities
viii. Vehicle repair workshops and depots
ix. Sustainable aquaculture; and

x. Light heavy and general industries, hazardous, offensive and high technology industries; infrastructure; and waste management or resource recovery facilities.

To demonstrate compliance with the Lake Macquarie Waste Management Guidelines.

5 If the development is not designed to enable Lake Macquarie City Council waste services, a letter must be provided from a private waste contractor advising how they are able to provide the required garbage, recycling and green (garden and food) waste services and (if needed) access the premises

4.3 ON-SITE SEWAGE MANAGEMENT

Objectives:

a. To ensure that land is suitable for on-site sewage management, and that on-site sewage management systems are designed to operate sustainably, without resulting in environmental harm or risk to public health.

Controls:

1. On-site sewage management must not be located on sites:
   i. Where connection to reticulated sewer is available (this requirement does not apply to grey water treatment systems); or
   ii. Below the 20-year ARI flood level.
2. Where an on-site sewage management system is proposed, an assessment report must be provided to determine land capacity for sewage effluent. An appropriately qualified consultant must carry out the assessment. The site assessment must:
   i. Be undertaken in accordance with the Environmental Health Protection Guidelines, and On-site Sewage Management for Single Households;
   ii. Recommend suitable wastewater treatment technology;
   iii. Include water balance calculations for determination of the size of the effluent irrigation area based on zero wet weather storage requirements; and
   iv. For greywater treatment systems, it must be demonstrated that the proposed system complies with the *NSW Guidelines for Greywater Reuse in Sewered, Single Residential Premises*.
3. Applications for sewage treatment systems must include:
   i. Sewerage Site Plan (1:200) indicating the location of the treatment system, disposal area, and buffer distances to boundaries, dwellings, water courses and other significant features on the site; and
   ii. Detailed plans and sections of the proposed effluent disposal system.
4. Other than for greywater treatment systems, surface and subsurface irrigation areas should be made up of irrigation zones that are a minimum 300m^2 and maximum 500m^2. Multiple irrigation zones must be dosed via an automatic irrigation controller or indexing valve.
5. Pump-out septic systems are only acceptable where on-site disposal of effluent is not feasible, and where access is available for a pump-out service to be rendered safely from a public road at the property boundary.

4.4 LIQUID TRADE WASTE AND CHEMICAL STORAGE

Objectives:

a. To ensure that liquid trade waste is disposed of appropriately, and does not enter the environment.
b. To ensure that chemicals associated with a development are stored in a secure manner.

Controls:

1. Where development is proposed that will generate liquid trade wastes, evidence of a liquid trade waste agreement with Hunter Water must be provided. On-site treatment and/or disposal of liquid trade waste will not be permitted.
2. Developments that generate liquid trade waste must ensure that this waste is adequately contained and bunded to prevent pollution entering the environment.
3. Where chemicals are stored within, or as part of development, those chemicals must be adequately contained and bunded to prevent chemicals entering the environment unintentionally in the event of a spill, flooding, or any other event that may lead to the escape of chemicals.
4. All containment and bunded areas must drain to the reticulated sewerage system under agreement with Hunter Water. No on-site treatment or disposal of liquid trade waste or spilt chemicals will be permitted.

4.5 EROSION AND SEDIMENT CONTROL

Objectives:

a. To ensure that development is designed to prevent erosion by minimising disturbance, retaining vegetation and reducing the need for earthworks.
b. To prevent erosion and sediment-laden run-off during site preparation, construction and the ongoing use of land.
c. To ensure that a number of integrated solutions, using a treatment train approach, are implemented for the control and treatment of erosion and sediment.

Controls:

1. For proposals where the area of soil disturbance is less than 250m^2, appropriate erosion and sediment control measures must be installed and maintained. This will prevent pollutants from entering water courses during construction and until 70% ground cover is attained.
2. For proposals where the area of soil disturbance is more than 250m^2 but less than 2500m^2, an Erosion and Sediment Control Plan (ESCP) must be prepared and lodged, in accordance with Council's *Erosion and Sediment Control Guideline*.
3. For proposals where the area of soil disturbance is more than 2500m^2, a Soil and Water Management Plan, identifying erosion prevention and sediment control measures, must be prepared and lodged, in accordance with Council's *Erosion and Sediment Control Guideline*).
4. The maximum area of soil exposure at any one time must not exceed 2.5 hectares.

Note: Council may vary the requirements, especially where there is a higher or lower risk of polluting receiving waters. Further information may be required for any site depending on, but not limited to, the calculated soil loss, sediment type and an assessment of site constraints and opportunities.

4.6 AIR QUALITY

Objectives

a. To ensure that development does not adversely affect air quality beyond the National Environment Protection Measure (Ambient Air Quality) standard for criteria air pollutants.
b. To ensure that measures are implemented to maintain air quality.
c. To ensure that odours and emissions do not have an unreasonable impact on the amenity of neighbouring properties, or the health of their occupants
d. To ensure that odours and emissions do not have an unreasonable impact on public health.
e. To ensure that emissions do not have an unreasonable impact on natural environment.

Controls

1. An air quality report must be prepared by an air quality/odour expert where a proposed development has the potential to adversely affect air quality. This report must:
    i. Consider the information provided on Council's Local Air Quality Maps;

ii. Address impacts caused by construction and ongoing operation or occupation of the development;

iii. Identify emissions, and measures to mitigate the overall impact, and the impact on nearby residences and occupants of other properties especially sensitive receivers; and

iv. Be prepared in accordance with the Approved Methods for the Modelling and Assessment of air pollutants in New South Wales and other requirements prescribed in State and Federal legislation.

Note: Council's air quality map is based on modelling air pollution in the local government area and identifies areas where the Criteria Air Pollutants exceed the National Environment Protection Measure (Ambient Air Quality) standard.

4.7 NOISE AND VIBRATION

Objectives:

a. To minimise the generation of noise and/or vibration, and to mitigate associated adverse impacts on the amenity of neighbouring properties and their occupants, and on occupants of the proposed development.

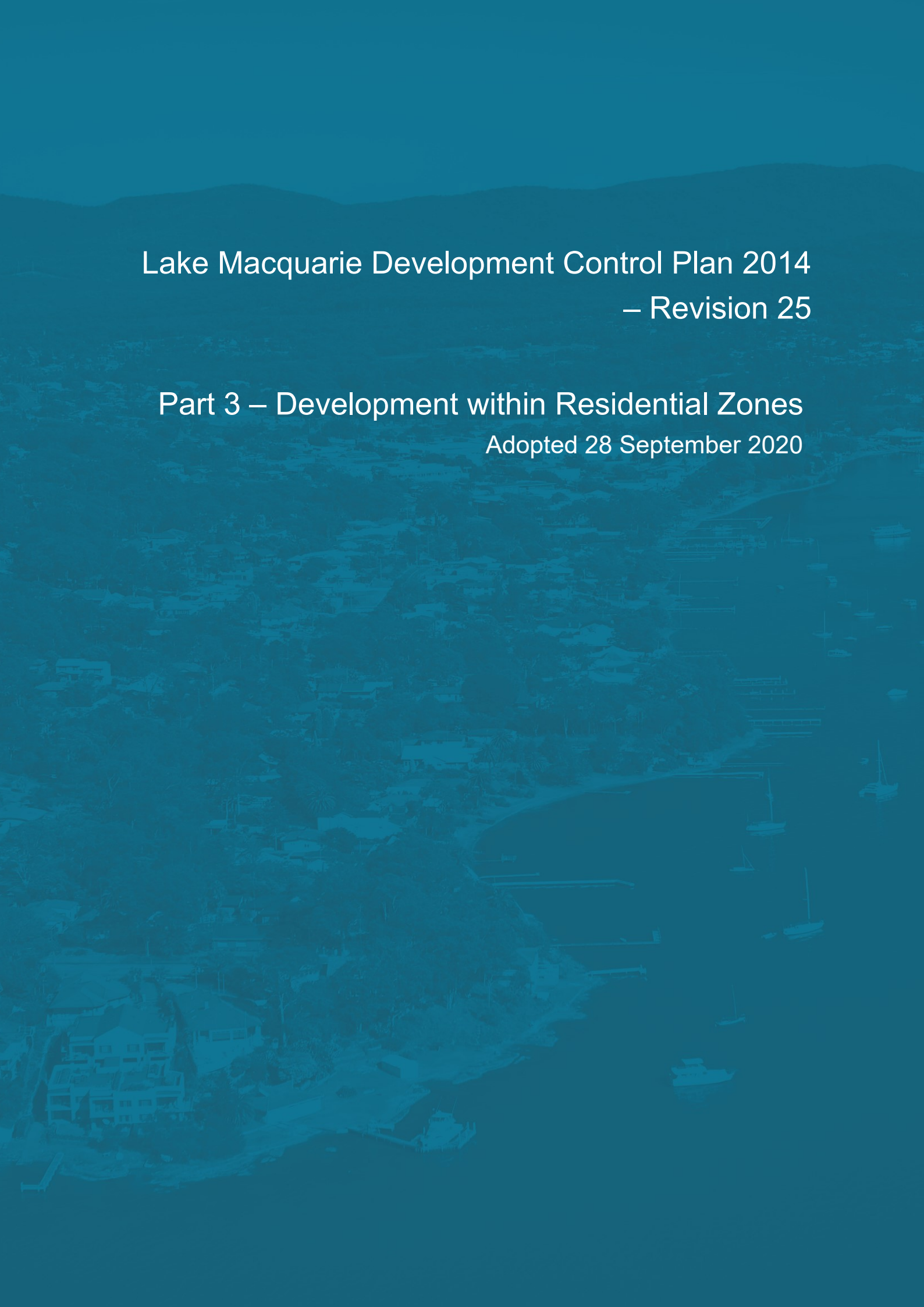
Controls:

1. Where proposed development has the potential to produce an adverse noise or vibration impact on occupants of the site or of nearby properties, an acoustic and vibration study must be prepared by a qualified consultant, to Council's satisfaction.
2. Noise or vibration generated by development must not exceed the criteria stipulated in the *NSW Industrial Noise Policy* or the *Noise Guide for Local Government* at the property boundary of the noise source, or at a receiving lot boundary.
3. Measures must be implemented to ensure that any noise or vibration generated is not offensive, in accordance with the *Noise Guide for Local Government*
4. During construction, the operating noise level of machinery, plant and equipment must comply with the *Noise Guide for Local Government*.
5. A suitably qualified acoustics consultant must prepare a Noise Management Plan where construction is proposed to exceed 26 weeks.
6. Noise generating operations and outdoor operations must only occur between 7am and 6pm Monday to Saturday.
7. Council may request at any stage an independent report to confirm that noise emissions are within acceptable limits; such costs are to be borne by the applicant/ operator.

Lake Macquarie Development Control Plan 2014 – Revision 25

Part 3 – Development within Residential Zones

Adopted 28 September 2020



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1 INTRODUCTION

Part 3 - Development within Residential Zones applies to all development in the R1 General Residential, R2 Low Density Residential and R3 Medium Density Residential land use zones.

The R1 General Residential zone only applies to land at North Wallarah, which has a site specific Area Plan. The North Wallarah Area Plan (in Part 12 of this DCP) contains most controls for development in this area. For issues not covered in the North Wallarah Area Plan, the controls of Part 3 – Development within Residential Zones apply to development in the R1 General Residential Zone.

This part is to be read in conjunction with Part 1 (Introduction) of LMDCP 2014, which outlines Council's general requirements for all developments and provides advice on the lodgement requirements for a Development Application. Part 1 also contains requirements for when an application seeks to vary a development control.

Additionally, controls for specific land uses may apply, depending on the type of development proposed. These controls can be found within Part 9 - Specific Land Uses of this DCP. Furthermore, an Area Plan may apply depending on the location of the development. Area Plans contain area specific controls that need to be considered. They can be found in Parts 10 - Town Centre Area Plans, 11- Heritage Area Plans and 12 - Precinct Area Plans of this DCP.

1.1 HOW TO USE THIS PLAN

LMDCP 2014 is the primary document used by Council's development assessment staff to assess development applications. Proponents of development will need to:

1. Determine the land use zone that applies to the development site (refer to LMLEP 2014);
2. Refer to the Parts of LMDCP 2014 that contain controls for the zone where the development is proposed (Parts 2 to 8);
3. Check if specific land use provisions apply to the proposed development (Part 9); and
4. Check if an Area Plan applies to the proposed development site (Parts 10, 11 or 12).

The development controls contained within each part and section, seek to achieve desired land use, conservation and/or built outcomes consistent with corresponding LMLEP 2014 zone objectives and aims in each part of LMDCP 2014.

Each part of LMDCP 2014 is structured to promote a development process where the site and context analysis informs the design of the development. Parts 2 to 8 of this DCP generally have the following main headings:

- **Introduction** – provides information about the particular part of the DCP, how to use the DCP and aims for development within the particular zone group.
- **Context and Setting** – outlines the site issues and environmental opportunities and constraints that need to be addressed in the development application.
- **Development Design** – provides Council's detailed design related requirements.
- **Operational Requirements** – provides Council's detailed requirements associated with the construction and ongoing operation of the development.

The detailed provisions of each subsection in each part of LMDCP 2014 are presented as follows:

- **Objectives** – state what outcomes LMCC is seeking new development to achieve along with providing the intent behind the controls, and
- **Controls** – advise the requirements for achieving outcomes and the desired future character identified by the aims and objectives.

Additionally, Parts 2 to 8 contain the specific aims that LMDCP 2014 seeks to achieve. Where specific controls are not provided, the aims of each part will be used to provide direction for a merits based assessment of a development application.

For more information on how to use this document, refer to Part 1 – Introduction.

1.2 ADDITIONAL CONTROLS FOR SPECIFIC LAND USES

If the development application relates to any of the following land uses, additional specific development controls must be considered in conjunction with controls in this part of the DCP. The detailed controls for these uses can be found in Part 9 of this DCP. Where a conflict exists between the controls within this part and a specific land use, the specific land use section prevails.

Attached Dwellings	Multi Dwelling Housing
Bed and Breakfast / Farm Stay Accommodation	Places of Public Worship
Dual Occupancy	Residential Flat Buildings
Dwelling House in Rural and Environmental Zones	Housing on Small and Narrow Lots
Foreshore and Waterway Development	Secondary Dwelling
Health Consulting Rooms	

1.3 AIMS FOR DEVELOPMENT IN THE RESIDENTIAL ZONES

Where controls are not provided for a particular circumstance, the following aims will be used to provide direction for a merits based assessment of a development application.

The aims of LMDCP 2014 for development in Residential Zones are:

1. To ensure development responds to the characteristics of the site and the qualities of the surrounding urban environment, or the desired future character.
2. To support the principles of Ecologically Sustainable Development.
3. To inspire innovative design for all forms of development within the residential zones.
4. To ensure development does not have adverse impacts on residential amenity.

2 CONTEXT AND SETTING

2.1 SITE ANALYSIS

Objectives

a. To encourage good site planning, built form and landscape outcomes informed by an understanding of the site and its context.

b. To illustrate how a development responds to a site and its relationship with the locality.

c. To identify the opportunities and constraints of sites, and the prevailing characteristics of a locality.

Controls

1. A Site Analysis Plan must be submitted that identifies the existing conditions relating to the subject site, and the surrounding land that may influence the design process.
2. The Site Analysis Plan must address:
   i. All relevant items as set out in the *Site Analysis Guidelines*; and
   ii. All relevant matters outlined below in section 2.2 to 2.20.
3. The Site Analysis Plan must provide a comprehensive view of the constraints and opportunities of the development site that will guide the design process.
4. The development application must clearly show that the constraints and opportunities identified in the Site analysis Plan have been used to inform and resolve the development design.
5. An electronic 3D block model must be submitted for any development that is three or more storeys, or that has a Gross Floor Area of 2000m^2 or more. The model must clearly show the scale and form of the proposed development and its setting, from viewing points along the street, and from public open space, waterways and other significant vantage points.
6. Council may require an electronic model for smaller developments on sites with potentially high visual or physical impacts on the public realm.

Note: The detail of the Site Analysis Plan should be tailored to the site, and the complexity of the proposed development.

2.2 SCENIC VALUES

The **Landscape Settings and Significant Natural Landscape Features Maps** identify the Landscape Setting boundaries and the relevant Scenic Management Zone for each Landscape Setting. The maps are a guide to the scenic quality associated with lands within the City of Lake Macquarie and are contained within the *Scenic Management Guidelines*. The *Scenic Management Guidelines* provide supporting documentation to this DCP.

Objectives

a. To ensure that the scenic values of the City are protected and enhanced.

b. To ensure that developments visible or adjoining the coastline, Lake Macquarie or ridgelines maintain and enhance the scenic value of these features.

Controls

1. A landscape and visual impact assessment is required for development identified in Table 1 unless specified by Council. A landscape and visual impact assessment must be prepared in accordance with section 7.3 of the Scenic Management Guidelines.

Table 1 - Development requiring a landscape and visual impact assessment

Type, category or impact of development: • Any designated, SEPP 14 or SEPP 65 development • Any new development or alterations and additions resulting in a building or structure equivalent to 4 storeys or more (in any zone), or a car park of 2 or more storeys (in any zone) • Telecommunication towers • Substantial loss of native tree cover (land parcels of one hectare or greater) • Subdivisions (in any zone with 10 or more lots proposed) • Tourist and visitor accommodation • Removal of any tree on the Significant Tree Register • Seniors living developments and hospitals with more than 30 beds • Educational facilities (new facilities in residential zones) • Any commercial buildings being more than 50 metres long on any side, or being over 10 metres high
Location of development: • Any development that is; within 300m of the Mean High Water Mark of the lake or coastal edge, or on a ridgeline and involves two or more of the following: o height equivalent to 3 or more storeys, or o sloping site (10% or more), or o requiring a combined cut and fill exceeding 2 metres, or o a development footprint exceeding 2000m^2. • Any building or structure in a public reserve having a footprint exceeding 100m^2 or being over 10 metres high. • Any development on a heritage item and/or development within a heritage conservation area (apart from alterations and additions to existing houses or new complying development houses) • Any development within 300m of the Sydney-Newcastle Freeway (apart from alterations and additions to existing houses or new complying development houses)

2. Developments must be designed and sited to complement their location through:
   i. the retention of existing vegetation,
   ii. incorporating appropriate landscaping,
   iii. minimising cut and fill,
   iv. building design and articulation compatible with natural context, and
   v. colour and material selection.
3. For developments visible from the coastline, Lake Macquarie and adjacent waterways, or from significant ridgelines, external finishes should be non-reflective and muted in tone.

2.3 GEOTECHNICAL

Objectives

a. To minimise potential damage to buildings/structures resulting from land movement.

b. To provide guidance on the preparation of geotechnical reports required to support a development application.

Controls

1. The following development types do not require submission of a Slope Stability Assessment with a development application:
    - Minor development such as garages, carports, decks and the like, pergolas, fiberglass swimming pools and cut/fill not exceeding 1 metre high/deep.
    - Development in Geo_4, Geo_5 or Geo_6 zone that consists of less than 3 storeys and less than 1000m^2 gross floor area and are not sensitive use facilities as defined by the Geotechnical Slope Stability Guidelines.
    - Subdivision consisting of:
        - 4 or less lots; and
        - Not including any new public road; and
        - Within a Geo_4, Geo_5 or Geo_6 zone.
2. A geotechnical report prepared by a geotechnical engineer must accompany an application for all other development as specified in Council's *Geotechnical Slope Stability Guidelines*. The report must be prepared in accordance with these Guidelines.

Note: After lodgement of a development application, Council may still require the submission of Geotechnical Report for the development types identified at (1) following a site inspection.

2.4 MINE SUBSIDENCE

Objectives

a. To minimise risks to buildings and structures associated with potential mine subsidence.

Controls

1. Where an application is made for the construction of a structure or building within a Mine Subsidence District, written concurrence must be obtained from the Mine Subsidence Board. Written concurrence should be obtained prior to the application being submitted to Council.
2. Written concurrence from the Mine Subsidence Board is not required for certain works that have deemed approval under the Mine Subsidence Board's publication 'A Guide for Council Staff'.

Note**:** Please refer to the Mine Subsidence Board's 'Surface Development Guidelines' for important information.

2.5 CONTAMINATED LAND

Objectives:

a. To ensure that contaminated land is identified through appropriate investigations
b. To ensure that the contaminated site is appropriately and effectively remediated prior to occupation of the land for its intended use.
c. To ensure that changes to land use will not increase the risks to public health or the environment as a result of contamination on site, or adjacent properties.

Controls:

1. Where development is proposed on land identified as being potentially contaminated, a Preliminary Site Investigation Report must be prepared and submitted with the application for development. Refer to Council's *Policy for Managing Contaminated or Potentially Contaminated Land* for further information.
2. Where contaminants are found within the site, a Detailed Site Investigation Report must be prepared and lodged with the development application.

3. Where a Detailed Site Investigation Report identifies the need for remediation, a Remedial Action Plan must be prepared and submitted with the application.
4. The site must be validated as suitable for its intended use prior to the issue of an occupation certificate.

Note: At discretion, Council may request a formal audit of contamination documentation by a site auditor accredited with the NSW Environment Protection Authority under the *Contaminated Land Management Act* 1997.

Note: Refer to SEPP 55 and the NSW State Governments '*Managing Land Contamination: Planning Guidelines*' for more information.

2.6 ACID SULFATE SOILS

Objectives

a. To ensure that disturbance of Acid Sulfate Soils or Potential Acid Sulfate Soils is minimised, to prevent adverse environmental impacts on soil conditions.
b. To ensure that water quality and associated receiving waters are not adversely affected Acid Sulfate Soils.
c. To ensure that habitat is not adversely affected by Acid Sulfate Soils.
d. To ensure that built structures and infrastructure are not adversely affected by Acid Sulfate Soils.

Controls

1. Development must be sited or designed to avoid the disturbance of Acid Sulfate Soils or potential Acid Sulfate Soils.
2. Where the disturbance of Acid Sulfate Soils is unavoidable, a Preliminary Acid Sulfate Soil Assessment report must be submitted with the development application, in accordance with the *NSW Acid Sulfate Soils Planning Manual.*
3. Where a Preliminary Acid Sulfate Soil Assessment report identifies potential adverse impacts, a detailed assessment report and management plan must be submitted, in accordance with the *NSW Acid Sulfate Soils Planning Manual*.
4. Any Acid Sulfate Soils must be identified on the site analysis plan.

***Note*:** Refer to Lake Macquarie Council's Acid Sulfate Soil planning maps showing classes of land containing potential or actual Acid Sulfate Soils. These maps are available at Council's Customer Service Centre, Speers Point.

2.7 STORMWATER MANAGEMENT

Objectives

a. To ensure that development does not adversely affect water quality or availability, including ground water.
b. To ensure that watercourses and associated riparian vegetation are maintained so as to contribute to water quality, and to mitigate sedimentation of the Lake Macquarie waterway.
c. To minimise any adverse impacts on downstream built or natural environments, or on nearby land due to increased development.
d. To incorporate Water Sensitive Urban Design techniques into all new developments.
e. To minimise the volume and rate of stormwater leaving a development site.

Controls

1. A *Water Cycle Management Plan* must be submitted for all development except single dwelling houses and dual-occupancy developments. The *Water Cycle Management Plan* must provide details of the management of stormwater, and the measures proposed to mitigate the effects of

stormwater on adjoining or downstream sites in accordance with Council's *Water Cycle Management Guidelines*.

2. A *Site Stormwater Drainage Plan* must be submitted for all single dwelling houses and dual-occupancy development proposals. The *Site Stormwater Drainage Plan* must be prepared in accordance with Council's *Water Cycle Management Guidelines*.
3. On-site measures must be implemented to maintain water quality, and to minimise the volume of stormwater run-off and the rate at which stormwater leaves the site.
4. A maximum of 10% of run-off from built impermeable surfaces may be discharged directly to the drainage system. The remaining 90% of run-off must be captured for reuse, or managed through infiltration and retention measures prior to being discharged to the drainage system.
5. Stormwater management systems should be visually unobtrusive and integrated within site landscaping, car parks or building structures.
6. All developments (except dwelling house or dual occupancy) that involve the re-use of stormwater or the use of recycled water must demonstrate compliance with the Australian Guidelines for Water Recycling and the licensing requirements of the *Water industry Competition Act 2006*.
7. Stormwater management systems must be designed in accordance with the *Water Cycle Management Guidelines.*

2.8 CATCHMENT FLOOD MANAGEMENT

This section applies to land in the various creek catchments in Lake Macquarie that are shown as 'Lots Affected by Catchment Flooding controls' on Council's 'Flood Control Lots' map.

The map is indicative only and property information should be checked to confirm if a lot is a catchment flood control lot.

Some lots are affected by both catchment flooding and Lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Further information on flood risk and flood planning levels (floor levels) for particular lots can be obtained by applying for a Flood Certificate from Council.

Provisions regarding Lake flooding are contained in section 2.9 of this Part of DCP 2014.

Where inconsistencies arise, the controls in area plans prevail over controls in parts 2 to 9 of this DCP.

Objectives

a. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties.
b. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding, and manage risks to property and life from flood events.

Controls

1. Development must be consistent with the current version of the *NSW Floodplain Development Manual*, and any relevant local flood study, floodplain management study or plan applying to the land that has been endorsed by Council.
2. The proposed development must consider and respond to flooding hazards. It must also mitigate risks to life and/or property through design and positioning of development.
3. Buildings must not be located in an identified floodway.
4. Buildings and other structures, including fences, must be designed so as not to impede the flow of floodwaters or entrap debris.
5. Habitable rooms must have a finished floor height at least 500mm above the 100 year probable ARI (1% AEP) event. Where probability flood levels are not available, habitable rooms must have a finished floor height at least 500mm above the highest observed flood level for the development site.

6. Non-habitable rooms must have a finished floor height at or above the 20-year probable ARI (5% AEP) event. Where probability flood levels are not available, non-habitable rooms must have a finished floor height at or above the highest observed flood level for the site, except where this would result in a floor level more than 500mm above the existing ground level. In this case, a floor level of at least 500mm above existing ground level must be achieved.
7. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area, or within the extent of the 100-year probable ARI (1% AEP) flood event.
8. Lesser provisions may be acceptable where the applicant can demonstrate that the type of development or the proposed use poses no significant risk to life or property by flooding.
9. Any use of fill associated with development must not substantially impede the flow of floodwater, and must not contribute to flooding or ponding of water on any other property.
10. Additions or alterations to existing development will be assessed on the merits of the situation, having regard to meeting an acceptable level of risk of flood damage.
11. Development on designated flood prone land must incorporate the floodplain risk management measures, as recommended by a local flood study, floodplain management study or plan, which identifies and addresses appropriate actions in the event of flooding.
12. Development on land subject to flooding must use flood compatible materials that will minimise damage by flooding.
13. Development on lots adjoining areas affected by a 100 year probable ARI event will be subject to floor height requirements, even when the site may not be subject to flooding from the 100 year probable ARI event. This requirement is not applicable for land higher than 500mm above the 100 year probable ARI, as calculated for the relevant site.
14. Development where 100 year probable ARI levels are not available, and which could be flood liable, must be designed to meet an acceptable level of risk from flood damage. This may require the preparation of a Local Flood Study that considers cumulative impact issues, and demonstrates negligible impacts on other lands.

Note: Refer to Council's *Flood Management Guideline* for further information on the *NSW Floodplain Development Manual*, completed floodplain management plans, and on Council's requirements for flood studies.

Table 2 - Flood Planning Levels and floor height requirements in areas affected by catchment flooding and covered by a Floodplain Management Study and Plan

Development Type (including extensions)	Minimum Height Requirements
Dwellings	
Habitable rooms	1 in 100 year probable flood level + 500mm freeboard (post and beam rather than slab on ground preferred)
Non-habitable rooms and garages	1 in 20 year probable flood level
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Medium and High density residential development	

Development Type (including extensions)	Minimum Height Requirements
Habitable rooms	1 in 100 year probable flood level + 500mm freeboard
Non-habitable rooms and garages	1 in 20 year probable flood level
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Commercial and Retail	
Internal floor height	1 in 100 year probable flood level + 500mm freeboard
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Sensitive Uses (Residential care facilities, hospitals, etc.)	
Internal floor height	Probable maximum flood level
Unsealed electrical installations	Probable maximum flood level

2.9 LAKE FLOODING AND TIDAL INUNDATION (INCORPORATING SEA LEVEL RISE)

This section applies to land on and near the Lake Macquarie foreshore that is shown as 'Lots Affected by Lake Flooding controls' on Council's 'Flood Control Lots' map. The map is indicative only and property information should be checked to confirm if a lot is a Lake flood control lot.

Some lots are affected by both catchment flooding and lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Provisions regarding Catchment Flooding are contained in section 2.8 of this Part of DCP 2014.

The floor height requirements in Table 3 below must only be used for development on lots shown as 'Lots Affected by Lake Flooding controls' on Council's 'Flood Control Lots' map.

Council completed the Lake Macquarie Waterway Flood Study and Risk Management Plan in 2012. This flood study and risk management plan incorporated the implications of predicted sea level rise.

Predicted sea level rise is based on expert advice from NSW Government agencies and expert scientific agencies, namely that projections of sea level rise along the NSW coast are for a rise relative to 1990 mean sea levels of 40cm by 2050 and 90cm by 2100.

The controls contained in this section prevail where there is an inconsistency with other development requirements. This is particularly relevant to cut and fill controls.

Objectives

a. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties.
b. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding, and manage risks to property and life from flood events.
c. To ensure that development adequately considers and responds to sea level rise projections, and the predicted effects on inundation, flooding, coastal and foreshore recession, and on groundwater levels.
d. To ensure that development on land vulnerable to sea level rise is situated and designed to minimise the risk from future inundation, flooding, coastal and foreshore recession, and from rises in groundwater levels during the expected life of the development.
e. To ensure that development is designed to enable future adaptation if projections are realised, or that measures are implemented to mitigate any adverse impacts of climate change or sea level rise.
f. To encourage innovative responses to sea level rise impacts.

Controls

1. Development must implement measures to mitigate the adverse effects of projected sea level rise and increases in flood levels on the development.
2. Development should be designed and situated to reduce the risk from the effects of sea level rise. For example, structures should be located on the highest part of the Lot and/or located on the Lot as far back from the foreshore or coastline as possible, while still meeting other controls and objectives of the DCP.
3. Development should not be located in areas predicted to be permanently inundated during the life of the asset. The assumed asset life is 100 years for residential care facilities and seniors housing, hospitals, mixed use development, as well as medium and high density housing, and 50 years for other developments.
4. Notwithstanding the provisions for Cut and Fill in section 3.26, special consideration may be given to increased fill allowances in areas affected by sea level rise provided that:
    i. Additional fill does not adversely affect stormwater management, drainage, or the flow of water from roads, natural or constructed watercourses, foreshore areas, or adjoining properties.
    ii. The filled area maintains functional connections to adjoining footpaths, roads, neighbouring blocks, and other local features.
5. Development identified within Table 3 should comply with the floor height provisions. Where the development proposed is not contained within Table 3, or an alternative to the provisions contained within Table 3 is proposed, a Flood Safety Audit and Management Plan must be submitted with the application, which is to include:
    i. Current 100 year ARI flood levels and velocity, as well as 2050 and 2100,
    ii. Analysis of potential and likely risk of flooding, and/or potential threat to life and/or property, now and at 2050 and 2100,
    iii. Analysis of the potential effects of permanent inundation, foreshore recession and rising groundwater,
    iv. Where flood proof materials are proposed, evidence of flood-proof characteristics of those materials is to be provided,

v. Where an innovative of adaptable building design is proposed, it meets the principles and performance criteria set out in the Development Guidelines for Resilient Housing for Lake Macquarie, and

vi. Any other justification for an alternative adaptive measure to be implemented.

6. The assessing officer may determine that the development proposal is of a minor nature and there is no need for a Flood Safety Audit and Management Plan. In these circumstances, the assessing officer still needs to be satisfied that the proposed development adequately addresses projected sea level rise and increases in flood levels.

Table 3 - Floor height requirements for land affected by Lake Flooding and Tidal Inundation requirements.

Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
Dwellings		
Habitable rooms	1 in 100 year probable flood level for 2050 + 500mm freeboard (post and beam rather than slab on ground preferred)	2.36 m AHD
Non-habitable rooms and garages	1 in 20 year probable flood level for 2050	1.61 m AHD
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement	
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Medium and High density residential development		
Habitable rooms	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Non-habitable rooms and garages	1 in 20 year probable flood level for 2100	2.10 m AHD
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement	
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2100 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.82 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Sensitive Uses (Residential care facilities,	Probable maximum flood level for 2100	3.27 m AHD

Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
hospitals, etc.) Unsealed electrical installations	Probable maximum flood level for 2100	3.27 m AHD

2.10 NATURAL WATER SYSTEMS

Definition

A **natural water system** is a naturally occurring watercourse, waterway, lake, wetland, lagoon, estuary and/or other water body.

Objectives

a. To protect and maintain the water regime of natural water systems.
b. To ensure that development does not adversely affect aquatic fauna.
c. To ensure that development does not adversely affect water quality or availability, including ground water.
d. To ensure that watercourses and associated riparian vegetation are maintained to contribute to water quality and to mitigate sedimentation of the Lake Macquarie waterway.
e. To ensure that natural water systems and associated vegetation and landforms are protected to improve the ecological processes and ensure that land is adequately buffered from development.
f. To ensure that the pre-development water quality of receiving waters is maintained or improved.

Controls

1. Natural water systems should be maintained in a natural state including maintaining riparian vegetation and habitat such as fallen debris. Unless extraordinary circumstances exist, filling, redirecting, piping, capping or otherwise modifying natural water systems will not be permitted. Refer to Council's Water Cycle Management Guidelines for further information.
2. Where a development is associated with, or will affect a natural water system, rehabilitation must occur to return that natural water system – as much as possible – to a natural state. The Rehabilitation Plan must be prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies*.
3. Rehabilitation should occur where a development site includes a degraded watercourse, water body, or wetland. Rehabilitation is to be carried out following the completion of a Rehabilitation Plan, This Plan must prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies.*
4. Stormwater must be managed to minimise nutrient and sediment runoff entering constructed drainage lines, natural watercourses, or waterways.
5. Development within a Vegetated Riparian Zone (VRZ) (as shown in Figure 1 – Vegetated Riparian Zones) should be avoided where possible to retain its ecological processes. Where development is unavoidable within the VRZ, it must be demonstrated that potential impacts on water quality, aquatic habitat and riparian vegetation will be negligible.
6. A Plan of Management must be submitted in accordance with State Government guidelines for development proposed within a VRZ.
7. Asset Protection Zones must not be located within the Vegetated Riparian Zone.

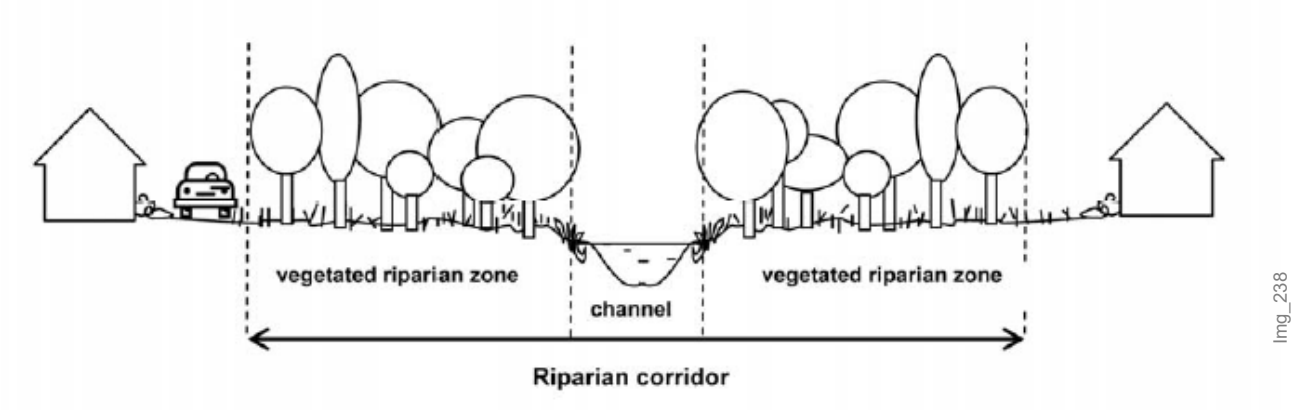

Figure 1 - Vegetated Riparian Zones

Types of watercourses	VRZ Width[2] (Each side of watercourse)	Total Riparian Corridor Width
Any first order[1] watercourse	10 metres	20m + channel width
Any second order[1] watercourse	20 metres	40m + channel width
Any third order[1] watercourse	30 metres	60m + channel width
Any fourth order[1] watercourse or greater (includes estuaries, wetlands and any parts of rivers influenced by tidal waters)	40 metres	80m + channel width

[1] As classified under the Strahler System of ordering watercourses.

[2] Bushfire Asset Protection zones will not be permitted in the Vegetated Riparian Zone. Additional areas may need to be protected to support ecological processes.

2.11 BUSHFIRE

This section only applies to land identified on Council's Bushfire Prone Land Map.

Objectives

a. To ensure that risks associated with bushfire are appropriately and effectively managed on the development site.

b. To ensure that bushfire risk is managed in connection with the preservation of the ecological values of the site and adjoining lands.

Controls

1. Development must comply with the *NSW Planning for Bushfire Protection Guidelines*
2. Asset Protection Zones must:
   i. Be incorporated into the design of the development;
   ii. Be as low maintenance as possible;
   iii. Be located outside areas of ecological value and the buffers necessary to protect them; and
   iv. Not occur on adjoining environmental zoned land.

3. Bushfire prone areas and Asset Protection Zones must be identified on the Site Analysis Plan. Refer to Council's Bushfire Prone Land Map.
4. Clearing for the purposes of Asset Protection Zones should be avoided on ridgelines and slopes of 1:5 or greater.
5. Clearing of vegetation must be limited to that necessary to meet the *NSW Planning for Bushfire Protection Guidelines*.
6. Clearing of native vegetation or trees for the purposes of reducing bushfire risk must be consistent with the current Bushfire Risk Management Plan prepared under the *Rural Fires Act 1997*.

Note: Development Consent is not required for clearing for the purpose of bushfire hazard reduction if the clearing is consistent with the current Bushfire Risk Management Plan, and is undertaken in accordance with a current hazard reduction certificate issued by the Rural Fire Service or other certifying authority.

2.12 FLORA AND FAUNA

Objectives

a. To avoid and minimise impacts on native flora and fauna.
b. To protect and enhance significant flora and fauna, vegetation communities, and significant habitat on the site and surrounding development sites.
c. To protect and enhance ecological corridors and increase the connections between habitats.
d. To ensure rehabilitation of degraded areas.

Controls

1. Where the proposed development is likely to have an impact on native vegetation or fauna habitat, or where five or more native trees are proposed to be removed, a flora and fauna assessment must be submitted with the development application. The flora and fauna assessment must be prepared in accordance with Council's *Flora and Fauna Survey Guidelines*.
2. The flora and fauna assessment must be sufficient to adequately identify and assess all the impacts of the proposed development. This includes cumulative, direct and indirect impacts, as well as the impacts of Asset Protection Zones, provision of services (water and sewer, etc) and stormwater management.
3. Where a proposed development site is within a vegetation corridor identified on Council's Native Vegetation and Corridors Map, or identified as part of a site specific flora and fauna assessment, the corridor must be surveyed. Within the survey, the appropriate corridor width must be determined with reference to core habitat areas and potential edge effects and fragmentation. The proposed development should be located and designed to avoid impacts on the identified vegetation corridor. Where this is not possible, the development should be designed to minimise impacts.
4. Development should be designed to avoid impacts on native flora and fauna, and minimise any unavoidable impacts. Significant flora and fauna species, vegetation communities and habitat should be protected and enhanced through appropriate site planning, design and construction.
5. A Site Vegetation Plan must be submitted clearly indicating the location of the proposed development in relation to vegetation communities, significant flora and fauna species and vegetation, and significant habitat and corridors on the site.
6. Native vegetation buffers must be provided between development and areas containing threatened flora and fauna species or their habitat, threatened vegetation communities and native vegetation corridors. The width of the buffer should be determined with reference to the function of the habitat, the threat of sea level rise and the type of development proposed. The buffer should be designed to keep the area of significance in natural condition.
7. A suitable barrier such as a perimeter road should be provided between development, (including landscaped areas) and native vegetation or significant habitat features, to minimise edge effects

8. Where a proposed development is likely to impact on an area of native vegetation, it must be demonstrated that no reasonable alternative is available. Suitable ameliorative measures must also be proposed (eg: weed management, rehabilitation, nest boxes).
9. Rehabilitation of degraded areas of the development site should include local native species to establish a self-maintaining ecosystem as close as possible to the natural state.
10. Buildings and structures, roads, driveways, fences, dams, infrastructure, drainage and asset protection zones should be located outside of areas with significant flora and fauna, native vegetation corridors and buffers.
11. An application for removal of native vegetation will only be considered where it is ancillary to, and necessary for conducting an approved use of the land (ie: an application for clearing alone will not be supported).
12. Where retention or rehabilitation of native vegetation and/or habitat is required, a vegetation management plan must be prepared in accordance with Council's *Vegetation Management Plan Guidelines*. This must detail how vegetation will be protected, rehabilitated and managed before, during and after construction.
13. Long-term protection and management of areas set aside for ecological reasons is encouraged through secure tenure with appropriate conservation management. This may be achieved through a Planning Agreement.
14. Development should be consistent with the effective conservation of land within any adjacent Environmental or Waterway zone and its protection from adverse impacts. It should include, but not be limited to weed invasion, erosion and sedimentation, pollution, chemicals, nutrients, stormwater run-off, feral and domestic animals.

Note: Council may require a bond to ensure that native vegetation is protected and any ameliorative measures are undertaken.

2.13 PRESERVATION OF TREES AND VEGETATION

Objectives

a. To ensure that trees listed on Council's Significant Tree register are not adversely affected by development.
b. To maintain and enhance the natural bushland or treed character of the City.
c. To retain trees for the urban amenity, microclimate, scenic, air and water quality, and the social benefits that they provide.

Controls

1. For the purposes of Clause 5.9 in LMLEP 2014, development consent is required to ring bark, cut down, top, lop, remove, injure, wilfully destroy or clear:
   i. Any species of vegetation that existed in the State of New South Wales before European Settlement;
   ii. A tree which is listed in Council's Significant Tree Register;
   iii. Tree(s) or native vegetation listed as heritage items or located within a Heritage Conservation Area; or
   iv. A Norfolk Island Pine Tree (*Araucaria heterophylla*) that is greater than three metres in height, or that has a trunk diameter of 75mm or greater, measured at ground level.

Note: This clause includes Native Vegetation defined in the *Native Vegetation Act 2003* and marine vegetation covered by section 205 of the *Fisheries Management Act 1994*.

2. Except in the E2 Zone, development consent is not required to remove, injure, wilfully destroy or clear native vegetation (excluding native trees and shrubs over three metres in height), only if:
   i. The work is for the purpose of landscaping understorey vegetation and lawn areas where the area to be cleared is less than 600m² (in total), and is on the same allotment as, and within the curtilage of an approved dwelling;

ii. The soil surface exposed in any period of 90 consecutive days is less than 250m^2;
iii. The slope of the land is less than 15 degrees;
iv. The area is not subject to a development consent that requires the native vegetation to be retained; and
v. The work does not involve the disturbance of habitat for threatened species.

3. Development consent is not required to ring bark, cut down top, lop, remove, injure, wilfully destroy or clear a tree or native vegetation, if:
   i. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
   ii. The tree or native vegetation is not required to be retained by a development consent, and
   iii. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or
   iv. The tree or native vegetation is within one metre of a sealed driveway to a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or
   v. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) on an adjoining allotment and the building and owners of both properties reach a written agreement that is submitted to Council prior to removal.

Note: For the purposes of clause 3 the distance must be measured from the trunk of a tree or shrub measured at ground level to the outer most projection of the building.

***Note*:** A sealed driveway is a driveway or car park with an impervious surface such as concrete, pavers, or bitumen. A gravel driveway is not classed as a sealed driveway.

***Note*:** A lawfully used building does not include drainage, excavation, a garden shed or jetty, but does include an underground water storage structure, septic tank or swimming pool.

4. Development consent is not required for removal of a tree or native vegetation if Council is satisfied beforehand that the tree or native vegetation:
   i. Is dead and is not required as habitat for native fauna or
   ii. Is a risk to life or property.

***Note*:** Evidence to support removal should be forwarded to Council in accordance with requirements outlined in Council's *Tree Preservation and Native Vegetation Management Guidelines*. Council's Tree Assessment Officer may undertake a site inspection to verify that these conditions are satisfied.

***Note*:** Habitat required for native fauna includes native vegetation and trees (including dead or dying trees) support hollows, spouts, splits, nests and roosts.

5. Development consent is not required for removal of a tree or native vegetation if:
   i. The tree or native vegetation is in danger of imminent failure and there is risk to life or property; and
   ii. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
   iii. Evidence to support its removal is forwarded to Council following the removal, in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.
6. Development consent is not required for removal of a NSW native tree if the tree is:
   i. not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
   ii. not located within other native vegetation and,
   iii. less than three metres in height and
   iv. has a trunk diameter at ground level of less than 75mm.

7. An application for removal of tree(s) and native vegetation will be considered only where it is necessary for conducting an approved use of the land. An application for clearing alone will not be supported.
8. A report from a suitably qualified arborist must be submitted to support:
   i. Any application that may have an impact on a tree listed in Council's Significant Tree Register, or on tree(s) or native vegetation listed as heritage items or located within a heritage conservation area;
   ii. Any request to review Council's determination of an application for tree pruning or removal; or
   iii. Any application that Council determines may cause significant impacts on native trees or native vegetation.
9. An arborist report must include a plan to scale that clearly shows:
   i. The location of the proposed development;
   ii. The location, diameter, canopy spread, condition and species of each tree on the site;
   iii. All trees to be removed;
   iv. All trees to be retained;
   v. All trees with habitat hollows;
   vi. Tree protection zones for all trees to be retained; and
   vii. Any asset protection zones.
10. Habitat trees must be assessed by a suitably qualified flora and fauna specialist.
11. Measures must be implemented to protect native vegetation and trees to be retained during construction works. Such protection measures must be specified in the development application, and should be compiled in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.
12. Where habitat trees are removed, measures (such as nest boxes) must be implemented to mitigate against injury or loss of native fauna and habitat. Such measures must be specified in the development application.
13. Boundary fences must be located, designed and constructed to avoid removing or damaging native trees that have a diameter of 200mm or greater, measured at ground level.

Note: Refer to Council's *Tree Preservation and Native Vegetation Management Guidelines* for further details and the *Significant Tree Register*.

***Note*:** Where the removal of five or more native trees is proposed, an arborist report may be required in addition to a Flora and Fauna Assessment prepared in accordance with Council's *Flora and Fauna Survey Guidelines*.

2.14 EUROPEAN HERITAGE

Objectives

a. To protect and maintain European heritage items and their facades.
b. To retain, preserve and promote the adaptive re-use of heritage-listed buildings and contributory buildings in particular, and other buildings that contribute to the heritage character of the locality.
c. To appropriately manage demolition of items of heritage significance, when all other alternatives to demolition have been fully investigated.
d. To ensure that development is sympathetic to heritage items and contributory buildings.

Controls

1. A Heritage Assessment and Statement of Heritage Impact must be submitted to Council where a proposed development:
   i. incorporates, or is adjacent to an item of heritage significance;
   ii. is located within a heritage conservation area, or,

iii. has been identified by Council to have particular circumstances that warrant it.

Note: Council officers will use the following criteria to determine the need for Heritage Assessment and Statement of Heritage Impact is required under control 1(iii) above:

- The subject site includes a building erected prior to 1950 whether or not it is identified as being of a particular architectural style,
- The development is considered in conflict with its heritage context , streetscape, or heritage precinct,
- The subject site includes a potential heritage item.

2. The impact of development on an item of heritage significance must be minimised by:
   i. Restricting the extent of development to that which is necessary;
   ii. Conserving what is significant about the item;
   iii. Clearly differentiating new development from the existing significant fabric;
   iv. Ensuring that development is of a scale, form, mass, proportion and finish that is sympathetic with the heritage item; and
   v. Ensuring that development is sufficiently separated from the heritage item, so as not to compromise the existing level of visibility.
3. For development involving demolition of an item of heritage significance, a heritage assessment and Statement of Heritage Impact must be prepared and lodged. It must verify that all alternative options to demolition have been fully investigated, and demonstrate the replacement building's compatibility with the physical context. The Statement of Heritage Impact must include details of the:
   i. Structural condition;
   ii. Overall extent of the remaining fabric;
   iii. Potential retention and adaptive reuse; and
   iv. Comparative costings.
4. Where demolition of the whole of a heritage item is proposed, approval must be sought concurrently for the replacement building.
5. Alterations and additions to items of heritage significance must where possible:
   i. Occur at the rear of the building;
   ii. Maintain the established building line;
   iii. Maintain an existing driveway access to the rear of the property;
   iv. Incorporate or retain elements such as chimneys, windows and gables;
   v. Maintain established patterns of buildings and garden; and
   vi. Not overwhelm or dominate the existing building.
6. Alterations and additions to items of heritage significance must be recognisable, on inspection, as new work. They must not mimic the design, materials or historic details of the heritage item.
7. Garages, sheds, carports, external utilitarian structures and the like must be detached and located at the rear, or set back at least two metres behind the heritage item.
8. Utilitarian structures must be constructed of the same material as the heritage listed building.

Note: Refer to Council's Heritage Guidelines for further information.

2.15 ABORIGINAL HERITAGE

Objectives

a. To protect and conserve Aboriginal cultural, spiritual, and sacred sites within the City.

b. To ensure the impact of a proposed development on the heritage significance of an Aboriginal place or object is considered by adequate investigation and assessment.

Controls

1. Where a development will disturb the ground surface and the natural ground surface has not been significantly disturbed, the development application must demonstrate that adequate due diligence has been undertaken. This includes (but is not limited to) submitting the following documentation in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*. This includes submitting the following documentation:
   i. A statement and results of a basic 200m Aboriginal Heritage Information Management System (AHIMS) search. Where a site is identified within 200m of the development site, a statement and results of a 50m AHIMS search must be included.
   ii. Identify whether the development site is partially or wholly within the Sensitive Aboriginal Landscape map under the LMLEP 2014 and whether the exemptions under the Excluded Development Criteria (Table 4) apply.
   iii. A statement indicating whether there are landscape features that indicate the potential presence of Aboriginal objects.

Note: landscape features include: foreshore areas, creek lines, rocky areas, wetlands, ridge tops, ridgelines, headlands, sand dunes, caves.

2. A Due Diligence Assessment must be prepared by a suitably qualified person to determine whether the proposed development is likely to harm Aboriginal objects and identify whether an Aboriginal Heritage Impact Permit is required where:
   i. An AHIMS search has identified the likelihood of an Aboriginal item within 200m of the development site, and/or
   ii. The site is identified on the Sensitive Aboriginal Landscape map and the Excluded Development Criteria do not apply.
3. The Due Diligence Assessment must include an assessment of the cultural significance of the place to the Aboriginal Community.

Note: - Clause 5.10(8) – Heritage Conservation of the LMLEP 2014 and the Lake Macquarie Aboriginal Heritage Management Strategy requires assessments to be forwarded to the Local Aboriginal Land Council for comment for a 28 day period.

4. An Aboriginal Cultural heritage Assessment Report should be prepared where:
   i. A Due Diligence Assessment has identified the potential for the site to contain an Aboriginal object or contains a place of significance, or.
   ii. The development will have an impact on a known Aboriginal object or place.

Table 4 - Excluded Development Criteria for Development in Sensitive Aboriginal Landscape Map

Excluded Development	Land on which excluded development may not be carried out
All development on sites having a combined/total area less than 800m^2	
Exempt development under the SEPP (Exempt and Complying Development Codes) 2008 on sites having a total area	Within 200m of an AHIMS site Setback from DP High Water mark does not

greater than 800m2 subject to: • 75% of combined/total site area already disturbed; or • Works do not exceed existing disturbed footprint; or • Site has previously been assessed for Aboriginal heritage such as subdivision applications post 1997 development consent.	exceed 50m.

Note: The SEPP (Exempt and Complying Development Codes) 2008 does not apply to land within the Sensitive Aboriginal Landscape area. However, exempt development within this SEPP may not require further Aboriginal assessment if it fulfils the requirements of the Excluded Development Criteria Table

5. Where required, the Aboriginal Heritage Impact Statement must be prepared in accordance with the Lake Macquarie Aboriginal Heritage Management Strategy and the Office of Environment and Heritage *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW,* which includes consultation with the Aboriginal community.
6. Where a proposal seeks to destroy, remove or impact on an Aboriginal object, any development will be Integrated Development and will also require a permit from the Office of Environment and Heritage.

2.16 NATURAL HERITAGE

Objectives

a. To ensure the protection of items of natural heritage significance.
b. To ensure that insect fossil beds and fossilised trees are maintained, along with features of scientific interest in their natural state.
c. To facilitate public appreciation and scientific investigation of insect fossil beds and geological features of scientific interest, without destruction or damage.

Controls

1. Where development is proposed on land within 50 metres of an item of natural heritage significance identified in the Lake Macquarie Local Environmental Plan 2014, a Heritage Impact Assessment must be prepared in accordance with the *Natural Heritage Guidelines*.
2. The likely impact of development proposals on the insect fossil beds and geological features of scientific interest should be identified through a report by a palaeontologist or geologist, which establishes the significance of the site. Such a report should include management strategies before, during and after construction.
3. The development should be designed to avoid natural heritage items.
4. Where it is not reasonable to avoid natural heritage items, the item must be protected and incorporated into the design. Reasonable access to the construction site and any excavated material should be provided to researchers and/or palaeontologists from the Australian Museum or other research institution.
5. Any natural heritage items extracted should be fully documented and catalogued prior to being forwarded to the Australian Museum. Documentation and cataloguing must be undertaken to museum standards.

2.17 SOCIAL IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the social impact of a proposal when assessing a specific development application.

Social Impact Assessment focuses on the human dimension of a locality. It seeks to address the question "what will be the impact of a project/development on people?" and to anticipate outcomes that may flow from a proposed development which are likely to affect people's way of life, their culture and/or their community. Social Impact Assessment is not a tool to stop development, but is to assist in the assessment of development proposals so that the best development results.

Objectives

a. To ensure that development takes into consideration the likely social impacts that may arise, including any effects on equity, access, participation and rights.
b. To ensure that development occurs in appropriate locations, and is supported by adequate services and facilities to support the community and its needs.
c. To ensure that services and facilities are accessible to all members of the community.
d. To facilitate availability of active and passive recreation, natural landscapes, educational opportunities, employment opportunities, health services, public transport, and neighbouring centres, as well as maintaining or enhancing the aesthetics and amenity of the area.

Controls

1. A Social Impact Assessment (SIA) must be prepared in accordance with Council's *Social Impact Assessment Guidelines*, and submitted with the development application in the following circumstances:

   i. the development is identified in table 5, or

   ii. the development is valued at $5,000,000 or greater, or

   iii. the development has a floor area greater than 3000m^2, or

   iv. where Council identifies that particular circumstances warrant it.

Note: Council officers will use the following criteria to determine if a SIA is required under control 1(iv) above:

- The development is targeted at a particular socio-economic or demographic group,
- The development is considered in conflict with its locality, and
- The development has, or is anticipated to generate, significant levels of community opposition.

2. Potential adverse impacts identified by a SIA must be mitigated through redesign, whilst positive impacts should be enhanced by the design or other actions.

Note: The scope, complexity and requirements of a SIA will be commensurate with the scale of the proposed development. Applicants are advised to consult with Council's Social Planner regarding specific requirements.

Table 5 - Uses requiring Social Impact Assessment

• Licensed Premises (Hotels, Taverns and Bottle Shops)	• Hospital (not including a day surgery facility – refer to medical centres)
• Bed and breakfast establishment	• Hotel or motel accommodation
• Boarding House	• Information and education facility
• Child Care Centre	• Markets
• Community Facility	• Medical centre
• Education establishments	• Place of public worship

• Expansion or Modification of an existing use that would otherwise be prohibited under the LEP • Group Home • Health Consulting Rooms • Health services facilities • Home-based child care	• Recreation areas • Recreation facilities (outdoor) • Registered Club • Residential Care facility • Respite day care centres • School • Seniors Housing

2.18 ECONOMIC IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the economic impact of a proposal when assessing a specific development application.

Economic Impact Assessment focuses on the economic dimensions of a locality. It seeks to identify how a proposal will contribute to the economic growth of the locality and City through locating development in appropriate areas, supporting existing development in the area and through the creation of employment opportunity and other economic benefits.

Objectives

a. To ensure that development supports the Lake Macquarie hierarchy of centres and positively contributes to the City by supporting existing development in the locality and the community, through the creation of employment opportunities.

b. To ensure development contributes through additional local employment and economic benefits.

Note: Refer to Council's *Economic Impact Assessment Guideline* that guides economic considerations for specific types of development.

Controls

1. An economic impact assessment must be prepared and submitted to Council at the discretion of the assessing officer under the following circumstances:
   i. Where development is valued at $5,000,000 or greater, or
   ii. Where the proposed development has a floor area greater than 5000m^2, or
   iii. Where the development is inconsistent with the zone objectives.

2.19 LOT AMALGAMATION IN THE R3 ZONE

Definition: an **isolated lot** means an allotment that is bounded on all sides (excluding any road frontage) by existing (or approved) medium to high-density residential or commercial development that will preclude the development of the allotment beyond a dwelling house or dual occupancy dwelling or a two storey commercial building.

Objectives

a. To avoid isolated lots with limited development potential.

b. To support efficient development and increase floor space yields on amalgamated sites.

c. To encourage the consolidation of development lots to allow efficient use of land.

d. To minimise the number of driveway crossings from the street or lane.

Controls

1. Site amalgamation should not result in an isolated lot this is unviable for redevelopment to the scale and intensity desired for the locality.

2. Development that would result in the creation of an isolated lot must provide for a future extension incorporating the isolated lot or demonstrate that the isolated lot can be developed independently.
3. Development that would result in the creation of an isolated lot must be supported by documentation that demonstrates in writing that an offer to purchase has been made to the owner(s) of the isolated lot and the owner has refused to negotiate. A Licensed Valuer must base the offer on at least one recent independent valuation.
4. Development that would result in the creation of an isolated lot must comply with the Planning Principles established by the Land and Environment Court in Melissa Grech v Auburn Council [2004] NSWLEC 40, Cornerstone Property Group Pty Ltd v Warringah Council [2004] NSWLEC 189; Karavellas v Sutherland Shire Council [2004] NSWLEC 251; provide for a future extension incorporating the isolated lot, or demonstrate that the isolated lot can be developed independently.

2.20 UTILITIES

Objectives:

a. To identify utility requirements and new infrastructure at an early stage of development.

b. To ensure utilities structures are integrated in the site planning and design of development.

c. To protect and improve the visual amenity of the primary street frontage.

Controls:

1. All existing and additional utility infrastructure must be identified at the site planning stage.
2. The location of existing and proposed electricity kiosk sub-stations, fire hydrants, along with clearance areas and access ways must be identified and shown on building and landscape plans.
3. Council may require the provision of underground electricity services for the full length of the primary frontage.

3 DEVELOPMENT DESIGN

3.1 STREETSCAPE

Objectives

a. To ensure that development responds to the existing, or desired future character of the street.

b. To ensure that buildings address the street and any adjacent public space.

c. To ensure that development provides passive surveillance of the street.

d. To ensure that onsite car parking, garages, and driveways do not dominate the streetscape.

e. To enhance street amenity for pedestrians and make a positive contribution to the streetscape.

Controls

1. The development design must contribute to the streetscape through built form and landscape that respects and responds to the local context, and the desired streetscape of the area.
2. Development design must recognise the street function, by using appropriate species, and locating utilities and services to reflect that function.
3. Development must provide direct and legible pedestrian access from the street to the front entry of each dwelling or building and provide non-discriminatory access.
4. Development design must include windows of habitable rooms that overlook the street. Developments on corner sites must overlook both streets.
5. Garages and parking structures must be setback and designed to minimise visual impact when viewed form the street.
6. Retain and incorporate existing buildings and structures that are in sound condition that positively contribute to the streetscape character including heritage items.

3.2 STREET SETBACK

Objectives

a. To ensure that the development complements the existing setback pattern in the locality.

b. To permit flexibility for developments that may be vulnerable to the impacts of flooding.

c. To define the street edge and provide definition between public and private space.

d. To encourage entries, windows, balconies and living areas that overlook the street.

Controls

1. Where there are existing adjoining residential buildings within 40 metres,
   i. the front setback must be consistent with the established setbacks or,
   ii. where adjoining building setbacks vary by more than three metres, the front setback must be the same distance as one or other of the adjoining buildings, or:
   iii. where adjoining buildings vary in setback, development must locate between their setbacks.
2. Where there are no existing (or approved) dwellings within 40 metres of the lot, the front setback must be a minimum of four metres from the front boundary.
3. The secondary street setback for corner allotments must be a minimum of two metres.
4. Entry features and porticos, porches, balconies, decks, verandahs, bay windows, eaves and awnings may encroach up to 1.5 metres into the front setback area. This encroachment must not cover more than 50 percent of building width.
5. Where the site is identified as being vulnerable to flooding or expected sea level rise, street setbacks may be reduced to ensure that developments are adequately setback from the shoreline.

Note: A front setback is measured at 90° from the front lot boundary to the building facade.

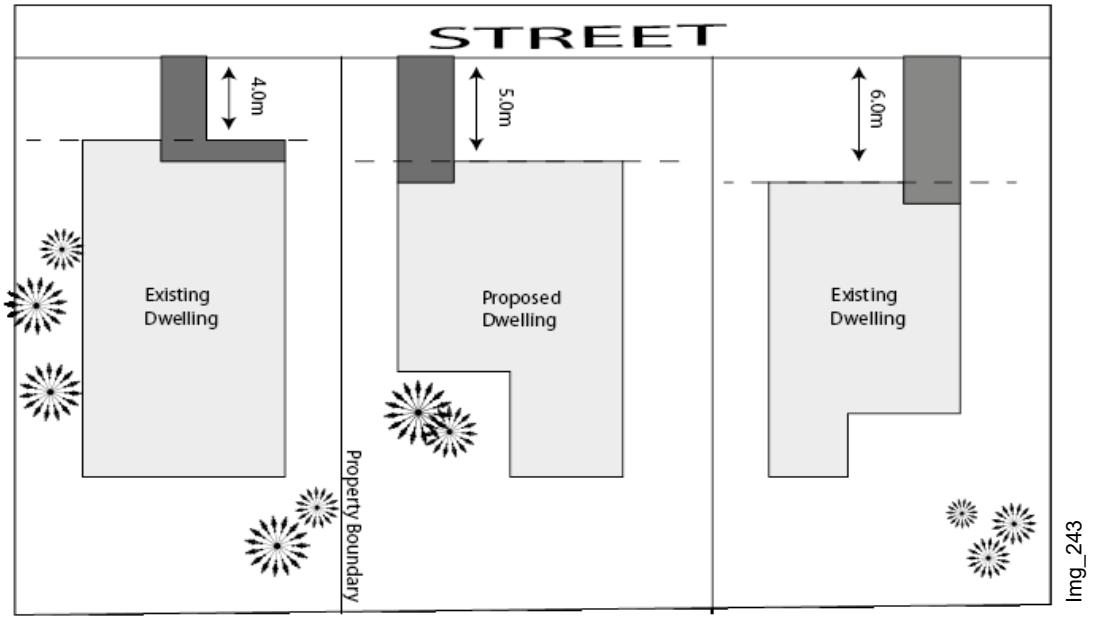

Figure 2 - Street Setback where adjoining dwellings are present

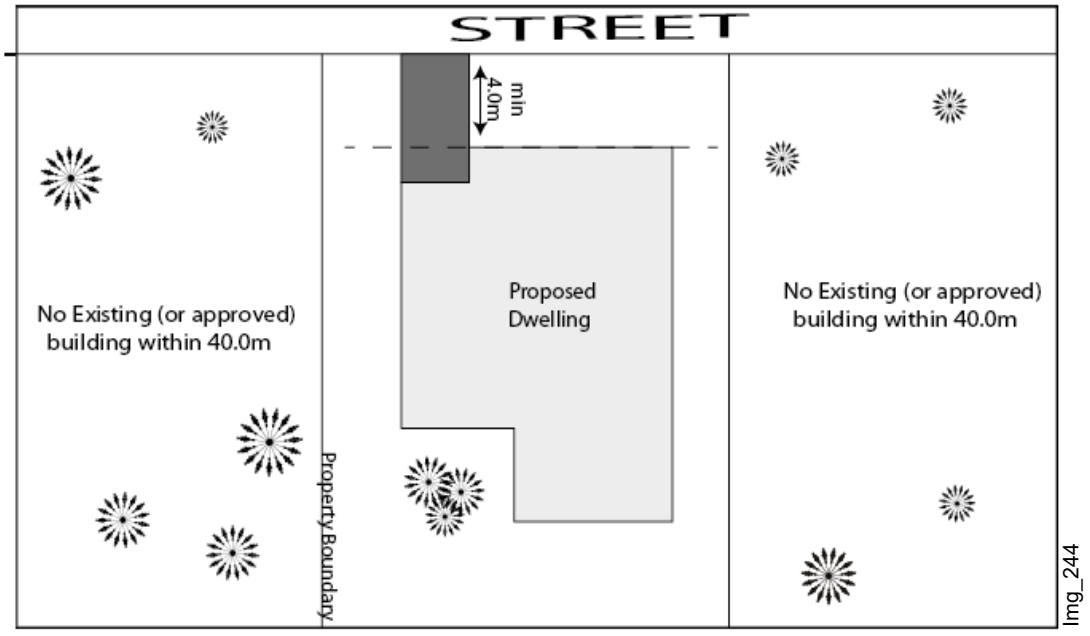

Figure 3 - Street Setback – no existing adjoining dwellings

3.3 SIDE SETBACK

Objectives

a. To provide adequate separation between buildings to ensure there is a reasonable level of privacy, solar access and natural ventilation.

b. To provide visual separation between buildings.

c. To ensure greater separation between upper floors of adjacent dwellings.

d. To provide opportunities for the planting of vegetation.

Controls

1. In the R2 and R3 zones, side setbacks must be a minimum of 900mm for building height up to 4.5 metres.
2. In the R2 and R3 zones, side setbacks must be a minimum of 1.5 metres for building height over 4.5 metres but less than three storeys.
3. In the R2 and R3 zones, the side setback must be a minimum of 3 metres for building height of three storeys or more.

Note*:* The minimum setback of a point on a building is based on the building height at that point.

Note*:* Any additional controls for specific development types are located in Part 9 (Specific Land Uses).

Note: Awnings and carports may be located within the side setback, as long as they are not located under the main roof of the dwelling.

Note: Larger setbacks may be required on a sloping site as set out in Section 3.26 of this chapter.

Note: Section 3.5 of this chapter contains exceptions to the site boundary setbacks provided above.

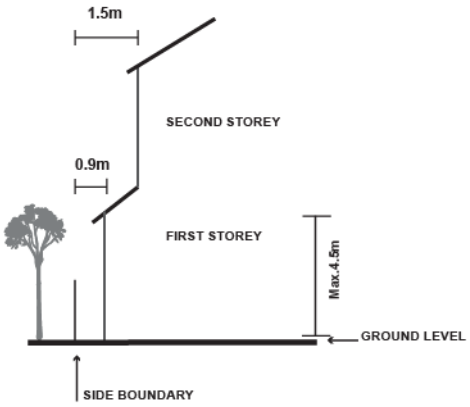

Figure 4 - Side setbacks for 2 storey buildings

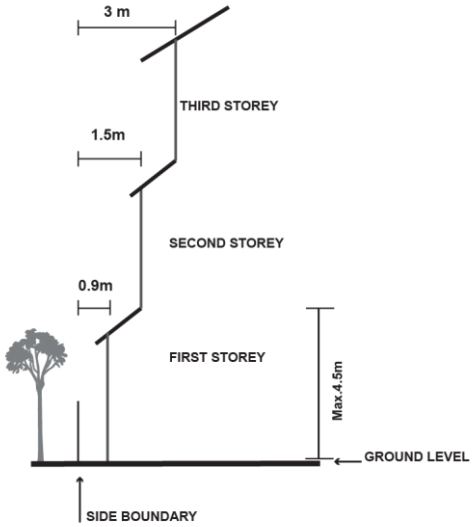

Figure 5 - Side setbacks for buildings of three storeys or more

3.4 REAR SETBACK

Objectives

a. To provide for tree planting in deep soil at the rear of lots.

b. To maintain the existing visual continuity and pattern of buildings and landscape elements.

c. To provide vegetation screening between dwellings.

d. To provide sufficient space for outdoor living areas.

Controls

1. In the R2 and R3 zones, rear setbacks must be a minimum of three metres for buildings up to 4.5 metres in height.
2. In the R2 and R3 zones, rear setbacks must be a minimum of six metres for buildings over 4.5 metres in height, but less than three storeys.
3. In the R2 and R3 zones, the rear setback must be a minimum of nine metres for building height of three storeys or more.

***Note**:* The minimum setback of a point on a building is based on the building height at that point.

***Note**:* Outbuildings, garages, carports, swimming pools, spas, decks, terraces and private open space may be located within the rear setback, as long as they are not located under the main roof of the dwelling.

***Note**:* Any additional controls for specific development types are located in Part 9 (Specific Land Uses).

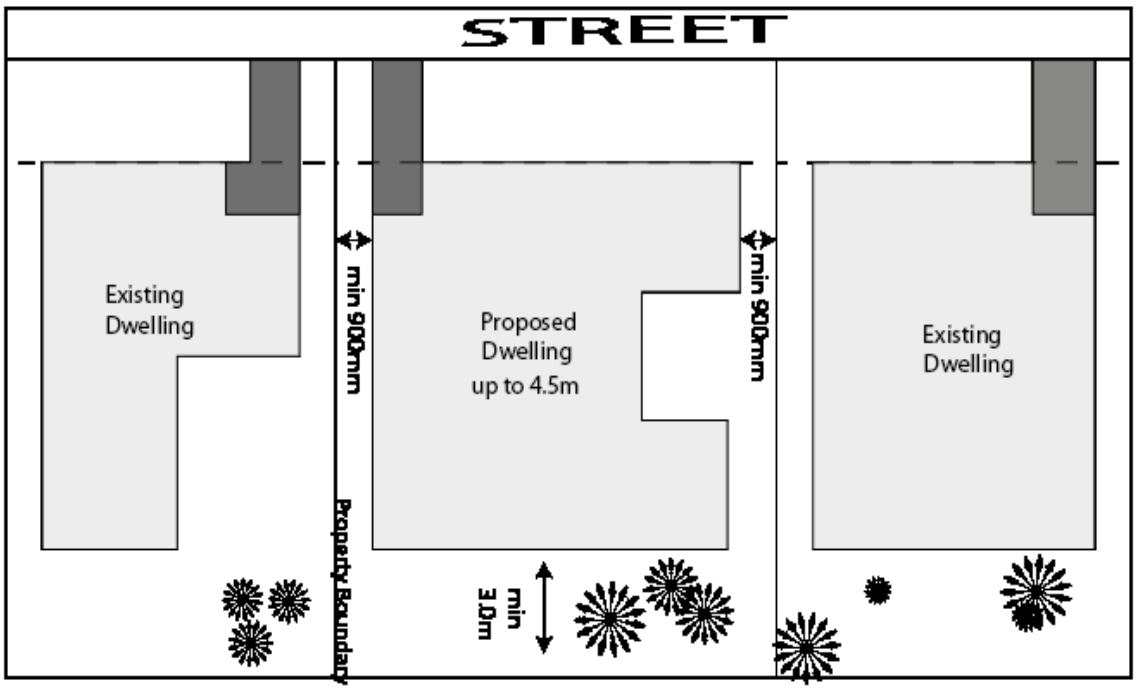

Figure 6 - Side and Rear Setback – buildings up to 4.5m in height.

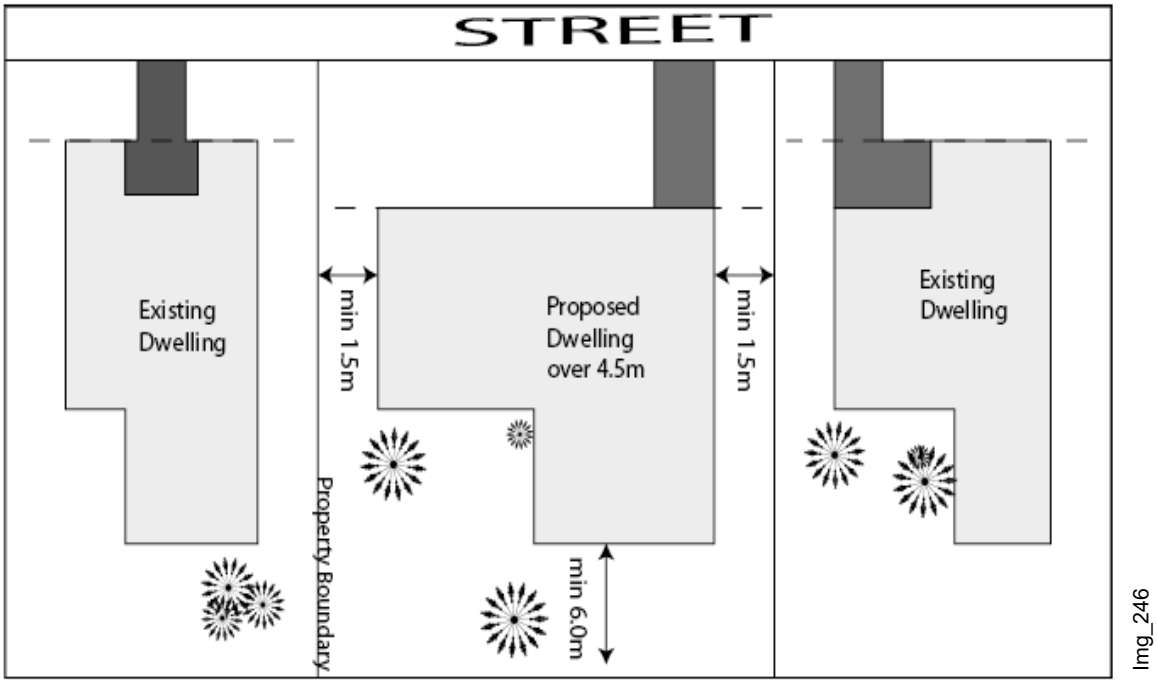

Figure 7 - Side and Rear Setback – buildings over 4.5m in height, but less than 3 storeys

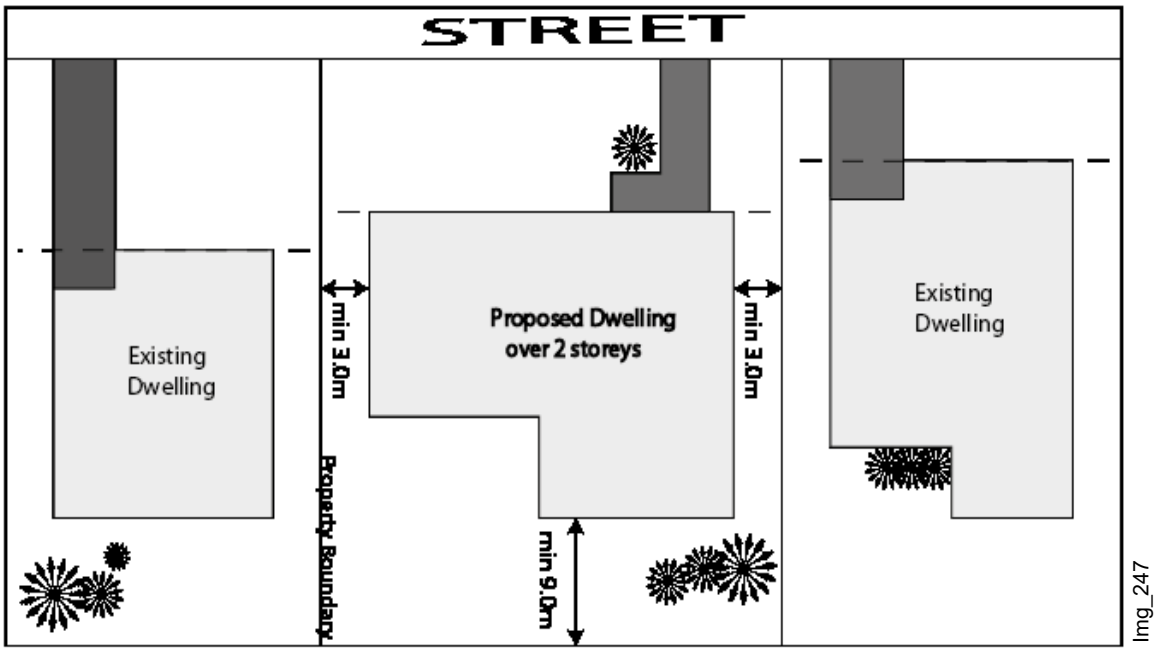

Figure 8 - Side and Rear Setback – buildings of 3 storeys or more

3.5 SITE COVERAGE

Objectives

a. To ensure density of development is in keeping with the local street character.

b. To provide sufficient area around a dwelling for access ways, private open space and landscape planting.

c. To maximise the potential for on-site stormwater retention.

Controls

1. The maximum site coverage, including ancillary development, must not exceed 50%.

Note: Site coverage means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

- any basement,
- any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
- any eaves,
- any unenclosed balconies, decks, pergolas and the like.

Note: Balconies, decks, pergolas and the like located under the main roof of the building are not considered to be unenclosed and will be included in the site coverage calculation.

Note: Site coverage controls operate in tandem with the Stormwater Management, Principal Private Open Space, and Landscaped Area and Design controls in this DCP to ensure that adequate unbuilt area is available for outdoor recreation and for reducing stormwater discharge from the site. Stormwater permeability and integration with the landscape design must be considered when determining whether structures are included in the site coverage calculations. ***Note****:* Any additional controls for specific development types are located in Part 9 (Specific Land Uses).

3.6 BUILDING BULK

Objectives

a. To minimise the visual impact of development when viewed from adjoining properties, the street, waterways and land zoned for public recreation purposes.

b. To ensure future development responds to the desired future character of the area and that its bulk and scale is not excessive.

c. To provide adequate separation between buildings.

Controls

1. Building height, scale, and roof form must relate to the topography and the existing site conditions.
2. Verandas, recesses, surface treatments and variations in material selection and colour must be utilised to reduce building bulk.
3. Unbroken walls in excess of 15 metres in length or four metres in height must be avoided. This can be achieved by varying wall alignments, or incorporating door and window openings, balconies, awnings, architectural detail or changes in materials to provide visual relief.
4. Basement parking structures between the street frontage and the main front elevation must be no more than one metre above ground level at any point.
5. The scale and massing of landscape planting must be adequate to reduce the visual bulk of development.

3.7 GARAGES, CARPORTS, AND SHEDS

Objectives

a. To ensure that garages, sheds and carports do not dominate the streetscape.

b. To integrate the location and design of garages and car parking without compromising street character, landscape or pedestrian amenity and safety.

Controls

1. Garages and sheds must be setback a minimum of one metre from the front building line.
2. Garages, carports, and sheds must be integrated into the design of the building and be of an appropriate size and scale.
3. Laneways must be utilised where available, to provide rear access to car parking.
4. Where garages and carports address the street, openings must not exceed six metres or 50% of the building width, whichever is the lesser.
5. Where additional vehicular storage is required, garages and carports that address the street may be extended lengthwise, as opposed to increasing the width fronting the street.
6. Carports are preferred within the side or rear setbacks, but may be considered in the front setback where:
    i. The carport does not have a trafficable roof;
    ii. The carport is set back a minimum of two metres from the front street boundary;
    iii. The design of the carport complements the dwelling; and
    iv. The carport has minimal impact on the streetscape, does not obscure views from the street to the front elevation of the dwelling, and has at least three open sides.
7. Design of garages, carports, and sheds must contribute in a positive way to the streetscape and character of the locality.

3.8 ROOFS

Objectives

a. To ensure that roof forms are designed to complement the local street character.

b. To ensure that roof height does not unnecessarily increase the bulk of the building.

c. To ensure that roofs are designed to conceal plant and other associated equipment.

Controls

1. The roof form must not be the dominant built element of a dwelling on any elevation.
2. The roof design must be a low angled pitched form where this complements the prevailing built form in the street.
3. For single storey development or where the second floor is fully contained within the roof space the roof must not exceed 5m in height.
4. For all other development the roof must not exceed 3m in height.
5. Air conditioning units, lift motor rooms and other plant must be fully integrated within the building volume, either within the roof volume or within an architectural roof feature.
6. Other roof elements, such as photovoltaic panels, communication devices, antennae, satellite dishes, chimneys and flues must not have an adverse impact on views from neighbouring properties, or from the public domain.

3.9 VIEWS

Objectives

a. To allow for the reasonable sharing of views.

b. To ensure that solar access to each dwelling has priority over access to views.

c. To ensure that retention of existing canopy trees has priority over views.

Controls

1. Developments must provide for the reasonable sharing of views in accordance with the Planning Principle established by the Land and Environment Court in *Tenacity Consulting v Warringah Council* [2004] NSLEC 140 and *Davies v Penrith City Council* [2013] NSWLEC 1141.
2. Developments must provide for reasonable public domain views in accordance with the Planning Principle established by the Land and Environment Court in *Rose Bay Marina Pty Limited v Woollahra Municipal Council* [2013] NSWLEC 1046.
3. Dwelling design must address solar access before the access to views.

3.10 SOLAR ACCESS AND ORIENTATION

Objectives

a. To ensure that reasonable access to sunlight is maintained for occupants of new and existing dwellings.

b. To optimise solar access to habitable living areas.

c. To ensure solar access is maintained to adjoining open space and public domain areas.

Controls

1. Developments must provide for the reasonable access to sunlight in accordance with the Planning Principle established by the Land and Environment Court in *The Benevolent Society v Waverley Council* [2010] NSWLEC 1082 and *Davies v Penrith City Council* [2013] NSWLEC 1141.
2. At a minimum, three hours of sunlight must be available between 9am and 3pm on June 21, to at least 50% of:

i. Habitable rooms, and

ii. The required area of private open space of each development, and

iii. The required area of private open space of adjoining developments.

***Note*:** Council may accept a reduction in solar access for the development or adjacent sites if the topography and lot orientation is such that the three hour standard is considered unreasonable.

3. Where adjacent existing developments and their private open space receive less than the minimum requirements, any new development must seek to maintain or enhance the solar access of the adjacent buildings.
4. Dwellings with a single aspect facing south should be minimised. Where unavoidable, applications must demonstrate adequate levels of natural light penetration to habitable areas of the dwelling.
5. Where lot orientation allows, developments should be designed so that the long axis of the development is running east-west.
6. Building openings on the western elevations should be minimised. Where openings are unavoidable, they should be located higher on the façade and shaded by eaves or landscaping or similar.

***Note**:* The shadow cast by fences, roof overhangs, and changes in level should be included on any shadow diagrams to allow assessment of the impact of overshadowing.

3.11 ENERGY EFFICIENCY AND GENERATION

Objectives

a. To ensure building orientation maximises solar access and natural cross ventilation.

b. To ensure energy efficiency is achieved in all developments.

c. To allow opportunities for future installation of renewable energy generation and low carbon technology.

d. To minimise the economic impacts of increasing electricity costs and any requirements to disclose energy efficiency when selling or leasing a property.

e. To promote increased levels of energy efficiency in large-scale developments.

Controls

1. Buildings must be oriented to provide efficient use of solar energy and natural ventilation wherever possible.
2. Designs must consider future potential for renewable energy generation and low carbon technology.
3. Development design for detached and semi-detached homes should achieve a higher than compliant SEPP BASIX rating to reduce future energy costs.
4. Developments in excess of 2,000m² gross floor area should achieve the equivalent of a minimum 4 Star Rating under the Green Building Council of Australia's Green Star Rating tool.

Note: These controls are in addition to the requirements of SEPP BASIX and Section J of the Building Code of Australia. Formal certification of Green Star Rating under the Green Building Council of Australia is not required. Justification that the design would achieve the Green Star rate or an equivalent rating under a different system is only required.

4 VISUAL PRIVACY

Objectives

a. To ensure that the design of buildings provides an acceptable level of internal and external visual privacy for new and existing developments, on the subject and surrounding land.

b. To maximise outlook, views, and natural surveillance without compromising visual privacy.

Controls

1. Developments must provide for a reasonable level of privacy in accordance with the Planning Principle established by the Land and Environment Court in *Meriton v Sydney City Council* [2004] NSWLEC 313,*Super Studio v Waverley Council* [2004] NSWLEC 91 and *Davies v Penrith City Council* [2013] NSWLEC 1141.
2. Living areas, habitable rooms and windows must be orientated to private open space areas on the same lot, or to the street.
3. Doors, windows and balconies must be designed and orientated to avoid overlooking the private open space and habitable rooms of surrounding dwellings. Avoid direct or close views of 9 metres or less. Screening devices, high sills or obscured glass may be used only where other options are not feasible.
4. Planter boxes, louvres, screens, pergolas, balcony design and the like must be used to screen a minimum of 50% of the principal private open space of a lower dwelling from overlooking from a higher dwelling. Landscape planting must not be relied upon as sole protection against overlooking.

4.1 ACOUSTIC PRIVACY

Objectives

a. To ensure that noise emissions do not unreasonably affect the amenity of the area or result in noise intrusion that would be unreasonable for occupants, users, or visitors.

b. To ensure that dwellings have an acceptable level of acoustic privacy.

Controls

1. Developments near existing noise generating activities such as roads, railways and industry must be designed to mitigate the effect of noise on the occupants.
2. Where viable, noise sensitive areas – such as bedrooms and private open space in mixed use developments – must be located away from noise sources.
3. Building structures must be designed to minimise the transmission of sound, particularly to sleeping and living areas through design measures such as orientation, separation, double glazing, screened balconies.
4. Development must demonstrate that dwellings achieve an internal comfort level in accordance with the relevant Australian Standard.
5. Private open space including balconies must be designed to achieve comfort levels in accordance with relevant Australian Standards for noise accentuation.
6. Developments must provide for a reasonable level of acoustic privacy in accordance with the Planning Principle established by the Land and Environment Court in *Davies v Penrith City Council* [2013] NSWLEC 1141.

4.2 LANDSCAPED AREA

Objectives

a. To provide areas of landscape planting that improve visual amenity, privacy, outlook, views and recreational opportunities for residents and occupants within a development

b. To enable landscape planting in front setback areas that enhances the streetscape.

c. To enable landscape planting in rear setback areas that enhances residential amenity.

d. To ensure landscape areas are integrated into the design of the development.

e. To promote on-site stormwater infiltration by encouraging pervious surfaces and landscaped areas.

f. To conserve significant vegetation, topographical features and fauna habitat.

Controls

1. For lots less than 600m^2, the minimum landscaped area must be 20% of the total lot area.
2. For lots between 600m^2 and 900m^2, the landscaped area must be at least 25% of the total lot area.
3. For lots greater than 900m^2, the landscaped area must be at least 35% of the total lot area.
4. For lots greater than 1500m^2, the landscaped area must be at least 45% of the total lot area.
5. Proposals must retain significant natural features on the site, including mature trees, rocky outcrops and other major vegetation where practical.
6. At least one landscaped area capable of supporting a mature tree must be located adjacent to the rear boundary.

Note*:* A minimum width of 2 metres is required for an area to be included in the landscaped area calculations.

4.3 LANDSCAPE DESIGN

Objectives

a. To provide site landscaping that complements the nature and scale of the development and contributes to the desired streetscape character.

b. To enhance the privacy and amenity of new and existing dwellings.

c. To provide shade and screening to car parking areas.

d. To maintain clear lines of site to entry points and access ways.

e. To design landscape works that are robust and require minimum maintenance.

Controls

1. Appropriate landscape documentation must be prepared and submitted, in accordance with Table 3 – Landscape Development Type and Requirements.
2. Appropriately qualified professionals must prepare landscape documentation. For Category 3 development, a qualified landscape architect should prepare landscape documentation. For Category 2 development, a landscape architect, landscape designer, or horticulturist should prepare landscape documentation.
3. The landscape consultant's declaration must be signed and submitted with the relevant landscape documentation.

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements.

Table 6 - Landscape development type and requirements

Development Type and Category	Landscape Documentation	
	Landscape Concept Plan at DA stage	Landscape Masterplan and Report at DA stage
Category 3: **Large Scale** • Development with an estimated value exceeding $1m, or • Development of 10 or more dwellings, or • Designated development, or • Childcare facilities, community facilities, educational establishments, seniors housing, health services facilities, or tourist accommodation, or. • Development in areas of high scenic quality, adjacent to the lake or Pacific Highway, in or adjacent to an environmental zone, on visually dominant ridgelines, or in a heritage conservation area.	Yes	Yes
Category 2: **Medium Scale** • development for 3-9 dwellings, or • dual occupancy development	No	Yes
Category 1 Small Scale • single dwellings, or • development that will have little impact on the existing environment	No	No

Note: If a development type is not detailed in this table or you are unsure of the category and requirements seek advice from Council.

Note: See Part 9 Specific Land Uses for landscape requirements related to Residential Flat Buildings and Multi-Dwelling Housing.

4.4 PRINCIPAL PRIVATE OPEN SPACE

Objectives

a. To ensure that dwellings are provided with functional, well located areas of private open space.

b. To ensure that private open space is integrated with, and is directly accessible from the living areas of a dwelling.

c. To ensure that private open space receives sufficient solar access and privacy.

d. To minimise adverse impacts on the private outdoor space of adjoining dwellings.

Controls

1. Residential developments must include private open space for each dwelling that:
   i. has a minimum area of 24m^2, and
   ii. has a minimum dimension of four metres, and
   iii. has a grade less than 1:50.
2. Private open space must be accessible from, and adjacent to a habitable room other than a bedroom.

3. Private open space within the front setback may only be considered on local roads and where it cannot be accommodated anywhere else as demonstrated by the site analysis
4. Private open space located within the front setback area must:
   i. maintain clear, direct access to dwelling entry when viewed from the street, and
   ii. not cover more than 50% of the building frontage, and
   iii. have a minimum of 3 hours of sun access between 9 am and 3 pm, and
   iv. not have a solid fence that is more than 1 metres high or an open fence that is more than 1.5 metres high, and
   v. incorporate landscaping in front of fence for privacy and streetscape, and
   vi. maintain streetscape surveillance.

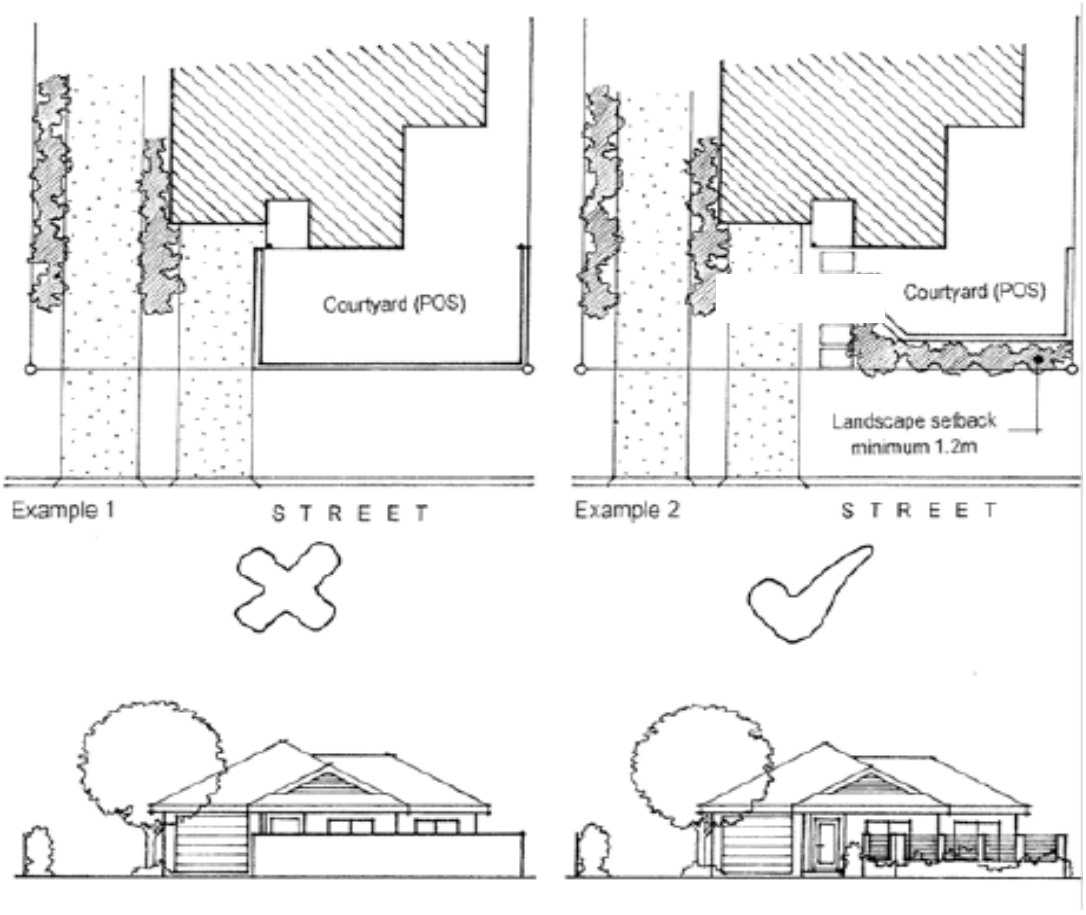

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Figure 9 - Good and Poor Examples of Private Open Space within the Front Setback

4.5 FRONT FENCES

Objectives

a. To ensure that fencing, terracing, and retaining walls are compatible with the existing streetscape character and do not dominate the street.

b. To provide privacy and security for residents, by delineating between public space and private property.

c. To allow passive surveillance of the street.

Controls

1. Front fences and front fence returns must not exceed 1.2 metres above the existing ground level or the footpath level (whichever is higher) when measured from the street side of the fence.
2. Front and side return fences must not be lapped or capped timber, or powder coated metal (Colorbond®) fencing.
3. Front fences must be designed to allow a direct line of sight from windows and entries to the street.
4. Retaining walls, if required, must be integrated in the design of the fence.
5. Where it can be demonstrated that a solid fence is consistent with the existing streetscape and is required to mitigate traffic noise, a fence up to 1.8 metres in height may be permitted when fronting arterial roads or highways.
6. On corner blocks, both the front fence and the secondary frontage fence, including fence returns, must not exceed 1.2 metres above the existing ground level or the footpath level (whichever is higher) when measured from the street side of the fence. The fence return on the secondary frontage shall extend to the rear building line.

Note: A front fence return is that part of the fence located between the street boundary and the building alignment.

4.6 SIDE AND REAR FENCES

Objectives

a. To provide privacy and security for residents.

b. To limit the visual impact of side and rear fences.

Controls

1. Side and rear boundary fences must not exceed 1.8 metres above the existing ground level.
2. For sloping sites, side and rear boundary fences may be regularly stepped provided the average height does not exceed 1.8 metres.
3. Where fences are proposed in conjunction with a retaining wall, the combined height of the fence and retaining wall must not exceed 1.8 metres above the existing ground level.

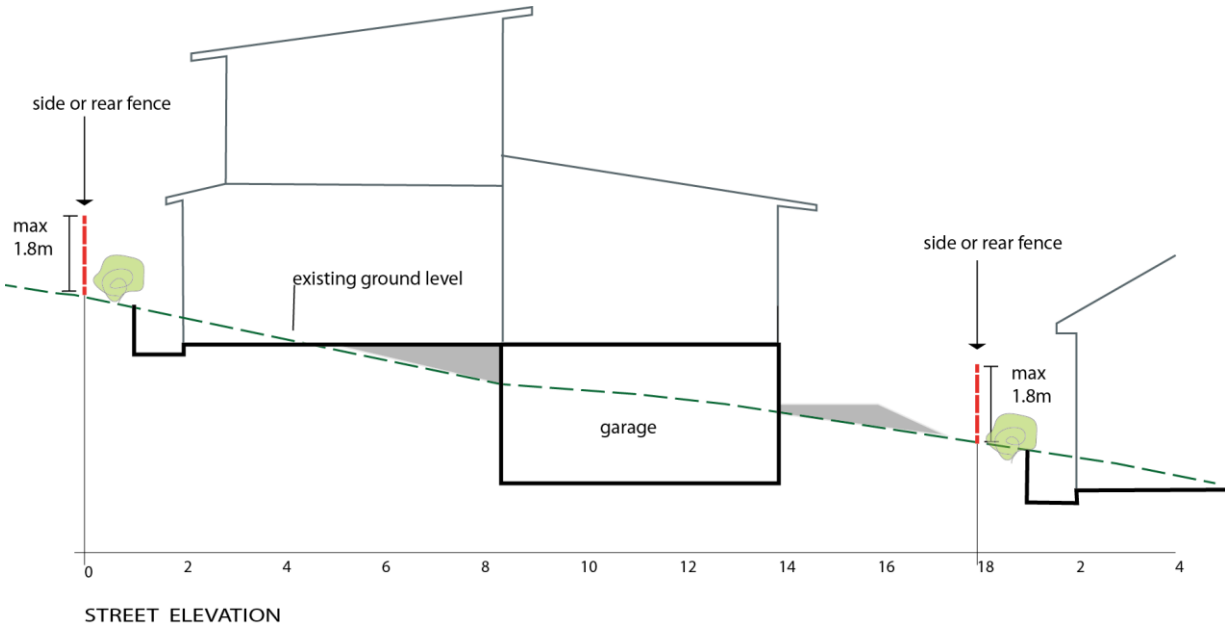


Figure 10 - Maximum Height of Side and Rear Fences

4.7 TRAFFIC AND TRANSPORT

Objectives

a. To provide effective, efficient and safe movement within urban areas for pedestrians, cyclists, and motor vehicles.

b. To ensure that vehicles can enter and leave a development site in a forward direction, unless otherwise justified to Council's satisfaction.

c. To minimise vehicle crossing points along pedestrian footpaths.

Controls

1. Vehicular access points to a site must be kept to a minimum. A single access point is preferred for most developments.
2. Access directly from arterial and sub-arterial roads must be minimised to maintain the efficient flow of traffic on those roads. Alternative access is encouraged where available.
3. Driveways must be designed and constructed to provide adequate sightlines.
4. Driveways and internal road circulation must be designed to cater for safe manoeuvring and queuing so that traffic operations on external roads are not disturbed.
5. Driveways are of a type, construction and width suitable to the proposed development.
6. A Traffic Impact Statement must prepared and submitted where:
   i. More than 20 dwellings are proposed; or
   ii. More than 1000m^2 Gross Floor Area is proposed; or
   iii. Direct access is required for an arterial or sub-arterial road; or
   iv. The main entry driveway is within 50 metres of a signalised intersection.

Note: Refer to Council's *Traffic Impact Statement and Vehicle Access Guideline* for further details and requirements.

4.8 DESIGN OF PARKING AND SERVICE AREAS

***Objectives*:**

a. To ensure that on-site car parking and driveways do not dominate or detract from the appearance of the development or the local streetscape.

b. To maximise pedestrian safety and amenity.

c. To encourage co-operative approaches to car parking provision between adjoining small lots, such as amalgamation of car parks and shared access and egress points.

d. To ensure the safe and efficient movement of vehicles within, entering and leaving properties.

Controls:

1. On-site car parking and servicing facilities must be located at the rear of development.
2. Car parking and driveway areas must be located to minimise disruption to pedestrian movement, safety and amenity on the public footpath.
3. Car park design must include direct, safe, and well marked pedestrian routes from the car park to building entries.
4. Car park design must not result in dead-end aisles.
5. Parking aisles must be orientated at right angles to the main building frontage.
6. Car parks must be screened from the street with landscape planting or with high quality façade screening that allows natural lighting and ventilation.
7. Servicing facilities must be located and designed to protect the amenity of residents.
8. Stack parking may be permitted only where two spaces are designated for a single dwelling.
9. Permanent sub-surface support and retention structures must be set back a minimum of 900mm from adjacent property boundaries.
10. The design of parking areas must comply with *AS2890 Parking Facilities.*

4.9 DESIGN OF DRIVEWAYS

Objectives

a. To minimise the visual impact of driveways on the streetscape.

b. To ensure that driveways are designed to cater for the demands of the development.

Controls

1. For Dwelling House and Dual Occupancies (attached and detached), only one driveway access is permitted per lot.
2. For Dwelling House and Dual Occupancies (attached and detached), driveway crossings must have a maximum width of four metres at the apron and five metres at the lot boundary. Consideration may be given to wider driveways where it is demonstrated that additional width is required for safety reasons and materials minimise impact.
3. Driveways must be offset a minimum of one metre from any side boundary for their full length.
4. Driveways must not have a longitudinal grade exceeding 20% (1:5).
5. Stacked parking in front of a garage may be permitted where all parking is within the property boundary and located on the driveway.
6. Battle-axe carriages must have a minimum width of three metres.
7. Driveways for battle-axe allotments must be designed to ensure that vehicles can enter and leave the lot in a forward direction.
8. Landscaping should minimise the impact of the driveway on the streetscape without risk to safety.

4.10 MOTOR BIKE PARKING AND BICYCLE STORAGE

Objectives:

a. To provide convenient and safe access, movement and parking of motor bikes and bicycles for residential flat buildings.

Controls:

1. Development of a residential flat building must provide one motorbike parking space for each 20 car parking spaces (as required in Table 6: Parking Rates).
2. Development design should incorporate bicycle storage areas.

4.11 CAR PARKING RATES

Objectives

a. To ensure that the number of car parking spaces is sufficient to support the intended use.

b. To ensure that the number of car parking spaces does not discourage the use of public transport or other modes of transport.

Controls

1. The number of car parking spaces provided must be consistent with the specifications of the Table 6: Car Parking Rates.
2. Where vehicle parking requirements are not specified in Table 6, justification must be provided that supports the proposed vehicle parking provisions, such as:
   i. Survey data from comparable facilities; and
   ii. Survey data from existing operations where expansion is proposed.
3. Where the floor area of an existing development is being increased, the required car parking is to be calculated for the additional floor area only.
4. Where the proposed number of car parking spaces is **less than** or **greater than** as specified in Table 6, justification must be provided to support a variation, such as:
   i. Survey data from comparable facilities;
   ii. Survey data from existing operations where expansion is proposed; or
   iii. A proposal for dual use of parking spaces.
5. A reduction to the car parking rate must not exceed 20% or 20 spaces whichever is the lesser.

Note: 'Amenities' and 'storage space' are not included when calculating Gross Floor Area (GFA) for car parking purposes.

Table 7 - Car Parking Rates for Development in Residential Zones

<table>
<tr><th>Development Type</th><th>Car Parking Rate</th></tr>
<tr><td>Attached dwellings</td><td>One undercover space and 1 space as single file parking per dwelling</td></tr>
<tr><td>Boarding houses and group homes</td><td>One space plus 0.75 spaces per bed, where located on an Arterial or Sub Arterial Road.
Or
One space plus 1 space per bed where located on roads other than an Arterial or Sub Arterial Road.</td></tr>
<tr><td>Disability parking rate</td><td>One space per 50 spaces. Where the requirement is between 5 and 50 spaces, at least 1 space is to be provided for persons with a disability. All disabled parking must comply with the relevant Australian Standard.</td></tr>
<tr><td>Dual occupancies – attached or detached</td><td>One undercover space and 1 space as single file parking per dwelling of the dual occupancy.</td></tr>
<tr><td>Dwelling house</td><td>One undercover space and 1 space as single file parking.</td></tr>
<tr><td>Residential flat buildings, multi dwelling housing and shop top housing. Including, as a component of mixed use developments.</td><td>
<table>
<tr><td>No. of Bedrooms</td><td colspan="2">Avg. Vehicle Spaces Per Dwelling</td></tr>
<tr><td>Location</td><td>A</td><td>B</td></tr>
<tr><td>1 bedroom or studio apartment</td><td>0.5</td><td>0.75</td></tr>
<tr><td>2 bedrooms</td><td>0.75</td><td>1.0</td></tr>
<tr><td>3 bedrooms</td><td>1.0</td><td>1.5</td></tr>
<tr><td>Plus</td><td></td><td></td></tr>
<tr><td>Visitor parking per dwelling –</td><td></td><td></td></tr>
<tr><td>Residential flat buildings</td><td>0.25</td><td>0.25</td></tr>
<tr><td>Multi dwelling housing</td><td>0.5</td><td>0.5</td></tr>
</table>
Where:

A – On R3 zoned land adjacent to B2, B3 or B4 zoned land where the dwelling is less than 400 metres direct walking distance from business zone boundary.

B – In residential zones where ‘A’ does not apply.

Single file parking may be used where two spaces are provided for one dwelling.</td></tr>
<tr><td>Semi-detached dwellings</td><td>One undercover space and 1 space as single file parking per dwelling.</td></tr>
<tr><td>Seniors housing</td><td>Car parking provision is in accordance with SEPP (Senior Living) requirements.</td></tr>
<tr><td>Home business or home industry

Where vehicles are an intrinsic component of the business or industry</td><td>As per Dwelling - i.e. 1 undercover space and 1 space as single file parking per dwelling.
As per dwelling, plus 2 spaces</td></tr>
<tr><td>Backpackers' accommodation</td><td>One space per 100m² GFA and parking for a mini-bus</td></tr>
<tr><td>Bed and breakfast establishment</td><td>As per dwelling house, plus 1 space per guestroom. May be provided as single file parking where guest parking is provided behind dwelling parking.</td></tr>
<tr><td>Hotel or motel accommodation
May include dining facilities, outdoor eating areas or beer gardens.
Where providing accommodation
Where providing conference facilities</td><td>
One space per 25m2 of GFA

One space per short-stay room, plus 1 space per 2 staff.
One space per 5m² of GFA.</td></tr>
</table>

Development Type	Car Parking Rate
	Note – Where a mixture of these activities occurs calculate vehicle parking requirements based on activity mix.
Serviced apartments	One space per unit, plus 1 space per 50m² GFA for any dining room provided as part of the development
Eco-tourist facilities (not including a Motel or Hotel) *Where Serviced Apartments* *Where Backpackers Hostel*	 One space per unit, plus 1 space per 50m² GFA for any dining room provided as part of the development, One space per 100m² GFA and parking for a mini-bus
Business premises	One space per 40m²GFA. And where more than 20 car spaces are required and the development is within 400m of a designated bus route, the development provides a 'Bus shelter' (or approved equivalent) in lieu of 1 car space in every 40, or part thereof, of the onsite spaces required. One shelter to be provided for each car space deleted
Funeral homes	One space per employee plus 1 space per 3 seats in chapel(s)
Restaurant or café *Where the total area is less than 5000m² GFA* *Where the total area is greater than 5000m² GFA*	 1 space per 25m² GFA 1 space per 40m² GFA Note – See Australian Standard for Fast Food takeaway vehicle queuing lengths.
Neighbourhood Shops *Where the total area is less than 5000m2 GFA* *Where the total area is greater than 5000m2 GFA*	 One space per 25m² GFA One space per 40m² GFA
Education establishments *Where pre-school with normal school Hours* *Where primary or secondary school* *Above secondary school*	 One space per 4 children, plus 1 space per 1.5 full-time equivalent staff. One space per 1.5 full-time equivalent staff, plus 1 space per 50 students One space per 1.5 full-time equivalent staff, plus 1 space per 8 students
Hospitals (not including a day surgery facility – refer to Medical Centres) *Where a nursing home, hospice, or similar long-stay establishment*	One space per 2 beds, plus 1 space per 2 staff, plus Ambulance spaces One space per 6 nursing home beds, plus 1 space per 2 staff. Note – Calculate staff spaces on the maximum number of staff at any one time. Where a mixture of these activities occurs calculate vehicle parking requirements based on the activity mix
Medical centres *Where a health centre or diagnostic technology centre* *Where a day surgery* *Where a collection Centre* *Where a laboratory*	 One space per on-duty practitioner, plus 1 space per 2 full-time equivalent employees, plus 1.5 spaces per consulting room, plus 1 space for delivery and collection service As above, plus 1 space per 2 operating theatres One space, plus 1 space per collection room, plus 1 space for delivery and collection service Two spaces, plus 1 space per 50m2 GFA Note – Where a mixture of these activities occurs calculate

Development Type	Car Parking Rate
	vehicle parking requirements based on the activity mix
Health consulting rooms	One space per on-duty practitioner, plus 1 space per 2 full-time equivalent staff, plus 2 spaces per consulting room.
Child care centres	One car space per 8 children, plus 0.75 spaces per staff member. Parking designated for staff may be provided as single file parking where practical.
Community facilities	Five spaces, plus 1 space per 40m² GFA
Place of Public Worship	One space per 3 seats
Recreation facilities (outdoor)	
Football	Thirty spaces per field, plus 1 space per 3 seats, where spectator seating is provided.
Lawn bowls	Thirty spaces for the first green then 15 spaces for each additional green
Swimming	Fifteen spaces, plus 1 space per 100m² of site area
Tennis	Three spaces per court
Exhibition homes	Two spaces per dwelling house used for exhibition

4.12 NON-DISCRIMINATORY ACCESS

Objectives

a. To ensure non-discriminatory access so that development accommodates all people.

Controls

1. The design and construction of development must ensure that non-discriminatory access is provided to enable all users of that development to access the same level of service/use.
2. Where development is listed in Table 7, a Disability Access Audit must be prepared in accordance with Council's *Non-discriminatory Access Guideline* and submitted to Council. The Disability Access Audit must be prepared by an accredited access consultant.

Note: Refer to Council's *Non-discriminatory Access Guideline* for further information.

Note: A Disability Access Audit may be waived for some developments at the discretion of the assessing officer for some Change of Use proposals.

Table 8 - Development types requiring a Disability Access Audit

Amusement centres with a total floor area of 500m² or more	Markets with a total floor area of 500m² or more
Backpackers' accommodation with 20 or more bedrooms	Manufactured home estate/caravan park
Boarding House with more than 20 rooms	Medical centre
Business/commercial premises with a total floor area of 500m² or more	Mixed use development with a total floor area of 500m² or more
Child care centre	Multi-dwelling housing with 10 or more dwellings
Community facility	Nightclub
Educational establishment	Passenger transport facilities
Entertainment facility	Place of public worship
Function centre	Recreation facilities – indoor, outdoor and major
Group home	Registered club
Health consulting rooms with four or more	Retail premises with a total floor area of 500m² or

consulting rooms	more
Health services facilities	Residential care facility
Hospital	Residential flat building with 10 units or more
Hotel or motel accommodation	Seniors housing
Information and education facility	Tourist accommodation with 20 units or more
Licensed premises	Change of Use

4.13 SAFETY AND SECURITY

Objectives

a. To assist the development in mitigating opportunities for criminal activity, behaviour, and perceived opportunities for crime.
b. To ensure a development contributes to the liveability, safety and security of it users.

Controls

1. Developments must ensure that the following Crime Prevention Through Environmental Design (CPTED) principles have informed the design of the proposed development:

    i. Surveillance – Developments must be designed and managed to maximise the potential for passive surveillance;

    ii. Access Control – Developments must be designed so as to make them legible for users without losing the capacity for variety and interest;

    iii. Territorial Reinforcement – Developments must be designed to define clearly legitimate boundaries between private, semi private and public space; and

    iv. Space Management – Developments must be designed and detailed to minimise damage and the need for undue maintenance, without undermining the aesthetic and functional qualities of the building.

Note: Refer to Council's *Crime Prevention Through Environmental Design Guideline* for further information on CPTED principles.

2. Where development:

    i. is listed in Table 8, or

    ii. is valued at $5,000,000 or more, or

    iii. has a gross floor area greater than 5,000m^2, or

    iv. will be open to the public between the hours of 9pm and 6am, a Crime Risk Assessment must be prepared and submitted to Council.

3. The Crime Risk Assessment should be prepared by a person who has undertaken the NSW Police Service 'Safer by Design' course (or equivalent) and must:

    i. Analyse the types of crime that may be prevalent in the area, and to which the development may be susceptible;

    ii. Provide information as to how the design was informed by the CPTED principles; and

    iii. Inform the design, construction or future management practises of the development (eg: building materials, signage, lighting, landscaping, security patrols, maintenance and graffiti removal practices).

4. Any recommendations or shortfalls identified by a Crime Risk Assessment are to be implemented into the design of the development to the satisfaction of the assessing officer.

Note: Refer to Council's *Crime Prevention Through Environmental Design Guideline* for further information on what needs to be covered in a Crime Risk Assessment..

Table 9 - Development types requiring a Crime Risk Assessment

Child care centres	Community facilities
Health services facilities	Seniors housing developments and hospitals with more than 30 beds
Group homes	Recreation areas
Health services facilities	Hostels
Residential development comprising more than 20 dwellings	Boarding houses
Educational establishments	Recreation facilities (indoor)
Place of public worship	Car Parking Station

4.14 CUT AND FILL

Objectives

a. To minimise land shaping, particularly outside the building footprint.

b. To ensure development is on a stable site.

c. To minimise the impact on groundwater flow.

d. To ensure that development does not concentrate surface water flows to adjoining properties.

e. To minimise the extent of earthworks, stormwater infrastructure and retaining structures and the associated costs.

f. To minimise the cost of future maintenance works required for retaining structures.

g. To maintain amenity and privacy for residents of the new dwelling and adjoining dwellings.

h. To ensure that fences are constructed on existing ground.

Controls

1. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area, or within the extent of the 100 year probable ARI (1% AEP) flood event.
2. All calculations for proposed fill must include existing fill material on the site.
3. Cut and fill associated with development must comply with the provisions in Table 9 and Figure 11 below.
4. Where the ground level change across the proposed footprint of a dwelling, measured in any direction, exceeds 2m, the dwelling design must include one or more of the following:
   i. split level design
   ii. 2 storey design with the garage below habitable floorspace
   iii. drop edge beam or suspended slab on a footing wall
   iv. pier and beam construction
5. Fences on common boundaries must be built at existing ground level.

6. A retaining wall within the front setback area or that faces the secondary street on a corner site must be constructed of masonry materials.
7. The face of a retaining wall must be a minimum of 1m from a common boundary.
8. Retaining structures greater than 1m in height must be designed by an engineer, and the certification details lodged with the development application.
9. Batter slopes must not exceed a gradient of 1:4, unless stabilised by dense planting.
10. Fill must not contribute to unreasonable impacts on amenity or the redirection of water onto adjoining properties.
11. Any fill used must be certified Virgin Excavated Natural Materials, certified Excavated Natural Material or uncontaminated engineered fill.

Note: If an application seeks to replace an existing retaining wall, consideration must be given to whether it is possible to achieve the above controls on the particular site.

Table 10 - Requirements for cut and fill works

Location	Type of Works	Requirement	Other Requirement
within building footprint	cut and/or fill - retained	c =3 m max	
outside building footprint	cut and/or fill - retained	1.0m max	
near common boundary	cut and/or fill - retained	a =1m min* b =1m max	landscape planting to area between boundary fence and retaining wall
near common boundary	fill – unretained batter	e =400 min	side and rear fences built on existing ground level
remainder of site	cut and/or fill - retained	1.0m max	retaining walls on or near a front boundary do not exceed 1.0m.
all of site	fill – unretained batter	d = 600mm max	batter slope not to exceed 1:4

Note *: distance to a boundary is measured from the face of the retaining wall

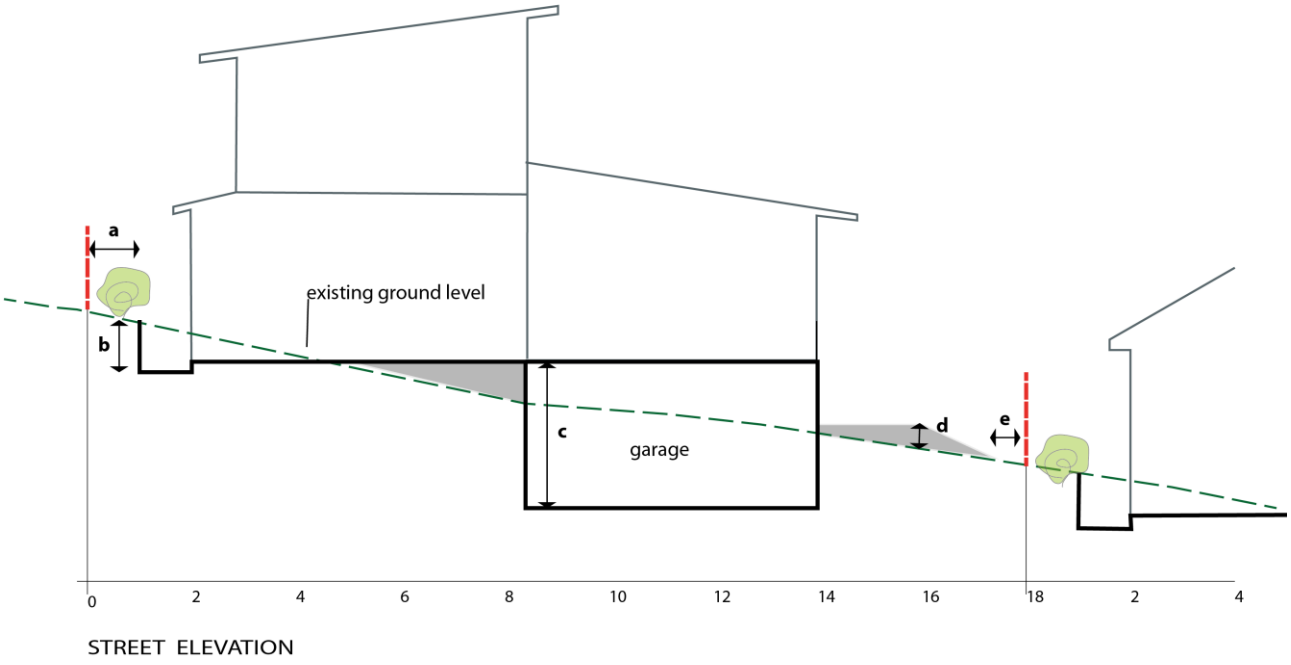


Figure 11 - Cut and fill for a dwelling

5 OPERATIONAL REQUIREMENTS

5.1 DEMOLITION AND CONSTRUCTION WASTE MANAGEMENT

Objectives

a. To reduce demolition waste by maximising beneficial reuse of infrastructure, buildings and materials onsite.

b. To avoid creating construction waste wherever possible.

c. To enable maximum diversion of demolition and construction wase to reuse, recycling or composting.

d. To ensure that waste management is planned across all demolition and construction stages so that reusable resources and waste can be appropriately and effectively stored and removed safely from site without adverse impacts on local amenity.

Controls

1. Applications must provide a completed Demolition Waste Management Plan (WMP) (where there are demolition works) and a Construction WMP (for construction works), in accordance with Chapter 2 (for Demolition) and Chapter 3 (for Construction) of the *Lake Macquarie City Council Waste Management Guidelines* unless the development is:

   i. Permitted without consent in this zone

   ii. Drainage

   iii. Earthworks

   iv. Roads

   v. Signs

   vi. Stormwater management facilities

   vii. Utility installations

   These plans must be provided to any relevant person involved in the demolition and/or construction, including architects, project managers, builders, contractors and sub-contractors.

2. The Demolition WMP must describe how the proposal avoids creating waste and how it maximises the reuse and recycling of demolition and construction materials.

3. The following must be shown on scaled plans to be submitted with the development application for demolition and construction stages:

   i. waste storage area(s) with bins and equipment shown to scale;

   ii. waste collection area(s) with bins shown to scale (if different from storage areas);

   iii. waste carting route(s) from buildings to waste storage area(s);

   iv. bin carting route(s) from waste storage to collection point(s) (if different from storage areas); and

   v. for developments proposing onsite collection, the waste collection vehicle route, swept path and clearances.

5.2 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure that waste management infrastructure and operational procedures are an integral part of the development's design and ongoing management.

b. To ensure sufficient volume of equitably accessible, safe, hygienic and aesthetically appropriate waste storage is provided on the property to minimise negative impacts of waste management on occupants and neighbours.
c. To enable maximum opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins.
d. To ensure equitable access for all occupants to opportunities to maximise diversion of waste.
e. To provide flexibility to expand or reconfigure waste separation systems, so that owners and occupants have options to access a range of waste services.
f. To ensure secure separation of commercial waste from residential waste storage and collection.
g. To provide unobstructed waste collection point(s) that are safely and efficiently accessible by Council waste collection vehicles wherever possible.
h. To provide unobstructed, safe access to move bins and bulk waste (such as furniture and whitegoods) between storage and collection points.

Controls

1. An Operational Waste Management Plan (WMP) must be prepared in accordance with the Lake Macquarie Waste Management Guidelines and submitted with the development application for all identified in Table 11, in other parts of this Development Control Plan or when Council identifies that particular circumstances warrant it.

Table 11 - Uses requiring an Operational Waste Management Plan

• Dwellings • Commercial and retail, recreation and tourism facilities • Industrial developments and infrastructure • Events • Subdivisions

2. The Operational WMP must address all wastes that will be generated from the operation of the premises. The plan must maximise opportunity for separation from general waste of reusable, recyclable and compostable materials for reuse, recycling and composting wherever possible.
3. The development application must demonstrate - in the Operational WMP and on plans with bins, equipment, waste collection vehicle swept paths and clearances all shown to scale - that the development has sufficient and usable:
   i. bin type, sizes, numbers and collection frequency; and
   ii. internal storage within premises; and
   iii. waste carting route(s) from premises to external waste storage area(s); and
   iv. external waste storage areas; and
   v. bin carting route(s) from waste storage to waste collection point(s); and
   vi. waste collection point(s);
   vii. for developments proposing onsite collection, the waste collection vehicle route(s), swept paths and clearances; and
   viii. waste management information guide for owners and occupants
4. For developments with the following specific land uses, the development and Operational WMP must address other matters as identified in the Lake Macquarie Waste Management Guidelines:
   i. boarding houses and hostels; group homes; short-term rental accommodation; social housing; and seniors' living developments;
   ii. commercial and retail premises
   iii. veterinary hospitals;
   iv. aged care facilities;

v. child care centres;
vi. service stations;
vii. public and private recreation; and amusement and functions centres and entertainment facilities;
viii. vehicle repair workshops and depots;
ix. sustainable aquaculture; and
x. light, heavy and general industries, hazardous, offensive and high technology industries; infrastructure; and waste management or resource recovery facilities.

to demonstrate compliance with the Lake Macquarie Waste Management Guidelines.

5. If the development is not designed to enable Lake Macquarie City Council waste services, a letter must be provided from a private waste contractor advising how they are able to provide the required garbage, recycling and green (garden and food) waste services and (if needed) access the premises.

5.3 ON-SITE SEWAGE MANAGEMENT

Objectives

a. To ensure that land is suitable for on-site sewage management, and that on-site sewage management systems are designed to operate sustainably, without resulting in environmental harm or risk to public health.

Controls

1. On-site sewage management must not be located on sites:
   i. Where connection to reticulated sewer is available (this requirement does not apply to greywater treatment systems); or
   ii. Below the 20 year ARI flood level.
2. Where an on-site sewage management system is proposed, an assessment report must be provided to determine land capacity for sewage effluent. The assessment must be carried out by an appropriately qualified consultant. The site assessment must:
   i. Be undertaken in accordance with the *Environmental Health Protection Guidelines*, and *On-site Sewage Management for Single Households*;
   ii. Recommend suitable wastewater treatment technology;
   iii. Include water balance calculations for determination of the size of the effluent irrigation area, based on zero wet weather storage requirements; and
   iv. For greywater treatment systems, it must be demonstrated that the proposed system complies with the *NSW Guidelines for Greywater Reuse in Sewered, Single Household Residential Premises*.
3. Applications for sewage treatment systems must include a:
   i. Sewerage Site Plan (1:200) indicating the location of the treatment system, disposal area, and buffer distances to boundaries, dwellings, water courses and other significant features on the site; and
   ii. Detailed plans and sections of the proposed effluent disposal system.
4. Other than for greywater treatment systems, surface and subsurface irrigation areas must be made up of irrigation zones that are a minimum 300m^2 and maximum 500m^2. Multiple irrigation zones must be dosed via an automatic irrigation controller or indexing valve.
5. Pump-out septic systems are only acceptable where on-site disposal of effluent is not feasible, and where access is available for a pump-out service to be rendered safely from a public road at the property boundary.

5.4 LIQUID TRADE WASTE AND CHEMICAL STORAGE

Objectives

a. To ensure that liquid trade waste is disposed of appropriately, and does not enter the environment.
b. To ensure that chemicals associated with a development are stored in a secure manner.

Controls

1. Where development is proposed that will generate liquid trade wastes, evidence of a liquid trade waste agreement with Hunter Water must be provided. On-site treatment and/or disposal of liquid trade waste will not be permitted.
2. Developments that generate liquid trade waste must ensure that this waste is adequately contained and bunded to prevent pollution entering the environment.
3. Where chemicals are stored within, or as part of development, those chemicals must be adequately contained and bunded to prevent chemicals entering the environment unintentionally in the event of a spill, flooding, or any other event that may lead to the escape of chemicals.
4. All containment and bunded areas must drain to the reticulated sewerage system under agreement with Hunter Water. No on-site treatment or disposal of liquid trade waste or spilt chemicals will be permitted.

5.5 EROSION AND SEDIMENT CONTROL

Objectives

a. To ensure that development is designed to prevent erosion by minimising disturbance, retaining vegetation and reducing the need for earthworks.
b. To prevent erosion and sediment-laden run-off during site preparation, construction and the ongoing use of land.
c. To ensure that a number of integrated solutions, using a treatment train approach, are implemented for the control and treatment of erosion and sediment.

Controls

1. For proposals where the area of soil disturbance is less than 250m^2, appropriate erosion and sediment control measures must be installed and maintained. This will prevent pollutants from entering water courses during construction and until 70% ground cover is attained.
2. For proposals where the area of soil disturbance is more than 250m^2 but less than 2500m^2, an Erosion and Sediment Control Plan (ESCP) must be prepared and lodged, in accordance with Council's *Erosion and Sediment Control Guideline*.
3. For proposals where the area of soil disturbance is more than 2500m^2, a Soil and Water Management Plan, identifying erosion prevention and sediment control measures, must be prepared and lodged, in accordance with Council's *Erosion and Sediment Control Guideline.*
4. The maximum area of soil exposure at any one time must not exceed 2.5 hectares.

Note: Council may vary the requirements, especially where there is a higher or lower risk of polluting receiving waters. Further information may be required for any site depending on, but not limited to, the calculated soil loss, sediment type and an assessment of site constraints and opportunities.

5.6 AIR QUALITY

Objectives

a. To ensure that development does not adversely affect air quality beyond the National Environment Protection Measure (Ambient Air Quality) standard for criteria air pollutants.
b. To ensure that measures are implemented to maintain air quality.
c. To ensure that odours and emissions do not have an unreasonable impact on the amenity of neighbouring properties, or the health of their occupants

d. To ensure that odours and emissions do not have an unreasonable impact on public health.
e. To ensure that emissions do not have an unreasonable impact on natural environment.

Controls

1. An air quality report must be prepared by an air quality/odour expert where a proposed development has the potential to adversely affect air quality. This report must:
   i. Consider the information provided on Council's Local Air Quality Maps;
   ii. Address impacts caused by construction and ongoing operation or occupation of the development;
   iii. Identify emissions, and measures to mitigate the overall impact, and the impact on nearby residences and occupants of other properties especially sensitive receivers; and
   iv. Be prepared in accordance with the Approved Methods for the Modelling and Assessment of air pollutants in New South Wales and other requirements prescribed in State and Federal legislation.

Note: Council's air quality map is based on modelling air pollution in the local government area and identifies areas where the Criteria Air Pollutants exceed the National Environment Protection Measure (Ambient Air Quality) standard.

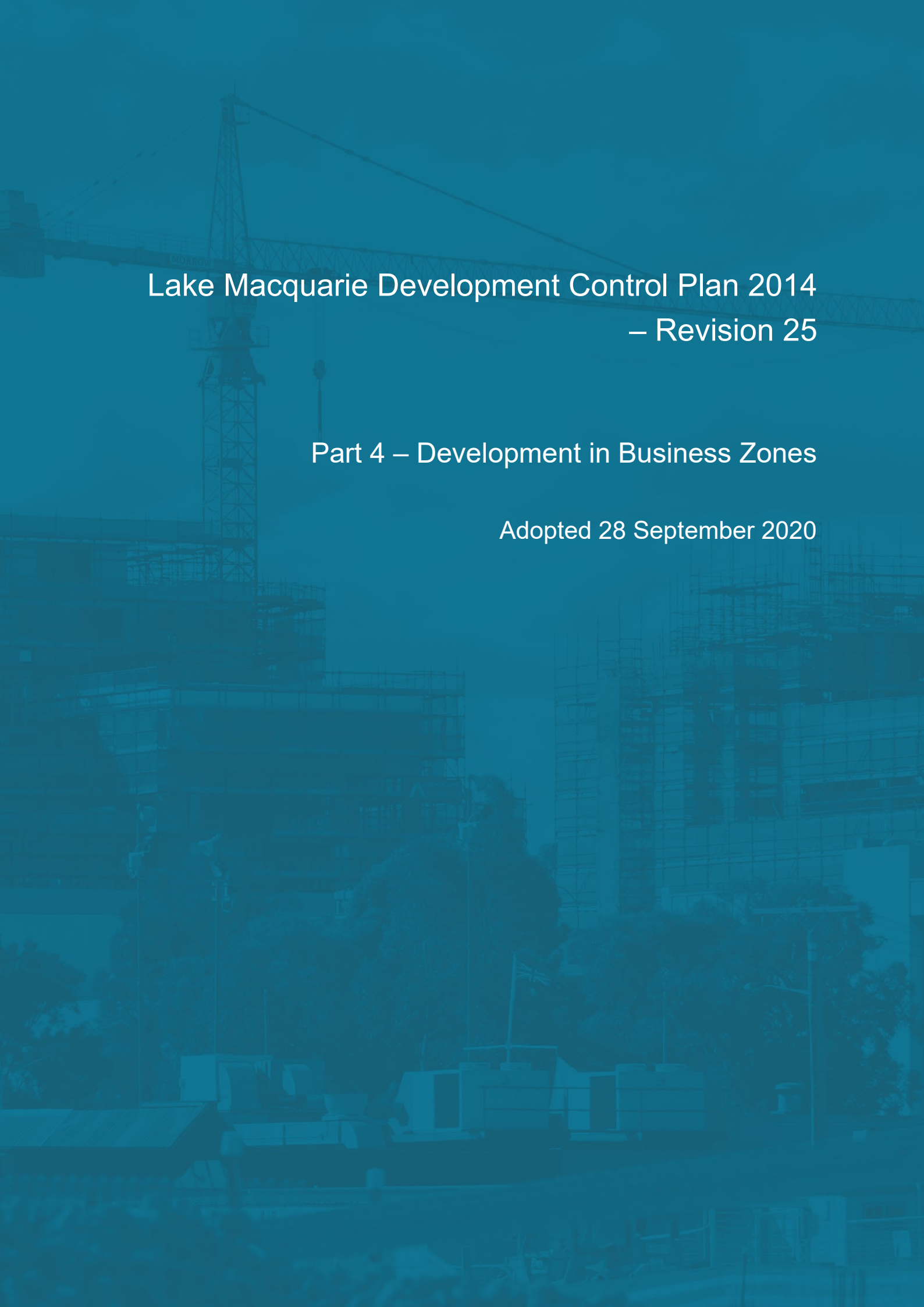
5.7 NOISE AND VIBRATION

Objectives

a. To minimise the generation of noise and/or vibration, and to mitigate associated adverse impacts on the amenity of neighbouring properties and their occupants, and on occupants of the proposed development.

Controls

7. Where proposed development has the potential to produce an adverse noise or vibration impact on occupants of the site or of nearby properties, an acoustic and vibration study must be prepared by a qualified consultant, to Council's satisfaction.
8. Noise or vibration generated by development must not exceed the criteria stipulated in the *NSW Industrial Noise Policy* or the *Noise Guide for Local Government* at the property boundary of the noise source, or at a receiving lot boundary.
9. Measures must be implemented to ensure that any noise or vibration generated is not offensive, in accordance with the *Noise Guide for Local Government*
10. During construction, the operating noise level of machinery, plant and equipment must comply with the *Noise Guide for Local Government*.
11. A suitably qualified acoustics consultant must prepare a Noise Management Plan where construction is proposed to exceed 26 weeks.
12. Noise generating operations and outdoor operations must only occur between 7am and 6pm Monday to Saturday.
13. Council may request at any stage an independent report to confirm that noise emissions are within acceptable limits; such costs are to be borne by the applicant/ operator.



Lake Macquarie Development Control Plan 2014 – Revision 25

Part 4 – Development in Business Zones

Adopted 28 September 2020

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1 INTRODUCTION

Part 4 - Development in Business Zones applies to all development in the B1 Neighbourhood Centre, B2 Local Centre, B3 Commercial Core, and in B4 Mixed Use zones.

This part is to be read in conjunction with Part 1 (Introduction) of DCP 2014, which outlines Council's general requirements for all developments and provides advice on the lodgement requirements for a Development Application. Part 1 also contains requirements for when an application seeks to vary a development control. Additionally, controls for specific land uses may apply depending on the type of development proposed. They can be found within Part 9 of this DCP.

Furthermore, an Area Plan may apply depending on the location of the development. Area Plans contain area specific controls that need to be considered and can be found in Parts 10, 11 and 12 of this DCP.

Development in Cardiff within the core area is subject to controls for a B2 Local Centre Zone, as set out in this part (see Figure 1: Area in Cardiff Subject to Controls for a B2 Zone).

For mixed-use development, any building that includes four or more dwellings and is three or more storeys in height must comply with the provisions of Part 9: Residential Flat Buildings, as well as the provisions of SEPP 65– Design Quality of Residential Flat Development and Residential Flat Design Code.

1.1 HOW TO USE THIS PLAN

LM DCP 2014 is the primary document used by Council's development assessment staff to assess development applications. Proponents of development will need to:

1. Determine the land use zone that applies to the development site (refer to LM LEP 2014);
2. Refer to the Part of LM DCP 2014 that contains controls for the zone where the development is proposed (Parts 2 to 8);
3. Check if specific land use provisions apply to the proposed development (Part 9); and
4. Check if an Area Plan applies to the proposed development site (Parts 10, 11 or 12).

The development controls contained within each part and section, seek to achieve desired land use, conservation and/or built outcomes consistent with corresponding LM LEP 2014 zone objectives and aims in each part of LM DCP 2014.

Each part of this DCP is structured to promote a development process where the site and context analysis informs the design of the development. This part of the DCP has the following main headings:

- **Introduction** – provides information about the particular part of the DCP, how to use the DCP and aims for development within the particular zone.
- **Context and Setting** – outlines the site issues and environmental opportunities and constraints that need to be addressed in the development application.
- **Streets and Public Space** – outlines the public domain considerations that need to be addressed in a development application.
- **Active Street Frontage** – outlines the specific requirements of how the building interacts with the street.
- **Access and Parking** – outlines the pedestrian and vehicular access issues that need to be addressed in the development application.
- **Development Design** – provides Council's detailed site-specific building design related requirements.
- **Landscape Design** – provides Council's detailed landscape design requirements.
- **Operational Requirements** – provides Council's detailed requirements associated with the construction and ongoing operation of the development.

The detailed provisions of each subsection in each part of LM DCP 2014 are presented as follows:

- **Objectives** – state what outcomes Lake Macquarie City Council is seeking new development to achieve, and
- **Controls** – advise the requirements for achieving outcomes and the desired future character identified by the aims and objectives.

Additionally, Parts 2 to 8 contain the specific aims, which LM DCP 2014 seeks to achieve.

For more information on how to use this document, please consult Part 1 – Introduction.

1.2 ADDITIONAL CONTROLS FOR SPECIFIC LAND USES

If the development application relates to any of the following land uses, additional specific development controls must be considered in conjunction with controls in this part of the DCP. The detailed controls for these uses can be found in Part 9 of LM DCP 2014. Where a conflict exists between the controls within this part and a specific land use, the specific land use section prevails.

Bed & Breakfast/Farm stay Accommodation	Residential Flat Buildings
Child Care Centres	Service Stations
Foreshore and Waterway Development	Sex Services Premises
Health Consulting Rooms	Signage
Home Business and Industry	Tourist and Visitor Accommodation
Places of Public Worship	

1.3 AIMS FOR DEVELOPMENT IN BUSINESS ZONES

Where controls are not provided for a particular circumstance, the following aims will be used to provide direction for a merits based assessment of a development application.

The aims of LM DCP 2014 for development in business zones are:

1. To support the business centres hierarchy contained in the Lifestyle 2030 Strategy.
2. To support retail, business, entertainment and community uses that contribute to safe and vibrant places for people who live in, work in and visit the centre.
3. To provide for appropriate employment opportunities in accessible locations, and for housing within mixed use developments.
4. To maximise public transport patronage and encourage walking and cycling.
5. To make efficient use of land through the amalgamation of existing lots to facilitate higher yields and good built form, and to avoid unnecessary isolation of lots.
6. To encourage Ecologically Sustainable Design principles to reduce energy, materials and water consumption.

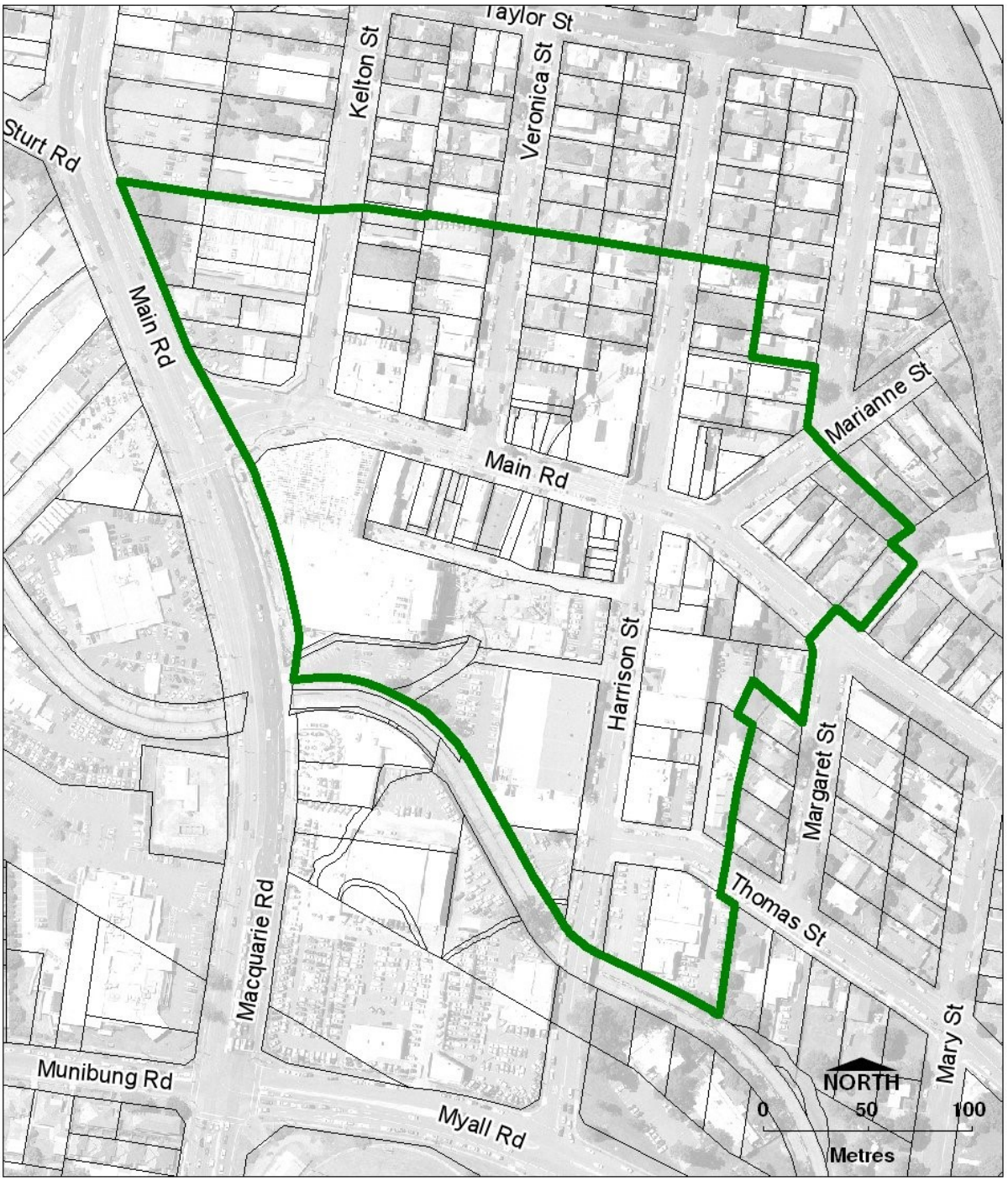


Figure 1 - Area In Cardiff Subject to Controls for a B2 Zone

1.4 B3 COMMERCIAL CORE

Charlestown, Glendale and Morisset

The B3 Commercial Core Zone is intended to provide the greatest concentration of commercial floor space, services and facilities for the wider community. The core activities in this zone are commercial and retail, supported by government services, with residential, community, recreational, educational, entertainment, tourist and open space uses.

Preferred land uses are retail premises, business premises, food and drink premises, entertainment facilities, and office premises at street level with office premises, tourist accommodation or apartments above.

See Charlestown Major Regional Centre Area Plan and Morisset Town Centre Area Plan for additional background and controls.

1.5 B2 LOCAL CENTRES

Swansea, Belmont, Warners Bay, Toronto, Mount Hutton and Cameron Park/Pambulong.

The B2 Local Centre Zone is intended to provide a range of retail, business, office, entertainment, community and other suitable land uses that serve the needs of the local community.

Preferred land uses are retail premises, business premises, and food and drink premises. Also preferred are office premises at street level with office premises, tourist accommodation or apartments above.

See Belmont Town Centre Area Plan, Warners Bay Town Centre Area Plan, Toronto Town Centre Area Plan and Mount Hutton Centre Area Plan for additional background and controls.

1.6 B1 NEIGHBOURHOOD CENTRES

B1 Neighbourhood Centres include, Kahibah, Whitebridge, Dudley, Redhead, Windale, Jewells, Boolaroo, Northlakes, West Wallsend, Teralba, Woodrising, Bonnells Bay, Wangi Wangi and Wyee Point

The B1 Neighbourhood Centre Zone is intended to provide a limited range of small-scale retail, business and community uses that serve the needs of people who live or work in the surrounding neighbourhood.

Preferred land uses are small retail premises, food and drink premises, and smaller office premises at street level with office premises or housing above.

1.7 B4 MIXED USE ZONE

The B4 Mixed Use Zone is intended to complement and enhance the activity of the local and regional centres, and to serve as a transition between the centre and surrounding residential zones.

B4 areas are located at Charlestown, Glendale, Cardiff, Belmont, Mount Hutton, Warners Bay, Swansea, Toronto, Morisset, Cooranbong, Argenton, Cockle Creek, Wangi Wangi, Belmont North and Caves Beach.

The preferred mix of land uses is either business or office premises, retail premises, or food and drink premises at street level, with office premises, shop-top housing or apartments above. Activity in the centre should be supported by development of community, recreational, educational, entertainment, tourist and open space facilities.

2 CONTEXT AND SETTING

2.1 SITE ANALYSIS

Objectives

a. To encourage good site planning, built form and landscape outcomes informed by an understanding of the site and its context.

b. To illustrate how a development responds to a site and its relationship with the locality.

c. To identify the opportunities and constraints of sites, and the prevailing characteristics of a locality.

Controls

1. A Site Analysis Plan must be submitted that identifies the existing conditions relating to the subject site and the surrounding land that may influence the design outcome.
2. The Site Analysis Plan must address:
   i. all relevant items as set out in the *Site Analysis Guidelines*, and
   ii. all relevant matters outlined below in section 2.2 to 2.22.
3. The Site Analysis Plan must provide a comprehensive view of the constraints and opportunities of the development site that will guide the design process.
4. The development application must clearly show that the constraints and opportunities identified in the Site Analysis Plan have been used to inform and resolve the development design.
5. An electronic 3D block model must be submitted for any development that is three or more storeys, or that has a Gross Floor Area of 2000m^2 or more. The model must clearly show the scale and form of the proposed development and its setting, from viewing points along the street, and from public open space, waterways and other significant vantage points.
6. Council may require an electronic model for smaller developments on sites with potentially high visual or physical impacts on the public realm.

Note: The detail of the Site Analysis Plan should be tailored to the site, and the complexity of the proposed development.

2.2 SCENIC VALUES

The **Landscape Settings and Significant Natural Landscape Features Maps** identify the Landscape Setting boundaries and the relevant Scenic Management Zone for each Landscape Setting. The maps are a guide to the scenic quality associated with lands within the City of Lake Macquarie and are contained within the *Scenic Management Guidelines*. The *Scenic Management Guidelines* provide supporting documentation to this DCP.

Objectives:

a. To ensure that the scenic values of the City are protected and enhanced.

b. To ensure that developments visible or adjoining the coastline, Lake Macquarie or ridgelines maintain and enhance the scenic value of these features.

Controls:

1. A landscape and visual impact assessment is required for development identified in Table 1 unless specified by Council. A landscape and visual impact assessment must be prepared in accordance with section 7.3 of the Scenic Management Guidelines.

Table 1 - Development requiring a landscape and visual impact assessment

Type, category or impact of development: • Any designated, SEPP 14 or SEPP 65 development • Any new development or alterations and additions resulting in a building or structure equivalent to 4 storeys or more (in any zone), or a car park of 2 or more storeys (in any zone) • Telecommunication towers • Substantial loss of native tree cover (land parcels of one hectare or greater) • Subdivisions (in any zone with 10 or more lots proposed) • Tourist and visitor accommodation • Waste or resource management facilities • Recreation facilities (major) • Service stations • Removal of any tree on the Significant Tree Register • Seniors living developments and hospitals with more than 30 beds • Educational facilities • Any commercial buildings being more than 50 metres long on any side, or being over 10 metres high
Location of development: • Any development that is; within 300m of the Mean High Water Mark of the lake or coastal edge, or on a ridgeline and involves two or more of the following: o height equivalent to 3 or more storeys, or o sloping site (10% or more), or o requiring a combined cut and fill exceeding 2 metres, or o a development footprint exceeding 2000m^2. • Any building or structure in a public reserve having a footprint exceeding 100m^2 or being over 10 metres high. • Any development on a heritage item and/or development within a heritage conservation area (apart from alterations and additions to existing houses or new complying development houses) • Any development within 300m of the Sydney-Newcastle Freeway (apart from alterations and additions to existing houses or new complying development houses)

2. Developments must be designed and sited to complement their location through:
   i. the retention of existing vegetation,
   ii. incorporating appropriate landscaping,
   iii. minimising cut and fill,
   iv. building design and articulation compatible with natural context, and
   v. colour and material selection.
3. For developments visible from the coastline, Lake Macquarie, and adjacent waterways, or from significant ridgelines, external finishes should be non-reflective and muted in tone.

2.3 GEOTECHNICAL

Objectives:

a. To minimise potential damage to buildings/structures resulting from land movement.

b. To provide guidance on the preparation of geotechnical reports required to support a development application.

Controls:

1. The following development types do not require submission of a Slope Stability Assessment with a development application:
    - Minor development such as garages, carports, decks and the like, pergolas, fiberglass swimming pools and cut/fill not exceeding 1 metre high/deep.
    - Development in Geo_4, Geo_5 or Geo_6 zone that consists of less than 3 storeys and less than 1000m^2 gross floor area and are not sensitive use facilities as defined by the Geotechnical Slope Stability Guidelines.
2. A geotechnical report prepared by a geotechnical engineer must accompany an application for all other development as specified in Council's *Geotechnical Slope Stability Guidelines*. The report must be prepared in accordance with these Guidelines.

Note: After lodgement of a development application, Council may still require the submission of Geotechnical Report for the development types identified at (1) following a site inspection.

2.4 CUT AND FILL

Objectives

a. To minimise land shaping, particularly outside the building footprint.

b. To ensure development is on a stable site.

c. To minimise the impact on groundwater flow.

d. To ensure that development does not concentrate surface water flows to adjoining properties.

e. To minimise the extent of earthworks, stormwater infrastructure and retaining structures and the associated costs.

Controls

1. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area , or within the extent of the 100 year probable ARI (1% AEP) flood event.
2. Retaining structures greater than 1m in height must be designed by an engineer, and the certification details lodged with the development application.
3. Fill must not contribute to unreasonable impacts on amenity or the redirection of water onto adjoining properties.
4. Batter slopes must not exceed a gradient of 1:4, unless stabilised by dense planting.
5. Any fill used must be certified Virgin Excavated Natural Materials, certified Excavated Natural Material or uncontaminated engineered fill.

2.5 MINE SUBSIDENCE

Objectives:

a. To minimise risks to buildings and structures associated with potential mine subsidence.

Controls:

1. Where an application is made for the construction of a structure or building within a Mine Subsidence District, written concurrence must be obtained from the Mine Subsidence Board. Written concurrence should be obtained prior to the application being submitted to Council.
2. Written concurrence from the Mine Subsidence Board is not required for certain works that have deemed approval under the Mine Subsidence Board's publication 'A Guide for Council Staff'.

***Note*:** Please refer to the Mine Subsidence Board's 'Surface Development Guidelines' for important information.

2.6 CONTAMINATED LAND

Objectives:

a. To ensure that contaminated land is identified through appropriate investigations
b. To ensure that contaminated land at a site is appropriately and effectively remediated prior to development taking place.
c. To ensure that changes to land use will not increase the risks to public health or the environment as a result of contamination on site, or to adjacent properties.

Controls:

1. Where development is proposed on land identified as being potentially contaminated, a Preliminary Site Investigation Report must be prepared and submitted with the application for development. Refer to Council's *Policy for Managing Contaminated or Potentially Contaminated Land* for further information.
2. Where contaminants are found within the site, a Detailed Site Investigation Report must be prepared and lodged with the development application.
3. Where a Detailed Site Investigation Report identifies the need for remediation, a Remedial Action Plan must be prepared and submitted with the application.
4. The site must be validated as suitable for its intended use prior to the issue of an occupation certificate.

Note: At discretion, Council may request a formal audit of contamination documentation by a site auditor accredited with the NSW Environment Protection Authority under the *Contaminated Land Management Act* 1997.

Note: Refer to SEPP 55 and the NSW State Governments '*Managing Land Contamination: Planning Guidelines*' for more information.

2.7 ACID SULFATE SOILS

Objectives:

a. To ensure that disturbance of Acid Sulfate Soils or Potential Acid Sulfate Soils is minimised, to prevent adverse environmental impacts on soil conditions.
b. To ensure that water quality and associated receiving waters are not detrimentally affected by the effects of Acid Sulfate Soils.
c. To ensure that habitat is not detrimentally affected by the effects of Acid Sulfate Soils.
d. To ensure that built structures and infrastructure are not detrimentally affected by Acid Sulfate Soils.

Controls:

1. Development must be sited or designed to avoid the disturbance of Acid Sulfate Soils or potential Acid Sulfate Soils.
2. Where the disturbance of Acid Sulfate Soils is unavoidable, a Preliminary Acid Sulfate Soil Assessment report must be submitted with the development application, in accordance with the *NSW Acid Sulfate Soils Planning Guidelines*.
3. Where a Preliminary Acid Sulfate Soil Assessment report identifies potential adverse impacts, a detailed assessment report and management plan must be submitted, in accordance with the *NSW Acid Sulfate Soils Planning Guidelines*.
4. Any Acid Sulfate Soils must be identified on the site analysis plan.

***Note*:** Refer to Lake Macquarie Council's Acid Sulfate Soil planning maps showing classes of land containing potential or actual Acid Sulfate Soils. These maps are available at Council's Customer Service Centre, Speers Point.

2.8 STORMWATER MANAGEMENT

Objectives

a. To ensure that development does not adversely affect water quality or availability, including ground water.
b. To ensure that watercourses and associated riparian vegetation are maintained so as to contribute to water quality, and to mitigate sedimentation of the Lake Macquarie waterway.
c. To minimise any adverse impacts on downstream built or natural environments, or on nearby land due to increased development.
d. To incorporate Water Sensitive Urban Design techniques into all new developments.
e. To minimise the volume and rate of stormwater leaving a development site.

Controls

1. A *Water Cycle Management Plan* must be submitted for all development except single dwelling houses and dual-occupancy developments. The *Water Cycle Management Plan* must provide details of the management of stormwater, and the measures proposed to mitigate the effects of stormwater on adjoining or downstream sites in accordance with Council's *Water Cycle Management Guidelines*.
2. A *Site Stormwater Drainage Plan* must be submitted for all single dwelling houses and dual-occupancy development proposals. The *Site Stormwater Drainage Plan* must be prepared in accordance with Council's *Water Cycle Management Guidelines*.
3. On-site measures must be implemented to maintain water quality, and to minimise the volume of stormwater run-off and the rate at which stormwater leaves the site.
4. A maximum of 10% of run-off from built impermeable surfaces may be discharged directly to the drainage system. The remaining 90% of run-off must be captured for reuse, or managed through infiltration and retention measures prior to being discharged to the drainage system.
5. Stormwater management systems should be visually unobtrusive and integrated within site landscaping, car parks or building structures.
6. All developments (except dwelling house or dual occupancy) that involve the re-use of stormwater or the use of recycled water must demonstrate compliance with the Australian Guidelines for Water Recycling and the licensing requirements of the *Water industry Competition Act 2006.*
7. Stormwater management systems must be designed in accordance with the *Water Cycle Management Guidelines.*

2.9 CATCHMENT FLOOD MANAGEMENT

This section applies to land in the various creek catchments in Lake Macquarie that are shown as 'Lots Affected by Catchment Flooding controls' on Council's 'Flood Control Lots' map.

The map is indicative only and property information should be checked to confirm if a lot is a catchment flood control lot.

Some lots are affected by both catchment flooding and Lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Further information on flood risk and flood planning levels (floor levels) for particular lots can be obtained by applying for a Flood Certificate from Council.

Provisions regarding Lake flooding are contained in section 2.10 of this Part of DCP 2014.

Where inconsistencies arise, the controls in area plans prevail over controls in parts 2 to 9 of this DCP.

Objectives:

a. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties.
b. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding, and manage risks to property and life from flood events.

Controls:

1. Development must be consistent with the current version of the *NSW Floodplain Development Manual*, and any relevant local flood study, floodplain management study or plan applying to the land that has been endorsed by Council.
2. The proposed development must consider and respond to flooding hazards. It must also mitigate risks to life and/or property through design and positioning of development.
3. Buildings must not be located in an identified floodway.
4. Buildings and other structures, including fences, must be designed so as not to impede the flow of floodwaters or entrap debris.
5. Habitable rooms and commercial development must have a finished floor height at least 500mm above the 100 year ARI (1% AEP) event, or is to have equivalent measures in place to mitigate flood damage (e.g. flood barrier system with evacuation plan). Where probability flood levels are not available, habitable rooms must have a finished floor height at least 500mm above the highest observed flood level for the development site.
6. Non-habitable rooms must have a finished floor height at or above the 20 year probable ARI (5% AEP) event. Where probability flood levels are not available, non-habitable rooms must have a finished floor height at or above the highest observed flood level for the site, except where this would result in a floor level more than 500mm above the existing ground level. In this case, a floor level of at least 500mm above existing ground level must be achieved.
7. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area, or within the extent of the 100 year probable ARI (1% AEP) flood event.
8. Lesser provisions may be acceptable where the applicant can demonstrate that the type of development or the proposed use poses no significant risk to life or property by flooding.
9. Any use of fill associated with development must not substantially impede the flow of floodwater, and must not contribute to flooding or ponding of water on any other property.
10. Additions or alterations to existing development will be assessed on the merits of the situation, having regard to meeting an acceptable level of risk of flood damage.
11. Development on designated flood prone land should incorporate the floodplain risk management measures, as recommended by a local flood study, floodplain management study or plan, which identifies and addresses appropriate actions in the event of flooding.

12. Development on land subject to flooding must use flood compatible materials that will minimise damage by flooding.
13. Development on lots adjoining areas affected by a 100 year probable ARI event will be subject to floor height requirements, even when the site may not be subject to flooding from the 100 year probable ARI event. This requirement is not applicable for land higher than 500mm above the 100 year probable ARI, as calculated for the relevant site.
14. Development where 100 year probable ARI levels are not available, and which could be flood liable, should be designed to meet an acceptable level of risk from flood damage. This may require the preparation of a Local Flood Study that considers cumulative impact issues, and demonstrates negligible impacts on other lands.

Note: Refer to Council's *Flood Management Guideline* for further information on the *NSW Floodplain Development Manual*, completed floodplain management plans, and on Council's requirements for flood studies.

Table 2 - Flood Planning Levels and floor height requirements in areas affected by catchment flooding and covered by a Floodplain Management Study and Plan

Development Type (including extensions)	Minimum Floor Height Requirements
Dwellings	
Habitable rooms	1 in 100 year probable flood level + 500mm freeboard (post and beam rather than slab on ground preferred)
Non-habitable rooms and garages	1 in 20 year probable flood level
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Medium and High density residential development	
Habitable rooms	1 in 100 year probable flood level + 500mm freeboard
Non-habitable rooms and garages	1 in 20 year probable flood level
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard

Development Type (including extensions)	Minimum Floor Height Requirements
Commercial and Retail	
Internal floor height	1 in 100 year probable flood level + 500mm freeboard
Basement car parking Also includes Places of Public Worship, restaurants, clubs, entertainment facilities, warehouses, and bulky goods showrooms etc.	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Mixed Use development	
Internal floor height	1 in 100 year probable flood level + 500mm freeboard
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Industrial	
Internal floor height	1 in 100 year probable flood level
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Sensitive Uses (Residential care facilities, hospitals, etc.)	
Internal floor height	Probable maximum flood level
Unsealed electrical installations	Probable maximum flood level

2.10 LAKE FLOODING AND TIDAL INUNDATION (INCORPORATING SEA LEVEL RISE)

This section applies to land on and near the Lake Macquarie foreshore that is shown as 'Lots Affected by Lake Flooding controls' on Council's 'Flood Control Lots' map. The map is indicative only and property information should be checked to confirm if a lot is a Lake flood control lot.

Some lots are affected by both catchment flooding and Lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Provisions regarding Catchment Flooding are contained in section 2.9 of this Part of DCP 2014.

The floor height requirements in Table 3 below must only be used for development on lots shown as 'Lots Affected by Lake Flooding controls' on Council's 'Flood Control Lots' map.

Council completed the Lake Macquarie Waterway Flood Study and Risk Management Plan in 2012. This flood study and risk management plan incorporated the implications of predicted sea level rise.

Predicted sea level rise is based on expert advice from NSW Government agencies and expert scientific agencies, namely that projections of sea level rise along the NSW coast are for a rise relative to 1990 mean sea levels of 40cm by 2050 and 90cm by 2100.

The controls contained in this section prevail where there is an inconsistency with other development requirements. This is particularly relevant to cut and fill controls.

Objectives

a. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties.
b. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding, and manage risks to property and life from flood events.
c. To ensure that development adequately considers and responds to sea level rise projections, and the predicted effects on inundation, flooding, coastal and foreshore recession, and on groundwater levels.
d. To ensure that development on land vulnerable to sea level rise is situated and designed to minimise the risk from future inundation, flooding, coastal and foreshore recession, and from rises in groundwater levels during the expected life of the development.
e. To ensure that development is designed to enable future adaptation if projections are realised, or that measures are implemented to mitigate any adverse impacts of climate change or sea level rise.
f. To encourage innovative responses to sea level rise impacts.

Controls

1. Development must implement measures to mitigate the adverse effects of projected sea level rise and increases in flood levels on the development.
2. Development should be designed and situated to reduce the risk from the effects of sea level rise. For example, structures should be located on the highest part of the lot and/or located as far back from the foreshore or coastline as possible, while still meeting other controls and objectives of the DCP.
3. Development should not be located in areas predicted to be permanently inundated during the life of the asset. The assumed asset life is 100 years for residential care facilities and seniors housing, hospitals, mixed use development and for medium and high density housing, and 50 years for other developments.
4. Notwithstanding the provisions for Cut and Fill in section 2.4, special consideration may be given to increased fill allowances in areas affected by sea level rise provided that:
   i. Additional fill does not adversely affect stormwater management, drainage, or the flow of water from roads, natural or constructed watercourses, foreshore areas or adjoining properties; and
   ii. The filled area maintains functional connections to adjoining footpaths, roads, neighbouring blocks and other local features.
5. Development identified within Table 3 should comply with the floor height provisions. Where the development proposed is not contained within Table 3, or an alternative to the provisions contained within Table 3 is proposed, a Flood Safety Audit and Management Plan must be submitted with the application, which is to include:
   i. Current 100 year ARI flood levels and velocity, as well as at 2050 and 2100 ;
   ii. Analysis of potential and likely risk of flooding, and/or potential threat to life and/or property now, and at 2050 and 2100;

iii. Analysis of the potential effects of permanent inundation, foreshore recession and rising groundwater,

iv. Where flood-proof materials are proposed, evidence of the flood-proof characteristics of those materials must be provided;

v. Where an innovative of adaptable building design is proposed, it meets the principles and performance criteria set out in the Development Guidelines for Resilient Housing for Lake Macquarie, and

vi. Any other alternative adaptive measure must be justified.

6. The assessing officer may determine that the development proposal is of a minor nature, and that there is no need for a Flood Safety Audit and Management Plan. In these circumstances, the assessing officer must be satisfied that the proposed development adequately addresses projected sea level rise and increases in flood levels.

Table 3 - Floor height requirements for land affected by Lake Flooding and Tidal Inundation requirements.

Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
Dwellings		
Habitable rooms	1 in 100 year probable flood level for 2050 + 500mm freeboard (post and beam rather than slab on ground preferred)	2.36 m AHD
Non-habitable rooms and garages	1 in 20 year probable flood level for 2050	1.61 m AHD
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement	
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Medium and High density residential development		
Habitable rooms	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Non-habitable rooms and garages	1 in 20 year probable flood level for 2100	2.10 m AHD
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement	
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2100 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.82 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD

Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
Commercial and Retail		
Internal floor height	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Basement car parking Also includes Places of Public Worship, restaurants, clubs, entertainment facilities, warehouses, and bulky goods showrooms etc.	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2050 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.36 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Mixed Use development		
Internal floor height	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2100 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.82 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Industrial		
Internal floor height	1 in 100 year probable flood level for 2050	1.86 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Sensitive Uses (Residential care facilities, hospitals, etc.)	Probable maximum flood level for 2100	3.27 m AHD
Unsealed electrical installations	Probable maximum flood level for 2100	3.27 m AHD

2.11 NATURAL WATER SYSTEMS

Definition: A **natural water system** is a naturally occurring watercourse, waterway, lake, wetland, lagoon, estuary, and/or other water body.

Objectives:

a. To protect and maintain the water regime of natural water systems.
b. To ensure that development does not adversely affect aquatic fauna.
c. To ensure that development does not adversely affect water quality or availability, including ground water.
d. To ensure that watercourses and associated riparian vegetation are maintained to contribute to water quality, and to mitigate sedimentation of the Lake Macquarie waterway.

e. To ensure that natural water systems and associated vegetation and landforms are protected to improve the ecological processes and ensure that land is adequately buffered from development.
f. To ensure that the pre-development water quality of receiving waters is maintained or improved.

Controls:

1. Natural water systems must be maintained in a natural state, including the maintenance of riparian vegetation and habitat such as fallen debris.
2. Where a development is associated with, or will affect a natural water system, rehabilitation must occur to return that natural water system – as much as possible – to a natural state. The Rehabilitation Plan must be prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies*.
3. Rehabilitation should occur where a development site includes a degraded watercourse, water body, or wetland. Rehabilitation is to be carried out following the completion of a Rehabilitation Plan, This Plan must prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies.*
4. Stormwater must be managed to minimise nutrient and sediment run-off entering constructed drainage lines, natural watercourses, or waterways.
5. Development within a Vegetated Riparian Zone (VRZ), as shown in Figure 2 – Vegetated Riparian Zones, should be avoided where possible to retain its ecological processes. Where development is unavoidable within the VRZ, it must be demonstrated that potential impacts on water quality, aquatic habitat, and riparian vegetation will be negligible.
6. A Plan of Management must be submitted in accordance with State Government guidelines for development proposed within a VRZ.
7. Asset Protection Zones must not be located within the Vegetated Riparian Zone.

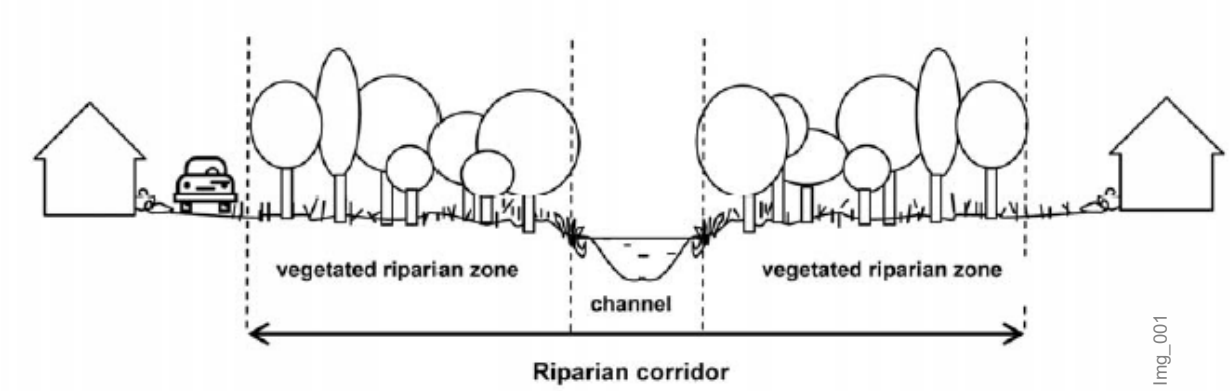


Figure 2 - Vegetated Riparian Zones

Types of watercourses	VRZ Width[2] (Each side of watercourse)	Total Riparian Corridor Width
Any first order[1] watercourse	10 metres	20m + channel width
Any second order[1] watercourse	20 metres	40m + channel width
Any third order[1] watercourse	30 metres	60m + channel width
Any fourth order[1] watercourse or greater (includes estuaries,	40 metres	80m + channel

Types of watercourses	VRZ Width[2] (Each side of watercourse)	Total Riparian Corridor Width
wetlands and any parts of rivers influenced by tidal waters)		width

[1] As classified under the Strahler System of ordering watercourses.

[2] Bushfire Asset Protection zones will not be permitted in the Vegetated Riparian Zone. Additional areas may need to be protected to support ecological processes.

2.12 BUSHFIRE

This section only applies to land identified on Council's Bushfire Prone Land Map.

Objectives:

a. To ensure that risks associated with bushfire are appropriately and effectively managed on the development site.
b. To ensure that bushfire risk is managed in connection with the preservation of the ecological values of the site and adjoining lands.

Controls:

1. Development must comply with the *NSW Planning for Bushfire Protection Guidelines*.
2. Asset Protection Zones must:
   i. Be incorporated into the design of the development;
   ii. Be as low maintenance as possible;
   iii. Be located outside areas of ecological value and the buffers necessary to protect them; and
   iv. Not occur on adjoining environmental zoned land.
3. Bushfire prone areas and Asset Protection Zones must be identified on the Site Analysis Plan. Refer to Council's Bushfire Prone Land Map.
4. Clearing for the purposes of Asset Protection Zones should be avoided on ridgelines and slopes of 1:5 or greater.
5. Clearing of vegetation must be limited to that necessary to meet the *NSW Planning for Bushfire Protection Guidelines*.
6. Clearing of native vegetation or trees for the purposes of reducing bushfire risk must be consistent with the current Bushfire Risk Management Plan prepared under the *Rural Fires Act 1997*.

Note: Development Consent is not required for clearing for the purpose of bushfire hazard reduction if the clearing is consistent with the current Bushfire Risk Management Plan, and is undertaken in accordance with a current hazard reduction certificate issued by the Rural Fire Service or other certifying authority.

2.13 FLORA AND FAUNA

Objectives

a. To avoid and minimise impacts on native flora and fauna
b. To protect and enhance native flora and fauna, vegetation communities, and native habitat on the site, and on surrounding development sites.
c. To protect and enhance ecological corridors and increase the connections between habitats.
d. To ensure rehabilitation of degraded areas.

Controls

1. Where the proposed development is likely to have an impact on native vegetation or fauna habitat, or where five or more native trees are proposed to be removed, a flora and fauna assessment must be submitted with the development application. The flora and fauna assessment must be prepared in accordance with Council's *Flora and Fauna Survey Guidelines*.

2. The flora and fauna assessment must be sufficient to adequately identify and assess all the impacts of the proposed development. This includes cumulative, direct and indirect impacts, as well as the impacts of Asset Protection Zones, provision of services (water and sewer, etc) and stormwater management.
3. Where a proposed development site is within a vegetation corridor identified on Native Vegetation and Corridors Map, or identified as part of a site specific flora and fauna assessment, the corridor must be surveyed. Within the survey, the appropriate corridor width must be determined with reference to core habitat areas and potential edge effects and fragmentation. The proposed development should be located and designed to avoid impacts on the identified vegetation corridor. Where this is not possible, the development should be designed to minimise impacts.
4. Development should be designed to avoid impacts on native flora and fauna, and minimise any unavoidable impacts. Significant flora and fauna species, vegetation communities and habitat should be protected and enhanced through appropriate site planning, design and construction.
5. A Site Vegetation Plan must be submitted clearly indicating the location of the proposed development in relation to vegetation communities, significant flora and fauna species and vegetation, and significant habitat and corridors on the site.
6. Native vegetation buffers must be provided between development and areas containing threatened flora and fauna species or their habitat, threatened vegetation communities and native vegetation corridors. The width of the buffer should be determined with reference to the function of the habitat, the threat of sea level rise and the type of development proposed. The buffer should be designed to keep the area of significance in natural condition.
7. A suitable barrier such as a perimeter road should be provided between development, (including landscaped areas) and native vegetation or significant habitat features, to minimise edge effects
8. Where a proposed development is likely to impact on an area of native vegetation, it must be demonstrated that no reasonable alternative is available. Suitable ameliorative measures must also be proposed (eg: weed management, rehabilitation, nest boxes).
9. Rehabilitation of degraded areas of the development site should include local native species to establish a self-maintaining ecosystem as close as possible to the natural state.
10. Buildings and structures, roads, driveways, fences, dams, infrastructure, drainage and asset protection zones should be located outside of areas with significant flora and fauna, native vegetation corridors and buffers.
11. An application for removal of native vegetation will only be considered where it is ancillary to, and necessary for conducting an approved use of the land (ie: an application for clearing alone will not be supported).
12. Where retention or rehabilitation of native vegetation and/or habitat is required, a vegetation management plan must be prepared in accordance with Council's *Vegetation Management Plan Guidelines*. This must detail how vegetation will be protected, rehabilitated and managed before, during and after construction.
13. Long-term protection and management of areas set aside for ecological reasons is encouraged through secure tenure with appropriate conservation management. This may be achieved through a Planning Agreement.
14. Development should be consistent with the effective conservation of land within any adjacent Environmental or Waterway zone and its protection from adverse impacts. It should include, but not be limited to weed invasion, erosion and sedimentation, pollution, chemicals, nutrients, stormwater run-off, feral and domestic animals.

Note: Council may require a bond to ensure that native vegetation is protected and any ameliorative measures are undertaken.

2.14 PRESERVATION OF TREES AND VEGETATION

Objectives:

a. To ensure that trees listed on Council's Significant Tree register are not adversely affected by development.
b. To maintain and enhance the natural bushland or vegetated character of the city.
c. To retain trees for the urban amenity, microclimate, scenic, air and water quality, and the social benefits that they provide.

Controls:

1. For the purposes of Clause 5.9 in LMLEP 2014, development consent is required to ring bark, cut down, top, lop, remove, injure, wilfully destroy or clear:
   i. Any species of vegetation that existed in the State of New South Wales before European Settlement;
   ii. A tree which is listed in Council's Significant Tree Register;
   iii. Tree(s) or native vegetation listed as heritage items or located within a Heritage Conservation Area; or
   iv. A Norfolk Island Pine Tree (*Araucaria heterophylla*) that is greater than three metres in height, or that has a trunk diameter of 75mm or greater, measured at ground level.

Note: This clause includes Native Vegetation defined in the *Native Vegetation Act 2003* and marine vegetation covered by section 205 of the *Fisheries Management Act 1994*.

2. Except in the E2 Zone, development consent is not required to remove, injure, wilfully destroy or clear native vegetation (excluding native trees and shrubs over three metres in height), only if:
   i. The work is for the purpose of landscaping understorey vegetation and lawn areas where the area to be cleared is less than 600m² (in total), and is on the same allotment as, and within the curtilage of an approved dwelling;
   ii. The soil surface exposed in any period of 90 consecutive days is less than 250m^2;
   iii. The slope of the land is less than 15 degrees;
   iv. The area is not subject to a development consent that requires the native vegetation to be retained; and
   v. The work does not involve the disturbance of habitat for threatened species.
3. Development consent is not required to ring bark, cut down top, lop, remove, injure, wilfully destroy or clear a tree or native vegetation, if:
   i. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
   ii. The tree or native vegetation is not required to be retained by a development consent, and
   iii. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or
   iv. The tree or native vegetation is within one metre of a sealed driveway to a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or
   v. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) on an adjoining allotment as the building and owners of both properties reach a written agreement that is submitted to Council prior to removal.

Note: For the purposes of clause 3 the distance must be measured from the trunk of a tree or shrub measured at ground level to the outer most projection of the building.

***Note*:** A sealed driveway is a driveway or car park with an impervious surface such as concrete, pavers, or bitumen. A gravel driveway is not classed as a sealed driveway.

***Note*:** A lawfully used building does not include drainage, excavation, a garden shed or jetty, but does include an underground water storage structure or septic tank.

4. Development consent is not required for removal of a tree or native vegetation if Council is satisfied beforehand that the tree or native vegetation:
   i. Is dead and is not required as habitat for native fauna or
   ii. Is a risk to life or property.

***Note*:** Evidence to support removal should be forwarded to Council in accordance with requirements outlined in Council's *Tree Preservation and Native Vegetation Management Guidelines*. Council's Tree Assessment Officer may undertake a site inspection to verify that these conditions are satisfied.

***Note*:** Habitat required for native fauna includes native vegetation and trees (including dead or dying trees) support hollows, spouts, splits, nests and roosts.

5. Development consent is not required for removal of a tree or native vegetation if:
   i. The tree or native vegetation is in danger of imminent failure and there is risk to life or property; and
   ii. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
   iii. Evidence to support its removal is forwarded to Council following the removal, in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.
6. Development consent is not required for removal of a NSW native tree if the tree is:
   i. not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
   ii. not located within other native vegetation and,
   iii. less than three metres in height and
   iv. has a trunk diameter at ground level of less than 75mm.
7. An application for removal of tree(s) and native vegetation will be considered only where it is necessary for conducting an approved use of the land. An application for clearing alone will not be supported.
8. A report from a suitably qualified arborist must be submitted to support:
   i. Any application that may have an impact on a tree listed in Council's Significant Tree Register, or on tree(s) or native vegetation listed as heritage items or located within a heritage conservation area;
   ii. Any request to review Council's determination of an application for tree pruning or removal; or
   iii. Any application that Council determines may cause significant impacts on native trees or native vegetation.
9. An arborist report must include a plan to scale that clearly shows:
   i. The location of the proposed development;
   ii. The location, diameter, canopy spread, condition and species of each tree on the site;
   iii. All trees to be removed;
   iv. All trees to be retained;
   v. All trees with habitat hollows;
   vi. Tree protection zones for all trees to be retained; and
   vii. Any asset protection zones.
10. Habitat trees must be assessed by a suitably qualified flora and fauna specialist.
11. Measures must be implemented to protect native vegetation and trees to be retained during construction works. Such protection measures must be specified in the development application, and should be compiled in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.

12. Where habitat trees are removed, measures (such as nest boxes) must be implemented to mitigate against injury or loss of native fauna and habitat. Such measures must be specified in the development application.
13. Boundary fences must be located, designed and constructed to avoid removing or damaging native trees that have a diameter of 200mm or greater, measured at ground level.

Note: Refer to Council's *Tree Preservation and Native Vegetation Management Guidelines* for further details and the Significant Tree Register.

***Note*:** Where the removal of five or more native trees is proposed, an arborist report may be required in addition to a Flora and Fauna Assessment prepared in accordance with Council's *Flora and Fauna Survey Guidelines*.

2.15 EUROPEAN HERITAGE

Definition: A ***Contributory building*** is a building that makes a positive contribution to the heritage character of the place or locality.

Objectives

a. To protect and maintain European heritage items and their facades.

b. To retain, preserve and promote the adaptive re-use of heritage-listed buildings and contributory buildings in particular, and other buildings that contribute to the heritage character of the locality.

c. To appropriately manage demolition of items of heritage significance, when all other alternatives to demolition have been fully investigated.

d. To ensure that development is sympathetic to heritage items, adjoining heritage items and contributory buildings.

Controls

1. A Heritage Assessment and Statement of Heritage Impact must be submitted to Council where a proposed development:

   i. incorporates, or is adjacent to an item of heritage significance;

   ii. is located within a heritage conservation area, or,

   iii. has been identified by Council to have particular circumstances that warrant it.

Note: Council officers will use the following criteria to determine the need for Heritage Assessment and Statement of Heritage Impact is required under control 1(iii) above:

- The subject site includes a building erected prior to 1950 whether or not it is identified as being of a particular architectural style,
- The development is considered in conflict with its heritage context , streetscape, or heritage precinct,
- The subject site includes a potential heritage item.

2. The impact of development on a heritage item or contributory building must be minimised by:

   i. Restricting the extent of development to that which is necessary;

   ii. Conserving what is significant about the item;

   iii. Clearly differentiating new development from the existing significant fabric;

   iv. Ensuring that development is of a scale, form, mass, proportion and finish that is sympathetic with the heritage item; and

   v. Ensuring that development is sufficiently separated from the heritage item, so as not to compromise the existing level of visibility and setting.

3. For development involving demolition of an item of heritage significance, a heritage assessment and Statement of Heritage Impact must be prepared and lodged. It must verify that all alternative options to demolition have been fully investigated, and demonstrate the replacement building's compatibility with the physical context. The Statement of Heritage Impact must include details of the:

   i. Structural condition;

   ii. Overall extent of the remaining fabric;

   iii. Potential retention and adaptive reuse; and

   iv. Comparative costings.

4. Where demolition of the whole of a heritage item is proposed, approval must be sought concurrently for the replacement building.
5. Alterations and additions to heritage items or contributory buildings must where possible:
   i. Occur at the rear of the building;
   ii. Maintain the established building line;
   iii. Maintain an existing driveway access to the rear of the property;
   iv. Incorporate or retain elements such as chimneys, windows and gables;
   v. Maintain established patterns of buildings and garden; and
   vi. Not overwhelm or dominate the existing building.
6. Alterations and additions to heritage items and contributory buildings must be recognisable, on inspection, as new work. They must not mimic the design, materials or historic details of the heritage item.
7. Garages, sheds, carports, external utilitarian structures and the like must be detached and located at the rear, or set back at least two metres behind a heritage item.
8. Utilitarian structures must be constructed of the same material as the heritage listed building.

Note: Refer to Council's Heritage Guidelines for further information.

2.16 ABORIGINAL HERITAGE

Objectives:

a. To protect and conserve Aboriginal cultural, spiritual, and sacred sites within the City.
b. To ensure the impact of a proposed development on the heritage significance of an Aboriginal place or object is considered by adequate investigation and assessment.

Controls:

1. Where a development will disturb the ground surface and the natural ground surface has not been significantly disturbed, the development application must demonstrate that adequate due diligence has been undertaken. This includes (but is not limited to) submitting the following documentation in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*. This includes submitting the following documentation:

   i) A statement and results of a basic 200m Aboriginal Heritage Information Management System (AHIMS) search. Where a site is identified within 200m of the development site, a statement and results of a 50m AHIMS search must be included.
   ii) Identify whether the development site is partially or wholly within the Sensitive Aboriginal Landscape map under the LMLEP2014 and whether the exemptions under the Excluded Development Criteria (Table 4) apply.
   iii) A statement indicating whether there are landscape features that indicate the potential presence of Aboriginal objects.

Note: landscape features include: foreshore areas, creek lines, rocky areas, wetlands, ridge tops, ridgelines, headlands, sand dunes, caves.

2. A Due Diligence Assessment must be prepared by a suitably qualified person to determine whether the proposed development is likely to harm Aboriginal objects and identify whether an Aboriginal Heritage Impact Permit is required where:

   i) An AHIMS search has identified the likelihood of an Aboriginal item within 200m of the development site, and/or

ii) The site is identified on the Sensitive Aboriginal Landscape map and the Excluded Development Criteria do not apply.

3. The Due Diligence Assessment must include an assessment of the cultural significance of the place to the Aboriginal Community.

Note: Clause 5.10(8) – Heritage Conservation of the LMLEP 2014 and the Lake Macquarie Aboriginal Heritage Management Strategy requires assessments to be forwarded to the Local Aboriginal Land Council for comment for a 28 day period.

4. An Aboriginal Cultural Heritage Assessment Report should be prepared where:

i) A Due Diligence assessment has identified the potential for the site to contain an Aboriginal object or contains a place of significance, or
ii) The development will have an impact on a known Aboriginal object or place.

Table 4 - Excluded Development Criteria for Development in Sensitive Aboriginal Landscape Map

Excluded Development	Land on which excluded development may not be carried out
All development on sites having a combined/total area less than 800m^2	Within 200m of an AHIMS site Setback from DP High Water mark does not exceed 50m.
Exempt development under the SEPP (Exempt and Complying Development Codes) 2008 on sites having a total area greater than 800m^2 subject to: • 75% of combined/total site area already disturbed; or • Works do not exceed existing disturbed footprint; or • Site has previously been assessed for Aboriginal heritage such as subdivision applications post 1997 development consent.	

Note: The SEPP (Exempt and Complying Development Codes) 2008 does not apply to land within the Sensitive Aboriginal Landscape area. However, exempt development within this SEPP may not require further Aboriginal assessment if it fulfills the requirements of the Excluded Development Criteria Table.

5. Where required, the Aboriginal Heritage Impact Statement must be prepared in accordance with the Lake Macquarie Aboriginal Heritage Management Strategy and the Office of Environment and Heritage *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW,* which includes consultation with the Aboriginal community.

6. Where a proposal seeks to destroy, remove or impact on an Aboriginal object, any development will be Integrated Development and will also require a permit from the Office of Environment and Heritage.

2.17 NATURAL HERITAGE

Objectives:

a. To ensure the protection of items of natural heritage significance.
b. To ensure that insect fossil beds and fossilised trees are maintained, along with features of scientific interest in their natural state.
c. To facilitate public appreciation and scientific investigation of insect fossil beds and geological features of scientific interest, without destruction or damage.

Controls:

1. Where development is proposed on land within 50 metres of an item of natural heritage significance identified in the Lake Macquarie Local Environmental Plan 2014, a Heritage Impact Assessment must be prepared in accordance with the *Natural Heritage Guidelines*.
2. The likely impact of development proposals on the insect fossil beds and geological features of scientific interest should be identified through a report by a palaeontologist or geologist, which establishes the significance of the site. Such a report should include management strategies before, during, and after construction.
3. The development should be designed to avoid natural heritage items.
4. Where it is not reasonable to avoid natural heritage items, the item must be protected and incorporated into the design. Reasonable access to the construction site and any excavated material should be provided to researchers and/or palaeontologists from the Australian Museum or other research institution.
5. Any natural heritage items extracted should be fully documented and catalogued prior to being forwarded to the Australian Museum. Documentation and cataloguing must be undertaken to museum standards.

2.18 SOCIAL IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the social impact of a proposal when assessing a specific development application.

Social Impact Assessment focuses on the human dimension of a locality. It seeks to address the question "what will be the impact of a project/development on people?" and to anticipate outcomes that may flow from a proposed development which are likely to affect people's way of life, their culture and/or their community.

Social Impact Assessment is not a tool to stop development, but is to assist in the assessment of development proposals so that the best development results.

Objectives

a. To ensure that development takes into consideration the likely social impacts that may arise, including any effects on equity, access, participation and rights.
b. To ensure that development occurs in appropriate locations, and is supported by adequate services and facilities to support the community and its needs.
c. To ensure that services and facilities are accessible to all members of the community.
d. To facilitate availability of active and passive recreation, natural landscapes, educational opportunities, employment opportunities, health services, public transport, and neighbouring centres, as well as maintaining or enhancing the aesthetics and amenity of the area.

Controls

1. A Social Impact Assessment (SIA) must be prepared in accordance with Council's *Social Impact Assessment Guidelines*, and submitted with the development application in the following circumstances:
   i. the development is identified in table 5, or
   ii. the development is valued at $5,000,000 or greater, or
   iii. the development has a floor area greater than 3000m^2, or
   iv. where Council identifies that particular circumstances warrant it.

Note: Council officers will use the following criteria to determine if a SIA is required under control 1(iv) above:

- The development is targeted at a particular socio-economic or demographic group,
- The development is considered in conflict with its locality, and
- The development has, or is anticipated to generate, significant levels of community opposition.

2. Potential adverse impacts identified by a SIA must be mitigated through redesign, whilst positive impacts should be enhanced by the design or other actions.

Note: The scope, complexity and requirements of a SIA will be commensurate with the scale of the proposed development. Applicants are advised to consult with Council's Social Planner regarding specific requirements.

Table 5 - Uses requiring Social Impact Assessment

• Amusement Centres • Animal Training and Boarding Establishments • Backpackers Accommodation • Boarding House • Brothels/sex service premises • Child Care Centre • Community Facility	• Markets • Medical Centre • Mixed Use Development (residential and commercial) • Mortuary • Passenger Transport Facilities • Place of Public Entertainment • Place of public worship

- Designated Development
- Education establishment
- Entertainment facility
- Expansion or Modification of an existing use that would otherwise be prohibited under the LEP
- Function Centre
- Funeral Chapel / Funeral Home
- Group Home
- Health Consulting Rooms
- Health service facilities
- Helipad
- Home Occupation (sex services)
- Home-based child care
- Hospital (not including a day surgery facility – refer to medical centres)
- Hotel or Motel accommodation
- Information and Education Facility
- Licensed Premises (Hotels, Taverns and Bottle Shops)
- Major roads, arterial or transport corridors
- Port uses/port facilities
- Pub
- Public Transport facilities
- Recreation Areas
- Recreation facilities (indoor)
- Registered Club
- Residential Care Facility
- Residential Flat Building containing over 10 dwellings
- Restricted Premises
- School
- Seniors Housing
- Service Stations
- Sewage Treatment Plants
- Takeaway food and drink premises including, drive-thru establishments, bottle shops, and fast food outlets
- Waste Facilities
- Water System / Facilities

2.19 ECONOMIC IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the economic impact of a proposal when assessing a specific development application.

Economic Impact Assessment focuses on the economic dimensions of a locality. It seeks to identify how a proposal will contribute to the economic growth of the locality and City through locating development in appropriate areas, supporting existing development in the area and through the creation of employment opportunity and other economic benefits.

Objectives:

a. To ensure that development supports the Lake Macquarie hierarchy of centres and positively contributes to the City by supporting existing development in the locality and the community through the creation of employment opportunities.

b. To ensure development contributes through additional local employment and economic benefits.

Controls

1. An economic impact assessment must be prepared and submitted to Council at the discretion of the assessing officer under the following circumstances:

   i. Where development is valued at $5,000,000 or greater, or

   ii. Where the proposed development has a floor area greater than 5000m^2, or

iii. Where the development is inconsistent with the zone objectives.

Note: Refer to Council ***Economic Impact Assessment Guideline*** for further information and guide to the economic considerations for specific types of development.

2.20 LOT AMALGAMATION

Definition: An **isolated lot** means an allotment (or allotments) that are bounded on all sides (excluding any road frontage) by existing (or approved) medium to high-density residential or commercial development that would preclude the development of the allotment(s) beyond a dwelling house or dual occupancy dwelling or a two storey commercial or mixed use building.

Objectives

a. To avoid isolated lots with limited development potential.

b. To support efficient development and increase floor space yields on amalgamated sites.

c. To accommodate the desired built form of the town centre.

d. To minimise the number of driveway crossings from the street or lane.

Controls

1. Site amalgamation should not result in an isolated lot that is unviable for redevelopment to the scale and intensity desired for the locality.
2. Development that would result in the creation of an isolated lot must be supported by documentation that demonstrates in writing that an offer to purchase has been made to the owner(s) of the isolated lot, and the owner has refused to negotiate. A Licensed Valuer must base the offer on at least one recent independent valuation.
3. Development that would result in the creation of an isolated lot must provide for a future extension incorporating the isolated lot or demonstrate that the isolated lot can be developed independently.
4. Development that would result in the creation of an isolated lot must comply with the Planning Principles established by the Land and Environment Court in *Melissa Grech v Auburn Council [2004] NSWLEC 40, Cornerstone Property Group Pty Ltd v Warringah Council [2004] NSWLEC 189* and *Karavellas v Sutherland Shire Council [2004] NSWLEC 251*.

Note: Council may determine that sites with a frontage of less than 20 metres are not suited to achieving the maximum permissible height for that lot.

2.21 UTILITY INFRASTRUCTURE

Objectives:

a. To identify utility requirements and new infrastructure at an early stage of development.

b. To ensure utilities structures are integrated in the site planning and design of development.

c. To protect and improve the visual amenity of the primary street frontage.

Controls:

1. All existing and additional utility infrastructure must be identified, and an assessment of whether these services need to be upgraded for the proposed development, at the site planning stage.
2. The location of existing and proposed electricity kiosk sub-stations, fire hydrants, along with clearance areas and access ways must be identified and shown on building and landscape plans.
3. Council may require the provision of underground electricity services for the full length of the primary frontage of a development.

2.22 SITES WHERE A CONCEPT PLAN IS REQUIRED

Objectives

a. To capture the opportunities for public benefit that planning and development of larger sites permit.

b. To ensure that a thorough urban design analysis of the site, and its urban context, is used to inform the site planning and design process.

c. To allow the site layout, building scale form and height, approximate yield and public benefit of a development proposal to be determined early in the development assessment process.

d. To allow consideration of a proposal that varies from the specified block controls in the Town Centre Area Plans.

Controls

1. Where development is proposed on site(s) that exceeds 4000m^2 in area or that are identified as a 'Concept Plan Required' site in an Area Plan in Part 10, 11 or 12 of this DCP, a Concept Plan for the site must be prepared and submitted to Council as a Stage 1 Development Application.
2. A comprehensive urban design analysis of the site and its urban context must be prepared by a suitably qualified and experienced professional.
3. The urban design analysis must be used to inform and guide preparation of the Concept Plan.
4. The Concept Plan must include but is not limited to:
    i. a site plan identifying new public views, new or improved public space, new or improved community facilities, items of heritage, landscape or environmental conservation, public transport facilities, new or improved pedestrian links and/or new vehicle access,
    ii. utility infrastructure requirements such as electricity substations, fire hydrants and gas connections, and their location,
    iii. a site plan and elevations showing proposed built form, heights, setbacks, building separation, podium levels, extent of podium, landscape areas and interface with the street or public space,
    iv. an interactive electronic 3D block model of the proposed building masses and the existing buildings on surrounding sites,
    v. illustrations that indicate proposed building character and materials,
    vi. an indication of the extent of basement car parking, as basement car parking that is built to the boundary has implications for providing deep soil zones in accordance with Section 6.8 of Part 4 – Development in Business Zones.

3 STREETS AND PUBLIC SPACE

3.1 PEDESTRIAN LANES

Objectives:

a. To provide pedestrian lanes between key destinations in each town centre.

b. To focus pedestrian traffic and sustain retail activity along each lane.

c. To ensure a pedestrian lane is open, accessible, safe, well lit, and has active frontages.

Controls:

1. A pedestrian lane must be a minimum five metres in width
2. A pedestrian lane must be open to the sky above.
3. A pedestrian lane must allow non-discriminatory access.
4. The alignment of a pedestrian lane must provide a clear line of sight from end to end.
5. Development must maximise the length of retail or office floor space with frontage to the lane.
6. Development must maximise the area of display windows fronting the lane.
7. Development must include entries, cantilevered awnings, and architectural detail at the footpath level.
8. Development must include windows or balconies on upper levels to provide surveillance to the lane.
9. Development must include pedestrian lighting to the lane.
10. The property owner must maintain the lane as an open and public lane, or dedicate the land to Council as a public lane.

3.2 PEDESTRIAN LINKS THROUGH BUILDINGS

Objectives:

a. To improve pedestrian access and ease of circulation through town centres.

b. To provide pedestrian access through buildings that is easy to navigate, pleasant, safe and well lit.

Controls:

1. A pedestrian link through a building must:
   i. be a minimum of four metres in width, and
   ii. have a minimum floor to ceiling height of four metres, and
   iii. incorporate non-discriminatory access, and
   iv. incorporate CPTED principles, and
   v. include signage to identify the link.
2. The alignment of the pedestrian link must ensure a clear line of sight from end to end.
3. The building elevation at ground level fronting the pedestrian link must include suitable uses that encourage pedestrian activity along with windows, entries, and architectural detail that supports casual surveillance and provides interest.
4. Development must include lighting for the length of the pedestrian link and the entries.

3.3 FOOTPATH DINING

Objectives:

a. To support footpath dining in appropriate locations.

b. To maintain safe and functional pedestrian access.

c. To make efficient use of footpath dining space on active frontages.

d. To integrate footpath dining with other footpath uses and infrastructure.

e. To encourage the use of large wall openings and retractable windows or doors at the street level for café uses.

Controls:

1. Footpath dining must only be located in areas where it is possible to maintain a two metre wide clear pedestrian through route.
2. The two metre wide clear pedestrian route should be located along the building frontage to assist with navigation for the vision impaired.
3. New development for café use must include opening or retractable windows or doors below awning level that occupy at least 75% of the façade area.
4. The design of footpath dining areas must be integrated with other street uses and infrastructure such bus stops, pedestrian crossings, poles, trees, bins, seats and planter boxes.
5. Footpath dining areas adjacent to vehicle parking or no standing lanes must maintain a 600mm clear area, measured from the face of the kerb for access and egress.
6. A wheelstop must be provided for each rear to kerb parking space that abuts a footpath dining area.
7. Footpath planter boxes must be permanently fixed to the pavement or designed for removal and storage outside of trading hours.
8. A footpath dining proposal must be consistent with Council's *Footpath Dining Procedure*.
9. A licence agreement must be obtained from Council for footpath dining.

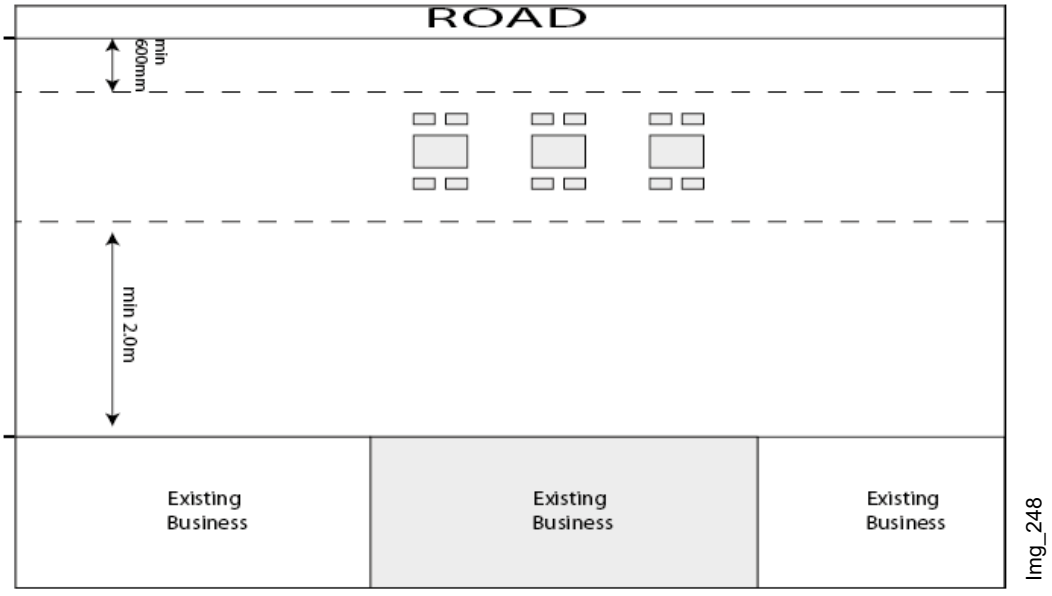


Figure 3 - Location of Footpath Dining

3.4 STREETSCAPE IMPROVEMENTS

Objectives:

a. To provide high quality infrastructure such as pedestrian paving, kerb extensions, drainage, and cycleways that support walking, cycling and access to public transport.

b. To enhance the amenity of the street for pedestrians.

c. To develop the character of each town centre character through a consistent selection of materials, trees, furniture and design details.

d. To provide opportunities for public art.

Controls:

1. Development must result in improvement to the amenity and appearance of adjoining footpaths or public domain.
2. Works undertaken within the public domain must be consistent with the provisions of the relevant *Streetscape Master Plan* and Council's *Streetscape Technical Guidelines*.
3. Where there is not a relevant *Streetscape Master Plan* for a town centre, Council will specify the extent and type of street trees, footpath paving, pedestrian lighting, street furniture, public art and the like.

3.5 NON-DISCRIMINATORY ACCESS

Objectives:

a. To ensure that development accommodates all people regardless of mobility.

b. To ensure universal design that provides non-discriminatory access and equitable use.

c. To minimise the scale and visual impact of ramp structures on the footpath and building façade.

d. To ensure that design for flooding and sea level rise does not preclude non-discriminatory access.

Controls:

1. Building entries must be located where there is the smallest level change from the public footpath to the ground floor interior.
2. The design and construction of development must ensure that non-discriminatory access is provided to enable all users of that development to access the same level of service and use.
3. Where floor levels are raised to accommodate flooding or projected sea level rise, the design of non-discriminatory access must incorporate an external terrace or internal floor space set at an intermediate level between the footpath and general ground floor level of development.
4. Where development is listed in Table 6, a Disability Access Audit must be prepared, in accordance with Council's non-discriminatory access guideline, and submitted to Council. An accredited access consultant must prepare the Disability Access Audit.

Note*:* Refer to Council's *Non-discriminatory Access Guideline* for further information.

Note: A Disability Access Audit may be waived for some developments at the discretion of the assessing officer for some Change of Use proposals.

Table 6 - Development types requiring a Disability Access Audit

Amusement centres with a total floor area of 500m^2 or more	Markets with a total floor area of 500m^2 or more
Backpackers' accommodation with 20 or more bedrooms	Manufactured home estate/caravan park

Boarding House with more than 20 rooms	Medical centre
Business/commercial premises with a total floor area of 500m^2 or more	Mixed use development with a total floor area of 500m^2 or more
Child care centre	Multi-dwelling housing with 10 or more dwellings
Community facility	Nightclub
Educational establishment	Passenger transport facilities
Entertainment facility	Place of public worship
Function centre	Recreation facilities – indoor, outdoor and major
Group home	Registered club
Health consulting rooms with 4 or more consulting rooms	Retail premises with a total floor area of 500m^2 or more
Health services facilities	Residential care facility
Hospital	Residential flat building with 10 units or more
Hotel or motel accommodation	Seniors housing
Information and Education facility	Tourist accommodation with 20 units or more
Licensed premises	Change of Use

3.6 LIGHTING

Objectives:

a. To ensure safe and convenient pedestrian movement on footpaths and through public spaces.

b. To provide energy efficient external lighting.

c. To allow for cost effective maintenance of external lighting.

d. To ensure that the impact of light and glare on surrounding residential development is minimised.

Controls:

1. Development must include external lighting that provides at least 20 lux illumination at the building entrance and to the footpath at the street boundary, or the boundary with a public place.
2. External lighting must be located on the building façade and below awning level.
3. External lighting must be designed and sited in accordance with the relevant Australian Standard to minimise glare on surrounding dwellings, commercial and retail premises, and public spaces.
4. Footpath lighting must incorporate low energy design features such as:
   i. Energy efficient lamps and lenses;
   ii. Daylight sensors and timer controls; and
   iii. Lamps located at an effective height and spacing.

4 ACTIVE STREET FRONTAGE

4.1 GROUND FLOOR RESIDENTIAL USES IN THE BUSINESS ZONES

Objectives:

a. To maximise the extent of ground floor business, retail or community uses at the street frontage in the B3 Commercial Core and B2 Local Centre zones.

b. To support development of ground floor commercial premises, in conjunction with residential development, in the B4 Mixed Use zone.

Controls:

1. For the purposes of Clause 7.10 in LMLEP 2014, development in the B3 Commercial Core and B2 Local Centre zones must provide retail, business or community uses at ground level, for the full extent of the street frontage(s), not including entry and access ways.
2. Development in the B4 Mixed Use Zone that provides commercial premises on the ground floor, may satisfy the requirements of Clause 7.10 in LMLEP 2014, provided that each office and each ground floor residential unit has:
   i. frontage to the street,
   ii. direct entry from the street that is visible from the footpath,
   iii. direct access to the parking area,
   iv. a minimum floor to ceiling height of 3.0m,
   v. a minimum area of $30m^2$,
   vi. basic facilities such as a sink and toilet,
   vii. a front terrace or deck facing the street with a maximum height above the street of 1.0m, and
   viii. a landscape area of at least $10m^2$ between the street and front entry that satisfies the landscape requirements for planting in front setback areas.
3. For the purposes of Clause 7.10 in LMLEP 2014, each ground floor office in the B4 Mixed Use Zone must have a dedicated parking space where the office area exceeds $40m^2$.

4.2 GROUND FLOOR LEVELS

Definition: Active street frontage means a street frontage that enables direct visual and physical contact between the street and the interior of the building. Clearly defined entrances, windows and shop fronts are elements of the building façade that contribute to an active street frontage.

Objectives:

a. To ensure non-discriminatory access between the public footpath and ground floor space.

b. To allow a line of sight between the public footpath and ground floor space.

c. To adapt floor levels close to the street where general ground floor levels are raised to meet Sea Level Rise Policy.

Controls:

1. Where floor levels are raised to accommodate flooding or projected sea level rise the building design must incorporate either:
   i. an external terrace within the front setback area that is set at an intermediate level between the footpath and the main ground floor and is suitable for outdoor trading, or:

ii. an internal floor space at the street frontage that is set at an intermediate level between the footpath and the main ground floor and is suitable for active use or display.

2. For all other sites the difference in level between the public footpath and the internal floor level at any point on the street boundary must not exceed 600mm (refer to Figure 4).
3. Where floor levels are raised to accommodate flooding or projected sea level rise an intermediate floor areas must be designed and built to withstand temporary inundation.

4.3 GROUND FLOOR ENTRIES

Objectives:

a. To ensure that entries are located on the street frontage and are clearly recognisable.
b. To ensure that entries are easily accessible for all users.

Controls:

1. On sites that slope along the street boundary the building entry must be located to minimise the difference between the footpath level and the internal floor level.
2. Solid framing or solid wall elements must be used to distinguish entries from window display areas.
3. Fully glazed doors within fully glazed frontages are not an acceptable design solution.
4. Signage must be incorporated into the façade design to identify the tenancy and address.

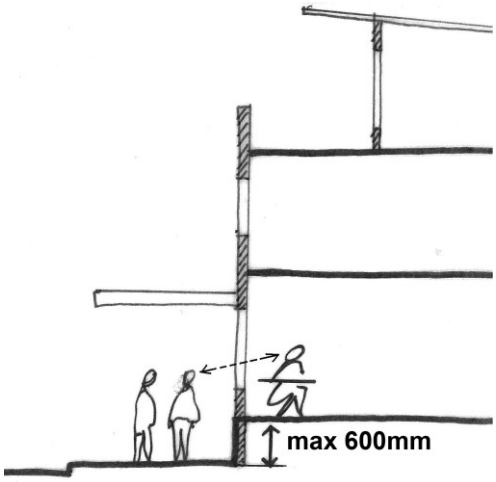


Figure 4 - Level change between footpath and ground floor level

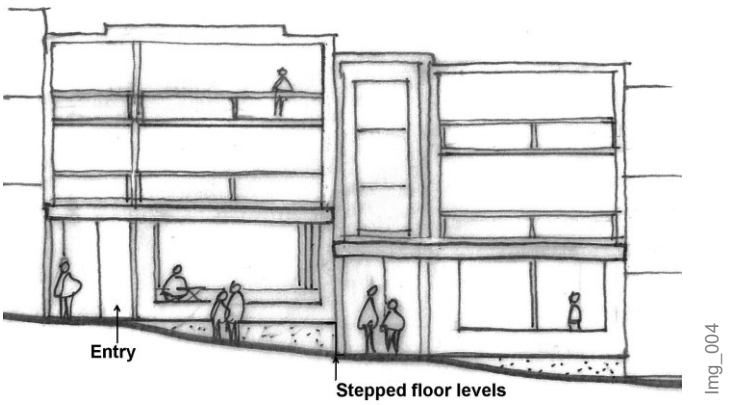


Figure 5 - Floor levels and roof levels stepping with topography

4.4 GROUND FLOOR GLAZING

Objectives:

a. To ensure that development allows a visual connection between the street and the ground level activity.

Controls:

1. The façade below awning level must include clear glazed windows with low sills or retractable glazed doors.
2. The clear glazing area below awning level must be at least 50% of the façade area.

4.5 STREET AWNINGS

Objectives:

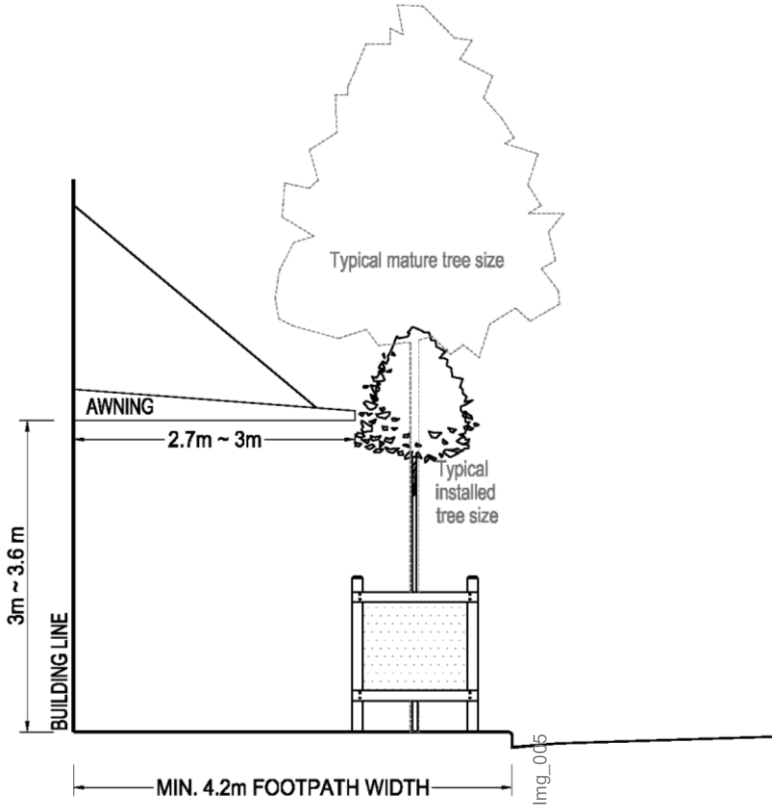
a. To provide shelter and shade for pedestrians and footpath activity in pedestrian priority areas.

b. To create a consistent pedestrian scale and space, by stepping awnings with the slope of the footpath.

Controls:

1. Development in B1, B2, or B3 Zones must provide a continuous or stepped solid box awning for the full extent of the building frontage at the street. Use of tinted glass is not acceptable.
2. The awning on primary pedestrian streets must be at least 2.7 metres deep, or extend to within 600mm of the kerb face, except where Council requires a variation to accommodate street planting within the footpath area.
3. Development in the B4 Zone must provide a solid box awning that is at least two metres deep for at least 50% of the building frontage, including the entrance to the building.
4. The vertical distance from the footpath to the underside of an awning must be between three and 3.6 metres at any point.
5. Awnings must use materials that are sun, rain and wind proof.

6. Awnings must drain towards the building, and be supported by approved stormwater disposal



methods.

Figure 6 - Cantilever box awnings and street trees

5 ACCESS AND PARKING

Note: Several Australian Standards are specifically relevant to this section. All designs and development must be in accordance with the relevant Australian Standard.

5.1 TRAFFIC AND VEHICLE ACCESS

Objectives:

a. To minimise impacts on the streetscape.

b. To minimise the impacts of traffic generation on street function and other modes of transport.

c. To maximise the retail frontage to streets in the town centre.

d. To minimise vehicle crossing points along pedestrian footpaths.

e. To maximise vehicle access along the rear of properties.

f. To ensure adequate space for turning from a rear laneway into private property.

Controls:

1. A Traffic Impact Statement must be prepared and submitted where:
   i. More than 1000m^2 Gross Floor Area is proposed; or
   ii. Direct access is required for an arterial or sub-arterial road; or
   iii. The main entry driveway is within 50 metres of a signalised intersection.
2. Vehicle access to on-site car parking or service areas must not be located on the primary street frontage if access can be gained from a secondary street or rear lane.
3. Vehicle access for light traffic must be restricted to one location.
4. The driveway crossover at the boundary must not exceed the minimum design width required to meet Council traffic requirements.
5. Access to on-site car parking and servicing facilities must be oriented perpendicular to the street alignment, and must not ramp along a street or lane alignment.
6. Where there is no alternative to access at the primary street frontage, the crossover must not occupy more than 25% of that frontage.
7. Where the existing laneway width is less than eight metres, development must be set back a minimum of one metre from the lane boundary.

Note: Refer to Council's *Traffic Impact Statement and Vehicle Access Guideline* for further details and requirements.

5.2 DESIGN OF PARKING AND SERVICE AREAS

Objectives:

a. To maximise pedestrian safety and amenity.

b. To design parking areas that do not have a negative impact in the movement of pedestrians and cyclists.

c. To ensure that on-site car parking and driveways do not dominate or detract from the appearance of the development or the local streetscape.

d. To support basement parking where there is adequate site area.

e. To encourage co-operative approaches to car parking provision between adjoining small lots, such as amalgamation of car parks and shared access and egress points.

f. To ensure the safe and efficient movement of vehicles within, entering and leaving properties.

Controls:

1. Designs of parking areas must ensure that priority is given to the needs or pedestrians, disabled people and cyclists above the needs of the car.
2. Basement parking should be provided on all sites that have sufficient area for access and circulation at a basement level.
3. Where unable to provide basement or rear parking, at grade car parking must be screened along the primary street frontage, and a minimum of 50% on the secondary street frontage for developments on corner lots.
4. On-site car parking and servicing facilities must be located at a basement level or at the rear of development.
5. Car parking and driveway areas must be located to minimise disruption to pedestrian movement, safety and amenity on the public footpath.
6. Car park design must include direct, safe, and well-marked pedestrian routes from the car park to building entries and footpaths / shared pathways.
7. Car park design must not result in dead-end aisles.
8. Where at-grade parking needs to be provided, aisles must be orientated at right angles to the main building frontage.
9. Car parks above ground level must be screened from the street with landscape planting or with high quality façade screening that allows natural lighting and ventilation.
10. Servicing facilities for non-residential uses must be located and designed to protect the amenity of residents.
11. For the non-residential component of parking, stack parking may be permitted for long stay spaces only.
12. For the residential component of parking, stack parking may be permitted only where two spaces are designated for a single dwelling.
13. The area of site excavated for the purposes of underground car parking must be limited to the building footprint of the development.
14. Permanent sub-surface support and retention structures must be set back a minimum of 900mm from adjacent property boundaries.
15. The design of parking areas must comply with *AS2890 Parking Facilities*.

5.3 BIKE PARKING AND FACILITIES

***Objectives*:**

a. To provide convenient and safe bike access, movement and parking.

b. To encourage active forms of transport with convenient and secure end of trip facilities.

***Controls*:**

1. The following bike facilities must be provided for customers and short term users:
   i. Five bike parking spaces plus an additional 10% of bike parking spaces/ car parking spaces for up to 50 car parking spaces.
   ii. For developments requiring over 50 car parking spaces, a flat 10% ratio of bike parking spaces/car parking spaces applies.

Note: Car parking rates are defined in Table 7: Car Parking Rates

2. Bike parking for customers and short term users must be:
    i. Located close to the development's pedestrian entrance where there is active and passive surveillance;
    ii. Within easy and safe access from outside the site, without impeding the movement of pedestrians or other vehicles; and
    iii. At least 50% covered from the weather where there are more than 10 spaces.
3. The following bike facilities must be provided for employees:
    i. One employee bike parking space for each 10 employees, or part thereof;
    ii. One personal locker per two employee bike parking spaces;
    iii. One unisex change room and one shower for developments greater than 1000m^2 GFA and less than 2500m^2 GFA;
    iv. One female change room with one shower and one male change room with one shower, for developments greater than 2500m^2 GFA; and
    v. One additional shower (in each change room) for each additional 5000m^2 GFA up to a maximum of five showers in each change room.
4. Bike parking for employees must be located in a secure undercover area.
5. The design of all bike parking must:
    i. Include clear signposting and good lighting;
    ii. Use racks that support the bicycle in an upright position, with the bicycle frame and at least one wheel locked to the rack;
    iii. Ensure racks that fit all types and sizes of bicycles;
    iv. Incorporate construction and materials that are durable and resistant to vandals and thieves; and
    v. Be designed in accordance with relevant Australian Standards.

5.4 MOTOR BIKE PARKING

Objectives:

a. To provide convenient and safe motor bike access, movement and parking.
b. To ensure that the number of motorbike parking spaces is sufficient to support the intended use.

Controls:

1. Development must provide one motorbike parking space for each 20 car parking spaces (as required in Table 7: Parking Rates).

5.5 CAR PARKING RATES

Objectives

a. To ensure the provision of parking does not result in a substandard urban outcome.
b. To ensure that the number of car parking spaces is sufficient to support the intended use.
c. To ensure that the number of car parking spaces does not discourage the use of public transport or other modes of transport.
d. To ensure the provision of car parking results in an efficient use of land within our centres.

Controls

1. Where the proposed number of car parking spaces is **less than** those specified in Table 7, detailed justification must be provided to support a variation, including:
    i. Analysis of the active and public transport options available within the vicinity of the proposal; and
    ii. Survey data from comparable facilities with similar levels of active and public transport provision; or
    iii. Implementation of a Green Travel Plan.
2. Where the proposed number of car parking spaces is **more than** that specified in Table 7, detailed justification must be provided to support a variation, including:
    i. Demonstration that exceeding the designated car parking rates does not detract from the urban design outcomes (streetscape and built form) of the proposal; and
    ii. A detailed cost benefit analysis demonstrating the benefits to the community is superior than adherence to the rates including consideration of the environmental and economic benefits of using the land for a higher order use; and
    iii. Parking survey data from existing operations where expansion is proposed.
3. The number of car parking spaces provided may be consistent with the specifications of Table 7 without further justification.
4. Where vehicle parking requirements are not specified in Table 7, justification must be provided that supports the proposed vehicle parking provisions, including:
    i. Consideration of the desired urban design (streetscape and built form) outcomes of the area; and
    ii. Analysis of the active and public transport options available within the vicinity of the proposal; and
    iii. Survey data from comparable facilities with similar levels of active and public transport provision.

Note: Determination of parking rates is at Council's discretion.

5. Where the floor area of an existing development is being increased, the required car parking is to be calculated for the additional floor area only.
6. Where a Green Travel Plan proposes to reduce the car parking rate, it must demonstrate a practical and effective combination of:
    i. Employee incentives to encourage alternatives to car travel (such as public transport or taxi vouchers);
    ii. End of trip facilities in excess of Council's requirements, including additional showers and lockers to encourage walking and cycling;
    iii. Designated car parking spaces for car sharing; and
    iv. Preparation of a Transport Access Guide (TAG) with concise instructions on how to reach a site or venue by public transport, walking and cycling (using such sources as maps, websites and business publications).
7. Where a Green Travel Plan is proposed, it must be accompanied by a written agreement with the owner or occupier to implement the plan.

Note: Where proposals cannot meet the parking requirements on site and cannot provide sufficient justification for the variation, alternative provisions for car parking may be made in accordance with the relevant *Section 7.11 Contributions Plan(s)* and/or *Council's Voluntary Planning Agreement Policy*.

Note: 'Amenities' and 'storage space' are not included when calculating Gross Floor Area (GFA) for car parking purposes.

Table 7 - Car Parking Rates for Development in Business Zones

<table>
<tr><th>Development Type</th><th>Car Parking Rate</th></tr>
<tr><td>boarding houses and group homes</td><td>1 space plus 0.5 spaces per bed.</td></tr>
<tr><td>disability parking rate</td><td>1 space per 50 spaces. Where the requirement is between 5 and 50 spaces, at least 1 space is to be provided for persons with a disability</td></tr>
<tr><td>residential flat buildings, Multi dwelling housing and Shop top housing. Including, as a component of Mixed Use Developments.</td><td>
<table>
<tr><th colspan="2">Dwelling Unit Size/No. of Bedrooms</th><th>Avg. Vehicle Spaces Per Dwelling</th></tr>
<tr><th>Location</th><th>A</th><th>B</th></tr>
<tr><td>1 bedroom or studio apartment</td><td>0.5</td><td>0.75</td></tr>
<tr><td>2 bedrooms</td><td>0.75</td><td>1.0</td></tr>
<tr><td>3 bedrooms</td><td>1.0</td><td>1.5</td></tr>
<tr><td>Plus</td><td></td><td></td></tr>
<tr><td>Visitor parking per dwelling –</td><td></td><td></td></tr>
<tr><td>Residential flat buildings and shop top housing</td><td>0.25</td><td>0.25</td></tr>
<tr><td>Multi dwelling housing</td><td>0.5</td><td>0.5</td></tr>
</table>
Where:
A – Development on B2, B3 and B4 zoned land.
B – Development on B1 zoned land.
Single file parking may be used where two spaces are provided for one dwelling.</td></tr>
<tr><td>seniors housing</td><td>Car parking provision is in accordance with SEPP (Senior Living) requirements.</td></tr>
<tr><td>home business and home industry
In B1, B2, B3, B4 zones or as a component of a Mixed Use Development
Where vehicles are an intrinsic component of the business or industry</td><td>As per Dwelling – ie: 1 undercover space and 1 space as single file parking per dwelling.
As per residential flat buildings, plus 1 space per 35m^2 GFA of the workplace area to provide for employees and clients.
As per dwelling, plus 2 spaces</td></tr>
<tr><td>home occupation (sex services)</td><td>1 space per customer as expected at any one time</td></tr>
<tr><td>backpackers' accommodation</td><td>1 space per 100m^2 GFA and parking for a mini-bus</td></tr>
<tr><td>bed and breakfast establishment</td><td>As per dwelling house, plus 1 space per guestroom. May be provided as single file parking where guest parking is provided behind dwelling parking.</td></tr>
<tr><td>hotel or motel accommodation
May include dining facilities, outdoor eating areas or beer gardens.</td><td>1 space per 25m^2 of GFA</td></tr>
</table>

Development Type	Car Parking Rate
Where providing accommodation *Where providing conference facilities*	1 space per short-stay room, plus 1 space per 2 staff. 1 space per 5m^2 of GFA. Note – Where a mixture of these activities occurs calculate vehicle parking requirements based on activity mix.
serviced apartments	1 space per unit, plus 1 space per 50m^2 GFA for any dining room provided as part of the development
business and office premises	1 space per 40m^2 GFA And where more than 20 car spaces are required and the development is within 400m of a designated bus route, the development provides a 'Bus shelter' (or approved equivalent) in lieu of 1 car space in every 40, or part thereof, of the onsite spaces required. One shelter to be provided for each car space deleted
funeral homes	1 space per employee plus 1 space per 3 seats in chapel(s)
bulky goods premises	2 spaces per tenancy or lot, plus 1 space per 40m ^{2} GFA.
food & drink premises *Where the total area is less than 5000m^2 GFA* *Where the total area is greater than 5000m^2 GFA*	 1 space per 25m^2 GFA 1 space per 40m^2 GFA
restaurant or café *Where the total area is less than 5000m^2 GFA* *Where the total area is greater than 5000m^2 GFA*	 1 space per 25m^2 GFA 1 space per 40m^2 GFA Note:- See Australian Standard for Fast Food takeaway vehicle queuing lengths.
take-away food & drink premises *Where the total area is less than 5000m^2 GFA* *Where the total area is greater than 5000m^2 GFA*	 1 space per 25m^2 GFA 1 space per 40m^2 GFA
hardware & building supplies	2 spaces per tenancy or lot, plus 1 space per 50m ^{2} GFA.
shops or group of shops *Where the total area is less than 5000m^2 GFA* *Where the total area is greater than 5000m^2 GFA*	 1 space per 25m^2 GFA 1 space per 40m^2 GFA

Development Type	Car Parking Rate
	And where more than 20 car spaces are required and the development is within 400m of a designated bus route, the development provides a 'Bus shelter' (or approved equivalent) in lieu of 1 car space in every 40, or part thereof, of the onsite spaces required. One shelter to be provided for each car space deleted. Note - Where a development forms a group of shops or centre, parking requirements are calculated on the total GFA of the shops rather than the total GFA of the development. Where the development is a mix of activities, parking for these activities are calculated individually and added to the total GFA shop component.
neighbourhood Shops *Where the total area is less than 5000m² GFA* *Where the total area is greater than 5000m² GFA*	 1 space per 25m² GFA 1 space per 40m² GFA
vehicle sales or hire premises	1 space per 10 vehicles displayed, plus 1 space per 1.5 staff
registered club *Less than 1,500m² GFA* *Greater than 1,500m² GFA*	 1 space, plus 1 space per 15m²GFA 40 spaces, plus 1 space per 25m² GFA And where more than 50 car spaces are required, a 'Courtesy bus' is provided for clientele transfers in lieu of 1 car space in every 20 spaces required. Note – See also Hotel/Motel if providing dining or accommodation.
restricted premises *Where the total area is less than 5000m² GFA* *Where the total area is greater than 5000m² GFA*	 1 space per 25m² GFA 1 space per 40m² GFA
service station *Where including a convenience store* *Where including a vehicle repair and service facility* *Where including vehicle hire* *Where tyre retail and/or repair*	 1 space per 60m² GFA 1 space per repair bay 0.25 spaces per vehicle for hire 1 space per staff, plus 2 spaces per work bay Note - Where a mixture of these activities occurs calculate vehicle parking requirements based on the activity mix
sex services premises	1 space per employee plus 1 space per customer as expected at any one time.
veterinary hospitals	1 space per practitioner, plus 0.5 per full-time equivalent employee, plus 3 visitor spaces

Development Type	Car Parking Rate
light industries	1 space per 100m^2 GFA, plus 1 space per 50m^2 ancillary office space
passenger transport facilities	2 spaces, plus 1 space per vehicle, plus 0.5 spaces per full-time equivalent employee
education establishments	
Where pre-school with normal school hours	1 space per 4 children, plus 1 space per 1.5 full-time equivalent staff.
Where primary or secondary school	1 space per 1.5 full-time equivalent staff, plus 1 space per 50 students
Above secondary school	1 space per 1.5 full-time equivalent staff, plus 1 space per 8 students
In B1, B2, B3, B4 zones or as a component of Mixed Use Development	1 space per 2 full-time equivalent staff, plus 1 space per 50 students
hospitals (not including a day surgery facility – refer to Medical Centres)	1 space per 2 beds, plus 1 space per 2 staff, plus Ambulance spaces
Where a nursing home, hospice, or similar long-stay establishment	1 space per 6 nursing home beds, plus 1 space per 2 staff. Note – Calculate staff spaces on the maximum number of staff at any one time. Where a mixture of these activities occurs calculate vehicle parking requirements based on the activity mix
medical centres	
Where a health centre or diagnostic technology centre	1 space per on-duty practitioner, plus 1 space per 2 full-time equivalent employees, plus 1.5 spaces per consulting room, plus 1 space for delivery and collection service
Where a day surgery	As above, plus 1 space per 2 operating theatres
Where a collection Centre	1 space, plus 1 space per collection room, plus 1 space for delivery and collection service
Where a laboratory	2 spaces, plus 1 space per 50m^2 GFA Note – Where a mixture of these activities occurs calculate vehicle parking requirements based on the activity mix
health consulting rooms	1 space per on-duty practitioner, plus 1 space per 2 full-time equivalent staff, plus 2 spaces per consulting room.
child care centres	1 car space per 8 children, plus 0.75 spaces per staff member. Parking designated for staff may be provided as single file parking where practical.
community facilities	5 spaces, plus 1 space per 40m^2 GFA
place of public worship	1 space per 3 seats
recreation facilities (indoor)	

Development Type	Car Parking Rate
Squash	3 spaces per court
Indoor cricket or other court game	20 spaces per pitch or court
Swimming	15 spaces, plus 1 space per 100m^2 GFA (indoor pool)
Gymnasium	1 space per 10m^2 GFA Notes - Where a mixture of these activities occurs calculate vehicle parking requirements based on the activity mix. Where a facility combines a number of sporting activities in one area, determine the vehicle parking requirement based on the highest use activity.
exhibition homes	2 spaces per dwelling house used for exhibition

6 DEVELOPMENT DESIGN

6.1 FRONT SETBACKS – SHOPPING CENTRES IN B1 AND B2 ZONES

This section relates to small stand-alone shopping centres such as Woodrising, Jewells, Bonnells Bay and Wyee Point

Objectives:

a. To ensure that stand alone shopping centres relate to the street.

b. To encourage small public outdoor trading areas with good sun aspect and adjacent to a main entry

Controls:

1. Development of a shopping centre on land zoned B1 Neighbourhood Centre or B2 Local Centre must be built up to the primary street boundary, and occupy at least 50% of the frontage.
2. Development of a shopping centre on land zoned B1 Neighbourhood Centre or B2 Local Centre must include retail units that have direct access from the primary street.
3. Development must include a cantilever box awning to the full length of the street frontage.
4. Development must include an outdoor trading space on the street frontage or a north or east facing frontage that:
   i. is open to the sky;
   ii. immediately adjoins a main building entry; and
   iii. has direct access to at least two retail units in the shopping centre as shown in Figure 7.

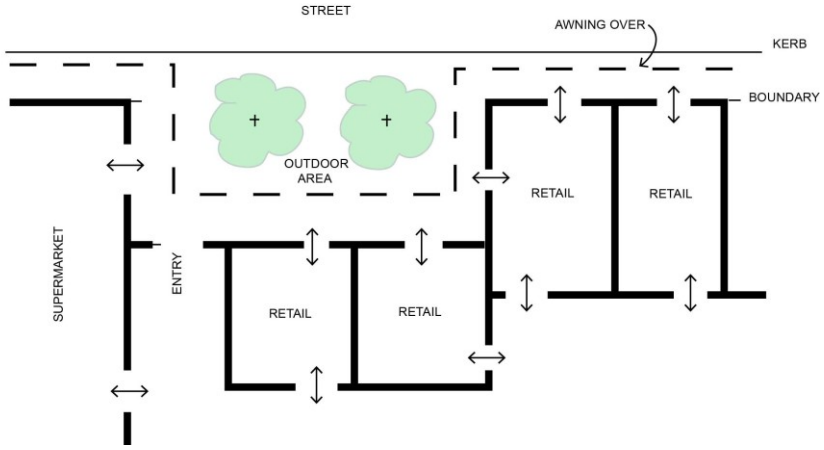


Figure 7 - Outdoor trading area at entry to a stand alone shopping centre

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6.2 FRONT SETBACKS – MAIN STREET SHOPS IN B1 B2 AND B3 ZONES

Objectives:

a. To maximise building mass and floor space at the street boundary.

b. To define the spatial character of the street.

c. To ensure privacy and amenity on upper levels

Controls:

1. Development on land zoned B1 Neighbourhood Centre, B2 Local Centre or B3 Commercial Core must be built to the primary street boundary for the full width of the building.
2. On corner lots, development on land zoned B1 Neighbourhood Centre, B2 Local Centre or B3 Commercial Core must be built to the secondary street boundary for the full depth of the building.
3. On upper levels, development must be set back at least three metres from the primary street boundary, and for corner lots, development must be set back three metres from the secondary street boundary, as shown in 8.

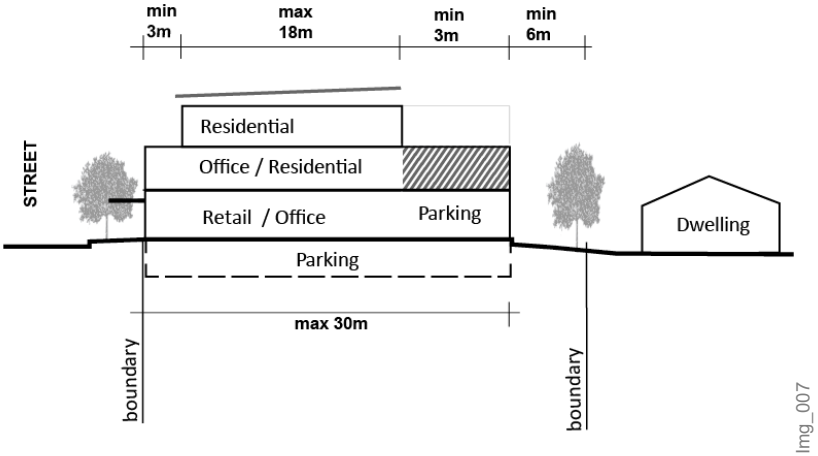

Figure 8 - Building setbacks and building depth for development in B1 B2 B3 zones

6.3 FRONT SETBACKS - B4 ZONE

Objective:

a. To provide for landscape plantings in the front setback area.

b. To support building articulation at the street frontage.

Controls:

1. Development must comply with the setbacks, as shown in Figure 9.
2. A maximum of 40% of the building frontage may encroach up to one metre into the front setback area, provided development retains adequate aerial space and deep soil volume for the planting of shade trees within the front setback area.

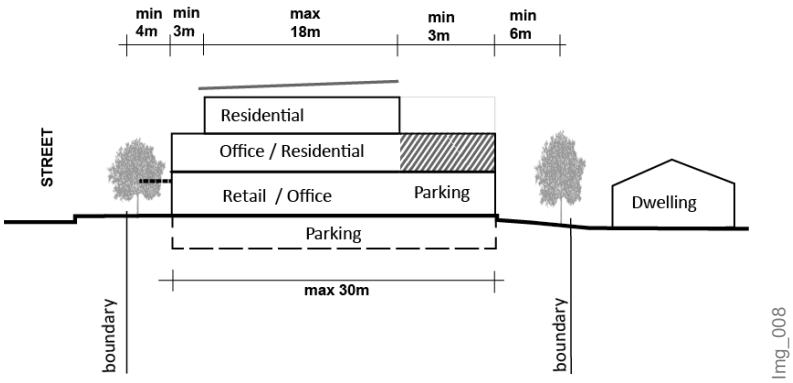

Figure 9 - Setbacks and building depths for development in B4 zone

6.4 FAÇADE ARTICULATION

Definition: **Articulation** is the change in the external alignment of walls (or other elements) that expresses the way that the parts of the building fit together.

Objectives:

a. To define smaller scale shopfronts, windows and doorways by articulation of the building façade.

b. To provide interest and detail at a pedestrian scale and level.

c. To avoid potentially unsafe places or opportunities for anti-social behaviour.

d. To contribute to the existing character or desired future character of the street as described in each Town Centre Area Plan in Part 10.

Controls:

1. Articulation of the building façade must define the scale and extent of each shop or office at the street frontage.
2. For development built to the street boundary, street level entries must not be recessed more than one metre from the surrounding façade wall.
3. For development built to the street boundary, the change in wall alignment at street level for all façade elements, except entries, must not exceed 600mm.
4. Upper level balconies may encroach up to 600mm into the front setback area, for a maximum of 50% of the building façade width.
5. On upper levels, balconies, entry awnings, sun shading devices, cornices and the like may project up to 600mm into the front setback area.
6. Blank façade walls must not exceed five metres in length.

6.5 BUILDING EXTERIORS

Objectives:

a. To ensure that buildings contribute positively to the streetscape and public domain, by means of high quality architecture, material selection and finishes.

b. To provide richness of detail and architectural interest at the street level.

c. To provide appropriate design responses to nearby development, which complement the streetscape and contribute to the efficiency of the building interior.

d. To ensure that development contributes to the interest, character and sustainability of the street.

e. To avoid glare or nuisance from highly reflective roofs, walls or windows.

f. To ensure that materials are chosen based on environmental and life cycle considerations.

Controls:

1. Building design must include:
   i. Stepped awnings and parapets on sloping street elevations;
   ii. Vertical articulation of the façade to define retail and office units;
   iii. Horizontal changes in the façade treatment on upper levels; and
   iv. Recessed balconies on the first level above the street.
2. External walls must be constructed of high quality, durable materials and finishes, with self-cleaning attributes. Curtain wall glazing or other highly reflective finishes are not acceptable.

3. Finishes with high maintenance costs, or those susceptible to degradation or corrosion from coastal environments must be avoided.
4. External façades must include articulation and/or detail elements to define internal spaces and to provide visual interest.
5. The building wall finishes must include at least two surface materials and one other detail material.
6. A material sample board and schedule that includes the environmental performance and life expectancy for each material must be submitted for all developments two storeys or more.
7. Wall, roof or glazing finishes must not include highly reflective surfaces.

6.6 BUILDING SEPARATION

Objectives:

a. To ensure an appropriate level of amenity for building occupants and neighbouring residents, including solar access, ventilation, outlook view sharing and privacy.

Controls:

1. Mixed use development that includes residential levels must meet the building separation requirements for residential flat buildings are contained within SEPP 65 – Design Quality of Residential Flat Buildings, and the accompanying Residential Flat Building Design Code.

6.7 SIDE AND REAR SETBACKS

Objectives:

a. To support development of a continuous built form at street level in town centres.

b. To ensure an appropriate level of amenity for building occupants and neighbouring residents, including natural light and ventilation, outlook, view sharing, wind shelter, and privacy.

Controls:

1. Where possible, development must be built to the side boundary for the ground and first level, for a depth of no more than 12 metres measured from the street boundary, as shown in Figure 10.
2. Beyond the 12 meters referred to in control 1, development must be set back as follows:
   i. a minimum of 1.5 metres from a side boundary for the ground and first levels, and
   ii. 3 metres for all upper levels, beyond the first level.
3. Buildings must be set back a minimum of 1.5 metres from rear boundaries for the ground level and three metres for all upper levels.
4. Where setback distances are not sufficient for visual privacy, development must provide additional measures, such as privacy screens, to achieve visual privacy for occupants and neighbours.

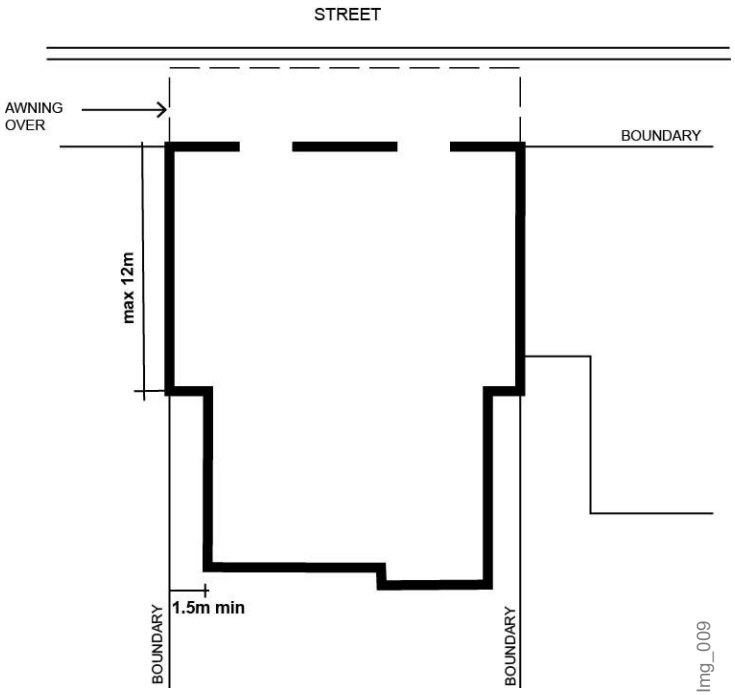

Figure 10 - Building to the side boundary

6.8 MINIMUM LANDSCAPED AREA

Objective:

a. To provide areas of landscape planting that improve visual amenity, privacy, outlook, views and recreational opportunities for residents and occupants within a development.
b. To ensure that mixed use commercial and residential development includes areas for planting on podium and roof structures.
c. To ensure that mixed use commercial and residential development in the B4 Zone includes areas for the mature growth of trees and large shrubs in deep soil.
d. To ensure landscape areas are integrated into the design of the development.
e. To encourage design of landscape planting on podium and roof structures that is suited for communal use by residents.

Controls:

1. All development must provide a minimum landscaped area of 20% of the total site area.
2. In the B4 Mixed Use Zone at least 50% of landscaped area must be deep soil planting.
3. The deep soil planting area must have a minimum width of three metres to allow for the planting of trees and shrubs that will grow to be mature plants. Optimise the extent of deep soil zones beyond the site boundaries by locating them contiguous with deep soil zones of adjacent properties.
4. Where site levels allow, podium planting is to be integrated with surrounding deep soil landscaping and hard paved areas so the podium reads as an extension of the surrounding landscape.
5. Structures to support or contain planting must be designed by a suitably qualified engineer.

Note: A minimum width of 2 metres is required for an area to be included in the landscaped area calculations.

6.9 BUILDING DEPTH

Objective:

a. To allow for natural light and ventilation to residential floor space.

b. To allow for efficient floor plans for retail and office space.

Controls:

1. Residential floor space should not exceed 18 metres in depth, unless all habitable floor space is within nine metres of an adequate natural light source.
2. Retail, business, or office floor space should not exceed 30 metres in depth, unless all floor space is within 15 metres of an adequate natural light source.

6.10 MAXIMUM OCCUPIED AREA

Definition:

100% occupied area means that the floor space on that level completely fills the maximum possible area within the setbacks from each boundary.

50% occupied area means that the floor space on that level occupies no more than 50% of the maximum possible area within the setbacks from each boundary.

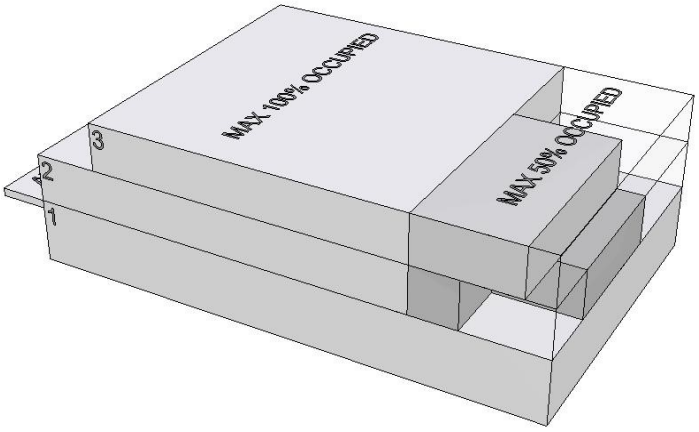

Figure 11 - Example of building mass that achieves 50% occupied area on upper levels at the rear of the development

Objectives

a. To reduce the impact of building mass and bulk on neighbouring development.

Controls

1. The floor space above ground level and within three metres of the rear setback line must not occupy more than 50% of the maximum possible area.

6.11 SETBACKS FROM RESIDENTIAL ZONED LAND

Objectives:

a. To minimise the impacts of visual bulk and scale, privacy, ventilation, and solar access on the residential amenity of neighbouring dwellings.

b. To ensure adequate separation distances between buildings.

c. To encourage deep soil zones to maximum opportunities for landscaping and natural site drainage.

Controls:

1. Development adjacent to residential zoned land must comply with the setbacks in Table 8 – Setbacks from residential zoned land.

Note: Additional setbacks requirements for residential flat buildings are contained within SEPP 65 – Design Quality of Residential Flat Buildings, and the accompanying Residential Flat Building Design Code.

Table 8 - Setbacks from residential zoned land

Proposed development	Minimum setback from residential zoned land
Ground level	3.0m
Level 2	6.0m
Level 3	9.0m

6.12 BUILDING HEIGHT

Definition: **Building height** is defined as the vertical distance between ground level (existing), at any point to the highest point of the building, including plan and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.

Objectives:

a. To allow solar access and restrict overshadowing of adjoining properties.

b. To ensure that views from neighbouring dwellings are not unduly compromised.

c. To ensure that the building height does not overwhelm the public street and is compatible with the scale of surrounding developments.

Controls:

1. Development must comply with the maximum height as shown on the height of building map in LMLEP 2014 and the number of storeys as shown in Table 9 – Maximum number of storeys:

Note: Calculation of permissible height has assumed 1.0 m for podium height, ground floor for retail or commercial use with 3.7m floor to floor, second level for commercial or residential use with 3.4m floor to floor, and upper levels for residential use with 3.1m floor to floor, and 1.5m for roof volume. A development proposal may reach the maximum number of storeys without reaching the maximum permissible height.

Table 9 - Maximum number of storeys

Permissible Height (m) – LMLEP 2014	Maximum Number of Storeys
6	1
10	2
13	3
16	4
19	5
22	6

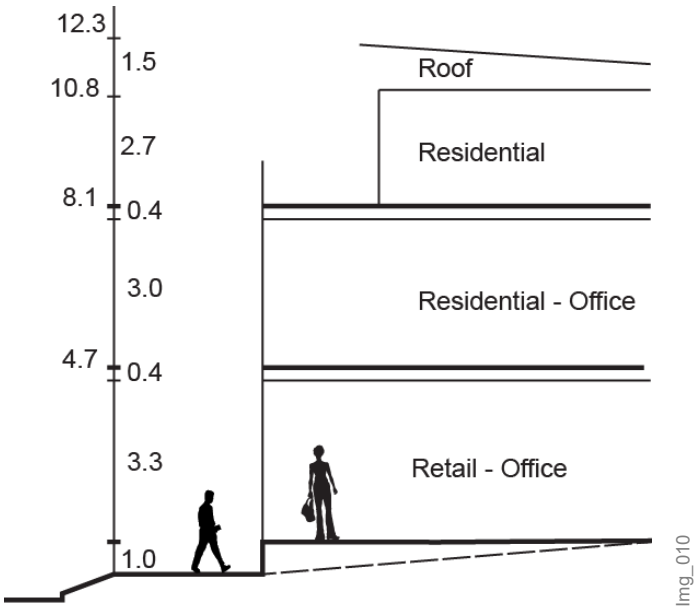

Figure 12 - Example of height allowed for three storey building

6.13 BUILDING HEIGHT AT THE STREET

Objectives:

a. To maximise the building mass and floor space at the street.

b. To define and reinforce the spatial character of the street.

c. To emphasise each corner of a block with additional height and/or building mass.

Controls:

1. In the B2 and B3 zone, development must provide at least two storeys in height along the primary street boundary for at least 50% of the frontage(s).
2. On corner lots, the maximum height of development must occur at the corner element.

6.14 FLOOR TO CEILING HEIGHTS

Objective:

a. To ensure flexible use of commercial and mixed-use commercial-residential buildings.

Controls:

1. The floor to ceiling heights must comply with Table 10 - Minimum floor to ceiling heights.
2. Ground floor residential use must not be approved unless the floor to ceiling height is a minimum of three metres.

Table 10 - Minimum floor to ceiling heights

Level	Use	Minimum floor to ceiling height (m)
Ground floor	Commercial	**3.3**
Upper floors	Commercial	**3.0**
Upper floors	Residential	**2.7**

6.15 ROOFS

Objectives:

a. To ensure that roofs and roof structures create minimum visual intrusion.

Controls:

1. On sloping sites, roof planes must step with the topography.
2. The roof form must be flat or low pitched.
3. The roof form should not exceed 1.5 metres in height.
4. Air conditioning units, lift motor rooms, and other plant must be fully integrated within the building or roof volume, or within an architectural roof feature and not openly viewed from public place or dwelling.
5. Other roof elements such as photovoltaic panels, communication devices, antennae, satellite dishes, chimneys and flues must not interfere with the outlook of viewers in neighbouring properties, or in the public domain.

Note: Council may consider architectural roof features that exceed the permissible height.

6.16 VIEWS

Objectives

a. To allow for the reasonable sharing of views.

b. To ensure that existing canopy trees have priority over views.

Controls

1. Developments must provide for the reasonable sharing of views in accordance with the Planning Principle established by the Land and Environment Court in *Tenacity Consulting v Warringah Council* [2004] NSWLEC 140 and *Davies v Penrith City Council* [2013] NSWLEC 1141.
2. Developments must provide for reasonable public domain views in accordance with the Planning Principle established by the Land and Environment Court in *Rose Bay Marina Pty Limited v Woollahra Municipal Council* [2013] NSWLEC 1046.
3. The desire for views must not outweigh the design for solar access.

6.17 BALCONIES AND COMMUNAL OPEN SPACE

Objectives:

a. To reinforce the street wall by recessing lower level balconies in the building volume.

b. To ensure balconies are functional and responsive to the environment thereby promoting the enjoyment of outdoor living for dwellings.

c. To provide suitable privacy and amenity for users of balconies close to the street.

d. To ensure that communal open space is consolidated, configured and designed to be useable and attractive.

Controls:

1. Balconies at the first level above the street must be recessed in the street façade wall. Minor projections up to 600mm from the wall face are acceptable.
2. Balconies on the uppermost level may occupy roof space if bounded by a parapet at the street frontage.

3. Balconies must not be enclosed unless the building is characterised by enclosed balconies.
4. Balconies must be provided for all dwellings with a minimum area of 8m^2 and a width of 2 metres
5. Where balconies cannot be provided for all dwellings, a communal open space with a minimum area of 40m^2 and minimum dimension of 5 metres must be provided.
6. Communal open space should be provided principally at ground level, except where no residential uses are required at ground level.

6.18 PLANTING ON STRUCTURES

Objectives:

a. To enhance the quality and amenity of open space on roof tops, internal courtyards, and over car parking structures.
b. To encourage the establishment of vegetation in urban areas.
c. To maintain privacy of neighbouring residents.

Controls:

1. The planting of shrubs and trees is encouraged on the top of setback areas, rooftops, and over car parking structures.
2. Planter boxes must be located at the perimeter of rooftop gardens to minimise overlooking of neighbouring dwellings.
3. Planting containers must allow sufficient depth and volume, growing medium and irrigation to support the mature size of plants.
4. All planting areas on structures must be designed by a suitably qualified engineer.

6.19 SOLAR ACCESS AND ORIENTATION

Objectives:

a. To ensure that reasonable access to sunlight is maintained for occupants of new and existing dwellings in the residential component of mixed-use development.
b. To ensure solar access is maintained to adjoining open space and public domain areas.
c. To ensure that the design for solar access is not outweighed by the desire for views.

Controls:

1. Developments must provide for the reasonable access to sunlight in accordance with the Planning Principle established by the Land and Environment Court in *The Benevolent Society v Waverley Council* [2010] NSWLEC 1082 and *Davies v Penrith City Council* [2013] NSWLEC 1141.
2. At least 50% of the required area of private open space of each dwelling, and at least 50% of the required area of private open space of adjoining dwellings must receive a minimum of three hours of sunlight between 9am and 3pm on June 21. Council may accept a reduction in solar access for the development or adjacent sites if the topography and lot orientation is such that the three-hour standard is considered unreasonable.
3. Where adjacent existing developments and their private open space receive less than the minimum requirements, any new development must seek to maintain or enhance the solar access for the adjacent development.
4. Dwellings with a single aspect facing south should be minimised. Where they cannot be avoided, applications must demonstrate adequate levels of natural light penetration into habitable areas of the dwelling.
5. Where lot orientation allows, developments should be designed so that the long axis of the development is running east-west.

6. Building openings on the western elevations should be minimised. Where openings are unavoidable, they should be located higher on the façade and shaded by eaves or landscaping or similar.

Note: The shadow cast by fences, roof overhangs, and changes in level are to be considered and should be indicated on shadow diagrams submitted.

6.20 ENERGY EFFICIENCY AND GENERATION

Objectives

a. To ensure building orientation maximises solar access and natural cross ventilation.

b. To ensure energy efficiency is achieved in all developments .

c. To allow opportunities for future installation of renewable energy generation and low carbon technology.

d. To minimise the economic impacts of increasing electricity costs and any requirements to disclose energy efficiency when selling or leasing a property.

e. To promote increased levels of energy efficiency in large-scale developments.

f. To ensure that development minimises the use of water and non-renewable resources.

Controls

1. Buildings must be oriented to provide efficient use of solar energy and natural ventilation wherever possible.
2. Designs must consider future potential for renewable energy generation and low carbon technology.
3. Commercial developments in excess of 4,000m² gross floor area must achieve the equivalent of a minimum 4 Star Rating under the Green Building Council of Australia's Green Star Rating tool.
4. Commercial developments in excess of 2,000m² gross floor area should achieve the equivalent of a minimum 4 Star Rating under the Green Building Council of Australia's Green Star Rating tool.

Note: These controls are in addition to the requirements of SEPP BASIX and Section J of the Building Code of Australia. Formal certification of Green Star Rating under the Green Building Council of Australia is not required. Justification that the design would achieve the Green Star rate or an equivalent rating under a different system (e.g. NABERS) is only required.

6.21 VISUAL PRIVACY

Objectives:

a. To ensure that the design of buildings provides an acceptable level of internal and external visual privacy for new and existing dwellings on subject and surrounding land.

Controls:

1. Developments must provide for a reasonable level of privacy in accordance with the Planning Principle established by the Land and Environment Court in *Meriton v Sydney City Council* [2004] NSWLEC 313, *Super Studio v Waverley Council* [2004] NSWLEC 91 and *Davies v Penrith City Council* [2013] NSWLEC 1141.
2. Living areas, habitable rooms and windows of dwellings must be orientated to minimise overlooking. The effective location of doors, windows, and balconies to avoid overlooking is preferred to the use of screening devices, high sills or obscured glass.
3. The use of landscape planting must not be solely relied upon to resolve visual privacy.
4. The windows of habitable rooms of one dwelling must be located so as to minimise direct or close views (less than 9 metres away) into the windows of habitable rooms of other dwellings.

5. Balconies and decks of one dwelling must be located so they minimise direct or close views (less than 9 metres away) to the balconies, decks, or habitable rooms of any adjoining dwelling.
6. Planter boxes, louvre screens, pergolas, balcony design, and the like must be used to screen a minimum of 50% of the principal private open space of a lower apartment from overlooking from an upper apartment. Landscape planting must not be relied upon as sole protection against overlooking.

6.22 ACOUSTIC PRIVACY

Objectives

a. To ensure that noise emissions do not unreasonably impact on the amenity of the area or result in noise intrusion that would be unreasonable for occupants, users or visitors.
b. To ensure that dwellings have an acceptable level of acoustic privacy.

Controls:

1. Developments near existing noise generating activities, such as plant, services, roads and industry, must be designed to mitigate the effect of noise on the occupants of dwellings.
2. Where viable, noise sensitive areas – such as bedrooms and private open space in mixed use developments – must be located away from noise sources.
3. Building structures must be designed to minimise the transmission of sound, particularly to sleeping and living areas in adjoining developments.
4. Development must demonstrate that dwellings achieve an internal comfort level in accordance with the relevant Australian Standard.
5. Private open space including balconies must be designed to achieve comfort levels in accordance with relevant Australian Standards for noise accentuation.
6. Developments must provide for a reasonable level of acoustic privacy in accordance with the Planning Principle established by the Land and Environment Court in *Davies v Penrith City Council* [2013] NSWLEC 1141.

6.23 FRONT FENCES

Objectives

a. To limit the use of front fences.
b. To ensure that any fence on the front boundary allows clear lines of sight from the street to car parks and building entries.

Controls

1. Front fences and front fence returns must not exceed 1.5 metres above the footpath level.
2. Front fences must not be solid masonry, sheet metal, solid timber that would block sight lines between the public footpath and development site.
3. Front fences must not be positioned forward of the building line.

6.24 SIDE AND REAR FENCES

Objectives

a. To provide privacy and security to residents and tenants on subject and adjoining land.

Controls

1. Side and rear boundary fences must not exceed 1.8 metres above the existing ground level.
2. For sloping sites, side and rear boundary fences may be regularly stepped provided the average height does not exceed 1.8 metres.

3. Where fences are proposed in conjunction with a retaining wall, the combined height of the fence and retaining wall must not exceed 1.8 metres above the existing ground level.
4. The design and materials of fencing must complement development and landscaping on site. The use of masonry and lapped and capped timber fencing is encouraged rather than excessive use of colour bond material.

6.25 SAFETY AND SECURITY

Objectives

a. To ensure that development mitigates opportunities for crime, and perceived opportunities for crime.

Controls

1. Developments must ensure that the following Crime Prevention Through Environmental Design (CPTED) principles have informed the design of the proposed development:
   i. Surveillance – developments should be designed and managed to maximise the potential for passive surveillance;
   ii. Access Control – developments must be designed in order to make them legible for users without losing the capacity for variety and interest;
   iii. Territorial Reinforcement – developments must be designed to define clearly legitimate boundaries between private, semi private, and public space; and
   iv. Space Management – developments must be designed and detailed to minimise damage, and the need for undue maintenance, without undermining the aesthetic and functional qualities of the building.

Note: Refer to Council's *Crime Prevention Through Environmental Design Guideline* for further information on CPTED principles.

2. A Crime Risk Assessment must be prepared and submitted to Council, where development:
   i. is listed in Table 11, or
   ii. is valued at $5,000,000 or greater, or
   iii. has a floor area greater than 5000m^2, or
   iv. will be open to the public between the hours of 9pm and 6am..
3. The Crime Risk Assessment should be prepared by a person who has undertaken the NSW Police Service 'Safer by Design' course (or equivalent) and must:
   i. analyse the types of crime that may be prevalent in the area, and to which the development may be susceptible;
   ii. provide information as to how the design was informed by the CPTED principles;
   iii. inform the design, construction, or future management practises of the development (eg: building materials, signage, lighting, landscaping, security patrols, maintenance and graffiti removal practices).
4. Any recommendations or shortfalls identified by a Crime Risk Assessment must be implemented into the design of the development to the satisfaction of the assessing officer.

Note: Refer to Council's *Crime Prevention Through Environmental Design Guideline* for further information on what needs to be covered in a Crime Risk Assessment.

Table 11 - Uses requiring a crime risk assessment

Pub	Commercial or Retail premises greater than 3000m²
Child care centres	Mixed use developments or Residential flat buildings comprising more than 20 dwellings
Boarding houses	Educational establishment
Information and education facilities	Medical centres
Entertainment facilities	Function centre
Passenger transport facilities	Community facilities
Service stations	Seniors living developments and hospitals with more than 30 beds
Car parks	Sex services premises
Recreation facilities (indoor)	Registered clubs
Takeaway food and drink premises including, drive-thru establishments, bottle shops, and fast food outlets (such as McDonalds	Tourist and visitor accommodation
Amusement centres	

7 LANDSCAPE

7.1 LANDSCAPE DESIGN

Objective:

a. To provide landscape design that complements the nature and scale of the development and contributes to the desired streetscape character.

b. To provide landscape design that supports a functional, safe, and pleasant pedestrian environment.

c. To provide landscape design that informs and responds well with the built form.

d. To ensure that landscaping and architectural features are integrated and complementary.

e. To design landscape works that are robust and require minimum maintenance.

Controls:

1. Appropriate landscape documentation must be prepared and submitted in accordance with Table 12 – Landscape Development Type and Requirements.

2. Appropriately qualified professionals must prepare landscape documentation. For Category 3 development, a qualified landscape architect should prepare landscape documentation. For Category 2 development, a landscape architect, landscape designer, or horticulturist should prepare landscape documentation.

3. The landscape consultant's declaration must be signed and submitted with the relevant landscape documentation.

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements.

Table 12 - Landscape development type and requirements.

Development Type and Category	**Landscape Documentation**	
	Landscape Concept Plan at DA stage	Landscape Masterplan and Report at DA stage
Category 3: **Large Scale** • development with an estimated value exceeding $1m, or • development of 10 or more dwellings, or • designated development, or • childcare facilities, community facilities, educational establishments, seniors housing, health services facilities, or tourist accommodation, or. • development in areas of high scenic quality, adjacent to the lake or Pacific Highway, in or adjacent to an environmental zone, on visually dominant ridgelines, or in a heritage conservation area.	Yes	Yes
Category 2: **Medium Scale** • industrial development with an estimated value exceeding $0.25m, or • development for 3-9 dwellings, or • dual occupancy development; or • any development in a business zone	No	Yes

Development Type and Category	Landscape Documentation	
	Landscape Concept Plan at DA stage	Landscape Masterplan and Report at DA stage
Category 1: **Small Scale** • single dwellings, or • development that will have little impact on the existing environment	No	No

Note: If a development type is not detailed in this table or you are unsure of the category and requirements seek written advice from Council. Council's Landscape Architect has the authority to request landscape documentation for any category of development where written advice from Council is not sought.

7.2 STREET TREES AND STREETSCAPE IMPROVEMENTS

Objectives:

a. To enhance the amenity and desired character of the street.

b. To provide tree shade and shelter for pedestrians.

c. To ensure that paving and street furniture is constructed from high quality material that provide consistency and continuity of the streetscape.

Controls:

1. Where the footpath is 4.2 metres or wider, development must include supply, installation and establishment of at least one advanced clear trunk tree for every 10 metres of street frontage.
2. The root volume for each tree must be a minimum of $8m^3$ and between 600 and 750mm deep.
3. All trees installed must be advanced stock, and at least 100L container size.
4. The tree supplier or landscape contractor must provide evidence that all trees generally comply with *NATSPEC Guide to Specifying Trees - Assessment of Tree Quality*.
5. All trees installed must be established and maintained for a minimum period of 24 months. Any failed trees must be replaced immediately.
6. Where the footpath is less than 4 metres wide, Council may specify tree planting in the parking lane or alternative public space.
7. Council may specify details for tree supply and installation, paving, lighting, street furniture and similar landscape improvements.

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements.

7.3 LANDSCAPE AND TREE PLANTING IN FRONT SETBACK AREAS

Objectives:

a. To allow for the planting and healthy growth of large canopy trees which enhance amenity and street character.

b. To provide large-scale planting between the street and parking and service areas, that reduces the visual impact of development.

c. To maintain sightlines from the street to carparks and entrances.

Controls:

1. Development must include installation and maintenance of at least one advanced clear-trunked broad-canopy tree for every $20m^2$ of front setback area.

2. The root volume for each tree in the front setback area must be a minimum of 8m^3 and between 600 and 750mm deep.
3. Each area allocated to tree planting must have a corresponding clear air space that is at least eight metres high and six metres in width.
4. All trees installed must be advanced stock, and at least 45L container size.
5. Understorey planting must comprise low growing species less than 900mm in height.

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements.

7.4 LANDSCAPE AND TREE PLANTING IN CAR PARKS

Objectives:

a. To provide broad canopy tree cover in car parks for shade and shelter.
b. To reduce the visual impact of car parking areas.
c. To maintain safety for car park users and sightlines below the tree canopy.

Controls:

1. Development must include supply, installation and maintenance of at least one advanced clear-trunked broad-canopy tree for every six at-grade car parking spaces.
2. Each landscape planting area must include at least one medium canopy tree, with suitable ground covers or low shrubs below.
3. Each landscape planting area must have a minimum width of two metres.
4. The root volume for each tree must be a minimum of 8m^3 and between 600 and 750mm deep.
5. The root volume must be either existing deep soil or an equivalent volume of gap graded (load bearing) soil with a porous vehicle pavement over, that is installed to manufacturers specifications.
6. Each area allocated to tree planting must have a corresponding clear air space that is at least eight metres high and six metres in width.
7. All trees installed must be advanced stock and at least 75L container size.
8. All trees installed must be established and maintained for the life of the development. Any failed trees must be replaced immediately.

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements.

8 OPERATIONAL REQUIREMENTS

8.1 DEMOLITION AND CONSTRUCTION WASTE MANAGEMENT

Objectives:

a. To reduce demolition waste by maximising beneficial reuse of infrastructure, buildings and materials onsite.
b. To avoid creating construction waste wherever possible.
c. To enable maximum diversion of demolition and construction waste to reuse, recycling or composting.
d. To ensure that waste management is planned across all demolition and construction stages so that reusable resources and waste can be appropriately and effectively stored and removed safely from site without adverse impacts on local amenity.

Controls:

1. Applications must provide a completed Demolition Waste Management Plan (WMP) (where there are demolition works) and a Construction WMP (for all construction works), in accordance with Chapter 2 (for Demolition) and Chapter 3 (for Construction) of the *Lake Macquarie City Council Waste Management Guidelines* unless the development is:

   i. Advertising structures
   ii. Building or business identification signs
   iii. Drainage
   iv. Earthworks
   v. Environmental protection works
   vi. Roads
   vii. Signs/signage
   viii. Stormwater management facilities
   ix. Utility installations
   x. Waterbodies (artificial or natural)
   xi. Watercourses
   xii. Wetland

   These plans must be provided to relevant person involved in the demolition and/or construction, including architects, project managers, builders, contractors or sub-contractors.

2. The Demolition WMP must describe how the proposal avoids creating waste and how it maximises the reuse and recycling of demolition and construction wastes.

3. The following must be shown on scaled plans to be submitted with the development application for demolition and construction stages;

   i. waste storage area(s) with bins and equipment shown to scale;
   ii. waste collection area(s) with bins shown to scale (if different from storage areas);
   iii. waste carting route(s) from buildings to waste storage area(s)'
   iv. bin carting route(s) from waste storage to collection point(s) (if different from storage areas); and
   v. for developments proposing onsite collection, the waste collection vehicle route, swept paths and clearances.

8.2 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure that waste management infrastructure and operational procedures are an integral part of the development's design and ongoing management.
b. To ensure sufficient volume of equitably accessible, safe, hygienic and aesthetically appropriate waste storage is provided on the property to minimise negative impacts of waste management on occupants and neighbours.
c. To enable maximum opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins.
d. To ensure equitable access for all occupants to opportunities to maximise diversion of waste.
e. To provide flexibility to expand or reconfigure waste separation systems, so that owners and occupants have options to access a range of waste services.
f. To ensure secure separation of commercial waste from residential waste storage and collection.
g. To provide unobstructed waste collection point(s) that are safely and efficiently accessible by Council waste collection vehicles wherever possible.
h. To provide unobstructed, safe access to move bins and bulk waste (such as furniture and whitegoods) between storage and collection points.

Controls

1. An Operational Waste Management Plan (WMP) must be prepared in accordance with the Lake Macquarie Waste Management Guidelines and submitted with the development application for all identified in Table 13, in other parts of this Development Control Plan or when Council identifies that particular circumstances warrant it.

Table 13 - Uses requiring an Operational Waste Management Plan

• Dwellings • Commercial and retail, recreation and tourism facilities • Industrial developments and infrastructure • Events • Subdivisions

2. The Operational WMP must address all wastes that will be generated from the operation of the premises. The plan must maximise opportunity for separation from general waste of reusable, recyclable and compostable materials for reuse, recycling and composting wherever possible.
3. The development application must demonstrate - in the Operational WMP and on plans with bins, equipment, waste collection vehicle swept paths and clearances all shown to scale - that the development has sufficient and usable:
   i. bin type, sizes, numbers and collection frequency; and
   ii. internal storage within premises; and
   iii. waste carting route(s) from premises to external waste storage area(s); and
   iv. external waste storage areas; and
   v. bin carting route(s) from waste storage to waste collection point(s); and
   vi. waste collection point(s);
   vii. for developments proposing onsite collection, the waste collection vehicle route(s), swept paths and clearances; and
   viii. waste management information guide for owners and occupants

4. For developments with the following specific land uses, the development and Operational WMP must address other matters as identified in the Lake Macquarie Waste Management Guidelines:
   i. boarding houses and hostels; group homes; short-term rental accommodation; social housing; and seniors' living developments;
   ii. commercial and retail premises
   iii. veterinary hospitals;
   iv. aged care facilities;
   v. child care centres;
   vi. service stations;
   vii. public and private recreation; and amusement and functions centres and entertainment facilities;
   viii. vehicle repair workshops and depots;
   ix. sustainable aquaculture; and
   x. light, heavy and general industries, hazardous, offensive and high technology industries; infrastructure; and waste management or resource recovery facilities.

   to demonstrate compliance with the Lake Macquarie Waste Management Guidelines.
5. If the development is not designed to enable Lake Macquarie City Council waste services, a letter must be provided from a private waste contractor advising how they are able to provide the required garbage, recycling and green (garden and food) waste services and (if needed) access the premises.

8.3 ON-SITE SEWAGE MANAGEMENT

Objectives:

a. To ensure that land is suitable for on-site sewage management, and that on-site sewage management systems are designed to operate sustainably, without resulting in environmental harm or risk to public health.

Controls:

1. On-site sewage management must not be located on sites:
   i. Where connection to reticulated sewer is available (this requirement does not apply to grey water treatment systems); or
   ii. Below the 20-year ARI flood level.
2. Where an on-site sewage management system is proposed, an assessment report must be provided to determine land capacity for sewage effluent. An appropriately qualified consultant must carry out the assessment. The site assessment must:
   i. Be undertaken in accordance with the Environmental Health Protection Guidelines, and On-site Sewage Management for Single Households;
   ii. Recommend suitable wastewater treatment technology;
   iii. Include water balance calculations for determination of the size of the effluent irrigation area based on zero wet weather storage requirements; and
   iv. For greywater treatment systems, it must be demonstrated that the proposed system complies with the *NSW Guidelines for Greywater Reuse in Sewered, Single Household Residential Premises*.
3. Applications for sewage treatment systems must include:
   i. Sewerage Site Plan (1:200) indicating the location of the treatment system, disposal area, and buffer distances to boundaries, dwellings, water courses and other significant features on the site; and
   ii. Detailed plans and sections of the proposed effluent disposal system.

4. Other than for greywater treatment systems, surface and subsurface irrigation areas should be made up of irrigation zones that are a minimum 300m^2 and maximum 500m^2. Multiple irrigation zones must be dosed via an automatic irrigation controller or indexing valve.
5. Pump-out septic systems are only acceptable where on-site disposal of effluent is not feasible, and where access is available for a pump-out service to be rendered safely from a public road at the property boundary.

8.4 LIQUID TRADE WASTE AND CHEMICAL STORAGE

Objectives:

a. To ensure that liquid trade waste is disposed of appropriately, and does not enter the environment.
b. To ensure that chemicals associated with a development are stored in a secure manner.

Controls:

1. Where development is proposed that will generate liquid trade wastes, evidence of a liquid trade waste agreement with Hunter Water must be provided. On-site treatment and/or disposal of liquid trade waste will not be permitted.
2. Developments that generate liquid trade waste must ensure that this waste is adequately contained and bunded to prevent pollution entering the environment.
3. Where chemicals are stored within, or as part of development, those chemicals must be adequately contained and bunded to prevent chemicals entering the environment unintentionally in the event of a spill, flooding, or any other event that may lead to the escape of chemicals.
4. All containment and bunded areas must drain to the reticulated sewerage system under agreement with Hunter Water. No on-site treatment or disposal of liquid trade waste or spilt chemicals will be permitted.

8.5 EROSION AND SEDIMENT CONTROL

Objectives:

a. To ensure that development is designed to prevent erosion by minimising disturbance, retaining vegetation and reducing the need for earthworks.
b. To prevent erosion and sediment-laden run-off during site preparation, construction and the ongoing use of land.
c. To ensure that a number of integrated solutions, using a treatment train approach, are implemented for the control and treatment of erosion and sediment.

Controls:

1. For proposals where the area of soil disturbance is less than 250m^2, appropriate erosion and sediment control measures must be installed and maintained. This will prevent pollutants from entering water courses during construction and until 70% ground cover is attained.
2. For proposals where the area of soil disturbance is more than 250m^2 but less than 2500m^2, an Erosion and Sediment Control Plan (ESCP) must be prepared and lodged, in accordance with Council's *Erosion and Sediment Control Guideline*.
3. For proposals where the area of soil disturbance is more than 2500m^2, a Soil and Water Management Plan, identifying erosion prevention and sediment control measures, must be prepared and lodged, in accordance with Council's *Erosion and Sediment Control Guideline*.
4. The maximum area of soil exposure at any one time must not exceed 2.5 hectares.

Note: Council may vary the requirements, especially where there is a higher or lower risk of polluting receiving waters. Further information may be required for any site depending on, but not limited to, the calculated soil loss, sediment type and an assessment of site constraints and opportunities.

8.6 AIR QUALITY

Objectives

a. To ensure that development does not adversely affect air quality beyond the National Environment Protection Measure (Ambient Air Quality) standard for criteria air pollutants.

b. To ensure that measures are implemented to maintain air quality.

c. To ensure that odours and emissions do not have an unreasonable impact on the amenity of neighbouring properties, or the health of their occupants

d. To ensure that odours and emissions do not have an unreasonable impact on public health.

e. To ensure that emissions do not have an unreasonable impact on natural environment.

Controls

1. An air quality report must be prepared by an air quality/odour expert where a proposed development has the potential to adversely affect air quality or to be affected by poor air quality. This report must:

    i. Consider the information provided on Council's Local Air Quality Maps;

    ii. Address impacts caused by construction and ongoing operation or occupation of the development;

    iii. Identify emissions, and measures to mitigate the overall impact, and the impact on nearby residences and occupants of other properties especially sensitive receivers; and

    iv. Be prepared in accordance with the Approved Methods for the Modelling and Assessment of air pollutants in New South Wales and other requirements prescribed in State and Federal legislation.

Note: Council's air quality map is based on modelling air pollution in the local government area and identifies areas where the Criteria Air Pollutants exceed the National Environment Protection Measure (Ambient Air Quality) standard.

8.7 NOISE AND VIBRATION

Objectives:

a. To minimise the generation of noise and/or vibration, and to mitigate associated adverse impacts on the amenity of neighbouring properties and their occupants, and on occupants of the proposed development.

Controls:

1. Where proposed development has the potential to produce an adverse noise or vibration impact on occupants of the site or of nearby properties, an acoustic and vibration study must be prepared by a qualified consultant, to Council's satisfaction.
2. Noise or vibration generated by development must not exceed the criteria stipulated in the *NSW Industrial Noise Policy* or the *Noise Guide for Local Government* at the property boundary of the noise source, or at a receiving lot boundary.
3. Measures must be implemented to ensure that any noise or vibration generated is not offensive, in accordance with the *Noise Guide for Local Government*
4. During construction, the operating noise level of machinery, plant and equipment must comply with the *Noise Guide for Local Government*.
5. A suitably qualified acoustics consultant must prepare a Noise Management Plan where construction is proposed to exceed 26 weeks.
6. Noise generating operations and outdoor operations must only occur between 7am and 6pm Monday to Saturday.

7. Council may request at any stage an independent report to confirm that noise emissions are within acceptable limits; such costs are to be borne by the applicant/ operator.

Lake Macquarie Development Control Plan 2014 – Revision 25

Part 5 – Development in Industrial, Business Park and Infrastructure Zones

Adopted by Council 28 September 2020

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1 INTRODUCTION

Part 5 - Development in Industrial, Business Park and Infrastructure Zones applies to all development in the IN1 General Industrial, IN2 Light Industrial, IN4 Working Waterfront, B7 Business Park and SP2 Infrastructure zones.

This part is to be read in conjunction with Part 1 (Introduction) of DCP 2014, which outlines Council's general requirements for all developments and provides advice on the lodgement requirements for a Development Application. Part 1 also contains requirements for when an application seeks to vary a development control. Additionally, controls for specific land uses may apply depending on the type of development proposed. These controls can be found within Part 9 - Specific Land Uses of this DCP.

Furthermore, an Area Plan may apply depending on the location of the development. Area Plans contain area specific controls that need to be considered and can be found in Part 10 - Town Centre Area Plans, Part 11 – Heritage Area Plans and Part 12 - Precinct Area Plans of this DCP.

1.1 HOW TO USE THIS PLAN

LMDCP 2014 is the primary document used by Council's development assessment staff to assess development applications. Proponents of development will need to:

1. Determine the land use zone that applies to the development site (refer to LMLEP 2014);
2. Refer to the Parts of LMDCP 2014 that contain controls for the zone where the development is proposed (Parts 2 to 8);
3. Check if specific land use provisions apply to the proposed development (Part 9); and
4. Check if an Area Plan applies to the proposed development site (Parts 10, 11 or 12).

The development controls contained within each part and section, seek to achieve desired land use, conservation and/or built outcomes consistent with corresponding LMLEP 2014 zone objectives, and the aims in each part of LMDCP 2014.

Each part of LMDCP 2014 is structured to promote a development process where the site and context analysis informs the design of the development. Parts 2 to 8 of this DCP generally have the following main headings:

- **Introduction** – provides information about the particular part of the DCP, how to use the DCP and aims for development within the particular zone group.
- **Context and Setting** – outlines the site issues and environmental opportunities and constraints that need to be addressed in the development application.
- **Development Design** – provides Council's detailed design related requirements.
- **Operational Requirements** – provides Council's detailed requirements associated with the construction and ongoing operation of the development.

The detailed provisions of each sub-section in each part of LMDCP 2014 are presented as follows:

- **Objectives** – state what outcomes LMCC is seeking new development to achieve, and
- **Controls** – advise the requirements for achieving outcomes and the desired future character identified by the aims and objectives.

Additionally, Parts 2 to 8 contain the specific aims that LMDCP 2014 seeks to achieve. Where specific controls are not provided, the aims of each part will be used to provide direction for a merits based assessment of a development application.

For more information on how to use this document, please refer to Part 1 – Introduction.

1.2 ADDITIONAL CONTROLS FOR SPECIFIC LAND USES

If the development application relates to any of the following land uses, additional specific development controls must be considered in conjunction with controls in this part of the DCP. The detailed controls for these uses can be found in Part 9 of this DCP. Where a conflict exists between the controls within this part and a specific land use, the specific land use section prevails.

Attached Dwellings	Multi Dwelling Housing
Bed and Breakfast / Farm Stay Accommodation	Places of Public Worship
	Secondary Dwelling
Dual Occupancy	Service Stations
Dwelling House	Sex Services Premises
Foreshore and Waterway Development	Signage
Health Consulting Rooms	Tourist and Visitor Accommodation

1.3 AIMS FOR DEVELOPMENT IN INDUSTRIAL, BUSINESS PARK AND INFRASTRUCTURE ZONES

Where controls are not provided for a particular circumstance, the following aims will be used to provide direction for a merits based assessment of a development application.

The aims of LMDCP 2014 for development in industrial, business park and infrastructure zones are:

1. To provide employment opportunities within the Lake Macquarie Local Government Area.
2. To encourage high quality development that improves the amenity and aesthetics of industrial, business park and infrastructure zoned land.
3. To encourage development that will support workers in their day-to-day needs, and provide a pleasant environment for workers and the broader community.
4. To ensure that foreshore development contributes to the visual amenity of the area, and maximises public access to the foreshore.
5. To ensure that buildings promote innovation in design, energy efficiency, materials reuse and water reuse.
6. To promote landscaping that retains existing vegetation.
7. To ensure development incorporates safe, effective, and convenient provision for servicing, parking, pedestrian, and vehicular access.
8. To minimise waste and ensure rehabilitation and control of any contaminated sites.
9. Minimise the impact of industrial development on adjoining residential zones.

2 CONTEXT AND SETTINGS

2.1 SITE ANALYSIS

Objective

a. To identify site opportunities, constraints, and prevailing characteristics of the locality.

b. To illustrate how a development responds to that site and its relationship with the locality.

c. To encourage good site planning, built form and landscape outcomes, informed by an understanding of the site and its context.

Controls

a. A Site Analysis Plan must be submitted that identifies the existing conditions relating to the subject site, and the surrounding land that may influence the design process.

b. The Site Analysis Plan must address:

   a. All relevant items as set out in the *Site Analysis Guidelines*; and

   b. All relevant matters outlined below in section 2.2 to 2.18.

c. The Site Analysis Plan must provide a comprehensive view of the constraints and opportunities of the development site that will guide the design process.

d. The development application must clearly show that the constraints and opportunities identified in the Site Analysis Plan have been used to inform and resolve the development design.

e. An electronic 3D block model must be submitted for any development that is three or more storeys, or that has a Gross Floor Area of 2000m^2 or more. The model must clearly show the scale and form of the proposed development and its setting, from viewing points along the street, and from public open space, waterways and other significant vantage points.

f. Council may require an electronic model for smaller developments on sites with potentially high visual or physical impacts on the public realm.

Note: The detail of the Site Analysis Plan should be tailored to the site, and the complexity of the proposed development.

2.2 SCENIC VALUES

The **Landscape Settings and Significant Natural Landscape Features Maps** identify the Landscape Setting boundaries and the relevant Scenic Management Zone for each Landscape Setting. The maps are a guide to the scenic quality associated with lands within the City of Lake Macquarie and are contained within the *Scenic Management Guidelines*. The *Scenic Management Guidelines* provide supporting documentation to this DCP.

Objectives:

a. To ensure that the scenic values of the City are protected and enhanced.

b. To ensure that developments visible or adjoining the coastline, Lake Macquarie or ridgelines maintain and enhance the scenic value of these features.

Controls:

a. A landscape and visual impact assessment is required for development identified in Table 1 unless specified by Council. A landscape and visual impact assessment must be prepared in accordance with section 7.3 of the Scenic Management Guidelines.

Table 1 - Development requiring a landscape and visual impact assessment

Type, category or impact of development: a. Any designated, SEPP 14 or SEPP 65 development b. Any new development or alterations and additions resulting in a building or structure equivalent to 4 storeys or more (in any zone), or a car park of 2 or more storeys (in any zone) c. Telecommunication towers d. Substantial loss of native tree cover (land parcels of one hectare or greater) e. Subdivisions (in any zone with 10 or more lots proposed) f. Waste or resource management facilities g. Recreation facilities (major) h. Cemeteries i. Freight transport facilities j. Service stations k. Removal of any tree on the Significant Tree Register l. Hospitals with more than 30 beds m. Educational facilities n. Any industrial or commercial buildings being more then 50 metres long on any side, or being over 10 metres high
Location of development: 1. Any development that is; within 300m of the Mean High Water Mark of the lake or coastal edge, or on a ridgeline and involves two or more of the following: a. height equivalent to 3 or more storeys, or b. sloping site (10% or more), or c. requiring a combined cut and fill exceeding 2 metres, or d. a development footprint exceeding 2000m^2. o. Any building or structure in a public reserve having a footprint exceeding 100m^2 or being over 10 metres high. p. Any development on a heritage item and/or development within a heritage conservation area (apart from alterations and additions to existing houses or new complying development houses) q. Any development within 300m of the Sydney-Newcastle Freeway (apart from alterations and additions to existing houses or new complying development houses)

b. Developments must be designed and sited to complement their location through:
    a. the retention of existing vegetation,
    b. incorporating appropriate landscaping,
    c. minimising cut and fill,
    d. building design and articulation compatible with natural context, and
    e. colour and material selection,
c. For developments visible from the coastline, Lake Macquarie, and adjacent waterways, or from significant ridgelines, external finishes should be non-reflective and muted in tone.

2.3 GEOTECHNICAL

Objectives:

1. To minimise potential damage to buildings/structures resulting from land movement.
2. To provide guidance on the preparation of geotechnical reports required to support a development application.

Controls:

1. The following development types do not require submission of a Slope Stability Assessment with a development application:
    - Minor development such as garages, carports, decks and the like, pergolas, fiberglass swimming pools and cut/fill not exceeding 1 metre high/deep.
    - Development in Geo_4, Geo_5 or Geo_6 zone that consists of less than 3 storeys and less than 1000m^2 gross floor area and are not sensitive use facilities as defined by the Geotechnical Slope Stability Guidelines.
2. A geotechnical report prepared by a geotechnical engineer must accompany an application for all other development as specified in Council's *Geotechnical Slope Stability Guidelines*. The report must be prepared in accordance with these Guidelines.

Note: After lodgement of a development application, Council may still require the submission of Geotechnical Report for the development types identified at (1) following a site inspection.

2.4 MINE SUBSIDENCE

Objectives:

a. To minimise risks to buildings and structures associated with potential mine subsidence.

Controls:

- Where an application is made for the construction of a structure or building within a Mine Subsidence District, written concurrence must be obtained from the Mine Subsidence Board. Written concurrence should be obtained prior to the application being submitted to Council.
- Written concurrence from the Mine Subsidence Board is not required for certain works that have deemed approval under the Mine Subsidence Board's publication 'A Guide for Council Staff'.

***Note*:** Please refer to the Mine Subsidence Board's 'Surface Development Guidelines' for important information.

2.5 CONTAMINATED LAND

Objectives:

1. To ensure that contaminated land is identified through appropriate investigations
2. To ensure that contaminated land at a site is appropriately and effectively remediated prior to development taking place.
3. To ensure that changes to land use will not increase the risks to public health or the environment as a result of contaminated land on site, or to adjacent to the site.

Controls:

8. Where development is proposed on land identified as being potentially contaminated, a Preliminary Site Investigation Report must be prepared and submitted with the application for development. Refer to Council's *Policy for Managing Contaminated or Potentially Contaminated Land* for further information.
9. Where contaminants are found within the site, a Detailed Site Investigation Report must be prepared and lodged with the development application.

10. Where a Detailed Site Investigation Report identifies the need for remediation, a Remedial Action Plan must be prepared and submitted with the application.
11. The site must be validated as suitable for its intended use prior to the issue of an occupation certificate.

Note: At discretion, Council may request a formal audit of contamination documentation by a site auditor accredited with the NSW Environment Protection Authority under the *Contaminated Land Management Act* 1997.

Note: Refer to SEPP 55 and the NSW State Governments '*Managing Land Contamination: Planning Guidelines*' for more information.

2.6 ACID SULFATE SOILS

Objectives:

a. To ensure that disturbance of Acid Sulfate Soils or Potential Acid Sulfate Soils is minimised, to prevent adverse environmental impact on soil conditions.
b. To ensure that water quality and associated receiving waters are not detrimentally affected by the effects of Acid Sulfate Soils.
c. To ensure that habitat is not detrimentally affected by the effects of Acid Sulfate Soils.
d. To ensure that built structures and infrastructure are not detrimentally affected by the effects of Acid Sulfate Soils.

Controls:

a. Development should be sited or designed to avoid the disturbance of Acid Sulfate Soils or potential Acid Sulfate Soils.
b. Where the disturbance of Acid Sulfate Soils is unavoidable, a Preliminary Acid Sulfate Soil Assessment report must be submitted with the development application, in accordance with the *NSW Acid Sulfate Soils Planning Guidelines.*
c. Where a Preliminary Acid Sulfate Soil Assessment report identifies potential adverse impacts, a detailed assessment report and management plan must be submitted, in accordance with the *NSW Acid Sulfate Soils Planning Guidelines*.
d. Any Acid Sulfate Soils must be identified on the site analysis plan.

***Note*:** Refer to Lake Macquarie Council's Acid Sulfate Soil planning maps showing classes of land containing potential or actual Acid Sulfate Soils. These maps are available at Council's Customer Service Centre, Speers Point.

2.7 STORMWATER MANAGEMENT

Objectives

1. To ensure that development does not adversely affect water quality or availability, including ground water.
2. To ensure that watercourses and associated riparian vegetation are maintained so as to contribute to water quality, and to mitigate sedimentation of the Lake Macquarie waterway.
3. To minimise any adverse impacts on downstream built or natural environments, or on nearby land due to increased development.
4. To incorporate Water Sensitive Urban Design techniques into all new developments.
5. To minimise the volume and rate of stormwater leaving a development site.

Controls

- A *Water Cycle Management Plan* must be submitted for all development except single dwelling houses and dual-occupancy developments. The *Water Cycle Management Plan* must provide details of the management of stormwater, and the measures proposed to mitigate the effects of

stormwater on adjoining or downstream sites in accordance with Council's *Water Cycle Management Guidelines*.

- On-site measures must be implemented to maintain water quality, and to minimise the volume of stormwater run-off and the rate at which stormwater leaves the site.
- A maximum of 10% of run-off from built impermeable surfaces may be discharged directly to the drainage system. The remaining 90% of run-off must be captured for reuse, or managed through infiltration and retention measures prior to being discharged to the drainage system.
- Stormwater management systems should be visually unobtrusive and integrated within site landscaping, car parks or building structures.
- All developments (except dwelling house or dual occupancy) that involve the re-use of stormwater or the use of recycled water must demonstrate compliance with the Australian Guidelines for Water Recycling and the licensing requirements of the *Water industry Competition Act 2006*.
- Stormwater management systems must be designed in accordance with the *Water Cycle Management Guidelines.*

2.8 CATCHMENT FLOOD MANAGEMENT

This section applies to land in the various creek catchments in Lake Macquarie that are shown as 'Lots Affected by Catchment Flooding' on Council's 'Flood Control Lots' map.

The map is indicative only and property information should be checked to confirm if a lot is a catchment flood control lot.

Some lots are affected by both catchment flooding and Lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Further information on flood risk and flood planning levels (floor levels) for particular lots can be obtained by applying for a Flood Certificate from Council.

Provisions regarding Lake flooding are contained in section 2.9 of this Part of DCP 2014.

Where inconsistencies arise, the controls in area plans prevail over controls in parts 2 to 9 of this DCP.

Objectives

a. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development or on other properties.

b. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding and to manage risks to property and life from flood events.

Controls

1. Development must be consistent with the current version of the *NSW Floodplain Development Manual*, and any local flood study, floodplain management study or plan applying to the land that has been endorsed by Council.
2. The proposed development must consider and respond to flooding hazards. It must also mitigate risks to life and/or property through design and positioning of development.
3. Buildings are not permitted in an identified floodway.
4. Buildings and other structures, including fences, must be designed so as not to impede the flow of floodwaters or entrap debris.
5. Commercial floor space must have a finished floor height at least 500mm above the 100 year ARI (1% AEP) event, or equivalent measures must be in place to mitigate flood damage (eg: flood barrier system with evacuation plan). Where probability flood levels are not available, habitable rooms must have a finished floor height at least 500mm above the highest observed flood level for the development site.

6. Other development must have a finished floor height at or above the 100 year probable ARI (1% AEP) event, or equivalent measures must be in place to mitigate flood damage (eg: flood barrier system / sealed entrances with evacuation plan). Where probability flood levels are not available, the finished floor height must be at, or above the highest observed flood level for the site, or equivalent measures must be in place to mitigate flood damage.
7. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area, or within the extent of the 100 year probable ARI (1% AEP) flood event.
8. Lesser provisions may be acceptable where the applicant can demonstrate that the type of development or the proposed use poses no significant risk to life or property by flooding.
9. Development on designated flood prone land must incorporate the floodplain risk management measures, as recommended by a local flood study, floodplain management study or plan, which identifies and addresses appropriate actions in the event of flooding.
10. Any fill associated with the development must not substantially impede the flow of floodwater, and must not contribute to flooding or ponding of water on other property.
11. Additions or alterations to existing development will be assessed on the merits of the situation, having regard to meeting an acceptable level of risk of flood damage.
12. Development on land subject to flooding must use flood compatible materials that will minimise damage by flooding.
13. Development where 100 year ARI levels are not available, and which may be flood liable, should be designed to meet an acceptable level of risk from flood damage. This may require the creation of a new Local Flood Study that considers cumulative impact issues, and demonstrates negligible impacts on other lands.

Note: Refer to Council's *Flood Management Guideline* for further information on the *NSW Floodplain Development Manual*, completed floodplain management plans, and on Council's requirements for Flood Studies.

Table 2 - Flood Planning Levels and floor height requirements in areas affected by catchment flooding and covered by a Floodplain Management Study and Plan

Development Type (including extensions)	Minimum Height Requirements
Dwellings	
Habitable rooms	1 in 100 year probable flood level + 500mm freeboard (post and beam rather than slab on ground preferred)
Non-habitable rooms and garages	1 in 20 year probable flood level
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard

Development Type (including extensions)	Minimum Height Requirements
Medium and High density residential development	
Habitable rooms	1 in 100 year probable flood level + 500mm freeboard
Non-habitable rooms and garages	1 in 20 year probable flood level
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Commercial and Retail	
Internal floor height	1 in 100 year probable flood level + 500mm freeboard
Basement car parking Also includes Places of Public Worship, restaurants, clubs, entertainment facilities, warehouses, and bulky goods showrooms etc.	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Mixed Use development	
Internal floor height	1 in 100 year probable flood level + 500mm freeboard
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard

Development Type (including extensions)	Minimum Height Requirements
Industrial	
Internal floor height Unsealed electrical installations	1 in 100 year probable flood level 1 in 100 year probable flood level + 500mm freeboard
Sensitive Uses (Residential care facilities, hospitals, etc.)	
Internal floor height Unsealed electrical installations	Probable maximum flood level Probable maximum flood level

2.9 LAKE FLOODING AND TIDAL INUNDATION (INCORPORATING SEA LEVEL RISE)

This section applies to land on and near the Lake Macquarie foreshore that is shown as 'Lots Affected by Lake Flooding' on Council's 'Flood Control Lots' map. The map is indicative only and property information should be checked to confirm if a lot is a Lake flood control lot.

Some lots are affected by both catchment flooding and Lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Provisions regarding Catchment Flooding are contained in section 2.8 of this Part of DCP 2014.

The floor height requirements in Table 3 below must only be used for development on lots shown as 'Lots Affected by Lake Flooding' on Council's 'Flood Control Lots' map.

Council completed the Lake Macquarie Waterway Flood Study and Risk Management Plan in 2012. This flood study and risk management plan incorporated the implications of predicted sea level rise.

Predicted sea level rise is based on expert advice from NSW Government agencies and expert scientific agencies, namely that projections of sea level rise along the NSW coast are for a rise relative to 1990 mean sea levels of 40cm by 2050 and 90cm by 2100.

The controls contained in this section prevail where there is an inconsistency with other development requirements. This is particularly relevant to cut and fill controls.

Objectives

5. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties.
6. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding, and manage risks to property and life from flood events.
7. To ensure that development adequately considers and responds to sea level rise projections, and the predicted effects on inundation, flooding, coastal and foreshore recession, and on groundwater levels.
8. To ensure that development on land vulnerable to sea level rise is situated and designed to minimise the risk from future inundation, flooding, coastal and foreshore recession, and from rises in groundwater levels during the expected life of the development.
9. To ensure that development is designed to enable future adaptation if projections are realised, or that measures are implemented to mitigate any adverse impacts of climate change or sea level rise.
10. To encourage innovative responses to sea level rise impacts.

Controls

6. Development must implement measures to mitigate the adverse effects of projected sea level rise and increases in flood levels on the development.
7. Development should be designed and situated to reduce the risk from the effects of sea level rise. For example, structures should be located on the highest part of the lot and/or located as far back from the foreshore or coastline as possible, while still meeting other controls and objectives of the DCP.
8. Development should not be located in areas predicted to be permanently inundated during the life of the asset. The assumed asset life is 100 years for residential care facilities and seniors housing, hospitals, mixed use development and for medium and high density housing, and 50 years for other developments.
9. Notwithstanding the provisions for Cut and Fill in section 3.18, special consideration may be given to increased fill allowances in areas affected by sea level rise provided that:
    i. Additional fill does not adversely affect stormwater management, drainage, or the flow of water from roads, natural or constructed watercourses, foreshore areas or adjoining properties; and
    ii. The filled area maintains functional connections to adjoining footpaths, roads, neighbouring blocks and other local features.

a. Development identified within Table 3 should comply with the floor height provisions. Where the development proposed is not contained within Table 3, or an alternative to the provisions contained within Table 3 is proposed, a Flood Safety Audit and Management Plan must be submitted with the application, which is to include:
    i. Current 100 year ARI flood levels and velocity, as well as at 2050 and 2100;
    ii. Analysis of potential and likely risk of flooding, and/or potential threat to life and/or property now, and at 2050 and 2100;
    iii. Analysis of the potential effects of permanent inundation, foreshore recession and rising groundwater;
    iv. Where flood-proof materials are proposed, evidence of the flood-proof characteristics of those materials must be provided;
    v. Where a relocatable building or structure is proposed, a demonstrated ability to relocate the building or structure, including an identified relocation site must be provided; and
    vi. Any other alternative adaptive measure must be justified.

- The assessing officer may determine that the development proposal is of a minor nature, and that there is no need for a Flood Safety Audit and Management Plan. In these circumstances, the assessing officer must be satisfied that the proposed development adequately addresses projected sea level rise and increases in flood levels.

Table 3 - Floor height requirements for land affected by Lake Flooding and Tidal Inundation requirements

Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
Dwellings		
Habitable rooms	1 in 100 year probable flood level for 2050 + 500mm freeboard (post and beam rather than slab on ground preferred)	2.36 m AHD
Non-habitable rooms and garages	1 in 20 year probable flood level for 2050	1.61 m AHD
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement	
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Medium and High density residential development		
Habitable rooms	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Non-habitable rooms and garages	1 in 20 year probable flood level for 2100	2.10 m AHD
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement	
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2100 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.82 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Commercial and Retail		
Internal floor height	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Basement car parking Also includes Places of Public Worship, restaurants, clubs, entertainment facilities, warehouses, and bulky goods showrooms etc.	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2050 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.36 m AHD

Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Mixed Use development		
Internal floor height	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2100 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.82 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Industrial		
Internal floor height	1 in 100 year probable flood level for 2050	1.86 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Sensitive Uses (Residential care facilities, hospitals, etc.)	Probable maximum flood level for 2100	3.27 m AHD
Unsealed electrical installations	Probable maximum flood level for 2100	3.27 m AHD

2.10 NATURAL WATER SYSTEMS

Definition: A **natural water system** is a naturally occurring watercourse, waterway, lake, wetland, lagoon, estuary, and/or other water body.

Objectives:

a. To protect and maintain the water regime of natural water systems.

b. To ensure that development does not adversely affect aquatic fauna.

c. To ensure that development does not adversely affect water quality or availability, including ground water.

d. To ensure that watercourses and associated riparian vegetation are maintained to contribute to water quality, and to mitigate sedimentation of the Lake Macquarie waterway.

e. To ensure that natural water systems and associated vegetation and landforms are protected to improve the ecological processes and ensure that land is adequately buffered from development.

f. To ensure that the pre-development water quality of receiving waters is maintained or improved.

Controls:

a. Natural water systems must be maintained in a natural state, including the maintenance of riparian vegetation and habitat such as fallen debris.

b. Where a development is associated with, or will affect a natural water system, rehabilitation must occur to return that natural water system – as much as possible – to a natural state. The Rehabilitation Plan must be prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies*.

c. Rehabilitation should occur where a development site includes a degraded watercourse, water body, or wetland. Rehabilitation is to be carried out following the completion of a Rehabilitation Plan, This Plan must prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies.*

d. Stormwater must be managed to minimise nutrient and sediment run-off entering constructed drainage lines, natural watercourses, or waterways.

e. Development within a Vegetated Riparian Zone (VRZ), as shown in Figure 2 – Vegetated Riparian Zones, should be avoided where possible to retain its ecological processes. Where development is unavoidable within the VRZ, it must be demonstrated that potential impacts on water quality, aquatic habitat, and riparian vegetation will be negligible.

f. A Plan of Management must be submitted in accordance with State Government guidelines for development proposed within a VRZ.

g. Asset Protection Zones must not be located within the Vegetated Riparian Zone.

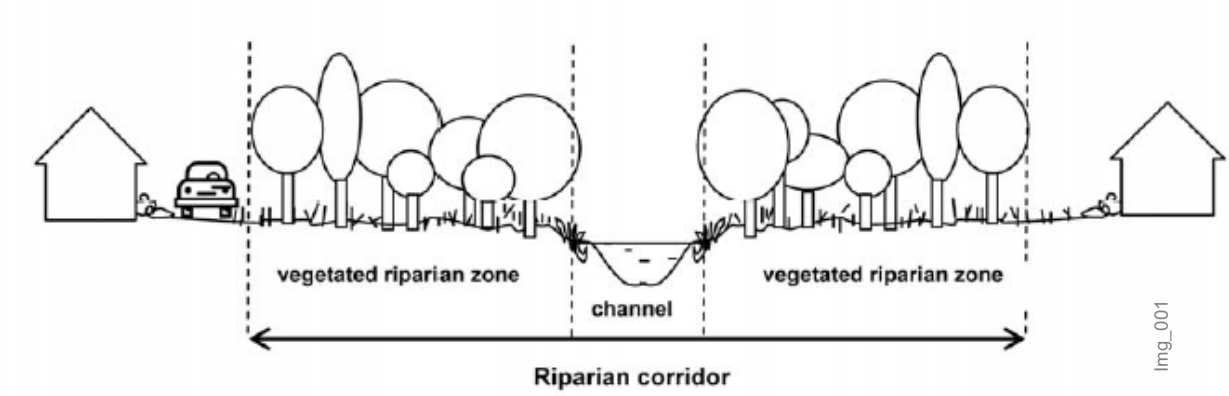

Figure 1 - Vegetated Riparian Zones

Types of watercourses	VRZ Width[2] (Each side of watercourse)	Total Riparian Corridor Width
Any first order[1] watercourse	10 metres	20m + channel width
Any second order[1] watercourse	20 metres	40m + channel width
Any third order[1] watercourse	30 metres	60m + channel width
Any fourth order[1] watercourse or greater (includes estuaries, wetlands and any parts of rivers influenced by tidal waters)	40 metres	80m + channel width

[1] As classified under the Strahler System of ordering watercourses.

[2] Bushfire Asset Protection zones will not be permitted in the Vegetated Riparian Zone. Additional areas may need to be protected to support ecological processes.

2.11 BUSHFIRE

This section only applies to land identified on Council's Bushfire Prone Land Map.

Objectives:

1. To ensure that risks associated with bushfire are appropriately and effectively managed on the development site.

r. To ensure that bushfire risk is managed in connection with the preservation of the ecological values of the site and adjoining lands.

Controls:

1. Development must comply with the *NSW Planning for Bushfire Protection* guidelines.
2. Asset Protection Zones must:
   i. Be incorporated into the design of the development;
   ii. Be as low maintenance as possible;
   iii. Be located outside areas of ecological value and the buffers necessary to protect them; and
   iv. Not occur on adjoining environmental zoned land.

1. Bushfire prone areas and Asset Protection Zones must be identified on the Site Analysis Plan. Refer to Council's Bushfire Prone Land Map.
2. Clearing for the purposes of Asset Protection Zones should be avoided on ridgelines and slopes of 1:5 or greater.
3. Clearing of vegetation must be limited to that necessary to meet the *NSW Planning for Bushfire Protection* guidelines.
4. Clearing of native vegetation or trees for the purposes of reducing bushfire risk must be consistent with the current Bushfire Risk Management Plan prepared under the *Rural Fires Act 1997*.

Note: Development Consent is not required for clearing for the purpose of bushfire hazard reduction if the clearing is consistent with the current Bushfire Risk Management Plan, and is undertaken in accordance with a current hazard reduction certificate issued by the Rural Fire Service or other certifying authority.

2.12 FLORA AND FAUNA

Objectives

a. To avoid and minimise impacts on native flora and fauna

b. To protect and enhance significant flora and fauna, vegetation communities, and significant habitat on the site, and on surrounding development sites.

c. To protect and enhance ecological corridors and increase the connections between habitats.

d. To ensure rehabilitation of degraded areas.

Controls

1. Where the proposed development is likely to have an impact on native vegetation or fauna habitat, or where five or more native trees are proposed to be removed, a flora and fauna assessment must be submitted with the development application. The flora and fauna assessment must be prepared in accordance with Council's *Flora and Fauna Survey Guidelines*.
2. The flora and fauna assessment must be sufficient to adequately identify and assess all the impacts of the proposed development. This includes cumulative, direct and indirect impacts, as well as the impacts of Asset Protection Zones, provision of services (water and sewer, etc) and stormwater management.
3. Where a proposed development site is within a vegetation corridor identified on Native Vegetation and Corridors Map, or identified as part of a site specific flora and fauna assessment, the corridor

must be surveyed. Within the survey, the appropriate corridor width must be determined with reference to core habitat areas and potential edge effects and fragmentation. The proposed development should be located and designed to avoid impacts on the identified vegetation corridor. Where this is not possible, the development should be designed to minimise impacts.

4. Development should be designed to avoid impacts on native flora and fauna, and minimise any unavoidable impacts. Significant flora and fauna species, vegetation communities and habitat should be protected and enhanced through appropriate site planning, design and construction.
5. A Site Vegetation Plan must be submitted clearly indicating the location of the proposed development in relation to vegetation communities, significant flora and fauna species and vegetation, and significant habitat and corridors on the site.
6. Native vegetation buffers must be provided between development and areas containing threatened flora and fauna species or their habitat, threatened vegetation communities and native vegetation corridors. The width of the buffer should be determined with reference to the function of the habitat, the threat of sea level rise and the type of development proposed. The buffer should be designed to keep the area of significance in natural condition.
7. A suitable barrier such as a perimeter road should be provided between development, (including landscaped areas) and native vegetation or significant habitat features, to minimise edge effects
8. Where a proposed development is likely to impact on an area of native vegetation, it must be demonstrated that no reasonable alternative is available. Suitable ameliorative measures must also be proposed (eg: weed management, rehabilitation, nest boxes).
9. Rehabilitation of degraded areas of the development site should include local native species to establish a self-maintaining ecosystem as close as possible to the natural state.
10. Buildings and structures, roads, driveways, fences, dams, infrastructure, drainage and asset protection zones should be located outside of areas with significant flora and fauna, native vegetation corridors and buffers.
11. An application for removal of native vegetation will only be considered where it is ancillary to, and necessary for conducting an approved use of the land (ie: an application for clearing alone will not be supported).
12. Where retention or rehabilitation of native vegetation and/or habitat is required, a vegetation management plan must be prepared in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*. This must detail how vegetation will be protected, rehabilitated and managed before, during and after construction.
13. Long-term protection and management of areas set aside for ecological reasons is encouraged through secure tenure with appropriate conservation management. This may be achieved through a Planning Agreement.
14. Development should be consistent with the effective conservation of land within any adjacent Environmental or Waterway zone and its protection from adverse impacts. It should include, but not be limited to weed invasion, erosion and sedimentation, pollution, chemicals, nutrients, stormwater run-off, feral and domestic animals.

Note: Council may require a bond to ensure that native vegetation is protected and any ameliorative measures are undertaken.

2.13 PRESERVATION OF TREES AND VEGETATION

Objectives:

1. To ensure that trees listed on Council's Significant Tree register are not adversely affected by development.
2. To maintain and enhance the natural bushland or vegetated character of the city.
3. To retain trees for the urban amenity, microclimate, scenic, air and water quality, and the social benefits that they provide.

Controls:

7. For the purposes of Clause 5.9 in LMLEP 2014, development consent is required to ring bark, cut down, top, lop, remove, injure, wilfully destroy or clear:
   i. Any species of vegetation that existed in the State of New South Wales before European Settlement;
   ii. A tree which is listed in Council's Significant Tree Register;
   iii. Tree(s) or native vegetation listed as heritage items or located within a Heritage Conservation Area; or
   iv. A Norfolk Island Pine Tree (*Araucaria heterophylla*) that is greater than three metres in height, or that has a trunk diameter of 75mm or greater, measured at ground level.

Note: This clause includes Native Vegetation defined in the *Native Vegetation Act 2003* and marine vegetation covered by section 205 of the *Fisheries Management Act 1994*.

8. Except in the E2 Zone, development consent is not required to remove, injure, wilfully destroy or clear native vegetation (excluding native trees and shrubs over 3m in height), only if:
   i. The work is for the purpose of landscaping understorey vegetation and lawn areas where the area to be cleared is less than 600m² (in total), and is on the same allotment as, and within the curtilage of an approved dwelling;
   ii. The soil surface exposed in any period of 90 consecutive days is less than 250m^2;
   iii. The slope of the land is less than 15 degrees;
   iv. The area is not subject to a development consent that requires the native vegetation to be retained; and
   v. The work does not involve the disturbance of habitat for threatened species.
9. Development consent is not required to ring bark, cut down top, lop, remove, injure, wilfully destroy or clear a tree or native vegetation, if:
   i. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
   ii. The tree or native vegetation is not required to be retained by a development consent, and
   iii. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or
   iv. The tree or native vegetation is within one metre of a sealed driveway to a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or
   v. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) on an adjoining allotment as the building and owners of both properties reach a written agreement before removal occurs.

Note: For the purposes of clause 3 the distance must be measured from the trunk of a tree or shrub measured at ground level to the outer most projection of the building.

***Note*:** A sealed driveway is a driveway or car park with an impervious surface such as concrete, pavers, or bitumen. A gravel driveway is not classed as a sealed driveway.

***Note*:** A lawfully used building does not include drainage, excavation, a garden shed or jetty, but does include an underground water storage structure or septic tank.

10. Development consent is not required for removal of a tree or native vegetation if Council is satisfied beforehand that the tree or native vegetation:
    i. Is dead and is not required as habitat for native fauna or

ii. Is a risk to life or property.

***Note*:** Evidence to support removal should be forwarded to Council in accordance with requirements outlined in Council's *Tree Preservation and Native Vegetation Management Guidelines*. Council's Tree Assessment Officer may undertake a site inspection to verify that these conditions are satisfied.

***Note*:** Habitat required for native fauna includes native vegetation and trees (including dead or dying trees) support hollows, spouts, splits, nests and roosts.

11. Development consent is <u>not</u> required for removal of a tree or native vegetation if:
    i. The tree or native vegetation is in danger of imminent failure and there is risk to life or property; and
    ii. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
    iii. Evidence to support its removal is forwarded to Council following the removal, in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.
12. Development consent is <u>not</u> required for removal of a NSW native tree if the tree is:
    i. not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
    ii. not located within other native vegetation and,
    iii. less than three metres in height and
    iv. has a trunk diameter at ground level of less than 75mm.
13. An application for removal of tree(s) and native vegetation will be considered only where it is necessary for conducting an approved use of the land. An application for clearing alone will not be supported.

1. A report from a suitably qualified arborist must be submitted to support:
    i. Any application that may have an impact on a tree listed in Council's Significant Tree Register, or on tree(s) or native vegetation listed as heritage items or located within a heritage conservation area;
    ii. Any request to review Council's determination of an application for tree pruning or removal; or
    iii. Any application that Council determines may cause significant impacts on native trees or native vegetation.
2. An arborist report must include a plan to scale that clearly shows:
    a. The location of the proposed development;
    b. The location, diameter, canopy spread, condition and species of each tree on the site;
    c. All trees to be removed;
    d. All trees to be retained;
    e. All trees with habitat hollows;
    f. Tree protection zones for all trees to be retained; and
    g. Any asset protection zones.
3. Habitat trees must be assessed by a suitably qualified flora and fauna specialist.
4. Measures must be implemented to protect native vegetation and trees to be retained during construction works. Such protection measures must be specified in the development application, and should be compiled in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.

5. Where habitat trees are removed, measures (such as nest boxes) must be implemented to mitigate against injury or loss of native fauna and habitat. Such measures must be specified in the development application.
6. Boundary fences must be located, designed and constructed to avoid removing or damaging native trees that have a diameter of 200mm or greater, measured at ground level.

Note: Refer to Council's *Tree Preservation and Native Vegetation Management Guidelines* for further details and the Significant Tree Register.

2.14 EUROPEAN HERITAGE

Objectives

2 To protect and maintain European heritage items and their facades.

3 To retain, preserve and promote the adaptive re-use of heritage-listed buildings and contributory buildings in particular, and other buildings that contribute to the heritage character of the locality.

4 To appropriately manage demolition of items of heritage significance, when all other alternatives to demolition have been fully investigated.

5 To ensure that development is sympathetic to heritage items and contributory buildings.

Controls

Figure 2 - A Heritage Assessment and Statement of Heritage Impact must be submitted to Council where a proposed development:

2.15 incorporates, or is adjacent to an item of heritage significance;

2.16 is located within a heritage conservation area, or,

2.17 has been identified by Council to have particular circumstances that warrant it.

Note: Council officers will use the following criteria to determine the need for Heritage Assessment and Statement of Heritage Impact is required under control 1(iii) above:

a. The subject site includes a building erected prior to 1950 whether or not it is identified as being of a particular architectural style,

b. The development is considered in conflict with it's heritage context , streetscape, or heritage precinct,

c. The subject site includes a potential heritage item.

Figure 3 - The impact of development on an item of heritage significance must be minimised by:

a. Restricting the extent of development to that which is necessary;

b. Conserving what is significant about the item;

c. Clearly differentiating new development from the existing significant fabric;

d. Ensuring that development is of a scale, form, mass, proportion and finish that is sympathetic with the heritage item; and

e. Ensuring that development is sufficiently separated from the heritage item, so as not to compromise the existing level of visibility.

Figure 4 - For development involving demolition of an item of heritage significance, a heritage assessment and Statement of Heritage Impact must be prepared and lodged. It must verify that all alternative options to demolition have been fully investigated, and demonstrate the replacement building's compatibility with the physical context. The Statement of Heritage Impact must include details of the:

a. Structural condition;

b. Overall extent of the remaining fabric;

c. Potential retention and adaptive reuse; and

d. Comparative costings.

Figure 5 - Where demolition of the whole of a heritage item is proposed, approval must be sought concurrently for the replacement building.

Figure 6 - Alterations and additions to items of heritage significance must where possible:

a. Occur at the rear of the building;

b. Maintain the established building line;

c. Maintain an existing driveway access to the rear of the property;

d. Incorporate or retain elements such as chimneys, windows and gables;

e. Maintain established patterns of buildings and garden; and

f. Not overwhelm or dominate the existing building.

Figure 7 - Alterations and additions to items of heritage significance must be recognisable, on inspection, as new work. They must not mimic the design, materials or historic details of the heritage item.

Figure 8 - Garages, sheds, carports, external utilitarian structures and the like must be detached and located at the rear, or set back at least two metres behind the heritage item.

2.18 ABORIGINAL HERITAGE

Objectives

1. To protect and conserve Aboriginal cultural, spiritual, and sacred sites within the City.
2. To ensure the impact of a proposed development on the heritage significance of an Aboriginal place or object is considered by adequate investigation and assessment.

Controls

3. Where a development will disturb the ground surface and the natural ground surface has not been significantly disturbed, the development application must demonstrate that adequate due diligence has been undertaken. This includes (but is not limited to) submitting the following documentation in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*. This includes submitting the following documentation:

2. A statement and results of a basic 200m Aboriginal Heritage Information Management System (AHIMS) search. Where a site is identified within 200m of the development site, a statement and results of a 50m AHIMS search must be included.
3. Identify whether the development site is partially or wholly within the Sensitive Aboriginal Landscape map under the LMLEP2014 and whether the exemptions under the Excluded Development Criteria (Table 4) apply.
4. A statement indicating whether there are landscape features that indicate the potential presence of Aboriginal objects.

Note: landscape features include: foreshore areas, creek lines, rocky areas, wetlands, ridge tops, ridgelines, headlands, sand dunes, caves.

4. A Due Diligence Assessment must be prepared by a suitably qualified person to determine whether the proposed development is likely to harm Aboriginal objects and identify whether an Aboriginal Heritage Impact Permit is required where:

    1. An AHIMS search has identified the likelihood of an Aboriginal item within 200m of the development site, and/or
    2. The site is identified on the Sensitive Aboriginal Landscape map and the Excluded Development Criteria do not apply.

5. The Due Diligence Assessment must include an assessment of the cultural significance of the place to the Aboriginal Community.

Note: Clause 5.10(8) – Heritage Conservation of the LMLEP 2014 and the Lake Macquarie Aboriginal Heritage Management Strategy requires assessments to be forwarded to the Local Aboriginal Land Council for comment for a 28 day period.

6. An Aboriginal Cultural Heritage Assessment Report should be prepared where:

    1. A Due Diligence assessment has identified the potential for the site to contain an Aboriginal object or contains a place of significance, or
    2. The development will have an impact on a known Aboriginal object or place.

Table 4 - Excluded Development Criteria for Development in Sensitive Aboriginal Landscape Map

Excluded Development	Land on which excluded development may not be carried out
All development on sites having a combined/total area less than 800m^2	Within 200m of an AHIMS site Setback from DP High Water mark does not exceed 50m.
Exempt development under the SEPP (Exempt and Complying Development Codes) 2008 on sites having a total area greater than 800m^2 subject to: 1. 75% of combined/total site area already disturbed; or 2. Works do not exceed existing disturbed footprint; or 3. Site has previously been assessed for Aboriginal heritage such as subdivision applications post 1997 development consent.	

Note: The SEPP (Exempt and Complying Development Codes) 2008 does not apply to land within the Sensitive Aboriginal Landscape area. However, exempt development within this SEPP may not require further Aboriginal assessment if it fulfills the requirements of the Excluded Development Criteria Table.

7. Where required, the Aboriginal Heritage Impact Statement must be prepared in accordance with the Lake Macquarie Aboriginal Heritage Management Strategy and the Office of Environment and Heritage Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW, which includes consultation with the Aboriginal community.

8. Where a proposal seeks to destroy, remove or impact on an Aboriginal object, any development will be Integrated Development and will also require a permit from Office of Environment and Heritage.

2.19 NATURAL HERITAGE

Objectives

a. To ensure the protection of items of natural heritage significance.
b. To ensure that insect fossil beds and fossilised trees are maintained, along with features of scientific interest in their natural state.
c. To facilitate public appreciation and scientific investigation of insect fossil beds and geological features of scientific interest, without destruction or damage.

Controls

1. Where development is proposed on land within 50 metres of an item of natural heritage significance identified in the Lake Macquarie Local Environmental Plan 2014, a Heritage Impact Assessment must be prepared in accordance with the *Natural Heritage Guidelines*.
2. The likely impact of development proposals on the insect fossil beds and geological features of scientific interest should be identified through a report by a palaeontologist or geologist, which establishes the significance of the site. Such a report should include management strategies before, during, and after construction.
3. The development should be designed to avoid natural heritage items.
4. Where it is not reasonable to avoid natural heritage items, the item must be protected and incorporated into the design. Reasonable access to the construction site and any excavated material should be provided to researchers and/or palaeontologists from the Australian Museum or other research institution.
5. Any natural heritage items extracted should be fully documented and catalogued prior to being forwarded to the Australian Museum. Documentation and cataloguing must be undertaken to museum standards.

2.20 SOCIAL IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the social impact of a proposal when assessing a specific development application.

Social Impact Assessment focuses on the human dimension of a locality. It seeks to address the question "what will be the impact of a project/development on people?" and to anticipate outcomes that may flow from a proposed development which are likely to affect people's way of life, their culture and/or their community.

Social Impact Assessment is not a tool to stop development, but is to assist in the assessment of development proposals so that the best development results.

Objectives

a. To ensure that development takes into consideration the likely social impacts that may arise, including any effects on equity, access, participation and rights.
b. To ensure that development occurs in appropriate locations, and is supported by adequate services and facilities to support the community and its needs.
c. To ensure that services and facilities are accessible to all members of the community.
d. To facilitate availability of active and passive recreation, natural landscapes, educational opportunities, employment opportunities, health services, public transport, and neighbouring centres, as well as maintaining or enhancing the aesthetics and amenity of the area.

Controls

1. A Social Impact Assessment (SIA) must be prepared in accordance with Council's *Social Impact Assessment Guidelines*, and submitted with the development application in the following circumstances:

2. the development is identified in table 5, or
3. the development is valued at $5,000,000 or greater, or
4. the development has a floor area greater than 3000m2, or
5. where Council identifies that particular circumstances warrant it.

Note: Council officers will use the following criteria to determine if a SIA is required under control 1(iv) above:

6. The development is targeted at a particular socio-economic or demographic group,
7. The development is considered in conflict with its locality, and
8. The development has, or is anticipated to generate, significant levels of community opposition.
9. Potential adverse impacts identified by a SIA must be mitigated through redesign, whilst positive impacts should be enhanced by the design or other actions.

Note: The scope, complexity and requirements of a SIA will be commensurate with the scale of the proposed development. Applicants are advised to consult with Council's Social Planner regarding specific requirements.

Table 5 - Uses requiring Social Impact Assessment

Airport	Licensed Premises (Hotels, Taverns and Bottle Shops)
Animal Boarding etc	Marinas
Backpackers Accommodation	Medical centre
Brothels/sex service premises	Mortuary
Child Care Centre	Offensive and/or Hazardous Industry
Community facility	Passenger Transport Facilities
Crematorium	Place of public worship
Designated Development	Port uses/ port facilities
Education establishment	Public Transport Facilities
Entertainment facility	Recreation Areas
Expansion or Modification of an existing use that would otherwise be prohibited under the LEP	Recreation facilities (indoor)
Freight Transport Facility	Registered Club
Funeral Chapel / Funeral Home	School
Group Home	Seniors Housing
Health Consulting Rooms	Service Stations
Health Service Facilities	Sewage Treatment Plants
Helipad	Takeaway food and drink premises including, drive-thru establishments, bottle shops, and fast food outlets
Home Occupation (Sex Services)	Waste Facilities
Hospital (not including a day surgery facility – refer to medical centres)	Water System / Facilities
Hotel or motel accommodation	

2.21 ECONOMIC IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the economic impact of a proposal when assessing a specific development application.

Economic Impact Assessment focuses on the economic dimensions of a locality. It seeks to identify how a proposal will contribute to the economic growth of the locality and City through locating development in appropriate areas, supporting existing development in the area and through the creation of employment opportunity and other economic benefits.

Objectives

a. To ensure that development supports the Lake Macquarie hierarchy of centres and positively contributes to the City by supporting existing development in the locality and the community through the creation of employment opportunities.
b. To ensure development contributes through additional local employment and economic benefits.

Note: Refer to Council Economic Impact Assessment Guideline for further information and guide to the economic considerations for specific types of development**.**

Controls

1. An economic impact assessment must be prepared and submitted to Council at the discretion of the assessing officer under the following circumstances:
    i. Where development is valued at $5,000,000 or greater, or
    ii. Where the proposed development has a floor area greater than 5000m2, or
    iii. Where the development is inconsistent with the zone objectives.

3 DEVELOPMENT DESIGN

3.1 STREETSCAPE

Objectives

a. To improve the visual amenity for all users and provide street activation of industrial areas.

b. To encourage building design that positively contributes to the streetscape and a pleasant environment for workers, and the community more broadly.

Controls

1. Blank walls must be minimised by incorporating an opening or change in the wall's articulation. This should include a combination of change in materials, setback variation, architectural details and/or landscaping.

2. Screening of poorly designed buildings with vegetation is not an acceptable streetscape treatment. A combination of quality building design and landscaping must be used to provide a positive contribution to the streetscape.

3.2 STREET SETBACK

Objectives

a. To provide setbacks that complement the streetscape and provide for landscaping, reducing the dominance of buildings.

b. To maximise the efficient use of industrial zoned land.

Controls

1. Warehouses, bulky goods developments and the like are to be set back from the front property boundary a minimum distance of five metres for landscaping purposes. Designs must include soft and hard landscaping that provides a positive contribution to the streetscape. Where the site is a corner lot, this provision should be applied to both road frontages unless the assessing officer is satisfied that a lesser setback is appropriate for one of the frontages.

2. Single storey offices or display rooms are permitted within the front setback area, provided that they are ancillary to the primary industrial building's use. Such a structure must be designed as an integral built form that makes a positive contribution to the streetscape, and must not exceed 50% of the primary building frontage.

Note: The term soft landscape refers to the vegetative materials used to improve a landscape by design. The corresponding term hard landscape describes construction materials. Soft and hard landscaping refers to all types of landscaping for development.

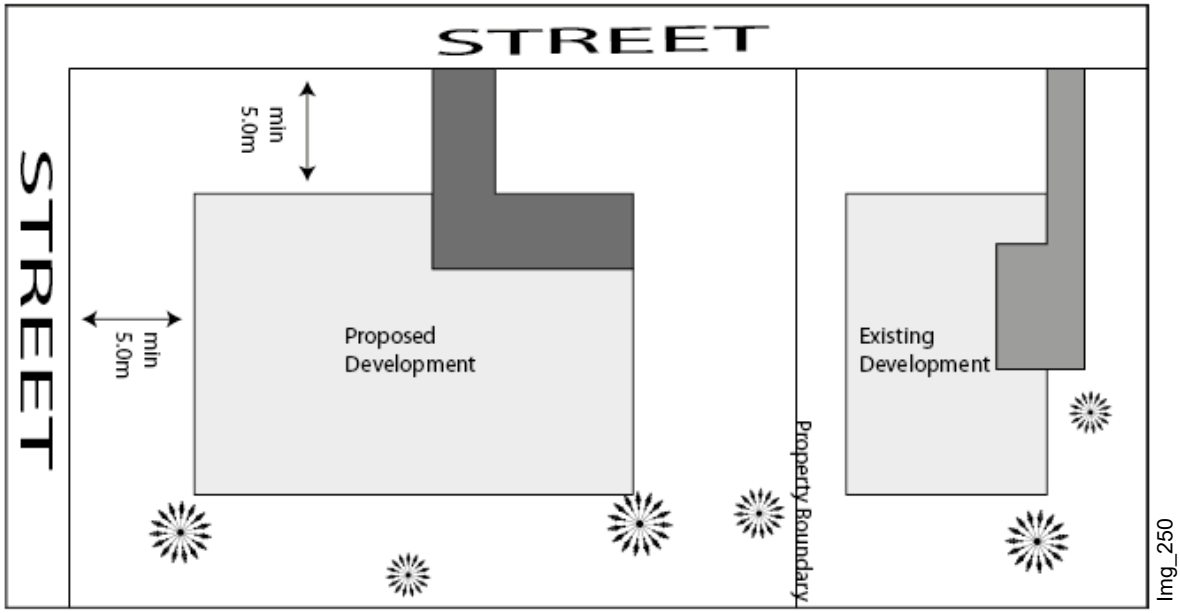

Figure 9 - Street Setback

3.3 BUILDING BULK

Objectives

a. To encourage good design and innovative architecture to improve the urban environment.

b. To minimise the visual impact of development (including its bulk and scale) when viewed from adjoining properties, the street, waterways and land zoned for public recreation purposes.

Controls

1. Large areas of continuous wall planes must be avoided by varying building setbacks, and using appropriate techniques to provide visual relief.
2. Building height and scale must relate to the topography and the existing site conditions.
3. Verandas, recesses, surface treatments and variations in material selection and colour should be utilised to reduce building bulk.
4. Landscaping should be provided to reduce the visual bulk of buildings.
5. Walls in excess of 15 metres in length must be articulated, landscaped or otherwise treated in order to provide visual relief.
6. Walls in excess of four metres in height must be articulated, landscaped or otherwise treated in order to provide visual relief.

3.4 ENERGY EFFICIENCY AND GENERATION

Objectives

1 To ensure building orientation maximises solar access and natural cross ventilation.

2 To ensure energy efficiency is achieved in all developments.

3 To create energy resilience in local communities through design that allows opportunities for future installation of renewable energy generation and low carbon technology.

4 To minimise the economic impacts of increasing electricity costs and any requirements to disclose energy efficiency when selling or leasing a property.

Controls

1. Buildings must be oriented to provide efficient use of solar energy and natural ventilation wherever possible.
2. Designs must consider future potential for renewable energy generation and low carbon technology.
3. Developments in excess of 4,000m² gross floor area should achieve the equivalent of a minimum 4 Star Rating under the Green Building Council of Australia's Green Star Rating tool.

Note: Formal certification of Green Star Rating under the Green Building Council of Australia is not required. Justification that the design would achieve the Green Star rate or an equivalent rating under a different system (e.g. NABERS) is only required.

3.5 SOLAR ACCESS AND ORIENTATION

Objectives

1. To ensure reasonable access to sunlight is maintained for occupants of likely future and existing dwellings on adjoining lands.
2. To ensure solar access is maintained to adjoining open space and public domain areas.

Controls

a. Developments must provide for the reasonable access to sunlight in accordance with the Planning Principle established by the Land and Environment Court in *The Benevolent Society v Waverley Council* [2010] NSWLEC 1082 and *Davies v Penrith City Council* [2013] NSWLEC 1141.

b. Where adjacent existing developments and their private open space receive less than the minimum requirements, any new development must seek to maintain or enhance the solar access of the adjacent buildings.

c. Where lot orientation allows, developments should be designed so that the long axis of the development is running east-west.

d. Building openings on the western elevations should be minimised. Where openings are unavoidable, they should be located higher on the façade and shaded by eaves or landscaping or similar.

3.6 LANDSCAPE DESIGN

Objectives

a. To provide site landscaping that complements the nature and scale of the development.

b. To enhance the amenity of the proposed development and streetscape.

c. To provide a visual buffer between the street and car parking areas.

d. To maintain clear lines of sight to entry points and access ways.

e. To provide low maintenance plantings.

f. To integrate stormwater management structures in the landscape design.

g. To link landscaped areas to the open space network where possible.

h. To provide a green industrial park environment to soften the impact of development on the environment.

Controls

1. Appropriate landscape documentation must be prepared and submitted, in accordance with Table 6 – Landscape Development Type and Requirements.

2. Landscape documentation must be prepared by appropriately qualified professionals. For Category 3 development, landscape documentation must be prepared by a qualified landscape architect. For Category 2 development, landscape documentation must be prepared by a landscape architect, landscape designer or horticulturist.

3. The landscape consultant's declaration must be signed and submitted with the relevant landscape documentation.

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements.

Table 6 - Landscape development type and requirements

Development Type and Category	**Landscape Documentation**	
	Landscape Concept Plan at DA stage	Landscape Masterplan and Report at DA stage
Category 3: **Large Scale** • Development with an estimated value exceeding $1m, or • Development of 10 or more dwellings, or • Designated development, or • Childcare facilities, community facilities, educational establishments, seniors housing, health services facilities, or tourist accommodation, or. • Development in areas of high scenic quality, adjacent to the lake or Pacific Highway, in or adjacent to an environmental zone, on visually dominant ridgelines, or in a heritage conservation area.	Yes	Yes
Category 2: **Medium scale** • Industrial development with an estimated value exceeding $0.25m, or • Development for 3-9 dwellings, or • Dual occupancy development; or • Any development in a business zone.	No	Yes
Category 1: Small scale • Single dwellings, or • Development that will have little impact on the existing environment.	No	No

Note: If a development type is not detailed in this table, or you are unsure of the category and requirements, seek advice from Council.

3.7 STREET TREE PLANTING

Objectives:

a. To enhance the amenity and desired character of the street.

b. To provide shade and shelter for pedestrians.

Controls:

1. Development must include the supply, installation and establishment of at least one advanced clear-trunk tree for every 20 metres of street frontage.

2. The root volume for each tree in the front setback area must be a minimum of $8m^3$ and between 600 and 750mm deep.

3. All trees installed must be advanced stock, and at least 75L container size.

4. The tree supplier or landscape contractor must provide evidence that all trees generally comply with *NATSPEC Guide to Specifying Trees - Assessment of Tree Quality.*
5. All trees installed must be established and maintained for a minimum period of 24 months. Any failed trees must be replaced immediately.

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements

3.8 LANDSCAPE AND TREE PLANTING IN FRONT SETBACK AREAS

Objectives

a. To allow for the planting and healthy growth of large canopy trees which enhance amenity and street character.
b. To provide large-scale planting between the street and parking and service areas, that reduces the visual impact of development.
c. To maintain sightlines from the street to carparks and entrances.

Controls

1. Development must include installation and maintenance of at least one advanced clear-trunked broad-canopy tree for every 20m^2 of front setback area.
2. The root volume for each tree in the front setback area must be a minimum of 8m^3 and between 600 and 750mm deep.
3. Each area allocated to tree planting must have a corresponding clear air space that is at least eight metres high and six metres in width.
4. All trees installed must be advanced stock, and at least 45L container size.
5. Understorey planting must comprise low growing species less than 900mm in height.

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements

3.9 LANDSCAPE AND TREE PLANTING IN CAR PARKS – B7 ZONE

This section applies to development within the B7 Business Park zone only.

Objectives

a. To provide broad-canopy tree cover in car parks for shade and shelter.
b. To reduce the visual impact of car parking areas.
c. To maintain sightlines below the tree canopy.

Controls

1. Development must include supply, installation and maintenance of at least one advanced clear-trunked broad-canopy tree for every six at-grade car parking spaces.
2. Each landscape planting area must include at least one medium to large tree species, with suitable ground covers or low shrubs below.
3. Each landscape planting area must have a minimum width of two metres.
4. The root volume for each tree in the front setback area must be a minimum of 8m^3 and between 600 and 750mm deep..
5. The root volume must be either existing deep soil or an equivalent volume of gap graded (load bearing) soil with a porous vehicle pavement on top, which is installed to manufacturers specifications.
6. Each area allocated to tree planting must have a corresponding clear air space that is at least eight metres high and six metres in width.

7. All trees installed must be advanced stock and at least 75L container size.
8. All trees installed must be established and maintained for the life of the development. Any failed trees must be replaced immediately.

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements

3.10 FENCING

Objectives

a. To avoid the dominance of fences on the streetscape and similar hostile design, and to soften the built environment in industrial areas.

Controls

1. Security gates and fencing may be erected on or just forward of the building line, provided it does not exceed a height of two metres, is designed for maximum visibility, and is screened by landscaping.
2. Fencing forward of the five metre setback must not exceed a height of 1.2 metres. It should be constructed of masonry or dark coloured picket/pool style fencing, in combination with vegetation

Note: Exceptions to the above fencing requirements must be justified by a CPTED Assessment, as described in Section 3.17 Safety and Security of this chapter of the DCP and demonstrated through a streetscape presentation assessment.

3.11 TRAFFIC AND TRANSPORT

Objectives

a. To provide effective, efficient and safe movement for pedestrians, bicyclists and motor vehicles.
b. To ensure that vehicles can enter and leave a development site in a forward direction, unless otherwise justified to Council's satisfaction.

Controls

1. A Traffic Impact Statement must be prepared and submitted with any commercial/retail or industrial application for development of an area greater than 1000m², or where access to the site will be via an arterial or sub-arterial road.
2. Access points to a site are to be kept to a minimum and should be kept to one where possible.
3. Direct access to arterial and sub-arterial roads must be minimised to maintain the efficient flow of traffic on those roads. Alternative access is encouraged where available.
4. Driveways must be located as far as possible from intersections.
5. All driveways must be designed and constructed to provide adequate sightlines.
6. Driveways and internal road circulation must be designed to cater for safe manoeuvring and queuing, so as not to disturb traffic operations on external roads.
7. The design and layout of the development must reflect the type of vehicles that will need to access the site/development. It must also ensure that vehicles can enter and leave the site in a forward direction.
8. Driveways are of a type, construction and width suitable to the proposed development, and are designed so as not to detract from the streetscape.

Note: Refer to Council's *Traffic Impact Statement and Vehicle Access Guideline* for further details and requirements.

3.12 DESIGN OF PARKING AND SERVICE AREAS

Objectives

a. To ensure that on-site parking, loading/unloading docks, and driveways do not dominate or detract from the appearance of the development or the local streetscape.

b. To maximise pedestrian safety and amenity.

c. To ensure the safe and efficient movement of vehicles within, entering and leaving properties.

Controls

1. Parking and service areas must be behind the front setback area, and should be located to the side or rear of the development.
2. Car park design must include direct, safe and well marked pedestrian routes from the parking area to building entries.
3. Car park design must not result in dead-end aisles.
4. Parking aisles must be orientated at right angles to the main building frontage to facilitate pedestrian movement.
5. The design of vehicle parking areas must include appropriate lighting for safe pedestrian movement and security.

Note: The design of parking areas must comply with the provisions of AS2890 Parking Facilities.

3.13 BIKE PARKING AND FACILITIES

Objectives

a. To provide convenient and safe bike access, movement and parking.

b. To encourage travel to work by bike with convenient and secure end of trip facilities.

Controls

1. The following bike facilities must be provided for customers and short term users:
   i. Three bike parking spaces or one bike parking space for each 20 car parking spaces (as required in Table 7), whichever is the greater.
2. Bike parking for customers and short term users must be:
   i. Located close to the development's pedestrian entrance where there is active and passive surveillance;
   ii. Within easy and safe access from outside the site, without impeding the movement of pedestrians or other vehicles; and
   iii. At least 50% covered from the weather where there are more than 10 spaces.
3. The following bike facilities must be provided for employees:
   i. One employee bike parking space for each 20 employees, or part thereof;
   ii. One personal locker per two employee bike parking spaces;
   iii. One unisex change room and one shower for development greater than 1000m^2 GFA and less than 5000m^2 GFA;
   iv. One female change room with one shower and one male change room with one shower, for development greater than 5000m^2 GFA; and
   v. One additional shower (in each change room) for each additional 5000m^2 GFA up to a maximum of five showers in each change room.
4. Bike parking for employees must be located in a secure undercover area.
5. The design of all bike parking must include:
   i. Clear signposting and good lighting;

ii. Racks that support the bicycle in an upright position, with the bicycle frame and at least one wheel locked to the rack;

iii. Racks that fit all types and sizes of bicycles;

iv. Construction and materials that are durable, and resistant to vandals and thieves; and

v. Designs in accordance with relevant Australian Standards.

3.14 MOTOR BIKE PARKING

Objectives

a. To provide convenient and safe motor bike access, movement and parking.

Controls

1. Development must provide one motor bike parking space for each 20 car parking spaces (as required in Table 7: Car Parking Rates)

3.15 CAR PARKING RATES

Objectives

a. To ensure that the number of bike, motor bike and car parking spaces is sufficient to support the intended use.

b. To ensure that the number of car parking spaces does not discourage the use of public transport or other modes of transport.

Controls

1. The number of car parking spaces provided must be consistent with the specifications of Table 7: Car Parking Rates.
2. Where vehicle parking requirements are not specified in Table 7, justification must be provided that supports the proposed vehicle parking provisions, such as:
   i. Survey data from comparable facilities; and
   ii. Survey data from existing operations where expansion is proposed.
3. Where the floor area of an existing development is being increased, the required car parking should be calculated for the additional floor area only.
4. Where the proposed number of car parking spaces is less than or greater than specified in Table 7, a justification must be provided to support a variation , such as:
   i. Survey data from comparable facilities;
   ii. Survey data from existing operations where expansion is proposed; and
   iii. A proposal for dual use of parking spaces.
5. A reduction to the car parking rate must not exceed 20% or 20 spaces, whichever is the lesser.

Note: 'Amenities' and 'storage space' are not included when calculating Gross Floor Area (GFA) for car parking purposes.

Table 7 - Car parking rates table for development in industrial, business park, and infrastructure zones

Development Type	Car Parking Rate
Disability parking rate	One space per 50 spaces. Where the requirement is between five and 50 spaces, at least one space is to be provided for persons with a disability. All disabled parking must comply with the relevant Australian Standard.

Development Type	Car Parking Rate
Bulky goods premises	Two spaces, plus one space per 40m^2 GFA
Depots	One space per vehicle, plus one space per two full time equivalent employees
Home business or industry *Where vehicles are an intrinsic component of the business or industry*	As per Dwelling - ie: one undercover space and one space as single file parking per dwelling. As per dwelling, plus two spaces
Hotel or motel accommodation *May include dining facilities, outdoor eating areas or beer gardens.* *Where providing accommodation* *Where providing conference facilities*	 1 space per 25m^2 of GFA 1 space per short-stay room, plus 1 space per 2 staff. 1 space per 5m^2 of GFA. Note – Where a mixture of these activities occurs calculate vehicle parking requirements based on activity mix.
Restaurant or café *Where the total area is less than 5000m^2 GFA* *Where the total area is greater than 5000m^2 GFA*	 1 space per 25m^2 GFA 1 space per 40m^2 GFA Note:- See Australian Standard for Fast Food takeaway vehicle queuing lengths.
Take-away food & drink premises *Where the total area is less than 5000m^2 GFA* *Where the total area is greater than 5000m^2 GFA*	 1 space per 25m^2 GFA 1 space per 40m^2 GFA
Funeral homes	One space per employee plus one space per three seats in chapel(s)
Landscape and garden supplies	One space per 50m^2 GFA
Neighbourhood Shops *Where the total area is less than 5000m2 GFA* *Where the total area is greater than 5000m2 GFA*	 One space per 25m² GFA One space per 40m² GFA
Self storage units	One space per 300m^2 GFA
Service stations	One space per 60m^2 convenience store GFA, plus one space per workshop bay
Sex services premises	One space per room used for sex services, plus one space per additional full time equivalent employee

Development Type	Car Parking Rate
Storage premises (except hazardous storage establishments and offensive storage establishments)	One space per 300m^2
Veterinary hospitals	One space per practitioner, plus 0.5 per full-time equivalent employee, plus 3 visitor spaces
Industry	One space per 100m^2 GFA, plus one space per 50m^2 ancillary office space
Freight transport facilities	Two spaces, plus one space per vehicle, plus 0.5 spaces per full-time equivalent employee
Passenger transport facilities	Two spaces, plus one space per vehicle, plus 0.5 spaces per full-time equivalent employee
Education establishments *Where pre-school with normal school Hours* *Where primary or secondary school* *Above secondary school*	 One space per four children, plus one space per 1.5 full-time equivalent staff. One space per 1.5 full-time equivalent staff, plus one space per 50 students One space per 1.5 full-time equivalent staff, plus one space per 8 students
Hospitals (not including a day surgery facility – refer to medical centres) *Where a nursing home, hospice, or similar long-stay establishment*	One space per two beds, plus one space per two staff, plus ambulance spaces One space per six nursing home beds, plus one space per two staff. Note – Calculate staff spaces on the maximum number of staff at any one time. Where a mixture of these activities occurs, calculate vehicle parking requirements based on the activity mix
Child care centres	One car space per eight children, plus 0.75 spaces per staff member. Parking designated for staff may be provided as single file parking where practical.
Place of public worship	One space per three seats
Recreation facilities (indoor) *Squash* *Indoor cricket or other court game* *Swimming* *Gymnasium*	 Three spaces per court Twenty spaces per pitch or court Fifteen spaces, plus one space per 100m^2 GFA (indoor pool) One space per 10m^2 GFA Notes - Where a mixture of these activities occurs, calculate vehicle parking requirements based on the activity mix. Where a facility combines a number of sporting activities in one area, determine the vehicle parking requirement based on the highest use activity.
Timber yard	One space per 50m^2
Transport depots	One space per vehicle, plus one space per two full time equivalent employees

Development Type	Car Parking Rate
Truck depots	One space per vehicle, plus one space per two full time equivalent employees
Vehicle body repair workshops	Two spaces, plus one space per 50m^2 GFA
Vehicle repair stations	Two spaces, plus one space per 50m^2 GFA
Vehicle sales or hire premises	One space per 130m^2 GFA
Veterinary hospitals	Three spaces per practitioner, plus one space per full time equivalent employee
Warehouse or distribution centres	One space per 100m^2

3.16 NON-DISCRIMINATORY ACCESS

Objectives

1. To ensure development has non-discriminatory access that accommodates all people.

Controls

a. The design and construction of development must ensure that non-discriminatory access is provided to enable all users of that development to access the same level of service/use.

b. Where development is listed in Table 8, a Disability Access Audit must be prepared in accordance with Council's *Non-discriminatory Access Guideline* and submitted to Council. The Disability Access Audit must be prepared by an accredited access consultant.

Note: Refer to Council's *Non-discriminatory Access Guideline* for further information.

Note: A Disability Access Audit may be waived for some developments at the discretion of the assessing officer for some Change of Use proposals.

Table 8 - Development types requiring a Disability Access Audit

a. Amusement centres with a total floor area of 500m^2 or more	b. Markets with a total floor area of 500m^2 or more
c. Backpackers' accommodation with 20 or more bedrooms	d. Manufactured home estate/caravan park
e. Boarding houses with more than 20 rooms	f. Medical centre
g. Business/commercial premises with a total floor area of 500m^2 or more	h. Mixed use development with a total floor area of 500m^2 or more
i. Child care centre	j. Multi-dwelling housing with 10 or more dwellings
k. Community facility	l. Nightclub
m. Educational establishment	n. Passenger transport facilities
o. Entertainment facility	p. Place of public worship
q. Function centre	r. Recreation facilities – indoor, outdoor and major
s. Group home	t. Registered club
u. Health consulting rooms with four or more consulting rooms	v. Retail premises with a total floor area of 500m^2 or more
w. Health services facilities	x. Residential care facility
y. Hospital	z. Residential flat building with 10 units or more
aa. Hotel or motel accommodation	bb. Seniors housing
cc. Information and education facility	dd. Tourist accommodation with 20 units or more

ee.Licensed premises	ff. Change of Use

3.17 SAFETY AND SECURITY

Objectives

1. To assist the development in mitigating opportunities for criminal activity, behaviour, and perceived opportunities for crime.
2. To ensure a development contributes to the liveability, safety and security of its users.

Controls

1. Developments must ensure that the following Crime Prevention Through Environmental Design (CPTED) principles have informed the design of the proposed development:

   i. Surveillance – Developments must be designed and managed to maximise the potential for passive surveillance;

   ii. Access Control – Developments must be designed so as to make them legible for users without losing the capacity for variety and interest;

   iii. Territorial Reinforcement – Developments must be designed to define clearly legitimate boundaries between private, semi private and public space; and

   iv. Space Management – Developments must be designed and detailed to minimise damage and the need for undue maintenance, without undermining the aesthetic and functional qualities of the building.

   Note: Refer to Council's *Crime Prevention Through Environmental Design Guideline* for further information on CPTED principles.

2. Where development:

   i. is listed in Table 9, or

   ii. is valued at $5,000,000 or more, or

   iii. has a gross floor area greater than 5,000m^2, or

   iv. will be open to the public between the hours of 9pm and 6am, a Crime Risk Assessment must be prepared and submitted to Council.

3. The Crime Risk Assessment should be prepared by a person who has undertaken the NSW Police Service 'Safer by Design' course (or equivalent) and must:

   i. Analyse the types of crime that may be prevalent in the area, and to which the development may be susceptible;

   ii. Provide information as to how the design was informed by the CPTED principles; and

   iii. Inform the design, construction or future management practises of the development (eg: building materials, signage, lighting, landscaping, security patrols, maintenance and graffiti removal practices).

4. Any recommendations or shortfalls identified by a Crime Risk Assessment are to be implemented into the design of the development to the satisfaction of the assessing officer.

   Note: Refer to Council's *Crime Prevention Through Environmental Design Guideline* for further information on what needs to be covered in a Crime Risk Assessment.

Table 9 - Development types requiring a Crime Risk Assessment

1. Child care centres	2. Service stations
3. Development involving the provision of publicly accessible open space	4. Car parks
5. Industries comprising more than one unit	6. Seniors living developments and hospitals with more than 30 beds
7. Passenger transport facilities	8. Sex service premises
9. Freight transport facilities	10. Takeaway food and drink premises including, drive-thru establishments, bottle shops, and fast food outlets (such as McDonalds
11. Registered clubs	12. Tourist and visitor accommodation

3.18 CUT AND FILL

Objectives

1. To minimise land shaping, particularly outside the building footprint.
2. To ensure development is on a stable site.
3. To minimise the impact on groundwater flow.
4. To ensure that development does not concentrate surface water flows to adjoining properties.
5. To minimise the extent of earthworks, stormwater infrastructure and retaining structures and the associated costs.

Controls

1. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area, or within the extent of the 100 year probable ARI (1% AEP) flood event.
2. Cut and fill associated with a development must only occur within the building and carpark footprint
3. Cut and fill must comply with the provisions in Table 10.
4. Retaining structures greater than 1m in height must be designed by an engineer, and the certification details lodged with the development application.
5. Batter slopes must not exceed a gradient of 1:4, unless stabilised by dense planting.
6. Fill must not contribute to unreasonable impacts on amenity or the redirection of water onto adjoining properties.
7. Any fill used must be certified Virgin Excavated Natural Materials, certified Excavated Natural Material or uncontaminated engineered fill.

Table 10 - Requirements for cut and fill works

Location	Type of Works	Height	Other Requirement
within building footprint	cut and/or fill - retained	4m max	
within 2m of a boundary	cut and/or fill - retained	not permitted	landscape planting to area between boundary and retaining wall
remainder of site	cut and/or fill - retained	2.0m max	.

***Note** *: distance to a boundary is measured from the face of the retaining wall

4 OPERATIONAL REQUIREMENTS

4.1 DEMOLITION AND CONSTRUCTION WASTE MANAGEMENT

Objectives

3. To reduce demolition waste by maximising beneficial reuse of infrastructure, buildings and materials onsite.
4. To avoid creating construction waste wherever possible.
5. To enable maximum diversion of demolition and construction waste to reuse, recycling or composting.

c. To ensure that waste management is planned across all demolition and construction stages so that reusable resources and waste can be appropriately and effectively stored and removed safely from site without adverse impacts on local amenity.

Controls

1. Applications must provide a completed Demolition Waste Management Plan (WMP)(where there are demolition works) and a Construction WMP (for all construction works), in accordance with Chapter 2 (for Demolition) and Chapter 3 (for Construction) of the Lake Macquarie City Council Waste Management Guidelines unless the development is:

   i. Permitted without consent in this zone

   ii. Agriculture (other than intensive agriculture)

   iii. Drainage

   iv. Earthworks

   v. Rail lines

   vi. Roads

   vii. Signs

   viii. Stormwater management facilities

   ix. Utility installations

   These plans must be provided to any relevant person involved in the demolition and/or construction, including architects, project managers, builders, contractors and sub-contractors.

2. The Demolition WMP must describe how the proposal avoids creating waste and how it maximises the reuse and recycling of demolition and construction materials.
3. The following must be shown on scaled plans to be submitted with the development application for demolition and construction stages:

   waste storage area(s) with bins and equipment all shown to scale;

   waste collection area(s) with all bins shown to scale (if different from storage areas);

   waste carting route(s) from buildings to waste storage area(s)'

   bin carting route(s) from waste storage to collection point(s); and

   for developments proposing onsite collection, the waste collection vehicle route, swept paths and clearances.

4.2 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure that waste management infrastructure and operational procedures are an integral part of the development's design and ongoing management.

b. To ensure sufficient volume of equitably accessible, safe, hygienic and aesthetically appropriate waste storage is provided on the property to minimise negative impacts of waste management on occupants and neighbours.

c. To enable maximum opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins.

d. To ensure equitable access for all occupants to opportunities to maximise diversion of waste.

e. To provide flexibility to expand or reconfigure waste separation systems, so that owners and occupants have options to access a range of waste services.

f. To ensure secure separation of commercial waste from residential waste storage and collection.

g. To provide unobstructed waste collection point(s) that are safely and efficiently accessible by Council waste collection vehicles wherever possible.

h. To provide unobstructed, safe access to move bins and bulk waste (such as furniture and whitegoods) between storage and collection points.

Controls

1. An Operational Waste Management Plan (WMP) must be prepared in accordance with the Lake Macquarie Waste Management Guidelines and submitted with the development application for all identified in Table 11, in other parts of this Development Control Plan or when Council identifies that particular circumstances warrant it.

Table 11 - Uses requiring an Operational Waste Management Plan

Dwellings
Commercial and retail, recreation and tourism facilities
Industrial developments and infrastructure
Events
Subdivisions

2. The Operational WMP must address all wastes that will be generated from the operation of the premises. The plan must maximise opportunity for separation from general waste of reusable, recyclable and compostable materials for reuse, recycling and composting wherever possible.
3. The development application must demonstrate - in the Operational WMP and on plans with bins, equipment, waste collection vehicle swept paths and clearances all shown to scale - that the development has sufficient and usable:
   i. bin type, sizes, numbers and collection frequency; and
   ii. internal storage within premises; and
   iii. waste carting route(s) from premises to external waste storage area(s); and
   iv. external waste storage areas; and
   v. bin carting route(s) from waste storage to waste collection point(s); and
   vi. waste collection point(s);
   vii. for developments proposing onsite collection, the waste collection vehicle route(s), swept paths and clearances; and
   viii. waste management information guide for owners and occupants.
4. For developments with the following specific land uses, the development and Operational WMP must address other matters as identified in the Lake Macquarie Waste Management Guidelines:
   i. boarding houses and hostels; group homes; short-term rental accommodation; social housing; and seniors' living developments;
   ii. commercial and retail premises

iii. veterinary hospitals;
iv. aged care facilities;
v. child care centres;
vi. service stations;
vii. public and private recreation; and amusement and functions centres and entertainment facilities;
viii. vehicle repair workshops and depots;
ix. sustainable aquaculture; and
x. light, heavy and general industries, hazardous, offensive and high technology industries; infrastructure; and waste management or resource recovery facilities.

to demonstrate compliance with the Lake Macquarie Waste Management Guidelines.

5. If the development is not designed to enable Lake Macquarie City Council waste services, a letter must be provided from a private waste contractor advising how they are able to provide the required garbage, recycling and green (garden and food) waste services and (if needed) access the premises.

4.3 ON-SITE SEWAGE MANAGEMENT

Objectives

d. To ensure that land is suitable for on-site sewage management, and that on-site sewage management systems are designed to operate sustainably, without resulting in environmental harm or risk to public health.

Controls

1. On-site sewage management must not be located on sites:
    i) Where connection to reticulated sewer is available (this requirement does not apply to grey water treatment systems); or
    ii) Below the 20-year ARI flood level.
2. Where an on-site sewage management system is proposed, an assessment report must be provided to determine land capacity for sewage effluent. An appropriately qualified consultant must carry out the assessment. The site assessment must:
    i) Be undertaken in accordance with the Environmental Health Protection Guidelines, and On-site Sewage Management for Single Households;
    ii) Recommend suitable wastewater treatment technology;
    iii) Include water balance calculations for determination of the size of the effluent irrigation area based on zero wet weather storage requirements; and
    iv) For greywater treatment systems, it must be demonstrated that the proposed system complies with the *NSW Guidelines for Greywater Reuse in Sewered, Single Household Residential Premises*.
3. Applications for sewage treatment systems must include:
    i) Sewerage Site Plan (1:200) indicating the location of the treatment system, disposal area, and buffer distances to boundaries, dwellings, water courses and other significant features on the site; and
    ii) Detailed plans and sections of the proposed effluent disposal system.
4. Other than for greywater treatment systems, surface and subsurface irrigation areas should be made up of irrigation zones that are a minimum 300m^2 and maximum 500m^2. Multiple irrigation zones must be dosed via an automatic irrigation controller or indexing valve.

5. Pump-out septic systems are only acceptable where on-site disposal of effluent is not feasible, and where access is available for a pump-out service to be rendered safely from a public road at the property boundary.

4.4 LIQUID TRADE WASTE AND CHEMICAL STORAGE

Objectives

a. To ensure that liquid trade waste is disposed of appropriately, and does not enter the environment.

b. To ensure that chemicals associated with a development are stored in a secure manner.

Controls

1. Where development is proposed that will generate liquid trade wastes, evidence of a liquid trade waste agreement with Hunter Water must be provided. On-site treatment and/or disposal of liquid trade waste will not be permitted.
2. Developments that generate liquid trade waste must ensure that this waste is adequately contained and bunded to prevent pollution entering the environment.
3. Where chemicals are stored within, or as part of development, those chemicals must be adequately contained and bunded to prevent chemicals entering the environment unintentionally in the event of a spill, flooding, or any other event that may lead to the escape of chemicals.
4. All containment and bunded areas must drain to the reticulated sewerage system under agreement with Hunter Water. No on-site treatment or disposal of liquid trade waste or spilt chemicals will be permitted.

4.5 EROSION AND SEDIMENT CONTROL

Objectives

a. To ensure that development is designed to prevent erosion by minimising disturbance, retaining vegetation and reducing the need for earthworks.

b. To prevent erosion and sediment-laden run-off during site preparation, construction and the ongoing use of land.

c. To ensure that a number of integrated solutions, using a treatment train approach, are implemented for the control and treatment of erosion and sediment.

Controls

a. For proposals where the area of soil disturbance is less than 250m^2, appropriate erosion and sediment control measures must be installed and maintained. This will prevent pollutants from entering water courses during construction and until 70% ground cover is attained.

b. For proposals where the area of soil disturbance is more than 250m^2 but less than 2500m^2, an Erosion Sediment Control Plan (ESCP) must be prepared and lodged, in accordance with Council's *Erosion and Sediment Control Guideline*.

c. For proposals where the area of soil disturbance is more than 2500m^2, a Soil and Water Management Plan, identifying erosion prevention and sediment control measures, must be prepared and lodged, in accordance with Council's *Erosion and Sediment Control Guideline*.

d. The maximum area of soil exposure at any one time must not exceed 2.5 hectares.

Note: Council may vary the requirements, especially where there is a higher or lower risk of polluting receiving waters. Further information may be required for any site depending on, but not limited to, the calculated soil loss, sediment type and an assessment of site constraints and opportunities.

4.6 AIR QUALITY

Objectives

1. To ensure that development does not adversely affect air quality beyond the National Environment Protection Measure (Ambient Air Quality) standard for criteria air pollutants.
2. To ensure that measures are implemented to maintain air quality.
3. To ensure that odours and emissions do not have an unreasonable impact on the amenity of neighbouring properties, or the health of their occupants
4. To ensure that odours and emissions do not have an unreasonable impact on public health.
5. To ensure that emissions do not have an unreasonable impact on natural environment.

Controls

i) An air quality report must be prepared by an air quality/odour expert where a proposed development has the potential to adversely affect air quality. This report must:

a. Consider the information provided on Council's Local Air Quality Maps;

b. Address impacts caused by construction and ongoing operation or occupation of the development;

c. Identify emissions, and measures to mitigate the overall impact, and the impact on nearby residences and occupants of other properties especially sensitive receivers; and

d. Be prepared in accordance with the Approved Methods for the Modelling and Assessment of air pollutants in New South Wales and other requirements prescribed in State and Federal legislation.

Note: Council's air quality map is based on modelling air pollution in the local government area and identifies areas where the Criteria Air Pollutants exceed the National Environment Protection Measure (Ambient Air Quality) standard.

4.7 NOISE AND VIBRATION

Objectives

a. To minimise the generation of noise and/or vibration and to mitigate associated adverse impacts to the amenity of neighbouring properties, their occupants, and the occupants of the proposed development.

Controls

1. Where proposed development has the potential to produce an adverse noise or vibration impact on occupants of the site or of nearby properties, an acoustic and vibration study must be prepared by a qualified consultant, to Council's satisfaction.
2. Noise or vibration generated by development must not exceed the criteria stipulated in the *NSW Industrial Noise Policy* or the *Noise Guide for Local Government* at the property boundary of the noise source, or at a receiving lot boundary.
3. Measures must be implemented to ensure that any noise or vibration generated is not offensive, in accordance with the *Noise Guide for Local Government*
4. During construction, the operating noise level of machinery, plant and equipment must comply with the *Noise Guide for Local Government*.
5. A suitably qualified acoustics consultant must prepare a Noise Management Plan where construction is proposed to exceed 26 weeks.
6. Noise generating operations and outdoor operations must only occur between 7am and 6pm Monday to Saturday.
7. Council may request at any stage an independent report to confirm that noise emissions are within acceptable limits; such costs are to be borne by the applicant/ operator.

Lake Macquarie Development Control Plan 2014 - Revision 25

Part 6 – Development in Recreation and Tourist Zones

Adopted 28 September 2020

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1 INTRODUCTION

Part 6 - Development in Recreation and Tourist Zones applies to all development in the RE1 Public Recreation, RE2 Private Recreation, and in SP3 Tourist zones.

This part is to be read in conjunction with Part 1 - Introduction of DCP 2014, which outlines Council's general requirements for all developments and provides advice on the lodgement requirements for a Development Application. Part 1 also contains requirements for when an application seeks to vary a development control. Additionally, controls for specific land uses may apply depending on the type of development proposed. These controls can be found within Part 9 - Specific Land Uses of this DCP.

Furthermore, an Area Plan may apply depending on the location of the development. Area Plans contain area specific controls that need to be considered and can be found in Part 10 - Town Centre Area Plans, Part 11 - Heritage Area Plans or Part 12 - Precinct Area Plans of this DCP.

1.1 HOW TO USE THIS PLAN

LMDCP 2014 is the primary document used by Council's development assessment staff to assess development applications. Proponents of development will need to:

1. Determine the land use zone(s) that applies to the development site (refer to LMLEP 2014);
2. Refer to the Part of LMDCP 2014 that contains controls for the zone where the development is proposed (Parts 2 to 8);
3. Check if specific land use provisions apply to the proposed development (Part 9); and
4. Check if an Area Plan applies to the proposed development site (Parts 10, 11 or 12).

The development controls contained within each part and section, seek to achieve desired land use, conservation and/or built outcomes consistent with corresponding LMLEP 2014 zone objectives and aims in each part of LMDCP 2014.

Each part of LMDCP 2014 is structured to promote a development process where the site and context analysis determines the design of the development. Parts 2 to 8 of this DCP generally have the following main headings:

- **Introduction** – provides information about the particular part of the DCP, how to use the DCP and aims for development within the particular zone group.
- **Context and Setting** – outlines the site issues and environmental opportunities and constraints that need to be addressed in the development application.
- **Development Design** – provides Council's detailed design related requirements.
- **Operational Requirements** – provides Council's detailed requirements associated with the construction and ongoing operation of the development.

The detailed provisions of each sub-section in each part of LMDCP 2014 are presented as follows:

- **Objectives -** state what outcomes Lake Macquarie City Council is seeking new development to achieve along with providing the intent behind the controls, and
- **Controls -** advise the requirements for achieving outcomes and the desired future character identified by the aims and objectives.

Additionally, Parts 2 to 8 contain the specific aims that LMDCP 2014 seeks to achieve. Where specific controls are not provided, the aims of each part will be used to provide direction for a merits based assessment of a development application.

For more information on how to use this document, refer to Part 1 – Introduction.

1.2 ADDITIONAL CONTROLS FOR SPECIFIC LAND USES

If the development application relates to any of the following land uses, additional specific development controls must be considered in conjunction with controls in this part of the DCP. The detailed controls for these uses can be found in Part 9 of this DCP. Where a conflict between the controls within this part and a specific land use exists, the specific land use section prevails.

• Caravan Parks and Manufactured Homes	• Places of Public Worship
•	• Signage
• Foreshore and Waterway Development	• Tourist and Visitor Accommodation

1.3 AIMS FOR DEVELOPMENT IN RECREATION AND TOURIST ZONES

Where controls are not provided for a particular circumstance, the following aims will be used to provide direction for a merits based assessment of a development application.

The aims of LMDCP 2014 for development in recreation zones are:

1. To ensure that development promotes an active and healthy lifestyle for the community through a variety of opportunities for recreation and culture;
2. To manage and promote public access to public recreation zoned land;
3. To promote innovative designs for recreation developments; and
4. To protect and enhance the natural environment for private and public recreation purposes.

The aims of LMDCP 2014 for development in tourist zones are:

1. To facilitate development that provides suitable accommodation and ancillary facilities for tourism purposes;
2. To minimise adverse impacts from tourist developments;
3. To promote innovative designs for tourist developments; and
4. To promote Lake Macquarie as a tourism destination and to promote appropriate tourism related economic development and investment in the City.
5. To ensure that buildings promote innovation in design, energy efficiency, materials reuse and water reuse.
6. To ensure development incorporates safe, effective, and convenient provision for servicing, parking, pedestrian, and vehicular access.
7. To minimise waste and ensure rehabilitation and control of any contaminated sites.

2 CONTEXT AND SETTING

2.1 SITE ANALYSIS

Objective

a. To encourage good site planning, built form and landscape outcomes, informed by an understanding of the site and its context.

b. To identify the opportunities and constraints of a site, and the prevailing characteristics of a locality.

c. To illustrate how a development responds to a site and its relationship with the locality.

Controls

1. A Site Analysis Plan must be submitted that identifies the existing conditions relating to the subject site and the surrounding land that may influence the design process.
2. The Site Analysis Plan must address:
   i. all relevant items as set out in the *Site Analysis Guidelines*.
   ii. all relevant matters outlined below in section 2.2 to 2.19.
3. The Site Analysis Plan must provide a comprehensive view of the constraints and opportunities of the development site that will guide the design process.
4. The development application must clearly show that the constraints and opportunities identified in the Site Analysis Plan have been used to inform and resolve the development design.
5. An electronic 3D block model must be submitted for any development that is three or more storeys, or that has a Gross Floor Area of 2000m^2 or more. The model must clearly show the scale and form of the proposed development and its setting, from viewing points along the street, and from public open space, waterways and other significant vantage points.
6. Council may require an electronic model for smaller developments on sites with potentially high visual or physical impacts on the public realm.

Note: The detail of the Site Analysis Plan should be tailored to the site, and the complexity of the proposed development.

2.2 SCENIC VALUES

The **Landscape Settings and Significant Natural Landscape Features Maps** identify the Landscape Setting boundaries and the relevant Scenic Management Zone for each Landscape Setting. The maps are a guide to the scenic quality associated with lands within the City of Lake Macquarie and are contained within the *Scenic Management Guidelines*. The *Scenic Management Guidelines* provide supporting documentation to this DCP.

Objectives

a. To ensure that the scenic values of the City are protected and enhanced.

b. To ensure that developments visible or adjoining the coastline, Lake Macquarie or ridgelines maintain and enhance the scenic value of these features.

Controls

1. A landscape and visual impact assessment is required for development identified in Table 1 unless specified by Council. A landscape and visual impact assessment must be prepared in accordance with section 7.3 of the Scenic Management Guidelines.

Table 1 - Development requiring a landscape and visual impact assessment

Type, category or impact of development: • Any designated or SEPP 14 development • Any new development or alterations and additions resulting in a building or structure equivalent to 4 storeys or more (in any zone), or a car park of 2 or more storeys (in any zone) • Camping grounds and caravan parks • Telecommunication towers • Substantial loss of native tree cover (land parcels of one hectare or greater) • Subdivisions (in any zone with 10 or more lots proposed) • Tourist and visitor accommodation • Eco-tourist facilities • Recreation facilities (major) • Cemeteries • Removal of any tree on the Significant Tree Register • Educational facilities • Any commercial buildings being more than 50 metres long on any side, or being over 10 metres high
Location of development: • Any development that is; within 300m of the Mean High Water Mark of the lake or coastal edge, or on a ridgeline and involves two or more of the following: o height equivalent to 3 or more storeys, or o sloping site (10% or more), or o requiring a combined cut and fill exceeding 2 metres, or o a development footprint exceeding 2000m^2. • Any building or structure in a public reserve having a footprint exceeding 100m^2 or being over 10 metres high. • Any development on a heritage item and/or development within a heritage conservation area (apart from alterations and additions to existing houses or new complying development houses) • Any development within 300m of the Sydney-Newcastle Freeway (apart from alterations and additions to existing houses or new complying development houses)

2. Developments must be designed and sited to complement their location through:
   i. the retention of existing vegetation,
   ii. incorporating appropriate landscaping,
   iii. minimising cut and fill,
   iv. building design and articulation compatible with natural context, and
   v. colour and material selection,
3. For developments visible from the coastline, Lake Macquarie, and adjacent waterways, or from significant ridgelines, external finishes should be non-reflective and muted in tone.

2.3 GEOTECHNICAL

Objectives

a. To minimise potential damage to buildings/structures resulting from land movement.

b. To provide guidance on the preparation of geotechnical reports required to support a development application.

Controls

1. The following development types do not require submission of a Slope Stability Assessment with a development application:
    - Minor development such as garages, carports, decks and the like, pergolas, fiberglass swimming pools and cut/fill not exceeding 1 metre high/deep.
    - Development in Geo_4, Geo_5 or Geo_6 zone that consists of less than 3 storeys and less than 1000m^2 gross floor area and are not sensitive use facilities as defined by the Geotechnical Slope Stability Guidelines.
2. A geotechnical report prepared by a geotechnical engineer must accompany an application for all other development as specified in Council's *Geotechnical Slope Stability Guidelines*. The report must be prepared in accordance with these Guidelines.

Note: After lodgement of a development application, Council may still require the submission of Geotechnical Report for the development types identified at (1) following a site inspection.

2.4 CUT AND FILL

Objectives

a. To maintain existing ground levels outside the building and car park footprint.

b. To ensure development is on a stable site.

c. To minimise the impact on groundwater flow.

d. To ensure that development does not concentrate surface water flows to adjoining properties.

Controls

1. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area, or within the extent of the 100 year probable ARI (1% AEP) flood event.
2. Cut and fill associated with a development must only occur within the building and car park footprint
3. Cut and fill associated with development must comply with the provisions in Table 2.
4. Retaining structures greater than 1m in height must be designed by an engineer, and the certification details lodged with the development application.
5. Batter slopes must not exceed a gradient of 1:4, unless stabilised by dense planting.
6. Fill must not contribute to unreasonable impacts on amenity or the redirection of water onto adjoining properties.
7. Any fill used must be certified Virgin Excavated Natural Materials, certified Excavated Natural Material or uncontaminated engineered fill.

Table 2 - Requirements for cut and fill works

Location	Type of Works	Height	Other Requirement
within building footprint	cut and/or fill - retained	4m max	
within 2m of a boundary	cut and/or fill - retained	not permitted	landscape planting to area between boundary and retaining wall
remainder of site	cut and/or fill - retained	1m max	

2.5 MINE SUBSIDENCE

Objectives

a. To minimise risks to buildings and structures associated with potential mine subsidence.

Controls

1. Where an application is made for the construction of a structure or building within a Mine Subsidence District, written concurrence must be obtained from the Mine Subsidence Board. Written concurrence should be obtained prior to the application being submitted to Council.
2. Written concurrence from the Mine Subsidence Board is not required for certain works that have deemed approval under the Mine Subsidence Board's publication 'A Guide for Council Staff'.

***Note*:** Please refer to the Mine Subsidence Board's 'Surface Development Guidelines' for important information.

2.6 CONTAMINATED LAND

Objectives:

a. To ensure that contaminated land is identified through appropriate investigations
b. To ensure that contaminated land at a site is appropriately and effectively remediated prior to development taking place.
c. To ensure that changes to land use will not increase the risks to public health or the environment as a result of contaminated land on, or adjacent to the site

Controls:

1. Where development is proposed on land identified as being potentially contaminated, a Preliminary Site Investigation Report must be prepared and submitted with the application for development. Refer to Council's *Policy for Managing Contaminated or Potentially Contaminated Land* for further information.
2. Where contaminants are found within the site, a Detailed Site Investigation Report must be prepared and lodged with the development application.
3. Where a Detailed Site Investigation Report identifies the need for remediation, a Remedial Action Plan must be prepared and submitted with the application.
4. The site must be validated as suitable for its intended use prior to the issue of an occupation certificate.

Note: At discretion, Council may request a formal audit of contamination documentation by a site auditor accredited with the NSW Environment Protection Authority under the *Contaminated Land Management Act* 1997.

Note: Refer to SEPP 55 and the NSW State Governments '*Managing Land Contamination: Planning Guidelines*' for more information.

2.7 ACID SULFATE SOILS

Objectives

a. To ensure that disturbance of Acid Sulfate Soils or Potential Acid Sulfate Soils is minimised, to prevent adverse environmental impact on soil conditions.

b. To ensure that water quality and associated receiving waters are not detrimentally affected by the effects of Acid Sulfate Soils.

c. To ensure that habitat is not detrimentally affected by the effects of Acid Sulfate Soils.

d. To ensure that built structures and infrastructure are not detrimentally affected by Acid Sulfate Soils.

Controls

1. Development should be sited or designed to avoid the disturbance of Acid Sulfate Soils or potential Acid Sulfate Soils.
2. Where the disturbance of Acid Sulfate Soils is unavoidable, a Preliminary Acid Sulfate Soil Assessment report must be submitted with the development application, in accordance with the *NSW Acid Sulfate Soils Planning Guidelines*.
3. Where a Preliminary Acid Sulfate Soil Assessment report identifies potential adverse impacts, a detailed assessment report and management plan must be submitted, in accordance with the *NSW Acid Sulfate Soils Planning Guidelines*.
4. Any Acid Sulfate Soils must be identified on the site analysis plan.

***Note*:** Refer to Lake Macquarie Council's Acid Sulfate Soil planning maps showing classes of land containing potential or actual Acid Sulfate Soils. These maps are available at Council's Customer Service Centre, Speers Point.

2.8 STORMWATER MANAGEMENT

Objectives

a. To ensure that development does not adversely affect water quality or availability, including ground water.

b. To ensure that watercourses and associated riparian vegetation are maintained so as to contribute to water quality, and to mitigate sedimentation of the Lake Macquarie waterway.

c. To minimise any adverse impacts on downstream built or natural environments, or on nearby land due to increased development.

d. To incorporate Water Sensitive Urban Design techniques into all new developments.

e. To minimise the volume and rate of stormwater leaving a development site.

Controls

1. A *Water Cycle Management Plan* must be submitted for all development except single dwelling houses and dual-occupancy developments. The *Water Cycle Management Plan* must provide details of the management of stormwater, and the measures proposed to mitigate the effects of stormwater on adjoining or downstream sites in accordance with Council's *Water Cycle Management Guidelines*.
2. A *Site Stormwater Drainage Plan* must be submitted for all single dwelling houses and dual-occupancy development proposals. The *Site Stormwater Drainage Plan* must be prepared in accordance with Council's *Water Cycle Management Guidelines*.
3. On-site measures must be implemented to maintain water quality, and to minimise the volume of stormwater run-off and the rate at which stormwater leaves the site.

4. A maximum of 10% of run-off from built impermeable surfaces may be discharged directly to the drainage system. The remaining 90% of run-off must be captured for reuse, or managed through infiltration and retention measures prior to being discharged to the drainage system.
5. Stormwater management systems should be visually unobtrusive and integrated within site landscaping, car parks or building structures.
6. All developments (except dwelling house or dual occupancy) that involve the re-use of stormwater or the use of recycled water must demonstrate compliance with the Australian Guidelines for Water Recycling and the licensing requirements of the *Water industry Competition Act 2006.*
7. Stormwater management systems must be designed in accordance with the *Water Cycle Management Guidelines.*

2.9 CATCHMENT FLOOD MANAGEMENT

This section applies to land in the various creek catchments in Lake Macquarie that are shown as 'Lots Affected by Catchment Flooding' on Council's 'Flood Control Lots' map.

The map is indicative only and property information should be checked to confirm if a lot is a catchment flood control lot.

Some lots are affected by both catchment flooding and Lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Further information on flood risk and flood planning levels (floor levels) for particular lots can be obtained by applying for a Flood Certificate from Council.

Provisions regarding Lake flooding are contained in section 2.10 of this Part of DCP 2014.

Where inconsistencies arise, the controls in area plans prevail over controls in parts 2 to 9 of this DCP.

Objectives

a. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties.
b. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding, and manage risks to property and life from flood events.

Controls

1. Development must be consistent with the current version of the *NSW Floodplain Development Manual*, and any relevant local flood study, floodplain management study or plan applying to the land that has been endorsed by Council.
2. The proposed development must consider and respond to flooding hazards. It must also mitigate risks to life and/or property through design and positioning of development.
3. Buildings must not be located in an identified floodway.
4. Buildings and other structures, including fences, must be designed so as not to impede the flow of floodwaters or entrap debris.
5. Habitable rooms and commercial development must have a finished floor height at least 500mm above the 100 year ARI (1% AEP) event, or is to have equivalent measures in place to mitigate flood damage (e.g. flood barrier system with evacuation plan). Where probability flood levels are not available, habitable rooms must have a finished floor height at least 500mm above the highest observed flood level for the development site.
6. Non-habitable rooms must have a finished floor height at or above the 20 year probable ARI (5% AEP) event. Where probability flood levels are not available, non-habitable rooms must have a finished floor height at or above the highest observed flood level for the site, except where this

would result in a floor level more than 500mm above the existing ground level. In this case, a floor level of at least 500mm above existing ground level must be achieved.

7. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area, or within the extent of the 100 year probable ARI (1% AEP) flood event.
8. Lesser provisions may be acceptable where the applicant can demonstrate that the type of development or the proposed use poses no significant risk to life or property by flooding.
9. Any use of fill associated with development must not substantially impede the flow of floodwater, and must not contribute to flooding or ponding of water on any other property.
10. Additions or alterations to existing development will be assessed on the merits of the situation, having regard to meeting an acceptable level of risk of flood damage.
11. Development on designated flood prone land should incorporate the floodplain risk management measures, as recommended by a local flood study, floodplain management study or plan, which identifies and addresses appropriate actions in the event of flooding.
12. Development on land subject to flooding must use flood compatible materials that will minimise damage by flooding.
13. Development on lots adjoining areas affected by a 100 year probable ARI event will be subject to floor height requirements, even when the site may not be subject to flooding from the 100 year probable ARI event. This requirement is not applicable for land higher than 500mm above the 100 year probable ARI, as calculated for the relevant site.
14. Development where 100 year probable ARI levels are not available, and which could be flood liable, should be designed to meet an acceptable level of risk from flood damage. This may require the preparation of a Local Flood Study that considers cumulative impact issues, and demonstrates negligible impacts on other lands.

Note: Refer to Council's *Flood Management Guideline* for further information on the *NSW Floodplain Development Manual*, completed floodplain management plans, and on Council's requirements for flood studies.

Table 3 - Flood Planning Levels and floor height requirements in areas affected by catchment flooding and covered by a Floodplain Management Study and Plan

Development Type (including extensions)	Minimum Height Requirements
Dwellings	
Habitable rooms	1 in 100 year probable flood level + 500mm freeboard (post and beam rather than slab on ground preferred)
Non-habitable rooms and garages	1 in 20 year probable flood level
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard

Development Type (including extensions)	Minimum Height Requirements
Medium and High density residential development	
Habitable rooms	1 in 100 year probable flood level + 500mm freeboard
Non-habitable rooms and garages	1 in 20 year probable flood level
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Commercial and Retail	
Internal floor height	1 in 100 year probable flood level + 500mm freeboard
Basement car parking Also includes Places of Public Worship, restaurants, clubs, entertainment facilities, warehouses, and bulky goods showrooms etc.	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Mixed Use development	
Internal floor height	1 in 100 year probable flood level + 500mm freeboard
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Industrial	
Internal floor height	1 in 100 year probable flood level
Unsealed electrical installations	1 in 100 year probable flood level + 500mm

Development Type (including extensions)	Minimum Height Requirements
	freeboard
Sensitive Uses (Residential care facilities, hospitals, etc.)	
Internal floor height	Probable maximum flood level
Unsealed electrical installations	Probable maximum flood level

2.10 LAKE FLOODING AND TIDAL INUNDATION (INCORPORATING SEA LEVEL RISE)

This section applies to land on and near the Lake Macquarie foreshore that is shown as 'Lots Affected by Lake Flooding' on Council's 'Flood Control Lots' map. The map is indicative only and property information should be checked to confirm if a lot is a Lake flood control lot.

Some lots are affected by both catchment flooding and Lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Provisions regarding Catchment Flooding are contained in section 2.9 of this Part of DCP 2014.

The floor height requirements in Table 3 below must only be used for development on lots shown as 'Lots Affected by Lake Flooding' on Council's 'Flood Control Lots' map.

Council completed the Lake Macquarie Waterway Flood Study and Risk Management Plan in 2012. This flood study and risk management plan incorporated the implications of predicted sea level rise.

Predicted sea level rise is based on expert advice from NSW Government agencies and expert scientific agencies, namely that projections of sea level rise along the NSW coast are for a rise relative to 1990 mean sea levels of 40cm by 2050 and 90cm by 2100.

The controls contained in this section prevail where there is an inconsistency with other development requirements. This is particularly relevant to cut and fill controls.

Objectives

a. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties.

b. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding, and manage risks to property and life from flood events.

c. To ensure that development adequately considers and responds to sea level rise projections, and the predicted effects on inundation, flooding, coastal and foreshore recession, and on groundwater levels.

d. To ensure that development on land vulnerable to sea level rise is situated and designed to minimise the risk from future inundation, flooding, coastal and foreshore recession, and from rises in groundwater levels during the expected life of the development.

e. To ensure that development is designed to enable future adaptation if projections are realised, or that measures are implemented to mitigate any adverse impacts of climate change or sea level rise.

f. To encourage innovative responses to sea level rise impacts.

Controls

1. Development must implement measures to mitigate the adverse effects of projected sea level rise and increases in flood levels on the development.

2. Development should be designed and situated to reduce the risk from the effects of sea level rise. For example, structures should be located on the highest part of the lot and/or located as far back from the foreshore or coastline as possible, while still meeting other controls and objectives of the DCP.
3. Development should not be located in areas predicted to be permanently inundated during the life of the asset. The assumed asset life is 100 years for residential care facilities and seniors housing, hospitals, mixed use development and for medium and high density housing, and 50 years for other developments.
4. Notwithstanding the provisions for Cut and Fill in section 2.4, special consideration may be given to increased fill allowances in areas affected by sea level rise provided that:
   i. Additional fill does not adversely affect stormwater management, drainage, or the flow of water from roads, natural or constructed watercourses, foreshore areas or adjoining properties; and
   ii. The filled area maintains functional connections to adjoining footpaths, roads, neighbouring blocks and other local features.
5. Development identified within Table 4 should comply with the floor height provisions. Where the development proposed is not contained within Table 4, or an alternative to the provisions contained within Table 4 is proposed, a Flood Safety Audit and Management Plan must be submitted with the application, which is to include:
   i. Current 100 year ARI flood levels and velocity, as well as at 2050 and 2100;
   ii. Analysis of potential and likely risk of flooding, and/or potential threat to life and/or property now, and at 2050 and 2100;
   iii. Analysis of the potential effects of permanent inundation, foreshore recession and rising groundwater,
   iv. Where flood-proof materials are proposed, evidence of the flood-proof characteristics of those materials must be provided;
   v. Where an innovative of adaptable building design is proposed, it meets the principles and performance criteria set out in the Development Guidelines for Resilient Housing for Lake Macquarie, and
   vi. Any other alternative adaptive measure must be justified.
6. The assessing officer may determine that the development proposal is of a minor nature, and that there is no need for a Flood Safety Audit and Management Plan. In these circumstances, the assessing officer must be satisfied that the proposed development adequately addresses projected sea level rise and increases in flood levels.

Table 4 - Floor height requirements for land affected by Lake Flooding and Tidal Inundation requirements

Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
Dwellings		
Habitable rooms	1 in 100 year probable flood level for 2050 + 500mm freeboard (post and beam rather than slab on ground preferred)	2.36 m AHD
Non-habitable rooms and garages	1 in 20 year probable flood level for 2050	1.61 m AHD
Carports, boat sheds, garden sheds, and other ancillary structures	No requirement	

Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
(excluding garages)		
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Medium and High density residential development		
Habitable rooms	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Non-habitable rooms and garages	1 in 20 year probable flood level for 2100	2.10 m AHD
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement	
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2100 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.82 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Commercial and Retail		
Internal floor height	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Basement car parking Also includes Places of Public Worship, restaurants, clubs, entertainment facilities, warehouses, and bulky goods showrooms etc.	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2050 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.36 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Mixed Use development		
Internal floor height	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD

Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2100 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.82 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Industrial		
Internal floor height	1 in 100 year probable flood level for 2050	1.86 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Sensitive Uses (Residential care facilities, hospitals, etc.)	Probable maximum flood level for 2100	3.27 m AHD
Unsealed electrical installations	Probable maximum flood level for 2100	3.27 m AHD

2.11 NATURAL WATER SYSTEMS

Definition

A **natural water system** is a naturally occurring watercourse, waterway, lake, wetland, lagoon, estuary, and/or other water body.

Objectives

a. To protect and maintain the water regime of natural water systems.

b. To ensure that development does not adversely affect aquatic fauna.

c. To ensure that development does not adversely affect water quality or availability, including ground water.

d. To ensure that watercourses and associated riparian vegetation are maintained to contribute to water quality, and to mitigate sedimentation of the Lake Macquarie waterway.

e. To ensure that natural water systems and associated vegetation and landforms are protected to improve the ecological processes and ensure that land is adequately buffered from development.

f. To ensure that the pre-development water quality of receiving waters is maintained or improved.

Controls

1. Natural water systems must be maintained in a natural state, including the maintenance of riparian vegetation and habitat such as fallen debris.

2. Where a development is associated with, or will affect a natural water system, rehabilitation must occur to return that natural water system – as much as possible – to a natural state. The Rehabilitation Plan must be prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies*.

3. Rehabilitation should occur where a development site includes a degraded watercourse, water body, or wetland. Rehabilitation is to be carried out following the completion of a Rehabilitation Plan. This Plan must prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies*
4. Stormwater must be managed to minimise nutrient and sediment run-off entering constructed drainage lines, natural watercourses, or waterways.
5. Development within a Vegetated Riparian Zone (VRZ), as shown in Figure 1 – Vegetated Riparian Zones, should be avoided where possible to retain its ecological processes. Where development is unavoidable within the VRZ, it must be demonstrated that potential impacts on water quality, aquatic habitat, and riparian vegetation will be negligible.
6. A Plan of Management must be submitted in accordance with State Government guidelines for development proposed within a VRZ.
7. Asset Protection Zones must not be located within a Vegetated Riparian Zone.

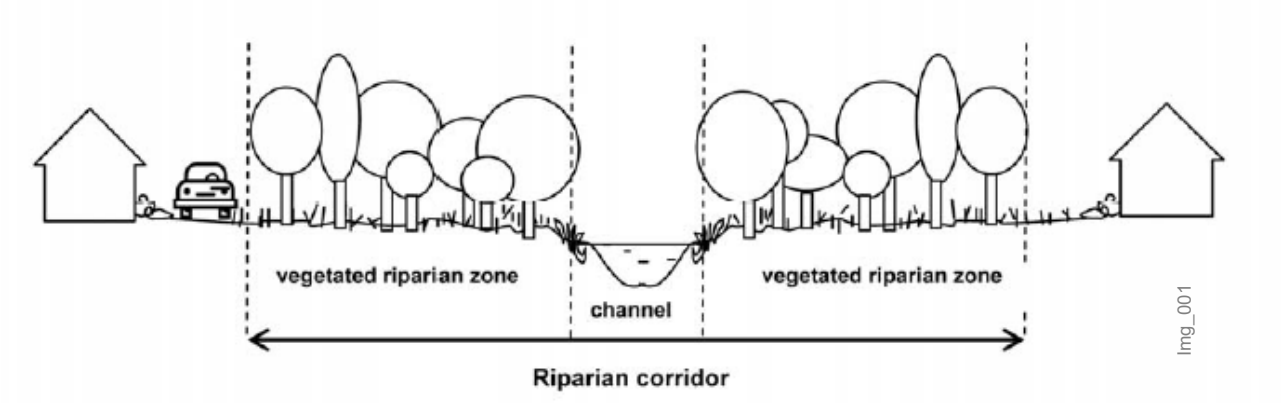

Figure 1 - Vegetated Riparian Zones

Types of watercourses	VRZ Width[2] (Each side of watercourse)	Total Riparian Corridor Width
Any first order[1] watercourse	10 metres	20m + channel width
Any second order[1] watercourse	20 metres	40m + channel width
Any third order[1] watercourse	30 metres	60m + channel width
Any fourth order[1] watercourse or greater (includes estuaries, wetlands and any parts of rivers influenced by tidal waters)	40 metres	80m + channel width

[1] As classified under the Strahler System of ordering watercourses.

[2] Bushfire Asset Protection zones will not be permitted in the Vegetated Riparian Zone. Additional areas may need to be protected to support ecological processes.

2.12 BUSHFIRE

This section only applies to land identified on Council's Bushfire Prone Land Map.

Objectives:

a. To ensure that risks associated with bushfire are appropriately and effectively managed on the development site.

b. To ensure that bushfire risk is managed in connection with the preservation of the ecological values of the site and adjoining lands.

Controls:

1. Development must comply with the *NSW Planning for Bushfire Protection Guidelines*.
2. Asset Protection Zones must:
   i. Be incorporated into the design of the development;
   ii. Be as low maintenance as possible;
   iii. Be located outside areas of ecological value and the buffers necessary to protect them; and
   iv. Not occur on adjoining environmental zoned land.
3. Bushfire prone areas and Asset Protection Zones must be identified on the Site Analysis Plan. Refer to Council's Bushfire Prone Land Map.
4. Clearing for the purposes of Asset Protection Zones should be avoided on ridgelines and slopes of 1:5 or greater.
5. Clearing of vegetation must be limited to that necessary to meet the *NSW Planning for Bushfire Protection Guidelines*.
6. Clearing of native vegetation or trees for the purposes of reducing bushfire risk must be consistent with the current Bushfire Risk Management Plan prepared under the *Rural Fires Act 1997*.

Note: Development Consent is not required for clearing for the purpose of bushfire hazard reduction if the clearing is consistent with the current Bushfire Risk Management Plan, and is undertaken in accordance with a current hazard reduction certificate issued by the Rural Fire Service or other certifying authority.

2.13 FLORA AND FAUNA

Objectives

a. To avoid and minimise impacts on native flora and fauna.
b. To protect and enhance significant flora and fauna, vegetation communities and significant habitat on the site, and on surrounding development sites.
c. To protect and enhance ecological corridors and increase the connections between habitats.
d. To ensure rehabilitation of degraded areas.

Controls

1. Where the proposed development is likely to have an impact on native vegetation or fauna habitat, or where five or more native trees are proposed to be removed, a flora and fauna assessment must be submitted with the development application. The flora and fauna assessment must be prepared in accordance with Council's *Flora and Fauna Guidelines*.
2. The flora and fauna assessment must be sufficient to adequately identify and assess all the impacts of the proposed development. This includes cumulative, direct and indirect impacts, as well as the impacts of Asset Protection Zones, provision of services (water and sewer, etc) and stormwater management.
3. Where a proposed development site is within a vegetation corridor identified on Council's Native Vegetation and Corridors Map, or identified as part of a site specific flora and fauna assessment,

the corridor must be surveyed. Within the survey, the appropriate corridor width must be determined with reference to core habitat areas and potential edge effects and fragmentation. The proposed development should be located and designed to avoid impacts on the identified vegetation corridor. Where this is not possible, the development should be designed to minimise impacts.

4. Development should be designed to avoid impacts on native flora and fauna, and minimise any unavoidable impacts. Significant flora and fauna species, vegetation communities and habitat should be protected and enhanced through appropriate site planning, design and construction.
5. A Site Vegetation Plan must be submitted clearly indicating the location of the proposed development in relation to vegetation communities, significant flora and fauna species and vegetation, and significant habitat and corridors on the site.
6. Native vegetation buffers must be provided between development and areas containing threatened flora and fauna species or their habitat, threatened vegetation communities and native vegetation corridors. The width of the buffer should be determined with reference to the function of the habitat, the threat of sea level rise and the type of development proposed. The buffer should be designed to keep the area of significance in natural condition.
7. A suitable barrier such as a perimeter road should be provided between development, (including landscaped areas) and native vegetation or significant habitat features, to minimise edge effects
8. Where a proposed development is likely to impact on an area of native vegetation, it must be demonstrated that no reasonable alternative is available. Suitable ameliorative measures must also be proposed (eg: weed management, rehabilitation, nest boxes).
9. Rehabilitation of degraded areas of the development site should include local native species to establish a self-maintaining ecosystem as close as possible to the natural state.
10. Buildings and structures, roads, driveways, fences, dams, infrastructure, drainage and asset protection zones should be located outside of areas with significant flora and fauna, native vegetation corridors and buffers.
11. An application for removal of native vegetation will only be considered where it is ancillary to, and necessary for conducting an approved use of the land (ie: an application for clearing alone will not be supported).
12. Where retention or rehabilitation of native vegetation and/or habitat is required, a vegetation management plan must be prepared in accordance with Council's *Vegetation Management Plan Guidelines*. This must detail how vegetation will be protected, rehabilitated and managed before, during and after construction.
13. Long-term protection and management of areas set aside for ecological reasons is encouraged through secure tenure with appropriate conservation management. This may be achieved through a Planning Agreement.
14. Development should be consistent with the effective conservation of land within any adjacent Environmental or Waterway zone and its protection from adverse impacts. It should include, but not be limited to weed invasion, erosion and sedimentation, pollution, chemicals, nutrients, stormwater run-off, feral and domestic animals.

Note: Council may require a bond to ensure that native vegetation is protected and any ameliorative measures are undertaken.

2.14 PRESERVATION OF TREES AND VEGETATION

Objectives:

a. To ensure that trees listed on Council's Significant Tree register are not adversely affected by development.
b. To maintain and enhance the natural bushland or vegetated character of the city.

c. To retain trees for the urban amenity, microclimate, scenic, air and water quality, and the social benefits that they provide.

Controls:

1. For the purposes of Clause 5.9 in LMLEP 2014Development consent is required to ring bark, cut down, top, lop, remove, injure, wilfully destroy or clear:
   i. Any species of vegetation that existed in the State of New South Wales before European Settlement;
   ii. A tree which is listed in Council's Significant Tree Register;
   iii. Tree(s) or native vegetation listed as heritage items or located within a Heritage Conservation Area; or
   iv. A Norfolk Island Pine Tree (*Araucaria heterophylla*) that is greater than three metres in height, or that has a trunk diameter of 75mm or greater, measured at ground level.

Note: This clause includes Native Vegetation defined in the *Native Vegetation Act 2003* and marine vegetation covered by section 205 of the *Fisheries Management Act 1994*.

2. Except in the E2 Zone, development consent is not required to remove, injure, wilfully destroy or clear native vegetation (excluding native trees and shrubs over 3m in height), only if:
   i. The work is for the purpose of landscaping understorey vegetation and lawn areas where the area to be cleared is less than 600m² (in total), and is on the same allotment as, and within the curtilage of an approved dwelling;
   ii. The soil surface exposed in any period of 90 consecutive days is less than 250m^2;
   iii. The slope of the land is less than 15 degrees;
   iv. The area is not subject to a development consent that requires the native vegetation to be retained; and
   v. The work does not involve the disturbance of habitat for threatened species.
3. Development consent is not required to ring bark, cut down top, lop, remove, injure, wilfully destroy or clear a tree or native vegetation, if:
   i. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
   ii. The tree or native vegetation is not required to be retained by a development consent, and
   iii. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or
   iv. The tree or native vegetation is within one metre of a sealed driveway to a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or
   v. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) on an adjoining allotment as the building and owners of both properties reach a written agreement that is submitted to Council prior to removal.

Note: For the purposes of clause 3 the distance must be measured from the trunk of a tree or shrub measured at ground level to the outer most projection of the building.

***Note*:** A sealed driveway is a driveway or car park with an impervious surface such as concrete, pavers, or bitumen. A gravel driveway is not classed as a sealed driveway.

***Note*:** A lawfully used building does not include drainage, excavation, a garden shed or jetty, but does include an underground water storage structure or septic tank.

4. Development consent is not required for removal of a tree or native vegetation if Council is satisfied beforehand that the tree or native vegetation:
    i. Is dead and is not required as habitat for native fauna or
    ii. Is a risk to life or property.

***Note*:** Evidence to support removal should be forwarded to Council in accordance with requirements outlined in Council's *Tree Preservation and Native Vegetation Management Guidelines*. Council's Tree Assessment Officer may undertake a site inspection to verify that these conditions are satisfied.

***Note*:** Habitat required for native fauna includes native vegetation and trees (including dead or dying trees) support hollows, spouts, splits, nests and roosts.

5. Development consent is not required for removal of a tree or native vegetation if:
    i. The tree or native vegetation is in danger of imminent failure and there is risk to life or property; and
    ii. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
    iii. Evidence to support its removal is forwarded to Council following the removal, in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.
6. Development consent is not required for removal of a NSW native tree if the tree is:
    i. not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
    ii. not located within other native vegetation and,
    iii. less than three metres in height and
    iv. has a trunk diameter at ground level of less than 75mm.
7. An application for removal of tree(s) and native vegetation will be considered only where it is necessary for conducting an approved use of the land. An application for clearing alone will not be supported.
8. A report from a suitably qualified arborist must be submitted to support:
    i. Any application that may have an impact on a tree listed in Council's Significant Tree Register, or on tree(s) or native vegetation listed as heritage items or located within a heritage conservation area;
    ii. Any request to review Council's determination of an application for tree pruning or removal; or
    iii. Any application that Council determines may cause significant impacts on native trees or native vegetation.
9. An arborist report must include a plan to scale that clearly shows:
    i. The location of the proposed development;
    ii. The location, diameter, canopy spread, condition and species of each tree on the site;
    iii. All trees to be removed;
    iv. All trees to be retained;
    v. All trees with habitat hollows;
    vi. Tree protection zones for all trees to be retained; and
    vii. Any asset protection zones.
10. Habitat trees must be assessed by a suitably qualified flora and fauna specialist.

11. Measures must be implemented to protect native vegetation and trees to be retained during construction works. Such protection measures must be specified in the development application, and should be compiled in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.
12. Where habitat trees are removed, measures (such as nest boxes) must be implemented to mitigate against injury or loss of native fauna and habitat. Such measures must be specified in the development application.
13. Boundary fences must be located, designed and constructed to avoid removing or damaging native trees that have a diameter of 200mm or greater, measured at ground level.

Note: Refer to Council's *Tree Preservation and Native Vegetation Management Guidelines* for further details and the Significant Tree Register.

***Note*:** Where the removal of five or more native trees is proposed, an arborist report may be required in addition to a Flora and Fauna Assessment prepared in accordance with Council's *Flora and Fauna Survey Guidelines*.

2.15 EUROPEAN HERITAGE

Objectives

a. To protect and maintain European heritage items and their facades.
b. To retain, preserve and promote the adaptive re-use of heritage-listed buildings and contributory buildings in particular, and other buildings that contribute to the heritage character of the locality.
c. To appropriately manage demolition of items of heritage significance, when all other alternatives to demolition have been fully investigated.
d. To ensure that development is sympathetic to heritage items and contributory buildings.

Controls

1. A Heritage Assessment and Statement of Heritage Impact must be submitted to Council where a proposed development:
    i. incorporates, or is adjacent to an item of heritage significance;
    ii. is located within a heritage conservation area, or,
    iii. has been identified by Council to have particular circumstances that warrant it.

Note: Council officers will use the following criteria to determine the need for Heritage Assessment and Statement of Heritage Impact is required under control 1(iii) above:

- The subject site includes a building erected prior to 1950 whether or not it is identified as being of a particular architectural style,
- The development is considered in conflict with it's heritage context, streetscape, or heritage precinct,
- The subject site includes a potential heritage item.

2. The impact of development on an item of heritage significance must be minimised by:
    i. Restricting the extent of development to that which is necessary;
    ii. Conserving what is significant about the item;
    iii. Clearly differentiating new development from the existing significant fabric;
    iv. Ensuring that development is of a scale, form, mass, proportion and finish that is sympathetic with the heritage item; and
    v. Ensuring that development is sufficiently separated from the heritage item, so as not to compromise the existing level of visibility.

3. For development involving demolition of an item of heritage significance, a heritage assessment and Statement of Heritage Impact must be prepared and lodged. It must verify that all alternative options to demolition have been fully investigated, and demonstrate the replacement building's compatibility with the physical context. The Statement of Heritage Impact must include details of the:
   i. Structural condition;
   ii. Overall extent of the remaining fabric;
   iii. Potential retention and adaptive reuse; and
   iv. Comparative costings.
4. Where demolition of the whole of a heritage item is proposed, approval must be sought concurrently for the replacement building.
5. Alterations and additions to items of heritage significance must where possible:
   i. Occur at the rear of the building;
   ii. Maintain the established building line;
   iii. Maintain an existing driveway access to the rear of the property;
   iv. Incorporate or retain elements such as chimneys, windows and gables;
   v. Maintain established patterns of buildings and garden; and
   vi. Not overwhelm or dominate the existing building.
6. Alterations and additions to items of heritage significance must be recognisable, on inspection, as new work. They must not mimic the design, materials or historic details of the heritage item.
7. Garages, sheds, carports, external utilitarian structures and the like must be detached and located at the rear, or set back at least two metres behind the heritage item.
8. Utilitarian structures must be constructed of the same material as the heritage listed building.

Note: Refer to Council's Heritage Guidelines for further information.

2.16 ABORIGINAL HERITAGE

Objectives:

a. To protect and conserve Aboriginal cultural, spiritual, and sacred sites within the City.
b. To ensure the impact of a proposed development on the heritage significance of an Aboriginal place or object is considered by adequate investigation and assessment.

Controls:

1. Where a development will disturb the ground surface and the natural ground surface has not been significantly disturbed, the development application must demonstrate that adequate due diligence has been undertaken. This includes (but is not limited to) submitting the following documentation in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*. This includes submitting the following documentation:

i) A statement and results of a basic 200m Aboriginal Heritage Information Management System (AHIMS) search. Where a site is identified within 200m of the development site, a statement and results of a 50m AHIMS search must be included.
ii) Identify whether the development site is partially or wholly within the Sensitive Aboriginal Landscape map under the LMLEP2014 and whether the exemptions under the Excluded Development Criteria (Table 5) apply
iii) A statement indicating whether there are landscape features that indicate the potential presence of Aboriginal objects.

Note: landscape features include: foreshore areas, creek lines, rocky areas, wetlands, ridge tops, ridgelines, headlands, sand dunes, caves.

2. A Due Diligence Assessment must be prepared by a suitably qualified person to determine whether the proposed development is likely to harm Aboriginal objects and identify whether an Aboriginal Heritage Impact Permit is required where:

    i) An AHIMS search has identified the likelihood of an Aboriginal item within 200m of the development site, and/or
    ii) The site is identified on the Sensitive Aboriginal Landscape map and the Excluded Development Criteria do not apply.

3. The Due Diligence Assessment must include an assessment of the cultural significance of the place to the Aboriginal Community.

Note: Clause 5.10(8) – Heritage Conservation of the LMLEP 2014 and the Lake Macquarie Aboriginal Heritage Management Strategy requires assessments to be forwarded to the Local Aboriginal Land Council for comment for a 28 day period.

4. An Aboriginal Cultural Heritage Assessment Report should be prepared where:

    i) A Due Diligence assessment has identified the potential for the site to contain an Aboriginal object or contains a place of significance, or
    ii) The development will have an impact on a known Aboriginal object or place.

Table 5 - Excluded Development Criteria for Development in Sensitive Aboriginal Landscape Map

Excluded Development	Land on which excluded development may not be carried out
All development on sites having a combined/total area less than 800m^2	Within 200m of an AHIMS site Setback from DP High Water mark does not exceed 50m.
Exempt development under the SEPP (Exempt and Complying Development Code) 2008 on sites having a total area greater than 800m^2 subject to: • 75% of combined/total site area already disturbed; or • Works do not exceed existing disturbed footprint; or • Site has previously been assessed for Aboriginal heritage such as subdivision applications post 1997 development consent.	

Note: The SEPP (Exempt and Complying Development Codes) 2008 does not apply to land within the Sensitive Aboriginal Landscape area. However, exempt development within this SEPP may not require further Aboriginal assessment if it fulfills the requirements of the Excluded Development Criteria Table.

5. Where required, the Aboriginal Heritage Impact Statement must be prepared in accordance with the Lake Macquarie Aboriginal Heritage Management Strategy and the Office of Environment and Heritage *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW,* which includes consultation with the Aboriginal community.

6. Where a proposal seeks to destroy, remove or impact on an Aboriginal object, any development will be Integrated Development and will also require a permit from the Office of Environment and Heritage.

2.17 NATURAL HERITAGE

Objectives:

a. To ensure the protection of items of natural heritage significance.

b. To ensure that insect fossil beds and fossilised trees are maintained, along with features of scientific interest in their natural state.

c. To facilitate public appreciation and scientific investigation of insect fossil beds and geological features of scientific interest, without destruction or damage.

Controls:

1. Where development is proposed on land within 50 metres of an item of natural heritage significance identified in the Lake Macquarie Local Environmental Plan 2014, a Heritage Impact Assessment must be prepared in accordance with the *Natural Heritage Guidelines*.

2. The likely impact of development proposals on the insect fossil beds and geological features of scientific interest should be identified through a report by a palaeontologist or geologist, which establishes the significance of the site. Such a report should include management strategies before, during, and after construction.

3. The development should be designed to avoid natural heritage items.

4. Where it is not reasonable to avoid natural heritage items, the item must be protected and incorporated into the design. Reasonable access to the construction site and any excavated material should be provided to researchers and/or palaeontologists from the Australian Museum or other research institution.

5. Any natural heritage items extracted should be fully documented and catalogued prior to being forwarded to the Australian Museum. Documentation and cataloguing must be undertaken to museum standards.

2.18 SOCIAL IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the social impact of a proposal when assessing a specific development application.

Social Impact Assessment focuses on the human dimension of a locality. It seeks to address the question "what will be the impact of a project/development on people?" and to anticipate outcomes that may flow from a proposed development which are likely to affect people's way of life, their culture and/or their community.

Social Impact Assessment is not a tool to stop development, but is to assist in the assessment of development proposals so that the best development results.

Objectives

a. To ensure that development takes into consideration the likely social impacts that may arise, including any effects on equity, access, participation and rights.
b. To ensure that development occurs in appropriate locations, and is supported by adequate services and facilities to support the community and its needs.
c. To ensure that services and facilities are accessible to all members of the community.
d. To facilitate availability of active and passive recreation, natural landscapes, educational opportunities, employment opportunities, health services, public transport, and neighbouring centres, as well as maintaining or enhancing the aesthetics and amenity of the area.

Controls

2. A Social Impact Assessment (SIA) must be prepared in accordance with Council's *Social Impact Assessment Guidelines*, and submitted with the development application in the following circumstances:

   i. the development is identified in table 6, or

   ii. the development is valued at $5,000,000 or greater, or

   iii. the development has a floor area greater than 3000m^2, or

   iv. where Council identifies that particular circumstances warrant it.

Note: Council officers will use the following criteria to determine if a SIA is required under control 1(iv) above:

- The development is targeted at a particular socio-economic or demographic group,
- The development is considered in conflict with its locality, and
- The development has, or is anticipated to generate, significant levels of community opposition.

3. Potential adverse impacts identified by a SIA must be mitigated through redesign, whilst positive impacts should be enhanced by the design or other actions.

Note: The scope, complexity and requirements of a SIA will be commensurate with the scale of the proposed development. Applicants are advised to consult with Council's Social Planner regarding specific requirements.

Table 6 - Uses requiring Social Impact Assessment

- Amusement Centres
- Animal Training and Boarding Establishments
- Backpackers accommodation
- Boarding House
- Child Care Centre
- Community facility
- Crematorium
- Designated Development
- Education establishment
- Entertainment facility
- Expansion or Modification of an existing use that would otherwise be prohibited under the LEP
- Major Roads, arterial or transport corridors Marinas
- Markets
- Multi-dwelling housing (developments of more than 20 dwellings)
- Nightclub
- Place of public worship
- Port uses/port facilities
- Pub
- Recreation Areas
- Recreation facilities
- Registered Club
- School
- Seniors Housing

- Function Centre
- Helipad
- Hotel or motel accommodation
- Information and Education Facility
- Licensed Premises (Hotels, Taverns and Bottle Shops)
- Sewage Treatment Plants
- Takeaway food and drink premises including, drive-thru establishments, bottle shops, and fast food outlets
- Water System / Facilities

2.19 ECONOMIC IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the economic impact of a proposal when assessing a specific development application.

Economic Impact Assessment focuses on the economic dimensions of a locality. It seeks to identify how a proposal will contribute to the economic growth of the locality and City through locating development in appropriate areas, supporting existing development in the area and through the creation of employment opportunity and other economic benefits.

Objectives

a. To ensure that development supports the Lake Macquarie hierarchy of centres and positively contributes to the economic growth of the locality and City by supporting existing development in the locality, locating development in appropriate areas and through the creation of employment opportunities.

b. To ensure development contributes through additional local employment and economic benefits.

Controls

1. An economic impact assessment must be prepared and submitted to Council at the discretion of the assessing officer where the proposed development::
   i. is valued at $5,000,000 or greater, or
   ii. has a floor area greater than 5000m2,
   iii. is inconsistent with the relevant zone objectives, or
   iv. .is inconsistent with the hierarchy of centres identified in Lifestyle 2030 Strategy.

Note: Refer to Council's *Economic Impact Assessment Guideline* that guides economic considerations for specific types of development.

3 DEVELOPMENT DESIGN

3.1 STREETSCAPE

Objectives

a. To ensure that development responds to the existing, or desired future character of the street.

b. To ensure that buildings address the street and any adjacent public space.

c. To ensure that development provide passive surveillance of the street.

d. To ensure that car parking and driveways do not dominate the street.

e. To enhance street amenity for pedestrians and make a positive contribution to the streetscape.

Controls

1. Development must address and offer passive surveillance to the street.
2. The development design must contribute to the streetscape through built form and landscape that respects and responds to the local context, and the desired streetscape of the area.
3. Development design must recognise the street function, by using appropriate species, and locating utilities and services to reflect that function
4. Developments must provide accessible and legible pedestrian access from the street to the front entry of each building.
5. Developments on sites with two or more road frontages must address all frontages.
6. Parking structures must be setback, sited and designed to minimise visual impact when viewed from the street.

3.2 FRONT SETBACK

Objectives

a. To ensure that the development complements the existing front setback character or desired future setback pattern in the locality.

b. To permit flexibility for developments that may be vulnerable to the impacts of flooding.

c. To define the street edge and provide definition between public and private space.

d. To define clear entrances to developments.

Controls

1. Where there are existing neighbouring buildings within 40 metres, front setbacks should be the average of the front setbacks of the nearest four neighbouring buildings.
2. Where the adjoining setbacks vary by more than three metres, the proposed development should be set back the same distance as one of the adjoining buildings.
3. Where there are no existing (or approved) buildings within 40 metres of the lot, front setbacks should be a minimum of four metres from the front boundary.
4. Where the site is identified as being vulnerable to flooding or expected sea level rise, front setbacks may be reduced to ensure that developments are adequately setback from the shoreline.
5. The front setback to secondary streets for corner allotments must be a minimum of two metres.

Note: The front setback must be measured perpendicular from the boundary to the building façade.

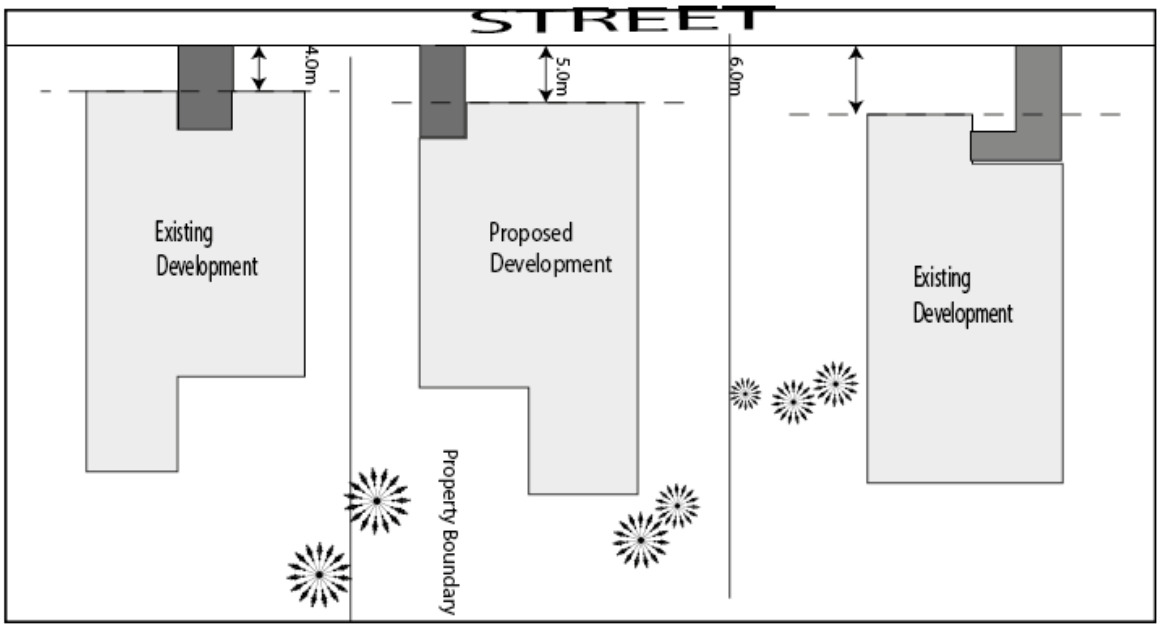

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Figure 2 - Front Setback – average of buildings within 40 metres

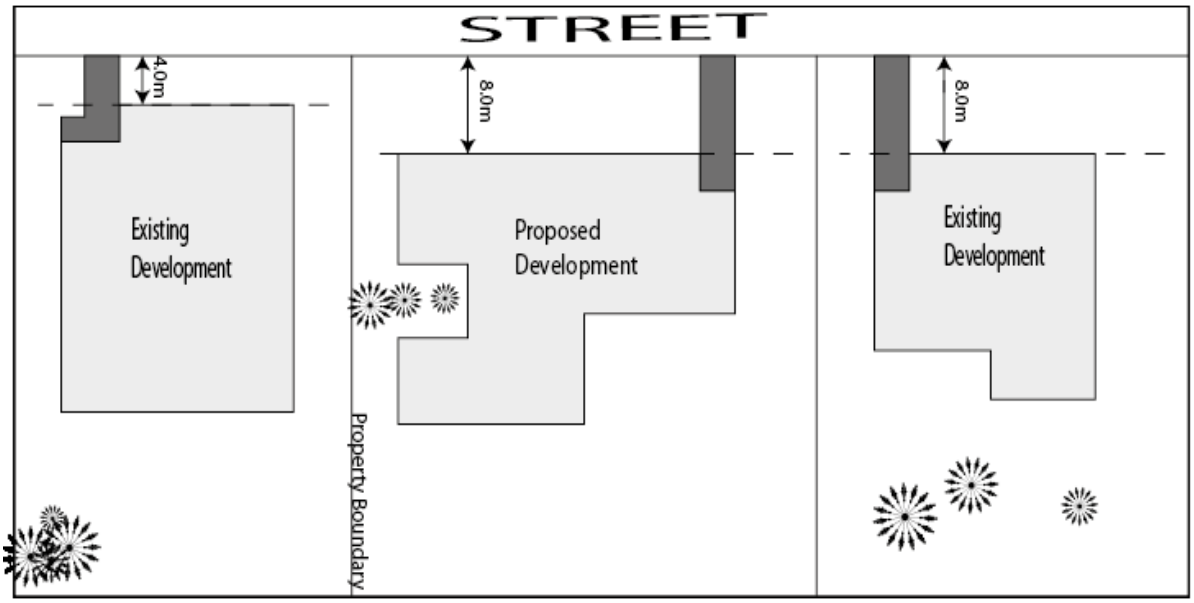

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Figure 3 - Front Setback – same as adjoining building

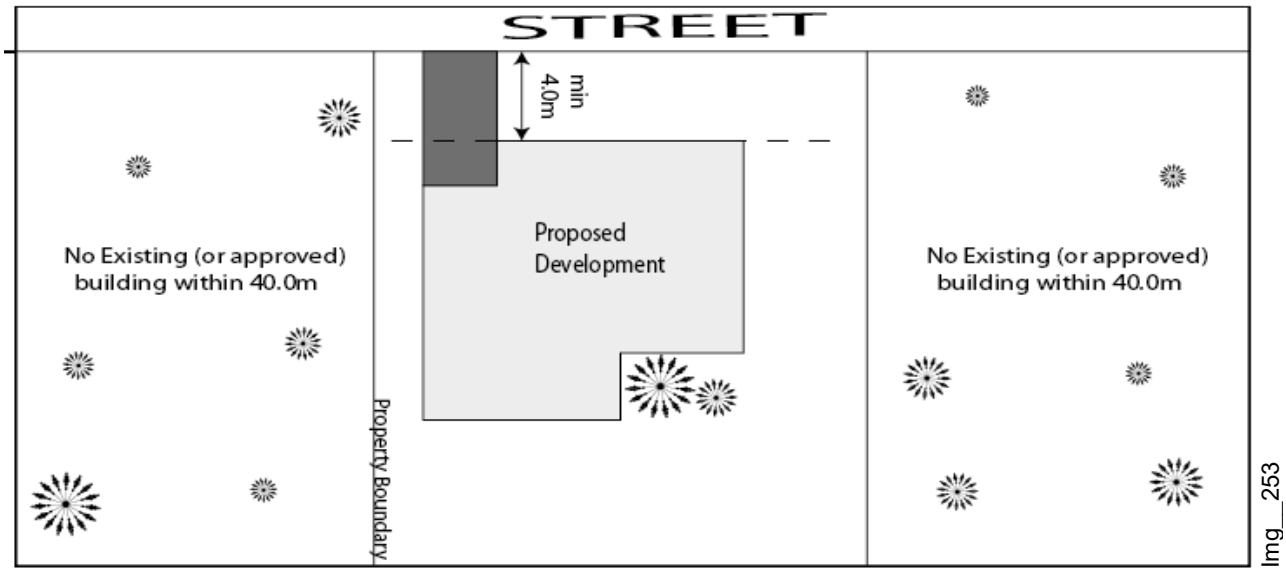


Figure 4 - Front Setback – no building within 40 metres

3.3 SIDE SETBACK

Objectives

a. To provide adequate separation between buildings to ensure that a reasonable level of privacy, outlook, views, ventilation, amenity, solar access and natural ventilation.

b. To provide visual separation between buildings.

c. To provide opportunities for the planting of vegetation.

Controls

1. Side setbacks must be a minimum of 900mm for building height up to 4.5 metres.
2. Side setbacks must be a minimum of 1.5 metres for building height over 4.5 metres.
3. Side setback must be a minimum of three metres for building height of three or more storeys.
4. Where a building's elevation exceeds 15 metres in length adjacent to a side boundary, the elevation must be articulated, modulated, landscaped or otherwise treated to provide visual relief.

Note: The minimum setback of a point on a building is based on the building height at that point.

Note: Any additional controls for specific development types are located in Part 9 (Specific Land Uses).

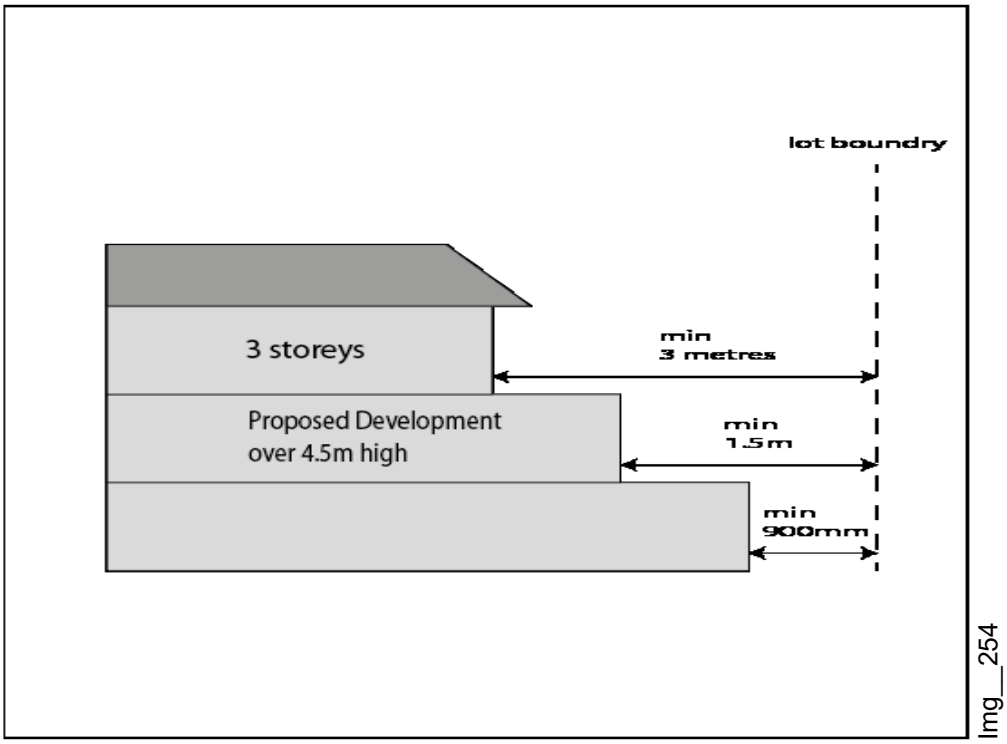


Figure 5 - Side Setback

3.4 REAR SETBACK

Objectives

a. To ensure opportunities for deep soil landscaping at the rear of lots.
b. To maintain the existing visual continuity pattern of buildings and landscape elements.
c. To maintain visual and acoustic privacy between buildings.

Controls

1. Rear setbacks must be a minimum of three metres for building height up to 4.5 metres.
2. Rear setbacks must be a minimum of six metres for building height over 4.5 metres.
3. Rear setback must be a minimum of nine metres for building height of three or more storeys.

Note: The minimum setback of a point on a building is based on the building height at that point.

Note: Any additional controls for specific development types are located in Part 9 (Specific Land Uses).

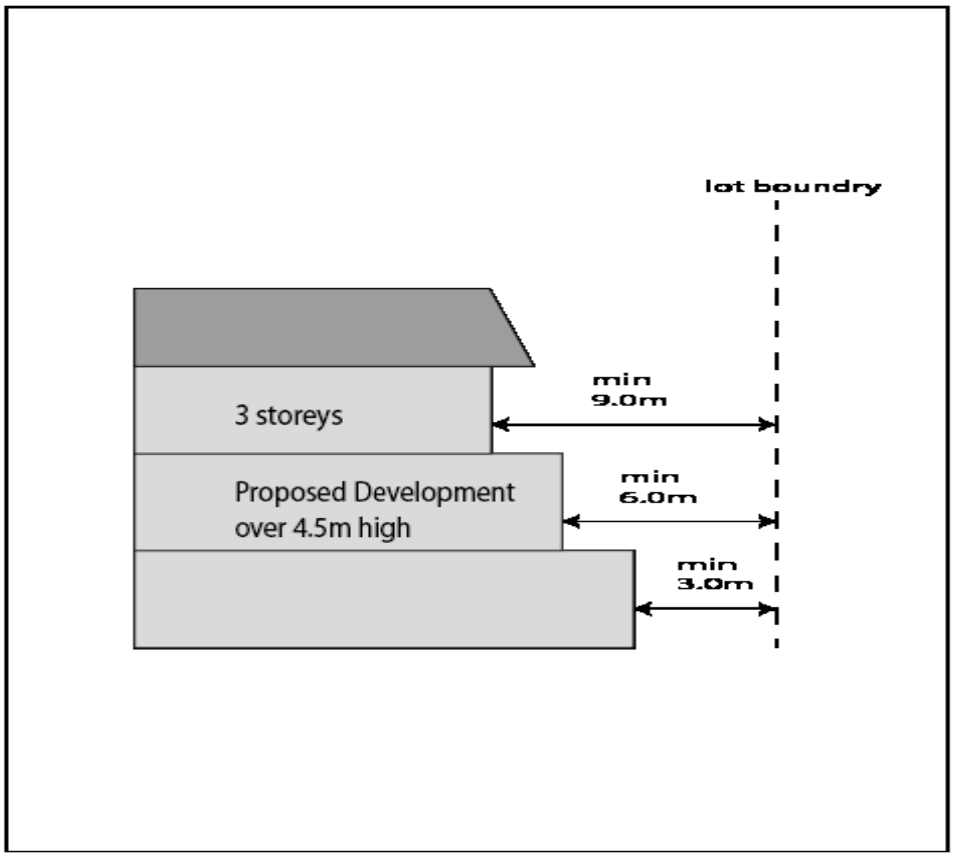


Figure 6 - Rear Setback

3.5 SETBACKS FROM RESIDENTIAL ZONED LAND

Objectives:

a. To minimise the impacts of visual bulk and scale, privacy, ventilation, and solar access on the residential amenity of neighbouring dwellings.

b. To ensure adequate separation distances between buildings.

Controls:

1. Development adjacent to residential zoned land must comply with the setbacks in Table 7 – Setbacks from residential zoned land.

Table 7 - Setbacks from residential zoned land

Proposed development	Minimum setback from residential zoned land
Ground level	**3.0m**
Level 2	**6.0m**
Level 3	**9.0m**

3.6 BUILDING BULK & SCALE

Objectives

a. To encourage good design and innovative architecture, in order to improve the urban environment.

b. To minimise the visual impact of development when viewed from adjoining properties, the street, waterways and land zoned for public recreation purposes.

c. To ensure that building bulk and scale is appropriate to its location and context.

d. To provide adequate separation between buildings and preserve amenity.

Controls

1. Large areas of continuous wall planes are to be avoided by varying building setbacks, providing articulation, modulation, landscaping or otherwise treated to provide visual relief.
2. Building bulk and scale must relate to the topography and the location and context of the site.
3. Verandas, recesses, surface treatments and variations in material selection and colour should be utilised to reduce building bulk.
4. Landscaping should be provided to reduce the visual bulk of buildings, but must not be solely relied upon.
5. Walls in excess of 15 metres in length must be articulated, landscaped or otherwise treated in order to provide visual relief.
6. Walls in excess of four metres in height must be articulated, landscaped or otherwise treated in order to provide visual relief.

3.7 BUILDING HEIGHT

Definition:

Building height is defined as the vertical distance between ground level (existing), at any point to the highest point of the building, including plan and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues, and the like.

Objectives

a. To ensure an adequate level of solar access is achieved for new and existing buildings.

b. To promote the retention and sharing of views.

c. To ensure an adequate level of privacy is achieved for dwellings.

d. To ensure that the building height does not overwhelm the public street and is of compatible scale with the surrounding developments.

Controls

1. Building heights must be consistent with the Height of Building map in LMLEP 2014.
2. Building height must relate to the site's topography along with the location and context of the site.

3.8 ROOFS

Objectives

a. To ensure that roof forms are designed to complement the local character and topography.

b. To ensure that roofs are designed to conceal plant and other associated equipment.

Controls

1. On sloping sites, roof planes must step with the topography.

2. Air conditioning units, lift motor rooms and other plant must be fully integrated within the building volume, either within the roof volume or within an architectural roof feature.
3. Other roof elements, such as photovoltaic panels, communication devices, antennae, satellite dishes, chimneys and flues must not interfere with the outlook of viewers in neighbouring properties, or in the public domain.

3.9 VIEWS

Objectives

a. To allow for the reasonable sharing of views.
b. To ensure that existing canopy trees have priority over views.

Controls

1. Developments must provide for the reasonable sharing of views in accordance with the Planning Principle established by the Land and Environment Court in *Tenacity Consulting v Warringah Council* [2004] NSWLEC 140 and *Davies v Penrith City Council* [2013] NSWLEC 1141.
2. Developments must provide for reasonable public domain views in accordance with the Planning Principle established by the Land and Environment Court in *Rose Bay Marina Pty Limited v Woollahra Municipal Council* [2013] NSWLEC 1046.
3. The desire for views must not outweigh the design for solar access.

3.10 SOLAR ACCESS AND ORIENTATION

Objectives

a. To ensure that reasonable access to sunlight is maintained for occupants of new and existing development.
b. To promote passive solar design and the use of thermal energy to encourage energy efficient buildings.
c. To ensure that solar access is maintained to adjoining open space and public domain areas.

Controls

1. Developments must provide for the reasonable access to sunlight in accordance with the Planning Principle established by the Land and Environment Court in *The Benevolent Society v Waverley Council* [2010] NSWLEC 1082 and *Davies v Penrith City Council* [2013] NSWLEC 1141.
2. Development must minimise overshadowing existing solar collectors for hot water or electricity.
3. Development must minimise overshadowing of public open space and public domain areas..
4. Openings on western elevations must be minimised to avoid the extremes of solar access. Where openings are unavoidable on a western elevation, they should be shaded by devices, eaves, landscaping or located higher on the façade.
5. At least 50% of habitable rooms must receive a minimum of three hours of sunlight between 9am and 3pm on June 21
6. At least 50% of the required area of private open space of each development and at least 50% of the required area of private open space of adjoining development must receive a minimum of three hours of sunlight between 9am and 3pm on June 21.
7. Where adjacent existing developments and their open space receive less than the minimum requirements, any new development should seek to maintain or enhance the solar access.
8. Where lot orientation allows, developments should be designed so that the long axis of the development is running east-west.

9. Building openings on the western elevations should be minimised. Where openings are unavoidable, they should be located higher on the façade and shaded by eaves or landscaping or similar.

Note: Council may accept a reduction in solar access for the development and adjacent sites if the topography and lot orientation is such that the three hour standard is demonstrated to be unreasonable

Note: The shadow cast by fences, roof overhangs, and changes in level are to be considered and should be indicated on any shadow diagrams submitted.

3.11 ENERGY EFFICIENCY AND GENERATION

Objectives

a. To ensure building orientation maximises solar access and natural cross ventilation.

b. To ensure energy efficiency is achieved in all developments.

c. To allow opportunities for future installation of renewable energy generation and low carbon technology.

d. To minimise the economic impacts of increasing electricity costs and any requirements to disclose energy efficiency when selling or leasing a property.

e. To promote increased levels of energy efficiency in large-scale developments.

f. To ensure that development minimises the use of water and non-renewable resources.

Controls

1. Buildings must be oriented to provide efficient use of solar energy and natural ventilation wherever possible.
2. Designs must consider future potential for renewable energy generation and low carbon technology.
3. Developments in excess of 4,000m² gross floor area must achieve the equivalent of a minimum 4 Star Rating under the Green Building Council of Australia's Green Star Rating tool.
4. Developments in excess of 2,000m² gross floor area should achieve the equivalent of a minimum 4 Star Rating under the Green Building Council of Australia's Green Star Rating tool.

Note: These controls are in addition to the requirements of SEPP BASIX and Section J of the Building Code of Australia. Formal certification of Green Star Rating under the Green Building Council of Australia is not required. Justification that the design would achieve the Green Star rate or an equivalent rating under a different system (e.g. NABERS) is only required.

3.12 FRONT FENCES

Objectives

a. To ensure that any fence on the front boundary allows clear lines of sight from the street to car parks and building entries.

b. To ensure front fences do not dominate the street.

Controls

1. Front fences and front fence returns must not exceed 1.5 metres.
2. Front fences must not be solid masonry, sheet metal, solid timber that would block sight lines between the public footpath and the development site.

3.13 SIDE AND REAR FENCES

Objectives

a. To provide privacy and security to tenants and occupants.

Controls

1. Side and rear boundary fences must not exceed 1.8 metres above the existing ground level.
2. For sloping sites, side and rear boundary fences may be regularly stepped provided the average height does not exceed 1.8 metres.
3. Where fences are proposed in conjunction with a retaining wall, the combined height of the fence and retaining wall must not exceed 1.8 metres above the existing ground level.

3.14 LANDSCAPE DESIGN

Objectives

a. To provide site landscaping that complements the nature and scale of the development.

b. To enhance the amenity of the proposed development.

c. To provide shade and shelter to car parking areas.

d. To maintain clear lines of sight to entry points and access ways.

e. To provide low maintenance plantings.

f. To integrate stormwater management structures in the landscape design.

g. To link landscaped areas to the open space network where possible.

h. To use predominantly local native species in the landscape design.

Controls

1. Appropriate landscape documentation must be prepared and submitted in accordance with Table 8 – Landscape Development Type and Requirements.
2. Landscape documentation must be prepared by appropriately qualified professionals. For Category 3 development, landscape documentation must be prepared by a qualified landscape architect. For Category 2 development, landscape documentation must be prepared by a landscape architect, landscape designer or horticulturist.
3. The landscape consultant's declaration must be signed and submitted with the relevant landscape documentation.

2 ***Note***: Refer to Council's *Landscape Design Guideline* for further details and requirements.

Table 8 - Landscape development type and requirements.

Development Type and Category	**Landscape Documentation**	
	Landscape Concept Plan at DA stage	Landscape Masterplan and Report at DA stage
Category 3: **Large Scale** • development with an estimated value exceeding $1m, or • development of 10 or more dwellings, or • designated development, or • childcare facilities, community facilities, educational establishments, seniors housing, health services facilities, or tourist accommodation, or. • development in areas of high scenic quality, adjacent to the lake or Pacific Highway, in or adjacent to an environmental zone, on visually	Yes	Yes

Development Type and Category	Landscape Documentation	
	Landscape Concept Plan at DA stage	Landscape Masterplan and Report at DA stage
dominant ridgelines, or in a heritage conservation area.		
Category 2: **Medium Scale** • development for 3-9 dwellings, or • dual occupancy development	No	Yes
Category 1 Small Scale • single dwellings, or • development that will have little impact on the existing environment	No	No

Note: If a development type is not detailed in this table or you are unsure of the category and requirements seek advice from Council.

3.15 LANDSCAPE AND TREE PLANTING IN CAR PARKS

Objectives

a. To provide broad-canopy tree cover in car parks for shade and shelter.

b. To reduce the visual impact of open car parking areas.

c. To maintain sightlines below the tree canopy.

Controls

1. Development must include supply, installation and maintenance of at least one advanced clear-trunked broad-canopy tree for every six at-grade car parking spaces.
2. Each landscape planting area must include at least one medium canopy tree with suitable ground covers or low shrubs below.
3. Each landscape planting area must have a minimum width of two metres.
4. The root volume for each tree must be a minimum of $8m^3$ and between 600 and 750mm deep.
5. The root volume must be either existing deep soil or an equivalent volume of gap-graded (load bearing) soil with a porous vehicle pavement over, that is installed to manufacturers specifications.
6. Each area allocated to tree planting must have a corresponding clear air space that is at least eight metres high and six metres in width.
7. All trees installed must be advanced stock and at least 75L container size.
8. All trees installed must be established and maintained for the life of the development. Any failed trees must be replaced immediately.

Note: CPTED design principles will need to be incorporated when considering landscaping in car parks.

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements

3.16 TRAFFIC AND TRANSPORT

Objectives

a. To provide effective, efficient, and safe movement within urban areas for pedestrians, cyclists, and motor vehicles.

b. To ensure that vehicles can enter and leave a development site in a forward direction unless otherwise justified to council's satisfaction.

Controls

1. A Traffic Impact Statement must be prepared and submitted with any application for development of an area greater than 1000m², or where access to the site will be via an arterial or sub-arterial road.
2. Access points to a site must be kept to a minimum and should be kept to one where possible.
3. Direct access to arterial and sub-arterial roads should be minimised to maintain the efficient flow of traffic on those roads. Alternative access is encouraged where available.
4. Driveways should be located as far as possible from intersections.
5. All driveways must be designed and constructed to provide adequate sightlines.
6. Driveways and internal road circulation must be designed to cater for safe manoeuvring and queuing so as not to disturb traffic operations on external roads.
7. The design and layout of the development must reflect the type of vehicles that will need to access the site/development. It must also ensure that vehicles can enter and leave the site in a forward direction.
8. Driveways must be of a type, construction and width suitable to the proposed development, and designed so as not to detract from the streetscape.

Note: Refer to Council's *Traffic Impact Statement and Vehicle Access Guideline* for further details and requirements.

3.17 DESIGN OF PARKING AND SERVICE AREAS

Note: Several Australian Standards are specifically relevant to this section. All designs and development must be in accordance with the relevant Australian Standard.

Objectives

a. To ensure that on-site parking and driveways do not dominate or detract from the appearance of the development or the setting.

b. To maximise pedestrian safety and amenity.

c. To ensure the safe and efficient movement of vehicles within, entering and leaving the site.

Controls

1. Parking and service areas must be located to the side or rear of the development.
2. Car park design must include direct, safe and well marked pedestrian routes from the parking area to building entries.
3. Car park design must not result in dead-end aisles.
4. Parking aisles must be orientated at right angles to the main building frontage.
5. The design of vehicle parking areas must include appropriate lighting for safe pedestrian movement and security.
6. The design of parking areas must comply with the provisions of AS2890 - Parking Facilities.
7. Appropriate landscaping must be provided along driveways.

3.18 BIKE PARKING AND FACILITIES

Objectives

a. To provide convenient and safe bike access, movement and parking.

b. To encourage travel to work by bike with convenient and secure end of trip facilities.

Controls

1. The following bike facilities must be provided for customers and short term users:
    i. Three bike parking spaces or one bike parking space for each 20 car parking spaces (as required in Table 10: Car Parking Rates), whichever is the greater.
2. Bike parking for customers and short term users must be:
    i. Located close to the development's pedestrian entrance where there is active and passive surveillance;
    ii. Within easy and safe access from outside the site, without impeding the movement of pedestrians or other vehicles; and
    iii. At least 50% covered from the weather where there are more than 10 spaces.
3. The following bike facilities must be provided for employees:
    i. One employee bike parking space for each 20 employees, or part thereof;
    ii. One personal locker per two employee bike parking spaces;
    iii. One unisex change room and one shower for development greater than 1000m^2 GFA and less than 5000m^2 GFA;
    iv. One female change room with one shower and one male change room with one shower, for development greater than 5000m^2 GFA; and
    v. One additional shower (in each change room) for each additional 5000m^2 GFA up to a maximum of five showers in each change room.
4. Bike parking for employees must be located in a secure undercover area.
5. The design of all bike parking must include:
    i. Clear signposting and good lighting;
    ii. Racks that support the bicycle in an upright position, with the bicycle frame and at least one wheel locked to the rack;
    iii. Racks that fit all types and sizes of bicycles;
    iv. Construction and materials that are durable and resistant to vandals and thieves; and
    v. Designs in accordance with relevant Australian Standards.

3.19 MOTOR BIKE PARKING

Objectives

a. To provide convenient and safe motor bike access, movement and parking.

Controls

1. Development must provide one motor bike parking space for each 20 car parking spaces (as required in Table 9: Car Parking Rates)

3.20 CAR PARKING RATES

Objectives

a. To ensure that the number of bike, motor bike and car parking spaces is sufficient to support the intended use.
b. To ensure that the number of car parking spaces does not discourage the use of public transport or other modes of transport.

Controls

1. The number of car parking spaces provided must be consistent with the specifications of Table 9: Car Parking Rates.
2. Where vehicle parking requirements are not specified in Table 9, justification must be provided that supports the proposed vehicle parking provisions, such as:
   i. Survey data from comparable facilities; and
   ii. Survey data from existing operations where expansion is proposed.
3. Where the floor area of an existing development is being increased, the required car parking should be calculated for the additional floor area only.
4. Where the proposed number of car parking spaces is **less than** or **greater than** specified in Table 9, a justification must be provided to support a variation , such as:
   i. Survey data from comparable facilities;
   ii. Survey data from existing operations where expansion is proposed; and
   iii. A proposal for dual use of parking spaces.
5. A reduction to the car parking rate must not exceed 20% or 20 spaces, whichever is the lesser.

Note: 'Amenities' and 'storage space' are not included when calculating Gross Floor Area (GFA) for car parking purposes.

Table 9 - Car Parking Rates for Development in Recreation and Tourist Zones

Development Type	Car Parking Rate
Disability parking rate	1 space per 50 spaces. Where the requirement is between 5 and 50 spaces, at least 1 space is to be provided for persons with a disability
Boarding houses	1 space plus 0.75 spaces per bed, where located on an Arterial or Sub Arterial Road. Or 1 space plus 1 space per bed where located on roads other than an Arterial or Sub Arterial Road.
Backpackers' accommodation	1 space per 100m² GFA and parking for a mini-bus
Bed and breakfast establishment	As per dwelling house, plus 1 space per guestroom. May be provided as single file parking where guest parking is provided behind dwelling parking.
Camping grounds	1 space per tent site
Caravan park including manufactured home estates	11 spaces per 10 sites, plus 1 space per 10 sites for visitor parking.
Child care centres	1 car space per 8 children, plus 0.75 spaces per staff member. Parking designated for staff may be provided as single file parking where practical.
Community facilities	5 spaces, plus 1 space per 40m² GFA
Hotel or motel accommodation *May include dining facilities, outdoor eating areas or beer gardens.*	1 space per 25m² of GFA

Development Type	Car Parking Rate
Where providing accommodation	1 space per short-stay room, plus 1 space per 2 staff.
Where providing conference facilities	1 space per 5m² of GFA. Note – Where a mixture of these activities occurs calculate vehicle parking requirements based on activity mix.
Eco-tourist facilities (not including a motel or hotel)	
Where serviced apartments	1 space per unit, plus 1 space per 50m² GFA for any dining room provided as part of the development,
Where backpackers hostel	1 space per 100m²GFA and parking for a mini-bus
Where a Camping Ground	1 space per tent site
Business and office premises	1 space per 40m² GFA. And where more than 20 car spaces are required and the development is within 400m of a designated bus route, the development provides a 'Bus shelter' (or approved equivalent) in lieu of 1 car space in every 40, or part thereof, of the onsite spaces required. One shelter to be provided for each car space deleted.
Funeral homes	1 space per employee plus 1 space per 3 seats in chapel(s)
Neighbourhood Shops	
Where the total area is less than 5000m² GFA	1 space per 25m² GFA
Where the total area is greater than 5000m² GFA	1 space per 40m² GFA
Place of public worship	1 space per 3 seats
Registered club	
Less than 1500mgfa	1 space, plus 1 space per 15m² GFA
Greater than 1500mgfa	40 spaces, plus 1 space per 25m² GFA And where more than 50 car spaces are required, a 'Courtesy bus' is provided for clientele transfers in lieu of 1 car space in every 20 spaces required. Note – See also Hotel/Motel if providing dining or accommodation.
Recreation facilities (indoor)	
Squash	3 spaces per court
Indoor cricket or other court game	20 spaces per pitch or court
Swimming	15 spaces, plus 1 space per 100m² GFA (indoor pool)
Gymnasium	1 space per 10m² GFA
	Notes - Where a mixture of these activities occurs calculate vehicle parking requirements based on the activity mix. Where a facility combines a number of

Development Type	Car Parking Rate
	sporting activities in one area, determine the vehicle parking requirement based on the highest use activity.
Recreation facilities (outdoor)	
Football	30 spaces per field, plus 1 space per 3 seats, where spectator seating is provided.
Lawn bowls	30 spaces for the first green then 15 spaces for each additional green
Swimming	15 spaces, plus 1 space per 100m2 of site area
Tennis	3 spaces per court
Restaurant or café	
Where the total area is less than 5000m² GFA	1 space per 25m² GFA
Where the total area is greater than 5000m² GFA	1 space per 40m² GFA Note:- See Australian Standard for Fast Food takeaway vehicle queuing lengths.
Serviced apartments	1 space per unit, plus 1 space per 50m² GFA for any dining room provided as part of the development

3.21 NON-DISCRIMINATORY ACCESS

Objectives

a. To ensure development has non-discriminatory access that accommodates all people.
b. To ensure universal design that provides non-discriminatory access and equitable use.
c. To minimise the scale and visual impact of ramp structures on the footpath and building façade.

Controls

1. Building entries must be located where there is the smallest level change from the public footpath to the ground floor interior.
2. The design and construction of development must ensure that non-discriminatory access is provided to enable all users of that development to access the same level of service/use.
3. Where development is listed in Table 10, a Disability Access Audit must be prepared in accordance with Council's *Non-discriminatory Access Guideline* and accompany the development application submitted to Council. The Disability Access Audit must be prepared by an accredited access consultant.

Note: Refer to Council's *Non-discriminatory Access Guideline* for further information.

Note: A Disability Access Audit may be waived for some developments at the discretion of the assessing officer for some Change of Use proposals.

Table 10 - Development types requiring a Disability Access Audit

• Amusement centres with a total floor area of 500m^2 or more	• Markets with a total floor area of 500m^2 or more
• Backpackers' accommodation with 20 or more bedrooms	• Manufactured home estate/caravan park
• Boarding House with more than 20 rooms	• Medical centre
• Business/commercial premises with a total floor area of 500m^2 or more	• Mixed use development with a total floor area of 500m^2 or more
• Child care centre	• Multi-dwelling housing with 10 or more dwellings
• Community facility	• Nightclub
• Educational establishment	• Passenger transport facilities
• Entertainment facility	• Place of public worship
• Function centre	• Recreation facilities – indoor, outdoor and major
• Group home	• Registered club
• Health consulting rooms with four or more consulting rooms	• Retail premises with a total floor area of 500m^2 or more
• Health services facilities	• Residential care facility
• Hospital	• Residential flat building with 10 units or more
• Hotel or motel accommodation	• Seniors housing
• Information and education facility	• Tourist accommodation with 20 units or more
• Licensed premises	• Change of Use

3.22 SAFETY AND SECURITY

Objectives

a. To assist the development in mitigating opportunities for criminal activity, behaviour, and perceived opportunities for crime.
b. To ensure a development contributes to the liveability, safety and security of it users.

Controls

1. Developments must ensure that the following Crime Prevention Through Environmental Design (CPTED) principles have informed the design of the proposed development:

   i. Surveillance – Developments must be designed and managed to maximise the potential for passive surveillance;

   ii. Access Control – Developments must be designed so as to make them legible for users without losing the capacity for variety and interest;

   iii. Territorial Reinforcement – Developments must be designed to define clearly legitimate boundaries between private, semi private and public space; and

iv. Space Management – Developments must be designed and detailed to minimise damage and the need for undue maintenance, without undermining the aesthetic and functional qualities of the building.

Note: Refer to Council's *Crime Prevention Through Environmental Design Guideline* for further information on CPTED principles.

2. Where development:

   i. is listed in Table 11, or

   ii. is valued at $5,000,000 or more, or

   iii. has a gross floor area greater than 5,000m^2, or

   iv. will be open to the public between the hours of 9pm and 6am, a Crime Risk Assessment must be prepared and submitted to Council.

3. The Crime Risk Assessment should be prepared by a person who has undertaken the NSW Police Service 'Safer by Design' course (or equivalent) and must:

   i. Analyse the types of crime that may be prevalent in the area, and to which the development may be susceptible;

   ii. Provide information as to how the design was informed by the CPTED principles; and

   iii. Inform the design, construction or future management practises of the development (eg: building materials, signage, lighting, landscaping, security patrols, maintenance and graffiti removal practices).

4. Any recommendations or shortfalls identified by a Crime Risk Assessment are to be implemented into the design of the development to the satisfaction of the assessing officer.

Note: Refer to Council's *Crime Prevention Through Environmental Design Guideline* for further information on what needs to be covered in a Crime Risk Assessment.

Table 11 - Development types requiring a Crime Risk Assessment

• Amusement centres	• Registered club
• Development involving the provision of publicly accessible open space	• Places of public worship
• Eco-tourist facilities	• Information and education facilities
• Function centres	• Community facilities
• Hostel	• Seniors living developments and hospitals with more than 30 beds
• Car park	• Recreation area
• Boarding house	• Recreation facilities (indoor)
• Function centres	• Recreation facilities (outdoor)
• Child care centres	• Recreation facilities (major)
• Tourist and visitor accommodation	• Takeaway food and drink premises including, drive-thru establishments, bottle shops, and fast food outlets (such as McDonalds

4 OPERATIONAL REQUIREMENTS

4.1 DEMOLITION AND CONSTRUCTION WASTE MANAGEMENT

Objectives

a. To reduce demolition waste by maximising beneficial reuse of infrastructure, buildings and materials onsite.
b. To avoid creating construction waste wherever possible.
c. To enable maximum diversion of demolition and construction waste to reuse, recycling or composting.
d. To ensure that waste management is planned across all demolition and construction stages so that reusable resources and waste can be appropriately and effectively stored and removed safely from site without adverse impacts on local amenity.
e. To appropriately manage the retention of existing vegetation and vegetation to be removed.

Controls

1. Applications must provide a completed Demolition Waste Management Plan (WMP) (where there are demolition works) and a Construction WMP (for all construction works), in accordance with Chapter 2 (for Demolition) and Chapter 3 (for Construction) of the *Lake Macquarie City Council Waste Management Guidelines* unless the development is:

   i. Permitted without consent in this zone
   ii. Drainage
   iii. Earthworks
   iv. Roads
   v. Signs
   vi. Stormwater management facilties
   vii. Utility installations

   These plans must be provided to any relevant person involved in the demolition and/or construction, including architects, project managers, builders, contractors and sub-contractors.

2. The demolition WMP must describe how the proposal avoids creating waste and how it maximises the reuse and recycling of demolition and construction materials.
3. The following must be shown on scaled plans to be submitted with the development application for demolition and construction stages:

   i. waste storage area(s) with bins and equipment shown to scale;
   ii. waste collection area(s) with bins shown to scale (if different from storage areas);
   iii. waste carting route(s) from buildings to waste storage area(s);
   iv. bin carting route(s) from waste storage to collection point(s) (if different from storage areas); and
   v. for developments proposing onsite collection, the waste collection vehicle route, swept paths and clearances.

4.2 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure that waste management infrastructure and operational procedures are an integral part of the development's design and ongoing management.

b. To ensure sufficient volume of equitably accessible, safe, hygienic and aesthetically appropriate waste storage is provided on the property to minimise negative impacts of waste management on occupants and neighbours.
c. To enable maximum opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins.
d. To ensure equitable access for all occupants to opportunities to maximise diversion of waste.
e. To provide flexibility to expand and reconfigure waste separation systems, so that owners and occupants have options to access a range of waste services.
f. To ensure secure separation of commercial waste from residential waste storage and collection.
g. To provide unobstructed waste collection point(s) that are safely and efficiently accessible by Council waste collection vehicles wherever possible.
h. To provide unobstructed, safe access to move bins and bulk waste (such as furniture and whitegoods) between storage and collection points.

Controls

1. An Operational Waste Management Plan (WMP) must be prepared in accordance with the Lake Macquarie Waste Management Guidelines and submitted with the development application for all identified in Table 12, in other parts of this Development Control Plan or when Council identifies that particular circumstances warrant it.

Table 12 - Uses requiring an Operational Waste Management Plan

• Dwellings • Commercial and retail, recreation and tourism facilities • Industrial developments and infrastructure • Events • Subdivisions

2. The Operational WMP must address all wastes that will be generated from the operation of the premises. The plan must maximise opportunity for separation from general waste of reusable, recyclable and compostable materials for reuse, recycling and composting wherever possible.
3. The development application must demonstrate - in the Operational WMP and on plans with bins, equipment, waste collection vehicle swept paths and clearances all shown to scale - that the development has sufficient and usable:
    i. bin type, sizes, numbers and collection frequency; and
    ii. internal storage within premises; and
    iii. waste carting route(s) from premises to external waste storage area(s); and
    iv. external waste storage areas; and
    v. bin carting route(s) from waste storage to waste collection point(s); and
    vi. waste collection point(s);
    vii. for developments proposing onsite collection, the waste collection vehicle route(s), swept paths and clearances; and
    viii. waste management information guide for owners and occupants.
4. For developments with the following specific land uses, the development and Operational WMP must address other matters as identified in the Lake Macquarie Waste Management Guidelines:
    i. boarding houses and hostels; group homes; short-term rental accommodation; social housing; and seniors' living developments;

ii. commercial and retail premises

iii. veterinary hospitals;

iv. aged care facilities;

v. child care centres;

vi. service stations;

vii. public and private recreation; and amusement and functions centres and entertainment facilities;

viii. vehicle repair workshops and depots;

ix. sustainable aquaculture; and

x. light, heavy and general industries, hazardous, offensive and high technology industries; infrastructure; and waste management or resource recovery facilities.

to demonstrate compliance with the Lake Macquarie Waste Management Guidelines.

5. If the development is not designed to enable Lake Macquarie City Council waste services, a letter must be provided from a private waste contractor advising how they are able to provide the required garbage, recycling and green (garden and food) waste services and (if needed) access the premises.

4.3 ON-SITE SEWAGE MANAGEMENT

Objectives

a. To ensure that land is suitable for on-site sewage management, and that on-site sewage management systems are designed to operate sustainably, without resulting in environmental harm or risk to public health.

Controls

1. On-site sewage management must not be located on sites:
   i. Where connection to reticulated sewer is available (this requirement does not apply to grey water treatment systems); or
   ii. Below the 20-year ARI flood level.
2. Where an on-site sewage management system is proposed, an assessment report must be provided to determine land capacity for sewage effluent. An appropriately qualified consultant must carry out the assessment. The site assessment must:
   i. Be undertaken in accordance with the Environmental Health Protection Guidelines, and On-site Sewage Management for Single Households;
   ii. Recommend suitable wastewater treatment technology;
   iii. Include water balance calculations for determination of the size of the effluent irrigation area based on zero wet weather storage requirements; and
   iv. For greywater treatment systems, it must be demonstrated that the proposed system complies with the *NSW Guidelines for Greywater Reuse in Sewered, Single Household Residential Premises*.
3. Applications for sewage treatment systems must include:
   i. Sewerage Site Plan (1:200) indicating the location of the treatment system, disposal area, and buffer distances to boundaries, dwellings, water courses and other significant features on the site; and
   ii. Detailed plans and sections of the proposed effluent disposal system.

4. Other than for greywater treatment systems, surface and subsurface irrigation areas should be made up of irrigation zones that are a minimum 300m^2 and maximum 500m^2. Multiple irrigation zones must be dosed via an automatic irrigation controller or indexing valve.
5. Pump-out septic systems are only acceptable where on-site disposal of effluent is not feasible, and where access is available for a pump-out service to be rendered safely from a public road at the property boundary.

4.4 LIQUID TRADE WASTE AND CHEMICAL STORAGE

Objectives

a. To ensure that liquid trade waste is disposed of appropriately, and does not enter the environment.
b. To ensure that chemicals associated with a development are stored in a secure manner.

Controls

1. Where development is proposed that will generate liquid trade wastes, evidence of a liquid trade waste agreement with Hunter Water must be provided. On-site treatment and/or disposal of liquid trade waste will not be permitted.
2. Developments that generate liquid trade waste must ensure that this waste is adequately contained and bunded to prevent pollution entering the environment.
3. Where chemicals are stored within, or as part of development, those chemicals must be adequately contained and bunded to prevent chemicals entering the environment unintentionally in the event of a spill, flooding, or any other event that may lead to the escape of chemicals.
4. All containment and bunded areas must drain to the reticulated sewerage system under agreement with Hunter Water. No on-site treatment or disposal of liquid trade waste or spilt chemicals will be permitted.

4.5 EROSION AND SEDIMENT CONTROL

Objectives

a. To ensure that development is designed to prevent erosion by minimising disturbance, retaining vegetation and reducing the need for earthworks.
b. To prevent erosion and sediment-laden run-off during site preparation, construction and the ongoing use of land.
c. To ensure that a number of integrated solutions, using a treatment train approach, are implemented for the control and treatment of erosion and sediment.

Controls

1. For proposals where the area of soil disturbance is less than 250m^2, appropriate erosion and sediment control measures must be installed and maintained. This will prevent pollutants from entering water courses during construction and until 70% ground cover is attained.
2. For proposals where the area of soil disturbance is more than 250m^2 but less than 2500m^2, an Erosion and Sediment Control Plan (ESCP) must be prepared and lodged, in accordance with Council's *Erosion and Sediment Control Guideline*.
3. For proposals where the area of soil disturbance is more than 2500m^2, a Soil and Water Management Plan, identifying erosion prevention and sediment control measures, must be prepared and lodged, in accordance with Council's *Erosion and Sediment Control Guideline*.
4. The maximum area of soil exposure at any one time must not exceed 2.5 hectares.

Note: Council may vary the requirements, especially where there is a higher or lower risk of polluting receiving waters. Further information may be required for any site depending on, but not limited to, the calculated soil loss, sediment type and an assessment of site constraints and opportunities.

4.6 AIR QUALITY

Objectives

a. To ensure that development does not adversely affect air quality beyond the National Environment Protection Measure (Ambient Air Quality) standard for criteria air pollutants.

b. To ensure that measures are implemented to maintain air quality.

c. To ensure that odours and emissions do not have an unreasonable impact on the amenity of neighbouring properties, or the health of their occupants

d. To ensure that odours and emissions do not have an unreasonable impact on public health.

e. To ensure that emissions do not have an unreasonable impact on natural environment.

Controls

1. An air quality report must be prepared by an air quality/odour expert where a proposed development has the potential to adversely affect air quality. This report must:

   i. Consider the information provided on Council's Local Air Quality Maps;

   ii. Address impacts caused by construction and ongoing operation or occupation of the development;

   iii. Identify emissions, and measures to mitigate the overall impact, and the impact on nearby residences and occupants of other properties especially sensitive receivers; and

   iv. Be prepared in accordance with the Approved Methods for the Modelling and Assessment of air pollutants in New South Wales and other requirements prescribed in State and Federal legislation.

Note: Council's air quality map is based on modelling air pollution in the local government area and identifies areas where the Criteria Air Pollutants exceed the National Environment Protection Measure (Ambient Air Quality) standard.

4.7 NOISE AND VIBRATION

Objectives

a. To minimise the generation of noise and/or vibration, and to mitigate associated adverse impacts on the amenity of neighbouring properties and their occupants, and on occupants of the proposed development.

Controls

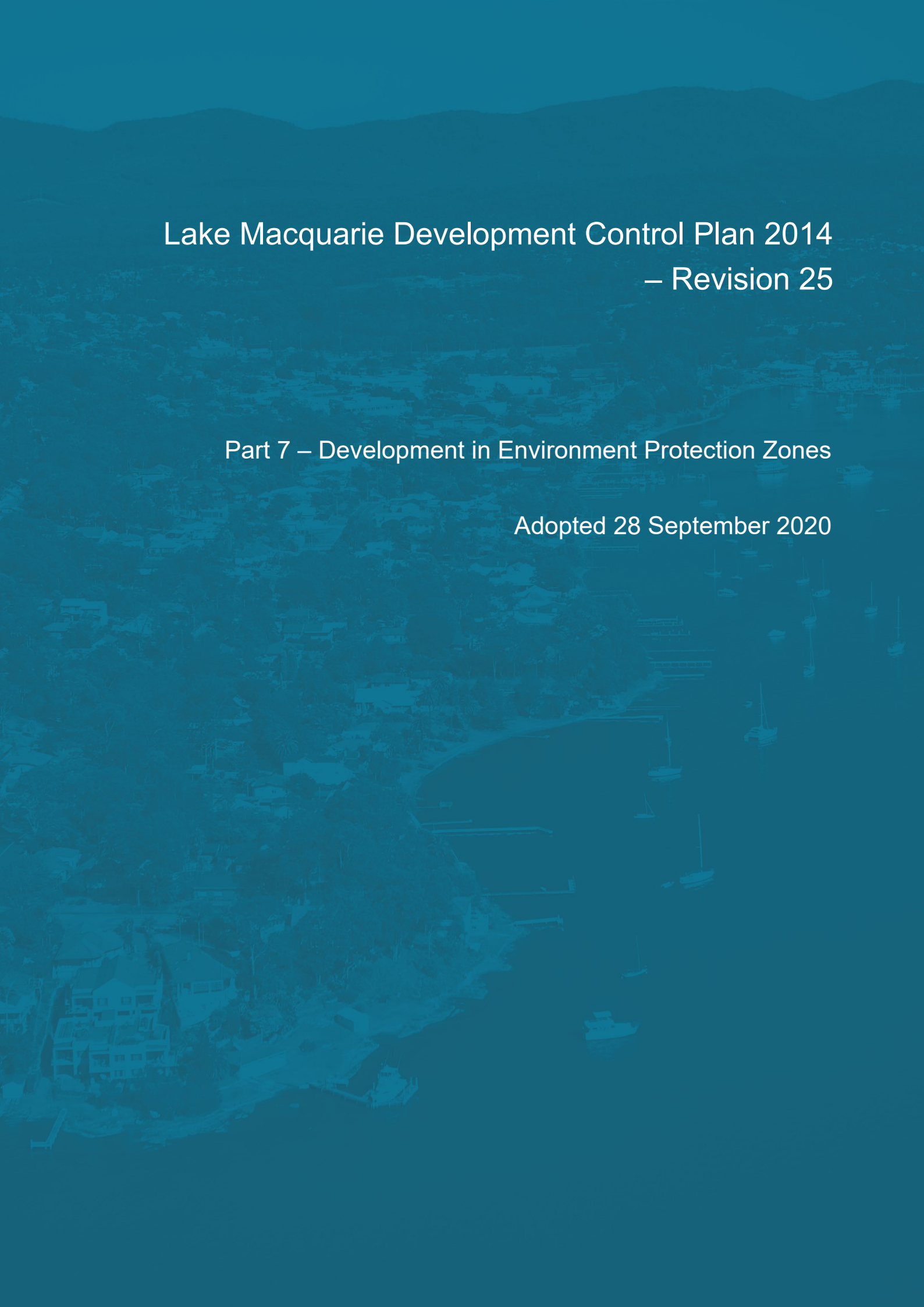
1. Where proposed development has the potential to produce an adverse noise or vibration impact on occupants of the site or of nearby properties, an acoustic and vibration study must be prepared by a qualified consultant, to Council's satisfaction.
2. Noise or vibration generated by development must not exceed the criteria stipulated in the *NSW Industrial Noise Policy* or the *Noise Guide for Local Government* at the property boundary of the noise source, or at a receiving lot boundary.
3. Measures must be implemented to ensure that any noise or vibration generated is not offensive, in accordance with the *Noise Guide for Local Government*
4. During construction, the operating noise level of machinery, plant and equipment must comply with the *Noise Guide for Local Government*.
5. A suitably qualified acoustics consultant must prepare a Noise Management Plan where construction is proposed to exceed 26 weeks.
6. Noise generating operations and outdoor operations must only occur between 7am and 6pm Monday to Saturday.

   Council may request at any stage an independent report to confirm that noise emissions are within acceptable limits; such costs are to be borne by the applicant/ operator.

Lake Macquarie Development Control Plan 2014 – Revision 25

Part 7 – Development in Environment Protection Zones

Adopted 28 September 2020



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1 INTRODUCTION

Part 7 - Development in Environment Protection Zones applies to all development in the E2 Environmental Conservation, E3 Environmental Management, and E4 Environmental Living zones.

This part is to be read in conjunction with Part 1 (Introduction) of DCP 2014, which outlines Council's general requirements for all developments and provides advice on the lodgement requirements for a Development Application. Part 1 also contains requirements for when an application seeks to vary a development control. Additionally, controls for specific land uses may apply depending on the type of development proposed. These controls can be found within Part 9 of this DCP.

Furthermore, an Area Plan may apply depending on the location of the development. Area Plans contain area specific controls that need to be considered. They can be found in Parts 10, 11 and 12 of this DCP.

1.1 HOW TO USE THIS PLAN

LMDCP 2014 is the primary document used by Council's development assessment staff to assess development applications. Proponents of development will need to:

1. Determine the land use zone that applies to the development site (refer to LM LEP 2014);
2. Refer to the Part of LMDCP 2014 that contains controls for the zone where the development is proposed (Parts 2 to 8);
3. Check if specific land use provisions apply to the proposed development (Part 9); and
4. Check if an Area Plan applies to the proposed development site (Parts 10, 11 or 12).

The development controls contained within each part and section, seek to achieve desired land use, conservation and/or built outcomes consistent with corresponding LMLEP 2014 zone objectives, and the aims in each part of LMDCP 2014.

Each part of LMDCP 2014 is structured to promote a development process where the site and context analysis informs the design of the development. Parts 2 to 8 of this DCP generally have the following main headings:

- **Introduction** – provides information about the particular part of the DCP, how to use the DCP and aims for development within the particular zone group.
- **Context and Setting** – outlines the site issues and environmental opportunities and constraints that need to be addressed in the development application.
- **Development Design** – provides Council's detailed design related requirements.
- **Operational Requirements** – provides Council's detailed requirements associated with the construction and ongoing operation of the development.

The detailed provisions of each subsection in each part of LMDCP 2014 are presented as follows:

- **Objectives** – state what outcomes Lake Macquarie City Council is seeking new development to achieve along with the intent behind the controls, and
- **Controls** – advise the requirements for achieving outcomes and the desired future character identified by the aims and objectives.

Additionally, Parts 2 to 8 contain the specific aims that LMDCP 2014 seeks to achieve. Where specific controls are not provided, the aims of each part will be used to provide direction for a merits based assessment of a development application.

For more information on how to use this document, please consult Part 1 – Introduction.

1.2 ADDITIONAL CONTROLS FOR SPECIFIC LAND USES

If the development application relates to any of the following land uses, additional specific development controls must be considered in conjunction with controls in this part of the DCP. The detailed controls for these uses can be found in Part 9 of this DCP. Where a conflict exists between the controls within this part and a specific land use, the specific land use section prevails.

Bed and Breakfast / Farm Stay Accommodation	Health Consulting Rooms
Dual Occupancy	Home Business and Industry
Dwelling House in Rural and Environmental Zones	Places of Public Worship
Foreshore and Waterway Development	

1.3 AIMS FOR DEVELOPMENT IN ENVIRONMENT PROTECTION ZONES

Where controls are not provided for a particular circumstance, the following aims will be used to provide direction for a merits based assessment of a development application.

The aims of LMDCP 2014 for development in environment protection zones are:

1. To ensure that the amenity of natural landscapes is maintained.
2. To ensure that lifestyle development in environmental areas is effectively integrated with environmental and conservation uses.
3. To ensure that development occurs in an ecologically sustainable manner, and is energy efficient in terms of design and layout, consumption and materials.
4. To maintain the amenity and integrity of conservation and other environmentally valuable areas, and to maintain the natural character of the landscape.

2 CONTEXT AND SETTING

2.1 SITE ANALYSIS

Objectives

a. To encourage good site planning, built form and landscape outcomes informed by an understanding of the site and its context.

b. To illustrate how a development responds to a site and its relationship with the locality.

c. To identify the opportunities and constraints of sites, and the prevailing characteristics of a locality.

Controls

1. A Site Analysis Plan must be submitted that identifies the existing conditions relating to the subject site, and the surrounding land that may influence the design process.
2. The Site Analysis Plan must address:
   i. All relevant items as set out in the *Site Analysis Guidelines*; and
   ii. All relevant matters outlined below in section 2.2 to 2.18.
3. The Site Analysis Plan must provide a comprehensive view of the constraints and opportunities of the development site that will guide the design process.
4. The development application must clearly show that the constraints and opportunities identified in the Site Analysis Plan have been used to inform and resolve the development design.
5. An electronic 3D block model must be submitted for any development that is three or more storeys, or that has a Gross Floor Area of 2000m^2 or more. The model must clearly show the scale and form of the proposed development and its setting, from viewing points along the street, and from public open space, waterways and other significant vantage points.
6. Council may require an electronic model for smaller developments on sites with potentially high visual or physical impacts on the public realm.

Note: The detail of the Site Analysis Plan should be tailored to the site, and the complexity of the proposed development.

2.2 SCENIC VALUES

The **Landscape Settings and Significant Natural Landscape Features Maps** identify the Landscape Setting boundaries and the relevant Scenic Management Zone for each Landscape Setting. The maps are a guide to the scenic quality associated with lands within the City of Lake Macquarie and are contained within the *Scenic Management Guidelines*. The *Scenic Management Guidelines* provide supporting documentation to this DCP.

Objectives

a. To ensure that the scenic values of the City are protected and enhanced.

b. To ensure that developments visible or adjoining the coastline, Lake Macquarie or ridgelines maintain and enhance the scenic value of these features.

Controls

1. A landscape and visual impact assessment is required for development identified in Table 1 unless specified by Council. A landscape and visual impact assessment must be prepared in accordance with section 7.3 of the Scenic Management Guidelines.

Table 1 - Development requiring a landscape and visual impact assessment

Type, category or impact of development: • Any designated or SEPP 14 development • Any new development or alterations and additions resulting in a building or structure equivalent to 4 storeys or more (in any zone), or a car park of 2 or more storeys (in any zone) • Telecommunication towers • Substantial loss of native tree cover (land parcels of one hectare or greater) • Subdivisions (in any zone with 10 or more lots proposed) • Tourist and visitor accommodation • Eco-tourist facilities • Removal of any tree on the Significant Tree Register • Seniors living developments • Educational facilities
Location of development: • Any development that is; within 300m of the Mean High Water Mark of the lake or coastal edge, or on a ridgeline and involves two or more of the following: o height equivalent to 3 or more storeys, or o sloping site (10% or more), or o requiring a combined cut and fill exceeding 2 metres, or o a development footprint exceeding 2000m^2. • Any building or structure in a public reserve having a footprint exceeding 100m^2 or being over 10 metres high. • Any development on a heritage item and/or development within a heritage conservation area (apart from alterations and additions to existing houses or new complying development houses) • Any development within 300m of the Sydney-Newcastle Freeway (apart from alterations and additions to existing houses or new complying development houses)

2. Developments must be designed and sited to complement their location through:
   i. the retention of existing vegetation,
   ii. incorporating appropriate landscaping,
   iii. minimising cut and fill,
   iv. building design and articulation compatible with natural context, and
   v. colour and material selection,
3. For developments visible from the coastline, Lake Macquarie, and adjacent waterways, or from significant ridgelines, external finishes should be non-reflective and muted in tone.

2.3 GEOTECHNICAL

Objectives

a. To minimise potential damage to buildings/structures resulting from land movement.
b. To provide guidance on the preparation of geotechnical reports required to support a development application.

Controls

1. The following development types do not require submission of a Slope Stability Assessment with a development application:
    - Minor development such as garages, carports, decks and the like, pergolas, fiberglass swimming pools and cut/fill not exceeding 1 metre high/deep.
    - Development in Geo_4, Geo_5 or Geo_6 zone that consists of less than 3 storeys and less than 1000m^2 gross floor area and are not sensitive use facilities as defined by the Geotechnical Slope Stability Guidelines.
    - Subdivision consisting of:
        - 4 or less lots; and
        - Not including any new public road; and
        - Within a Geo_4, Geo_5 or Geo_6 zone.
2. A geotechnical report prepared by a geotechnical engineer must accompany an application for all other development as specified in Council's *Geotechnical Slope Stability Guidelines*. The report must be prepared in accordance with these Guidelines.

Note: After lodgement of a development application, Council may still require the submission of Geotechnical Report for the development types identified at (1) following a site inspection.

2.4 MINE SUBSIDENCE

Objectives

a. To minimise risks to buildings and structures associated with potential mine subsidence.

Controls

1. Where an application is made for the construction of a structure or building within a Mine Subsidence District, written concurrence must be obtained from the Mine Subsidence Board. Written concurrence should be obtained prior to the application being submitted to Council.
2. Written concurrence from the Mine Subsidence Board is not required for certain works that have deemed approval under the Mine Subsidence Board's publication 'A Guide for Council Staff'.

Note**:** Please refer to the Mine Subsidence Board's 'Surface Development Guidelines' for important information.

2.5 CONTAMINATED LAND

Objectives:

a. To ensure that contaminated land is identified through appropriate investigations
b. To ensure that contaminated land at a site is appropriately and effectively remediated prior to development taking place.
c. To ensure that changes to land use will not increase the risks to public health or the environment as a result of contaminated land on site, or adjacent to the site.

Controls:

1. Where development is proposed on land identified as being potentially contaminated, a Preliminary Site Investigation Report must be prepared and submitted with the application for development. Refer to Council's *Policy for Managing Contaminated or Potentially Contaminated Land* for further information.
2. Where contaminants are found within the site, a Detailed Site Investigation Report must be prepared and lodged with the development application.

3. Where a Detailed Site Investigation Report identifies the need for remediation, a Remedial Action Plan must be prepared and submitted with the application.
4. The site must be validated as suitable for its intended use prior to the issue of an occupation certificate.

Note: At discretion, Council may request a formal audit of contamination documentation by a site auditor accredited with the NSW Environment Protection Authority under the *Contaminated Land Management Act* 1997.

Note: Refer to SEPP 55 and the NSW State Governments '*Managing Land Contamination: Planning Guidelines'* for more information.

2.6 ACID SULFATE SOILS

Objectives

a. To ensure that disturbance of Acid Sulfate Soils or Potential Acid Sulfate Soils is minimised, to prevent adverse environmental impact on soil conditions.
b. To ensure that water quality and associated receiving waters are not detrimentally affected by the effects of Acid Sulfate Soils.
c. To ensure that habitat is not detrimentally affected by the effects of Acid Sulfate Soils.
d. To ensure that built structures and infrastructure are not detrimentally affected by Acid Sulfate Soils.

Controls

1. Development should be sited or designed to avoid the disturbance of Acid Sulfate Soils or potential Acid Sulfate Soils.
2. Where the disturbance of Acid Sulfate Soils is unavoidable, a Preliminary Acid Sulfate Soil Assessment report must be submitted with the development application, in accordance with the *NSW Acid Sulfate Soils Planning Guidelines*.
3. Where a Preliminary Acid Sulfate Soil Assessment report identifies potential adverse impacts, a detailed assessment report and management plan must be submitted, in accordance with the *NSW Acid Sulfate Soils Planning Guidelines*.
4. Any Acid Sulfate Soils must be identified on the site analysis plan.

***Note*:** Refer to Lake Macquarie Council's Acid Sulfate Soil planning maps showing classes of land containing potential or actual Acid Sulfate Soils. These maps are available at Council's Customer Service Centre, Speers Point.

2.7 STORMWATER MANAGEMENT

Objectives

a. To ensure that development does not adversely affect water quality or availability, including ground water.
b. To ensure that watercourses and associated riparian vegetation are maintained so as to contribute to water quality, and to mitigate sedimentation of the Lake Macquarie waterway.
c. To minimise any adverse impacts on downstream built or natural environments, or on nearby land due to increased development.
d. To incorporate Water Sensitive Urban Design techniques into all new developments.
e. To minimise the volume and rate of stormwater leaving a development site.

Controls

1. A *Water Cycle Management Plan* must be submitted for all development except single dwelling houses and dual-occupancy developments. The *Water Cycle Management Plan* must provide details of the management of stormwater, and the measures proposed to mitigate the effects of stormwater on adjoining or downstream sites in accordance with Council's *Water Cycle Management Guidelines*.
2. A *Site Stormwater Drainage Plan* must be submitted for all single dwelling houses and dual-occupancy development proposals. The *Site Stormwater Drainage Plan* must be prepared in accordance with Council's *Water Cycle Management Guidelines*.
3. On-site measures must be implemented to maintain water quality, and to minimise the volume of stormwater run-off and the rate at which stormwater leaves the site.
4. A maximum of 10% of run-off from built impermeable surfaces may be discharged directly to the drainage system. The remaining 90% of run-off must be captured for reuse, or managed through infiltration and retention measures prior to being discharged to the drainage system.
5. Stormwater management systems should be visually unobtrusive and integrated within site landscaping, car parks or building structures.
6. All developments (except dwelling house or dual occupancy) that involve the re-use of stormwater or the use of recycled water must demonstrate compliance with the Australian Guidelines for Water Recycling and the licensing requirements of the *Water industry Competition Act 2006.*
7. Stormwater management systems must be designed in accordance with the *Water Cycle Management Guidelines.*

2.8 CATCHMENT FLOOD MANAGEMENT

This section applies to land in the various creek catchments in Lake Macquarie that are shown as 'Lots Affected by Catchment Flooding' on Council's 'Flood Control Lots' map.

The map is indicative only and property information should be checked to confirm if a lot is a catchment flood control lot.

Some lots are affected by both catchment flooding and Lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Further information on flood risk and flood planning levels (floor levels) for particular lots can be obtained by applying for a Flood Certificate from Council.

Provisions regarding Lake flooding are contained in section 2.9 of this Part of DCP 2014.

Where inconsistencies arise, the controls in area plans prevail over controls in parts 2 to 9 of this DCP.

Objectives

a. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties.
b. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding, and manage risks to property and life from flood events.

Controls

1. Development must be consistent with the current version of the *NSW Floodplain Development Manual*, and any relevant local flood study, floodplain management study or plan applying to the land that has been endorsed by Council.
2. The proposed development must consider and respond to flooding hazards. It must also mitigate risks to life and/or property through design and positioning of development.

3. Buildings must not be located in an identified floodway.
4. Buildings and other structures, including fences, must be designed so as not to impede the flow of floodwaters or entrap debris.
5. Habitable rooms must have a finished floor height at least 500mm above the 100 year probable ARI (1% AEP) event. Where probability flood levels are not available, habitable rooms must have a finished floor height at least 500mm above the highest observed flood level for the development site.
6. Non-habitable rooms must have a finished floor height at or above the 20 year probable ARI (5% AEP) event. Where probability flood levels are not available, non-habitable rooms must have a finished floor height at or above the highest observed flood level for the site, except where this would result in a floor level more than 500mm above the existing ground level. In this case, a floor level of at least 500mm above existing ground level must be achieved.
7. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area, or within the extent of the 100 year probable ARI (1% AEP) flood event.
8. Lesser provisions may be acceptable where the applicant can demonstrate that the type of development or the proposed use poses no significant risk to life or property by flooding.
9. Any use of fill associated with development must not substantially impede the flow of floodwater, and must not contribute to flooding or ponding of water on any other property.
10. Additions or alterations to existing development will be assessed on the merits of the situation, having regard to meeting an acceptable level of risk of flood damage.
11. Development on designated flood prone land should incorporate the floodplain risk management measures, as recommended by a local flood study, floodplain management study or plan, which identifies and addresses appropriate actions in the event of flooding.
12. Development on land subject to flooding must use flood compatible materials that will minimise damage by flooding.
13. Development on lots adjoining areas affected by a 100 year probable ARI event will be subject to floor height requirements, even when the site may not be subject to flooding from the 100 year probable ARI event. This requirement is not applicable for land higher than 500mm above the 100 year probable ARI, as calculated for the relevant site.
14. Development where 100 year probable ARI levels are not available, and which could be flood liable, should be designed to meet an acceptable level of risk from flood damage. This may require the preparation of a Local Flood Study that considers cumulative impact issues, and demonstrates negligible impacts on other lands.

Note: Refer to Council's *Flood Management Guideline* for further information on the *NSW Floodplain Development Manual*, completed floodplain management plans, and on Council's requirements for flood studies.

Table 2 - Flood Planning Levels and floor height requirements in areas affected by catchment flooding and covered by a Floodplain Management Study and Plan

Development Type (including extensions)	Minimum Height Requirements
Dwellings	
Habitable rooms	1 in 100 year probable flood level + 500mm freeboard (post and beam rather than slab on ground preferred)
Non-habitable rooms and garages	1 in 20 year probable flood level
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Medium and High density residential development	
Habitable rooms	1 in 100 year probable flood level + 500mm freeboard
Non-habitable rooms and garages	1 in 20 year probable flood level
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Commercial and Retail	
Internal floor height	1 in 100 year probable flood level + 500mm freeboard
Basement car parking Also includes Places of Public Worship, restaurants, clubs, entertainment facilities, warehouses, and bulky goods showrooms etc.	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard

Development Type (including extensions)	Minimum Height Requirements
Mixed Use development	
Internal floor height	1 in 100 year probable flood level + 500mm freeboard
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Industrial	
Internal floor height	1 in 100 year probable flood level
Unsealed electrical installations	1 in 100 year probable flood level + 500mm freeboard
Sensitive Uses (Residential care facilities, hospitals, etc.)	
Internal floor height	Probable maximum flood level
Unsealed electrical installations	Probable maximum flood level

2.9 LAKE FLOODING AND TIDAL INUNDATION (INCORPORATING SEA LEVEL RISE)

This section applies to land on and near the Lake Macquarie foreshore that is shown as 'Lots Affected by Lake Flooding' on Council's 'Flood Control Lots' map. The map is indicative only and property information should be checked to confirm if a lot is a Lake flood control lot.

Some lots are affected by both catchment flooding and Lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Provisions regarding Catchment Flooding are contained in section 2.8 of this Part of DCP 2014.

The floor height requirements in Table 3 below must only be used for development on lots shown as 'Lots Affected by Lake Flooding' on Council's 'Flood Control Lots' map.

Council completed the Lake Macquarie Waterway Flood Study and Risk Management Plan in 2012. This flood study and risk management plan incorporated the implications of predicted sea level rise.

Predicted sea level rise is based on expert advice from NSW Government agencies and expert scientific agencies, namely that projections of sea level rise along the NSW coast are for a rise relative to 1990 mean sea levels of 40cm by 2050 and 90cm by 2100.

The controls contained in this section prevail where there is an inconsistency with other development requirements. This is particularly relevant to cut and fill controls.

Objectives

a. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties.

b. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding, and manage risks to property and life from flood events.

c. To ensure that development adequately considers and responds to sea level rise projections, and the predicted effects on inundation, flooding, coastal and foreshore recession, and on groundwater levels.

d. To ensure that development on land vulnerable to sea level rise is situated and designed to minimise the risk from future inundation, flooding, coastal and foreshore recession, and from rises in groundwater levels during the expected life of the development.

e. To ensure that development is designed to enable future adaptation if projections are realised, or that measures are implemented to mitigate any adverse impacts of climate change or sea level rise.

f. To encourage innovative responses to sea level rise impacts

Controls

1. Development must implement measures to mitigate the adverse effects of projected sea level rise and increases in flood levels on the development.
2. Development should be designed and situated to reduce the risk from the effects of sea level rise. For example, structures should be located on the highest part of the lot and/or located as far back from the foreshore or coastline as possible, while still meeting other controls and objectives of the DCP.
3. Development should not be located in areas predicted to be permanently inundated during the life of the asset. The assumed asset life is 100 years for residential care facilities and seniors housing, hospitals, mixed use development and for medium and high density housing, and 50 years for other developments.
4. Notwithstanding the provisions for Cut and Fill in section 3.14, special consideration may be given to increased fill allowances in areas affected by sea level rise provided that:
    i. Additional fill does not adversely affect stormwater management, drainage, or the flow of water from roads, natural or constructed watercourses, foreshore areas or adjoining properties; and
    ii. The filled area maintains functional connections to adjoining footpaths, roads, neighbouring blocks and other local features.
5. Development identified within Table 3 should comply with the floor height provisions. Where the development proposed is not contained within Table 3, or an alternative to the provisions contained within Table 3 is proposed, a Flood Safety Audit and Management Plan must be submitted with the application, which is to include:
    i. Current 100 year ARI flood levels and velocity, as well as at 2050 and 2100;
    ii. Analysis of potential and likely risk of flooding, and/or potential threat to life and/or property now, and at 2050 and 2100;
    iii. Analysis of the potential effects of permanent inundation, foreshore recession and rising groundwater;
    iv. Where flood-proof materials are proposed, evidence of the flood-proof characteristics of those materials must be provided;
    v. Where an innovative of adaptable building design is proposed, it meets the principles and performance criteria set out in the Development Guidelines for Resilient Housing for Lake Macquarie, and
    vi. Any other alternative adaptive measure must be justified.

6. The assessing officer may determine that the development proposal is of a minor nature, and that there is no need for a Flood Safety Audit and Management Plan. In these circumstances, the assessing officer must be satisfied that the proposed development adequately addresses projected sea level rise and increases in flood levels.

Table 3 - Floor height requirements for land affected by Lake Flooding and Tidal Inundation requirements

Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
Dwellings		
Habitable rooms	1 in 100 year probable flood level for 2050 + 500mm freeboard (post and beam rather than slab on ground preferred)	2.36 m AHD
Non-habitable rooms and garages	1 in 20 year probable flood level for 2050	1.61 m AHD
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement	
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Medium and High density residential development		
Habitable rooms	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Non-habitable rooms and garages	1 in 20 year probable flood level for 2100	2.10 m AHD
Carports, boat sheds, garden sheds, and other ancillary structures (excluding garages)	No requirement	
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2100 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.82 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD

Development Type (including extensions)	Minimum Floor Height Requirements	Actual Minimum Floor Level for Land to which the Lake Flood Study Applies
Commercial and Retail		
Internal floor height	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Basement car parking Also includes Places of Public Worship, restaurants, clubs, entertainment facilities, warehouses, and bulky goods showrooms etc.	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2050 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.36 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Mixed Use development		
Internal floor height	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Basement car parking	Constructed to preclude entry of floodwater at levels up to the 1 in 100 year probable flood level for 2100 + 500mm freeboard. Additional requirement for basement levels to implement a failsafe means of evacuation, and a pump-out system to remove flood waters.	2.82 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2100 + 500mm freeboard	2.82 m AHD
Industrial		
Internal floor height	1 in 100 year probable flood level for 2050	1.86 m AHD
Unsealed electrical installations	1 in 100 year probable flood level for 2050 + 500mm freeboard	2.36 m AHD
Sensitive Uses (Residential care facilities, hospitals, etc.)	Probable maximum flood level for 2100	3.27 m AHD
Unsealed electrical installations	Probable maximum flood level for 2100	3.27 m AHD

2.10 NATURAL WATER SYSTEMS

Definition

A **natural water system** is a naturally occurring watercourse, waterway, lake, wetland, lagoon, estuary, and/or other water body.

Objectives

a. To protect and maintain the water regime of natural water systems.

b. To ensure that development does not adversely affect aquatic fauna.

c. To ensure that development does not adversely affect water quality or availability, including ground water.

d. To ensure that watercourses and associated riparian vegetation are maintained to contribute to water quality, and to mitigate sedimentation of the Lake Macquarie waterway.

e. To ensure that natural water systems and associated vegetation and landforms are protected to improve the ecological processes and ensure that land is adequately buffered from development.

f. To ensure that the pre-development water quality of receiving waters is maintained or improved.

Controls

1. Natural water systems must be maintained in a natural state, including the maintenance of riparian vegetation and habitat such as fallen debris.
2. Where a development is associated with, or will affect a natural water system, rehabilitation must occur to return that natural water system – as much as possible – to a natural state. The Rehabilitation Plan must be prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies*.
3. Rehabilitation should occur where a development site includes a degraded watercourse, water body, or wetland. Rehabilitation is to be carried out following the completion of a Rehabilitation Plan, This Plan must prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies*.
4. Stormwater must be managed to minimise nutrient and sediment run-off entering constructed drainage lines, natural watercourses, or waterways.
5. Development within a Vegetated Riparian Zone (VRZ), as shown in Figure 1 – Vegetated Riparian Zones, should be avoided where possible to retain its ecological processes. Where development is unavoidable within the VRZ, it must be demonstrated that potential impacts on water quality, aquatic habitat, and riparian vegetation will be negligible.
6. A Plan of Management must be submitted in accordance with State Government guidelines for development proposed within a VRZ.
7. Asset Protection Zones must not be located within the Vegetated Riparian Zone.

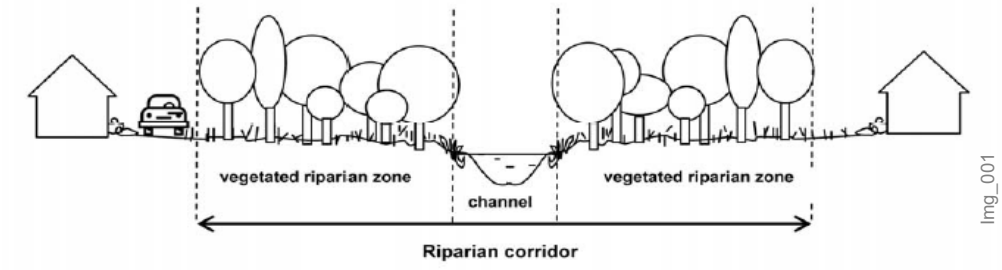


Figure 1 - Vegetated Riparian Zones

Types of watercourses	VRZ Width[2] (Each side of watercourse)	Total Riparian Corridor Width
Any first order[1] watercourse	10 metres	20m + channel width
Any second order[1] watercourse	20 metres	40m + channel width
Any third order[1] watercourse	30 metres	60m + channel width
Any fourth order[1] watercourse or greater (includes estuaries, wetlands and any parts of rivers influenced by tidal waters)	40 metres	80m + channel width

[1] As classified under the Strahler System of ordering watercourses.

[2] Bushfire Asset Protection zones will not be permitted in the Vegetated Riparian Zone. Additional areas may need to be protected to support ecological processes.

2.11 BUSHFIRE

Objectives

a. To ensure that risks associated with bushfire are appropriately and effectively managed on the development site.

b. To ensure that bushfire risk is managed in connection with the preservation of the ecological values of the site and adjoining lands.

Controls

1. Development must comply with the *NSW Planning for Bushfire Protection Guidelines*
2. Asset Protection Zones must:
   i. Be incorporated into the design of the development;
   ii. Be as low maintenance as possible;
   iii. Be located outside areas of ecological value and the buffers necessary to protect them; and
   iv. Not occur on adjoining environmental zoned land.
3. Bushfire prone areas and Asset Protection Zones must be identified on the Site Analysis Plan. Refer to Council's Bushfire Prone Land Map.
4. Clearing for the purposes of Asset Protection Zones should be avoided on ridgelines and slopes of 1:5 or greater.
5. Clearing of vegetation must be limited to that necessary to meet the *NSW Planning for Bushfire Protection Guidelines*.
6. Clearing of native vegetation or trees for the purposes of reducing bushfire risk must be consistent with the current Bushfire Risk Management Plan prepared under the *Rural Fires Act 1997*.

Note: Development Consent is not required for clearing for the purpose of bushfire hazard reduction if the clearing is consistent with the current Bushfire Risk Management Plan, and is undertaken in accordance with a current hazard reduction certificate issued by the Rural Fire Service or other certifying authority.

2.12 FLORA AND FAUNA

Objectives

a. To avoid or minimise impacts on native flora and fauna

b. To protect and enhance significant flora and fauna, vegetation communities and significant habitat on the site, and on surrounding development sites.

c. To protect and enhance ecological corridors and increase the connections between habitats.

d. To ensure rehabilitation of degraded areas.

Controls

1. Where the proposed development is likely to have an impact on native vegetation or fauna habitat, or where five or more trees are proposed to be removed, a flora and fauna assessment must be submitted with the development application. The flora and fauna assessment must be prepared in accordance with Council's *Flora and Fauna Survey Guidelines*.
2. The flora and fauna assessment must be sufficient to adequately identify and assess all the impacts of the proposed development. This includes cumulative, direct and indirect impacts, as well as the impacts of Asset Protection Zones, provision of services (water and sewer, etc) and stormwater management.
3. Where a proposed development site is within a vegetation corridor identified on Council's Native Vegetation and Corridors Map, or identified as part of a site specific flora and fauna assessment, the corridor must be surveyed. Within the survey, the appropriate corridor width must be determined with reference to core habitat areas and potential edge effects and fragmentation. The proposed development should be located and designed to avoid impacts on the identified vegetation corridor. Where this is not possible, the development should be designed to minimise impacts.
4. Development should be designed to avoid impacts on native flora and fauna, and minimise any unavoidable impacts. Significant flora and fauna species, vegetation communities and habitat should be protected and enhanced through appropriate site planning, design and construction.
5. A Site Vegetation Plan must be submitted clearly indicating the location of the proposed development in relation to vegetation communities, significant flora and fauna species and vegetation, and significant habitat and corridors on the site.
6. Native vegetation buffers must be provided between development and areas containing threatened flora and fauna species or their habitat, threatened vegetation communities and native vegetation corridors. The width of the buffer should be determined with reference to the function of the habitat, the threat of sea level rise and the type of development proposed. The buffer should be designed to keep the area of significance in natural condition.
7. A suitable barrier such as a perimeter road should be provided between development, (including landscaped areas) and native vegetation or significant habitat features, to minimise edge effects
8. Where a proposed development is likely to impact on an area of native vegetation, it must be demonstrated that no reasonable alternative is available. Suitable ameliorative measures must also be proposed (eg: weed management, rehabilitation, nest boxes).
9. Rehabilitation of degraded areas of the development site should include local native species to establish a self-maintaining ecosystem as close as possible to the natural state.
10. Buildings and structures, roads, driveways, fences, dams, infrastructure, drainage and asset protection zones should be located outside of areas with significant flora and fauna, native vegetation corridors and buffers.
11. An application for removal of native vegetation will only be considered where it is ancillary to, and necessary for conducting an approved use of the land (ie: an application for clearing alone will not be supported).
12. Where retention or rehabilitation of native vegetation and/or habitat is required, a vegetation management plan must be prepared in accordance with Council's *Vegetation Management Plan Guidelines*. This must detail how vegetation will be protected, rehabilitated and managed before, during and after construction.
13. Long-term protection and management of areas set aside for ecological reasons is encouraged through secure tenure with appropriate conservation management. This may be achieved through a Planning Agreement.

14. Development should be consistent with the effective conservation of land within any adjacent Environmental or Waterway zone and its protection from adverse impacts. It should include, but not be limited to weed invasion, erosion and sedimentation, pollution, chemicals, nutrients, stormwater run-off, feral and domestic animals.

Note: Council may require a bond to ensure that native vegetation is protected and any ameliorative measures are undertaken.

2.13 PRESERVATION OF TREES AND VEGETATION

Objectives

a. To ensure that trees listed on Council's Significant Tree register are not adversely affected by development.
b. To maintain and enhance the natural bushland or vegetated character of the city.
c. To retain trees for the urban amenity, microclimate, scenic, air and water quality, and the social benefits that they provide.

Controls

1. For the purposes of Clause 5.9 in LMLEP 2014, development consent is required to ring bark, cut down, top, lop, remove, injure, wilfully destroy or clear:
   i. Any species of vegetation that existed in the State of New South Wales before European Settlement;
   ii. A tree which is listed in Council's Significant Tree Register;
   iii. Tree(s) or native vegetation listed as heritage items or located within a Heritage Conservation Area; or
   iv. A Norfolk Island Pine Tree (*Araucaria heterophylla*) that is greater than three metres in height, or that has a trunk diameter of 75mm or greater, measured at ground level.

Note: This clause includes Native Vegetation defined in the *Native Vegetation Act 2003* and marine vegetation covered by section 205 of the *Fisheries Management Act 1994*.

2. Except in the E2 Zone, development consent is not required to remove, injure, wilfully destroy or clear native vegetation (excluding native trees and shrubs over 3m in height), only if:
   i. The work is for the purpose of landscaping understorey vegetation and lawn areas where the area to be cleared is less than 600m² (in total), and is on the same allotment as, and within the curtilage of an approved dwelling;
   ii. The soil surface exposed in any period of 90 consecutive days is less than 250m^2;
   iii. The slope of the land is less than 15 degrees;
   iv. The area is not subject to a development consent that requires the native vegetation to be retained; and
   v. The work does not involve the disturbance of habitat for threatened species.
3. Development consent is not required to ring bark, cut down top, lop, remove, injure, wilfully destroy or clear a tree or native vegetation, if:
   i. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and
   ii. The tree or native vegetation is not required to be retained by a development consent, and
   iii. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or

iv. The tree or native vegetation is within one metre of a sealed driveway to a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or

v. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) on an adjoining allotment as the building and owners of both properties reach a written agreement that is submitted to Council prior to removal.

Note: For the purposes of clause 3 the distance must be measured from the trunk of a tree or shrub measured at ground level to the outer most projection of the building.

***Note*:** A sealed driveway is a driveway or car park with an impervious surface such as concrete, pavers, or bitumen. A gravel driveway is not classed as a sealed driveway.

***Note*:** A lawfully used building does not include drainage, excavation, a garden shed or jetty, but does include an underground water storage structure or septic tank.

4. Development consent is not required for removal of a tree or native vegetation if Council is satisfied beforehand that the tree or native vegetation:

   i. is dead and is not required as habitat for native fauna or

   ii. is a risk to life or property.

***Note*:** Evidence to support removal should be forwarded to Council in accordance with requirements outlined in Council's *Tree Preservation and Native Vegetation Management Guidelines*. Council's Tree Assessment Officer may undertake a site inspection to verify that these conditions are satisfied.

***Note*:** Habitat required for native fauna includes native vegetation and trees (including dead or dying trees) support hollows, spouts, splits, nests and roosts.

5. Development consent is not required for removal of a tree or native vegetation if:

   i. The tree or native vegetation is in danger of imminent failure and there is risk to life or property; and

   ii. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and

   iii. Evidence to support its removal is forwarded to Council following the removal, in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.

6. Development consent is not required for removal of a NSW native tree if the tree is:

   i. not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and

   ii. not located within other native vegetation and,

   iii. less than three metres in height and

   iv. has a trunk diameter at ground level of less than 75mm.

7. An application for removal of tree(s) and native vegetation will be considered only where it is necessary for conducting an approved use of the land. An application for clearing alone will not be supported.

8. A report from a suitably qualified arborist must be submitted to support:

   i. Any application that may have an impact on a tree listed in Council's Significant Tree Register, or on tree(s) or native vegetation listed as heritage items or located within a heritage conservation area;

   ii. Any request to review Council's determination of an application for tree pruning or removal; or

   iii. Any application that Council determines may cause significant impacts on native trees or native vegetation.

9. An arborist report must include a plan to scale that clearly shows:
    i. The location of the proposed development;
    ii. The location, diameter, canopy spread, condition and species of each tree on the site;
    iii. All trees to be removed;
    iv. All trees to be retained;
    v. All trees with habitat hollows;
    vi. Tree protection zones for all trees to be retained; and
    vii. Any asset protection zones.
10. Habitat trees must be assessed by a suitably qualified flora and fauna specialist.
11. Measures must be implemented to protect native vegetation and trees to be retained during construction works. Such protection measures must be specified in the development application, and should be compiled in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.
12. Where habitat trees are removed, measures (such as nest boxes) must be implemented to mitigate against injury or loss of native fauna and habitat. Such measures must be specified in the development application.
13. Boundary fences must be located, designed and constructed to avoid removing or damaging native trees that have a diameter of 200mm or greater, measured at ground level.

Note: Refer to Council's *Tree Preservation and Native Vegetation Management Guidelines* for further details and the Significant Tree Register.

***Note*:** Where the removal of five or more native trees is proposed, an arborist report may be required in addition to a Flora and Fauna Assessment prepared in accordance with Council's *Flora and Fauna Survey Guidelines*.

2.14 EUROPEAN HERITAGE

Objectives

a. To protect and maintain European heritage items and their facades.
b. To retain, preserve and promote the adaptive re-use of heritage-listed buildings and contributory buildings in particular, and other buildings that contribute to the heritage character of the locality.
c. To appropriately manage demolition of items of heritage significance, when all other alternatives to demolition have been fully investigated.
d. To ensure that development is sympathetic to heritage items and contributory buildings.

Controls

1. A Heritage Assessment and Statement of Heritage Impact must be submitted to Council where a proposed development:
    i. incorporates, or is adjacent to an item of heritage significance;
    ii. is located within a heritage conservation area, or,
    iii. has been identified by Council to have particular circumstances that warrant it.

Note: Council officers will use the following criteria to determine the need for Heritage Assessment and Statement of Heritage Impact is required under control 1(iii) above:

- The subject site includes a building erected prior to 1950 whether or not it is identified as being of a particular architectural style,
- The development is considered in conflict with it's heritage context, streetscape, or heritage precinct,

- The subject site includes a potential heritage item.

2. The impact of development on an item of heritage significance must be minimised by:
   i. Restricting the extent of development to that which is necessary;
   ii. Conserving what is significant about the item;
   iii. Clearly differentiating new development from the existing significant fabric;
   iv. Ensuring that development is of a scale, form, mass, proportion and finish that is sympathetic with the heritage item; and
   v. Ensuring that development is sufficiently separated from the heritage item, so as not to compromise the existing level of visibility.
3. For development involving demolition of an item of heritage significance, a heritage assessment and Statement of Heritage Impact must be prepared and lodged. It must verify that all alternative options to demolition have been fully investigated, and demonstrate the replacement building's compatibility with the physical context. The Statement of Heritage Impact must include details of the:
   i. Structural condition;
   ii. Overall extent of the remaining fabric;
   iii. Potential retention and adaptive reuse; and
   iv. Comparative costings.
4. Where demolition of the whole of a heritage item is proposed, approval must be sought concurrently for the replacement building.
5. Alterations and additions to items of heritage significance must where possible:
   i. Occur at the rear of the building;
   ii. Maintain the established building line;
   iii. Maintain an existing driveway access to the rear of the property;
   iv. Incorporate or retain elements such as chimneys, windows and gables;
   v. Maintain established patterns of buildings and garden; and
   vi. Not overwhelm or dominate the existing building.
6. Alterations and additions to items of heritage significance must be recognisable, on inspection, as new work. They must not mimic the design, materials or historic details of the heritage item.
7. Garages, sheds, carports, external utilitarian structures and the like must be detached and located at the rear, or set back at least two metres behind the heritage item.
8. Utilitarian structures must be constructed of the same material as the heritage listed building.

Note: Refer to Council's Heritage Guidelines for further information.

2.15 ABORIGINAL HERITAGE

Objectives:

a. To protect and conserve Aboriginal cultural, spiritual, and sacred sites within the City.
b. To ensure the impact of a proposed development on the heritage significance of an Aboriginal place or object is considered by adequate investigation and assessment.

Controls:

1. Where a development will disturb the ground surface and the natural ground surface has not been significantly disturbed, the development application must demonstrate that adequate due diligence has been undertaken. This includes (but is not limited to) submitting the following documentation in

accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*. This includes submitting the following documentation:

i) A statement and results of a basic 200m Aboriginal Heritage Information Management System (AHIMS) search. Where a site is identified within 200m of the development site, a statement and results of a 50m AHIMS search must be included.
ii) Identify whether the development site is partially or wholly within the Sensitive Aboriginal Landscape map under the LMLEP2014 and whether the exemptions under the Excluded Development Criteria (Table 4) apply.
iii) A statement indicating whether there are landscape features that indicate the potential presence of Aboriginal objects.

Note: landscape features include: foreshore areas, creek lines, rocky areas, wetlands, ridge tops, ridgelines, headlands, sand dunes, caves.

2. A Due Diligence Assessment must be prepared by a suitably qualified person to determine whether the proposed development is likely to harm Aboriginal objects and identify whether an Aboriginal Heritage Impact Permit is required where:

i) An AHIMS search has identified the likelihood of an Aboriginal item within 200m of the development site, and/or
ii) The site is identified on the Sensitive Aboriginal Landscape map and the Excluded Development Criteria do not apply.

3. The Due Diligence Assessment must include an assessment of the cultural significance of the place to the Aboriginal Community.

Note: Clause 5.10(8) – Heritage Conservation of the LMLEP 2014 and the Lake Macquarie Aboriginal Heritage Management Strategy requires assessments to be forwarded to the Local Aboriginal Land Council for comment for a 28 day period.

4. An Aboriginal Cultural Heritage Assessment Report should be prepared where:

i) A Due Diligence assessment has identified the potential for the site to contain an Aboriginal object or contains a place of significance, or
ii) The development will have an impact on a known Aboriginal object or place.

Table 4 - Excluded Development Criteria for Development in Sensitive Aboriginal Landscape Map

Excluded Development	Land on which excluded development may not be carried out
All development on sites having a combined/total area less than 800m^2	Within 200m of an AHIMS site Setback from DP High Water mark does not exceed 50m.
Exempt development under the SEPP (Exempt and Complying Development CODES) 2008 on sites having a total area greater than 800m^2 subject to: • 75% of combined/total site area already disturbed; or	

Excluded Development	Land on which excluded development may not be carried out
• Works do not exceed existing disturbed footprint; or • Site has previously been assessed for Aboriginal heritage such as subdivision applications post 1997 development consent.	

Note: The SEPP (Exempt and Complying Development Codes) 2008 does not apply to land within the Sensitive Aboriginal Landscape area. However, exempt development within this SEPP may not require further Aboriginal assessment if it fulfills the requirements of the Excluded Development Criteria Table.

5. Where required, the Aboriginal Heritage Impact Statement must be prepared in accordance with the Lake Macquarie Aboriginal Heritage Management Strategy and the Office of Environment and Heritage *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW,* which includes consultation with the Aboriginal community.

6. Where a proposal seeks to destroy, remove or impact on an Aboriginal object, any development will be Integrated Development and will also require a permit from Office of Environment and Heritage.

2.16 NATURAL HERITAGE

Objectives

a. To ensure the protection of items of natural heritage significance.
b. To ensure that insect fossil beds and fossilised trees are maintained, along with features of scientific interest in their natural state.
c. To facilitate public appreciation and scientific investigation of insect fossil beds and geological features of scientific interest, without destruction or damage.

Controls

1. Where development is proposed on land within 50 metres of an item of natural heritage significance identified in the Lake Macquarie Local Environmental Plan 2014, a Heritage Impact Assessment must be prepared in accordance with the *Natural Heritage Guidelines*.
2. The likely impact of development proposals on the insect fossil beds and geological features of scientific interest should be identified through a report by a palaeontologist or geologist, which establishes the significance of the site. Such a report should include management strategies before, during, and after construction.
3. The development should be designed to avoid natural heritage items.
4. Where it is not reasonable to avoid natural heritage items, the item must be protected and incorporated into the design. Reasonable access to the construction site and any excavated material should be provided to researchers and/or palaeontologists from the Australian Museum or other research institution.
5. Any natural heritage items extracted should be fully documented and catalogued prior to being forwarded to the Australian Museum. Documentation and cataloguing must be undertaken to museum standards.

2.17 SOCIAL IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the social impact of a proposal when assessing a specific development application.

Social Impact Assessment focuses on the human dimension of a locality. It seeks to address the question "what will be the impact of a project/development on people?" and to anticipate outcomes that may flow from a proposed development which are likely to affect people's way of life, their culture and/or their community.

Social Impact Assessment is not a tool to stop development, but is to assist in the assessment of development proposals so that the best development results.

Objectives

a. To ensure that development takes into consideration the likely social impacts that may arise, including any effects on equity, access, participation and rights.

b. To ensure that development occurs in appropriate locations, and is supported by adequate services and facilities to support the community and its needs.

c. To ensure that services and facilities are accessible to all members of the community.

d. To facilitate availability of active and passive recreation, natural landscapes, educational opportunities, employment opportunities, health services, public transport, and neighbouring centres, as well as maintaining or enhancing the aesthetics and amenity of the area.

Controls

1. A Social Impact Assessment (SIA) must be prepared in accordance with Council's *Social Impact Assessment Guidelines*, and submitted with the development application in the following circumstances:

   i. the development is identified in table 5, or

   ii. the development is valued at $5,000,000 or greater, or

   iii. the development has a floor area greater than 3000m^2, or

   iv. where Council identifies that particular circumstances warrant it.

Note: Council officers will use the following criteria to determine if a SIA is required under control 1(iv) above:

- The development is targeted at a particular socio-economic or demographic group,
- The development is considered in conflict with its locality, and
- The development has, or is anticipated to generate, significant levels of community opposition.

2. Potential adverse impacts identified by a SIA must be mitigated through redesign, whilst positive impacts should be enhanced by the design or other actions.

Note: The scope, complexity and requirements of a SIA will be commensurate with the scale of the proposed development. Applicants are advised to consult with Council's Social Planner regarding specific requirements.

Table 5 - Uses requiring Social Impact Assessment

• Community facility • Designated Development • Education establishment • Expansion or Modification of an existing use that would otherwise be prohibited under the LEP • Funeral Chapel / Funeral Home • Group Home • Information and Education Facility	• Licensed Premises (Hotels, Taverns and Bottle Shops) • Major Roads, arterial or transport corridors • Place of public worship • Recreation Areas • School • Seniors Housing • Water System / Facilities

2.18 ECONOMIC IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the economic impact of a proposal when assessing a specific development application.

Economic Impact Assessment focuses on the economic dimensions of a locality. It seeks to identify how a proposal will contribute to the economic growth of the locality and City through locating development in appropriate areas, supporting existing development in the area and through the creation of employment opportunity and other economic benefits.

Objectives

a. To ensure that development supports the Lake Macquarie hierarchy of centres and positively contributes to the City by supporting existing development in the locality and the community through the creation of employment opportunities.

b. To ensure development contributes through additional local employment and economic benefits.

Note: Refer to Council Economic Impact Assessment Guideline for further information and guide to the economic considerations for specific types of development**.**

Controls

1. An economic impact assessment must be prepared and submitted to Council at the discretion of the assessing officer under the following circumstances:

   i. Where development is valued at $5,000,000 or greater, or

   ii. Where the proposed development has a floor area greater than 5000m^2, or

   iii. Where the development is inconsistent with the zone objectives.

3 DEVELOPMENT DESIGN

3.1 STREET SETBACK

Objectives

a. To ensure that the development complements the existing or desired future setback pattern in the locality

b. To permit flexibility for developments that may be vulnerable to the impacts of flooding.

Controls

1. Where there are existing neighbouring buildings within 40 metres, front setbacks should be the average of the front setbacks of the nearest four neighbouring buildings.
2. Where the adjoining setbacks vary by more than three metres, the proposed development should be set back the same distance as one of the adjoining buildings.
3. Where there are no existing (or approved) buildings within 40 metres of the lot, the front setback should be a minimum of 20 metres.
4. Where the site is part of a community title development, the front setback must be a minimum of 4 metres from the front boundary

Where the site is identified as being vulnerable to flooding or expected sea level rise, front setbacks may be reduced to ensure that developments are adequately set back from the shoreline.

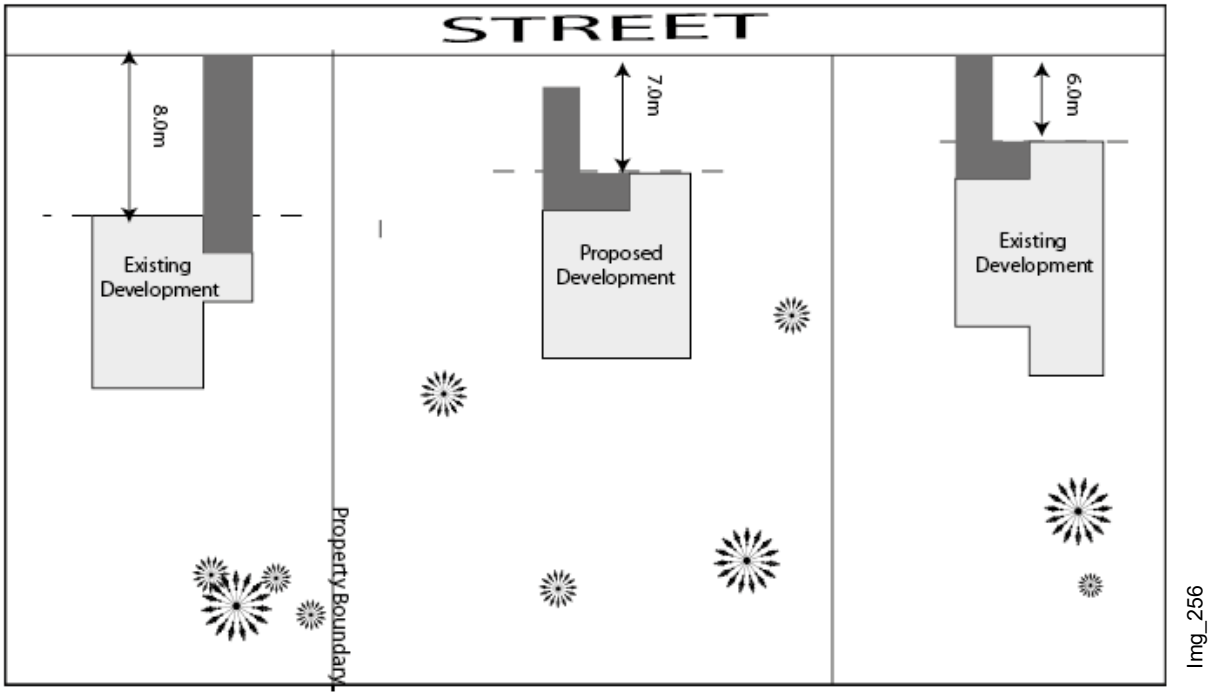


Figure 2 - Street Setback – existing development within 40 metres

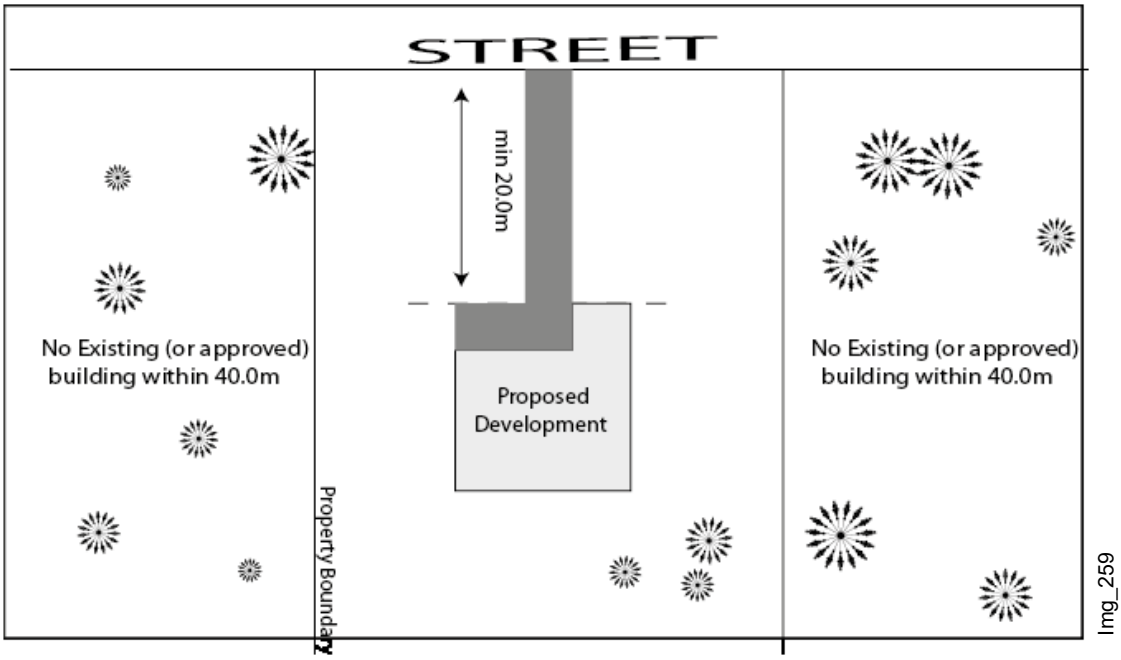


Figure 3 - Street Setback – no development within 40 metres

3.2 SIDE AND REAR SETBACK

Objectives

a. To provide adequate separation between buildings to ensure that a reasonable level of privacy, amenity, solar access and natural ventilation.

b. To provide a visual separation between buildings.

c. To ensure that the natural amenity and environmental landscape character is maintained.

d. To provide opportunities for the planting of vegetation.

Controls

1. In the E1, E2, E3 and E4 zones, buildings must be setback a minimum of five meters from side and rear boundaries.
2. In the E3 zone in a community title cluster subdivision, setback must be a minimum of:
   i. 3 metres from a side boundary; and
   ii. 10 metres from a rear boundary
3. In the E4 zone in a community title cluster subdivision:
   i. side setback must be a minimum of 900mm for building height up to 4.5 metres.
   ii. side setback must be a minimum of 1.5 metres for building height over 4.5 metres.
   iii. side setback must be a minimum of 3 metres for building height over 2 storeys.
   iv. rear setback must be a minimum of 3 metres for building height up to 4.5 metres.
   v. rear setback must be a minimum of 6 metres for building height over 4.5 metres.

Note: The minimum setback of a point on a building is based on the building height at that point.

Note: Any additional controls for specific development types are located in Part 9 (Specific Land Uses).

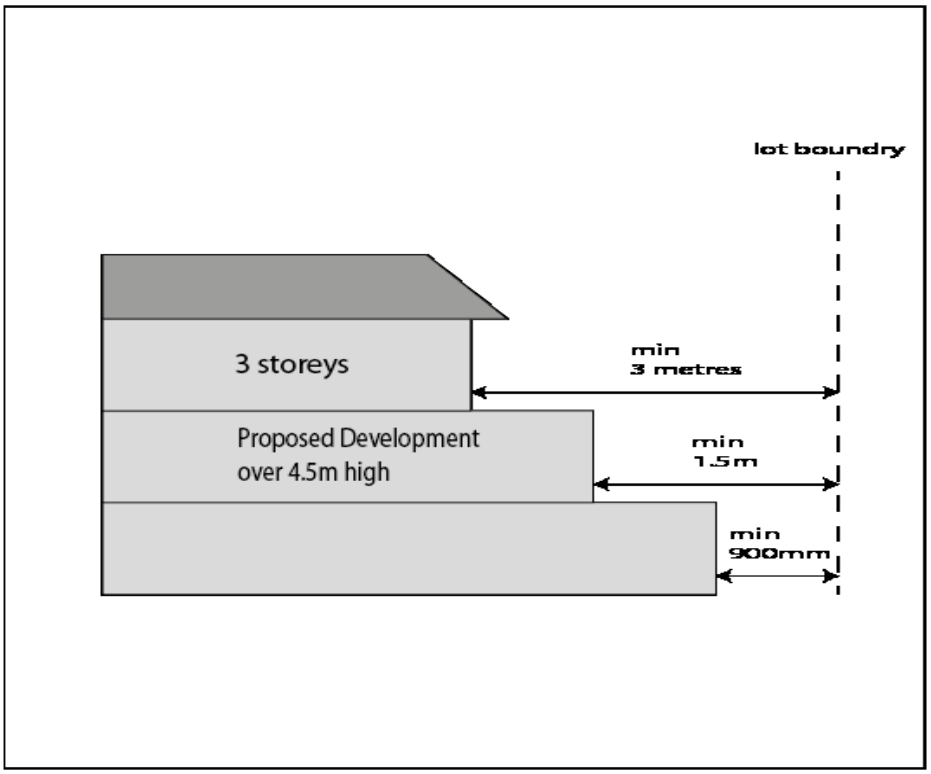


Figure 4 - Side Setback

3.3 BUILDING BULK

Objectives

a. To encourage good design and innovative architecture in order to improve the urban environment.

b. To minimise the visual impact of development when viewed from adjoining properties, the street, waterways and land zoned for public recreation purposes.

Controls

1. Large areas of continuous wall planes must be avoided by varying building setbacks, and using techniques to provide visual relief.
2. Building height and scale must relate to the topography and the existing site conditions.
3. Verandas, recesses, surface treatments and variations in material selection and colour should be utilised to reduce building bulk.
4. Landscaping should be provided to reduce the visual bulk of buildings.
5. Walls in excess of 15 metres in length must be articulated, landscaped, or otherwise treated in order to provide visual relief.
6. Walls in excess of four metres high must be articulated, landscaped or otherwise treated in order to provide visual relief.

3.4 SOLAR ACCESS AND ORIENTATION

Objectives

a. To ensure that reasonable access to sunlight is maintained.

b. To ensure that the design for solar access is not outweighed by the desire for views.

c. To promote passive solar design, and the use of thermal energy to encourage energy efficient buildings.

Controls

1. Developments must provide for the reasonable access to sunlight in accordance with the Planning Principle established by the Land and Environment Court in *The Benevolent Society v Waverley Council* [2010] NSWLEC 1082 and *Davies v Penrith City Council* [2013] NSWLEC 1141.
2. Development should avoid overshadowing of existing solar collectors for hot water or electricity.
3. Development must minimise overshadowing of public open space.
4. Openings on western elevations should be minimised to avoid the extremes of solar access. Where openings are unavoidable on a western elevation, they should be shaded by devices, eaves, landscaping or located higher on the façade.
5. At least 50% of the required area of private open space of each development, and at least 50% of the required area of private open space of adjoining development must receive a minimum of three hours of sunlight between 9am and 3pm on June 21.
6. Where adjacent existing developments and their open space receive less than the minimum requirements, any new development must seek to maintain or enhance that solar access.
7. Where lot orientation allows, developments should be designed so that the long axis of the development is running east-west.
8. Building openings on the western elevations should be minimised. Where openings are unavoidable, they should be located higher on the façade and shaded by eaves or landscaping or similar.

Note: The shadow cast by fences, roof overhangs, and changes in level are to be considered and should be indicated on any shadow diagrams submitted.

3.5 ENERGY EFFICIENCY AND GENERATION

Objectives

a. To ensure building orientation maximises solar access and natural cross ventilation.

b. To ensure energy efficiency is achieved in all developments.

c. To allow opportunities for future installation of renewable energy generation and low carbon technology.

d. To minimise the economic impacts of increasing electricity costs and any requirements to disclose energy efficiency when selling or leasing a property.

e. To ensure that development minimises the use of water and non-renewable resources.

f. To promote increased levels of energy efficiency in large-scale developments.

Controls

1. Buildings must be oriented to provide efficient use of solar energy and natural ventilation wherever possible.
2. Designs must consider future potential for renewable energy generation and low carbon technology.

3. Developments in excess of 4,000m² gross floor area must achieve the equivalent of a minimum 4 Star Rating under the Green Building Council of Australia's Green Star Rating tool.
4. Developments in excess of 2,000m² gross floor area should achieve the equivalent of a minimum 4 Star Rating under the Green Building Council of Australia's Green Star Rating tool.

Note: These controls are in addition to the requirements of BASIX and Section J of the Building Code of Australia. Formal certification of Green Star Rating under the Green Building Council of Australia is not required. Justification that the design would achieve the Green Star rate or an equivalent rating under a different system (e.g. NABERS) is only required.

3.6 LANDSCAPE DESIGN

Objectives

a. To provide quality site landscaping appropriate to the nature and scale of the development.
b. To conserve native vegetation and landscape features where possible.
c. To integrate site landscape design with the surrounding landscape.
d. To use predominantly local native species in the landscape design.
e. To enhance the amenity of the proposed development.

Controls

1. Appropriate landscape documentation must be prepared and submitted, in accordance with Table 6 – Landscape Development Type and Requirements and Council's *Landscape Design Guidelines*.
2. Appropriately qualified professionals must prepare landscape documentation. For Category 3 development, a qualified landscape architect should prepare landscape documentation. For Category 2 development, a landscape architect, landscape designer, or horticulturist should prepare landscape documentation.
3. The landscape consultant's declaration must be signed and submitted with the relevant landscape documentation

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements.

Table 6 - Landscape development type and requirements.

Development Type and Category	**Landscape Documentation**	
	Landscape Concept Plan at DA stage	Landscape Masterplan and Report at DA stage
Category 3: **Large Scale** • Development with an estimated value exceeding $1m, or • Development of 10 or more dwellings, or • Designated development, or • Childcare facilities, community facilities, educational establishments, seniors housing, health services facilities, or tourist accommodation, or. • Development in areas of high scenic quality, adjacent to the lake or pacific highway, in or adjacent to an environmental zone, on visually dominant ridgelines, or in a heritage conservation area.	Yes	Yes
Category 2: **Medium Scale** • Development with an estimated value exceeding $0.5m, or	No	Yes

Development Type and Category	Landscape Documentation	
	Landscape Concept Plan at DA stage	Landscape Masterplan and Report at DA stage
• Development for 3-9 dwellings, or • Dual occupancy development		
Category 1: Small Scale • Single dwellings, or • Development that will have little impact on the existing environment.	No	No

Note: If a development type is not detailed in this table, or you are unsure of the category and requirements, seek advice from Council.

3.7 LANDSCAPE AND TREE PLANTING IN CAR PARKS

Objectives

a. To provide broad canopy tree cover in car parks for shade and shelter.

b. To reduce the visual impact of car parking areas.

c. To maintain safety for car park users and sightlines below the tree canopy.

Controls

1. Development must include supply, installation and maintenance of at least one advanced clear-trunked broad canopy tree for every six at-grade car parking spaces.
2. Each landscape planting area must include at least one medium canopy tree with suitable ground covers or low shrubs below.
3. Each landscape planting area must have a minimum width of two metres.
4. The root volume for each tree must be a minimum of $8m^3$ and between 600 and 750mm deep.
5. The root volume must be either existing deep soil or an equivalent volume of gap graded (load bearing) soil, with a porous vehicle pavement over, that is installed to manufacturers specifications.
6. Each area allocated to tree planting must have a corresponding clear air space that is at least eight metres high and six metres wide.
7. All trees installed must be advanced stock and at least 75L container size.
8. All trees installed must be established and maintained for the life of the development. Any failed trees must be replaced immediately.

Note: Advice on recommended canopy trees for car parking areas should be requested from Council.

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements.

3.8 FENCING

Objectives

a. To ensure that fencing does not detract from the natural character of the landscape, inclusive of fencing design, materials and height.

Controls

1. Fencing must be consistent with the natural character of the landscape. Acceptable forms of fencing include post and wire, or post and rail fences.

2. Other types of fencing will only be permitted where the fencing does not have a detrimental impact on the scenic quality or natural character of the locality.
3. Fencing must not have the potential to affect fauna movement.
4. Solid fencing (including Colorbond) must not be used within Environmental Protection Zoned areas, except for entrance features, which must be constructed of masonry.

3.9 TRAFFIC AND TRANSPORT

Note: Several Australian Standards are specifically relevant to this section. All designs and development must be in accordance with the relevant Australian Standard.

Objectives

a. To provide effective, efficient and safe movement for pedestrians, cyclists and motor vehicles.
b. To ensure that vehicles can enter and leave a development site in a forward direction, unless otherwise justified to Council's satisfaction.

Controls

1. A Traffic Impact Statement must be prepared and submitted with any commercial/retail or industrial application for development with an area greater than 1000m², or where access to the site will be via an arterial or sub-arterial road.
2. Access to a site must be limited to one location where possible.
3. Direct access to arterial and sub-arterial roads must be minimised to maintain the efficient flow of traffic on those roads. Alternative access is encouraged where available.
4. Driveways must be located as far as possible from intersections.
5. All driveways must be designed and constructed to provide adequate sightlines.
6. Driveways and internal road circulation must be designed to cater for safe manoeuvring and queuing, so as not to disturb traffic operations on external roads.
7. The design and layout of the development must reflect the type of vehicles that will need to access the site/development. It must also ensure that vehicles can enter and leave the site in a forward direction.
8. Driveways must be of a type, construction and width suitable to the proposed development, and must be designed so as not to detract from the streetscape

Note: Refer to Council's *Traffic Impact Statement and Vehicle Access Guideline* for further details and requirements.

3.10 DESIGN OF PARKING AND SERVICE AREAS

Objectives

a. To ensure that on-site parking and driveways do not dominate or detract from the appearance of the development or the local environment.
b. To maximise pedestrian safety and amenity.
c. To ensure the safe and efficient movement of vehicles within, entering and leaving the site.

Controls

1. Parking and service areas must be located to the side or rear of the development.
2. The design of parking areas must include direct, safe and well marked pedestrian routes from the parking area to building entries.
3. Car park design must not result in dead-end aisles.

4. Parking aisles must be orientated at right angles to the main building frontage.
5. The design of parking areas must include appropriate lighting for safe pedestrian movement and security.
6. Car parks must be screened from the street with landscape planting or with high quality façade screening that allows natural lighting and ventilation.

Note: The design of parking areas must comply with the provisions of AS2890 Parking Facilities

3.11 CAR PARKING RATES

Objectives

a. To ensure that the number of car parking spaces is sufficient to support the intended use.

b. To ensure that the number of car parking spaces does not discourage the use of public transport or other modes of transport.

Controls

1. The number of car parking spaces provided must be consistent with the specifications of the Table 7: Car Parking Rates.
2. Where vehicle parking requirements are not specified in Table 7, justification must be provided that supports the proposed vehicle parking provisions, such as:
   i. Survey data from comparable facilities; and
   ii. Survey data from existing operations where expansion is proposed.
3. Where the floor area of an existing development is being increased, the required car parking is to be calculated for the additional floor area only.
4. Where the proposed number of car parking spaces is **less than** or **greater than** specified in Table 7, justification must be provided to support a variation, such as:
   i. Survey data from comparable facilities;
   ii. Survey data from existing operations where expansion is proposed; or
   iii. A proposal for dual use of parking spaces.
5. A reduction to the car parking rate must not exceed 20% or 20 spaces, whichever is the lesser.

Note: Where the required parking cannot be entirely provided on-site, alternative provisions for car parking may be made in accordance with the relevant *Section 7.11 Contributions Plan(s)* and/or *Council's Voluntary Planning Agreement Policy*.

Note: 'Amenities' and 'storage space' are not included when calculating Gross Floor Area (GFA) for car parking purposes.

Table 7 - Car parking rates table for development in Environment Protection zones

Development Type	Car Parking Rate
Disability parking rate	One space per 50 spaces. Where the requirement is between five and 50 spaces, at least one space is to be provided for persons with a disability. Disabled parking must comply with the relevant Australian Standard.
Dual occupancies (attached)	One undercover space and 1 space as single file parking per dwelling of the dual occupancy.
Dwelling house	One undercover space and one space as single file parking.

Development Type	Car Parking Rate
Home business or industry	As per Dwelling - ie: one undercover space and one space as single file parking per dwelling.
Where vehicles are an intrinsic component of the business or industry	As per dwelling house, plus two spaces
Bed and breakfast establishment	As per dwelling house, plus one space per guestroom. May be provided as single file parking where guest parking is provided behind dwelling parking.
Eco-tourist facilities (not including a motel or hotel)	
Where serviced apartments	One space per unit, plus one space per 50m² GFA for any dining room provided as part of the development,
Where backpackers hostel	One space per 100m² GFA and parking for a mini-bus
Where a Camping Ground	One space per tent site
Funeral homes	One space per employee plus one space per three seats in chapel(s)
Education establishments	
Where pre-school with normal school Hours	One space per 4 children, plus 1 space per 1.5 full-time equivalent staff.
Where primary or secondary school	One space per 1.5 full-time equivalent staff, plus one space per 50 students
Above secondary school	One space per 1.5 full-time equivalent staff, plus one space per eight students
Community facilities	Five spaces, plus one space per 40m² GFA
Place of public worship	One space per three seats

3.12 NON-DISCRIMINATORY ACCESS

Objectives

a. To ensure that development accommodates all people regardless of mobility.
b. To ensure universal design that provides non-discriminatory access and equitable use.
c. To minimise the scale and visual impact of ramp structures on the footpath and building façade.
d. To ensure that design for flooding and sea level rise does not preclude non-discriminatory access.

Controls

1. The design and construction of development must ensure that non-discriminatory access is provided to enable all users of that development to access the same level of service and use.
2. Building entries must be located where there is the smallest level change from the public footpath to the ground floor interior.
3. Where floor levels are raised to accommodate flooding or projected sea level rise, the design of non-discriminatory access must incorporate an external terrace or internal floor space set at an intermediate level between the footpath and general ground floor level of development.

4. Where development is listed in Table 8, a Disability Access Audit must be prepared in accordance with Council's *Non-discriminatory Access Guideline* and submitted to Council. The Disability Access Audit must be prepared by an accredited access consultant.

***Note**:* Refer to Council's *Non-discriminatory Access Guideline* for further information.

Note: A Disability Access Audit may be waived for some developments at the discretion of the assessing officer for some Changes of Use proposals.

Table 8 - Development types requiring a Disability Access Audit

Amusement centres with a total floor area of 500m^2 or more	Markets with a total floor area of 500m^2 or more
Backpackers' accommodation with 20 or more bedrooms	Manufactured home estate/caravan park
Boarding House with more than 20 rooms	Medical centre
Business/commercial premises with a total floor area of 500m^2 or more	Mixed use development with a total floor area of 500m^2 or more
Child care centre	Multi-dwelling housing with 10 or more dwellings
Community facility	Nightclub
Educational establishment	Passenger transport facilities
Entertainment facility	Place of public worship
Function centre	Recreation facilities – indoor, outdoor and major
Group home	Registered club
Health consulting rooms with four or more consulting rooms	Retail premises with a total floor area of 500m^2 or more
Health services facilities	Residential care facility
Hospital	Residential flat building with 10 units or more
Hotel or motel accommodation	Seniors housing
Information and education facility	Tourist accommodation with 20 units or more
Licensed premises	Change of Use

3.13 SAFETY AND SECURITY

Objectives

a. To ensure that development mitigates opportunities for crime, and perceived opportunities for crime.

Controls

1. Developments must ensure that the following Crime Prevention Through Environmental Design (CPTED) principles have informed the design of the proposed development:

   i. Surveillance – Developments must be designed and managed to maximise the potential for passive surveillance;

   ii. Access Control – Developments must be designed so as to make them legible for users without losing the capacity for variety and interest;

iii. Territorial Reinforcement – Developments must be designed to define clearly legitimate boundaries between private, semi private and public space; and

iv. Space Management – Developments must be designed and detailed to minimise damage and the need for undue maintenance, without undermining the aesthetic and functional qualities of the building.

Note: Refer to Council's *Crime Prevention Through Environmental Design Guideline* for further information on CPTED principles.

2. Where development:

   i. is listed in Table 9, or

   ii. is valued at $5,000,000 or more, or

   iii. has a gross floor area greater than 5,000m^2, or

   iv. will be open to the public between the hours of 9pm and 6am, a Crime Risk Assessment must be prepared and submitted to Council.

3. The Crime Risk Assessment should be prepared by a person who has undertaken the NSW Police Service 'Safer by Design' course (or equivalent) and must:

   i. Analyse the types of crime that may be prevalent in the area, and to which the development may be susceptible;

   ii. Provide information as to how the design was informed by the CPTED principles; and

   iii. Inform the design, construction or future management practises of the development (eg: building materials, signage, lighting, landscaping, security patrols, maintenance and graffiti removal practices).

4. Any recommendations or shortfalls identified by a Crime Risk Assessment are to be implemented into the design of the development to the satisfaction of the assessing officer.

Note: Refer to Council's *Crime Prevention Through Environmental Design Guideline* for further information on what needs to be covered in a Crime Risk Assessment.

Table 9 - Development types requiring a Crime Risk Assessment

Community facilities	Car parks
Development involving the provision of publicly accessible open space	Places of public worship
Educational establishments	Seniors living developments and hospitals with more than 30 beds
Information and education facilities	Eco-tourist facilities

3.14 CUT AND FILL

Objectives

a. To minimise land shaping, particularly outside the building footprint.

b. To ensure development is on a stable site.

c. To minimise the impact on groundwater flow.

d. To ensure that development does not concentrate surface water flows to adjoining properties.

e. To minimise the extent of earthworks, stormwater infrastructure and retaining structures and the associated costs.

Controls

1. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area, or within the extent of the 100 year probable ARI (1% AEP) flood event.
2. Cut and fill associated with a development must only occur within the building and car park footprint.
3. Cut and fill associated with a dwelling development must comply with the provisions in Table 10 and Figure 5.
4. Where the ground level change across the proposed footprint of a dwelling, measured in any direction, exceeds 2m, the dwelling design must include one or more of the following:
   i. split level design
   ii. 2 storey design with the garage below habitable floorspace
   iii. drop edge beam or suspended slab on a footing wall
   iv. pier and beam construction.
5. Cut and fill associated with all other development must comply with the provisions in Table 11.
6. Retaining structures greater than 1m in height must be designed by an engineer, and the certification details lodged with the development application.
7. Batter slopes must not exceed a gradient of 1:4, unless stabilised by dense planting.
8. Fill must not contribute to unreasonable impacts on amenity or the redirection of water onto adjoining properties.
9. Any fill used must be certified Virgin Excavated Natural Materials, certified Excavated Natural Material or uncontaminated engineered fill.

Table 10 - Requirements for cut and fill works for a dwelling

Location	Type of Works	Requirement	Other Requirement
within building footprint	cut and/or fill - retained	d =3 m max	
outside building footprint	cut and/or fill - retained	c =1.0m max	
near common boundary	cut and/or fill - retained	a =2m min* b =1m max	landscape planting to area between boundary fence and retaining wall
near common boundary	fill – unretained batter	f =400 min	side and rear fences built on existing ground level
remainder of site	cut and/or fill - retained	1.0m max	retaining walls on or near a front boundary do not exceed 1.0m.
remainder of site	fill – unretained batter	e = 600mm max	batter slope not to exceed 1:4

Note *: distance to a boundary is measured from the face of the retaining wall

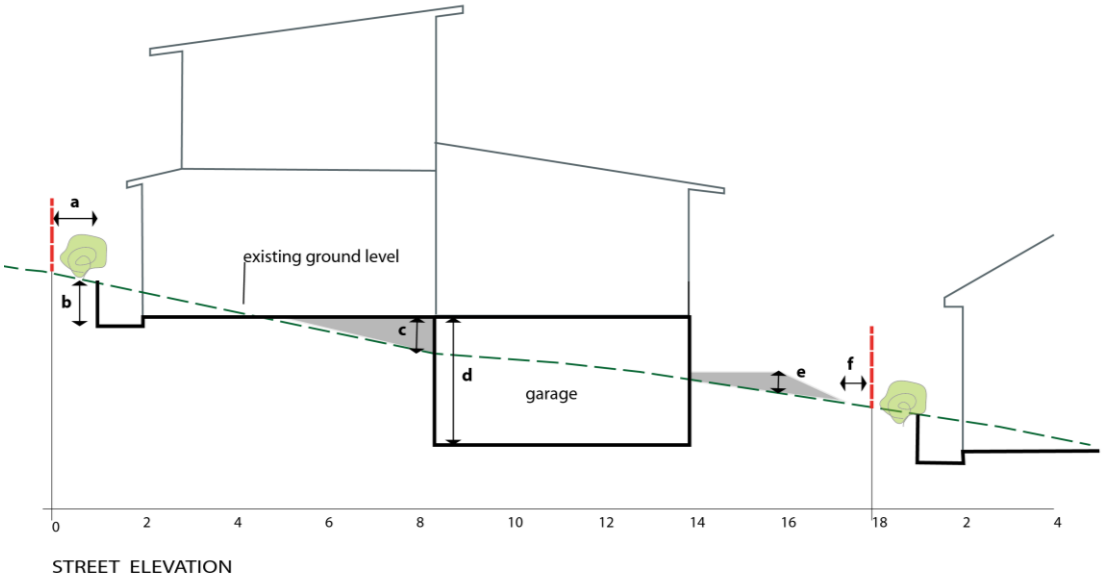


Figure 5 - Cut and fill for a dwelling

Table 11 - Requirements for cut and fill works generally

Location	Type of Works	Height	Other Requirement
within building footprint	cut and/or fill - retained	4m max	
within 2m of a boundary	cut and/or fill - retained	not permitted	landscape planting to area between boundary and retaining wall
remainder of site	cut and/or fill - retained	1.0m max	.

Note *: distance to a boundary is measured from the face of the retaining wall

4 OPERATIONAL REQUIREMENTS

4.1 DEMOLITION AND CONSTRUCTION WASTE MANAGEMENT

Objectives

a. To reduce demolition waste by maximising beneficial reuse of infrastructure, buildings and materials onsite.
b. To avoid creating construction waste wherever possible.
c. To enable maximum diversion of demolition and construction waste to reuse, recycling or composting.
d. To ensure that waste management is planned across all demolition and construction stages so that reusable resources and waste can be appropriately and effectively stored and removed safely from site without adverse impacts on local amenity.

Controls

1. Applications must provide a completed Demolition Waste Management Plan (WMP) (where there are demolition works) and a Construction WMP (for all construction works), in accordance with Chapter 2 (for Demolition) and Chapter 3 (for Construction) of the Lake Macquarie City Council Waste Management Guidelines unless the development is:

   i. Permitted without consent in this zone
   ii. Agriculture (other than intensive agriculture)
   iii. Drainage
   iv. Earthworks
   v. Forestry
   vi. Rail lines
   vii. Roads
   viii. Roadside stalls
   ix. Signs
   x. Stormwater management facilities
   xi. Utility installations

   These plans must be provided to any relevant person involved in the demolition and/or construction, including architects, project managers, builders, contractors and sub-contractors.

2. The Demolition WMP must describe how the proposal avoids creating waste and how it maximises the reuse and recycling of demolition and construction materials.
3. The following must be shown on scaled plans to be submitted with the development application for demolition and construction stages:

   i. waste storage area(s) with bins and equipment shown to scale;
   ii. waste collection area(s) with bins shown to scale (if different from storage areas);
   iii. waste carting route(s) from buildings to waste storage area(s);
   iv. bin carting route(s) from waste storage to collection point(s) (if different from storage areas); and
   v. for developments proposing onsite collection, the waste collection vehicle route, swept paths and clearances.

4.2 WASTE MANAGEMENT

Objectives

a. To ensure that waste management infrastructure and operational procedures are an integral part of the development's design and ongoing management.
b. To ensure sufficient volume of equitably accessible, safe, hygienic and aesthetically appropriate waste storage is provided on the property to minimise negative impacts of waste management on occupants and neighbours.
c. To enable maximum opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins.
d. To ensure equitable access for all occupants to opportunities to maximise diversion of waste.
e. To provide flexibility to expand or reconfigure waste separation systems, so that owners and occupants have options to access a range of waste services.
f. To ensure secure separation of commercial waste from residential waste storage and collection.
g. To provide unobstructed waste collection point(s) that are safely and efficiently accessible by Council waste collection vehicles wherever possible.
h. To provide unobstructed, safe access to move bins and bulk waste (such as furniture and whitegoods) between storage and collection points.
i. To integrate with the natural landscape.

Controls

1. Applications Operational Waste Management Plan (WMP) must be prepared in accordance with the Lake Macquarie Waste Management Guidelines and submitted with the development application for all identified in Table 12, in other parts of this Development Control Plan or when Council identifies that particular circumstances warrant it.

Table 12 - Uses Requiring an Operational Waste Management Plan

• Dwellings • Commercial and retail, recreation and tourism facilities • Industrial developments and infrastructure • Events • Subdivisions

2. The Operational WMP must address all wastes that will be generated from the operation of the premises. The plan must maximise opportunity for separation from general waste of reusable, recyclable and compostable materials for reuse, recycling and composting wherever possible.
3. The development application must demonstrate - in the Operational WMP and on plans with bins, equipment, waste collection vehicle swept paths and clearances all shown to scale - that the development has sufficient and usable:
   i. bin type, sizes, numbers and collection frequency; and
   ii. internal storage within premises; and
   iii. waste carting route(s) from premises to external waste storage area(s); and
   iv. external waste storage areas; and
   v. bin carting route(s) from waste storage to waste collection point(s); and
   vi. waste collection point(s);
   vii. for developments proposing onsite collection, the waste collection vehicle route(s), swept paths and clearances; and

viii. waste management information guide for owners and occupants.

4. For developments with the following specific land uses, the development and Operational WMP must address other matters as identified in the Lake Macquarie Waste Management Guidelines:
   i. boarding houses and hostels; group homes; short-term rental accommodation; social housing; and seniors' living developments;
   ii. commercial and retail premises
   iii. veterinary hospitals;
   iv. aged care facilities;
   v. child care centres;
   vi. service stations;
   vii. public and private recreation; and amusement and functions centres and entertainment facilities;
   viii. vehicle repair workshops and depots;
   ix. sustainable aquaculture; and
   x. light, heavy and general industries, hazardous, offensive and high technology industries; infrastructure; and waste management or resource recovery facilities.
   xi. to demonstrate compliance with the Lake Macquarie Waste Management Guidelines.
5. If the development is not designed to enable Lake Macquarie City Council waste services, a letter must be provided from a private waste contractor advising how they are able to provide the required garbage, recycling and green (garden and food) waste services and (if needed) access the premises.

4.3 ON-SITE SEWAGE MANAGEMENT

Objectives

a. To ensure that land is suitable for on-site sewage management, and that on-site sewage management systems are designed to operate sustainably, without resulting in environmental harm or risk to public health.

Controls

1. On-site sewage management must not be located on sites:
   i. Where connection to reticulated sewer is available (this requirement does not apply to grey water treatment systems); or
   ii. Below the 20-year ARI flood level.
2. Where an on-site sewage management system is proposed, an assessment report must be provided to determine land capacity for sewage effluent. An appropriately qualified consultant must carry out the assessment. The site assessment must:
   i. Be undertaken in accordance with the Environmental Health Protection Guidelines, and On-site Sewage Management for Single Households;
   ii. Recommend suitable wastewater treatment technology;
   iii. Include water balance calculations for determination of the size of the effluent irrigation area based on zero wet weather storage requirements; and
   iv. For greywater treatment systems, it must be demonstrated that the proposed system complies with the *NSW Guidelines for Greywater Reuse in Sewered, Single Household Residential Premises*.
3. Applications for sewage treatment systems must include:
   i. Sewerage Site Plan (1:200) indicating the location of the treatment system, disposal area, and buffer distances to boundaries, dwellings, water courses and other significant features on the site; and

ii. Detailed plans and sections of the proposed effluent disposal system.

4. Other than for greywater treatment systems, surface and subsurface irrigation areas should be made up of irrigation zones that are a minimum 300m^2 and maximum 500m^2. Multiple irrigation zones must be dosed via an automatic irrigation controller or indexing valve.
5. Pump-out septic systems are only acceptable where on-site disposal of effluent is not feasible, and where access is available for a pump-out service to be rendered safely from a public road at the property boundary.

4.4 LIQUID TRADE WASTE AND CHEMICAL STORAGE

Objectives

a. To ensure that liquid trade waste is disposed of appropriately, and does not enter the environment.

b. To ensure that chemicals associated with a development are stored in a secure manner.

Controls

1. Where development is proposed that will generate liquid trade wastes, evidence of a liquid trade waste agreement with Hunter Water must be provided. On-site treatment and/or disposal of liquid trade waste will not be permitted.
2. Developments that generate liquid trade waste must ensure that this waste is adequately contained and bunded to prevent pollution entering the environment.
3. Where chemicals are stored within, or as part of development, those chemicals must be adequately contained and bunded to prevent chemicals entering the environment unintentionally in the event of a spill, flooding, or any other event that may lead to the escape of chemicals.
4. All containment and bunded areas must drain to the reticulated sewerage system under agreement with Hunter Water. No on-site treatment or disposal of liquid trade waste or spilt chemicals will be permitted.

4.5 EROSION AND SEDIMENT CONTROL

Objectives

a. To ensure that development is designed to prevent erosion by minimising disturbance, retaining vegetation and reducing the need for earthworks.

b. To prevent erosion and sediment-laden run-off during site preparation, construction and the ongoing use of land.

c. To ensure that a number of integrated solutions, using a treatment train approach, are implemented for the control and treatment of erosion and sediment.

Controls

1. For proposals where the area of soil disturbance is less than 250m^2, appropriate erosion and sediment control measures must be installed and maintained. This will prevent pollutants from entering water courses during construction and until 70% ground cover is attained.
2. For proposals where the area of soil disturbance is more than 250m^2 but less than 2500m^2, an Erosion and Sediment Control Plan (ESCP) must be prepared and lodged, in accordance with Council's *Erosion and Sediment Control Guideline*.
3. For proposals where the area of soil disturbance is more than 2500m^2, a Soil and Water Management Plan, identifying erosion prevention and sediment control measures, must be prepared and lodged, in accordance with Council's *Erosion and Sediment Control Guideline*.
4. The maximum area of soil exposure at any one time must not exceed 2.5 hectares.

Note: Council may vary the requirements, especially where there is a higher or lower risk of polluting receiving waters. Further information may be required for any site depending on, but not limited to, the calculated soil loss, sediment type and an assessment of site constraints and opportunities.

4.6 AIR QUALITY

Objectives

a. To ensure that development does not adversely affect air quality beyond the National Environment Protection Measure (Ambient Air Quality) standard for criteria air pollutants.

b. To ensure that measures are implemented to maintain air quality.

c. To ensure that odours and emissions do not have an unreasonable impact on the amenity of neighbouring properties, or the health of their occupants

d. To ensure that odours and emissions do not have an unreasonable impact on public health.

e. To ensure that emissions do not have an unreasonable impact on natural environment.

Controls

1. An air quality report must be prepared by an air quality/odour expert where a proposed development has the potential to adversely affect air quality. This report must:
   i. Consider the information provided on Council's Local Air Quality Maps;
   ii. Address impacts caused by construction and ongoing operation or occupation of the development;
   iii. Identify emissions, and measures to mitigate the overall impact, and the impact on nearby residences and occupants of other properties especially sensitive receivers; and
   iv. Be prepared in accordance with the Approved Methods for the Modelling and Assessment of air pollutants in New South Wales and other requirements prescribed in State and Federal legislation.

Note: Council's air quality map is based on modelling air pollution in the local government area and identifies areas where the Criteria Air Pollutants exceed the National Environment Protection Measure (Ambient Air Quality) standard.

4.7 NOISE AND VIBRATION

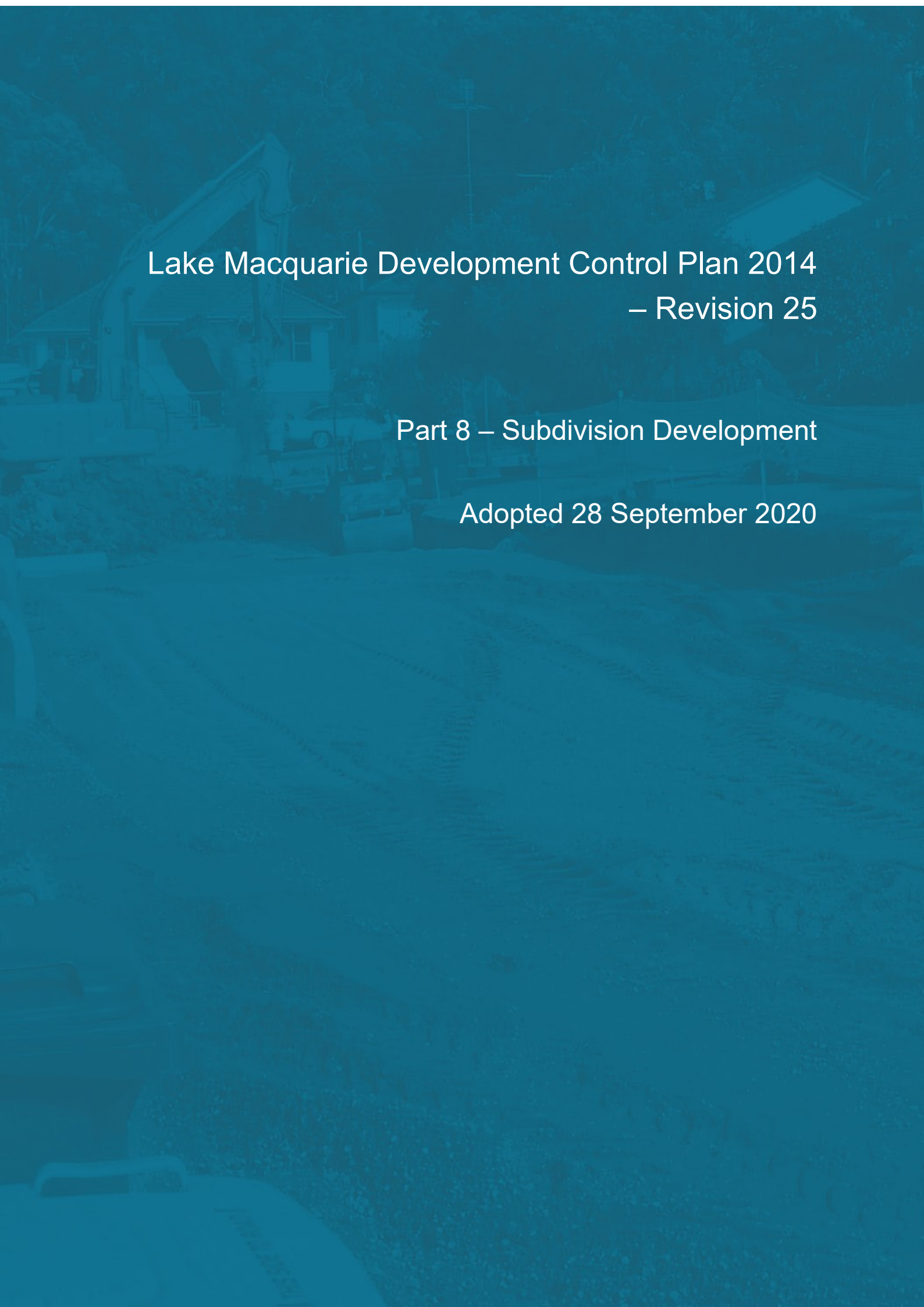
Objectives

a. To minimise the generation of noise and/or vibration, and to mitigate associated adverse impacts on the amenity of neighbouring properties and their occupants, and on occupants of the proposed development.

Controls

1. Where proposed development has the potential to produce an adverse noise or vibration impact on occupants of the site or of nearby properties, an acoustic and vibration study must be prepared by a qualified consultant, to Council's satisfaction.
2. Noise or vibration generated by development must not exceed the criteria stipulated in the *NSW Industrial Noise Policy* or the *Noise Guide for Local Government* at the property boundary of the noise source, or at a receiving lot boundary.
3. Measures must be implemented to ensure that any noise or vibration generated is not offensive, in accordance with the *Noise Guide for Local Government*
4. During construction, the operating noise level of machinery, plant and equipment must comply with the *Noise Guide for Local Government*.
5. A suitably qualified acoustics consultant must prepare a Noise Management Plan where construction is proposed to exceed 26 weeks.

6. Noise generating operations and outdoor operations must only occur between 7am and 6pm Monday to Saturday.
7. Council may request at any stage an independent report to confirm that noise emissions are within acceptable limits; such costs are to be borne by the applicant/ operator.



Lake Macquarie Development Control Plan 2014 – Revision 25

Part 8 – Subdivision Development

Adopted 28 September 2020

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1 INTRODUCTION

Part 8 – Subdivision Development applies to subdivision development in all zones. It is intended to ensure that subdivision occurs in a manner that supports the intention of the Zone in which it is proposed, and achieves orderly development of land and good urban structure outcomes.

This part of LMDCP 2014 does not apply to strata subdivision.

This part of LMDCP 2014 is to be read in conjunction with Part 1 (Introduction), which outlines Council's general requirements for all developments and provides advice on the lodgement requirements for a Development Application.

Additionally, an Area Plan may apply depending on the location of the development. Area Plans contain area specific controls that need to be considered and can be found in Parts 10, 11 and 12 of this DCP.

This part of the LMDCP 2014 divides subdivision into different categories depending on the scale and number of lots.

Minor scale subdivision means subdivision of land creating less than 10 lots.

Medium scale subdivision means subdivision of land creating between 10 and 50 lots.

Major scale subdivision means subdivision of land creating more than 50 lots.

1.1 HOW TO USE THIS PLAN

LMDCP 2014 is the primary document used by Council's development assessment staff to assess development applications. Proponents of development will need to:

1. Determine the land use zone that applies to the development site (refer to LMLEP 2014).
2. Refer to Part 8 of LMDCP 2014 that contains controls subdivision.
3. Check if an Area Plan applies to the proposed development site (Parts 10, 11 or 12).

The development controls contained within each part and section, seek to achieve desired land use, conservation and/or built outcomes consistent with corresponding LMLEP 2014 zone objectives and aims in each part of LMDCP 2014.

Each part of LMDCP 2014 is structured to promote a development application process where the site and context analysis informs the design of the development. This part of the DCP has the following main headings:

- **Introduction** – provides information about the particular part of the DCP, how to use the DCP and aims for development.
- **Context and Setting** – outlines the site issues and environmental opportunities and constraints that need to be addressed in the development application.
- **Subdivision Design** – provides Council's detailed design related requirements.
- **Subdivision Construction** – provides Council's detailed requirements associated with the construction and ongoing operation of the development.

The detailed provisions of each subsection in each part of LMDCP 2014 are presented as follows:

- **Objectives** – state what outcomes Lake Macquarie City Council is seeking new development to achieve, and
- **Controls** – advise the requirements for achieving outcomes and the desired future character identified by the aims and objectives.

Additionally, Part 8 contains specific aims that LMDCP 2014 seeks to achieve. Where specific controls are not provided, these will be used to provide direction for a merits based assessment of a development application.

For more information on how to use this document, please consult Part 1 – Introduction.

1.2 AIMS FOR SUBDIVISION DEVELOPMENT

The aims of LMDCP 2014 for subdivision development are:

1. To ensure that all subdivisions, and the potential impacts of such subdivisions and subsequent development take account of the principles of environmental sustainable development.
2. To ensure that the subdivision of land balances environmental, social and economic issues, and achieves good urban structure outcomes through increased connectivity, legibility and permeability. .
3. To ensure that the road network is efficient and legible through providing a grid or modified grid subdivision pattern. Subdivisions must also integrate closely with surrounding existing and planned future development.
4. To ensure that all proposed lots are provided with an appropriate level of amenity, and are physically capable of development. They must also have access to infrastructure and utility services.

1.3 SUBMISSION REQUIREMENTS

Different scale subdivision proposals require a different level of detail to be submitted to Council. The three scales of subdivision development discussed in this part of LMDCP 2014 include;

- Minor – subdivision creating less than 10 lots.
- Medium – subdivision creating between 10 and 50 lots.
- Major – subdivision creating more than 50 lots.

Schedule 1 of the *Environmental Planning and Assessment Regulation 2000* sets out the minimum submission requirements. This part of Lake Macquarie DCP 2014 outlines Council's requirements for subdivision applications. The following documents may be required to be submitted to Council with an application for subdivision. The detail in these documents will depend on the scale and complexity of the subdivision proposal.

- Site analysis plan and report;
- Structure plan;
- Water Cycle Strategy; and
- Subdivision Plan and report.

Please refer to the *Subdivision Guideline* for further information on the requirements of these documents.

Studies, reports or assessments conducted by suitable qualified consultants are to be submitted with subdivision applications where required by relevant controls contained in this part of LMDCP 2014, LMLEP 2014, or when requested by Council. These may include, but are not limited to:

- Flora and Fauna Assessment, a Species Impact Statement, and a Significance Test where applicable;
- Visual Impact Assessment;
- Land Clearance Plan;
- Bushfire Risk Assessment and Bushfire Management Plan;
- Flood Study;
- Geotechnical Report;
- Preliminary Acid Sulphate Soil Assessment and Management Plan;
- Erosion and Sediment Control Plan when not required as a component of a Soil and Water Management Plan;
- Contamination Assessment;

- Acoustic Assessment;
- Subdivision Waste Management Plan;
- Social Impact Assessment;
- Economic Impact Assessment;
- Heritage Report and/or Aboriginal Archaeology Report,
- Servicing and Infrastructure Plan;
- Water Quality and Stormwater Management Plan;
- Traffic and Transport Study;
- Landscape Plan; and
- Engineering Design Plans for Roads and Drainage.

The stage at which these documents are prepared will be dependent on the scale and complexity of the proposal. Early consultation with Council staff is strongly recommended to help determine what studies and/or reports are required and their detail.

2 CONTEXT AND SETTING

This section of the DCP applies to subdivision in all land use zones under Lake Macquarie LEP 2014.

2.1 SUBDIVISION AND EXISTING DEVELOPMENT

Where subdivision is proposed on a lot which includes an existing development, the following provisions apply.

Objectives

a. To ensure that the amenity and function of existing development on the parent lot is maintained.

Controls

1. Relevant controls within other parts of this DCP must be considered where subdivision is proposed on a lot containing existing development.
2. Subdivision must not result in the existing development being inconsistent with relevant controls contained in other parts of this DCP.
3. Subdivision must not result in the existing development being left with inadequate waste storage or waste collection location options.

2.2 SITE ANALYSIS

Objectives

a. To encourage good site planning and landscape outcomes, informed by an understanding of the site and its context.

b. To ensure that development occurs in an ecologically sustainable manner.

c. To ensure that potential social, environmental and economic impacts of development are identified early in the planning process.

d. To inform a design that is energy efficient in terms of site layout, consumption and materials.

Controls

1. A Site Analysis Plan must be submitted. It must identify the existing conditions relating to the subject site and the surrounding land that may influence the site planning process.
2. The Site Analysis Plan must address:
   i. All relevant items as set out in the *Subdivision Guidelines*; and
   ii. All relevant matters outlined below in section 2.3 to 2.18.
3. The Site Analysis Plan must provide a comprehensive view of the constraints and opportunities of the development site that will guide the design process.
4. The development application must clearly show that the constraints and opportunities identified in the Site Analysis Plan have been used to inform and resolve the subdivision design.
5. Where development is proposed adjacent to a common boundary shared with Council or another public authority, Council may request a registered surveyor's plan to confirm that development and access arrangements are wholly confined within the subject lot.

Note: The detail of the Site Analysis Plan should be tailored to the site and complexity of the proposed subdivision.

2.3 SCENIC VALUES

The **Landscape Settings and Significant Natural Landscape Features Maps** identify the Landscape Setting boundaries and the relevant Scenic Management Zone for each Landscape Setting. The maps are a guide to the scenic quality associated with lands within the City of Lake Macquarie and are contained within

the *Scenic Management Guidelines*. The *Scenic Management Guidelines* provide supporting documentation to this DCP.

Objectives

a. To ensure that the scenic values of the City are protected.

b. To ensure that developments visible or adjoining the coastline, Lake Macquarie or ridgelines maintain and enhance the scenic value of these features.

Controls

1. A landscape and visual impact assessment is required for subdivision development in any zone where:
   i. The site is within 300m of the mean high water mark of the lake or coast
   ii. 10 or more lots are proposed,
   iii. Loss of native tree cover of one hectare or more, or
   iv. A tree on the significant tree register is proposed to be removed.
2. A landscape and visual impact assessment must be prepared in accordance with section 7.3 of the Scenic Management Guidelines.
3. Developments must be designed and sited to complement their location through:
   i. the retention of existing vegetation,
   ii. incorporating appropriate landscaping,
   iii. minimising cut and fill, and
   iv. subdivision design and layout being compatible with its natural context.

2.4 GEOTECHNICAL

Objectives

a. To minimise the potential of damage to buildings/structures resulting from land movement.

b. To provide guidance on the preparation of geotechnical reports required to support a development application.

Controls

1 A Slope Stability Assessment is not required with a development application for subdivision development consisting of:
   i. 4 or less lots; and
   ii. Not including any new public road; and
   iii. Within any of the following LMLEP 2014 zones: Rural and Transition zones, Residential Zones or Environmental Protection zones; and
   iv. Within a Geo_4, Geo_5 or Geo_6 zone.

2 A geotechnical report prepared by a geotechnical engineer must accompany an application for all other development as specified in Council's Geotechnical Slope Stability Guideline. The report must be prepared in accordance with these Guidelines.

3 Subdivision type should comply with Table 1 – Slope and Development Suitability.

Note: After lodgement of a Development Application, Council may still require the submission of Geotechnical Report for the development types identified at (1) following a site inspection.

Table 1 - Slope and Development Suitability

Slope	Potential Hazard	Develop. Suitability
<1:20 (0-5%)	Flooding, high shrink swell soils, gravelly soils.	Drainage, stormwater reserve, open space. All types of subdivision
1:20 – 1:10 (5-10%)	Shallow soils, stony/gravel soils, overland flow and poor surface. Profile drainage, deep, swelling, erodable or dispersible soils.	All types of subdivision
1:10 – 1:7 (10-15%)	Overland flow, geological constraints – possibility of mass movement, swelling and erodable soils.	Residential subdivisions for detached housing, multiple dwelling housing, residential flat buildings. Industrial subdivision for smaller footprint modular industrial buildings,
1:7-1:5 (15-20%)	Geological constraints – possibility of mass movement, swelling and erodable soils.	Residential subdivisions for detached housing of a suitable form and construction.
1:5 –1:4 (20-25%)	Geological constraints – possibility of mass movement, high to very high erosion hazard.	Selective residential subdivision, generally of low density on lots larger than 450m² and of suitable form and construction
>1:4 (>25%)	Geological constraints – possibility of mass movement, severe erosion hazard.	No type of subdivision is recommended

2.5 MINE SUBSIDENCE

Objectives

a. To minimise risks to buildings and structures associated with potential mine subsidence.

Controls

1. Where an application is made for the construction of a structure or building within a Mine Subsidence District, written concurrence must be obtained from the Mine Subsidence Board. Written concurrence should be obtained prior to the application being submitted to Council.
2. Written concurrence from the Mine Subsidence Board is not required for certain works that have deemed approval under the Mine Subsidence Board's publication 'A Guide for Council Staff'.

***Note*:** Please refer to the Mine Subsidence Board's 'Surface Development Guidelines' for important information.

2.6 CONTAMINATED LAND

Objectives:

a. To ensure that contaminated land is identified through appropriate investigations

b. To ensure that contaminated the site is appropriately and effectively remediated prior to development taking place.

c. To ensure that changes to land use will not increase the risks to public health or the environment as a result of contamination on site, or adjacent properties.

Controls:

1. Where development is proposed on land identified as being potentially contaminated, a Preliminary Site Investigation Report must be prepared and submitted with the application for development. Refer to Council's *Policy for Managing Contaminated or Potentially Contaminated Land* for further information.

2. Where contaminants are found within the site, a Detailed Site Investigation Report must be prepared and lodged with the development application.
3. Where a Detailed Site Investigation Report identifies the need for remediation, a Remedial Action Plan must be prepared and submitted with the application.
4. The site must be validated as suitable for its intended use.

Note: At discretion, Council may request an independent third party peer review of a consultant's report (including but not limited to, the Preliminary Site Investigation Report, Detailed Site Investigation Report, Remedial Action Plan), prior to the commencement of the construction of the development. In some circumstances, these "site audits" must be performed by a site auditor accredited by the NSW Environment Protection Authority under the Contaminated Land Management Act 1997. Further information on site audits can be found in the Managing Land Contamination: Planning Guidelines.

Note: Refer to SEPP 55 and the NSW State Governments '*Managing Land Contamination: Planning Guidelines*' for more information.

2.7 ACID SULFATE SOILS

Objectives

a. To ensure that disturbance of Acid Sulfate Soils or Potential Acid Sulfate Soils is minimised, to prevent adverse environmental impact on soil conditions.
b. To ensure that water quality and associated receiving waters are not detrimentally affected by the effects of Acid Sulfate Soils.
c. To ensure that habitat is not detrimentally affected by the effects of Acid Sulfate Soils.
d. To ensure that built structures and infrastructure are not detrimentally affected by Acid Sulfate Soils.

Controls

1. Development should be sited or designed to avoid the disturbance of Acid Sulfate Soils or potential Acid Sulfate Soils.
2. Where the disturbance of Acid Sulfate Soils is unavoidable, a Preliminary Acid Sulfate Soil Assessment report must be submitted with the development application, in accordance with the *NSW Acid Sulfate Soils Planning Guidelines*.
3. Where a Preliminary Acid Sulfate Soil Assessment report identifies potential adverse impacts, a detailed assessment report and management plan must be submitted, in accordance with the *NSW Acid Sulfate Soils Planning Guidelines*.
4. Any Acid Sulfate Soils must be identified on the site analysis plan.

***Note*:** Refer to Lake Macquarie Council's Acid Sulfate Soil planning maps showing classes of land containing potential or actual Acid Sulfate Soils. These maps are available at Council's Customer Service Centre, Speers Point.

2.8 WATER CYCLE MANAGEMENT

Objectives

a. To ensure that development does not adversely affect natural flow regimes, water quality or availability, including ground water, and to ensure that water quality is maintained or improved.
b. To incorporate Water Sensitive Urban Design techniques into subdivision design.
c. To minimise any adverse impacts of increased development on downstream built or natural environments or nearby land.
d. To minimise the volume and rate of stormwater leaving a development site.

e. To reduce consumption of potable water by reducing demand, increasing water efficiency and using non-potable water sources (rainwater, stormwater, greywater, recycled water), as appropriate.

f. To ensure that natural water systems that contribute to improved water quality (creeks, rivers, wetlands, estuaries, lakes, lagoons, groundwater systems and their associated vegetation) are protected and enhanced.

g. To integrate water management systems into the landscape in a manner that provides multiple benefits. This should include water quality protection, stormwater retention and detention, public open space and recreational and visual amenity.

h. To ensure that stormwater and wastewater management and re-use systems operate sustainably, without resulting in environmental harm or risk to public health.

Controls

1. A *Water Cycle Management Plan* must be prepared and submitted. It must detail the management of stormwater and any measures to mitigate the effects of stormwater on adjoining or downstream sites. Refer to Council's *Water Cycle Management Guidelines* and *Protection of Watercourses and Drainage Channels Policy* for further information.
2. The *Water Cycle Management Plan* will identify how the development avoids disturbance of natural watercourses and associated vegetation, and protects the quality of receiving waters.
3. On-site measures must be implemented to maintain water quality, minimise the volume of stormwater run-off and the peak discharge at which stormwater leaves the site.
4. Finished lots should have a minimum 2% fall to the proposed stormwater management system.
5. The elements of the drainage system and stormwater treatment devices are to be designed in accordance with Council's *Water Cycle Management Guidelines* and *Engineering Guidelines*. They should be visually unobtrusive and integrated within individual sites, landscaped areas, roads and open space areas.
6. Subdivision that involves the re-use of stormwater or the use of recycled water must demonstrate compliance with the *Australian Guidelines for Water Recycling*, and the licensing requirements of the *Water Industry Competition Act (2006).*

2.9 CATCHMENT FLOOD MANAGEMENT

This section applies to land in the various creek catchments in Lake Macquarie that are shown as 'Lots Affected by Catchment Flooding Controls' on Council's 'Flood Control Lots' map.

The map is indicative only and property information should be checked to confirm if a lot is a catchment flood control lot.

Some lots are affected by both catchment flooding and Lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Further information on flood risk and flood planning levels (floor levels) for particular lots can be obtained by applying for a Flood Certificate from Council.

Provisions regarding Lake flooding are contained in section 2.10 of this Part of DCP 2014.

Where inconsistencies arise, the controls in area plans prevail over controls in parts 2 to 9 of this DCP.

Objectives

a. To ensure that new lots are located above the 1 in 100 year flood level.

b. To ensure that subdivision is sited and designed to minimise potentially adverse impacts of flooding on future development or on other surrounding properties.

c. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. They must also reduce private and public losses resulting from flooding and manage risks to property and life from flood events.

Controls

1. Development must be consistent with the current version of the *NSW Floodplain Development Manual*, and any local flood study, floodplain management study or plan applying to the land that has been endorsed by Council.
2. The proposed subdivision must consider and respond to flooding hazards. It must also mitigate risks to life and/or property through design and positioning of development.
3. Subdivision must not result in lots that are located in an identified floodway.
4. Proposed lots must allow future habitable rooms to have a finished floor height at least 500mm above the 100 year probable ARI (1% AEP) event. Where probability flood levels are not available, Council may require a flood study to be undertaken to determine the flood levels. Lesser provisions may be acceptable where the applicant can demonstrate that the type of development or the proposed use poses no significant risk to life or property by flooding.
5. Development on designated flood prone land should incorporate the floodplain risk management measures as recommended by a local flood study, floodplain management study or plan, which identifies and addresses appropriate actions in the event of flooding.
6. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area, or within the extent of the 100 year probable ARI (1% AEP) flood event.
7. Subdivision works on land subject to flooding must use flood compatible materials that will minimise damage by flooding.
8. Flood prone areas and flood hazard zones must be identified on the subdivision Site Analysis Plan.

Note: Refer to Council's *Flood Management Guideline* for further information on the *NSW Floodplain Development Manual*, completed floodplain management plans, and on Council's requirements for flood studies.

2.10 LAKE FLOODING AND TIDAL INUNDATION (INCORPORATING SEA LEVEL RISE)

This section applies to land on and near the Lake Macquarie foreshore that is shown as 'Lots Affected by Lake Flooding Controls' on Council's 'Flood Control Lots' map. The map is indicative only and property information should be checked to confirm if a lot is a Lake flood control lot.

Some lots are affected by both catchment flooding and Lake flooding. The development controls that apply to these lots depend on the type of development, and further advice should be sought from Council.

Provisions regarding Catchment Flooding are contained in section 2.9 of this Part of DCP 2014.

Council completed the Lake Macquarie Waterway Flood Study and Risk Management Plan in 2012. This flood study and risk management plan incorporated the implications of predicted sea level rise.

Predicted sea level rise is based on expert advice from NSW Government agencies and expert scientific agencies, namely that projections of sea level rise along the NSW coast are for a rise relative to 1990 mean sea levels of 40cm by 2050 and 90cm by 2100.

The controls contained in this section prevail where there is an inconsistency with other development requirements. This is particularly relevant to cut and fill controls.

Objectives

a. To avoid the creation of new lots for residential, commercial or industrial development on land covered in the Lake Macquarie Waterway Flood Study and Risk Management Plan 2012.

b. To ensure that development adequately considers and responds to sea level rise projections and the predicted effects on inundation, flooding, coastal and foreshore recession, and on groundwater levels.

c. To ensure that development on land vulnerable to sea level rise is situated and designed to minimise the risk from future inundation, flooding, coastal and foreshore recession, and from rises in groundwater levels during the expected life of the development.

d. To ensure that the development is designed to allow for future adaptation if sea levels rise more than expected, or protective measures are needed in the future.

e. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties.

f. To ensure that measures are implemented to reduce the impact of flooding and flood liability on owners and occupiers of flood prone property. Such measures must also reduce private and public losses resulting from flooding, and manage risks to property and life from flood events.

Controls

1. In Greenfield subdivision, the creation of new lots for residential, commercial or industrial development must be avoided on land below 3m AHD that is open to inundation from the ocean or lake.
2. Council may consider the subdivision of land below 3m AHD where it is in an established urban area and within the R2 Residential zone. Each resulting lot must have a minimum building area of 250m^2 located above 2m AHD without the need for filling, and must have adequate flood-free access.
3. If subdividing land below 3m AHD, all new roads, associated infrastructure and utilities must be located above 3m AHD.
4. Except for the conditions described in Control 2, all lots resulting from a subdivision, where part of the site is below 3m AHD must provide a sufficient building area above 3m AHD to accommodate new development appropriate to the zone.
5. Subdivision should be designed to mitigate the effects of changes in ecosystems, foreshore processes and flood behaviour, in response to sea level rise.
6. Notwithstanding the provisions for Cut and Fill in section 3.26, special consideration may be given to increased fill allowances in areas affected by sea level rise, provided that:
   i. The additional fill does not adversely affect stormwater management, drainage, or the flow of water from roads, natural or constructed watercourses, foreshore areas or adjoining properties; and
   ii. The filled area maintains functional connections to adjoining footpaths, roads, neighbouring blocks and other local features.
7. Land below 3m AHD must be identified on the site analysis plan.

2.11 NATURAL WATER SYSTEMS

Definition: A **natural water system** is a naturally occurring watercourse, waterway, lake, wetland, lagoon, estuary, and/or other water body.

Objectives

a. To protect and maintain the water regime of natural water systems.

b. To ensure that development does not adversely affect aquatic fauna.

c. To ensure that development does not adversely affect water quality or availability, including ground water.

d. To ensure that watercourses and associated riparian vegetation are maintained to contribute to water quality, and to mitigate sedimentation of the Lake Macquarie waterway.

e. To ensure that natural water systems and associated vegetation and landforms are protected to improve the ecological processes and ensure that land is adequately buffered from development.

f. To ensure that the pre-development water quality of receiving waters is maintained or improved.

Controls

1. Natural water systems must be maintained in a natural state, including the maintenance of riparian vegetation and habitat such as fallen debris.
2. Where a development is associated with, or will affect a natural water system, rehabilitation must occur to return that natural water system – as much as possible – to a natural state. The Rehabilitation Plan must be prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies*.
3. Rehabilitation should occur where a development site includes a degraded watercourse, water body, or wetland. Rehabilitation is to be carried out following the completion of a Rehabilitation Plan. This Plan must prepared in accordance with Council's *Guidelines for the Preparation of Rehabilitation Plans for Degraded Watercourses or Waterbodies.*
4. Stormwater must be managed to minimise nutrient and sediment run-off entering constructed drainage lines, natural watercourses, or waterways.
5. Development within a Vegetated Riparian Zone (VRZ), as shown in Figure 2 – Vegetated Riparian Zones, should be avoided where possible to retain its ecological processes. Where development is unavoidable within the VRZ, it must be demonstrated that potential impacts on water quality, aquatic habitat, and riparian vegetation will be negligible.
6. A Plan of Management must be submitted in accordance with State Government guidelines for development proposed within a VRZ.
7. Asset Protection Zones must not be located within the Vegetated Riparian Zones.

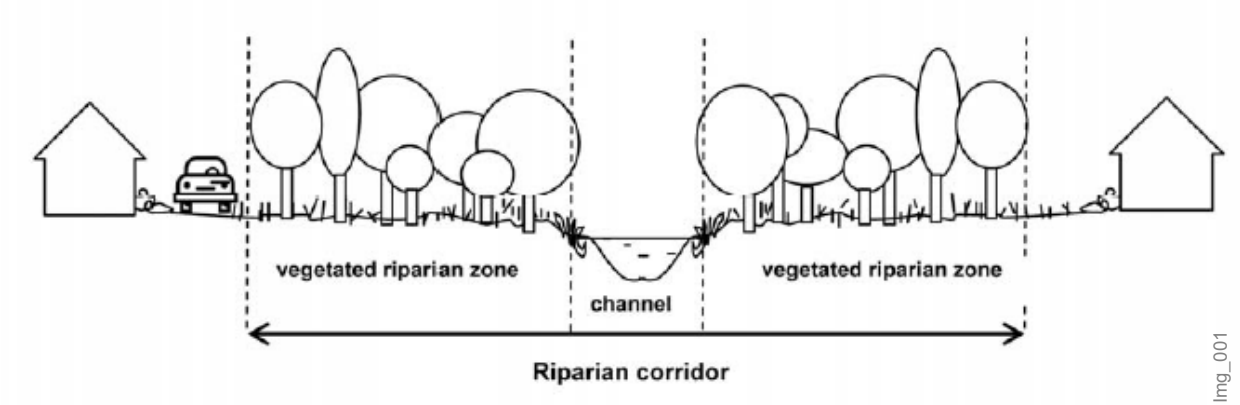


Figure 1 - Vegetated Riparian Zones

Types of watercourses	VRZ Width[2] (Each side of watercourse)	Total Riparian Corridor Width
Any first order[1] watercourse	10 metres	20m + channel width
Any second order[1] watercourse	20 metres	40m + channel width
Any third order[1] watercourse	30 metres	60m + channel width
Any fourth order[1] watercourse or greater (includes estuaries, wetlands and any parts of rivers influenced by tidal waters)	40 metres	80m + channel width

[1] As classified under the Strahler System of ordering watercourses.

[2] Bushfire Asset Protection zones will not be permitted in the Vegetated Riparian Zone. Additional areas may need to be protected to support ecological processes.

2.12 BUSHFIRE

Objectives

a. To ensure that risks associated with bushfire are appropriately and effectively managed.

b. To mitigate risks to property and life associated with bushfire hazards.

c. To ensure that bushfire risk is managed in connection with the preservation of the ecological values of the site and adjoining lands.

Controls

1. Development must comply with the *NSW Planning for Bushfire Protection Guidelines*
2. Bushfire prone areas and Asset Protection Zones must be identified on the Site Analysis Plan. Refer to Council's Bushfire Prone Land Map.
3. Asset Protection Zones must occur within the development lots.
4. Asset Protection Zones should:
   i. Be incorporated into the design of the development;
   ii. Be as low maintenance as possible;
   iii. Be located outside areas of ecological value and the buffers necessary to protect them.
5. The subdivision plan must provide perimeter roads between the bushfire prone land and development lots.
6. Where subdivision is proposed on environmental zoned land, a development site must be identified that avoids significant vegetation, endangered ecological communities and fauna habitat. The development site must include the required Asset Protection Zones for each lot.
7. Clearing for the purposes of Asset Protection Zones should be avoided on ridgelines and slopes of 1:5 or greater.
8. Clearing of vegetation must be limited to that necessary to meet the *NSW Planning for Bushfire Protection Guidelines*.
9. Clearing of native vegetation or trees for the purposes of reducing bushfire risk must be consistent with the current Bushfire Risk Management Plan prepared under the *Rural Fires Act 1997*.
10. Designated Asset Protection Zones must be shown on the subdivision plan, along with any other measures to address bushfire risk.

Note: Development Consent is not required for clearing for the purpose of bushfire hazard reduction if the clearing is consistent with the current Bushfire Risk Management Plan, and is undertaken in accordance with a current hazard reduction certificate issued by the Rural Fire Service or other certifying authority.

2.13 FLORA AND FAUNA

Objectives

a. To avoid and minimise impacts on native flora and fauna.

b. To protect and enhance significant flora and fauna, vegetation communities and significant habitat on the site, and on surrounding development sites.

c. To protect and enhance ecological corridors and increase the connections between habitats.

d. To ensure rehabilitation of degraded areas.

Controls

1. Where the proposed development is likely to have an impact on native vegetation or fauna habitat, or where five or more native trees are proposed to be removed, a Flora and Fauna Assessment must be submitted with the development application, in accordance with Council's *Flora and Fauna Survey Guidelines*.

2. The flora and fauna assessment must be sufficient to adequately identify and assess all the impacts of the proposed development. This includes cumulative, direct and indirect impacts, as well as the impacts of Asset Protection Zones, the provision of services (water and sewer, etc) and stormwater management.

3. Where a proposed development site is within a vegetation corridor identified on Council's Native Vegetation and Corridors Map, or identified as part of a site-specific flora and fauna assessment, the corridor must be surveyed. Within the survey, the appropriate corridor width must be determined with reference to core habitat areas and potential edge effects and fragmentation. The proposed development should be located and designed to avoid impacts on the identified vegetation corridor. Where this is not possible, the design should aim to minimise impacts.

4. Development should be designed to avoid impacts on native flora and fauna, and minimise any unavoidable impacts. Significant flora and fauna species, vegetation communities and habitat should be protected and enhanced through appropriate site planning, design and construction.

5. A Site Vegetation Plan must be submitted, clearly indicating the location of the proposed development in relation to vegetation communities, significant flora and fauna species and vegetation, and significant habitat and corridors on the site.

6. Native vegetation buffers must be provided between development and areas containing threatened flora and fauna species or their habitat, threatened vegetation communities and native vegetation corridors. The width of the buffer should be determined with reference to the function of the habitat, the threat of sea level rise and the type of development proposed. The buffer should be designed to keep the area of significance in natural condition.

7. A suitable barrier such as a perimeter road should be provided between development, including landscaped areas and native vegetation or significant habitat features, to minimise edge effects.

8. Where development is proposed to impact on an area of native vegetation, it must be demonstrated that no reasonable alternative is available. Suitable ameliorative measures must also be proposed (eg: weed management, rehabilitation, nest boxes).

9. Degraded areas of the development site should be rehabilitated using local native species to establish a self-maintaining ecosystem as close as possible to the natural state.

10. Buildings and structures, roads, driveways, fences, dams, infrastructure, drainage and asset protection zones should be located outside of areas with significant flora and fauna, native vegetation corridors and buffers.

11. An application for removal of native vegetation will only be considered where it is ancillary to and necessary for conducting an approved use of the land (ie: an application for clearing alone will not be supported).
12. Where retention or rehabilitation of native vegetation and/or habitat is required, a vegetation management plan must be prepared in accordance with Council's *Vegetation Management Plan Guidelines*. This must detail how vegetation will be protected, rehabilitated and managed before, during and after construction.
13. Long-term protection and management of areas set aside for ecological reasons is encouraged, through secure tenure with appropriate conservation management. This may be achieved through a Planning Agreement.
14. Development should be consistent with the effective conservation of land within any adjacent Environmental or Waterway zone. Conservation measures should include protection from adverse impacts including, but not limited to weed invasion, erosion and sedimentation, pollution, chemicals, nutrients, stormwater run-off, and feral and domestic animals.
15. The development should include mechanisms to minimise and manage key threatening processes (eg: environmental weeds, domestic dogs and cats).

Note: Council may require a bond to ensure that native vegetation is protected, and that ameliorative measures are undertaken.

2.14 PRESERVATION OF TREES AND VEGETATION

Objectives

a. To ensure that trees listed on Council's Significant Tree register are not adversely affected by development.
b. To maintain and enhance the natural bushland or vegetated character of the city.
c. To retain trees for the urban amenity, microclimate, scenic, air and water quality, and the social benefits that they provide.

Controls

1. Development consent is required to ring bark, cut down, top, lop, remove, injure, wilfully destroy or clear:
   i. Any species of vegetation that existed in the State of New South Wales before European Settlement;
   ii. A tree which is listed in Council's Significant Tree Register;
   iii. Tree(s) or native vegetation listed as heritage items or located within a Heritage Conservation Area; or
   iv. A Norfolk Island Pine Tree (*Araucaria heterophylla*) that is greater than three metres in height, or that has a trunk diameter of 75mm or greater, measured at ground level.

Note: This clause includes Native Vegetation defined in the *Native Vegetation Act 2003* and marine vegetation covered by section 205 of the *Fisheries Management Act 1994*.

2. Except in the E2 Zone, development consent is not required to remove, injure, wilfully destroy or clear native vegetation (excluding native trees and shrubs over 3m in height), only if:
   i. The work is for the purpose of landscaping understorey vegetation and lawn areas where the area to be cleared is less than 600m² (in total), and is on the same allotment as, and within the curtilage of an approved dwelling;
   ii. The soil surface exposed in any period of 90 consecutive days is less than 250m²;
   iii. The slope of the land is less than 15 degrees;

iv. The area is not subject to a development consent that requires the native vegetation to be retained; and

v. The work does not involve the disturbance of habitat for threatened species.

3. Development consent is not required to ring bark, cut down top, lop, remove, injure, wilfully destroy or clear a tree or native vegetation, if:

   i. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and

   ii. The tree or native vegetation is not required to be retained by a development consent, and

   iii. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or

   iv. The tree or native vegetation is within one metre of a sealed driveway to a lawfully used building (that is not exempt or complying development) and is on the same allotment as the building, or

   v. The tree or native vegetation is within five metres of the outermost projection of a lawfully used building (that is not exempt or complying development) on an adjoining allotment as the building and owners of both properties reach a written agreement before removal occurs.

***Note*:** For the purposes of clause 3 the distance must be measured from the trunk of a tree or shrub measured at ground level to the outer most projection of the building.

***Note*:** A sealed driveway is a driveway or car park with an impervious surface such as concrete, pavers, or bitumen. A gravel driveway is not classed as a sealed driveway.

***Note*:** A lawfully used building does not include drainage, excavation, a garden shed or jetty, but does include an underground water storage structure or septic tank.

4. Development consent is not required for removal of a tree or native vegetation if Council is satisfied beforehand that the tree or native vegetation:

   i. Is dead and is not required as habitat for native fauna or

   ii. Is a risk to life or property.

***Note*:** Evidence to support removal should be forwarded to Council in accordance with requirements outlined in Council's *Tree Preservation and Native Vegetation Management Guidelines*. Council's Tree Assessment Officer may undertake a site inspection to verify that these conditions are satisfied.

***Note*:** Habitat required for native fauna includes native vegetation and trees (including dead or dying trees) support hollows, spouts, splits, nests and roosts.

5. Development consent is not required for removal of a tree or native vegetation if:

   i. The tree or native vegetation is in danger of imminent failure and there is risk to life or property; and

   ii. The tree is not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and

   iii. Evidence to support its removal is forwarded to Council following the removal, in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.

6. Development consent is not required for removal of a NSW native tree if the tree is:

   i. not listed on Council's Significant Tree Register or as Heritage Item or is located within a heritage conservation area, and

   ii. not located within other native vegetation and,

   iii. less than three metres in height and

   iv. has a trunk diameter at ground level of less than 75mm.

7. An application for removal of tree(s) and native vegetation will be considered only where it is necessary for conducting an approved use of the land. An application for clearing alone will not be supported.
8. A report from a suitably qualified arborist must be submitted to support:
   i. Any application that may have an impact on a tree listed in Council's Significant Tree Register, or on tree(s) or native vegetation listed as heritage items or located within a heritage conservation area;
   ii. Any request to review Council's determination of an application for tree pruning or removal; or
   iii. Any application that Council determines may cause significant impacts on native trees or native vegetation.
9. An arborist report must include a plan to scale that clearly shows:
   i. The location of the proposed development;
   ii. The location, diameter, canopy spread, condition and species of each tree on the site;
   iii. All trees to be removed;
   iv. All trees to be retained;
   v. All trees with habitat hollows;
   vi. Tree protection zones for all trees to be retained; and
   vii. Any asset protection zones.
10. Habitat trees must be assessed by a suitably qualified flora and fauna specialist.
11. Measures must be implemented to protect native vegetation and trees to be retained during construction works. Such protection measures must be specified in the development application, and should be compiled in accordance with Council's *Tree Preservation and Native Vegetation Management Guidelines*.
12. Where habitat trees are removed, measures (such as nest boxes) must be implemented to mitigate against injury or loss of native fauna and habitat. Such measures must be specified in the development application.
13. Boundary fences must be located, designed and constructed to avoid removing or damaging native trees that have a diameter of 200mm or greater, measured at ground level.

Note: Refer to Council's *Tree Preservation and Native Vegetation Management Guidelines* for further details and the Significant Tree Register.

2.15 EUROPEAN HERITAGE

Objectives

a. To protect and maintain European heritage items and their facades.
b. To retain, preserve and promote the adaptive re-use of heritage-listed buildings and contributory buildings in particular, and other buildings that contribute to the heritage character of the locality.
c. To appropriately manage demolition of items of heritage significance, when all other alternatives to demolition have been fully investigated.
d. To ensure that development is sympathetic to heritage items and contributory buildings.

Controls

1. A Heritage Assessment and Statement of Heritage Impact must be submitted to Council where a proposed development:
   i. incorporates, or is adjacent to an item of heritage significance;

ii. is located within a heritage conservation area, or,

iii. has been identified by Council to have particular circumstances that warrant it.

Note: Council officers will use the following criteria to determine the need for Heritage Assessment and Statement of Heritage Impact is required under control 1(iii) above:

- The subject site includes a building erected prior to 1950 whether or not it is identified as being of a particular architectural style,
- The development is considered in conflict with its heritage context , streetscape, or heritage precinct,
- The subject site includes a potential heritage item.

2. The impact of development on an item of heritage significance must be minimised by:
   i. Restricting the extent of development to that which is necessary;
   ii. Conserving what is significant about the item;
   iii. Clearly differentiating new development from the existing significant fabric;
   iv. Ensuring that development is of a scale, form, mass, proportion and finish that is sympathetic with the heritage item; and
   v. Ensuring that development is sufficiently separated from the heritage item, so as not to compromise the existing level of visibility.
3. For development involving demolition of an item of heritage significance, a heritage assessment and Statement of Heritage Impact must be prepared and lodged. It must verify that all alternative options to demolition have been fully investigated, and demonstrate the replacement building's compatibility with the physical context. The Statement of Heritage Impact must include details of the:
   i. Structural condition;
   ii. Overall extent of the remaining fabric;
   iii. Potential retention and adaptive reuse; and
   iv. Comparative costings.
4. Where demolition of the whole of a heritage item is proposed, approval must be sought concurrently for the replacement building.
5. Alterations and additions to items of heritage significance must where possible:
   i. Occur at the rear of the building;
   ii. Maintain the established building line;
   iii. Maintain an existing driveway access to the rear of the property;
   iv. Incorporate or retain elements such as chimneys, windows and gables;
   v. Maintain established patterns of buildings and garden; and
   vi. Not overwhelm or dominate the existing building.
6. Alterations and additions to items of heritage significance must be recognisable, on inspection, as new work. They must not mimic the design, materials or historic details of the heritage item.
7. Garages, sheds, carports, external utilitarian structures and the like must be detached and located at the rear, or set back at least two metres behind the heritage item.

2.16 ABORIGINAL HERITAGE

Objectives:

a. To protect and conserve Aboriginal cultural, spiritual, and sacred sites within the City.
b. To ensure the impact of a proposed development on the heritage significance of an Aboriginal place or object is considered by adequate investigation and assessment.

Controls:

1. Where a development will disturb the ground surface and the natural ground surface has not been significantly disturbed, the development application must demonstrate that adequate due diligence has been undertaken. This includes (but is not limited to) submitting the following documentation in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*. This includes submitting the following documentation:

    i) A statement and results of a basic 200m Aboriginal Heritage Information Management System (AHIMS) search. Where a site is identified within 200m of the development site, a statement and results of a 50m AHIMS search must be included.
    ii) Identify whether the development site is partially or wholly within the Sensitive Aboriginal Landscape map under the LMLEP2014 and whether the exemptions under the Excluded Development Criteria (Table 2) apply
    iii) A statement indicating whether there are landscape features that indicate the potential presence of Aboriginal objects.

Note: landscape features include: foreshore areas, creek lines, rocky areas, wetlands, ridge tops, ridgelines, headlands, sand dunes, caves.

2. A Due Diligence Assessment must be prepared by a suitably qualified person to determine whether the proposed development is likely to harm Aboriginal objects and identify whether an Aboriginal Heritage Impact Permit is required where:

    i) An AHIMS search has identified the likelihood of an Aboriginal item within 200m of the development site, and/or
    ii) The site is identified on the Sensitive Aboriginal Landscape map and the Excluded Development Criteria do not apply.

3. The Due Diligence Assessment must include an assessment of the cultural significance of the place to the Aboriginal Community.

Note: Clause 5.10(8) – Heritage Conservation of the LMLEP 2014 and the Lake Macquarie Aboriginal Heritage Management Strategy requires assessments to be forwarded to the Local Aboriginal Land Council for comment for a 28 day period.

4. An Aboriginal Cultural Heritage Assessment Report should be prepared where:

    i) A Due Diligence assessment has identified the potential for the site to contain an Aboriginal object or contains a place of significance, or
    ii) The development will have an impact on a known Aboriginal object or place.

Table 2 - Excluded Development Criteria for Development in Sensitive Aboriginal Landscape Map

Excluded Development	Land on which excluded development may not be carried out
All development on sites having a combined/total area less than 800m^2	Within 200m of an AHIMS site Setback from DP High Water mark does not exceed 50m.
Exempt development under the SEPP (Exempt and Complying Development Codes) 2008 on sites having a total area greater than 800m^2 subject to: - 75% of combined/total site area already disturbed; or - Works do not exceed existing disturbed footprint; or - Site has previously been assessed for Aboriginal heritage such as subdivision applications post 1997 development consent.	

Note: The SEPP (Exempt and Complying Development Codes) 2008 does not apply to land within the Sensitive Aboriginal Landscape area. However, exempt development within this SEPP may not require further Aboriginal assessment if it fulfills the requirements of the Excluded Development Criteria Table.

5. Where required, the Aboriginal Heritage Impact Statement must be prepared in accordance with the Lake Macquarie Aboriginal Heritage Management Strategy and the Office of Environment and Heritage *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW,* which includes consultation with the Aboriginal community.

6. Where a proposal seeks to destroy, remove or impact on an Aboriginal object, any development should be Integrated Development and will also require a permit from the Office of Environment and Heritage.

2.17 NATURAL HERITAGE

Objectives

a. To ensure the protection of items of natural heritage significance.

b. To ensure that insect fossil beds and fossilised trees are maintained, along with features of scientific interest in their natural state.

c. To facilitate public appreciation and scientific investigation of insect fossil beds and geological features of scientific interest, without destruction or damage.

Controls

1. Where development is proposed on land within 50 metres of an item of natural heritage significance identified in the Lake Macquarie Local Environmental Plan 2014, a Heritage Impact Assessment must be prepared in accordance with the *Natural Heritage Guidelines*.

2. The likely impact of development proposals on the insect fossil beds and geological features of scientific interest should be identified through a report by a palaeontologist or geologist, which establishes the significance of the site. Such a report should include management strategies before, during, and after construction.
3. The development should be designed to avoid natural heritage items.
4. Where it is not reasonable to avoid natural heritage items, the item must be protected and incorporated into the design. Reasonable access to the construction site and any excavated material should be provided to researchers and/or palaeontologists from the Australian Museum or other research institution.
5. Any natural heritage items extracted should be fully documented and catalogued prior to being forwarded to the Australian Museum. Documentation and cataloguing must be undertaken to museum standards.

2.18 SOCIAL IMPACT

Council has a statutory obligation under the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* to consider the social impact of a proposal when assessing a specific development application.

Social Impact Assessment focuses on the human dimension of a locality. It seeks to address the question "what will be the impact of a project/development on people and facilities they use?" and to anticipate outcomes that may flow from a proposed development which are likely to affect people's way of life, their culture and/or their community.

Social Impact Assessment is not a tool to stop development, but is to assist in the assessment of development proposals so that the best development results.

Objectives

a. To ensure that development takes into consideration the likely social impacts that may arise because of the development.
b. To ensure that development considers the availability of adequate services and facilities to support the community and its needs.
c. To ensure that the full range of services and facilities are accessible to all members of the community.

Controls

1. A Social Impact Assessment (SIA) must be prepared in accordance with Council's *Social Impact Assessment Guidelines*, and submitted with the development application in the following circumstances:
   i. Where a major scale subdivision (creating more than 50 lots) is proposed, or
   ii. For medium scale subdivision (creating between 20 and 50 lots) proposals where Council identifies that particular circumstances warrant it.

Note: Council officers will use the following criteria to determine if a SIA is required under control 1(ii) above:

The development is targeted at a particular socio-economic or demographic group, and

The development has, or is anticipated to generate, significant levels of community opposition.

2. Potential adverse impacts identified by a SIA must be mitigated through redesign, whilst positive impacts should be enhanced by the design or other actions.

Note: The scope, complexity and requirements of a SIA will be commensurate with the scale of the proposed development. Applicants are advised to consult with Council's Social Planner regarding specific requirements. Where the development is proposed on land that has been the subject of rezoning in the previous two years and where a SIA was undertaken for that rezoning, the previous SIA can be submitted.

3 SUBDIVISION DESIGN

The following definitions are provided for words and phrases used in this section of LMDCP 2014:

standard lot means a lot that is generally rectangular in shape.

corner lot means a lot that has frontage to two or more intersecting roads.

battle axe lot means an allotment of land behind another with access to a public road via a narrow drive or access handle.

irregular lot means a lot that is not a standard lot.

small lot means a lot created under Clause 4.1A of the Lake Macquarie LEP 2014.

building area means the area of the site capable of supporting development. It does not include:

(a) front, side and rear setbacks, or

(b) the access handle of a battle-axe lot.

community association, ***community development lot***, ***community parcel***, ***community property*** and ***community scheme*** have the same meaning as they have in the *Community Land Development Act 1989*.

neighbourhood scheme has the same meaning as it has in the *Community Land Development Act 1989*.

3.1 LOT SIZES AND DIMENSIONS – RU2 RURAL LANDSCAPE ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To promote the efficient use of land.

b. To ensure that subdivision provides a variety of lot sizes that meet community and economic needs, while ensuring that ecological, social and cultural values are safeguarded.

c. To facilitate subdivision which results in predominately rectangular shaped lots.

d. To ensure that subdivision does not preclude the orderly development of land.

e. To require adequate street frontages and dimensions for standard, battle-axe and irregular shaped lots, including consideration of where bin collection from the property can occur.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.
2. For any subdivision, the minimum area for the resulting lot(s) is 20 hectares.

3.2 LOT SIZES AND DIMENSIONS – RU3 FORESTRY ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To ensure that subdivision does not preclude the orderly development of land.

b. To promote the efficient use of land.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.
2. No other numerical standards.

3.3 LOT SIZES AND DIMENSIONS – RU4 PRIMARY PRODUCTION SMALL LOTS ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To promote the efficient use of land.
b. To ensure that subdivision provides a variety of lot sizes that meet community and economic needs, while ensuring that ecological, social and cultural values are safeguarded.
c. To facilitate subdivision which results in predominately rectangular shaped lots.
d. To ensure that subdivision does not preclude the orderly development of land.
e. To require adequate street frontages and dimensions for standard, battle-axe and irregular shaped lots.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.
2. Subdivision for the purpose of:
   i. A standard lot, the minimum area of the resulting lot(s) is one hectare.
   ii. Community title schemes, the minimum area for the resulting lot(s) is 1000m² and the maximum is 1500m²; and
      - Lots must be clustered together, or otherwise established for the purpose of retaining a significant area of unbuilt open space, in order to preserve the natural quality of the land and the rural character of the area. All remaining land must be community property under the control of the community association;
      - Lots must not have frontage to a public road unless it can be demonstrated that the subdivision is consistent with the existing subdivision pattern, and that the subdivision will preserve the natural and scenic quality of the land;
      - To undertake a Community Title subdivision, the parent lot must be at least five hectares; and
      - The maximum density of lots (excluding the community lot) is 1.6 lots per hectare.

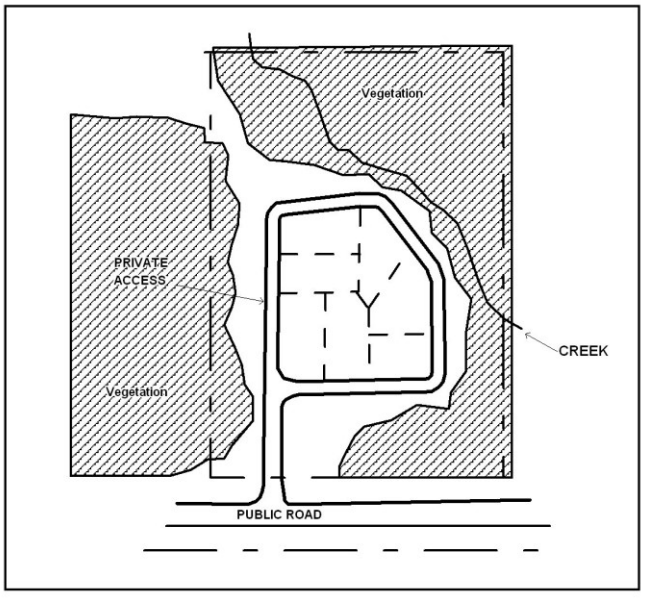


Figure 2 - Example of Community Title Subdivision

3.4 LOT SIZES AND DIMENSIONS – RU6 TRANSITION ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To promote the efficient use of land.

b. To ensure that subdivision does not preclude the orderly development of land.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.
2. For any subdivision, the minimum area for the resulting lot(s) is 200 hectares.

3.5 LOT SIZES AND DIMENSIONS – R1 GENERAL RESIDENTIAL ZONE (NORTH WALLARAH)

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To promote the efficient use of land.

b. To ensure that subdivision provides a variety of lot sizes that meet community and economic needs, while ensuring that ecological, social and cultural values are safeguarded.

c. To facilitate subdivision which results in predominately rectangular shaped lots.

d. To ensure that subdivision does not preclude the orderly development of land.

e. To require adequate street frontages and dimensions for standard, battle-axe and irregular shaped lots.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.
2. Subdivision must comply with the North Wallarah Area Plan in Part 12 of this DCP.

3.6 LOT SIZES AND DIMENSIONS – R2 LOW DENSITY RESIDENTIAL ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To promote the efficient use of land.

b. To ensure that subdivision provides a variety of lot sizes that meet community and economic needs, while ensuring that ecological, social and cultural values are safeguarded.

c. To facilitate subdivision which results in predominately rectangular shaped lots.

d. To ensure that subdivision does not preclude the orderly development of land.

e. To require adequate street frontages and dimensions for standard, battle-axe and irregular shaped lots.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014 or with Clause 4.1A of the Lake Macquarie LEP 2014.
2. Subdivision for the purpose of:
   i. A standard lot, the minimum area of the resulting lot(s) is 450m² and the minimum width is 14 metres;
   ii. A corner lot, the minimum area of the resulting lot(s) is 600m² and the minimum width is 18 metres;

iii. A battle-axe lot, the minimum area of the resulting lot(s) is 600m² and the minimum width is 18 metres. Additionally:

a. A battle-axe lot must have a minimum rectangular building area of 250m² with a minimum width of 12 metres; and

b. The minimum width of the battle-axe access handle is four metres when servicing one lot, and five metres when servicing two lots. The maximum number of battle-axe lots sharing a single access handle is two;

iv. An irregular lot, the minimum area of the resulting lot(s) is 450m². Irregular shaped lots must have a minimum rectangular building area of 250m² with a minimum width of 12 metres; and

v. A dual occupancy, the minimum area of the resulting lot(s) is 250m².

vi. A small lot under Clause 4.1A of the Lake Macquarie LEP 2014 must be a minimum of 300m² and no more than 450m².

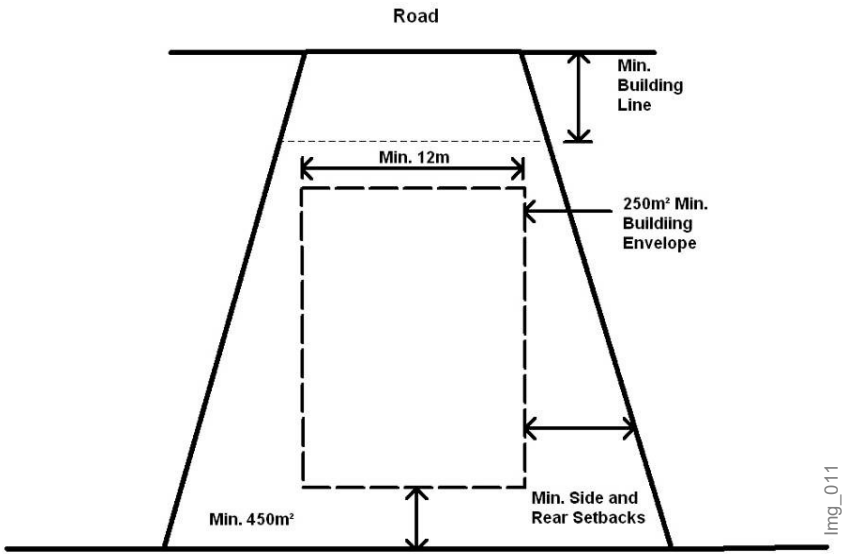


Figure 3 - Example of Irregular shaped lot

3.7 LOT SIZES AND DIMENSIONS – R3 MEDIUM DENSITY RESIDENTIAL ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To promote the efficient use of land.

b. To ensure that subdivision provides a variety of lot sizes that meet community and economic needs, while ensuring that ecological, social and cultural values are safeguarded.

c. To facilitate subdivision which results in predominately rectangular shaped lots.

d. To ensure that subdivision does not preclude the orderly development of land.

e. To require adequate street frontages and dimensions for standard, battle-axe and irregular shaped lots.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014 or with Clause 4.1A of the Lake Macquarie LEP 2014.

2. Subdivision for the purpose of:

i. A standard lot, the minimum area of the resulting lot(s) is 900m² and the minimum width is 25 metres;

ii. A corner lot, the minimum area of the resulting lot(s) is 1200m² and the minimum width is 25 metres;

iii. A battle-axe lot, the minimum area of the resulting lot(s) is 1500m² and the minimum width is 25 metres. Additionally:

- The minimum width of the battle-axe access handle is eight metres. The maximum number of battle-axe lots sharing a single access handle is two;

iv. An irregular shaped lot, the minimum area of the resulting lot(s) is 1200m². Irregular shaped lots must have a minimum rectangular building area of 900m² with a minimum width of 23 metres.

v. A small lot under Clause 4.1A of the Lake Macquarie LEP 2014 must be a minimum of 200m² and no more than 450m².

3.8 LOT SIZES AND DIMENSIONS – B1 NEIGHBOURHOOD CENTRE, B2 LOCAL CENTRE, B3 COMMERCIAL CORE AND B4 MIXED USE ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To promote the efficient use of land.

b. To ensure that subdivision provides a variety of lot sizes that meet community and economic needs, while ensuring that ecological, social and cultural values are safeguarded.

c. To facilitate subdivision which results in predominately rectangular shaped lots.

d. To ensure that subdivision does not preclude the orderly development of land.

e. To require adequate street frontages and dimensions for lots.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.
2. No numerical standards apply.

3.9 LOT SIZES AND DIMENSIONS – B7 BUSINESS PARK ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To promote the efficient use of land.

b. To ensure that subdivision provides a variety of lot sizes that meet community and economic needs, while ensuring that ecological, social and cultural values are safeguarded.

c. To facilitate subdivision which results in predominately rectangular shaped lots.

d. To ensure that subdivision does not preclude the orderly development of land.

e. To require adequate street frontages and dimensions for standard, battle-axe and irregular shaped lots.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.
2. For subdivision for the purpose of a standard lot or an irregular lot, the minimum area of the resulting lot(s) is 1500m² and the minimum width is 25 metres.

3. For subdivision for the purpose of a battle-axe lot, the minimum area of the resulting lot(s) is 1500m² and the minimum width is 25 metres. Additionally, the minimum width of the battle-axe access handle is nine metres. The maximum number of battle-axe lots sharing a single access handle is two.

3.10 LOT SIZES AND DIMENSIONS – IN1 GENERAL INDUSTRIAL ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To promote the efficient use of land.

b. To ensure that subdivision provides a variety of lot sizes that meet community and economic needs, while ensuring that ecological, social and cultural values are safeguarded.

c. To facilitate subdivision which results in predominately rectangular shaped lots.

d. To ensure that subdivision does not preclude the orderly development of land.

e. To require adequate street frontages and dimensions for standard, battle-axe and irregular shaped lots.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.

2. For subdivision for the purpose of a standard lot or an irregular lot, the minimum area of the resulting lot(s) is 4000m² and the minimum width is 40 metres.

3. For subdivision for the purpose of a battle-axe lot, the minimum area of the resulting lot(s) is 4000m² and the minimum width is 40 metres. Additionally, the minimum width of the battle-axe access handle is 12 metres. The maximum number of battle-axe lots sharing a single access handle is two.

3.11 LOT SIZES AND DIMENSIONS – IN2 LIGHT INDUSTRIAL ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To promote the efficient use of land.

b. To ensure that subdivision provides a variety of lot sizes that meet community and economic needs, while ensuring that ecological, social and cultural values are safeguarded.

c. To facilitate subdivision which results in predominately rectangular shaped lots.

d. To ensure that subdivision does not preclude the orderly development of land.

e. To require adequate street frontages and dimensions for standard, battle-axe and irregular shaped lots.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.

2. For subdivision for the purpose of a standard lot or an irregular lot, the minimum area of the resulting lot(s) is 1500m² and the minimum width is 25 metres

3. For subdivision for the purpose of a battle-axe lot, the minimum area of the resulting lot(s) is 1500m² and the minimum width is 25 metres. Additionally, the minimum width of the battle-axe access handle is nine metres. The maximum number of battle-axe lots sharing a single access handle is two.

3.12 LOT SIZES AND DIMENSIONS – SP1 SPECIAL ACTIVITIES, SP2 SPECIAL INFRASTRUCTURE, AND SP3 TOURIST ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To ensure that subdivision does not preclude the orderly development of land.

b. To promote the efficient use of land.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.
2. No numerical standards apply.

3.13 LOT SIZES AND DIMENSIONS – RE1 PUBLIC RECREATION AND RE2 PRIVATE RECREATION ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To ensure that subdivision does not preclude the orderly development of land.

b. To promote the efficient use of land.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.
2. No numerical standards apply.

3.14 LOT SIZES AND DIMENSIONS – E1 NATIONAL PARK AND NATURE RESERVE ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To ensure that land zoned for environmental conservation continues to maintain its ecological function.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.
2. No numerical standards apply.

3.15 LOT SIZES AND DIMENSIONS – E2 ENVIRONMENTAL CONSERVATION ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To ensure that land zoned for environmental conservation continues to maintain its ecological function.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.
2. The minimum area of the resulting lot(s) for all land within E2 Zone is 40 hectares.
3. The minimum area of the resulting lot(s) for land within South Wallarah Peninsula – being land east of the Pacific Highway, as shown on the Lot Size Map in Lake Macquarie LEP 2014 – is 100 hectares.

3.16 LOT SIZES AND DIMENSIONS – E3 ENVIRONMENTAL MANAGEMENT ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To ensure that land zoned for environmental management continues to maintain its ecological function.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.
2. Subdivision for the purpose of:
   i. A standard lot, the minimum area of the resulting lot(s) is 40 hectares. The resulting lot must have a minimum building area of 1600m² with a minimum width of 40 metres, and a slope less than 1:5; and
   ii. A Community Title scheme, the minimum area for the resulting lot(s) is 1000m² and the maximum is 2500m². The maximum density (excluding community property) is one lot per 10 hectares. Additionally:
      a. Lots must be clustered together, or otherwise established for the purpose of retaining a significant area of unbuilt open space in order to preserve, maintain and enhance the natural and scenic quality of the land. All remaining land must be community property under the control of the community association;
      b. Lots must not have frontage to a public road unless it can be demonstrated that the subdivision is consistent with the existing subdivision pattern, and that the subdivision will preserve the natural and scenic quality of the land;
      c. To qualify to subdivide using community title, the parent lot must be at least 40 hectares.

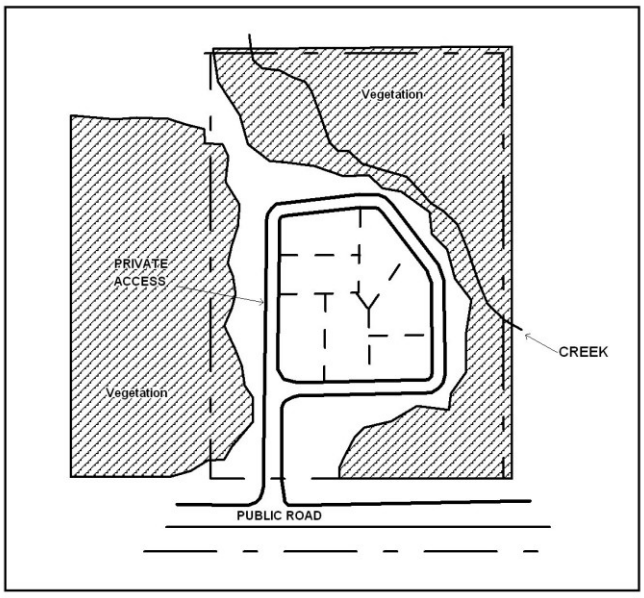


Figure 4 - Example of Community Title Subdivision

3.17 LOT SIZES AND DIMENSIONS – E4 ENVIRONMENTAL LIVING ZONE

The subdivision standards in this part do not apply to strata subdivision.

Objectives

a. To ensure that land zoned for environmental living continues to maintain its ecological function.

b. To promote the efficient use of land.

c. To ensure that subdivision provides a variety of lot sizes that meet community and economic needs, while ensuring that ecological, social and cultural values are safeguarded.

d. To facilitate subdivision which results in predominately rectangular shaped lots.

e. To ensure that subdivision does not preclude the orderly development of land.

f. To require adequate street frontages and dimensions for standard, battle-axe and irregular shaped lots.

Controls

1. Subdivision must comply with the lot size map in Lake Macquarie LEP 2014.
2. Subdivision for the purpose of:
   i. A standard lot, the minimum area of the resulting lot(s) is two hectares. The resulting lot must have a minimum building area of 1600m² with a minimum width of 40 metres, and a slope less than 1:5.
   ii. A Community Title scheme, the minimum area for the resulting lot(s) is 600m² and the maximum is 1200m². The maximum density (excluding community property) is one lot per hectare. Additionally:
      a. Lots must be clustered together, or otherwise established, for the purpose of retaining a significant area of unbuilt open space in order to preserve, maintain and enhance the natural and scenic quality of the land. All remaining land must be community property under the control of the community association;
      b. Lots must not have frontage to a public road unless it can be demonstrated that the subdivision is consistent with the existing subdivision pattern, and that the subdivision will preserve the natural and scenic quality of the land; and
      c. To qualify to subdivide using community title, the parent lot must be at least 10 hectares.

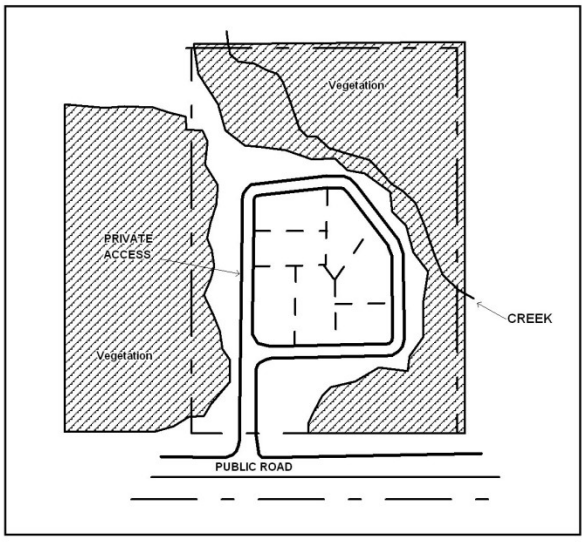


Figure 5 - Example of Community Title Subdivision

3.18 SUBDIVISION LAYOUT

Objectives

a. To ensure the subdivision layout responds to site characteristics, setting, landmarks, views, site constraints and land capability.

b. To ensure the street layout minimises cut and fill for road construction, and for future house construction.

c. To ensure street and lot orientation and lot dimensions facilitate the siting and design of energy efficient buildings with good solar access.

d. To ensure subdivision layout is designed to integrate with surrounding neighbourhoods and the natural environment.

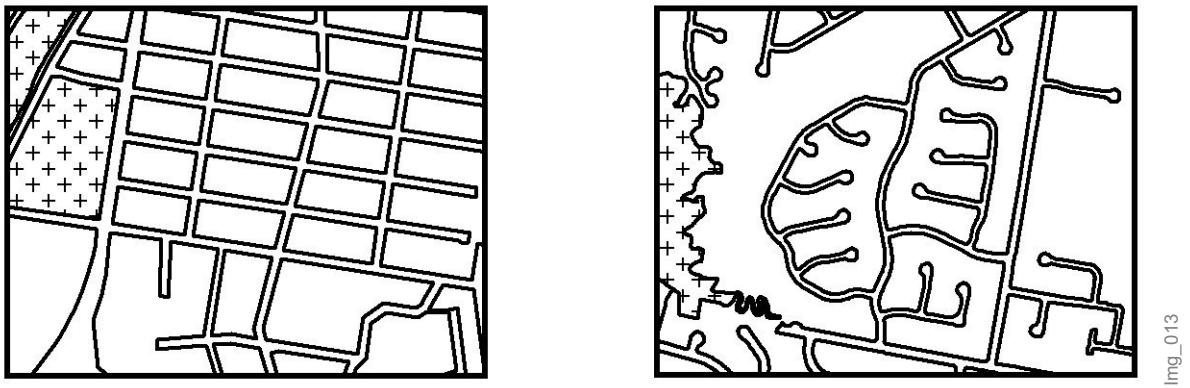
e. To ensure that development occurs in an ecologically sustainable manner, and is energy efficient in terms of design and layout, consumption and materials.

f. To ensure waste management systems, including servicing, are an integral component of the development.

g. To ensure layout and roads are designed with consideration to maximising sustainable waste collection by optimising waste collection routes and collection points.

Controls

1. A Site Analysis Plan, Structure Plan, Water Cycle Strategy and Subdivision Site Plan must be prepared and submitted with an application for subdivision. These plans must demonstrate how the subdivision responds to the site's characteristics and integrates with the surrounding settlement pattern.
2. Street layout should minimise cut and fill for road construction.
3. Road layout must reflect a grid pattern or modified grid pattern and avoid the use of cul-de-sacs. See Figure 4.



Good Example Poor Example

Figure 6 - Good and Poor example of grid road layout

4. Lots must be regular and rectangular in shape where possible, to maximise siting opportunities and lot yield.
5. Lots should be orientated and sized to allow good solar access for future developments. Lots fronting north-south orientated roads should be deeper, to maximise solar access opportunities for future development.

6. Narrow lots must avoid being oriented with the rear of the allotment to the south due to the lack of solar access at the rear of the house.
7. In residential subdivision and where topography allows, 80% of lots should achieve a 5 Star energy efficiency rating. Refer to Council's *Subdivision Guideline* for more information.
8. The subdivision pattern must be integrated with the surrounding neighbourhood in terms of lot size, orientation and road connectivity.
9. A perimeter road should be provided to separate development from bushfire areas, public open space and from ecological habitat and corridors.
10. All lots must have direct access to a road.
11. In residential subdivisions, access to individual lots must be gained predominately from local or collector roads. Refer to the hierarchy of streets in Figure 5.
12. Splays of at least 4m x 4m must be provided on corner allotments. Small lots are located in proximity to public or communal open space and / or close to public transport and / or close to amenities such as community services and shops.
13. Lots with vehicle access from the front that are 12.5m wide or less must be located on streets, which facilitate on-street parking on both sides. These streets should consist of two travel and two parking lanes where possible.
14. Different housing types are spread throughout a subdivision in localised clusters rather than distinct precincts to help create a desirable streetscape and neighbourhood character.
15. To achieve a more sustainable design, street layouts (and in staged development, interim stage street layouts) should, as described in the *Lake Macquarie City Council Waste Management Guidelines:*
    i. Minimise the need for waste collection vehicles to stop and collect bins in an uphill direction, and maximise collection stop points where a waste collection vehicle is traversing downhill*;*
    ii. Minimise the waste collection vehicle having to traverse the street more than once (or once in each direction);
    iii. Have collection routes with as few right hand turns across intersections as possible;
    iv. Minimise need for bin collection on heavily trafficked streets and turning off from heavily trafficked streets into properties to service bins;
    v. Minimise dead end streets, tight turning spaces, height-restricting overpasses, and any other situations requiring reversing, three-point turns and U-turns by waste collection vehicles;
    vi. Avoid the need to place bins for collection on the kerbside around a tight curve or cul-de-sac that would interfere with a waste collection vehicle swept path; and
    vii. In areas where safe waste collection space is limited, plan and design for waste collection vehicle pull-in bays and locate shared bin collection points there. However, these collection points should not be more than 75m from all waste storage areas that they service.

3.19 REQUIREMENTS UNDER CLAUSE 4.1A

This section provides specific requirements for an application prepared in accordance Clause 4.1A of LMLEP 2014 for dwelling houses, semi-detached dwellings, and attached dwellings.

Objectives

a. To demonstrate that all residential lots created can be developed to achieve a high level of amenity for the subject lot and for neighbouring lots.
b. To ensure that development on smaller lots is undertaken in a coordinated manner.

Controls

1. An application submitted pursuant to Clause 4.1A of the LMLEP 2014 is to include the following information, prepared consistently with the provisions contained in Part 9 – Specific Land Uses – Housing on Small and Narrow Lots and any other applicable provision of this DCP:
    i. A character statement,
    ii. A Site Analysis Plan,
    iii. Building Envelope Plans and Subdivision Design Plans (see Figures 7 and 8 below for examples) showing the following detail:
        - The front, side and rear building setbacks, including articulation zones,
        - Lot widths and depths,
        - The location of any zero lots lines,
        - The locations for principal private open space, including an area that meets the solar access requirements of the DCP,
        - The ground floor and second floor building zones,
        - The locations for garages and driveways,
        - Where it is proposed to build dwellings to the boundary on both sides, consideration must be given to the construction sequencing and how this will be achieved,
        - Utility and stormwater easements, and
        - The location of any benching or retaining walls.
    iv. An indication of how the subdivision design and proposed building zones respond to site topography and landscape features, and
    v. Any site specific development controls for the area.

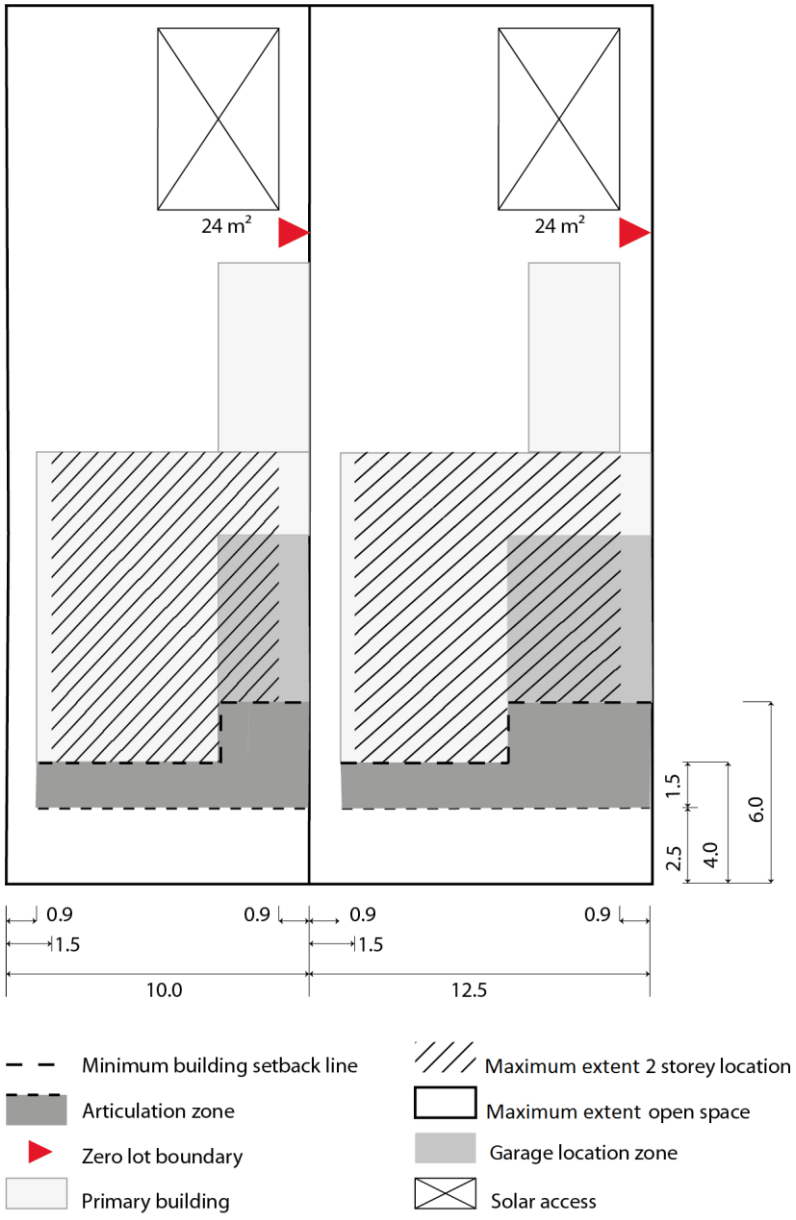


Figure 7 - Example of a Building Envelope Plan

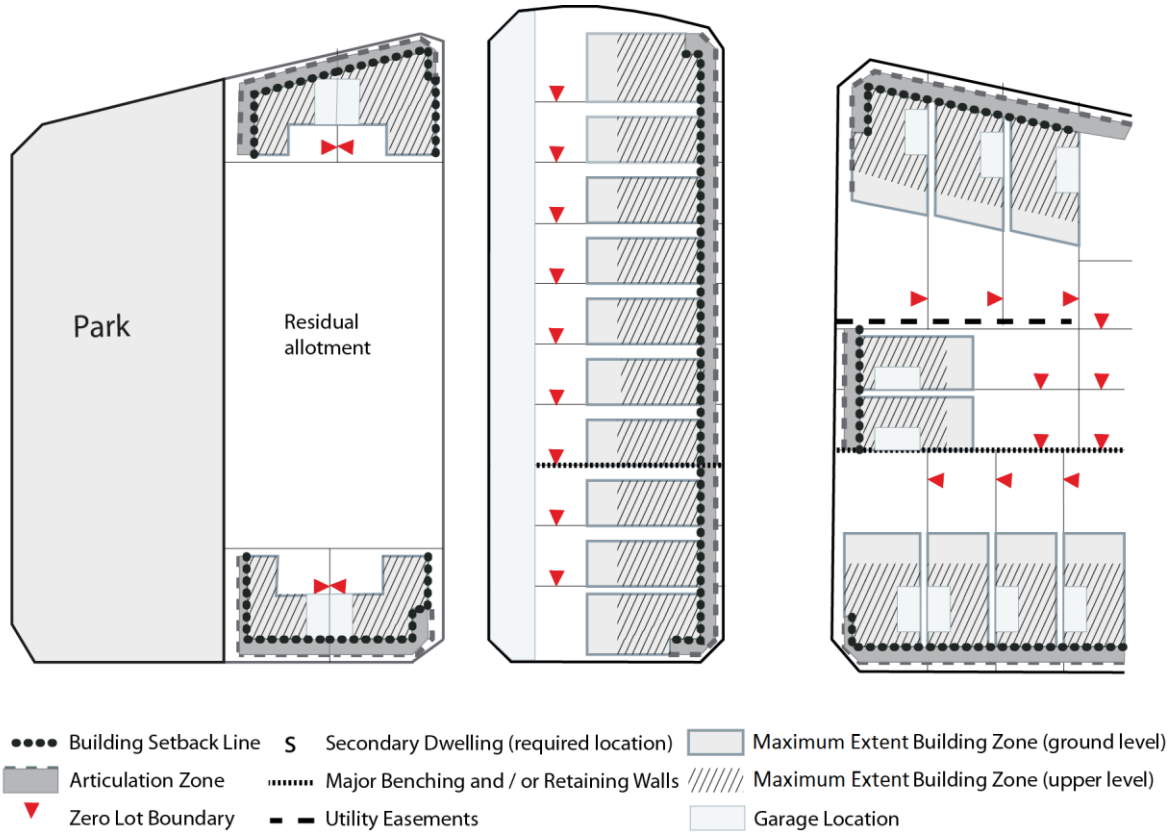


Figure 8 - Example of a Subdivision Design Plan

2. The Building Envelope Plans and Subdivision Design Plans must be registered on the deposited plan pursuant to section 88B of the Conveyancing Act 1919.

3.20 MOVEMENT SYSTEM

Objectives

a. The movement system is safe, efficient and facilitates connectivity, permeability and legibility for all road users (motor vehicles, cyclists and pedestrians).

b. The movement system is consistent with Council's Hierarchy of Streets (Figure 5).

c. The movement system has a clear structure with a clear physical distinction between each road type.

d. The movement system is designed to encourage non-motorised transport.

Controls

1. A Traffic Study must be prepared and lodged for medium and major scale subdivision applications, justifying the proposed road layout and addressing any other traffic implications. See Council's *Traffic Impact Statement and Vehicle Access Guideline* for more information.

2. For local and collector streets in residential subdivisions, street blocks must not exceed a maximum of 180 metres long and 90 metres wide. This will provide well connected and permeable neighbourhoods that encourage walking and cycling.

3. Commercial Street blocks must not exceed a maximum of 100 metres long and 70 metres wide, with rear lanes. Shorter lots dimensions must front the main or active road.

4. Cul-de-sacs or dead end streets should be avoided. Where residential dead ends streets are unavoidable, they must provide access to no more than 10 lots. The head of the cul-de-sac must be visible from the cross street (Figure 6). Cul-de-sacs must be designed to provide for on street parking, and movement of a medium-rigid vehicle. See figure 11 for the minimum dimensions for T-Head cul-de-sacs. If waste is to be collected within the cul-de-sac then the road must be designed for Council and contractors' waste collection vehicle fleet to be able to access the street, collect bins, turn and exit the street in a forward direction. Alternatively, a suitable waste collection point must be provided on the cross street, and be less than 75 metres from the furthest house in the cul-de-sac.
5. Road intersections must be appropriately spaced to allow for convenient and safe movement for all road users.

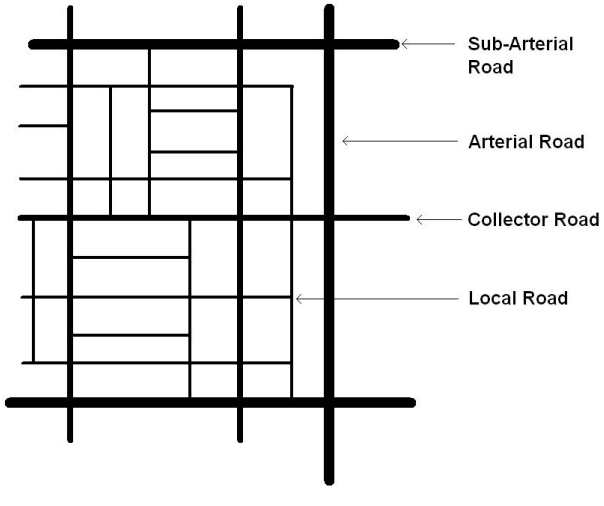


Figure 9 - Hierarchy of Streets

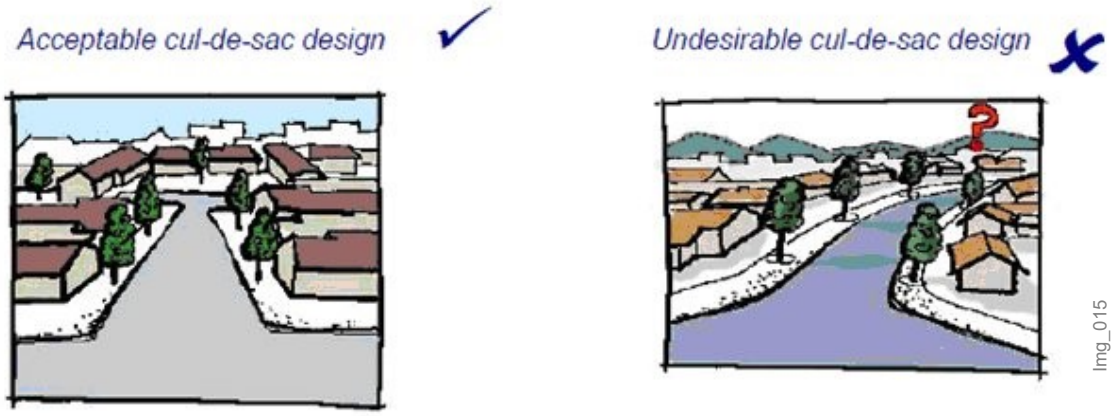


Figure 10 - Acceptable Cul-de-sac design

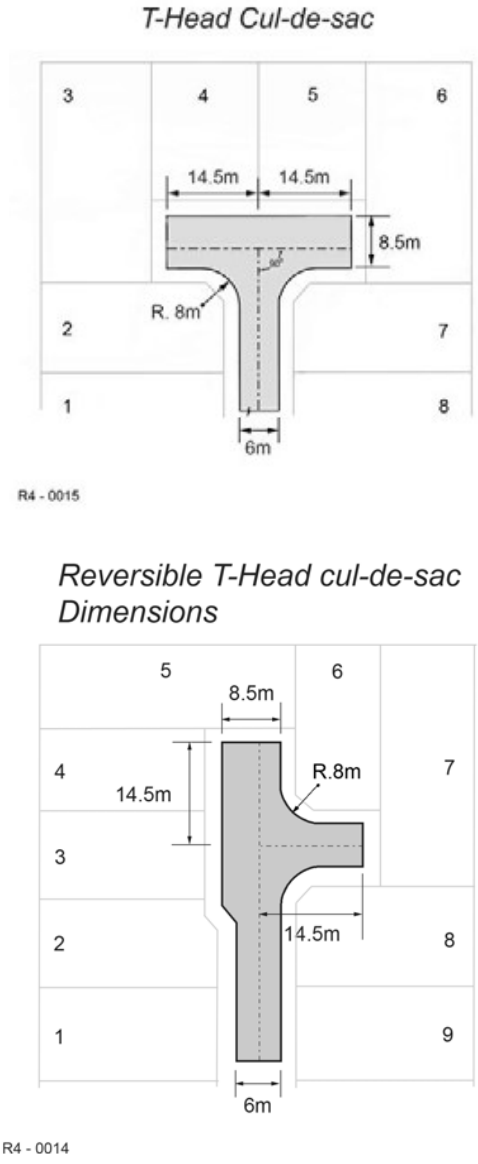


Figure 11 - Minimum dimensions for T-Head and Reversible T-Head cul-de-sacs

3.21 ROAD DESIGN

Objectives

a. The road network reflects the function of the road and the needs of all road users.

b. Roads are designed for a variety of transport modes.

c. Roads are designed and constructed to suit the intended use, and to minimise maintenance costs.

Controls

1. Roads must be designed to meet the requirements of Table 3 - Road types and dimensions.

2. When developing subdivisions that front existing roads, Council may require the construction of foot-paving, kerb and guttering, drainage and road-works. The extent of the required works will depend on the specific circumstances, the existing provision in the vicinity and the desired future

development outcomes of the area. As a minimum, Council will require works in Business, Residential, Industrial, Tourism and Recreation and Infrastructure Zones where:

i. Subdivision will result in five or more lots; or

ii. The lot frontage is greater than 100 metres; or

iii. Existing drainage problems will benefit from kerbing and associated works; or

iv. The development will adjoin existing footpath, kerbing or associated works; or

v. The development is in Environmental (Living) and Rural Zones, and where subdivision will result in additional lots.

3. Roads must be constructed using sound engineering practices and to the relevant Australian Standards and Council's *Volume 2 Engineering Guidelines*.

4. The location and design of arterial and sub-arterial roads must be determined in consultation with the Roads and Maritime Services (RMS) and Council.

5. Where subdivision is in a bushfire prone area, roads must be constructed in accordance with *NSW Planning for Bushfire Protection Guideline*.

6. Splays of at least four meters by four metres must be provided on all corner allotments.

Table 3 - Road types and dimensions

Road Type	Lots	Road reserve width (m)	Carriage way width (m)	Road verge width (m)	Footpath	Street Trees	Cycle lane	Kerbing
Access Lane (1) (2)		8m	6m	1m	No	No	No	roll – over (4)
Cul-de-sacs / Access Streets (2)	Up to 10	14m	7m	3.5m	No	Yes	No	roll – over (4)
Local Street – Secondary (2) (3)	10 - 100	16m	8m	3.5 & 4.5m	1.2m wide on one side	Yes	No	roll – over (4)
Local Street – Primary (3)	100 - 200	17m	9m	3.5m & 4.5m	1.2m wide on one side	Yes	No	roll - over(4)
Collector	200 +	22m	13m	4.5m	1.2m wide on both sides	Yes	Yes – on road within travel lane	barrier
Sub-Arterial	200 +	23m	14m	4.5m	1.2m wide on both sides	Yes	Yes – on road within parking lane	barrier
Commercial / Business area		23m	14m	4.5m	yes - full width of verge both sides. (5) (6)	Yes	Yes	barrier

Road Type	Lots	Road reserve width (m)	Carriage way width (m)	Road verge width (m)	Footpath	Street Trees	Cycle lane	Kerbing
Industrial		21m	14m	3.5m	No	Yes	Yes	barrier
Non - Urban Living (Rural /Environmental Living)		18.5m	6.5m with 1.0m shoulder either side	5m	No	Yes	No	table drain / grass swale

1. Access lanes should be provided as part of commercial subdivision for access and servicing.
2. In bushfire prone areas, the carriageway and road reserves may be required to be widened, to comply with the requirements of Planning for Bushfire Protection.
3. Reduced road verge widths may be considered where lots are located on only one side of the road.
4. Where subdivision has been designed using a 'Water Sensitive Urban Design' philosophy, kerb and guttering may be replaced with table drains/roadside swales. These treatments will require a wider road reserve.
5. A 1.2 metre wide footpath is required on one side of roads in the B7 Business Park zone.
6. A 1.2 metre wide footpath is required to be provided at the subdivision stage. A full width footpath will be provided with subsequent development of adjacent lots.

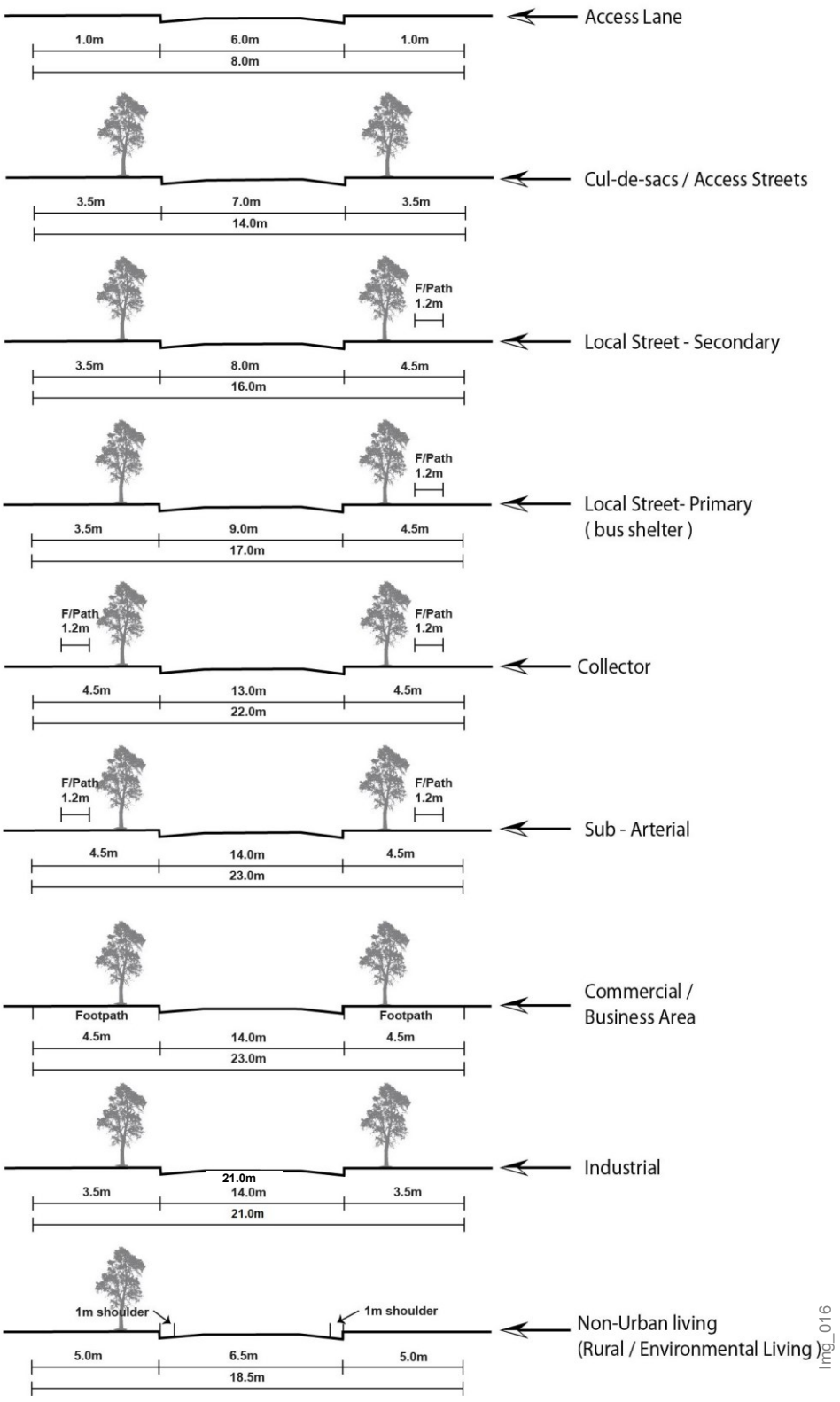


Figure 12 - Indicative road cross sections

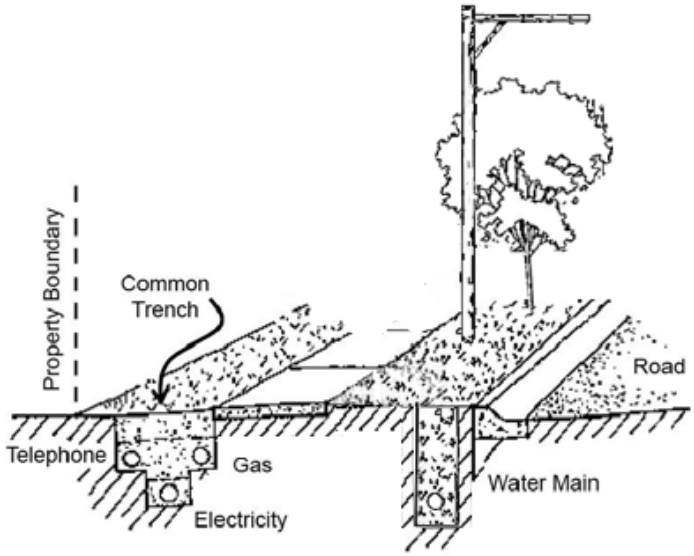


Figure 13 - 4.5 meter wide road verge with footpath

3.22 PEDESTRIAN AND CYCLE NETWORK

Objectives

a. To ensure the provision of accessible, well located and designed pedestrian and shared pathways.

b. To provide a highly accessible network of pedestrian and shared pathways that encourage walking and cycling to local destinations, including schools, shops, sporting and community facilities, parks, playgrounds, public transport stops/stations and employment areas.

c. To ensure that the width and location of pedestrian and shared pathways are safe, and that they have adequate lighting, conserve trees and other vegetation. They must also have suitable grades that allow for passing at potential congestion points, and meet relevant Council and Australian Standards.

Controls

1. Pedestrian and shared pathways must be provided for all major scale subdivisions. The routes of the pedestrian and shared pathway network must be identified on the subdivision plan.
2. Pedestrian and shared pathways must be within the road network and/or as a component of the open space network. The location of pedestrian and shared pathways in a road reserve is determined by the road type, vehicle speeds and volumes. It is preferable that pedestrian and cycle paths are separated from the road.
3. Pedestrian and shared pathways must be provided in accordance with Table 3 – Road types and dimensions.
4. Pedestrian and shared pathways should provide a shorter route (in length) than the alternative car route to major centres, recreational areas and transport nodes.
5. Pedestrian and shared pathways must comply with the design and construction requirements detailed in *Volume 2 Engineering Guidelines* and *Austroads Part 14: Bicycle Standards,* along with other relevant Council and Australian Standards.

6. Where provided, pedestrian and shared pathway corridors between lots must be a minimum width of four metres, and comply with the following criteria:
   i. Are a straight route that allows a direct sight line for the length of the connection;
   ii. Incorporate a street light at either end; and
   iii. If the length exceeds 75 metres, low level intermediate lighting and appropriate landscaping is provided.
7. Pedestrian and shared pathways:
   i. Widths must meet Austroads' standards, but can be wider where required to reflect their expected usage. They must also take into account usage generated by the development and surrounding development – such as schools, sporting and community facilities, parks and Centres;
   ii. Must be located and designed to complement and protect the natural attributes of riparian areas, native bushland areas, foreshore areas and surrounding environments;
   iii. Must provide directional, hazard warning, tactile indicators and interpretive signage;
   iv. Must provide facilities such as bike racks in accordance with relevant Australian Standards, seating, and drinking fountains at activity nodes within the open space network; and
   v. Must include lighting in accordance with Australian Standards.

Note: Please refer to Council's Cycling Strategy for further information.

3.23 PUBLIC TRANSPORT

Objectives

a. To maximise public transport usage.
b. To encourage higher population densities within a walkable catchment of public transport routes, stops or stations. This will capitalise on the infrastructure investment, and support the economic operation of the public transport network.
c. To ensure that the road network facilitates efficient bus routes and pedestrian access to bus stops and/or railway stations.

Controls

1. Higher lot densities should be provided within 200 metres of a public transport stop/station or interchange.
2. Public transport facilities such as bus shelters, seating and lighting must be provided for developments that incorporate a bus route, and/or where development is adjoining an existing or proposed bus route. All facilities must comply with the relevant Australian Standards and government guidelines.
3. Bus routes should be located on primary local streets, collector, sub-arterial and/or arterial roads.
4. Road networks must be a grid pattern and designed to maximise connectivity from local roads to the bus route. Ninety percent of proposed residential lots should be within a 400-metre walk to the preferred public transport route.
5. Subdivision applications must provide evidence of discussions with local bus service providers regarding potential location of bus routes, and the requirements for bus shelters/stops.

3.24 UTILITIES INFRASTRUCTURE

Objectives

a. The distribution and design of land uses minimise capital and maintenance cost of infrastructure and promotes the efficient use of infrastructure.

b. The location of utility infrastructure minimises visual impact.

Controls

1. All lots must have access to reticulated water and sewer, electricity, telecommunications and where available gas. Where an equal or superior service can be provided using alternative technology and this service meets all the requirements of the relevant service provider, this alternative may be considered.
2. Common underground trenching for electricity, gas and telecommunications must be provided wherever a new road is constructed. The common trench should be located adjacent to the lot boundary. Refer to Figure 10 – Example of common underground utility trench.
3. Water mains must be located in the road verge adjacent to the carriageway, and to Hunter Water's specifications.

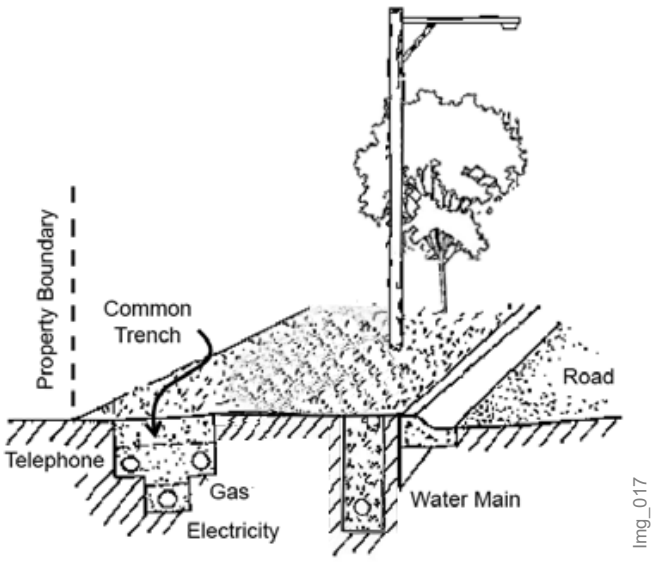


Figure 14 - Example of location of common underground utility trench.

3.25 OPEN SPACE AND RECREATION

The requirement for open space is typically required for residential subdivision. However, the open space and recreational requirements of subdivision in all zones will be considered during the assessment of any application for subdivision.

Objectives

a. To provide a highly accessible mix of local and district public open space areas and community facilities.

b. To ensure that public open space of appropriate quantity and quality is provided to meet the recreational and social needs of the community.

c. To provide for well distributed and highly accessible open spaces and recreation facilities that:

   i. Provide the community with a range of passive and active recreational opportunities;

   ii. Are of a manageable size for cost effective maintenance;

   iii. Are designed so as to contribute to water cycle management, without hindering their core purpose; and

   iv. Complement the broader open space network within the City.

Controls

1. Open space locations and networks must be shown on the subdivision structure plan.
2. The number, size and location of open space and local parks must be consistent with Council's requirements, and the relevant Section 7.11 Contributions Plan.
3. Open space and recreation facilities should be located so that 90% of residential lots are within 800 metres of a local park.
4. Subdivision layout must provide a direct access from all lots to regional and district level open space and recreation facilities.

3.26 SAFETY AND SECURITY

Objectives

a. To assist the development in mitigating opportunities for criminal activity, behaviour, and perceived opportunities for crime.

a. To ensure a development contributes to the liveability, safety and security of it users.

Controls

1. Developments must ensure that the following Crime Prevention Through Environmental Design (CPTED) principles have informed the design of the proposed development:

   i. Surveillance – Developments must be designed and managed to maximise the potential for passive surveillance;

   ii. Access Control – Developments must be designed so as to make them legible for users without losing the capacity for variety and interest;

   iii. Territorial Reinforcement – Developments must be designed to define clearly legitimate boundaries between private, semi private and public space; and

   iv. Space Management – Developments must be designed and detailed to minimise damage and the need for undue maintenance, without undermining the aesthetic and functional qualities of the building

Note: Refer to Council's *Crime Prevention through Environmental Design Guideline* for further information.

2. A Crime Risk Assessment must be prepared and submitted to Council for major scale subdivision applications (more than 50 lots). The Crime Risk Assessment should be prepared by a person who has undertaken the NSW Police Service 'Safer by Design' course (or equivalent) and must:

   i. Analyse the types of crime that may be prevalent in the area, and to which the development may be susceptible;

   ii. Provide information as to how the design was informed by the CPTED principles; and

   iii. Inform the design, construction or future management practises of the development (eg: building materials, signage, lighting, landscaping, security patrols, maintenance and graffiti removal practices)

3. Any recommendations or shortfalls identified by a Crime Risk Assessment are to be implemented into the design of the development to the satisfaction of the assessing officer.

Note: Refer to Council's *Crime Prevention Through Environmental Design Guideline* for further information on what needs to be covered in a Crime Risk Assessment.

3.27 SITE BENCHING

Objectives

a. To ensure that subdivision design and layout responds to the site's characteristics.

b. To maintain site stability.

c. To allow site benching of suitable land at subdivision stage.

d. To ensure that cut and fill does not significantly alter the flow of water or exacerbate flooding.

Controls

1. Fill is not permitted within core riparian zones, within the Lakefront Development Area or the Foreshore Development Area, or within the extent of the 100 year probable ARI (1% AEP) flood event.
2. Cut and fill associated with subdivision development must be minimised.
3. Trees and other native vegetation must be retained on site where possible. Justification is required for removal of trees and other native vegetation.
4. Any fill used must be virgin Excavated Natural Materials, certified Excavated Natural Material or be uncontaminated engineered fill.
5. Benching of allotment for residential subdivision is permitted at the subdivision stage if:
    i. The side-to-side crossfall on the resulting benched lots does not exceed 5%.
    ii. The height of retaining walls should generally be limited to 1 metre, and must not exceed 1.5 metres at any one point.
    iii. All retaining wall designs include a sub-soil drainage system;
    iv. Retaining walls must be located entirely on the lot being retained, including all necessary sub-soil drainage;
    v. Retaining walls are designed to accommodate the future dwellings, or a restriction is placed on the lots to ensure that buildings are not built within the zone of influence of the retaining wall;
    vi. Retaining walls are constructed of decorative masonry or similar high quality materials;
    vii. Retaining walls incorporate provision for future fencing.

Note: Benching is excavation and / or filling of the natural slope of land to create flat building sites. The earthworks are held in place by a retaining wall.

Note: Section 4.14 of Part 3 – Development within Residential Zones of LMDCP 2014 contains controls for cut and fill that apply in addition to those provided above. Where retaining walls are proposed at the development application stage for an individual lot or detached dual occupancy with two lot subdivision, only the provisions under Section 4.14 of Part 3 of the DCP apply and the retaining wall must be offset 1m from the allotment boundary and located within the low side lot.

3.28 STREET TREES AND STREETSCAPE IMPROVEMENTS

Objectives

a. To provide high amenity neighbourhoods that enhance the desirable features of the surrounding area.

b. To provide neighbourhoods with a distinctive character.

c. To ensure that street trees and adequate street lighting are provided at the subdivision stage.

d. To integrate the location of street trees, street lighting, and utility services.

Controls

1. For new residential streets, street trees must be supplied and installed at a minimum rate of one tree every lot (two per corner lot). For new industrial subdivisions, street trees must be supplied and installed at a rate of at least one tree every 20 metres. For new business subdivisions, street trees must be supplied and installed at a rate of at least one tree every 10 metres.
2. Street trees must be located in the road verge where practical. Street trees in the carriageway or median strip are permitted where there is inadequate space in the verge, or where other constraints exist that preclude plantings in the road verge.
3. Street tree location and species must not cause obstruction of the carriageway, vehicle sight distances at intersections. They must not obstruct the efficient movement of vehicles such as garbage trucks.
4. All street tree species must have at least three metres clearance from ground level to the lowest branch when mature.
5. In residential subdivisions, street tree species must be selected to provide summer shading while not impeding solar access in winter.
6. All trees installed must be advanced stock and at least 75L container size.
7. The tree supplier or landscape contractor must provide evidence that all trees generally comply with *NATSPEC Guide to Specifying Trees - Assessment of Tree Quality*.
8. All trees installed must be established and maintained for a minimum period of 24 months. Any failed trees must be replaced immediately.
9. Street lights must be provided for roads and intersections. Pedestrian crossings and traffic calming devices must also be provided, in accordance with relevant Australian Standards.
10. Appropriate landscape documentation must be prepared and submitted in accordance with Table 4 – Landscape Development Type and Requirements.
11. Landscape documentation must be prepared by appropriately qualified professionals. For Category 3 development, landscape documentation must be prepared by a qualified landscape architect. For Category 2 development, landscape documentation must be prepared by a landscape architect, landscape designer or horticulturist.
12. The landscape consultant's declaration must be signed and submitted with the relevant landscape documentation.

Note: Refer to Council's *Landscape Design Guidelines* for further details and requirements.

Table 4 - Landscape Development Type and Category

Development Type and Category	Landscape Documentation	
	Landscape Concept Plan at DA stage	Landscape Masterplan and Landscape Report at DA stage
Category 3: **Large Scale** - subdivision for 50 or more residential lots, or - subdivision for 10 or more industrial or commercial lots.	Yes	Yes
Category 2: **Medium Scale** - subdivision for less than 50 residential lots, or - subdivision for less than 10 industrial or commercial lots	No	Yes

3.29 COMMUNITY TITLE SUBDIVISION

Objectives

a. To encourage subdivision which achieves better social, environmental and economic outcomes that would not otherwise be achieved by conventional subdivision.

b. To provide appropriate access, amenity and siting for all development lots.

c. To ensure that separate private and communal open areas are provided.

Controls

1. Lot sizes and dimensions must be in accordance with clauses 3.1 to 3.17 of this part of LMDCP 2014.
2. A development site must be identified for each lot. The development site must be an appropriate size and shape to encompass the dwelling and all ancillary uses and structures.
3. Internal access ways and driveways must be designed to clearly indicate their function. They must provide acceptable levels of access, safety, amenity and convenience for users, as well as catering for vehicle parking. Internal access is designed in accordance with Table 5.

Table 5 - Internal Access Ways for Community Title Development

	Type 1	Type 2	Type 3
Maximum design speed	40km/h	30km/h	20km/h
Minimum carriage width	6m	5.5m low speed entrance treatment	5m
Minimum total access way reserve	10m	8m	8m

	Type 1	Type 2	Type 3
Minimum shoulder width	1.5m	1m	1m
Nature strip width	1.5m	No	No
Cul-de-sac design for service vehicle	3 point turn	3 point turn	3 point turn
Kerb and gutter	Yes In Business and Residential zones only	Yes In Business and Residential zones only	Yes
Footpath	Yes	Yes	No

Note:

Type 1 – Minor loop road not exceeding 200 metres in length.

Type 2 – Minor loop for vehicular and pedestrian use not exceeding 100 metres in length.

Type 3 – Road for vehicular and pedestrian use not exceeding 50 metres in length

Community Title Subdivisions that have Private roads that exceed the "Type 1" requirements must be designed to meet the standards shown in Table 3 for Public Road standards

4. Ingress/egress to individual lots is not from a public road.
5. Communal open space areas must be distinguished from private open space. Communal open space areas must be designed to meet user needs, and determined by:
   i. Overall housing density;
   ii. Their design to ensure non-discriminatory access and use; and
   iii. The quality and extent of alternative, nearby public open space.
6. The application for community title subdivision development must include a Schedule of Unit Entitlements, a Management Statement, and may also require a Development Contract.

3.30 SUBDIVISION IN RURAL AND ENVIRONMENTAL ZONES

The controls in this section are in addition to the controls elsewhere in this part of DCP 2014.

Objectives

a. To ensure that subdivision in the rural and environment protection zones protects the natural environment, including water catchments.
b. To ensure that subdivision protects the character of the location, and does not adversely impact on the agricultural productivity of rural zoned land.
c. To ensure the adequate servicing and suitable siting of development.

Controls

1. For each proposed lot, a 'development area' must be nominated that:
   i. Contains the dwelling and all ancillary buildings, structures and APZs, and where required, on-site sewage treatment;
   ii. Is not subject to flooding, landslip, land instability or other unreasonable risks or hazards;
   iii. Minimises the need for earthworks and vegetation clearing; and
   iv. Onsite sewage treatment is suitably located, if no access to reticulated sewer is available.
2. An access corridor to the development site must be identified which:
   i. Is at a grade that is less than 20%, and minimises the need for earthworks;

ii. Is designed and located to minimise clearing of vegetation, and does not adversely impact on views from areas external to the site; and

iii. In bushfire prone areas, the access complies with the requirements of the NSW Rural Fire Service's document *Planning for Bushfire Protection*.

3. Utility Services to the site should be located along the access corridor, and not require additional clearing.

4. An adequate level and type of utility service must be provided and identified on the Subdivision Plan, with details of how those services will be provided to each lot.

5. Adequate buffers should be provided between incompatible land uses.

3.31 SUBDIVISION FOR BIODIVERSITY CONSERVATION

Objectives:

a. To facilitate the subdivision of land for the purposes of biodiversity conservation.

Controls:

1 Subdivision of land below the minimum lot size for the purposes of biodiversity conservation must:

i. not create the opportunity for an additional dwelling or structure ;

ii. not result in the clearing of any additional native vegetation other than native vegetation required to be removed for the long term protection conservation and management of the lot (e.g. perimeter fencing);

iii. Ensure that the land is managed in accordance with a plan of management (and/or a management plan) and with sufficient resourcing available to implement the plan of management (and/or management plan);

iv. Ensure that arrangements for managing the land are secured in-perpetuity under a legally binding conservation mechanism.

Note: Legally binding conservation mechanisms include biobanking, biocertification, Native Conservation Trust agreements and planning agreements

4 SUBDIVISION CONSTRUCTION

4.1 EROSION AND SEDIMENT CONTROL

Objectives

a. To ensure that development is designed to avoid and reduce erosion by minimising disturbance, retaining vegetation and reducing the need for earthworks.

b. To prevent erosion and sediment laden run-off during site preparation, construction and the ongoing use of land.

c. To ensure that integrated solutions are implemented for the control and treatment of erosion and sediment, using a treatment train approach.

Controls

1. For proposals where the area of soil disturbance is less than 250m², appropriate erosion and sediment control measures must be installed and maintained, in order to prevent pollutants from entering water courses during construction and until 70% ground cover is attained.
2. For proposals where the area of soil disturbance is more than 250m² but less than 2500m², an Erosion Sediment Control Plan (ESCP) must be prepared and lodged, in accordance with the requirements in Council's *Erosion and Sediment Control Guideline*.
3. For proposals where the area of soil disturbance is more than 2500m², a Soil and Water Management Plan, identifying erosion prevention and sediment control measures must be prepared and lodged, in accordance with Council's *Erosion and Sediment Control Guideline*.
4. The maximum area of bare earth exposure at any one time should be restricted to 2.5 hectares.

Note: Council may vary the requirements, especially where there is a higher or lower risk of polluting receiving waters. Further information may be required for any site depending on, but not limited to, the calculated soil loss, sediment type and an assessment of site constraints and opportunities.

4.2 AIR QUALITY

Objectives

a. To ensure that development does not adversely affect air quality beyond the National Environment Protection Measure (Ambient Air Quality) standard for criteria air pollutants.

b. To ensure that measures are implemented to maintain air quality.

c. To ensure that odours and emissions do not have an unreasonable impact on the amenity of neighbouring properties, or the health of their occupants

d. To ensure that odours and emissions do not have an unreasonable impact on public health.

e. To ensure that emissions do not have an unreasonable impact on natural environment.

Controls

1. An air quality report must be prepared by an air quality/odour expert **w**here a proposed development has the potential to adversely affect air quality. This report must:
   i. Consider the information provided on Council's Local Air Quality Maps;
   ii. Address impacts caused by construction and ongoing operation or occupation of the development;
   iii. Identify emissions, and measures to mitigate the overall impact, and the impact on nearby residences and occupants of other properties especially sensitive receivers; and

iv. Be prepared in accordance with the Approved Methods for the Modelling and Assessment of air pollutants in New South Wales and other requirements prescribed in State and Federal legislation.

Note: Council's air quality map is based on modelling air pollution in the local government area and identifies areas where the Criteria Air Pollutants exceed the National Environment Protection Measure (Ambient Air Quality) standard.

4.3 NOISE AND VIBRATION

Objectives

a. To minimise the generation of noise and/or vibration and to mitigate associated adverse impacts on the amenity of neighbouring properties, their occupants and occupants of the proposed development.

Controls

1. Where proposed development has the potential to produce an adverse noise or vibration impact on occupants of the site or nearby properties, an acoustic and vibration study must be prepared by a qualified consultant and submitted to Council.
2. Any noise or vibration generated by development must not exceed the criteria stipulated in the *NSW Industrial Noise Policy* or the *Noise Guide for Local Government* at the property boundary of the noise source, or at a receiving lot boundary.
3. Measures must be implemented to ensure that any noise or vibration generated is not offensive, in accordance with the *Noise Guide for Local Government*.
4. During construction, the operating noise level of machinery, plant and equipment must comply with the *Noise Guide for Local Government*.
5. Any noise generating operations and outdoor operations must only occur between 7am and 6pm Monday to Saturday.
6. A suitably qualified acoustics consultant must prepare a Noise Management Plan if construction is proposed to exceed 26 weeks.
7. Council may request at any stage an independent report to confirm that any noise emissions are within acceptable limits; such costs are to be borne by the applicant.
8. Where construction vibration has the potential to damage nearby existing buildings, a dilapidation survey of the buildings must be undertaken before and after the construction works.

4.4 DEMOLITION AND CONSTRUCTION WASTE MANAGEMENT

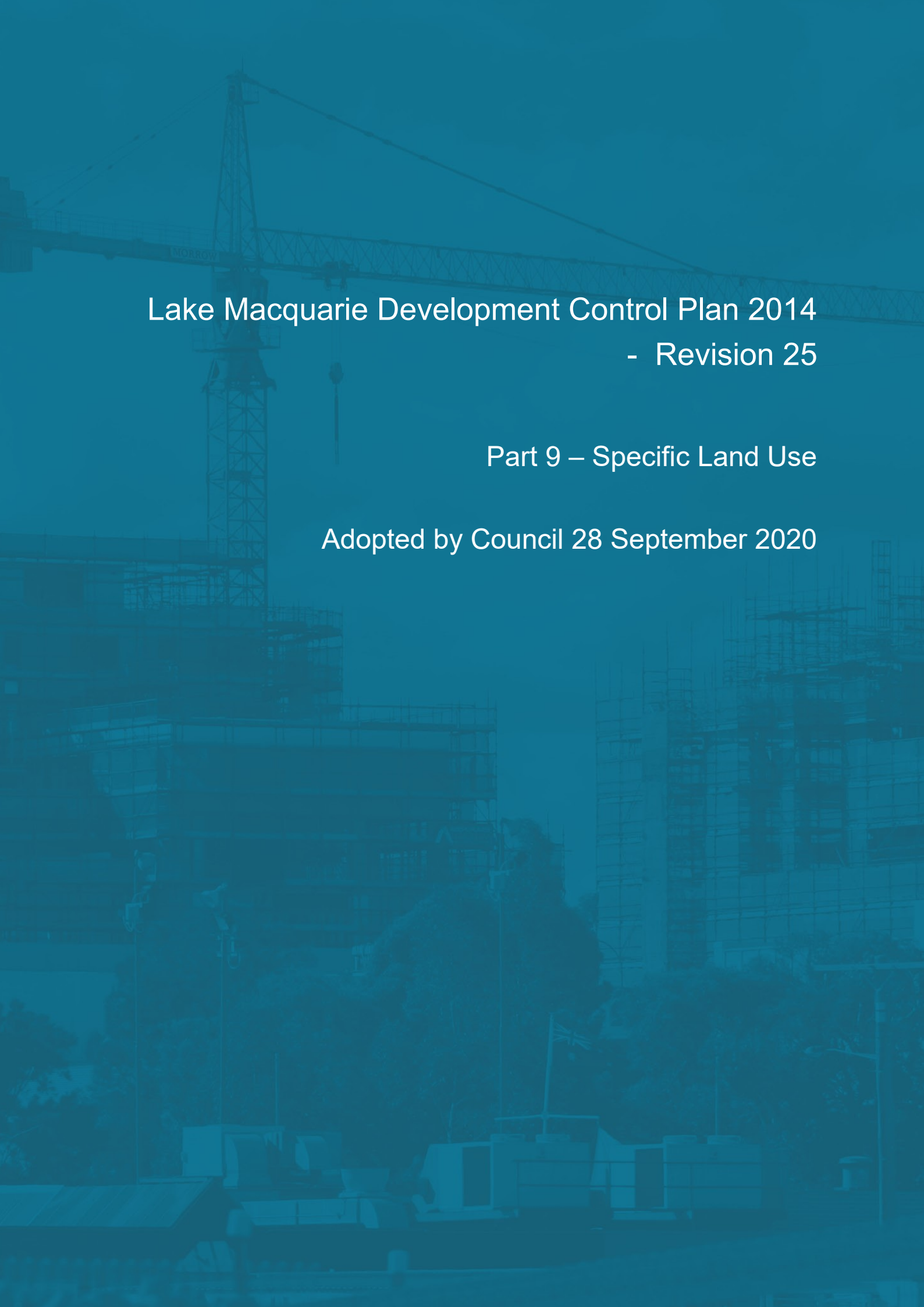
Objectives

a. To reduce demolition waste by maximising beneficial reuse of infrastructure, buildings and materials onsite.
b. To avoid creating construction waste wherever possible.
c. To enable maximum diversion of demolition and construction waste to reuse, recycling or composting.
d. To ensure that waste management is planned across all demolition and construction stages so that reusable resources and waste can be appropriately and effectively stored and removed safely from site without adverse impacts on local amenity.

Controls

1. For all demolition works, a Demolition Waste Management Plan (WMP) must be prepared and submitted. For all construction works, a Construction WMP must be prepared and submitted. Both plans must be prepared in accordance with Lake Macquarie City Council Waste Management Guidelines, must describe how the proposal avoids creating waste, and how they maximises the reuse and recycling of demolition and construction materials.

2. Waste should be contained within the construction site in a suitably screened area of at least 3.5m² and 1.2 metres high for removal during, or at the completion of, the construction stage. All demolition and construction stage waste storage areas must be shown on a demolition and construction waste site plan.
3. No waste should be left onsite unless it:
    i. can genuinely be reused onsite, in which case the materials to be reused must be included in the design;
    ii. will be used as replacement or spare parts for future maintenance; or
    iii. can be reused on another authorised part of the property.
4. In order to manage noise levels, collection of waste from the demolition and construction site must only occur during hours approved for construction and demolition work.
5. For staged constructions, a waste management plan must be prepared showing:
    i. the waste storage locations relating to construction sequencing of the dwellings; and
    ii the waste collection locations relating to each construction and occupation stage for both occupants' wastes and separately collected construction wastes, including evidence that waste collection vehicle access and turning space is available at every stage and will not be compromised by parking or unloading of construction-related vehicles or other consequences of construction staging.



Lake Macquarie Development Control Plan 2014 - Revision 25

Part 9 – Specific Land Use

Adopted by Council 28 September 2020

Table of contents:

1 ATTACHED DWELLINGS

This section of the DCP only provides Council's specific requirements for Attached Dwelling development. Other requirements that must be addressed are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

Groups of structurally independent dwellings built to both boundaries (abutting dwellings) are similar to attached dwellings as defined under the LMLEP 2014, but are not attached by a common wall. Abutting dwellings are considered to be a dwelling house under the LMLEP 2014 definitions, but the controls provided in this part of the LMDCP 2014 are applicable because of the similar built form.

1.1 SITE REQUIREMENTS

Objectives

a. To ensure that Attached Dwelling developments are located on sites with sufficient size and street frontage to accommodate the required building envelope, car parking, landscaping, and private open space.

Controls

1. The development site must have a minimum area of 700m^2.
2. The development site must have direct frontage to a public road.

1.2 SITE COVERAGE

Objectives

a. To ensure development maximises permeable surfaces and maintains a balance between built, and unbuilt areas.

b. To facilitate on-site stormwater infiltration and harvesting for re-use.

c. To incorporate suitable measures to minimise run-off directly accessing the Lake or its waterways.

Controls

1. The maximum site coverage for Attached Dwellings, including ancillary development, must not exceed 75%.

Note: Site coverage means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

- any basement,
- any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
- any eaves,
- any unenclosed balconies, decks, pergolas and the like.

Note: Balconies, decks, pergolas and the like located under the main roof of the building are not considered to be unenclosed and will be included in the site coverage calculation.

Note: Site coverage controls operate in tandem with the Stormwater Management, Principal Private Open Space, and Landscaped Area and Design controls in this DCP to ensure that adequate unbuilt area is available for outdoor recreation and for reducing stormwater discharge from the site. Stormwater permeability and integration with the landscape design will be considered when determining whether structures are included in the site coverage calculations.

1.3 LANDSCAPED AREA

Objectives

a. To enable landscape planting in front setback areas that enhances the streetscape.

b. To enable landscape planting in side and rear setback areas that enhances residential amenity.

c. To conserve significant vegetation, topographical features, and fauna habitat.

d. To promote on-site stormwater infiltration by encouraging pervious surfaces and landscaped areas.

Controls

1. For Attached Dwelling developments, the minimum landscaped area must be 10% of the total lot area. The landscaped area must have a minimum width of 1.5 metres to be included in the landscaped area calculations.
2. Landscaping should be used to define the entrances to individual dwellings.

Note: The landscaped area may be within the front, side or rear setbacks. The landscaped area is in addition to the principal private open space requirement.

1.4 PRINCIPAL PRIVATE OPEN SPACE

Objectives

a. To ensure that Attached Dwelling developments provide sufficient outdoor areas for residents' needs.

Controls

1. A Principal Private Open Space with a minimum area of 16m^2 and a minimum width of four metres must be provided for each dwelling.

Note: A waste storage area is in addition to the principal private open space requirement.

1.5 SERVICES

Objectives

a. To ensure that Attached Dwelling developments provide adequate services to cater for residents' needs, which are unobtrusive and integrated into a development.

Controls

1. Where any part of the Attached Dwelling development is located 120 metres or more from an existing street fire hydrant, a fire hydrant should be provided.
2. Air-conditioning plants should be located towards the centre of the site and be acoustically insulated.

1.6 DRIVEWAY DESIGN

Objectives

a. To ensure vehicular access has minimal impacts on neighbouring dwellings.

b. To ensure that vehicular access points and parking is safe and convenient for residents, visitors, and service providers.

Controls

1. All dwellings within an Attached Dwelling development must have direct access to a road frontage.

1.7 ACCESSIBILITY OF DWELLINGS

Objectives

a. To ensure that developments incorporate housing that is accessible to all members of the community.

Controls

1. For proposals for more than 10 dwellings, one dwelling in every 10 should be provided as an adaptable dwelling.
2. Adaptable dwellings must have a car park linked to the dwelling by an unobstructed path of travel, at a suitable gradient for wheelchair access.
3. Adaptable dwellings must have entries, doors and passageways that are of suitable dimensions to facilitate wheelchair access.
4. Each dwelling should have an individual entrance at ground level, which is direct to a public road.

1.8 SIDE SETBACKS

Objectives

a. To ensure that attached housing is provided in a coordinated manner.

b. To ensure a reasonable level of privacy, solar access and natural ventilation.

Controls

1. The composition of groups of attached and abutting dwelling lots must be designed to accommodate side setbacks to the end dwellings in each group, as shown in Figure 1 below.

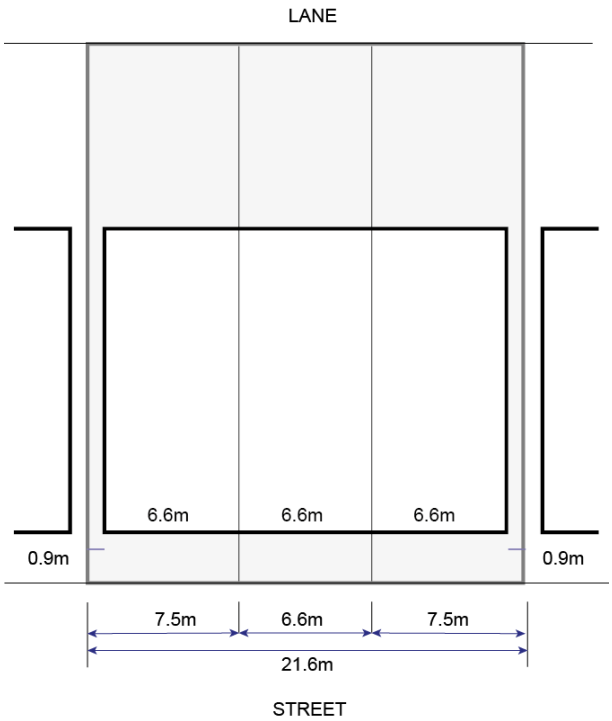


Figure 1 - Side setbacks for 'sets' of attached or abutting terraces

1.9 SOLAR ACCESS

Objectives

a. To ensure that reasonable access to sunlight is maintained for occupants of new and existing dwellings.

b. To optimise solar access to habitable living areas.

Controls

1. Attached and abutting dwellings must be located with the rear of the allotment to the north or to the east in order to meet solar access requirements set out elsewhere in this DCP.

1.10 CONSTRUCTION REQUIREMENTS

Objectives

a. To ensure that attached housing is provided in a coordinated manner.

Controls

1. Consideration must be given to the construction sequencing of groups of abutting dwellings.

1.11 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure that waste bins can be safely and conveniently moved between storage location(s) and collection point(s).

b. To ensure that occupants have reasonable access to the waste storage area.

c. To ensure that the location of bin storage and collection points do not obstruct access.

d. To ensure that bulk waste such as furniture and whitegoods can be effectively managed.

e. To ensure any bin storage area enclosures are an integral part of the built form and landscape character.

Controls

1. Waste management for Attached Dwellings must comply with "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:
   i. Waste Storage area(s)
      a) The development must ensure there is a common property shared waste storage area that is accessible to both dwellings to share a set of 240 litre bins, or another accessible common property shared waste storage area shared with other nearby dwellings or a minimum space for waste bin storage of three 240 litre bins (and access space) allocated per dwelling.
      b) Bin enclosures must be in character with the land use zone characteristics. The enclosure must be set back behind the front building line or suitably integrated visually to form part of the building line. The enclosure must visually integrate with the building or landscaping in terms of appearance, materials, bulk and scale, and location and orientation.
   ii. Waste carting route(s) from premises to external waste storage area(s):
      a) Distance of routes from dwelling door to waste storage location for that dwelling must be no further than 75 metres, or for adaptable dwellings must be no further than 50 metres at a maximum 1:14 gradient with wheelchair accessibility.
   iii. Bin carting route(s) from waste storage area(s) to waste collection point(s):
      a) Bin routes between storage and collection locations must be no further than 75 metres, or 50 metres for adaptable dwellings.

b) The route from storage to collection location must not pass through the interior of dwellings, but bins can be taken through garages and courtyards. Bin routes must not traverse up or down kerbs or steps, stairs or gradients steeper than 1:14 or over stepping-stones, loose gravel, or soft materials. For adaptable dwellings, the route through a garage must not require the removal of the vehicle to wheel the bin through.

iv. Waste collection point(s):

a) All dwellings must have access to space to place one to two (1-2) cubic metres of bulk waste such as furniture and whitegoods on kerbside for collection, or a suitable alternative bulk waste collection management option must be provided and described in the waste management plan.

b) A waste system information guide must be provided with the Waste Management Plan that will be given to owners, occupants and property managers. The guide must outline the waste service system and how to use it, the locations for bin storage and waste collection points, options within the planning for alternative waste service solutions, and wording to be included in the tenancy agreements about waste management.

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2 BED & BREAKFAST/ FARM STAY ACCOMMODATION

This section of the DCP only provides Council's specific requirements for Bed and Breakfast and Farm Stay Accommodation developments. Other requirements are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

2.1 GENERAL PROVISIONS

Objectives

a. To ensure that Bed and Breakfast and Farm Stay Accommodation does not adversely affect the character of the area.
b. To ensure that potential impacts on the amenity of neighbours is minimised.

Controls

1. A Bed and Breakfast and Farm Stay Accommodation development must not contain more than five guest bedrooms.
2. A Bed and Breakfast and Farm Stay Accommodation development must not accommodate more than 12 guests.

2.2 SIGNAGE

Objectives

a. To preserve the character of the surrounding area.
b. To enable identification of Bed and Breakfast and Farm Stay Accommodation developments while minimising the impact of signage.

Controls

1. Signage must not exceed a single sign with a maximum area of 0.6 square metres and may include details of:
   i. Land use,
   ii. Name(s) of the owner/establishment,
   iii. Phone number
2. Signage must not be illuminated and the style and materials of the sign must be compatible with the character of the area.

2.3 OPERATION

Objectives

a. To ensure that Bed and Breakfast and Farm Stay Accommodation developments provide an acceptable level of amenity to guests, and maintain adequate health standards.

Controls

1. The development must provide a minimum of two baths/showers, two toilets and two wash basins.
2. For guest bedrooms, a minimum of five square metres of bedroom floor area per person must be provided.

2.4 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure that Bed and Breakfast and Farm Stay Accommodation developments provide an acceptable level of waste management amenity to guests that will maximise diversion of waste from landfill to recycling and composting.

Controls

1. The Waste management for Bed and Breakfast and Farm Stay Accommodation must comply with the "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:
   i. Bin type, sizes, numbers and collection frequency
   ii. Internal storage
   iii. Waste carting route(s) from premises to external waste storage area(s)
   iv. Waste storage area(s)
   v. Bin carting route(s) from waste storage area(s) to waste collection point(s)
   vi. Waste collection point(s)
   vii. Waste collection vehicle access
2. The development must provide a waste storage space accessible to all guests within the accommodation that has sufficient space to store separated recycling, food waste, problem wastes (such as batteries, light globes, cooking oils and paint), and residual garbage for a minimum of two days. This must be clearly labelled to identify which wastes can be included in which container.
3. A safe access route from the accommodation to the waste bin storage area(s) must be shown on the design plan, must be well-lit and must be no more than 100 metres.

3 CARAVAN PARKS AND MANUFACTURED HOME ESTATES

This section of the DCP only provides Council's specific requirements for Caravan Parks and Manufactured Home Estate development. Other requirements are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

Sub-Division by Lease

Council supports the establishment of sub-division by lease arrangements within Caravan Parks and Manufactured Home Estates for longer term/permanent residents, which maintains the lower cost of housing, while also providing short term returns to developers. This is intended to make the development of Caravan Parks and Manufactured Home Estates more attractive to developers, and to provide greater viability in undertaking developments of this type.

Community Title Developments

A Community Title Manufactured Home Estate is another option for applicants, which enables individual dwellings to be sold, and provides a short-term return on investment.

3.1 DESIGN AND ACCESS

Objectives

a. To ensure non-discriminatory access to dwellings in Caravan Parks and Manufactured Home Estates.
b. To ensure adequate access to services and facilities and to enable freedom of movement for residents without the need for a motor vehicle.

Controls

1. Twenty-five percent of sites within the Caravan Park or Manufactured Home Estate must facilitate the establishment of housing designed to provide accommodation for disabled residents.
2. The entrance of the Caravan Park or Manufactured Home Estate must be within 400m of a sheltered bus stop or train station that provides at least two return journeys to a town centre.
3. Caravan Park and Manufactured Home Estate design must provide a high level of pedestrian safety and ease of access throughout the development.
4. Pedestrian access paths may be integrated with minor access roads that service no more than 30 dwelling sites.
5. Roads serving more than 30 dwelling sites are not suitable to accommodate pedestrian movement, and a separate pedestrian network is to be established to facilitate pedestrian movement where in these cases.
6. Lighting is to be provided between dusk and dawn, with light posts positioned along access roads and pedestrian routes.
7. Administration, retail, community facilities and amenities buildings, including laundry facilities within the Caravan Park or Manufactured Home Estate, are not to be greater than 75m from a long term site or 100m from a short term site, and non-discriminatory access is to be provided to these facilities.

3.2 PLANNING FOR EMERGENCIES

Objectives

a. To ensure the safety of Caravan park and Manufactured Home Estate residents through appropriate positioning and design, as well as through planning for emergencies.

Controls

1. An emergency management plan must be submitted to Council with a development application applying to a Caravan Park or Manufactured Home Estate. The emergency management plan must include:
   i. a risk assessment that identifies all possible risks (e.g. flood, fire, storm) and relevant mitigating actions (including warning signs, securing objects that might be mobilised during an event), appropriate responses (including evacuation procedures) and recovery;
   ii. an evacuation plan and identification of an evacuation location that can provide food and shelter for evacuated persons;
   iii. access for emergency response agencies; and
   iv. warnings and accessible information for residents and appropriate training for staff.

3.3 LAND TITLE ARRANGEMENTS

Objectives

a. To provide low cost rental accommodation while also providing incentives for developers to consider Caravan Parks and Manufactured Home Estates as a viable development option by enabling subdivision-by-lease arrangements.
b. To provide low cost rental accommodation while also enabling a greater level of ownership for residents by allowing Community title subdivision of Caravan Parks and Manufactured Home Estates.

Controls

1. A Caravan Park or Manufactured Home Estate may be subject to subdivision by lease up to a maximum of 60% of dwellings. The remaining are to be available for standard lease arrangements to ensure the maintenance of low cost rental accommodation.
2. A Caravan Park or Manufactured Home Estate may be subject to community title subdivision up to a maximum of 60% of dwellings. The remaining are to be available for lease to ensure the maintenance of low cost rental accommodation.

3.4 PARKING

Objectives

a. To provide suitable access for by motor vehicles while maintaining pedestrian safety and access.

Controls

1. Where the number of sites within the Caravan Park or Manufactured Home Estate is 100 or fewer, a single centralised car parking facility must be provided.
2. Where the number of sites within the Caravan Park or Manufactured Home Estate is greater than 100, car parking facilities should be spread through the development, with a minimum of four spaces per facility and a maximum of 10 spaces per facility.
3. All sites within the Caravan Park or Manufactured Home Estate must be within 100m of a visitor car parking facility.
4. A car parking facility must be immediately adjacent to the office/manager's residence of the Caravan Park or Manufacture Home Estate, and this facility is to contain at least one disabled car space.

3.5 AMENITY

Objectives

a. To ensure that appropriate measures are implemented to mitigate land use conflict, and to maintain amenity within the Caravan Park or Manufactured Home Estate.
b. To mitigate adverse impacts on the amenity of adjoining development.

Controls

1. Measures must be implemented to mitigate landuse conflict between Caravan Parks or Manufactured Home Estates and other nearby development, particularly at landuse zone interfaces. All structures should be setback at least 20 metres from a property boundary that adjoins a rural, industrial, open space, or an environmental land use, or at least 10 metres from a property boundary that adjoins any other land use.
2. Where the development is visible from a public road, dwelling, waterway, or open space area, the minimum setback requirement should increase by 5 metres for half of the Caravans or Manufactured Homes along that edge of the development.
3. No more than four Caravans or Manufactured Homes are to be positioned in a row with the same setback.
4. Landscaping must be provided to maintain a high level of amenity within the development complex, to contribute to privacy of residents and neighbours, as well as to contribute to streetscape amenity.
5. A detailed landscaping plan must be submitted with the development proposal for a Caravan Park or Manufactured Home Estate.
6. Landscaping must be provided between groups of Caravans or Manufactured Homes, with not more than four being contained within any one group. These landscaped areas are to be a minimum width of three metres and are to extend the length of the adjoining building.
7. Fencing is not to be relied upon for the delineation of sites.
8. Car parking areas must be landscaped to mitigate the effect of car headlights on dwellings within the Caravan Park or Manufactured Home Estate or on neighbouring dwellings.
9. Landscaping must provide shelter from adverse weather conditions including providing shade, as well as providing shelter from prevailing winds.
10. Landscaping must provide privacy to dwellings within, and adjoining, the Caravan Park or Manufactured Home Estate through screening.

3.6 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure that waste management solutions are an integral part of the design and operation.
b. To provide for sufficient volume of accessible, safe, hygienic, aesthetic waste storage on the property, with noise, odour and visual impacts on occupants and neighbours minimised.
c. To enable maximum separation of reusable, recyclable, compostable and problem wastes.
d. To ensure equitable access for all occupants to opportunities to maximise diversion of waste to recycling and food and garden waste composting.
e. To provide flexibility to expand or reconfigure waste separation systems, so that owners and occupants have options to access a choice of waste services.
f. To ensure that occupants of caravan parks and manufactured home estates have access to bulk waste disposal options (such as furniture and whitegoods).
g. To provide unobstructed waste collection point(s) that are safely and efficiently accessible by Council waste collection vehicles.
h. To provide unobstructed, safe access to move bins between storage and collection points.

Controls

1. Waste management for Caravan Parks and Manufactured Home Estates must comply with "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:
   i. Bin type, sizes, numbers and collection frequency
   ii. Internal storage
   iii. Waste carting route(s) from premises to external waste storage area(s)
   iv. Waste storage area(s)
   v. Bin carting route(s) from waste storage area(s) to waste collection point(s)
   vi. Waste collection point(s)
   vii. Waste collection vehicle access
2. The following must be shown on scaled plans to be submitted with the development application for Operational Use:
   i. waste bin locations around the park or estate (with bins drawn to scale);
   ii. shared waste storage area(s) with all bins, problem waste, bunded storage and equipment shown to scale and bulk waste storage area delineated;
   iii. location(s) from where waste will be collected, with all bins shown to scale (if different from storage areas);
   iv. waste carting route(s) from around park/estate to waste storage area(s) (whether by ute, wheeling bins or other means);
   v. bin carting route(s) from waste storage to collection point(s); and
   vi. for developments proposing onsite collection, the waste collection vehicle route, turn space, swept paths and clearances.
3. The caravan park or manufactured home estate must have, in accordance with Lake Macquarie City Council Waste Management Guidelines:
   i. waste storage areas for use by occupants and visitors that have at least one of each of a garbage, recycling and green (including food) waste bin and these bins are co-located;
   ii. waste storage area(s) that are screened from the main living spaces of dwellings, public road and views from neighbours, and are located away from doors, windows and air intakes of all dwellings and communal facilities. At least one waste storage area must be capable of storing problem wastes that cannot be collected in waste bins such as batteries, gas bottles, paints, oils, liquid wastes and chemical wastes, and bulk waste (such as furniture and whitegoods). Space for storage must also be allocated and indicated on plans for any proposed waste management equipment (such as ute, bin carts, bin lifts, large bins and compaction equipment);
   iii. if bins are not collected directly from the waste storage area(s), then unobstructed, safe waste bin collection space(s) sufficiently sized to enable bins to be placed for removal by waste collection vehicle of all wastes generated.;
   iv. safe, lit access from dwelling to allocated waste storage area that is less than:
      - 75 metres in length, or
      - 50 metres in length for adaptable housing and seniors' developments;
   v. if bins are to be moved from waste storage to another location to be emptied, mobile garbage bin carting routes that do not contain steps, walls, gateless fences, narrow gates, parked cars, vegetation, loose ground finishes, stepping-stones or other obstacles;
   vi. for wheeled bins over 360 litres, bin carting distances that are not over three metres (or five metres for 660 litre bins or smaller) at gradients that are not steeper than 1:30, and do not contain steps, walls, gateless fences, narrow gates, parked cars, vegetation, loose ground finishes, stepping-stones or other obstacles; and
   vii. bin enclosures that are all in character with the land use zone characteristics and blend with visual characteristics of the property;

4. Responsibility for the transfer, collection and disposal of recyclables, compostable wastes and residual garbage must be planned during the project's design stage. The development proposal must outline these arrangements in the Operational Waste Management Plan and/or in a waste management information guide. A copy of the waste management information that will be provided to property owners, caravan and manufactured home owners, property managers and occupants must be included with the development application.
5. Where bins (mobile garbage bins (MGBs) 360 litre size and smaller) are to be collected by a side-lift waste collection vehicle, sufficient space must be allocated so that bins can be placed at a minimum of one metre centres with half a metre each end of the row to allow the collection arm to grip around the bin to lift it. The length of continuous area required can be calculated as 1 metre per bin plus 1.5 metres for each separate collection area.
6. If the park or estate has less than 40 dwellings with shared bins and sufficient kerbside space is available, kerbside collection may be possible. No more than 20 bins of each waste type (40 bins on any one day) up to 360 litres in size should be placed out at any one kerbside location on a property.
7. Bins should be placed out for collection in a reasonably flat location that does not obstruct traffic and pedestrian flows, roundabouts, parking bays, No Stopping zones, bus stops, gutters, drainage swales, driver site lines, access to letterboxes, or access to and from car parks; and where bin lifts are not obstructed by signs, sign posts, fencing, retaining walls, vegetation or other elements. All bins larger than 360 litres must be collected from a designated onsite location.
8. For bins up to 360 litres to be collected onsite, the onsite road access must meet pavement quality, turn and lift requirements for Council waste collection vehicle dimensions. Provision of service will be subject to Council and waste contractor inspection on completion of works and signing of an indemnity agreement. Vehicle turn arcs must be demonstrated as sufficient for up to 10 metre length domestic side-lift waste collection vehicles or else with turns and cul-de-sacs as per Standard Drawing EGSD-701 for 12.5 metre length vehicles. If internal roads are only built as per the Lake Macquarie City Council Vehicle Access Guideline Medium Rigid Vehicle (MRV) standard, then it must be demonstrated that services using waste collection vehicles of 8.8 metres or less are available to provide the onsite waste collection.
9. Where the collection of waste in bins of 660 litre size or larger is required, the bin collection point must be onsite and accessible by service vehicles with minimal reversing. Waste collection must not block onsite car parking, or access and egress from the property. Vehicle turn arcs must be demonstrated as sufficient for rear-lift waste collection vehicles or else with turns and cul-de-sacs as per Standard Drawing EGSD-701 for 12.5 metre length vehicles. If internal roads are only built as per the Lake Macquarie City Council Vehicle Access Guideline Medium Rigid Vehicle (MRV) standard, then it must be demonstrated that services using waste collection vehicles of 8.8 metres or less are available to provide the onsite waste collection.
10. Measures must be implemented to mitigate the impacts of odour and noise associated with the management of waste. Noise must be evaluated in accordance with NSW Environment Protection Authority's Industrial Noise Policy.

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6 DUAL OCCUPANCY

This section of the DCP only provides Council's specific requirements for Dual Occupancy developments. Other requirements are contained in Part 3 Development within Residential Zones as well as other relevant general development parts (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP.

Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails. Where conflict arises between this Part and an Area Plan, the Area Plan prevails.

There are two types of dual occupancies, dual occupancy (attached) and dual occupancy (detached). LMLEP 2014 defines each as follows:

> ***dual occupancy (attached)*** means two dwellings on one lot of land that are attached to each other, but does not include a secondary dwelling.
>
> ***dual occupancy (detached)*** means two detached dwellings on one lot of land, but does not include a secondary dwelling.

The two dwellings may be arranged as shown in Figures 1-4 below:

- on a corner lot with a dwelling facing each street frontage,
- on a single frontage lot and arranged side by side
- on a single frontage lot and arranged front to back (also known as a battle axe development)
- arranged front to back with vehicle access from a rear lane

6.1 SITE REQUIREMENTS

Objectives

a. To ensure that Dual Occupancy developments are located on sites with sufficient size to accommodate the required building envelope, car parking, landscape area, and private open space.
b. To minimise the risk of sea level rise impacts on dual-occupancies.

Controls

A minimum site area of 500m^2 is required for Dual Occupancy developments

A minimum lot width of 12m measured at the building line is required for Dual Occupancy development.

Each proposed dwelling must have a minimum building envelope of 200m^2 located above 2m AHD without the need for filling, and must have adequate flood-free access.

Note: for minimum lot sizes associated with dual occupancy development and two lot subdivision refer to the minimum lot size provisions in LEP 2014.

***Note*:** Rural Zones and areas subject to an Area Plan may require greater site areas.

Note: Refer to Part 3 of this DCP for provisions related to catchment flood management and lake flooding and tidal inundation (incorporating sea level rise).

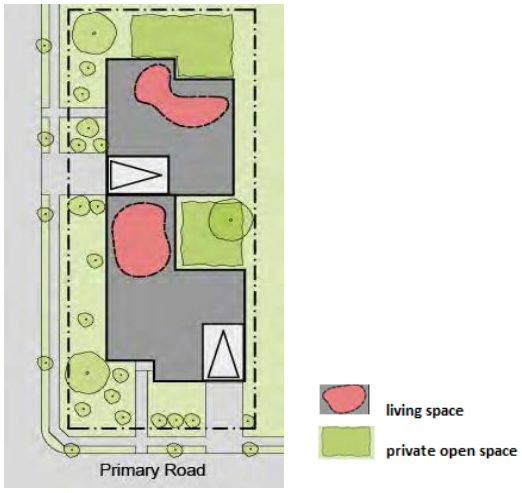

Figure 1 - Two dwellings on a corner lot

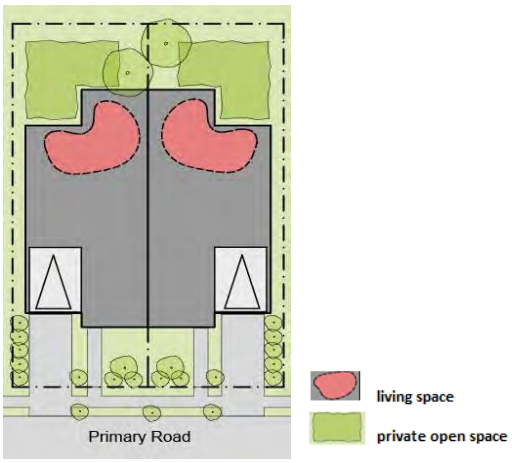

Figure 2 - Two dwellings side by side

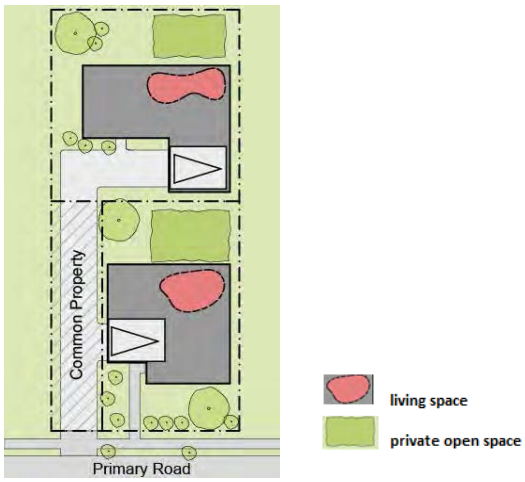

Figure 3 - Two dwellings front to back (battle axe development)

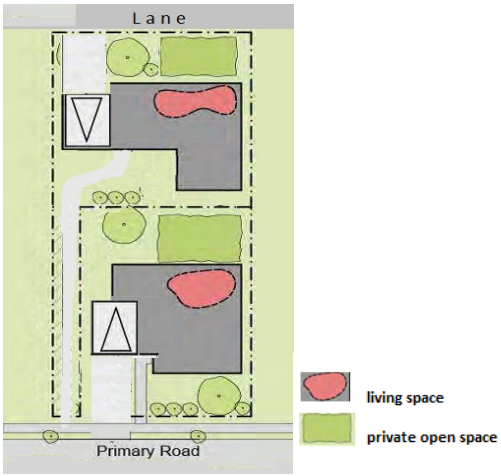

Figure 4 - Two dwellings front to back with rear lane access

6.2 SITE COVERAGE

Objectives

a. To ensure adequate unbuilt area is available for private open space
b. To ensure adequate unbuilt area is available for on-site stormwater infiltration and harvesting for re-use, and to reduce stormwater discharge form the site.
c. To incorporate suitable measures to minimise run-off directly accessing the Lake or its waterways.
d. To maximise the area available for landscape planting and screening.

Controls

1. The maximum site coverage for Dual Occupancy developments, including ancillary development, must not exceed 55%

Note: Site coverage means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

- any basement,
- any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
- any eaves,
- any unenclosed balconies, decks, pergolas and the like.

Note: Balconies, decks, pergolas and the like located under the main roof of the building are not considered to be unenclosed and will be included in the site coverage calculation.

6.3 STREETSCAPE

Objectives

a. To ensure Dual Occupancies on corner blocks address both street frontages.
b. To ensure developments are articulated and designed to provide interest to the streetscape, and individual identity for each dwelling.
c. To ensure that a dwelling at the rear of a lot relates to the primary street.

Controls

1. Dual occupancies on a corner lot must have a maximum of one front entry and one garage fronting each street as shown in Figure 1.

Dual Occupancies that incorporate an existing dwelling must ensure that the existing dwelling is renovated to a standard that complements the new dwelling.

Dual Occupancy design should provide individual identity for each dwelling within an overall design character as indicated in Figure 5.

The entry for a dwelling at the rear of a lot must be visible from the street as shown in Figure 4.

For sites with a rear lane, vehicle access for the rear dwelling should be from the lane, and pedestrian access should be from the primary street frontage as shown in Figure 4.

Note: Access from a laneway may not be supported where Council does not provide a full service including road surface and drainage.

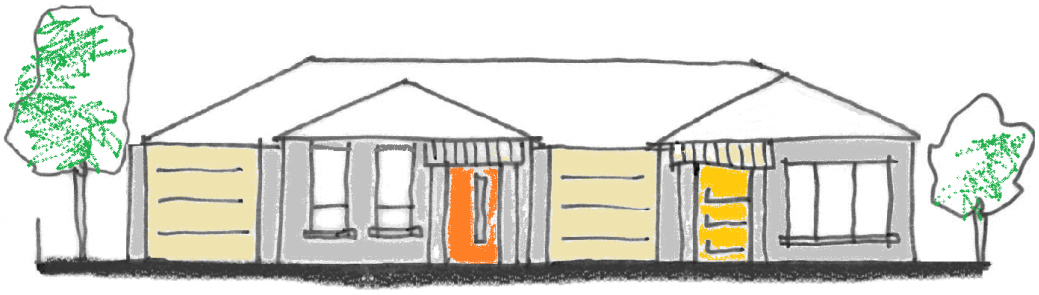

Figure 5 - Indicative design for attached side by side dual occupancy dwellings showing individual identity of each dwelling within an overall character

Figure 6 - Design for dual occupancy development with two new detached dwellings.

Figure 7 - Design for dual occupancy development incorporating an existing dwelling and a new dwelling at the rear.

6.4 SETBACKS

Objectives

a. To ensure that the development complements the existing setback pattern in the locality.
b. To define the street edge and provide definition between public and private space.
c. To encourage entries, windows, balconies and living areas that overlook the street
d. ***To ensure that dual occupancy development minimises overshadowing, considers amenity and privacy of adjoining dwellings.***

Controls

1. Where there are existing adjoining residential buildings within 40 metres,
    i. the front setback must be consistent with the established setbacks or,
    ii. where adjoining building setbacks vary by more than three metres, the front setback must be the same distance as one or other of the adjoining buildings, or:
    iii. where adjoining buildings vary in setback, development must locate between their setbacks.

Where there are no existing (or approved) dwellings within 40 metres of the lot, the front setback must be a minimum of four metres from the front boundary.

The secondary street setback for the corner dwelling on a corner allotment must be a minimum of two metres as shown in Figure 9.

Entry features and porticos, porches, balconies, decks, verandahs, bay windows, eaves and awnings may encroach up to 1.5 metres into the front setback area. This encroachment must not cover more than 50 percent of the building width.

Detached Dual Occupancy developments should have a minimum of two metres separation between the dwellings.

Note: Additional separation may be required between Detached Dual Occupancy developments on sites with a cross fall in order to fulfil the requirements of Part 3, Section 3.26 Cut and Fill of the LM DCP 2014. In particular, note that the face of a retaining wall must be a minimum of 1m from a common boundary and fences on common boundaries must be built at existing ground level.

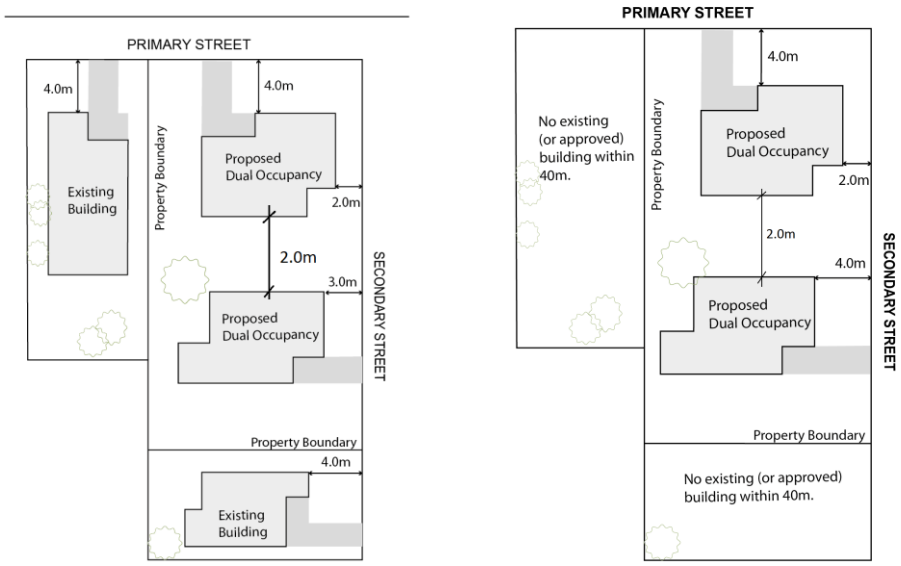

Figure 8 - Setbacks for dual occupancies on a corner block

6.5 LANDSCAPED AREA

Objectives

a. To enable landscape planting and tree retention within the front setback areas streetscape outcomes and that enhance the streetscape.
b. To enable landscape planting in side and rear setback areas that enhances residential amenity and provides contiguous planting areas with neighbours.
c. To promote on-site stormwater infiltration by optimising pervious surfaces and landscaped areas.

Controls

1. For Dual Occupancy developments, the minimum landscaped area must be 50% of the total lot area minus 100m^2. The landscaped area must have a minimum width of 1.5 metres to be included in the landscaped area calculations.

25% of the area forward of the building line must be landscaped.

A street tree is to be provided along each street frontage.

Note: The landscaped area should be spread across the front, side and rear setbacks. The landscaped area is in addition to the principal private open space requirement.

6.6 PRINCIPAL PRIVATE OPEN SPACE

Objectives

a. To ensure appropriately sized private open space for outdoor recreation on a smaller lot.

Controls

1. Dual occupancy development must include private open space for each dwelling that:
    i. has a minimum area of 16m² that is free of any storage areas, retaining walls, fencing, supports, tanks, structures or landscape planting, and
    ii. has a minimum dimension of three metres, and
    iii. has a grade less than 1:50

6.7 DRIVEWAY DESIGN

Objectives

a. To ensure vehicular access has minimal impacts on the streetscape.
b. To maintain on-street parking places outside a dual occupancy development.
c. To maximise the use of landscape planting adjacent to driveways.
d. To ensure safe clearance between a battle-axe driveway and the front dwelling.

Controls

1. Where on street parking is currently available in front of the development, the proposed driveways are located so that at least one space remains.

A minimum of 1m wide landscape area must be provided between a driveway and a boundary fence. The landscape area should be free of retaining walls and extend for the full length of the driveway.

A driveway along the side of a dwelling must be offset a minimum of 900mm from the side wall of the dwelling.

Vehicles accessing a rear dwelling or development on an arterial road must be able to enter and exit in a forward motion.

6.8 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure suitable bin storage is accessible to both dwellings.
b. To ensure sufficient bin and shared bulk waste (such as furniture and whitegoods) collection space is available to both dwellings.

Controls

1. Waste management for Dual Occupancy must comply with "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:
    i. Waste storage area(s)
        a. Dual properties may share a set of 240 litre bins (with maybe an upsized 360 litre recycling bin), so suitable shared storage space must be available; but the owner may pay for an additional set of bins, so space option must also be available for each property to store their own set of 240 litre bins, with an optional 360 litre recycling bin each;

b. A minimum space for waste bin storage must be allocated per dwelling (in addition to minimum space allocations for other purposes) with minimum internal dimensions of each storage area as follows:
   - Where each dwelling's set of 240 litre bins are to be stored on in each individual dwelling's yard, either 1905mm x 1560mm or 1410mm x 2340mm at each dwelling; or
   - Where two dwellings' individual bins (two sets of 240 litre bins) are to be stored in a shared area accessible to both dwellings, for 240 litre bins, 1905mm x 2340mm; or
   - Where two dwellings' shared 240 litre bins (one set of bins) are to be stored in a shared area accessible to both dwellings, either 1905mm x 1560mm or 1410mm x 2340mm.

ii. Waste collection point(s)

a. At least 3.5 metres length per dwelling of unobstructed position on safe kerbside must be available for bin collection; and for bulk waste collection space up to 2 square metres needs to be designated on the kerbside.

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5 DWELLING HOUSE IN RURAL AND ENVIRONMENTAL ZONES

This section of the DCP provides Council's specific requirements for dwelling house developments only in RU2, RU4, E2, E3 and E4 Zones. Other requirements are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

Provisions for dwelling houses in R2 and R3 zones are contained in Part 3 of this DCP.

5.1 SITING OF BUILDINGS

Objectives

a. To ensure that development responds to the existing character of the locality.

b. To conserve and enhance native vegetation, vegetation corridors, topographical features, and fauna habitat.

c. To facilitate water management, including on-site detention and infiltration of stormwater.

d. To maintain residential amenity in terms of privacy, views, solar access and separation.

Controls

1. In the RU2, RU4, E2, E3, and E4 zones development must retain significant natural features on the site including mature trees, rocky outcrops, and other major vegetation through the sensitive placement of buildings.

5.2 SETBACKS FOR COMMUNITY TITLE DEVELOPMENT

Objectives

a. To permit the efficient use of land where dwellings are clustered in a community title subdivision.

Controls

1. In the RU2 and E3 zones a dwelling located within a subdivision under the Community Land Development Act 1989, must be setback a minimum of:
   i. 4 metres from the front boundary; and
   ii. 3 metres from a side boundary; and
   iii. 10 metres from the rear boundary
2. In the RU4 zone a dwelling located within a subdivision under the Community Land Development Act 1989, must be setback a minimum of:
   i. 4 metres from the front boundary; and
   ii. 3 metres from a side boundary; and
   iii. 5 metres from the rear boundary
3. In the E4 zone a dwelling located within a subdivision under the Community Land Development Act 1989, must have a:
   i. side setback must be a minimum of 900mm for building height up to 4.5 metres.
   ii. side setback must be a minimum of 1.5 metres for building height over 4.5 metres.
   iii. side setback must be a minimum of 3 metres for building height over 2 storeys.
   iv. rear setback must be a minimum of 3 metres for building height up to 4.5 metres.
   v. rear setback must be a minimum of 6 metres for building height over 4.5 metres.

Note*:* The minimum setback of a point on a building is based on the building height at that point.

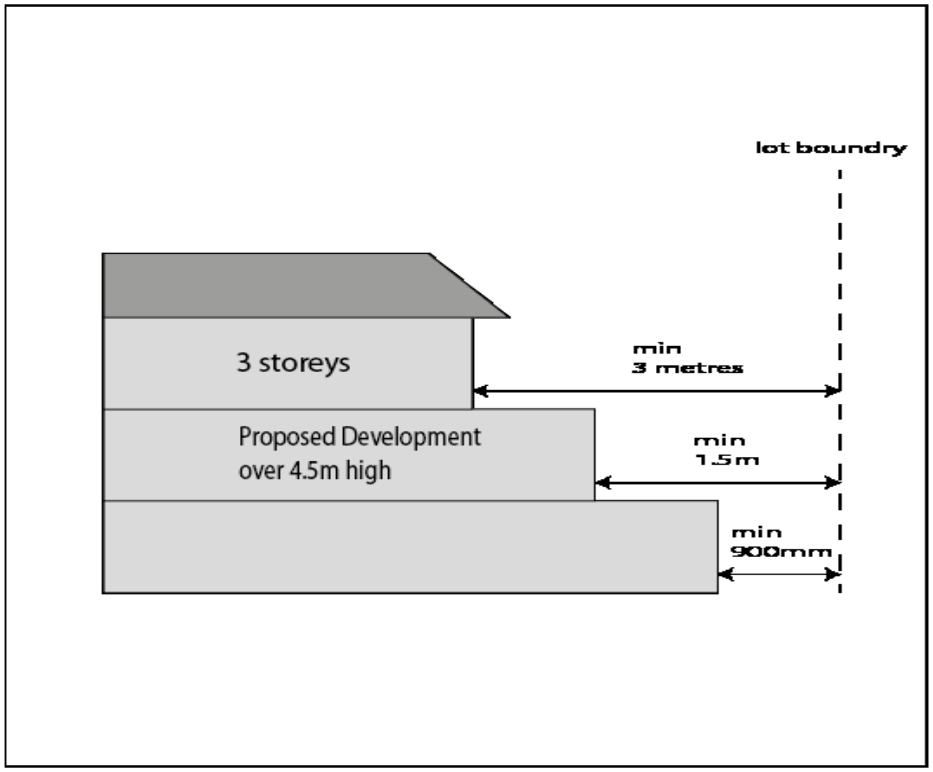

Figure 1 Side Setback for community title subdivision dwellings in E4 zone

5.3 BUILDING BULK

Objectives

a. To minimise the visual impact of development when viewed from adjoining properties, the street or road, waterways, and land zoned for public recreation purposes.

b. To minimise bulk and scale impacts which contribute to loss of privacy, views and overshadowing.

Controls

1. Building height, scale, and roof form must relate to the topography and the existing site conditions.
2. Verandas, recesses, surface treatments, and/or variations in material selection and colour must be utilised to reduce building bulk.
3. Unbroken walls in excess of 15 metres in length or 4 metres in height must be avoided by varying wall alignments, incorporating door and window openings, balconies, awnings, architectural detail or changes in materials to provide visual relief.
4. The scale and massing of landscape planting must be adequate to reduce the visual bulk of development.

5.4 GARAGES, CARPORTS AND SHEDS

Objectives

a. To ensure garages and carports do not dominate the streetscape or landscape setting.

Controls

In the RU4, RU2, E2, E3, and E4 zones:

1. Garages and carports must be integrated into the design of the dwelling or integrated into the design of an ancillary building.
2. Garages and carports that address the street or road, must not exceed 6 metres or 50% of the dwelling width, whichever is the lesser.
3. Where additional vehicular storage is required, garages and carports that address the street may be extended lengthwise, as opposed to increasing the width at the street.
4. Garages and carports must not be located in the front setback area.

5.5 ROOFS

Objectives

a. To ensure roof forms are designed to complement the local character and topography.
b. To ensure roofs are designed to conceal plant and other associated equipment.

Controls

1. On sloping sites roof planes must step with the topography.
2. Air conditioning units, lift motor rooms, and other plant must be fully integrated within the building volume, within the roof volume, or within an architectural roof feature.
3. Other roof elements such as photovoltaic panels, communication devices, antennae, satellite dishes, chimneys, and flues must not interfere with the outlook of viewers in neighbouring properties or in the public domain.

5.6 ENERGY EFFICIENCY AND GENERATION

Objectives

a. To ensure building orientation maximises solar access and natural cross ventilation.
b. To ensure energy efficiency is achieved in all developments.
c. To allow opportunities for future installation of renewable energy generation and low carbon technology.
d. To minimise the economic impacts of increasing electricity costs and any requirements to disclose energy efficiency when selling or leasing a property.

Controls

1. Buildings must be oriented to provide efficient use of solar energy and natural ventilation wherever possible.
2. Dwelling design must consider future potential for renewable energy generation and low carbon technology.
3. Development design should achieve a higher than compliant SEPP BASIX rating to reduce future energy costs.

5.7 VISUAL PRIVACY

Objectives

a. To ensure the design of buildings provides an acceptable level of visual privacy for new and existing dwellings.

Controls

1. The layout of buildings must be designed to optimise privacy for occupants of both the new dwelling and existing dwellings.
2. The windows of dwellings must be located so they do not provide direct or close views (less than 9m away) into the windows of other dwellings.
3. Dwellings must be designed and orientated so that windows, balconies, and decks are not situated with a direct line of sight to the habitable rooms or private open space of any adjoining dwelling.

5.8 ACOUSTIC PRIVACY

Objectives

a. To ensure that noise emissions do not result in noise intrusion which would be unreasonable for occupants of the development or neighbouring dwellings.

Controls

1. Developments near existing noise generating activities, such as roads and industry, must be designed to mitigate the effect of noise on the occupants.
2. Where practical noise sources such as air conditioning units and pumps must be located away from bedrooms and private open space of dwellings in the development and in neighbouring dwellings.
3. Building structures must be designed to minimise the transmission of sound, particularly to sleeping and living areas.

5.9 FRONT FENCES

Objectives

a. To ensure that fencing and retaining walls are compatible with the existing landscape character.

Controls

In the RU2, RU4, E2, E3 and E4 zones:

1. Front fences and front fence returns, must not exceed 1.2 metres in height and must not be more than 50% solid.
2. Front and side return fences must not be lapped or capped timber, or powder coated metal (Colorbond®) fencing.

5.10 SIDE AND REAR FENCES

Objectives

a. To provide privacy and security for residents.

b. To ensure that fencing and retaining walls are compatible with the existing landscape character.

c. To avoid risks to native fauna.

Controls

In the RU2, RU4, E2, E3 and E4 zones:

1. Side and rear boundary fences must not exceed 1.8 metres above the existing ground level.
2. The fence design and materials must be sympathetic to local landscape character.
3. The fence design must not cause any adverse risk to native fauna.

5.11 CUT AND FILL

Objectives

a. To minimise the visual impact of ground shaping in sensitive landscapes.

b. To ensure that the building design and retaining structures are appropriate for the site conditions with consideration to the slope, stability of the land, visual amenity, and the privacy of adjoining properties.

c. To ensure that cut and fill does not significantly alter the flow of water or exacerbate flooding.

Controls

1. Cut and fill must only occur within the dwelling and car parking perimeter.
2. Cut must not exceed 1m and fill must not exceed 1m.
3. Cut or fill must not occur within three metres of the allotment boundary.
4. Batter slopes must not exceed a gradient of 1:4.
5. All proposed retaining structures in excess of 1m in height must be certified by an engineer, and certification details lodged with the development application.
6. Fill is not permitted in core riparian zones, foreshore areas, or flood storage areas.
7. Where development uses fill, that fill must not contribute to flooding, or pooling of water on other properties.
8. Any fill used must be Virgin Excavated Natural Materials (VENM).

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7 FORESHORE AND WATERWAY DEVELOPMENT

This section applies to the following development uses proposed within the *foreshore area* (defined by LM LEP 2014), and contains Council's specific requirements for Foreshore and Waterway developments. Other requirements are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

Definitions:

Foreshore area – means the land between the foreshore building line and the mean high water mark of the nearest natural waterbody.

Foreshore development – means a boatshed, jetty, slipway, boat ramp, in-ground swimming pool, inclinator, landscaping, barbeques or other similar structures within the *foreshore area*.

Mean High Water Mark (MHWM) - means the mean height of all tides above a reference datum. The mean high water of Lake Macquarie is approximately equal to + 0.1 metres on the Australian Height Datum and should be used for controls of this section.

Objectives

a. To protect the visual character and natural landscape of Lake Macquarie, by restricting the erection of buildings and structures at the Lake foreshore.
b. To preserve natural foreshore vegetation in order to retain the visual character of Lake Macquarie.
c. To maintain the stability of shorelines and to protect against erosion and siltation.
d. To permit private development of foreshore land while maintaining foreshore public reserves and maintaining public access to the foreshore.
e. To ensure that hazardous and liquid wastes are managed properly to avoid pollution risk to waterways or foreshore.

Controls

1 All buildings and structures that are not foreshore development must be set back in accordance with the adopted foreshore building line.
2 Where the subject land does not have a foreshore building line and the subject land adjoins a foreshore reserve, development that is not foreshore development must be set back 6m from the boundary fronting the Lake. The setback to any side boundary adjoining a foreshore reserve must comply with the side setback provisions of the relevant section of this DCP.
3 Non-compliance with the foreshore building line will only be considered where the proposed development will provide greater compliance with the foreshore building line than existing buildings and structures, and those buildings or structures will be removed as part of the redevelopment. For public land, non-compliance with the foreshore building line will be considered where the development is in accordance with an adopted Plan of Management.
4 Foreshore development must be contained between the projected side boundaries of the land subject of the application.
5 A Visual Impact Statement must be prepared and submitted with all applications for foreshore development.
6 Domestic foreshore development is only permissible in conjunction with an existing approved dwelling.
7 Development uses other than those contained within this section of the DCP must not be developed in the foreshore area.
8 Foreshore development listed in Table 1 – Column 1 must not occur in the circumstances/ location identified by Table 1 – Column 2, except where the requirements of Table 1 – Column 3 are met.

Table 1 - Foreshore Development

Column 1 Development Type	Column 2 Locations Where Not Favoured	Column 3 Except Where
Domestic and Community Jetties, Boat Ramps, Slipways, Boatsheds and Pontoons	• Land adjoining land identified for acquisition as a proposed Foreshore Public Reserve. Shown hatched on the LEP Maps. • Land to which SEPP 14 – Coastal Wetlands or SEPP 26 - Littoral Rainforests applies. • Land that is identified as an aquatic reserve or supporting significant aquatic flora and fauna, which is likely to be harmed by the construction or use of the development. • Land forming part of a designated fishing ground. • Land forming part of a navigation channel. • Land within any tidal tributary. • Land adjoining the waterway Dora Creek. • Land in a prominent position, such as a headland, point or other promontory.	• In tidal tributaries –the overall dimension of the domestic landing platform and/or pontoon, does not exceed 2.4 metres x 2.4 metres. • Adjacent to a Foreshore Public Reserve, the community jetty is demonstrated to have community benefit.
Dredging	• Anywhere in the Natural Waterways Zone.	Necessary to maintain navigation channels and is carried out in accordance with the SEPP (Infrastructure) 2007.
Domestic foreshore stabilisation treatment including those below DHWM.	• Any development that does not comply with defined foreshore stabilisation treatment limit lines.	Council is satisfied that: • the development is necessary to control landslip, active erosion of the foreshore and persistent or continuing inundation. (Refer to *Foreshore Stabilisation Rehabilitation Guidelines*, (LMCC 2006), or Estuarine Creekbank Stabilisation and Rehabilitation Guidelines (LMCC 2007). • the treatment results in rehabilitation of native lake foreshore vegetation.
Domestic derricks, davits and boat hoists.	• Anywhere in the Natural Waterways Zone.	
Permanent, vessel and/or trolley parking and storage.	• Anywhere in the Natural Waterways Zone and within 3 metres landward of the DHWM.	
Signs	• Anywhere in the Natural Waterways Zone.	

7.1 DOMESTIC BOAT SHEDS

Objectives

a. To maintain the visual amenity and character of the Lake Macquarie foreshore.

b. To ensure that public access and safety is not adversely affected by the establishment of domestic boat sheds.

Controls

1 The height of a boat shed must not be greater than three metres for a skillion roof or 3.5 metres with a gable or hip roof.
2 The area of a boat shed must not be greater than 36 square metres (typically 4 x 9 metres).
3 The side of the boat shed fronting the Lake must not exceed 4 metres.
4 A boat shed must not include washing and/ or cooking facilities, habitable rooms, or entertaining areas/ facilities.
5 A boat shed must not include storage of hazardous or liquid wastes.

7.2 JETTIES

Objectives

a. To facilitate waterway recreation through jetty access to boats, where reasonable depth of water can be obtained without dredging.
b. To maintain the visual character and natural landscape of Lake Macquarie by reducing the number of jetties within the Lake through the use of shared jetties where adjoining private residences are present.
c. To mitigate adverse impacts of jetties on ecological processes and marine life.
d. To ensure that jetties do not adversely affect the amenity of the Lake or its foreshore.

Controls

1 To avoid the need to establish access rights on the properties Certificate of Title, private domestic jetties must be sited to enable the shared use from at least two adjoining properties i.e. positioned on the shared boundary.
2 Where a jetty (unshared) exists on an adjoining property, written evidence must be provided indicating why sharing of existing jetties is not feasible.
3 Documentation must be submitted, which demonstrates that the proposed development will not adversely affect Lake ecology or wildlife.
4 Jetties should be constructed of materials to maximise the passage of natural light through the structure to suit circumstances and orientation and should achieve at least 40% light penetration of decking.
5 The length of a jetty must be the shortest of:
   i. The length necessary to achieve a water depth of 1.2 metres at the jetty end at the Indian Spring Low Water; or
   ii. Thirty (30) metres into the Lake from the Mean High Water Mark.
6 In addition to Control 5, the applicant must demonstrate that a minimum water depth of 600mm over bare substratum and 900mm over sea grass will be maintained on three sides of the jetty end at the Indian Spring Low Water. If this cannot be met, a jetty is not appropriate for the location.
7 The width of the jetty is to be 1.2 metres with minor variations permitted.
8 The length of a jetty (L) or (T) end must be at least 2.4 metres but not more than 4.2 metres. The width of a jetty (L) or (T) end must not exceed 1.8 metres.
9 Prefabricated materials must be laid in such a way as to avoid creating a hazard for people using a wheelchair.
10 The finished surface of a domestic jetty must be at least 600 mm but not more than 750 mm above the mean high water level.
11 To minimise visual impact, no component of the jetty should protrude more than 300mm above the finished surface of a jetty. Any necessary protrusions must be positioned to mitigate risk to users.
12 Public access along the Lake foreshore must not to be impeded.

13 Jetties must not comprise solid fill structures or groynes in whole, or in part.

14 Installation, replacement or relocation of mooring poles associated with jetties must not be located within, or result in shadowing of, seagrass habitat.

15 Community jetties must be for the shared use of six or more properties, and must not be within 500 metres of another community jetty.

16 Community jetties must have frontage to a Foreshore Public Reserve or other suitable public access.

17 A written agreement must be submitted, which outlines use, insurance, and maintenance of shared jetties. Licence holders of a community jetty must provide documented evidence of a public risk insurance policy of at least $10 million.

7.3 DOMESTIC BOAT LAUNCHING RAMPS

Objectives

a. To mitigate the impact of domestic boat launching ramps on the integrity of local ecological processes.

b. To maintain the visual amenity and character of the Lake Macquarie foreshore.

c. To ensure that public access and safety is not adversely affected by the establishment of a domestic boat launching ramp.

Controls

1 Domestic boat launching ramps must not be more than 5 metres long when measured from the Mean High Water Mark, and must not be more than 3 metres wide.

2 Domestic boat launching ramps must achieve a depth of at least 600 mm at Indian Spring Low Water.

3 Measures must be implemented to reduce the risk of slipping on the surface of a domestic boat launching ramp.

4 Domestic boat launching ramps must be unobtrusive and must minimise trip hazards and protruding components.

5 Domestic boat launching ramps should be positioned to minimise adverse impacts on ecological processes including mitigating the need to remove sea grasses.

7.4 DOMESTIC SLIPWAYS

Objectives

a. To mitigate the impact of domestic slipways on the integrity of local ecological processes.

b. To maintain the visual amenity and character of the Lake Macquarie foreshore.

c. To ensure that public access and safety is not adversely affected by the establishment of a domestic slipway.

Controls

1 The length of a slipway must be the lesser of:

   i. The length necessary to achieve a water depth of 1.2 metres at Indian Spring Low Water;

   ii. The length of the jetty to be used in conjunction with the slipway.

2 Slipways should not be more than 1.2 metres wide.

3 Slipways must achieve a depth of at least 600 mm at Indian Spring Low Water.

4 Measures must be implemented to reduce the risk of slipping on the surface of a slipway and associated structures.

5 Slipways should be unobtrusive and must mitigate trip hazards and protruding components. This should be achieved through recessing the rails to ground level where possible, or where in conjunction with a boat ramp, recessed into the boat ramp.

6 Slipways should be positioned to minimise adverse impacts on ecological processes including mitigating the need to harm sea grasses.

7.5 SWIMMING POOLS

Objectives

a. To mitigate the visual impact of development on views from the Lake.
b. To re-establish environmental integrity and foreshore vegetation, while also screening of foreshore development.

Controls

1 Swimming pools must be in-ground.
2 Swimming pools must be set back at least 7.2 metres from the Deed High Water Mark or from the lot boundary fronting the Lake where a foreshore reserve is present.
3 Swimming pools must be set back at least 1.2 metres from side boundaries.
4 The swimming pool or concourse must not exceed one metre above ground level (existing).
5 Pool safety fencing must be screened with native endemic foreshore vegetation to reduce its visual impact and to contribute towards re-establishing a native vegetated foreshore.
6 Landscaping must not provide climbing opportunities that may undermine the function of pool safety fencing.
7 Backwashing associated with cleaning the pool must be directed to the reticulated sewerage system or alternative disposal area as approved by Council.

7.6 FENCING

Objectives

a. To mitigate the visual impact of fencing on views from the Lake through vegetation screening.
b. To re-establish environmental integrity and foreshore vegetation, while also screening of foreshore development.

Controls

1 Fencing must not occur within six metres of the Deed High Water Mark.
2 Fencing in the area between the foreshore building line and 6 metres from the Deed High Water Mark must not exceed 1.2 metres.
3 Fencing must be screened with native endemic foreshore vegetation to reduce its visual impact and to contribute towards re-establishing a native vegetated foreshore.

7.7 FORESHORE STABILISATION

Objectives

a. To ensure foreshore stabilisation works are designed and constructed to minimise environmental and visual impacts.
b. To re-establish the environmental integrity of the Lake foreshore.

Controls

1 Domestic foreshore stabilisation treatment must only be used to control erosion or landslip, retain authorised reclamation fill and prevent inundation.
2 The design of foreshore stabilisation works must protect through natural absorption of incident wave energy by incorporating high structural porosity and permeability with an upper surface of low gradient sloping lake-ward. Soft treatments are the preferred option and suit most conditions in Lake Macquarie. It is unlikely that sea walls, groynes, break walls or the like would be required or approved to address erosion problems associated with private properties.
3 The design and construction standards must comply with Council's *Foreshore Stabilisation and Rehabilitation Guidelines*.

4 The domestic foreshore stabilisation treatment must be located wholly within private land above the Deed High Water Mark, except in locations where foreshore stabilisation treatment limit lines have been approved.

7.8 WASTE MANAGEMENT AT PUBLIC AND COMMERCIAL FACILITIES

Objectives

a. To maximise opportunity for waste from boats or foreshore users to be collected separately for maximum resource recovery.

b. To ensure that hazardous and liquid wastes are managed properly to avoid pollution risk to waterways or foreshore.

Controls

1. Waste management for Public and Commercial Facilities must comply with "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:
   i. Bin type, sizes, numbers and collection frequency
      a. Applications for boatshed, jetty, slipway, boat ramps and other developments that extend over the water that are for commercial or public use must provide a completed Demolition, Construction and Operational Waste Management Plan (WMP) of the development, in accordance with Lake Macquarie City Council Waste Management Guidelines. The Operational WMP must enable separate management of garbage, recyclables and problem waste (such as batteries, oils, paints and fishing line) generated by boats or foreshore users.
   ii. Waste Storage
      a. Where the development extends over the water at highest tide, the development must not include storage of hazardous or liquid wastes unless these are completely enclosed and bunded to prevent spills reaching the water.
      b. If boat maintenance is part of the activities to be carried out at the facility, then the plan must also provide for scrap metal recycling, boat engine oil, other boating liquid chemicals, empty chemical drums, batteries and any other special or recyclable wastes to be separately collected and appropriately managed.
      c. Recyclable and problem waste (such as batteries, oils, paints and fishing line) generated by boats or foreshore users, must be collected separately. This may include providing separate publicly accessible bins for garbage, recycling, food waste, soft plastics, fishing line and batteries, and back of house bins for oils and paints.
      d. Waste storage areas should be designed to prevent access by rodents and insects with potential to be disease vectors.

8 HEALTH CONSULTING ROOMS

This section of the DCP only provides Council's specific requirements for Health Consulting Rooms. Other requirements are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

8.1 CONTEXT AND SETTING

Objectives

a. To ensure that Health Consulting Rooms are located in accessible, convenient, and appropriate areas.
b. To ensure that Health Consulting rooms make a positive contribution to the residential streetscape through their location and design.

Controls

1. Health Consulting Rooms should be located within easy access of their client base, public transport routes, and existing commercial centres.
2. Health Consulting Rooms should be located on Sub-Arterial or Collector Roads. Proposals on the local road network will be considered on merits.
3. Health Consulting Rooms should not be located on battle-axe allotments, or at the head of cul-de-sacs.

8.2 GENERAL REQUIREMENTS

Objectives

a. To ensure that Health Consulting Rooms provide small-scale consulting rooms or offices for health related services.
b. To ensure the operation of Health Consulting Rooms do not have a detrimental impact on adjacent properties.
c. To ensure that sufficient and secure storage space is provided for storage of waste in segregated waste types.
d. To ensure that clinical, pharmaceutical, sharps, chemical and (if any) cytotoxic and radioactive waste generated by Health Consulting Rooms are disposed of in an appropriate manner.

Controls

1. Health Consulting Rooms must not employ more than three full time (or part time equivalent) professional services providers and a further three full time (or part time equivalent) support employees connected with the operation of the service.
2. Hours of operation of Health Consulting Rooms should be limited to between 8am and 6pm, seven days a week, except in the case of an emergency.
3. Noise generated by Health Consulting rooms must not exceed 5dB (A) above the ambient background noise level at the nearest boundary of the lot.
4. Waste management for Health Consulting Rooms must comply with "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:
    i. Waste storage area(s)
        a) Waste storage room(s) must have sufficient space for secure storage of separated segregated waste types including clinical waste, chemical waste, radioactive waste, cytotoxic wastes, recyclables, organic (compostable garden and food) waste, and general waste, in accordance with NSW Department of Health Waste Management Guidelines for Health Care Facilities. This also includes space for trolley storage if required for managing wastes.

b) Waste storage room(s) must be able to be kept secure to prevent access by people other than staff, especially not by children.

ii. Waste collection

a) Collection and disposal of any clinical, pharmaceutical, sharps, chemical and (if any) cytotoxic and radioactive waste generated by a Health Consulting Room must be undertaken by a waste collector licensed by the Environmental Protection Authority for this activity.

8.3 VEHICULAR ACCESS AND PARKING

Objectives

a. To ensure that car parking for Health Consulting Rooms is appropriately located and designed.
b. To encourage the use of non-vehicular or public transport within town centres.

Controls

1. Where a Health Consulting Room is within land zoned B1 – Neighbourhood Centre, B2 – Local Centre, B3 – Commercial Core, or B4 – Mixed Use, Council may consider reducing the required number of car park spaces by a maximum of three where it can be demonstrated that there is sufficient alternative transport facilities or transport infrastructure within the locality.
2. If an occupied dwelling is attached to the Health Consulting Room, one separate car parking space must be provided for the residents of the dwelling.
3. At least one disability car parking space should be provided.

8.4 SIGNAGE

Objectives

a. To ensure signage for Health Consulting Rooms is appropriately located and sized.

Controls

1. One sign is permitted on the property to indicate that the dwelling is a Health Consulting Room.
2. The sign must not exceed 0.5m^2 in area.
3. The sign should be consistent with the architectural features and character of the building.
4. The sign must not be illuminated.

9 HOME BUSINESS AND HOME INDUSTRY

This section of the DCP provides Council's specific requirements for Home Business and Home Industry developments. Other requirements are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

Home Business and Home Industry are separate uses under LM LEP 2014, for the purpose of this DCP they have the same objectives and some similar controls as well as specific use controls. Development for the purposes of Home Business or Home Industry must comply with the definitions below.

Note: Health, safety, certification or registration requirements may regulate Home Activities. Refer to the *Building Code of Australia,* WorkCover Authority and verify with Council's Environmental Health and Building Officers when preparing an application for assessment by Council.

home business means a business that is carried on in a dwelling, or in a building ancillary to a dwelling, by one or more permanent residents of the dwelling and that does not involve:

(a) the employment of more than 2 persons other than those residents, or

(b) interference with the amenity of the neighbourhood by reason of the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil, traffic generation or otherwise, or

(c) the exposure to view, from any adjacent premises or from any public place, of any unsightly matter, or

(d) the exhibition of any signage (other than a business identification sign), or

(e) the sale of items (whether goods or materials), or the exposure or offer for sale of items, by retail, except for goods produced at the dwelling or building,

but does not include bed and breakfast accommodation, home occupation (sex services) or sex services premises.

home industry means a dwelling (or a building ancillary to a dwelling) used by one or more permanent residents of the dwelling to carry out an industrial activity that does not involve any of the following:

(a) the employment of more than 2 persons other than those residents,

(b) interference with the amenity of the neighbourhood by reason of the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil, traffic generation or otherwise,

(c) the exposure to view, from any adjacent premises or from any public place, of any unsightly matter,

(d) the exhibition of any signage (other than a business identification sign),

(e) the sale of items (whether goods or materials), or the exposure or offer for sale of items, by retail, except for goods produced at the dwelling or building,

but does not include bed and breakfast accommodation or sex services premises.

9.1 DEVELOPMENT LOCATION, DESIGN AND OPERATION

Objectives

a. To encourage and support home-based employment opportunities where they are of a low-key scale suitable to a dwelling and do not unreasonably impact on surrounding residences.

Controls

For Home Business and Home Industry:

1. Where the development has the potential to negatively affect the amenity of the neighbourhood, it must be demonstrated that measures will be implemented to mitigate those potential impacts.
2. The development must not impose greater demand on any public utility than would be reasonable from residential use in the same premises.
3. The development must be located close or easily accessible to the client base and public transport.
4. The development must not involve the boarding of animals on the property, other than during their immediate treatment.
5. The hours of operation for development that requires the use of machinery must be restricted to minimise adverse impacts on surrounding development. It must be demonstrated that the proposed hours of operation will not adversely affect the amenity of the area and surrounding properties.
6. The development must not require deliveries by vehicles greater than 2.5 tonnes.
7. The development must not involve:
   i. parking for more than two vehicles on the property or on a street to which the property fronts, at any time;
   ii. the provision of car parking within the front setback area, except as stacked parking provided on an existing driveway.
8. Where the development relies on vehicles as an inherent component (such as delivery vans, tow-truck operations, transport vehicles, mobile service vehicles, or similar) these should be limited to two vehicles and must be accommodated on-site at the side or rear of the existing dwelling. If a development requires more than two vehicles, they must be accommodated off-site.
9. The development should provide for non–discriminatory access.
10. The development must not involve the hiring out of materials, goods or vehicles.
11. The maximum amount of waste that can be generated by the home business or industry is limited by the availability of sufficient waste storage space. The space needed for waste storage cannot subtract from the minimum required landscaped area and private open space, nor displace a car from a garage or carport where the car will then occupy a visitor parking space or neighbour's kerbside.
12. The maximum amount of waste that can be generated by the home business or industry is also limited by the availability of sufficient waste space for collection of that waste on the kerbside, unless the waste will be regularly removed by the home business or industry operator in their own vehicle for delivery to legal waste management facilities.
13. The maximum commercial waste that can be generated by the home industry or home business per week is 1920 litres in mobile waste bins including household wastes.
14. To minimise disturbance in residential areas, commercial waste can only be collected a maximum of once per week (maximum of one waste collection vehicle per waste stream per week).

For Home Industry only:

15. The development must not emit unacceptable levels of vibration, odour, fumes, smoke, vapour, ash, dirt, oil, radio or electrical interference.
16. The development must not generate wastewater that requires connection to a trade waste facility.
17. The development must not require a licence under the NSW *Protection of the Environment Operations Act 1997* nor generate waste that requires collection by a licensed waste transporter. The business must also not store more than 12 waste tyres on the premises at any one time.

For Home Business only:

18. Where the development is within a Residential Flat Building, sufficient public or on-street parking should be located in proximity to the development.

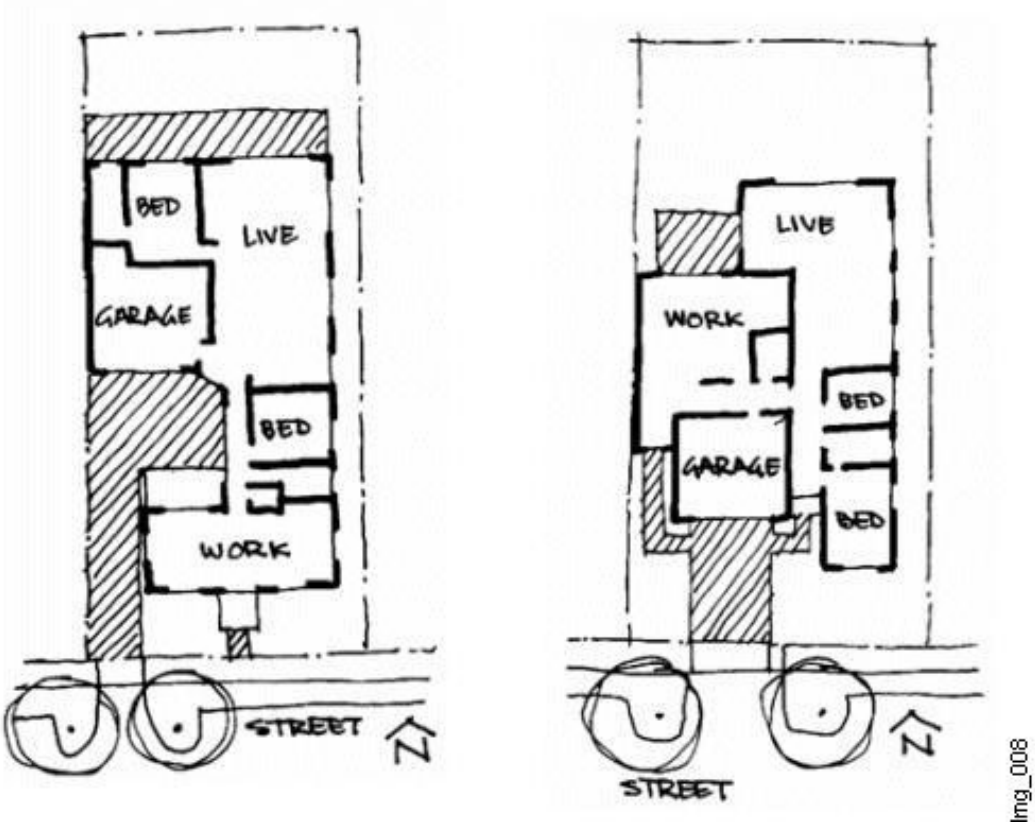

Figure 1 - Examples of house floor plans being used for home business

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19 HOUSING ON SMALL AND NARROW LOTS

This section of the DCP applies where development for the purpose of a dwelling house, attached dwellings, or semi-detached dwellings is or are proposed in the R2 Low Density Residential and R3 Medium Density Residential zones, that have an area less than the minimum lot size shown on the Lot Size Map of Lake Macquarie Local Environmental Plan 2014, as well as lots with a primary road frontage of 12.5m or less. This section of the DCP also applies to applications for new dwellings for housing on small and narrow lots on lots that have a Building Envelope Plan registered on the deposited plan.

This section of the DCP also applies to joint subdivision and dwelling applications for housing on small and narrow lots under clause 4.1A of the LMLEP 2014. Note, a subdivision application for housing under Clause 4.1A of the LMLEP 2014 does not need to include the application for the dwellings where it can be demonstrated that the dwellings can be accommodated on the lot though the preparation of subdivision design plans and building envelope plans in accordance with Part 8 – Subdivision of the DCP.

Other requirements that must be addressed are contained in the relevant general development part (Parts 2 to 8) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development parts of the DCP, this section prevails.

19.1 GENERAL CONTROLS FOR DEVELOPMENT

19.1.1 STREETSCAPE

Objectives

a. To promote diverse and varied streetscapes.
b. To ensure that built form reflects the intended outcomes of permitting small and narrow lots.

Controls

Articulation of front facades must be varied rather than uniform.

Development subject to this section of the DCP (Housing on Small and Narrow Lots) must comply with the Building Envelope Plans and Subdivision Design Plans approved in conjunction with the creation of the subject lot.

19.1.2 SIDE SETBACKS

Objectives

a. To ensure that reduced side and rear boundary setbacks maximise private open space, visual and acoustic privacy, views, natural ventilation, and solar access for the subject site and adjoining properties.
b. To ensure greater separation between upper floors of adjacent dwellings.
c. To provide opportunities for the planting of vegetation.

Controls

1. Applications to build to the boundary must demonstrate consideration of the following matters with regard to the subject lot and neighbouring development:
    i. The topography of the lot, allotment orientation and the ability to comply with the solar access, privacy and private open space provisions of this DCP; and
    ii. The location of utilities infrastructure, driveways, and street trees.

If the lot has a width, measured at the front building line, of at least 6m, but not more than 8m, the building may be built to both side boundaries.

If the lot has a width, measured at the front building line, of at least 8m, but not more than 12.5m, the building may be built to only one side boundary.

The length of side boundary walls must be determined as follows:

iii. Where an existing boundary wall on a neighbouring lot adjoins the subject site, the length of the new boundary wall must match the length of the existing boundary wall, or

iv. Where no adjoining boundary wall exists, the boundary wall must not exceed a maximum of 50 per cent of the length of the lot, or a maximum length of 12 metres, whichever is the lesser.

Walls built to the side or rear boundary must not exceed a maximum height of 3.5 metres above existing ground level unless the wall:

v. Abuts another higher existing or simultaneously constructed wall, in which case the wall must not be higher than the boundary wall on the adjoining lot, or

vi. Abuts a side or rear lane, in which case the maximum height is 5.5 metres.

Footings of buildings on a boundary must be designed to permit the maximum cut and fill on the neighbouring allotment.

Building to the boundary is not permitted if it would lead to non-conformance with the fire separation requirements of the Building Code of Australia including:

vii. the wall of the building on the adjoining lot is not of masonry (or similar) construction and is within 900mm of the boundary, or

viii. the wall of the building on the adjoining lot has a window facing the boundary and is within 900mm of the boundary.

Roof structures and drainage systems must be designed to drain away from the property boundary affected by reduced setbacks.

Structures built to the boundary must be designed and constructed to be easily maintained.

Note: Proposals for buildings with reduced setbacks should be discussed with neighbouring landowners before lodging a Development Application with Council. Construction, maintenance, finish and colour of side boundary walls are some of the issues that should be discussed.

19.1.3 REAR SETBACK

Objectives

a. To maintain the visual continuity and pattern of buildings and landscape elements.

b. To provide sufficient space for outdoor living areas.

Controls

1. Garages and any associated garage-top apartment (secondary dwelling) adjacent to a rear lane may be built to the rear boundary.

Note: Refer to Section 3.5 of Part 3 – Development within Residential Zones of LMDCP 2014 for provisions relating to building to the boundary.

19.1.4 GARAGES, CARPORTS AND SHEDS

Objectives

a. To reduce the visual impact of garages, carports and sheds on the streetscape and improve dwelling presentation.

b. To ensure garages do not dominate the streetscape.

Controls

1. Garage doors must be visually recessive through use of materials, colours, overhangs and the like.

Where the lot width is greater than 12m, dwellings may have a double garage on the primary street frontage if they do not dominate the streetscape and are visually recessive.

Where the lot width is less than 12m, single width garages only are permitted on the primary street frontage.

Note: The width of a lot is measured at the front building line.

19.1.5 DESIGN OF DRIVEWAYS – STREET TREES AND ON STREET CAR PARKING

Objectives

a. To minimise the visual impact of driveways on the streetscape.
b. To provide practical and safe access and egress to dwellings.
c. To minimise the impact of driveways on on-street car parking.

Controls

1. The location of driveways must be determined with regard to the location of utilities infrastructure, safe and unobstructed kerbside space to place waste bins out for collection, street tree planting and to maximise the availability of on-street parking.

19.1.6 UTILITIES

Objectives

a. To identify utility requirements and new infrastructure at an early stage of development.
b. To ensure utilities structures are integrated in the site planning and design of development.

Controls

1. The location of utilities, including gully pits, water meters, power pillars, communications pits, underground services and manholes must not interfere with driveways or driveway crossovers of narrow frontage lots.
2. The location of above ground utilities, including power poles and lines, must not interfere with waste collection space and waste collection vehicle bin lift clearances.

19.1.7 SITE COVERAGE

Objectives

a. To ensure density of development is in keeping with the existing or desired future street character.
b. To provide sufficient area around a dwelling for access ways, private open space and landscape planting.
c. To maximise the potential for on-site stormwater retention.

Controls

1. Site coverage must allow sufficient soft landscaped area to absorb water on site, reducing the load on stormwater drains and local waterways.

The maximum site coverage, including ancillary development, must not exceed 65%.

Note: Site coverage means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

- any basement,
- any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
- any eaves,
- any unenclosed balconies, decks, pergolas and the like.

Note: Balconies, decks, pergolas and the like located under the main roof of the building are not considered to be unenclosed and will be included in the site coverage calculation.

Note: Site coverage controls operate in tandem with the Stormwater Management, Principal Private Open Space, and Landscaped Area and Design controls in this DCP to ensure that adequate unbuilt area is available for outdoor recreation and for reducing stormwater discharge from the site. Stormwater permeability and integration with the landscape design will be considered when determining whether structures are included in the site coverage calculations.

19.1.8 PRINCIPAL PRIVATE OPEN SPACE

Objectives

a. To ensure that dwellings are provided with functional, well located areas of private open space.
b. To ensure that private open space is integrated with, and is directly accessible from the living areas of a dwelling.
c. To ensure that private open space receives sufficient solar access and privacy.
d. To minimise adverse impacts on the private outdoor space of adjoining dwellings.

Controls

1. A lot with a width, measured at the front building line, of at least 6m but less than 10m, must have at least 16m² of principal private open space. The principal private open space must have a minimum dimension of 3m and a grade less than 1:50.

A lot with a width, measured at the front building line, of 10m or more, must have at least 24m² of principal private open space. The principal private open space must have a minimum dimension of 4m and a grade less than 1:50.

The principle open space must not include the space allocated to waste storage.

19.1.9 LANDSCAPE AREA

Objectives

a. To provide areas of landscape planting that improve visual amenity, privacy, outlook, views and recreational opportunities for residents and occupants within a development
b. To enable landscape planting in front setback areas that enhances the streetscape.
c. To enable landscape planting in rear setback areas that enhances residential amenity.
d. To ensure landscape areas are integrated into the design of the development.
e. To promote on-site stormwater infiltration by encouraging pervious surfaces and landscaped areas.
f. To conserve significant vegetation, topographical features and fauna habitat.

Controls

1. The development must have a landscaped area of at least the following:
    i. If the lot has an area of at least 200m² but not more than 300m² - 10% of the area of the lot,
    ii. If the lot has an area of at least 300m² but not more than 450m² - 15% of the area of the lot,

The landscaped area must have a minimum width of 1.5m to be included in the landscaped area calculations.

Landscaping must be used to define the entrances to individual dwellings, as follows:

iii. If the lot has a width, measured at the building line, of more than 18 metres, at least 50% of the area forward of the building to the primary road must be landscaped,
iv. If the lot has a width, measured at the building line, of not more than 18m, at least 25% of the area forward of the building line to the primary road must be landscaped.

On corner lots, landscaping in the front setback must continue around the corner into the secondary setback.

Note: The landscaped area may be within the front, side or rear setbacks. The landscaped area is in addition to the principle private open space requirement.

19.1.10 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure dwellings have equitable access to waste collection services; and
b. To ensure that the practical requirements for waste management are met in such a way as to minimise negative impacts on the occupants and neighbours.

Controls

1. Waste management for Housing on Small and Narrow Lots must comply with "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:
    i. Waste storage area(s)

    Waste bin storage is to be appropriately located to:

    a. be separately accounted from that space allocated for principle private open space and landscaping;
    b. have a waste storage space per dwelling of minimum internal dimensions of either 1905mm x 1560mm or 1410mm x 2340mm to store one set of 240 litre recycling, food and garden waste and residual garbage bins;
    c. not compromise visual amenity for an occupant of the principle private open space;
    d. have the bins in a shaded area, at least from afternoon sun, to minimise bin odour;
    e. not compromise visual amenity of views from windows or doors of the property or neighbours;
    f. be set back behind the front building line, or suitably integrated visually to form part of the building line or landscaping;
    g. locate bins where odours are least likely to enter airflow for doors and windows for this or adjacent properties; and
    h. have unobstructed access (without steps and on a gradient less than 1:14) to move the bins to the location where bins are placed out for collection, which may be through a side gate, through a garage, courtyard, or by other unobstructed path that does not require passing through the dwelling's interior.

    ii. Waste collection point(s)

    Sufficient unobstructed space must be ensured to allow for two waste bins per dwelling to be placed kerbside for collection on any waste collection day, or alternative shared waste service solutions planned with suitable shared storage locations.

    iii. Sufficient unobstructed space must be ensured to allow for 1 cubic metre per dwelling of bulk waste (including furniture and whitegoods) to be placed kerbside for collection, or a suitable alternative bulk waste collection management option must be provided and described in the Operational Waste Management Plan.

10 INTENSIVE AGRICULTURE

This section of the DCP only provides Council's specific requirements for intensive agriculture. Other requirements are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

Objectives

a. To ensure that existing residences and other sensitive receiving environments, including conservation areas and aquifers, are not adversely affected by intensive agricultural activities.
b. To ensure that intensive agricultural practices are sustainable and maintain a high standard of operation.
c. To minimise adverse impacts of intensive agricultural practices on nearby residential land use without diminishing productivity of agricultural land.

Controls

1. Adequate buffers or other measures must be implemented to ensure that residences or other sensitive receiving environments are not adversely affected by noise, odour, chemicals, or the like.
2. Intensive agriculture must be managed to minimise offensive odours and to mitigate the exposure of existing residences to offensive odours.
3. Intensive agriculture must be managed to minimise the impact of noise on residences. A minimum separation distance of 60 metres is recommended for intermittent noise, and 500 metres for continuous noise. Additional measures may be necessary to mitigate noise impacts sufficiently. Alternatives measures may be implemented to mitigate noise impacts.
4. Where the operation of the proposed development requires the application or use of chemicals, measures must be implemented to ensure that no chemical or spray drift will enter adjoining property.
5. A Property Management Plan is to be prepared and lodged, which includes:
    i. The area to be used for agricultural production and any other uses on the site.
    ii. Existing development within 500 metres of the property boundary.
    iii. Any machinery to be used during the use of the land for the proposed agricultural purpose.
    iv. Any handling, processing, and storage facilities.
    v. Any internal fencing.
    vi. Adequacy of road access to and within the lot.
    vii. The location of any proposed dwelling.
    viii. The economic impact and any benefits of the proposal.
    ix. Annual water demand for the proposed use, the preferred water supply, and any alternative source of water supply.
    x. Irrigation system and how any impact on waterways and ground water will be managed.
    xi. Measures proposed to mitigate adverse impacts on ground water aquifers.
    xii. Any proposed drainage works and measures to mitigate pollutants entering waterways and/or aquifers.
    xiii. The impact of localised flooding.
    xiv. The location of any ground water, dam, river, creek, or other water source.
    xv. Potential impact on ground water levels and water quality and methods to mitigate impacts.
    xvi. Details of potential odours and noise.
    xvii. Possible exclusion zones around chemical or flammable liquid storage.
    xviii. Safety measures for spill containment and backup provisions.
    xix. Details of the quantity, use, and management of chemicals and fertilisers.

xx. Waste management plan for all types of wastes that will be generated.

6. Waste management for Intensive Agriculture must comply with "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:
   i. Residential waste bins may be placed kerbside for collection if suitable location available.
   ii. Commercial waste must be collected separately from an onsite location with sufficient road quality, clearances and swept path to enable safe access.

11 MULTI DWELLING HOUSING

This section of the DCP only provides Council's specific requirements for Multi Dwelling Housing developments. Other requirements that must be addressed are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

Under LM LEP 2014 ***multi dwelling housing*** means three or more dwellings (whether attached or detached) on one lot of land, each with access at ground level, but does not include a residential flat building.

11.1 SITE REQUIREMENTS

Objectives

a. To ensure that Multi Dwelling Housing developments are located on sites with sufficient size and street frontage to accommodate the required building envelope, car parking, landscaping, and private open space.

Controls

1. The development site must have a minimum area of 750m^2 for development consisting of three dwellings.
2. The development site must have a minimum area of 850m^2 for development consisting of four or more dwellings.
3. The development site must have direct frontage to a public road.
4. The development site must have a minimum width of 18 metres at that road frontage.

11.2 SITE COVERAGE

Objectives

a. To ensure development maximises permeable surfaces and maintains a balance between built, and unbuilt areas.
b. To facilitate on-site stormwater infiltration and harvesting for re-use.
c. To incorporate suitable measures to minimise run-off directly accessing the Lake or its waterways.

Controls

1. The maximum permitted site coverage at the ground floor is 65% of the site area.

Note: Site coverage means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

- any basement,
- any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
- any eaves,
- any unenclosed balconies, decks, pergolas and the like.

Note: Balconies, decks, pergolas and the like located under the main roof of the building are not considered to be unenclosed and will be included in the site coverage calculation.

Note: Site coverage controls operate in tandem with the Stormwater Management, Principal Private Open Space, and Landscaped Area and Design controls in this DCP to ensure that adequate unbuilt area is available for outdoor recreation and for reducing stormwater discharge from the site. Stormwater permeability and integration with the landscape design will be considered when determining whether structures are included in the site coverage calculations.

11.3 STREET SETBACK

Objectives

a. To ensure that the development complements the existing or future setback pattern in the locality.
b. To permit flexibility for developments that may be vulnerable to the impacts of flooding.
c. To define the street edge and provide definition between public and private space.
d. To encourage natural surveillance from the front of the dwelling to the street.

Controls

1. Where there are existing adjoining residential buildings within 40 metres,
   i. the front setback must be consistent with the established setbacks or,
   ii. where adjoining building setbacks vary by more than 3m, the front setback must be the same distance as one or other of the adjoining buildings, or:
   iii. where adjoining buildings vary in setback, development must locate between their setbacks.
2. Where there are no existing (or approved) dwellings within 40 metres of the lot, the front setback must be a minimum of four metres from the front boundary.
3. The secondary street setback for corner allotments must be a minimum of two metres.
4. Entry features and porticos, porches, balconies, decks, verandahs, and bay windows may encroach up to 1.5 metres into the front setback area. This encroachment must not cover more than 25 percent of the building width.
5. Where the site is identified as being vulnerable to flooding or expected sea level rise, front setbacks may be reduced to ensure that developments are adequately setback from the shoreline.

Note: A front setback is measured at 90° from the front lot boundary to the building facade.

11.4 SIDE SETBACKS

Objectives

a. To provide adequate separation between buildings to ensure that a reasonable level of privacy, amenity and solar access is maintained.
b. To provide visual separation between buildings.
c. To provide opportunities for the planting of vegetation.

Controls

1. Above ground structures must not encroach on the side boundary setback of multi dwelling housing developments.
2. For multi dwelling housing that adjoins the R2 zone, side setbacks must be:
   i. A minimum of three metres for buildings up to 4.5m.
   ii. A minimum of six metres for buildings over 4.5m.
   iii. A minimum of nine metres for elements of buildings over two storeys in height.

11.5 LANDSCAPED AREA

Objectives

a. To enable landscape planting in the front setback areas that enhances the streetscape.
b. To enable landscape planting in the side and rear setback areas that enhances residential amenity.
c. To conserve significant vegetation.
d. To promote on-site stormwater infiltration by encouraging pervious surfaces and landscaped areas.

Controls

1. Development must provide a landscape area that is at least 10% of the total lot area.
2. An area must have a minimum width of 2 metres to be included in the landscape area calculations.
3. Where a multiple dwelling housing development is proposed to directly adjoin land zoned R2 Residential an additional landscaped area with a minimum area of 10% of the total lot area must be provided along the full length of the boundary with the R2 Residential Zone.
4. Pervious surfaces selected for the purpose of stormwater infiltration must be designed by a suitably qualified engineer.

Note: The landscaped area is in addition to the principal private open space requirement.

11.6 LANDSCAPE AND TREE PLANTING IN FRONT SETBACK AREAS

Objectives

a. To allow for the planting and healthy growth of large canopy trees which enhance amenity and street character.
b. To provide large-scale planting between the street and parking and service areas, that reduces the visual impact of development.
c. To maintain sightlines from the street to car parks and entrances.

Controls

1. Development must include installation and maintenance of at least one advanced clear-trunked broad-canopy tree for every 20m^2 of front setback area.
2. The root volume for each tree in the front setback area must be a minimum of 8m^3 and between 600 and 750mm deep.
3. Each area allocated to tree planting must have a corresponding clear air space that is at least eight metres high and six metres in width.
4. All trees installed must be advanced stock, and be at least a 45L container size.
5. Understorey planting must comprise low growing species less than 900mm in height.

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements.

11.7 STREET TREES

Objectives

a. To enhance the amenity and desired character of the street.
b. To provide tree shade and shelter for pedestrians.

Controls

1. Development must include the supply, installation and establishment of at least one advanced clear trunk tree for every 10 metres of street frontage.
2. The root volume for each tree must be a minimum of 8m^3 and between 600 and 750mm deep.
3. All trees installed must be advanced stock, and at least 75L container size.
4. The tree supplier or landscape contractor must provide evidence that all trees generally comply with *NATSPEC Guide to Specifying Trees - Assessment of Tree Quality.*
5. All trees installed must be established and maintained for a minimum period of 24 months. Any failed trees must be replaced immediately.

11.8 PRINCIPAL PRIVATE OPEN SPACE

Objectives

a. To ensure that Multiple Dwelling Housing developments provide sufficient outdoor areas for occupants' needs.

Controls

1. A Principal Private Open Space with a minimum area of 16m^2 and a minimum width of 4 metres must be provided for each dwelling containing one or two bedrooms.
2. A Principal Private Open Space with a minimum area of 25m^2 and a minimum width of 4 metres must be provided for each dwelling containing three or four bedrooms.

11.9 SERVICES

Objectives

a. To ensure that Multiple Dwelling Housing developments provide adequate services to cater for residents' needs.

Controls

1. Where any part of the Multiple Dwelling House development is located 120 metres or more from an existing street fire hydrant, a fire hydrant should be provided.

11.10 DRIVEWAY DESIGN

Objectives

a. To ensure vehicular access has minimal impacts on neighbouring dwellings.
b. To ensure that vehicular access points and parking is safe and convenient for residents, visitors, and service providers.

Controls

1. Where the site is bounded by more than one street frontage, vehicular access points are encouraged on both frontages.

11.11 ADAPTABLE DWELLINGS

Objectives

a. To ensure that developments incorporate housing that is accessible to all members of the community.

Controls

1. For proposals with more than 10 dwellings, one adaptable dwelling must be provided for every 10 dwellings.
2. Adaptable dwellings must have a car park linked to the dwelling by an unobstructed path of travel at a suitable gradient for wheelchair access.
3. Adaptable dwellings must have entries, doors, and passageways that are of suitable dimensions to facilitate wheelchair access.
4. Adaptable dwellings must be designed and constructed to meet the performance requirements stated in Clause 2.2 and to include the essential features listed in Appendix A of AS 4299.

Note: An adaptable dwelling is designed in such a way that it can be modified easily in the future to become accessible to people with disabilities or progressive frailties.

11.12 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure that waste is managed, collected, and disposed of, reused, or recycled, effectively and efficiently to provide a safe, healthy, and clean environment for the community, as well as maintaining the amenity of the neighbours.

Controls

1. Waste management for Multi Dwelling Housing must comply with "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:
    i. A minimum of weather-protected space for bulk waste storage (such as furniture and whitegoods) must be allocated as a half square metre of floor space per dwelling in a shared bulk waste storage location, or a minimum square metre in individual garages.
    ii. Kerbside collection of mobile garbage bins (MGBs) by side-lift waste collection vehicles may only occur where the collection location is safe for stopping (up to fifteen minutes for 40 bins) to collect these bins and will not hinder access or traffic flow more than a minute.

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12 PLACE OF PUBLIC WORSHIP

This section of the DCP only provides Council's specific requirements for Place of Public Worship. Other requirements that must be addressed are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

12.1 INTRODUCTION

Under LM LEP 2014 a ***place of public worship*** means a building or place used for the purpose of religious worship by a congregation or religious group, whether or not the building or place is also used for counselling, social events, instruction or religious training.

A place or public worship is permissible with consent in the following zones:

R1 – General Residential

R2 – Low Density Residential

R3 – Medium Density Residential

B1 – Neighbourhood Centre

B2 – Local Centre

B3 – Commercial Core

B4 – Mixed Use

B7 – Business Park

IN1 – General Industrial

IN2 – Light Industrial

SP3 – Tourist

RE1 – Public Recreation

RE2 – Private Recreation

E3 – Environmental Management

This section of the DCP divides places of public worship into two categories; small scale and large scale. A definition of each is provided below:

A ***small-scale place of public worship*** means a place of public worship with a seating capacity less than 100 people in the assembly area and which predominately services people who live in the same neighbourhood as the place of public worship.

A ***large-scale place of public worship*** means a place of public worship with a seating capacity of 100 people or more in the assembly area and which services people who live outside the neighbourhood where the place of public worship is located.

Assembly Area means the sum of that portion of the gross floor area of a building that is to be used for public assembly, for the purpose of worship or other purposes. It includes any secondary areas of assembly, such as choir or musician's areas, altar areas, confessional areas, podiums, or rooms capable of being used for overspill accommodation of the congregation during a worship service. Ancillary areas such as kitchens, toilets, offices, washrooms and accommodation, which are not normally used for worship, are not included in the calculation of the assembly area.

12.2 AIMS FOR PLACE OF PUBLIC WORSHIP DEVELOPMENT

The key aims of this section of the DCP are:

1. To ensure the size, scale, height, form and external appearance of a place of public worship is compatible with the prevailing and desired character of the locality.
2. To maintain the streetscape character and amenity of the surrounding locality, especially in residential neighbourhoods.
3. To encourage the location of large-scale places of public worship on lands zoned for business industrial or recreation purposes.
4. To ensure the assessment process for any place of public worship is consistent for all religious groups.

12.3 SITE AND LOCATION REQUIREMENTS

Objectives

a. To ensure that places of public worship are suitably located.
b. To minimise noise, traffic, parking and other amenity impacts of places of public worship, especially in residential neighbourhoods.
c. To prevent the location of conflicting land uses within the vicinity of places of public worship.

Controls

1. Large scale places of public worship should be located a minimum of 250 metres away from any other existing or approved large scale place of public worship.
2. The entrance or exit to any place of public worship must not be located within pedestrian view of an existing or approved sex services premises.
3. Large scale places of public worship should be located on land zoned for B2 – Local Centre, B3 – Commercial Core, B4 – Mixed Use, B7 – Business Park, IN2 – Light Industrial, SP3 – Tourist, RE1 – Public Recreation, RE2 – Private Recreation.
4. Places of public worship must not be located on lots with a frontage to a road with a carriageway width less than 10 metres.
5. Places of public worship must not be located on lots where access is via a cul-de-sac.

12.4 BUILDING FORM AND CHARACTER

Objectives

a. To ensure that the scale of a place of worship is compatible with the scale of existing or desired future development in the area.
b. To ensure that the character of a place of worship is compatible with the character of existing or desired future development in the area.
c. To maintain the residential character of established residential areas.
d. To ensure facades define and enhance the public domain and desired street character.
e. To ensure that building elements are integrated into the overall building form and façade design.
f. To ensure development addresses all street frontages.

Controls

1. Places of public worship in residential zones must be designed to maintain the character of the residential area.
2. The front entrance of all places of public worship must be clearly visible from the street.
3. Where a place of public worship has dual frontages, the development must be designed to address both streets, by way of windows, architectural features and surveillance.

4. External building materials, finishes and colours must complement and be consistent with surrounding development.

12.5 LANDSCAPED AREA

Objectives

a. To maintain and enhance the existing streetscape and landscaped character of the residential neighbourhoods.
b. To provide privacy for surrounding residential development.

Controls

1. In residential zones a two-metre wide landscaped area must be provided along side and rear boundaries.
    i. In residential zones, a minimum of:
    ii. Twenty five percent of the site must be landscaped area, and

Fifty percent of the front setback must be landscaped area.

A landscape master plan and report must be submitted for large scale places of public worship.

12.6 VISUAL PRIVACY

Objectives

a. To ensure the design of places of public worship does not reduce the visual privacy of surrounding land uses especially residential uses.

Controls

1. The location of windows, doors or balconies within a place of public worship must be located to avoid overlooking the private open space of adjoining residential uses.

Landscaping must be used to reduce the impact of overlooking where it cannot be avoided.

12.7 ACOUSTIC PRIVACY

Objectives

a. To ensure that a place of public worship does not unreasonably impact on the acoustic privacy of occupants of surrounding residential development.
b. To ensure the design and materials used for places of public worship provide reasonable acoustic privacy to surrounding residential and business users.

Controls

1. Places of public worship must be designed to minimise noise impacts on surrounding development through building layout, building orientation and materials.

A noise impact statement prepared by a suitably qualified acoustic engineer must be submitted for a place of public worship on land within a residential zone or that adjoins a residential zone or adjoins a residential use in another zone.

The noise impact assessment report must address the following issues / matters including, but not limited to:

i. Existing LA_{90} background noise levels;
ii. Predicted LA_{10}, LA_{1}, and LA_{eq} noise emission levels, based on the size and nature of the proposed place of public worship and associated activities / functions;
iii. Assessment of all potential noise sources on-site, including vehicles, bells, musical instruments, singing and calling etc, and
iv. Recommended noise / acoustic mitigation measures, including any design amendments, landscaping requirements, and / or restrictions on the hours of operation of the development.

Note: A noise impact statement may not be required for development involving minor modifications to an existing place of public worship where the proposed changes will not increase the floor area and will not increase the capacity of an existing place of public worship.

12.8 TRAFFIC, PARKING AND ACCESS

Objectives

a. To minimise the impact of on street parking on surrounding local roads.
b. To ensure surrounding roads and intersections are able to operate effectively, safely and within their capacity.
c. To ensure adequate parking is available for the place of worship so that it does not cause unreasonable impacts to residents and congestion in nearby streets.
d. To maintain the amenity of residential areas.
e. To ensure that appropriate access is provided for service / commercial vehicles.
f. To ensure the safety of both pedestrians and vehicle users in the surrounding locality

Controls

1. All required parking must be provided on site, through at grade or basement parking.

All vehicles shall be able to enter and leave the site in a forward direction

A clear distinction must be made between vehicle and pedestrian movements, both on site and off site. Measures should be implemented to separate these two movements and reduce potential conflict

A traffic impact statement must be prepared and submitted for a new place of public worship or where alterations and additions are proposed that increase the seated capacity of the assembly area by 50 persons or more. The traffic impact assessment must assess:

i. number of parking spaces required;
ii. impact of the proposed place of public worship on the surrounding locality and the measures taken to minimise any potential issues;
iii. the impact of any festivals or functions (i.e. Weddings) and their impact in relation to car parking and vehicular access.

Note: The traffic impact statement must be prepared by a qualified traffic consultant in accordance with Council's Traffic Impact Statement and Vehicle Access Guidelines.

12.9 OPERATIONAL MANAGEMENT

Objectives

a. To ensure the operation of the place of worship does not have any adverse impact on surrounding properties.
b. To ensure that a place of worship operates at times where it will have the least impact on the amenity of adjoining residences.
c. To create a balance between the hours of operation for a place of public worship and maintaining adequate amenity for surrounding residents.
d. To provide certainty for both the consent authority and the local community about the ongoing management practices to be employed at the place of public worship to manage its impact upon the neighbourhood.

Controls

1. An operation management plan must be submitted to Council and address the following:
   i. The frequency of all proposed services, events and activities for the calendar year;
   ii. The proposed hours of operation for all proposed services, events and activities;
   iii. The likely number of people to attend each type of service, event etc;
   iv. Whether street parades or road closures are proposed;
   v. An explanation of the measures that will be in place to manage parking and local traffic when a special event (attracting more than 100 people for a small scale or 200 people for a large scale place of public worship) is scheduled;

vi. Any other uses that may take place within the place of public worship (i.e. community uses- youth group, community colleges etc), the frequency of these uses, the number of patrons proposed for these uses and the hours where these uses will be undertaken;

vii. Any particular custom or practice (such as ringing bells) that may occur and the frequency and length of such rituals;

viii. The nomination of a contact person that will be responsible in responding to any issues or complaints raised by the community or Council.

A minimum of 30 minutes must be allowed between the end of one service and the beginning of the next, to minimise noise and traffic impacts.

Note: The operation management plan will be used both for the assessment of the application as well as a means to manage the ongoing operation of the proposed premises through the conditions of development consent. The operation management plan (as may be amended) may be incorporated as a condition of development consent.

12.10 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure that appropriate access is provided for waste collection vehicles.

b. To ensure the safety of both pedestrians and waste collection vehicle users in the surrounding locality.

c. To ensure that places of public worship have appropriate and sufficient waste services.

d. d. To ensure that appropriate access is provided for collection of waste.

Controls

1. Waste management for Places of Public Worship must comply with "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:
   i. Waste types
      a. The Operational Waste Management Plan must include separate waste management provisions for the place of public worship (commercial waste management) from any residences on the property (residential waste management).
      b. Waste volumes estimated for the place of public worship should include capacity to handle peak volumes during events with high attendance and waste generation.
   ii. Waste collection vehicle access
      a. All waste collection vehicles shall be able to enter and leave the site in a forward direction.
      b. A clear distinction must be made between waste collection vehicle and pedestrian movements, both on site and off site. Measures should be implemented to separate these two movements and reduce potential conflict.
      c. For bins to be collected onsite, the onsite road access must meet pavement quality, turn and lift requirements for commercial or Council waste collection vehicle dimensions, which must be able to turn to leave the site in a forward direction. Provision of service will be subject to Council and waste contractor inspection on completion of works and signing of an indemnity agreement.

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13 RESIDENTIAL FLAT BUILDINGS

This Section of the DCP provides Council's specific requirements for Residential Flat Building developments. Other requirements that must be addressed are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this Section and the general development part of LM DCP 2014, this Section prevails.

This Section must be read in conjunction with State Environmental Planning Policy No 65 – Design Quality of Residential Flat Development.

Where a mixed use development is proposed containing a residential component, the controls contained in this section apply to that residential component.

Under LM LEP 2014 ***Residential Flat Building*** means a building containing three or more dwellings, but does not include an attached dwelling or multi dwelling housing.

13.1 SITE REQUIREMENTS

Objectives

a. To ensure that Residential Flat Building developments are located on sites with sufficient size and street frontage to accommodate the required building envelope, car parking, landscaping, and private open space.

Controls

1. The development site must have a minimum area of 800m^2.
2. The development site must have direct frontage to a public road.
3. The development site must have a minimum width of 20 metres at that road frontage.

13.2 HOUSING MIX

Objectives

a. To provide a housing mix that supports diversity and promotes choice in housing types.

Controls

1. A mix of dwelling types and sizes must be provided as follows:
   i. studio apartments maximum 15%,
   ii. one-bedroom apartments maximum 30%
   iii. two-bedroom apartments minimum 40%
   iv. three-bedroom apartments minimum 15%

Note: Substantial variations to unit mix must be supported by an authoritative analysis of current and future market demand.

13.3 STREET SETBACK

Objectives

a. To ensure that the development complements the existing setback pattern in the locality.
b. To permit flexibility for developments that may be vulnerable to the impacts of flooding.
c. To define the street edge and provide definition between public and private space.
d. To encourage entries, windows, balconies and outdoor living areas that overlook the street.

Controls

1. In a Residential Zone development (other than for battle-axe blocks) must be setback a minimum of six metres and a maximum of eight metres from a street boundary.
2. The front building elevation must be parallel or near parallel to the street boundary.
3. Entry features and porticos, porches, balconies, decks, verandahs, bay windows, eaves and awnings may encroach up to two metres into the front setback area. This encroachment must not cover more than 50 percent of building width.
4. Where the site is identified as being vulnerable to flooding or expected sea level rise, street setbacks may be reduced to ensure that developments are adequately setback from the shoreline.

Note: A front setback is measured at 90° from the front lot boundary to the building facade.

13.4 SIDE SETBACK

Objectives

a. To provide adequate separation between buildings to ensure that a reasonable level of privacy, amenity and solar access is maintained.

b. To provide visual separation between buildings.

c. To provide opportunities for the planting of vegetation.

Controls

1. Side setbacks for Residential Flat Buildings must be a minimum of three metres.
2. Above ground structures must not encroach on the side boundary setback of residential flat buildings.
3. For residential flat buildings that adjoin the R2 zone, side setbacks must be:
   i. A minimum of three metres for buildings up to 4.5m.
   ii. A minimum of six metres for buildings over 4.5m.
   iii. A minimum of nine metres for elements of buildings over two storeys in height.

Note: Additional setbacks may be required under SEPP 65 – Design Quality of Residential Flat Development.

13.5 SITE COVERAGE

Objectives

a. To ensure that development maximises permeable surfaces, and maintains a balance between built and unbuilt areas.

b. To facilitate on-site stormwater infiltration and harvesting for re-use.

c. To incorporate suitable measures to minimise run-off directly accessing the lake or its waterways.

Controls

1. The maximum site coverage for Residential Flat Buildings, including ancillary development, must not exceed 65%.

Note*:* Site coverage means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

- any basement,
- any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
- any eaves,

- any unenclosed balconies, decks, pergolas and the like.

Note: Balconies, decks, pergolas and the like located under the main roof of the building are not considered to be unenclosed and will be included in the site coverage calculation.

Note: Site coverage controls operate in tandem with the Stormwater Management, Principal Private Open Space, and Landscaped Area and Design controls in this DCP to ensure that adequate unbuilt area is available for outdoor recreation and for reducing stormwater discharge from the site. Stormwater permeability and integration with the landscape design will be considered when determining whether structures are included in the site coverage calculations.

13.6 LANDSCAPE AREA

Objectives

a. To enable landscape planting in the front setback that enhances the streetscape.

b. To enable landscape planting in the side and rear setback that enhances residential amenity.

c. To conserve significant vegetation.

d. To promote on-site stormwater infiltration by encouraging pervious surfaces and landscaped areas.

Controls

1. Development must provide a landscape area that is at least 20% of the total lot area.
2. At least half of the required landscape area must be suitable for deep soil planting.
3. An area must have a minimum width of three metres to be included in the landscape area calculations.
4. Where a residential flat building development is proposed adjacent to land zoned R2 Residential, an additional landscaped area with a minimum area of 10% of the total lot area must be provided along the R2 zone boundary.

Note: The landscape area is in addition to the principal private open space requirement.

13.7 PLANTING ON STRUCTURES

Objectives:

a. To enhance the quality and amenity of open space on roof tops, internal courtyards, and over car parking structures.

b. To encourage the establishment of vegetation in urban areas.

c. To maintain privacy of neighbouring residents.

Controls:

1. The planting of shrubs and trees is encouraged on the top of setback areas, rooftops, and over car parking structures.
2. Planter boxes must be located at the perimeter of rooftop gardens to minimise overlooking of neighbouring dwellings.
3. Planting containers must allow sufficient depth and volume, growing medium and irrigation to support the mature size of plants.
4. All planting areas on structures must be designed by a suitably qualified engineer.

13.8 LANDSCAPE AND TREE PLANTING IN FRONT SETBACK AREAS

Objectives:

a. To allow for the planting and healthy growth of large canopy trees which enhance amenity and street character.

b. To provide large-scale planting between the street and parking and service areas, that reduces the visual impact of development.

c. To maintain sightlines from the street to carparks and entrances.

Controls:

1. Development must include installation and maintenance of at least one advanced clear-trunked broad-canopy tree for every 20m^2 of front setback area.
2. The root volume for each tree in the front setback area must be a minimum of 8m^3 and between 600 and 750mm deep.
3. Each area allocated to tree planting must have a corresponding clear air space that is at least eight metres high and six metres in width.
4. All trees installed must be advanced stock, and at least 45L container size.
5. Understorey planting must comprise low growing species less than 900mm in height.

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements.

13.9 STREET TREES

Objectives:

a. To enhance the amenity and desired character of the street.

b. To provide tree shade and shelter for pedestrians.

Controls:

1. Development must include the supply, installation and establishment of at least one advanced clear trunk tree for every 10 metres of street frontage.
2. The root volume for each tree must be a minimum of 8m^3 and between 600 and 750mm deep.
3. All trees installed must be advanced stock, and at least 75L container size.
4. The tree supplier or landscape contractor must provide evidence that all trees generally comply with *NATSPEC Guide to Specifying Trees - Assessment of Tree Quality.*
5. All trees installed must be established and maintained for a minimum period of 24 months. Any failed trees must be replaced immediately.

Note: Refer to Council's *Landscape Design Guideline* for further details and requirements.

13.10 PRINCIPAL PRIVATE OPEN SPACE

Objectives

a. To ensure that Residential Flat Building developments provide sufficient outdoor areas for residents' needs.

Controls

1. A Principal Private Open Space in the form of a balcony with a minimum area of 8m^2 and a width of 2 metres must be provided for all dwellings. Development that seeks to vary from this minimum must demonstrate negative impacts cannot be satisfactorily mitigated with design solutions.
2. Where the above cannot be provided for all dwellings, a communal open space with a minimum area of 40m^2 and a minimum dimension of 5 metres should be provided.
3. Communal open space should be provided principally at ground level, except where retail and office uses are required at ground level.

Note*:* The communal open space may consist of a communal pool, tennis court, playground area, barbeque area or similar recreational facilities.

13.11 SERVICES

Objectives

a. To ensure that Residential Flat Building developments provide adequate services to cater for residents' needs.

Controls

1. For developments consisting of more than 50 dwellings, a car wash facility with the minimum dimension of 3.5 x 6 metres must be provided.
2. Where any part of the Residential Flat Building development is located 120 metres or more from an existing street fire hydrant, a fire hydrant and mechanical plant should be provided.
3. Air-conditioning plants and other mechanical plants should be located towards the centre of the site, and be acoustically insulated.

13.12 DRIVEWAYS AND PARKING AREAS

Objectives:

a. To ensure that on-site car parking and driveways do not dominate or detract from the appearance of the development or the local streetscape.

b. To ensure that vehicular access has minimal impact on neighbouring dwellings.

c. To ensure that vehicular access points and parking is safe and convenient for residents, visitors and service providers.

Controls

1. On-site car parking and servicing facilities must be located at the rear of development, or at a basement level.
2. Stack parking may be permitted only where two spaces are designated for a single dwelling.
3. Residential Flat Buildings should have a single driveway designed for two-way traffic with a minimum width of 5.5 metres.
4. Vehicular movement areas must be located a minimum of 3 metres from any bedroom window.
5. Developments with two street frontages should be designed so that the secondary street provides the main vehicle entry and exit point.

Note: The design of parking areas must comply with AS2890 Parking Facilities.

13.13 ADAPTABLE DWELLINGS

Objectives

a. To ensure that developments incorporate housing that is accessible to all members of the community.

Controls

1. For proposals for more than 10 dwellings, one adaptable dwelling must be provided for every 10 dwellings.
2. Adaptable dwellings must have a car park linked to the dwelling by an unobstructed path of travel, at a suitable gradient for wheelchair access.
3. Adaptable dwellings must have entries, doors and passageways that are of suitable dimensions to facilitate wheelchair access.
4. Adaptable dwellings must be designed and constructed to meet the performance requirements stated in Clause 2.2 and to include the essential features listed in Appendix A of AS 4299.

Note: An adaptable dwelling is designed in such a way that it can be modified easily in the future to become accessible to people with disabilities or progressive frailties.

13.14 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure that waste is managed, collected and disposed of, or re-used or recycled effectively and efficiently to provide a safe, healthy, and clean environment for the community, as well as maintaining the amenity of the City.

Controls

1. Waste management for Residential Flat Buildings must comply with "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:
    i. For developments where access is not at ground level for all dwellings, shared waste storage area(s) must be incorporated into the design.
    ii. Residential development greater than three storeys must provide one of the following waste management solutions:
        a. a waste chute system, designed in accordance with Lake Macquarie Waste Management Guidelines, with:
            - solutions to manage all three waste streams - recyclables, food and indoor/balcony garden waste and residual garbage;
            - recyclables not to be compacted;
            - food and indoor/balcony garden waste, if to be included in a Council green waste service, is to be un-bagged or else in Council-approved compostable bags;
            - a solution to manage wastes that must not be included in any of the bins, such as batteries, cooking oils, liquid wastes, chemicals and light globes; and
            - a solution to manage bulk waste items (such as furniture and whitegoods) and large recyclables such as cardboard boxes that would not fit in the recycling chute.
        b. an intermediate waste storage room on each level with associated arrangements in place for the transfer of waste to the bulk storage container, or a separate service lift, designed in accordance with Lake Macquarie Waste Management Guidelines, with:
            - solutions to manage all three waste streams - recyclables, food and indoor/balcony garden waste and residual garbage;
            - associated arrangements in place for a caretaker to transfer the waste to the bins in the waste storage room, ideally in a separate service lift; and
            - food and indoor/balcony garden waste, if to be included in a Council green waste service, is to be un-bagged or else in Council-approved compostable bags; and
            - a solution to manage wastes that must not be included in any of the bins, such as batteries, cooking oils, liquid wastes, chemicals and light globes.
        c. an innovative alternative, with:
            - solutions to manage all three waste streams - recyclables, food and indoor/balcony garden waste and residual garbage;
            - food and indoor/balcony garden waste, if to be included in a Council green waste service, is to be un-bagged or else in Council-approved compostable bags; and a solution to manage wastes that must not be included in any of the bins, such as batteries, cooking oils, liquid wastes, chemicals and light globes. if the solution includes onsite food and garden waste treatment:

composting, worm farming or food dehydrator that meets a NSW Environment Protection Authority Resource Recovery Order and Exemption with the output to be used in onsite.

iii. A minimum space for waste bin storage must be allocated per dwelling (in addition to minimum space allocations for other purposes) as follows:

a. four dwellings' shared 240 litre bins (two sets of bins) stored in a shared area accessible to all four dwellings; or

b. up to five dwellings' shared 660 litre bins (one set of bins) stored in a shared area accessible to all five dwellings; or

c. up to eight dwellings' shared 240 litre bins (four sets of bins) stored in a shared area accessible to all eight dwellings; or

d. up to ten dwellings' shared 1100 litre bins (one set of bins) stored in a shared area accessible to all ten dwellings; or

e. up to twenty dwellings' shared 1100 litre bins (two sets of bins) stored in a shared area accessible to all twenty dwellings;

f. up to forty dwellings' shared 1100 litre bins (four sets of bins) stored in a shared area accessible to all forty dwellings.

iv. A minimum of weather-protected space for bulk waste storage (such as furniture and whitegoods) must be allocated as a half square metre of floor space per dwelling, which may be in individual garages or in a shared bulk waste storage location.

v. Waste storage areas must be readily accessible to occupants, while being secure from non-occupants.

vi. Bin carting route(s) from waste storage area(s) to waste collection point(s):

a. Where waste storage must be in a lower level basement, a goods lift may be used to move bins between floors. Doorways to any goods lift(s) and lift space dimensions must fit the size of bins and space for a person to comfortably fit. The distance from store to lift and from lift to collection point must be no more than 3 metres for 1100 litre bins and 5 metres for 660 litre bins unless a bin cart is used and can also fit in the lift.

vii. Waste Collection Point(s):

a. kerbside collection of mobile garbage bins (MGBs) by side-lift waste collection vehicles may only occur where:

- up to 360 litre size are used and can be accommodated on the subject property frontage so that bins can be spaced with at least 300mm between bins;
- each bin placement location has a maximum of 40 bins out on any one day; and
- the collection location is safe for stopping (up to fifteen minutes for 40 bins) to collect these bins and will not hinder access or traffic flow more than a minute.

b. Where the collection of waste/recyclables will be in larger bins over 360 litres, the design of the development must accommodate safe collection of the centralised larger bins. The larger bins must be accessible by service vehicles without the need for manual manoeuvring of the bins, and the need for vehicle reversing should be minimised.

viii. Waste Collection vehicle access:

a. Where waste storage must be in a lower level basement and collections have to take place inside the from inside the basement, the building must be designed to accommodate private waste collection vehicles entering and exiting the site. Clearance height for under building access by collection vehicle must be no less than 3.6m at any point if vehicle is required to enter site to service bins. At sites here

waste collection vehicles must enter and exit in a forward direction, the use of vehicle turntables are acceptable. Confirmation is required in writing from a waste collection service provider that they would be able to service this site with this design.

ix. Waste Information guide

a. A waste system information guide must be provided with the Waste Management Plan to outline how the design has defined that waste will be managed and that will be given to owners, occupants and property managers. The guide must outline the waste service system and how to use it, the locations for bin storage and waste collection points, options within the planning for alternative waste service solutions, and wording to be included in the tenancy agreements about waste management.

14 SECONDARY DWELLING

This section of the DCP only provides Council's additional specific requirements for Secondary Dwelling developments. Other requirements that must be addressed are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

14.1 INTRODUCTION

The SEPP (Affordable Rental Housing) 2009 (AHSEPP) provides for the development of secondary dwellings (commonly referred to as granny flats) as complying development. SEPP (Exempt and Complying Development Codes) 2008 (Codes SEPP) also contains provisions relevant to the development of a secondary dwelling as complying development.

If all requirements for a secondary dwelling specified under the AHSEPP and Codes SEPP are met, a complying development approval can be obtained from Council or an accredited certifier without the need for a development application. Where the requirements for a secondary dwelling under the AHSEPP and Codes SEPP cannot be satisfied, a development application must be lodged with Council. This section of the DCP provides Council's detailed controls for secondary dwellings that require a development application.

Under Lake Macquarie LEP 2014 **secondary dwelling** means a self-contained dwelling that:

(a) is established in conjunction with the principal dwelling, and

(b) is on the same lot of land as the principal dwelling, and

(c) is located within, or attached to, or separate from, the principal dwelling, and

(d) has a maximum floor area of 60m^2 or 25% of the principal dwelling (whichever is the greater).

Under Lake Macquarie LEP 2014 a **secondary dwelling** is permitted with consent in the following zones:

(a) R1 General Residential

(b) R2 Low Density Residential

(c) R3 Medium Density Residential

14.2 LOT REQUIREMENTS

Objectives

a. To ensure that secondary dwellings are provide on appropriately sized lots.

b. To ensure that development densities are not out of character with adjacent lots.

c. To ensure that the amenity of residents is maintained.

Controls

1. Development of a secondary dwelling must result in only one principal dwelling and one secondary dwelling on the same lot.
2. Development of a secondary dwelling must be on the same lot as the principal dwelling.
3. A lot must be a minimum size of 450m^2 for the development of a secondary dwelling separate from the principal dwelling.
4. Development of a secondary dwelling separate from the principal dwelling on a battle-axe lot must not occur.
5. A lot on which a secondary dwelling is erected must have lawful access to a public road.

14.3 SITE COVERAGE

Objectives

a. To ensure that development allows permeable surfaces and maintains a balance between built and unbuilt areas.

b. To ensure that secondary dwelling development complements the density and built character of the area.

Controls

1. The maximum site coverage of the principal dwelling and secondary dwelling on a lot must be less than:
   i. Fifty-five percent for lots less than 900m^2 in area,
   ii. Forty-five percent for lots between 900m^2 and 1500m^2 in area,
   iii. Thirty-five percent for lots more than 1500m^2 in area.

Note: Site coverage means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

- any basement,
- any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
- any eaves,
- any unenclosed balconies, decks, pergolas and the like.

Note: Balconies, decks, pergolas and the like located under the main roof of the building are not considered to be unenclosed and will be included in the site coverage calculation.

Note: Site coverage controls operate in tandem with the Stormwater Management, Principal Private Open Space, and Landscaped Area and Design controls in this DCP to ensure that adequate unbuilt area is available for outdoor recreation and for reducing stormwater discharge from the site. Stormwater permeability and integration with the landscape design will be considered when determining whether structures are included in the site coverage calculations.

14.4 CAR PARKING

Objectives

a. To ensure that secondary dwellings remain an affordable housing option.

b. To ensure that where car parking is proposed, it is located and designed to complement the amenity and character of the surrounding development.

Controls

1. The provision of a car park for a secondary dwelling is not mandatory.
2. Where car parking (car port or garage) is proposed for a secondary dwelling, it must:
   i. Not interfere with parking and the movement of vehicles associated with the principal dwelling, and
   ii. Be limited to one car park, and
   iii. Be a maximum of 24m^2, and
   iv. Be located adjacent to the secondary dwelling and not within the street, side or rear setback.

14.5 SERVICES AND FACILITIES

Objectives

a. To ensure that occupants of secondary dwellings have access to relevant services and facilities to support independent living.

Controls

1. Secondary dwellings must have access to facilities such as a kitchen, bathroom, laundry and clothes drying area. These facilities may be shared with or independent from the principal dwelling.
2. Secondary dwellings must be serviced with utility infrastructure (reticulated water and sewer, gas (where available), electricity, telecommunications). The utility infrastructure for the secondary dwelling may be shared with or independent from the principal dwelling. Separate metering of utility infrastructure for the secondary dwelling is subject to concurrence from the utility infrastructure provider.

14.6 BUILDING DESIGN AND MATERIALS

Objectives

a. To ensure that secondary dwellings meet relevant design and construction standards.

b. To ensure that the design of secondary dwellings meet the needs of its occupants.

c. To ensure that secondary dwellings complement surrounding development.

Controls

1. Secondary dwellings must meet the requirements of the Building Code of Australia.
2. Secondary dwellings must meet the requirements of SEPP (BASIX) 2004.
3. Secondary dwellings attached to or within the principal dwelling must include at least one direct external access.
4. Secondary dwellings attached to or within the principal dwelling can either be totally separated or accessed through an internal door between the secondary and principal dwelling.
5. A secondary dwelling within or attached to the principal dwelling, that:
   i. shares facilities with the principal dwelling including a laundry, metering for utility infrastructure, mail box, postal address, car parking, and
   ii. has direct internal access to a habitable room of the principal dwelling, and
   iii. is provided with individual smoke alarms that are interconnected with smoke alarms in the principal dwelling in accordance with relevant legislation and Australian Standards,

   are defined as a single dwelling for the purposes of the Building Code of Australia.
6. Secondary dwellings must not include a rooftop terrace.
7. The secondary dwelling or principal dwelling must have the main entrance door visible from the primary road frontage.
8. The secondary dwelling or principal dwelling must have a window to a habitable room facing a primary road and secondary road where the land is a corner lot.
9. External building materials, finishes and colours on the secondary dwelling must complement and be consistent with the principal dwelling.

14.7 PRINCIPAL PRIVATE OPEN SPACE

Objectives

a. To ensure that occupants of secondary dwellings have access to private open space to support independent living.

b. Ensure the private open space is usable, functional and easily accessible for occupants.

Controls

1. Secondary dwellings separate from the principal dwelling must have a minimum area of principal private open space of 16m^2. The principal private open space must be:
   i. on a grade less than 1:50, and
   ii. have a minimum dimension of three metres, and
   iii. directly accessible from a habitable room of the secondary dwelling.
2. Principal private open space is not mandatory for secondary dwellings attached to or within the principal dwelling.

14.8 PRIVACY AND AMENITY

Objectives

a. To ensure adequate privacy is provided to occupants of secondary dwellings and the principal dwelling.

Controls

1. A landscaped area at least 2 metres wide must be planted between the principal dwelling and the principal private open space of the detached secondary dwelling to provide suitable privacy screening.

14.9 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure that waste/recyclables are managed, collected and disposed of, or reused or recycled effectively and efficiently.

b. To provide non-discriminatory access to waste management services for both dwellings.

Controls

1. Where Waste management for Secondary Dwellings must comply with "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:

   Waste storage area(s)

   i. Where principal private open space is not mandatory for the secondary dwelling (ones attached to or within the principal dwelling), bins of the principal dwelling may be shared, but must be accessible to both dwellings, with space allocated as per 2(c) below.

   ii. A minimum space for waste bin storage must be allocated (in addition to minimum space allocations for other purposes) with minimum internal dimensions of each storage area as follows:

      a. Where each dwelling's set of 240 litre bins are to be stored on in each individual dwelling's yard, either 1905mm x 1560mm or 1410mm x 2340mm at each dwelling; or

      b. Where two dwellings' individual bins (two sets of 240 litre bins) are to be stored in a shared area accessible to both dwellings, for 240 litre bins, 1905mm x 2340mm; or

      c. Where two dwellings' shared 240 litre bins (one set of bins) are to be stored in a shared area accessible to both dwellings, either 1905mm x 1560mm or 1410mm x 2340mm.

   Waste collection point(s)

i. Sufficient unobstructed space must be ensured to allow for two types of waste bins to be placed kerbside for collection on any waste collection day.

ii. Sufficient unobstructed space must be allocated along the kerb to allow for 2 cubic metres of bulk waste (including furniture and whitegoods) to be placed out for collection from the principal dwelling and 1 cubic metre from the secondary dwelling, or a suitable alternative bulk waste collection management option must be provided and described in the Operational Waste Management Plan.

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15 SERVICE STATIONS

This section of the DCP only provides Council's specific requirements for Service Station developments. Other requirements that must be addressed are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

Note: The provisions in SEPP 33 (Hazardous and Offensive Development) may apply to service station development.

Objectives

a. To ensure that service stations are suitably located on arterial or sub-arterial roads.

b. To ensure that the design and operation of service stations does not adversely impact upon the amenity of the area, or nearby residences.

c. To ensure that service stations are designed and constructed in a manner that positively contributes to the streetscape.

d. To ensure that service stations provide customers and employees with information, infrastructure and opportunities to maximise diversion of problem wastes, recyclables and food wastes from the general waste stream.

e. To ensure problem and special wastes can be separately and safely stored until collection for recycling or disposal;

f. To ensure secure, safe access for employees to the waste storage area while preventing illegal dumping and ensuring that the waste storage area does not increase risks of criminal incidents;

g. To ensure that waste storage visual impact, odours and waste collection noise do not reduce amenity for neighbours.

h. To ensure safe, obstruction-free access for waste collection vehicles.

Controls

1. Vegetation landscaping must be included in the design of service stations to soften the appearance of the development, and to assist in contributing to the amenity of the area.
2. A continuous landscape strip must be provided along the frontage of the site and any building or structure must be located at least 7 metres behind the landscape strip.
3. A continuous building form must be provided along at least 75% of the rear boundary, where the development adjoins housing.
4. A 3 metre wide densely vegetated buffer must be provided between the building and the lot boundary where a building wall with no openings is the closest element to adjoining housing.
5. A 6 metre wide densely vegetated buffer must be provided between the building and the lot boundary where a building wall with openings is the closest element to adjoining housing.
6. Vegetated buffers along boundaries must consist of species that will form a visual screen 4 meters high within three years.
7. Vegetated buffers along large featureless walls must screen a minimum of 30% of the building elevation at maturity.
8. The development must be designed and constructed with high quality finishes.
9. Building openings and operational activity areas must be located away from adjoining residences. Where site constraints mean that this is not feasible, measures are to be implemented to mitigate adverse impacts of noise, vibration, glare, light and odour on adjoining residences.
10. Parking and outdoor storage areas, including waste storage, must be screened from adjoining housing development.
11. Casual surveillance must be provided from the public domain to any retail area or shop associated with the service station.

12. Refuelling areas and the entrance to any retail area, waste storage area, or shop must be visible from the street.
13. Stand-alone Service Station development must not exceed 8.5 metres in height.
14. A Crime Risk Assessment must be submitted to Council. See Council's *Crime Prevention Through Environmental Design Guideline* for further information.
15. Non-discriminatory access must be provided to the development, including to waste storage facilities for staff and bins for customers.

Waste

16. Waste management for Service Stations must comply with "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:
17. The Operational Waste Management Plan must identify a list of types of problem wastes and how these will be managed and recycled where possible, such as light globes, batteries, motor oil, tyres, car parts, chemicals and electrical wastes from vehicle and building facility maintenance, and sanitary hygiene, nappy and medical sharps from restroom facilities.
18. Waste containers along with advisory signage must be provided at the bowsers, near the building exits and within any sitting area that allows and enables customers to separate and dispose of recyclables, food, residual garbage and problem wastes.

Waste Storage Areas

19. A secure waste storage area(s) must be provided to store separated wastes in suitable bins, compactors, containers, including bunded containers or area(s) if waste oil or chemicals are to be stored. The waste storage area(s) must:
    i. be lit, secured and meet security requirements as per Council's Crime Prevention Through Environmental Design Guideline;
    ii. have sufficient space to accommodate the volumes of waste and bin sizes identified to manage the waste;
    iii. be visually screened and integrated with the built form and landscaping in terms of appearance, materials, form, scale, location and orientation; and
    iv. be designed and located to mitigate noise and odour impacts on neighbours.

Waste collection vehicle access

20. Waste collection vehicle reversing should be minimised. Risk of collisions between waste collection vehicle and other vehicles, and between vehicles and pedestrians, must be minimised by design and vehicle routing.

16 SEX SERVICES PREMISES

This section of the DCP only provides Council's specific requirements for Sex Services Premises. Other requirements that must be addressed are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

Objectives

a. To ensure that Sex Services Premises operate in a discrete and orderly manner, and are positioned with consideration to surrounding land uses.
b. To ensure that Sex Services Premises provide safety for staff and clients including suitable provision for occupational health and safety measures.
c. To ensure that any hygienic sanitary or clinical-related wastes are able to be appropriately managed through provision of suitable waste separation, storage and collection infrastructure, information provision and management planning.

Controls

1. The location of a Sex Services Premises must be in accordance with the Planning Principle established by the Land and Environment Court in *Martyn v Hornsby Shire Council* [2004] NSWLEC 614.
2. The entrance or exit to a Sex Services Premises must not be located within pedestrian view of land used or reserved for a place of public worship, hospital, school, childcare centre, or a place frequented by children.
3. The entrance or exit to a Sex Services Premises must not be visible from the entrance of a dwelling house and must be a minimum of 100 metres walk from a dwelling house.
4. Sex Services Premises should not occur in a clustered fashion, and should be positioned at least 100 metres apart.
5. Sex Services Premises must not contain more than five rooms where sexual services and related activities occur.
6. Signage is limited to one sign per premises, and must be less than one square meter in area and only contain business name, address and telephone number.
7. Signage must not contain any images or other material that may offend.
8. Each room used, or available for acts of prostitution must contain, or have direct access to its own shower and hand basin facilities, for the use of both sex workers and their clients.
9. The entrance and exit to a Sex Services Premises must be discrete and discourage clients gathering or waiting within view of a street or other public place.
10. Waste management for Sex Service Premises must comply with "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:

    Waste types

    i. Any hygienic sanitary or clinical waste that is generated by a Sex Services Premises must be separated and managed accordingly, and collection must be undertaken by an appropriately licensed waste collector. Plans for management of this waste must be included in the Operational Waste Management Plan.

A Crime Risk Assessment must be submitted to Council. See Council's Crime Prevention Through Environmental Design Guideline to this DCP for further information.

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17 SIGNAGE

This section of the DCP only provides Council's specific requirements for Signage development. Other requirements that must be addressed are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

Consideration should also be given to the provisions contained within SEPP 64 – Advertising and Signage and the corresponding Transport Corridor Outdoor Advertising and Signage Guidelines.

The following signs are not encouraged, and Council is unlikely to support these forms of signage:

- Projecting wall signs above the awning level of a building that project more than 300mm out from the wall of that building;
- Illuminated, flashing, or moving signs, other than identification, interpretive, direction and advance warning signs, as constructed and installed by, or on behalf of Council or another road authority;
- Pole or pylon signs, unless there is no building on the site, or the building is not visible from the street;
- Signs on, or above the roof or parapet of a building and
- Trailer Advertisements

17.1 DESIGN

Objectives

a. To ensure that the design and configuration of signage positively contributes to the amenity of the building and streetscape.
b. To minimise incoherence of signage resulting from a proliferation of signs at a locality.

Controls

1 Signs must be compatible with the design, scale and architectural character of the building or the site upon which it is to be placed.
2 Design must ensure that signs are not confused with, or reduce the effectiveness of traffic control devices.
3 Supporting structures of signs must be of a high aesthetic appearance, and must not interfere with the visual amenity of the area.
4 Materials used for signs must be durable, fade-proof and of a high aesthetic quality.

17.2 POSITIONING

Objectives

a. To ensure that signs are positioned appropriately by not causing a hazard either physically or by distraction of motorists.
b. To ensure that signs do not interfere with the function of infrastructure, services, or other mechanisms which support a development.
c. To ensure signs are provided in an orderly manner, and to minimise incoherence of signage resulting from a proliferation of signs.
d. To ensure that signs are subject to development standards and assessment regarding their suitability.

Controls

1 Signs must not dominate or obscure other signs, or result in visual clutter.
2 Signs must not endanger the public, or diminish the amenity of nearby properties.
3 Sign must be shared where appropriate (ie: multi-tenanted premises).

4 Signs must be located and erected on the site to which they relate, and must not be:
   i. Mounted on vehicles, trailers or shipping containers that stand continuously stationary for the purpose of advertising, on either public or private land;
   ii. Mounted on trees; or
   iii. Supported by people or animals.
5 Signs must be located so as not to cause or create a traffic hazard, including obscuring views of vehicles, pedestrians or potentially hazardous road features.
6 Signs must not cover mechanical ventilation inlets or outlet vents.
7 Signs must not obstruct access to the area where bins are stored.
8 Signs must not obstruct the collection point nor overhead lift arc where bins are collected.
9 Signs must not obstruct the route that bins are moved between bin storage and collection point.

17.3 SPECIFIC SIGN DIMENSIONS

Objectives

a. To ensure that the dimensions of signs are appropriate to the type of sign proposed.
b. To ensure that signs integrate with the subject development and broader public realm in terms of size and dimensions.

Controls

1 Fascia signs must be located on an awning, and confined to the height of the awning and its length parallel to the street. They must not project more than 300mm out from the fascia and/or walls, and must integrate with the design of the building.

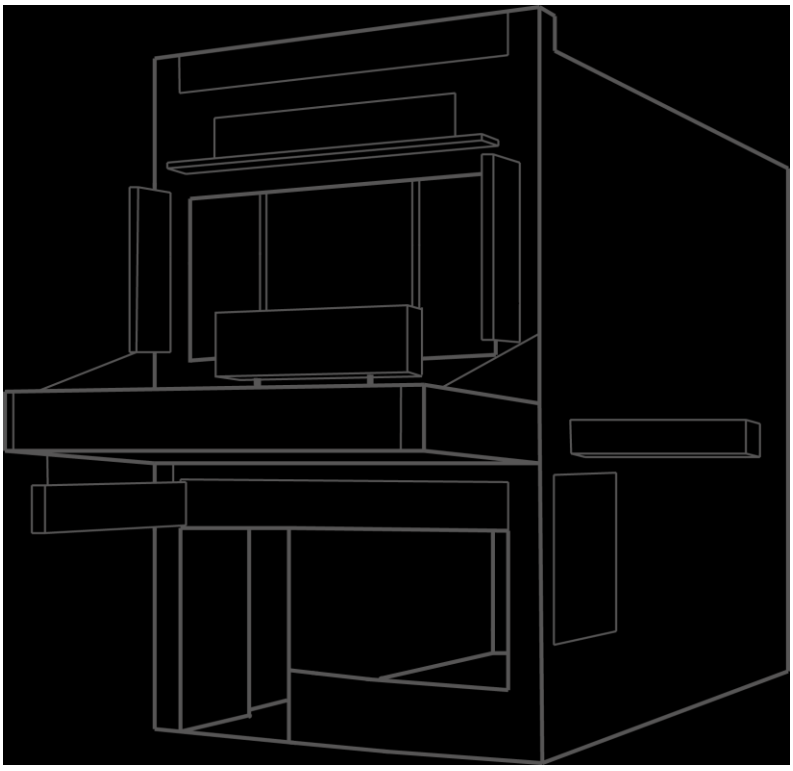

Figure 1 - Sign Types

2 Above awning signs must not exceed 0.9 metres in height, and the distance from the awning to the base of the sign must not exceed 0.2 metres. They must not extend beyond the edge of the awning, and are not to exceed 5m^2.

3 Under awning signs must maintain a 2.6 metre clearance above ground level and must not project beyond the edge of the awning. They must be limited to one sign per street frontage located under or below the awning level, and are not to exceed 5m^2.

4 Roof/sky signs and structures must not protrude above roof lines in any form, including mountings/structural supports. They must integrate with the architectural form or roofline of the building. The advertising structure/sign must not visually dominate or detract from the skyline, the streetscape or the building.

5 Identification signs – including nameplates on professional offices, community facilities, recreational facilities, rural pursuits or residences for home businesses or industry – are limited to 1m^2, and one sign per street frontage.

6 Flush wall and hamper signs must not extend laterally from the wall, or beyond the edges of the wall. If internally illuminated, they must maintain a minimum of 2.6 metres above ground level. They must not exceed 25 percent of the wall space for each frontage.

7 Projecting wall signs must maintain a 2.6 metre clearance above ground level and must not extend above the top of the wall. They must not interfere with street planting or street fixtures (eg: light poles) and must not have an area greater than 4m^2. When the sign is less than three metres above ground level, it must be setback 1.5 metres from the kerb line. When the sign is more than three metres above the ground, it must not extend beyond 300mm from the wall.

8 Projecting wall signs above an awning must not have an area greater than 4m^2, and must not extend beyond the vertical plane 300mm from the wall.

9 Pole and/or pylon signs (freestanding) must be a maximum height of six metres from ground level with a minimum clearance of 2.6 metres above ground level. The maximum width must be 3.75 metres, with a maximum depth of one metre. Signage must be limited to one freestanding sign for each business/occupancy on each street frontage, including flagpoles containing advertising material.

17.4 ILLUMINATED, FLASHING, AND MOVING SIGNS

Objectives

a. To mitigate unnecessary distraction to motorists.

b. To mitigate impacts upon residences through illumination, flashing, movement, reflection or glare.

Controls

1 Signs must be mounted and/or permanently fixed so that they do not flash, rotate or move in any way.

2 Signs must not emit excessive glare or cause excessive reflection.

3 Advertising signs must not resemble traffic warning or hazard signs.

17.5 BANNERS, BUNTING, AND INFLATABLE DEVICES

Objectives

a. To ensure the appropriate use of banner, bunting, and inflatable advertising devices.

Controls

1 Bunting and inflatable advertising devices must only be used for temporary periods, and not as a permanent form of advertising.

2 Banners that are to be installed for long term purposes should comply with Council's Banner Policy.

17.6 MULTIPLE TENANCY SIGNAGE

Objectives

a. To ensure that developments with multiple tenancy consolidate signage in an orderly manner at the entrance to the development.

Controls

1 Where the signage relates to multiple tenancy/occupancy, an entry/directory board signage structure must be used, rather than individual signs for each tenancy.

2 Multiple tenancy/occupancy entry/directory boards and advertising panels must have an integrated theme approach to signage in the Industrial Zones and Business Zones. They must not obstruct traffic vision or create safety hazards, and be located clear of underground or overhead services. The maximum allowable height is six metres, and there must be only one entry/directory board/ advertising panel per street frontage.

17.7 REAL ESTATE SIGNS

Objectives

a. To ensure that real estate signage is appropriate to the subject locality.

Controls

3 Real estate signs must comply with the exempt development criteria as provided by SEPP (Exempt and Complying Development Codes) 2008. Where real estate signs do not comply with these criteria, they will not be supported. Any directional real estate signs are also to comply with the exempt development criteria.

18 TOURIST AND VISITOR ACCOMMODATION

This section of the DCP only provides Council's specific requirements for Tourist and Visitor Accommodation development. Other requirements that must be addressed are contained in the relevant general development part (Parts 2 to 7) and/or Area Plans (Parts 10 to 12) of this DCP. Where a conflict exists between this section and the general development part of LM DCP 2014, this section prevails.

18.1 GENERAL CONTROLS FOR DEVELOPMENT

Objectives

a. To promote tourism within Lake Macquarie Local Government Area, and to facilitate growth in the local tourism economy.
b. To ensure that tourist and visitor accommodation is established with consideration of the surrounding environment, landscape and land uses, and to mitigate potential land use conflict.
c. To ensure Tourist Accommodation and Tourist Resorts are designed, constructed and operated on the basis of sustainable practices, including building materials, energy efficiency, self-sufficient water supply and waste avoidance, resource reuse and recycling.

Controls

1. Buildings within tourist and visitor accommodation developments (including ancillary facilities such as restaurants, conference, recreation, educational facilities or other similar development) must be designed, positioned, and set back from property boundaries in a manner that is consistent with other development in the locality, in order to maintain the character and visual amenity of the area.
2. Development must be set back adequately from potentially conflicting land uses, including those that generate noise, vibration, odour, dust, smoke and the like, in order to ensure a high level of amenity for visitors.
3. For development containing fifty units or greater a development master plan must be prepared and submitted that identifies:
    i. The natural resources and attributes of the site and region;
    ii. The ongoing management of environmental features;
    iii. The location and variety of tourist activities within the development;
    iv. Siting of buildings to integrate with the landscape;
    v. Architectural character, to reflect local and regional influences;
    vi. On-site infrastructure and systems, including waste management, and the proposed maintenance of those systems;
    vii. Transport to, from and within the development;
    viii. Continuing coordinated emphasis on waste avoidance, waste management, litter prevention and environment protection training for staff; and
    ix. On-site waste management infrastructure and systems and the proposed maintenance of those systems.
4. The number of buildings for tourist accommodation is determined by a merit-based assessment of the proposal on site, including, but not restricted to:
    i. Slope,
    ii. Ecological values,
    iii. Scenic values,
    iv. Access,
    v. Adjoining uses,
    vi. Lot size,
    vii. Waste water management, and
    viii. Landscaping.

18.2 DEMOLITION AND CONSTRUCTION WASTE MANAGEMENT

Objectives

a. To appropriately manage the retention of existing vegetation and vegetation.

Controls

1. All native vegetation proposed for demolition shall be integrated with landscaping and reused and retained onsite for chipping and spreading as mulch, with timber structures used as log piles or perches to house reptiles, mammals, insects and birds.
2. Second-hand and recycled content resources should be used for construction where possible and where visually integrates with the natural landscape character and dwelling form.

18.3 OPERATIONAL WASTE MANAGEMENT

Objectives

a. To ensure that Tourist Accommodation and Tourist Resorts provide an acceptable level of waste management amenity to guests that will maximise diversion of waste from landfill to recycling and composting.

Controls

1. Waste management for Tourist and Visitor Accommodation must comply with "Guidance to Meet Operational Controls - All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:
   i. Internal storage
   The development must provide a waste storage space accessible to all guests within their accommodation that is sufficiently sized to enable separate storage of garbage, recycling, and food waste for a minimum of two days.
   ii. Waste carting route(s) from premises to external waste storage areas(s)
   Where guests will need to transfer waste from their accommodation waste bin storage area(s), a safe access route from the accommodation to the waste bin storage area(s) must be shown on the design plan, must be well-lit, on an even path and must be no more than 75 metres from the accommodation.
   iii. Waste storage area(s)
   The waste storage area must accommodate sufficient space for separate bins of sufficient capacity to hold enough recycling, residual garbage and food waste to allow for peak period use of the facility, within the waste collection frequencies identified in the Operational Waste Management Plan.

   Garden and food waste may be processed in an onsite compost, worm farm or other organic waste processing solution for use onsite in gardens, provided this can be undertaken in to standards equivalent to NSW Environment Protection Authority Resource Recovery Orders and Exemptions.

   Waste storage areas should include space for storage of other wastes that can be recycled separately, or that must be managed separately from the kerbside collection service such as problem wastes, e-wastes and bulk wastes.

   Odour and noise associated with the management of waste must be mitigated to ensure guests using the accommodation and facilities are not negatively impacted. Noise must be evaluated in accordance with NSW Environment Protection Authority's Industrial Noise Policy.

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FIGURES:

1 INTRODUCTION

This section contains local objectives and controls for development in Belmont town centre as defined in Figure 2; Extent of Area Plan and are in addition to the general provision contained in Part 4. For general development controls, see Part 4 - General Provisions. Where conflict arises between this section and the general controls, the controls in the Belmont Area Plan take precedence.

1.1 BACKGROUND

Belmont is the major commercial centre for the eastern side of Lake Macquarie area, located on the Pacific Highway between the lake and the ocean. It is frequently described as the 'sailing capital' of the lake.

Aboriginal Heritage

Reverend Threkheld acted as a missionary to the Awabakal people from 1820 to 1840. He established his first mission in what is now Belmont because of the large number of aborigines who had gathered where food was abundant around the lake and Belmont Lagoon.

The "Bahtabah" mission operated from 1826-1829 and was probably located on what is now the school site in Victoria Street. Other Aboriginal archaeological sites are known around the lake foreshore where food resources were important.

European Heritage

Belmont Farm was established in the early 1860's after a survey from Belmont to Croudace Bay divided land into portions for farming. Forest covered the hilly land and by 1871 a timber industry had developed. The village of Belmont then developed steadily during the 1870's.

Initially boats were introduced on the lake for the purpose of transporting goods, mainly timber and coal. Passenger services operated from Redhead to Belmont from 1916-1971. The earliest deposited plan for Belmont dated 1918 shows the subdivision of land bounded by Macquarie, Maude, and Gen Streets. It was followed by other successful subdivisions and sales of land with lake views. In 1929 Lake Macquarie Yacht Club was founded. The Belmont Urban Area was proclaimed in 1930 and some form of local government came to Belmont in 1932.

The present-day town centre is generally low scale buildings from the interwar period and post WW2.

1.2 EXISTING CHARACTER

Belmont is one of the significant retail centres for the Lake Macquarie area. The town is bounded by natural elements and landscape features, namely Lake Macquarie to the west, Belmont lagoon to the southeast and bush and wetlands to the east. The centre stretches along the Pacific Highway which carries a high volume of traffic and creates a barrier between east and west parts of the town. Some higher density apartment development is located between Edgar Street and Brooks Parade with an outlook to the lake.

Vehicle Access and Movement

The existing focus of the town is the Pacific Highway, with the commercial area centred on the intersection between the highway and Macquarie Street. The Pacific Highway carries large volumes of vehicles through the town centre, especially in the early morning and late afternoon. Vehicular traffic circulation within the town centre is made difficult by the closure of streets, and restrictions on permissible turns at intersections.

Pedestrian circulation

A pedestrian mall is located in Macquarie Street between the highway and Ernest Street. This area and the Court House frontage are the two pedestrian refuges of note in an otherwise car-oriented centre. A number of pedestrian routes are established through Belmont Town Centre. While many side streets provide reasonable amenity for pedestrians, provision for pedestrians along and across the Pacific Highway is limited due to the impacts of heavy vehicular traffic.

Some blocks adjacent to the central core are particularly long. This discourages pedestrians, as they are forced to follow longer routes to reach their destination. The foreshore reserve adjacent to Brooks Parade has a well-used pathway.

Public Domain

The public streets that are activated by retail frontages include the main commercial strip fronting the Pacific Highway, the east side of Thomas Street, and the car park elevation of Coles Citi Centre. Streets with active frontage provide a higher quality pedestrian environment.

In contrast, the large open space of the Coles car park off Macquarie Street is poorly defined, without shelter or visual interest for pedestrians. The Coles loading dock on Herbert and Edgar Streets also detracts from the pedestrian amenity of the street.

Built Form

The existing commercial built form of Belmont is predominantly post-war although the centre is much older. Earlier retail buildings along the Pacific Highway and Macquarie Street are generally smaller frontages, two storeys in height with zero setbacks to front alignments and overhanging awnings extending to the kerb line.

More recent retail development for Coles Citi Centre and Woolworths Belmont Central are essentially single storey, large footprint buildings. Commercial activity facing the lake is limited to café/restaurant premises and a handful of small shops.

Residential development is predominantly detached single story dwellings with street setbacks between 3-5 metres. The low-density residential development and large block sizes around the town centre reduce the potential vitality of the area and provide limited opportunities for pedestrian supported retail activity.

The northern most commercial strip along the Pacific Highway from Evans Street to Maude Street is characterised by larger detached single storey buildings. These are either built to the boundary for visibility, or well set back from the street to permit easy customer access to car parking.

1.3 ENVIRONMENTAL CONSTRAINTS

Flooding

Belmont Town Centre is situated close to the shores of Lake Macquarie. The north western extent of the centre is situated on lower lying land that is subject to localised flooding.

Sea Level Rise

Developments on sites below 3m AHD are also vulnerable to sea level rise. Development on these sites would be subject to Council's Sea Level Rise policy.

Acid Sulphate Soils

The town centre is located on acid sulphate soils (Class 2, 3 and 5). Development must ensure that disturbance of acid sulphate soils is minimised to prevent adverse impact on water quality and the receiving waters of the lake.

1.4 DESIRED FUTURE CHARACTER

Activity and Uses

In the future, Belmont could become a compact, higher density, retail, business and residential centre focused on the area between the Pacific Highway and the lake foreshore. Office space and residential apartments would occupy upper levels above town centre retail.

Pedestrian movement from the Pacific Highway to the lake foreshore could be pleasant and interesting. Re-development of the existing car park site on Macquarie Street would provide active street frontages to Macquarie Street, Edgar Street and Thomas Street. The proposed Thomas Street extension would be a shared pedestrian and vehicle zone. Memorial place would be a sunny public place with the memorial and the forecourt of the Post Office, activated by a lively mix of small shopfronts and a cafe.

Apartment development on Brooks Parade would also provide a mix of café, restaurant, and small-scale retailing at street podium level. This would make for an attractive residential area close to the centre.

Figure 1 - Belmont Town Centre Structure Plan

Town Centre Structure

The future town centre structure (see Figure 1) is intended to:

- Establish a core area bounded by the Pacific Highway Macquarie Street, Herbert Street and Edgar Street;
- Protect existing views to the lake and key public domain elements;
- Create new pedestrian and vehicle links through the core area;
- Establish or enhance pedestrian places at key activity nodes;
- Provide a through cycle route;
- Maximise potential residential floor space west of the highway; and
- Establish an entry to the town centre coming from the north.

Built Form

Development within the B2 Zone core of the town centre should be of a perimeter block form built to the street boundary and side boundaries, to provide a continuous pedestrian strip. Additional height is provided west of the Pacific Highway to maximise yields on sites, with good visual and physical access to the lake.

Vehicle access points in the core area are restricted, in order to maintain pedestrian amenity and active street frontage.

To ensure lake glimpses between buildings, development in Brooks Parade as far north as Marks Street should be taller, freestanding blocks with a compact footprint, low podium and generous landscape areas.

Other development on B2 zoned land should be smaller scale 2-3 storey with smaller setbacks and generous tree planting areas at the rear. Buildings at the northern end of the Pacific Highway should maximise facade length, with floor space built to the street frontage.

Building Character

Belmont development character should reflect the high amenity waterside location and its popularity as a social and recreational destination on the lake. Balconies and terraces should be oriented for water views or for sun access, and provide recessed areas sheltered from prevailing winds and westerly sun.

Lightweight materials, the use of light but muted colours, awnings and moveable screening all add to the character of a contemporary waterside destination. Buildings on the Pacific Highway should incorporate heavier masonry facades and smaller glazing areas to manage noise and air quality. Upper residential levels should be well set back and lighter weight in appearance.

2 DEVELOPMENT CONTROLS

This Area Plan applies to the area bounded by the green line as shown in Figure 2.

Plans and sections are provided for each of the town centre blocks. The Block Controls are designed to respond to the topography, aspect and context of each block and street frontage in order to support the desired future structure, built form and character of the Belmont town centre (see Figures 4-21).

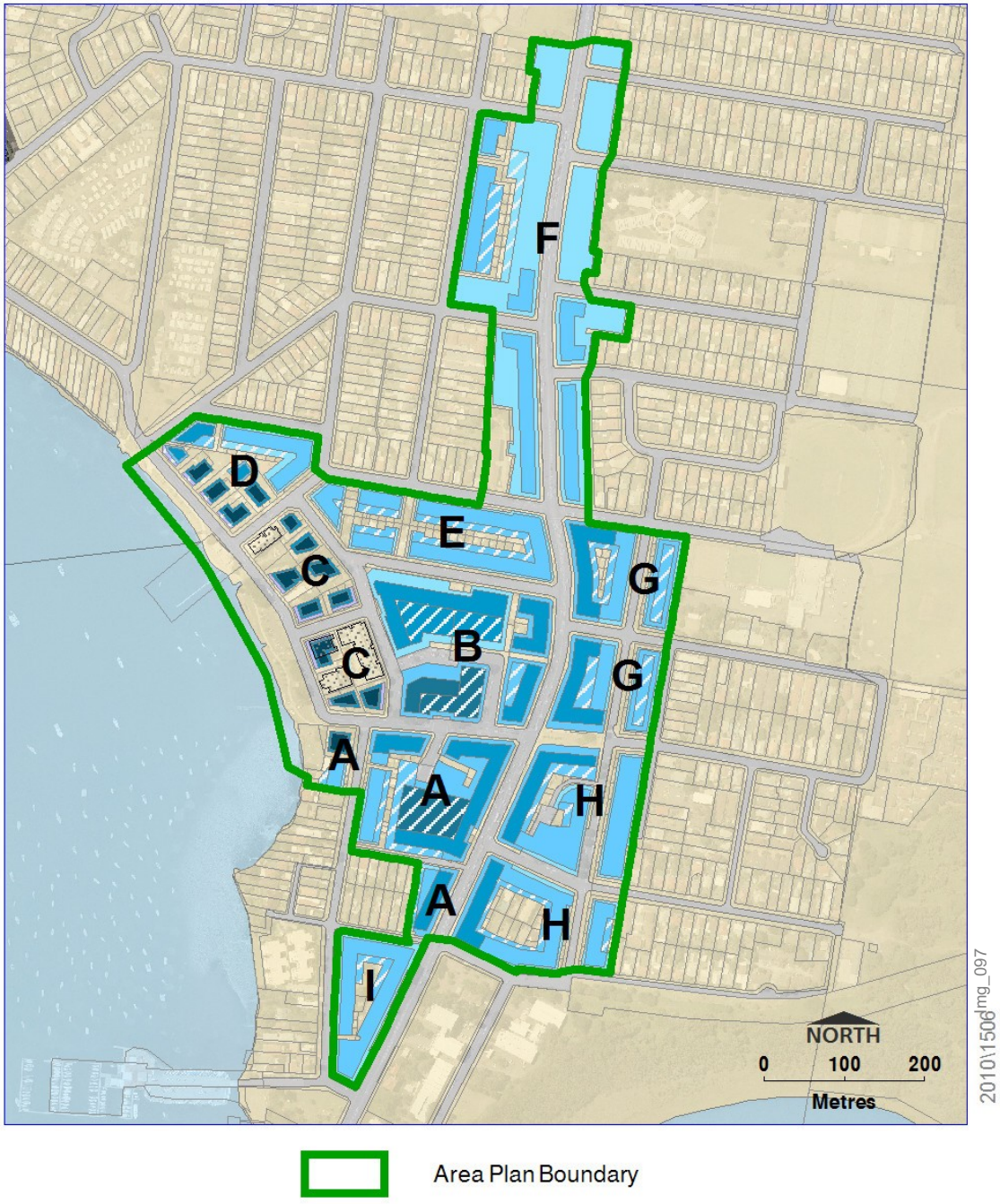


Figure 2 - Extent of Area Plan and Key to Block Plans (see Figures 4 to 21)

2.1 BLOCK CONTROLS

The Block Plans show the overall desired structure of development, and the spatial relationship between development and the street at a block-by-block view. They are based on site context, existing street character, and the desired future character of the town centre.

The Block Plans and sections provide general building envelopes including heights in storeys and indicative building footprints. They do not dictate lot amalgamations, or describe the design of future buildings.

Block Plans and Sections show the key built form outcomes Council is seeking and include:

- The location of public open space, public pedestrian links, and street awnings.
- The location of new vehicle links
- The location of non-residential uses
- Front setbacks at street level and upper levels
- The desired location of building mass close to the street
- The overall maximum depth of development
- The expected provision of basement car parking
- Aspects where building mass should be broken up (i.e. 50% occupied areas)

Site planning and building design should be informed by both the Block Controls and a detailed site and context analysis.

Objectives:

a. To improve the amenity and connectivity of the public domain.

b. To improve vehicle circulation and access to public transport.

c. To ensure that building scale, height and setback contributes to the desired future character of the town centre.

Controls

1. Development must make a positive contribution to the desired future character of the town centre as described in Section 1.4.

2. A development proposal must address the requirements of the relevant Block Plan and Section(s), as shown in Figures 4-21.

3. Site planning and building design must be based on a comprehensive site and context analysis.

3 CONTEXT AND SETTING

3.1 SENSITIVE ABORIGINAL CULTURAL LANDSCAPE

Objectives

a. To ensure that the cultural and archaeological significance of a development site and its context are determined prior to any development.

b. To manage and interpret the Sensitive Aboriginal Cultural Landscape in consultation with the local Aboriginal community.

Figure 3 - Sensitive Aboriginal Cultural Landscape

Controls

1. An Aboriginal Heritage Impact Statement must be prepared and lodged for a development proposal that is wholly or partly within the area shown cross hatched in Figure 3: Sensitive Aboriginal Cultural Landscape in Belmont.

2. The Aboriginal Heritage Impact Statement must be prepared in accordance with the *Lake Macquarie Aboriginal Heritage Management Strategy*.

4 STREETS AND PUBLIC SPACE

4.1 OUTLOOK TO THE LAKE

Objectives

a. To maintain public views along streets to the lake and landmark elements

b. To ensure development provides large breaks between buildings located between Edgar Street to Lake Macquarie.

c. To maintain and enhance the landscape corridor along existing stormwater channels

Controls

1. Building development must maintain Significant Views, as shown in Figure 1 Belmont Town Structure Plan

2. Development must provide clear breaks between buildings when viewed from Edgar Street to Brooks Parade, as shown in Figure 8: Block C Control Plan and to meet the requirements of SEPP 65 – Design Quality of Residential Flat Buildings, and the accompanying Residential Flat Building Design Code..

3. Development on Lots 2, 3, 4, 10 and 11 in DP 585 Section B and Lots 29-34 in DP2374 must be set back at least 6 metres from the stormwater channel for deep soil planting.

4.2 VEHICLE LANES

Objectives

a. To establish a safe and direct vehicle and pedestrian connection from Thomas Street to Herbert Street that provides service access to the rear of properties on the Pacific Highway.

b. To establish a safe and direct vehicle and pedestrian connection from Maude Street to Herbert Street located on the alignment of Henry Street.

Controls

1. Development on Lot 16 Section K in DP 9457 and Lot 16 DP 16704 must provide a vehicular lane on a single alignment, with a minimum width of eight metres from Thomas Street to Herbert Street, as shown on Block B Control Plan.

2. Development on Lot 22 Section I in DP 2374 and Lot 41 Section I DP 2374 must provide a vehicular lane on a single alignment, with a minimum width of eight metres from Herbert Street to Maude Street, as shown on Block E Control Plan.

4.3 PEDESTRIAN LANE – PACIFIC HIGHWAY TO THOMAS STREET

Objectives

a. To establish a pedestrian lane with active frontage for direct pedestrian movement from the Pacific Highway through the future retail core to the lake foreshore.

Controls

1. Development on 542-544 Pacific Highway must provide a pedestrian lane on a single alignment, with a minimum clear corridor width of 6 metres, and open to the sky, as shown in Block Control B.

2. Development must provide retail, office or business floor space on the lane frontage at street level.

3. The lane must be free of visual intrusions, including occupiable floor space, circulation space and signage structures.

4.4 PUBLIC PLACE - THOMAS STREET SQUARE

Objectives

a. To clarify and improve vehicle and pedestrian circulation between Thomas and Edgar Streets.

b. To provide an open air and north facing public space that is located in close proximity to extensive retail floor space, and readily accessible from surrounding streets.

Controls

1. Development on Lot 1 in DP 771701 on Thomas Street must include a shared vehicle and pedestrian street on a single alignment, with a minimum clear width of 16 metres and open to the sky, as shown in Block B Control Plan.
2. Development on Lot 1 in DP 771701 must provide a high quality public place of at least 600m^2, as shown in Block A Control Plan, that has:
    i. at least three hours sun access from 9am to 3pm on the winter solstice;
    ii. appropriate shade awnings, paving, lighting, seating and other furniture; and
    iii. suitable tree and landscape planting.
3. Ground floor uses fronting the Thomas Street Square must be pedestrian-based retail uses, active community space, or entries to upper level floor space.
4. Upper levels must include balconies or terraces overlooking the Thomas Street Square.

4.5 PUBLIC PLACE - SINGLETON STREET SQUARE

Objectives

a. To provide a pleasant, safe and lively public space and outdoor trading space with good sun access and an elevated outlook to the north.

Controls

1. Development on Lot 1 in DP 1146477 (1Singleton St) must include an outdoor pedestrian and trading space with a minimum size of 15mx20m on a single level and immediately adjacent to the main retaining floorspace, as shown in Block A Control Plan.
2. Development on Lot 1 and 2 in DP 1146477 must provide a high quality public place on a single level elevated above the street and adjacent to the main retail area as shown in Block A Control Plan, with a minimum area of 300m^2, that provides:
    i. an outlook to the north.
    ii. at least three hours sun access from 9am to 3pm on the winter solstice;
    iii. appropriate shade awnings, paving, lighting, seating and other furniture; and
    iv. suitable tree and landscape planting.
3. Uses fronting the Singleton Street Square must be pedestrian-based retail uses, active community space, or entries to upper level floor space.
4. Upper levels must include balconies or terraces overlooking the Singleton Street Square.

4.6 ENTRIES LOCATED AT STREET TERMINATIONS

Objectives

a. To support activity and pedestrian movement at the intersection of George St and Pacific Highway, at the intersection of Macquarie and Singleton Streets, and the intersection of Sharp and Edgar Streets.

Controls

1. Development on Lot 301 in DP 590786 and Lot 201 DP 103526 on Pacific Highway must provide a small forecourt, public entry and active retail frontage opposite the termination of George ST, as shown in Block A Control Plan.
2. Development on Lot 1 in DP 771701 on Macquarie Street must provide a small forecourt, public entry and active retail frontage opposite the termination of Singleton Street, as shown in Block B Control Plan.
3. Development on Lot 1 in DP 771701 on Edgar Street must provide a small forecourt, public entry and active retail frontage opposite the termination of Sharp Street, as shown in Block B Control Plan.
4. Pedestrian entries located at street terminations must be highlighted and improved through the provision of a minimum setback of 3 metres, a solid awning above, quality paving, street furniture, lighting and tree planting.

4.7 STREETSCAPE IMPROVEMENTS

Objectives

a. To provide high quality infrastructure for pedestrians in the town centre.

Controls

1. Works undertaken within the public domain must be consistent with the provisions of the *Belmont Streetscape Masterplan* and *Public Domain Technical Guidelines*.

5 ACCESS AND PARKING

5.1 SITE ACCESS

Objectives

a. To maximise the retail frontage and pedestrian amenity for streets in the town centre.

b. To minimise impacts on traffic flow on the Pacific Highway

Controls

1. For lots with frontage to the Pacific Highway, a development application for intensification of use must include an alternative vehicle access to the site.
2. Site access must comply with the locations where these are shown in the Block Controls (Figures 4-21).
3. Vehicle access to on-site car parking or service areas and loading docks on Lot 1 in DP 771701 must be limited to nominated locations on Herbert, Edgar and Thomas Streets.

5.2 PARKING PROVISION

Objectives

a. To maximise retail floor space at street level along the southern side of Macquarie Street and the eastern side of Thomas Street.

b. To maximise centralised public parking spaces on larger sites, either in basement excavations or on upper levels where sites are affected by flooding and sea level rise.

Controls

1. For development proposals on sites with frontage to the southern side of Macquarie Street or the eastern side of Thomas Street, where the required parking cannot be entirely provided on-site, alternative provisions for car parking may be made through the relevant *Section 7.11 Contributions Plan(s*) and/or *Council's Policy – Planning Agreement – Car Parking Deficiencies*...
2. For development on the site bounded by Edgar, Macquarie and Thomas Streets, car parking may be provided above street level, provided that the building includes a high quality architectural façade to the exterior of the parking decks.

6 BUILDING DESIGN

6.1 BROOKS PARADE AND EDGAR STREET

Objectives

a. To establish view corridors from Edgar Street to Brooks Parade and the lake.

b. To break up the mass of development along Brooks Parade and Edgar Street.

c. To ensure that each apartment block has an individual character that contributes to the overall streetscape character.

d. To encourage a pedestrian scale built form at street level along Brooks Parade and Edgar Street with single storey retail floor space close to the street boundary.

e. To support pedestrian movement and activity along the foreshore and Brooks Parade.

Controls

1. For development on sites with frontage to Edgar Street or Brooks Parade:

   i. Setbacks must be consistent with the controls shown in Block Plan C and D and Sections.

   ii. Building width must not exceed 30 metres at the street frontage.

   iii. Balconies may encroach on the front setback area up to three metres for up to 80% of the façade length.

   iv. Front setbacks must be a minimum on the primary and secondary street frontage, except that retail floorspace at podium level, may encroach up to four metres on the front setback area for up to 50% of the facade length.

   v. Side setbacks must be a minimum of three metres

   vi. Rear setbacks must be a minimum of six metres.

   vii. Podium level must not exceed 1.2 metres unless this is inconsistent with requirements under the Lake Macquarie Sea Level Rise Preparedness and Adaptation Policy.

Note: Development must satisfy the building separation, solar access and amenity requirements of State Environmental Planning Policy No. 65 – Quality Design of Residential Flat Development.

6.2 BUILDING TO THE STREET BOUNDARY

Objectives

a. To define the spatial character of the northern entry on the Pacific Highway.

b. To maximise building mass, floor space and activity at the street boundary in the town core.

Controls

1. For development on the Pacific Highway between Stanley Street and Herbert Street, at least 50% of the lot frontage must have a minimum of one storey built up to the Pacific Highway boundary.

2. Developments on the Pacific Highway between Herbert Street and Victoria Street, in Macquarie Street between the Pacific Highway and Edgar Street, and in Thomas Street, must have at least two storeys built to 100% of the lot frontage.

6.3 FRONT SETBACKS

Objectives

a. To define the spatial character and proportions of each street.

b. To maintain a wider landscape setback for the southern entry to Belmont on the Pacific Highway.

c. To provide a suitable interface to residential zoned land on the north side of Maude Street.

Controls

1. Front building setbacks must comply with the relevant Block Control Plan and Section (Figures 4-21).
2. Buildings on the Pacific Highway between Victoria and Ada Streets must be set back a minimum of six metres from the street boundary, as shown in Block I Control Plan. Landscape and tree plantings must be provided in the setback area.
3. Buildings on Maude Street between Pacific Highway and Albert Street must be set back a minimum of three metres from the street boundary, as shown in Block E Control Plan. Landscape and tree plantings must be provided in the setback area.

6.4 SIDE AND REAR SETBACKS

Objectives

a. To ensure an appropriate level of amenity for building occupants, including natural light and ventilation, outlook, view sharing, wind shelter and privacy.

b. To allow natural light and ventilation from the front and rear of properties.

Controls

1. Side and rear building setbacks must be consistent with the Block Control Plans and Sections (Figures 4-21).

6.5 BUILDING HEIGHT

Objectives

a. To ensure that developments do not overwhelm the public street, and are of compatible scale with the surrounding, or desired future built environment.

b. To encourage higher density development in the core area between the Pacific Highway, Macquarie Street, Edgar Street and Herbert Street.

c. To allow view lines between buildings from Edgar Street to Brooks Parade.

Controls

1. The maximum number of storeys must comply with the Block Control Plans and Sections (Figures 4-21).
2. Where an Area Plan does not specify height in storeys development must not exceed three storeys and 13m in height.

6.6 MAXIMUM OCCUPIED AREA

Definition

100% occupied area means that the floor space on that level completely fills the maximum possible area within the setbacks from each boundary.

50% occupied area means that the floor space on that level occupies no more than 50% of the maximum possible area within the setbacks from each boundary.

Objectives

a. To reduce the bulk and impact of a building mass on residential amenity within the development site, or on neighbouring sites.

Controls

1. Development must be consistent with the maximum occupied area controls, as shown in the Block Controls and Sections (Figures 4-21).

6.7 BUILDING EXTERIORS

Objective

a. To reduce the visual impact of buildings viewed from the foreshore or from the lake.

b. To ensure that building design contributes to the character and vitality of the Pacific Highway in Belmont.

Controls

1. Buildings visible from the foreshore or the lake must be predominantly finished in non-reflective muted-tones and neutral colours. White or brightly coloured finishes must be restricted to small detail elements.

2. Buildings on the Pacific Highway must incorporate heavier masonry façades and smaller glazing areas to manage noise and air quality.

6.8 BALCONIES ON THE PACIFIC HIGHWAY

Objectives

a. To provide suitable privacy and amenity for users of balconies on the Pacific Highway.

Controls

1. For development fronting the Pacific Highway balconies on levels two and three must be recessed into the building façade.

7 LANDSCAPE

7.1 PLANTING ON PRIVATE LAND

Objectives

a. To provide broad canopy trees along the Pacific Highway entry to Belmont from the north.

b. To enhance the amenity of the Brooks Parade waterfront with landscape planting on private land.

c. To provide a landscape buffer between mixed use development and residential zoned land.

Controls

1. Development on the Pacific Highway between Stanley Street and Herbert Street must include installation and maintenance of at least one advanced clear-trunked broad-canopy tree on the development site for every 10 metres of frontage, in addition to general tree planting required for car parking areas. The additional trees must be installed within five metres of the front boundary to maximise their visibility from the Highway.

2. Development exceeding three storeys in height between Brooks Parade, Edgar Street, Macquarie Street and Marks Street must provide landscape planting to at least 20% of the site area. The planting on private land must include installation and maintenance of at least one advanced clear-trunked broad-canopy tree for every 50m^2 of landscape area.

3. Development on the Pacific Highway between Stanley Street and Herbert Street must provide at least a three metre planted buffer on the rear boundary that provides screening to adjacent properties.

Note*:* see Part 2 – General Provisions for general tree planting details.

8 BLOCK CONTROLS

Note: Uses shown in the sections are indicative only.

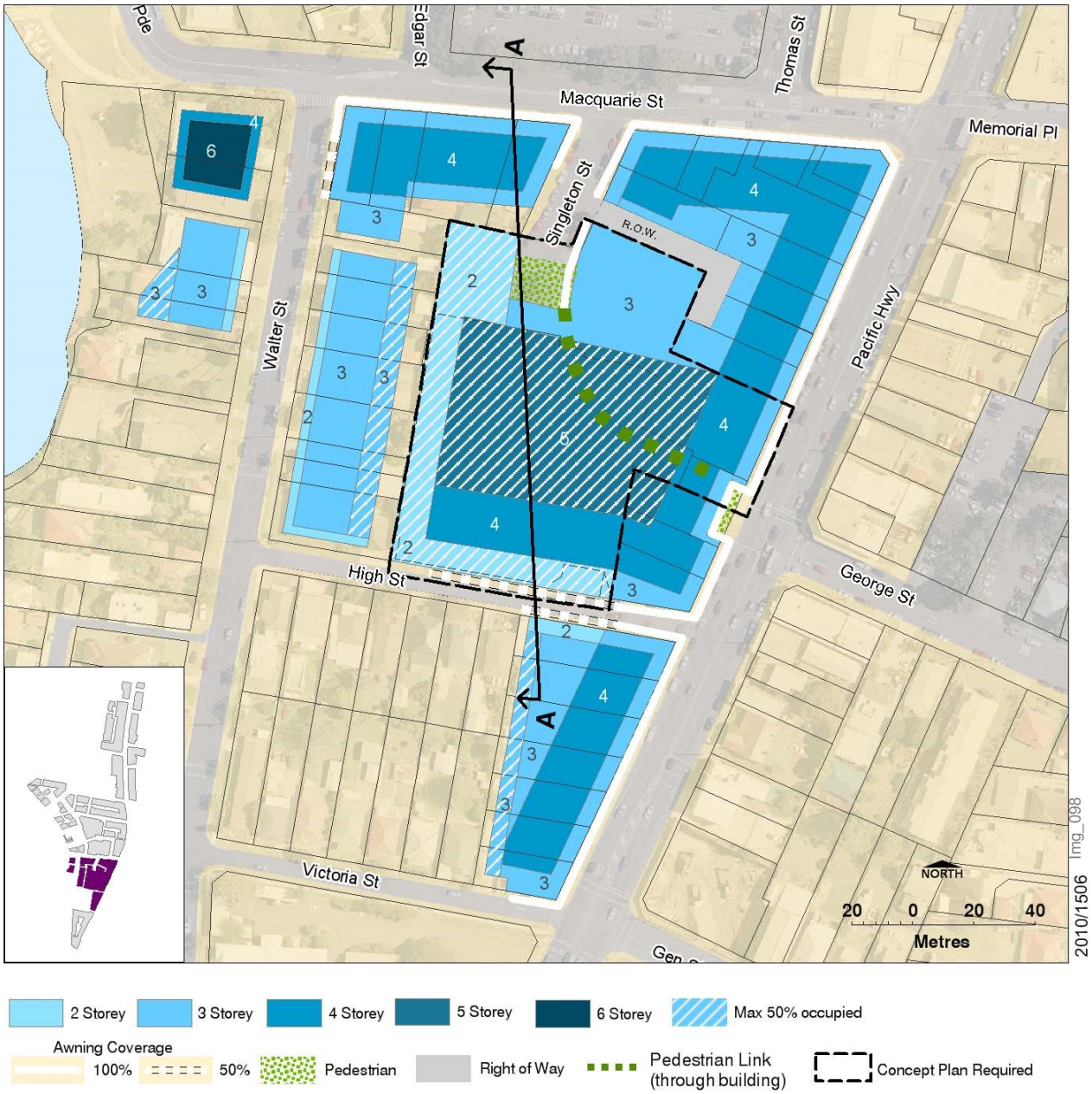


Figure 4 - Block A Control Plan

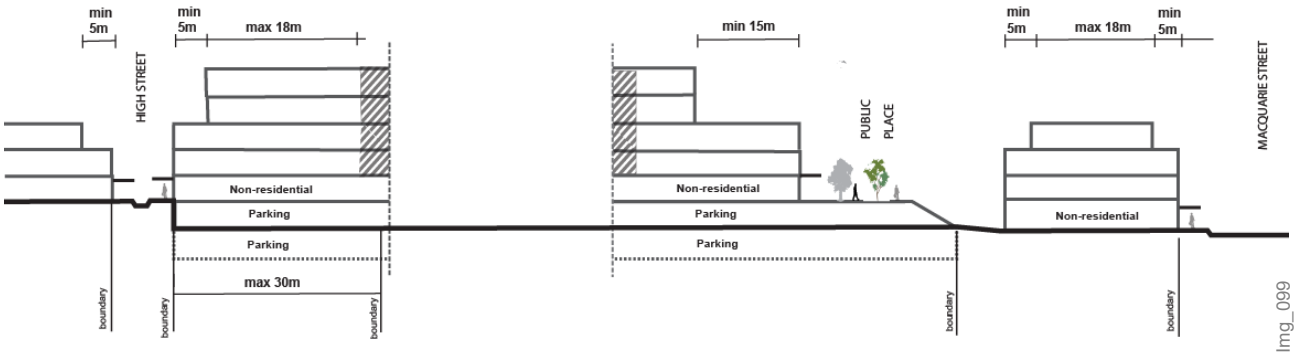


Figure 5 - Block A Section A-A

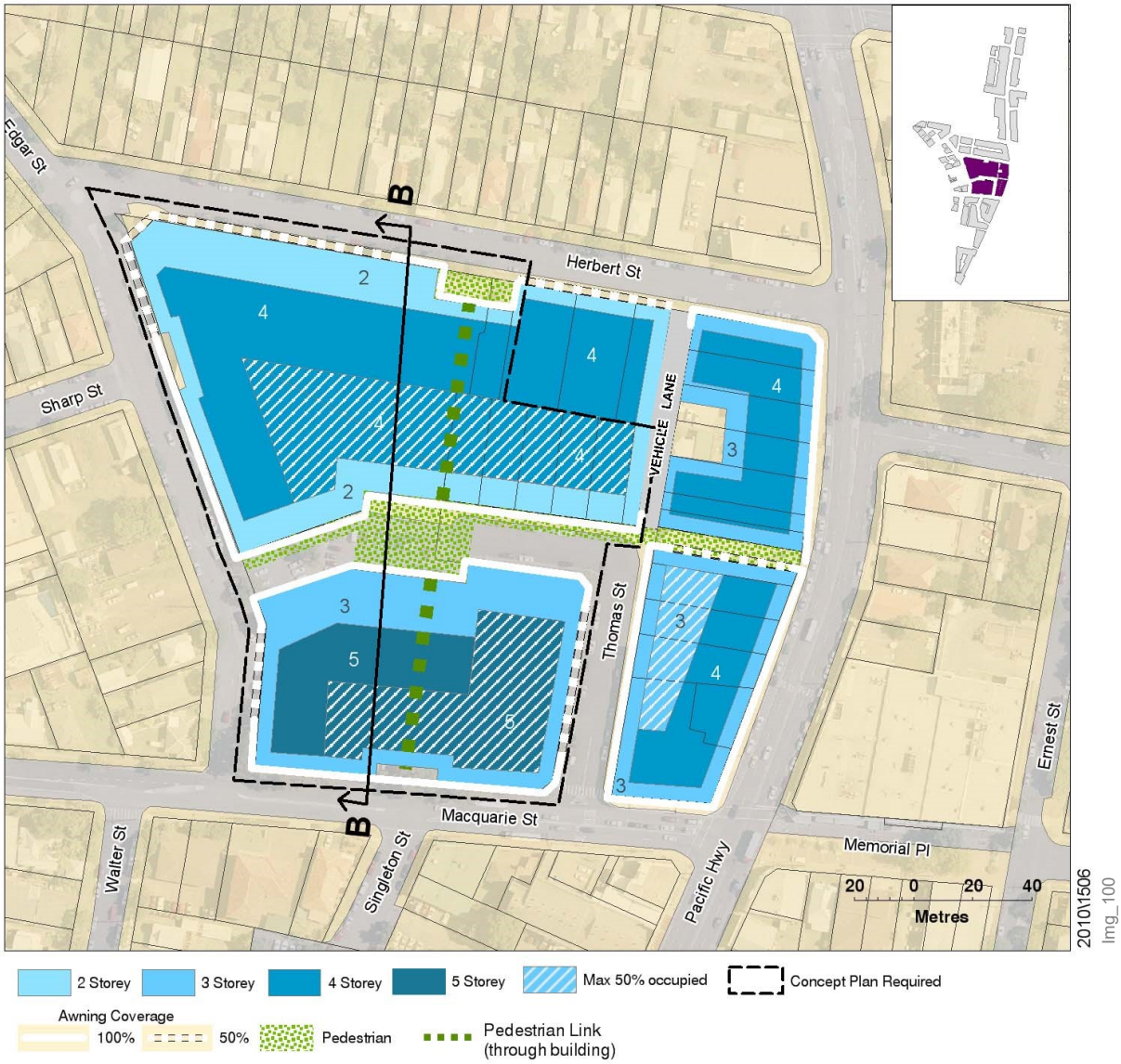


Figure 6 - Block B Control Plan

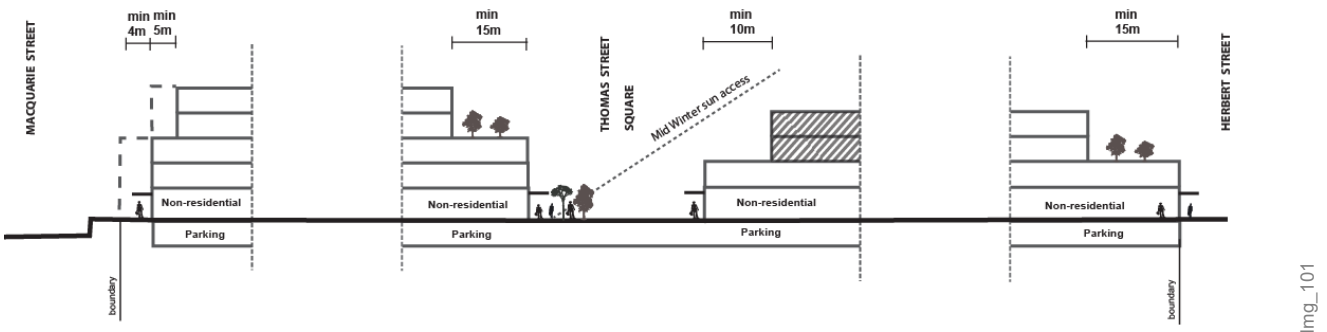


Figure 7 - Block B Section B-B

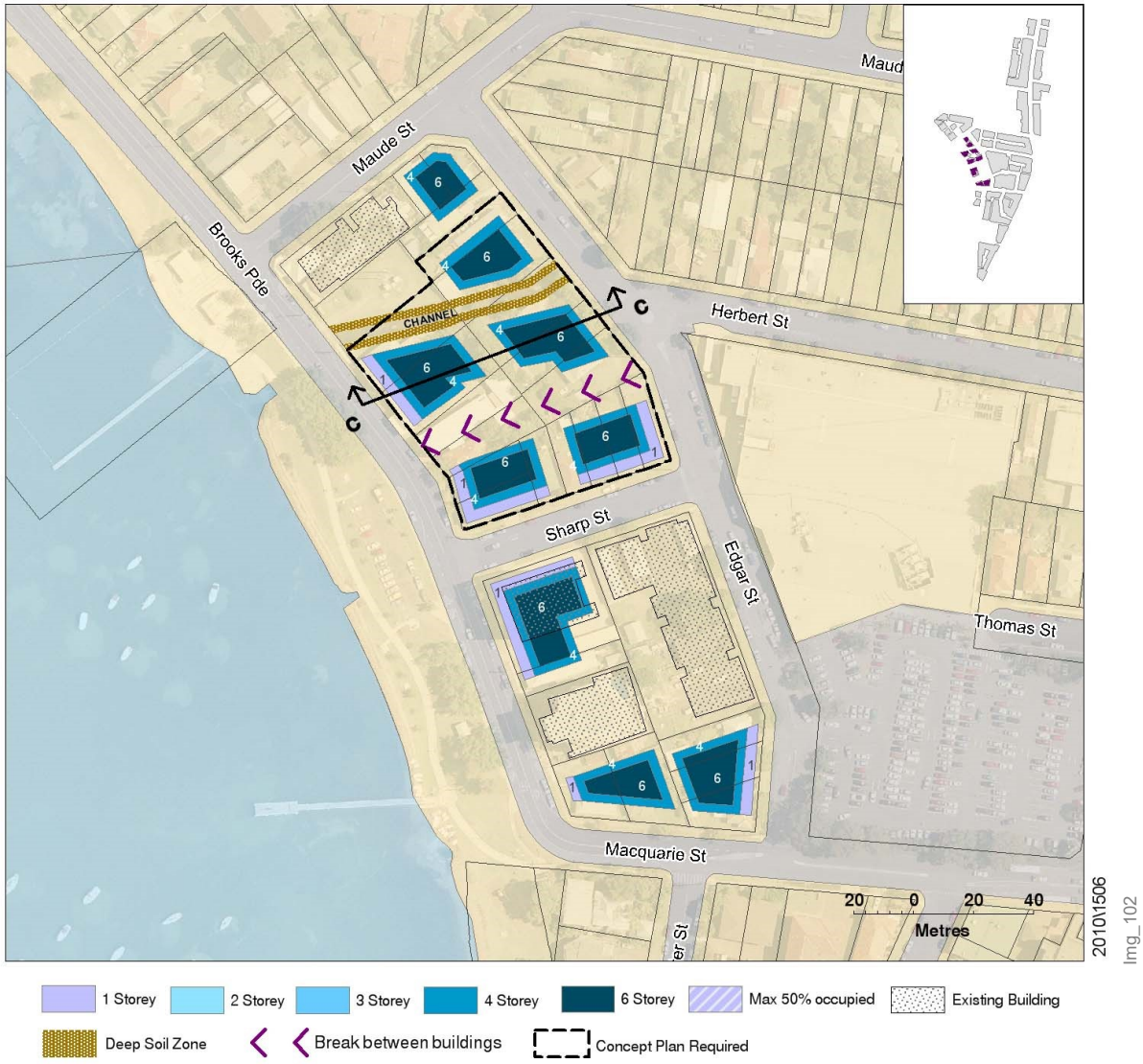


Figure 8 - Block C Control Plan

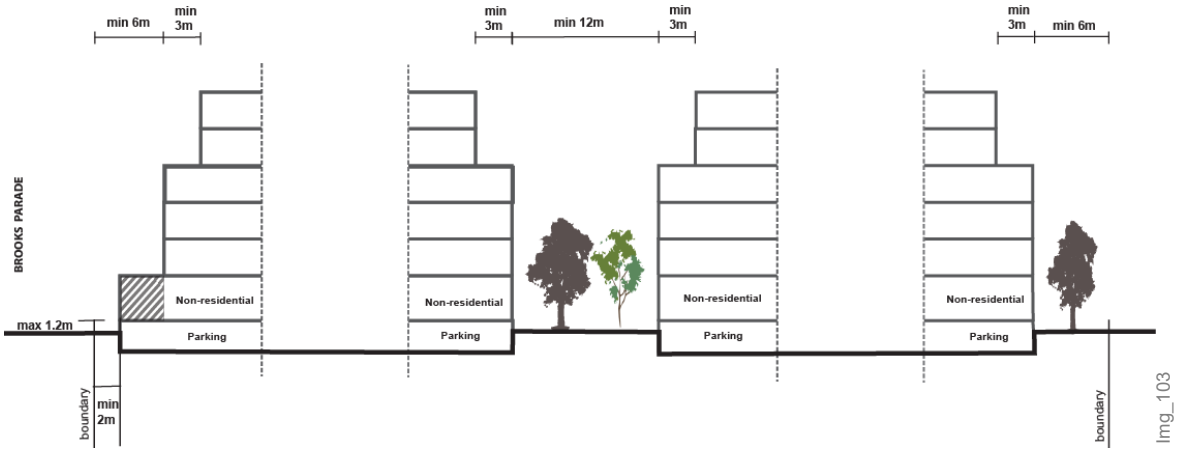


Figure 9 - Block C Section C-C

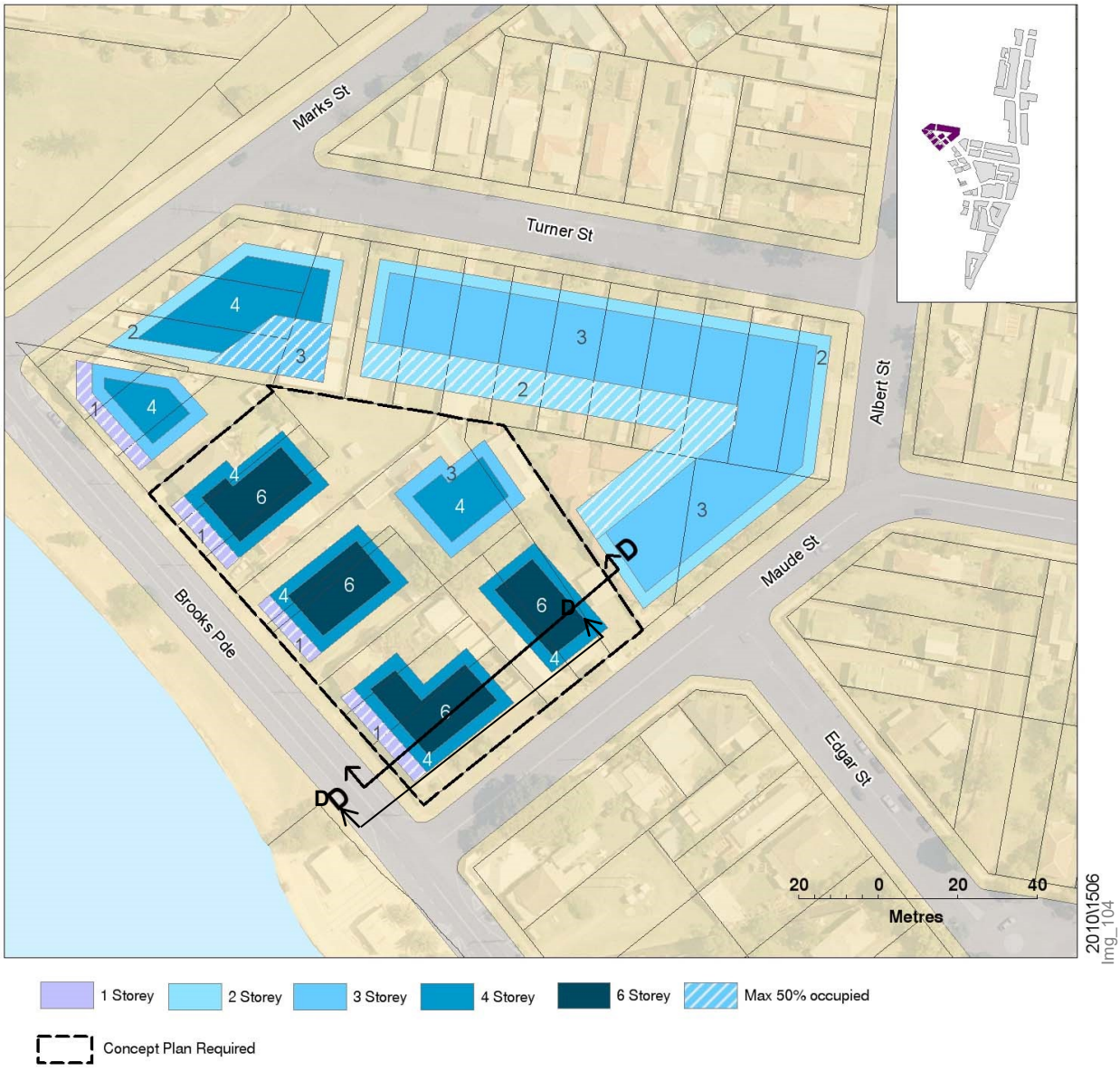


Figure 10 - Block D Control Plan

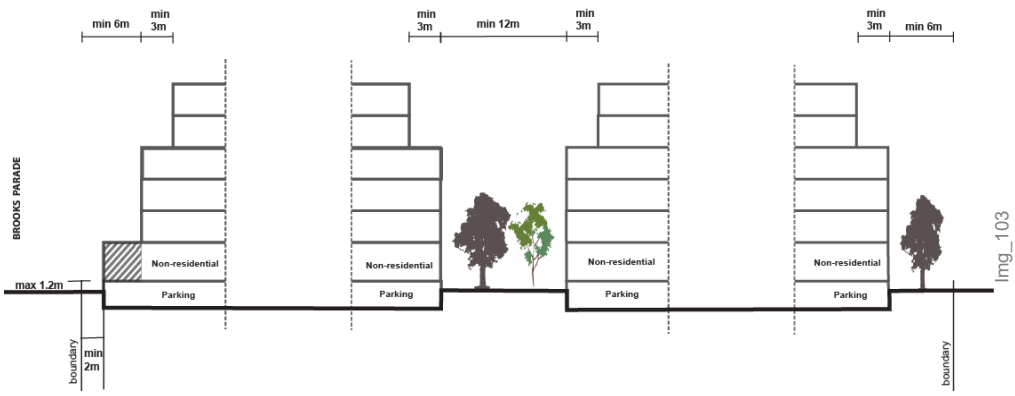


Figure 11 - Block D Section D-D

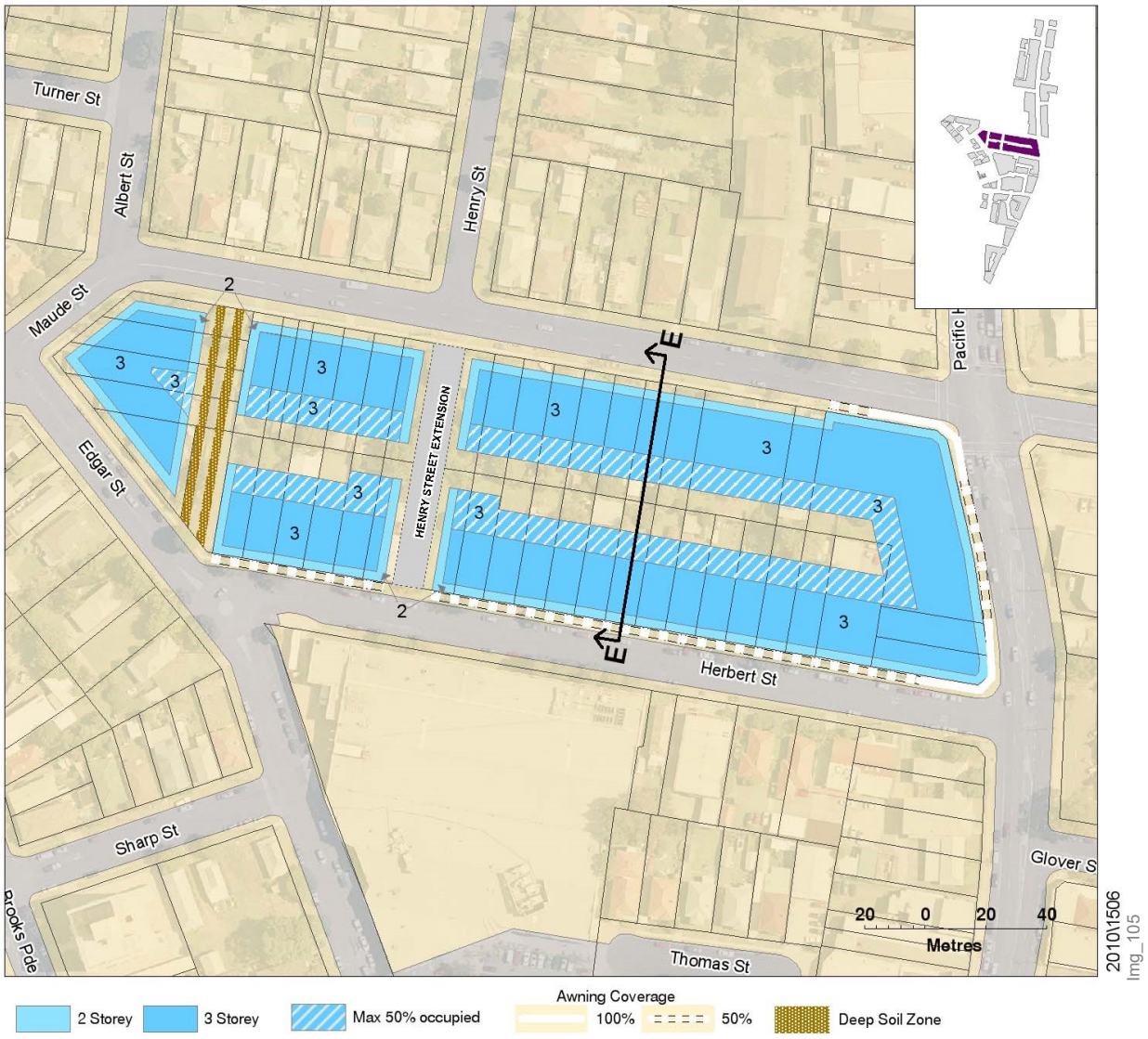


Figure 12 - Block E Control Plan

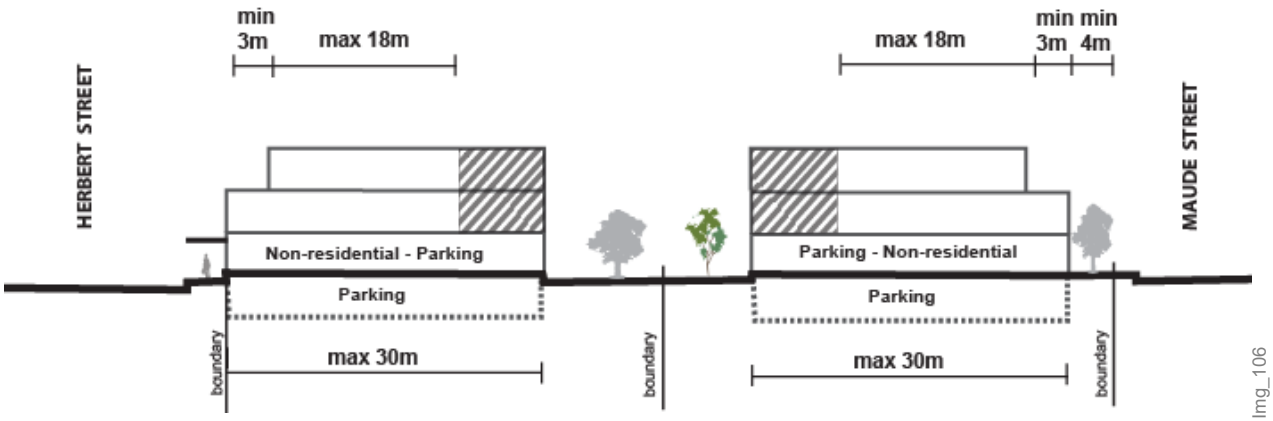


Figure 13 - Block E Section E-E

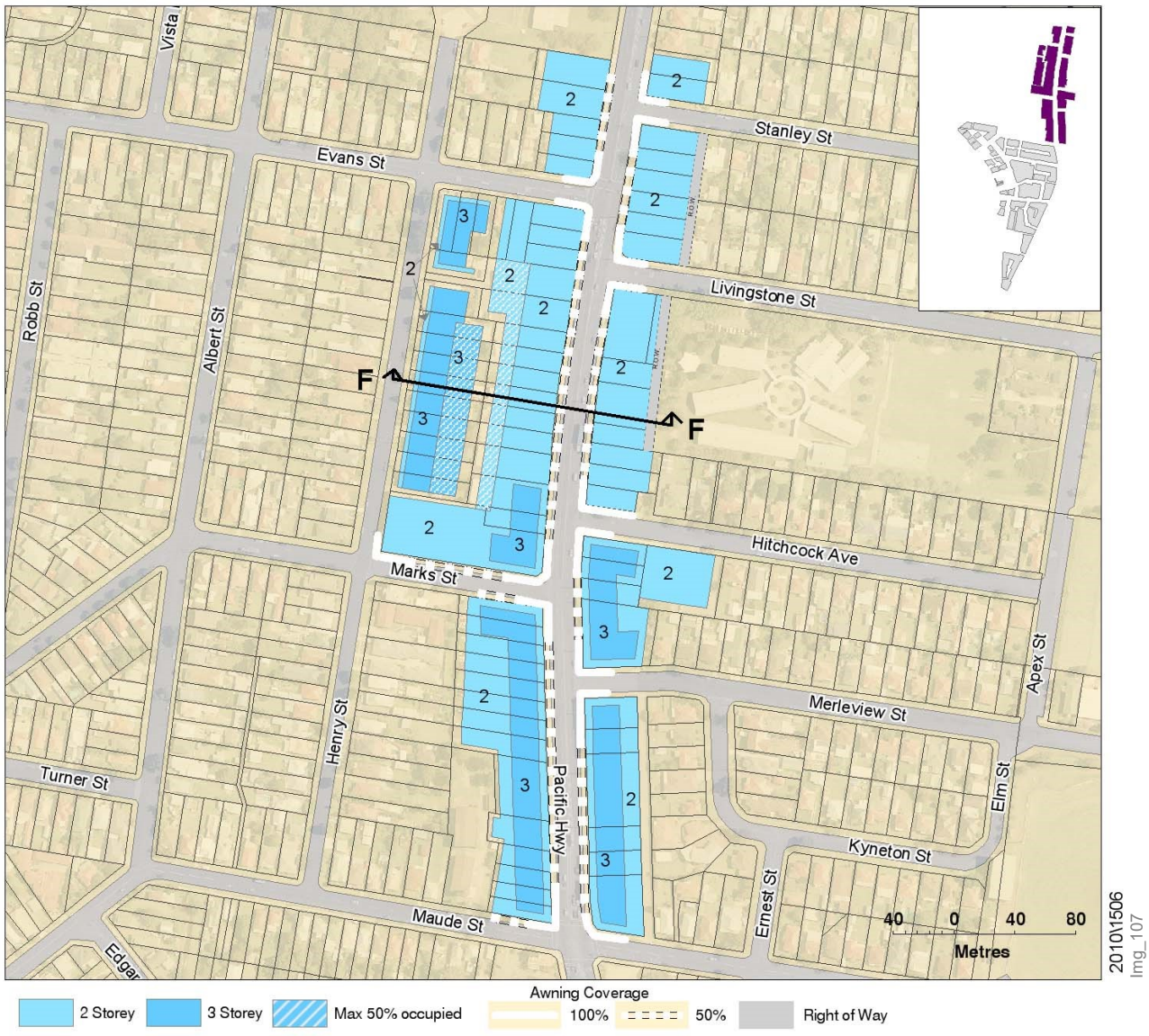


Figure 14 - Block F Control Plan

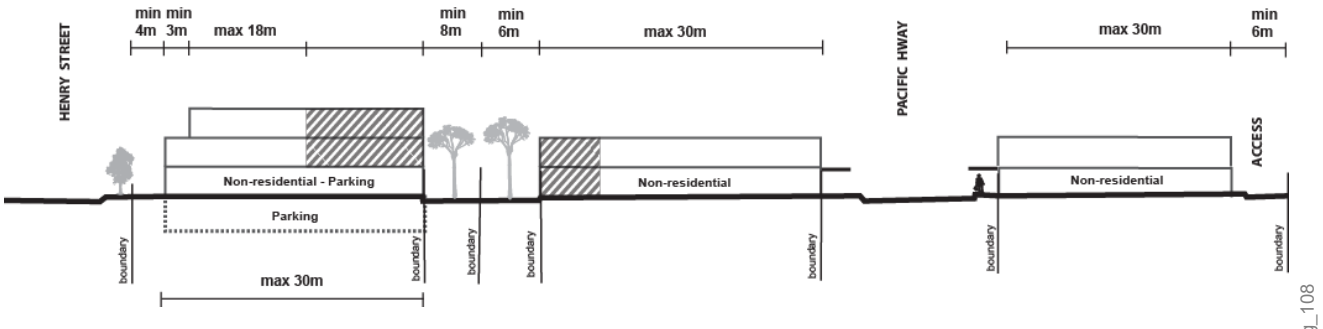


Figure 15 - Block F Section F-F

Figure 16 - Block G Control Plan

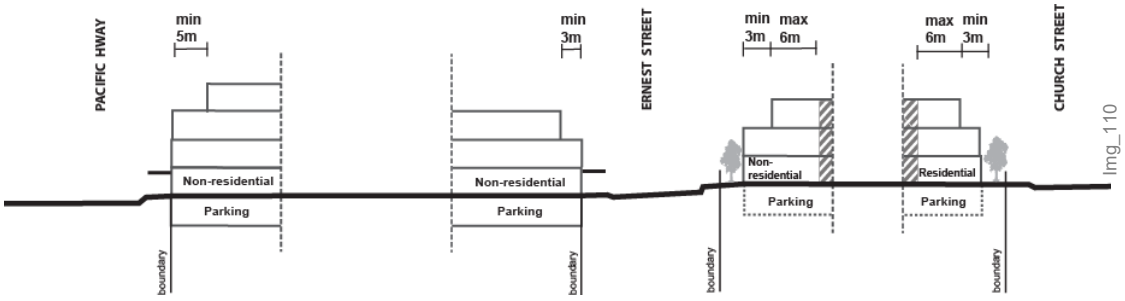


Figure 17 - Block G Section G-G

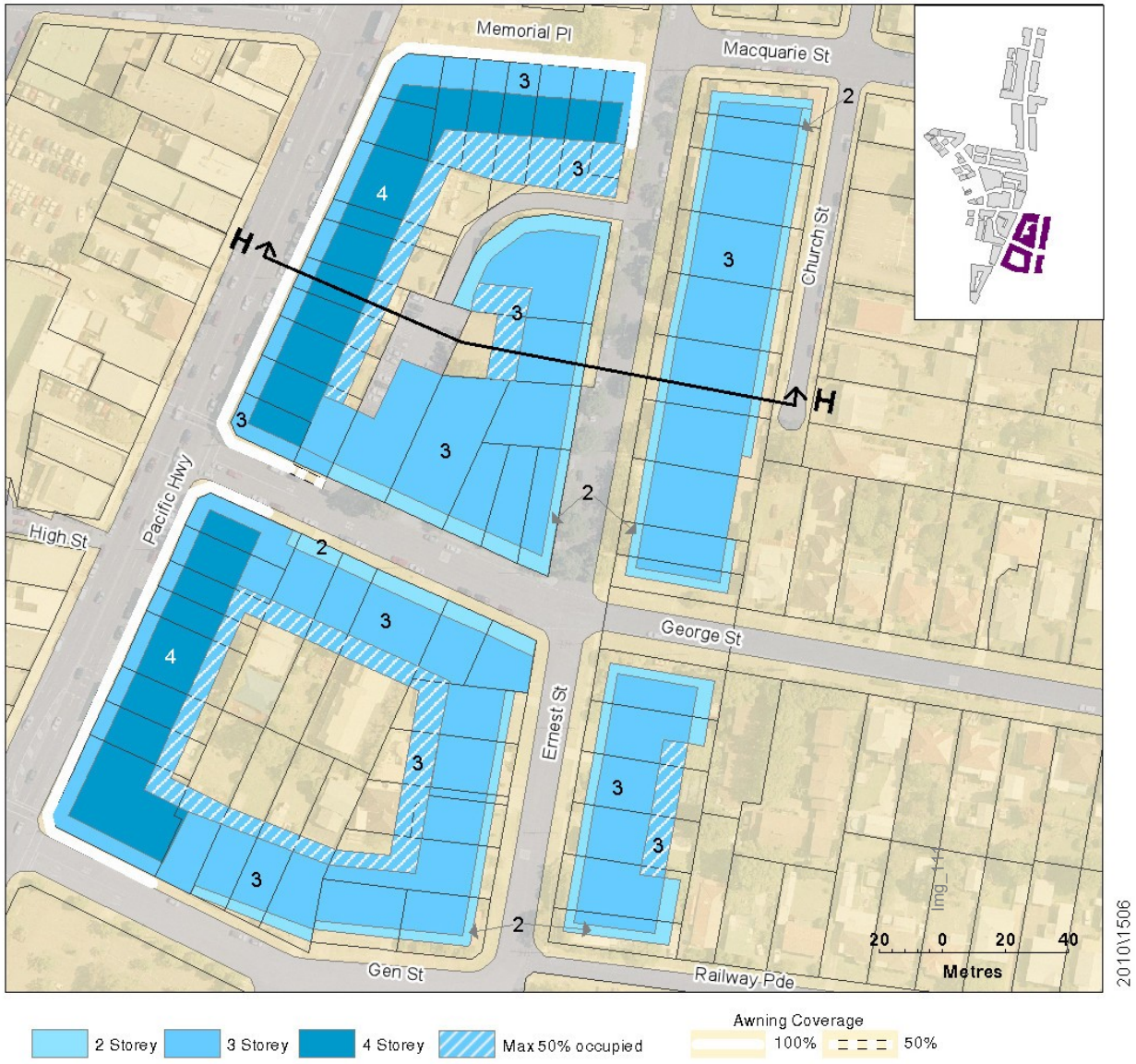


Figure 18 - Block H Control Plan

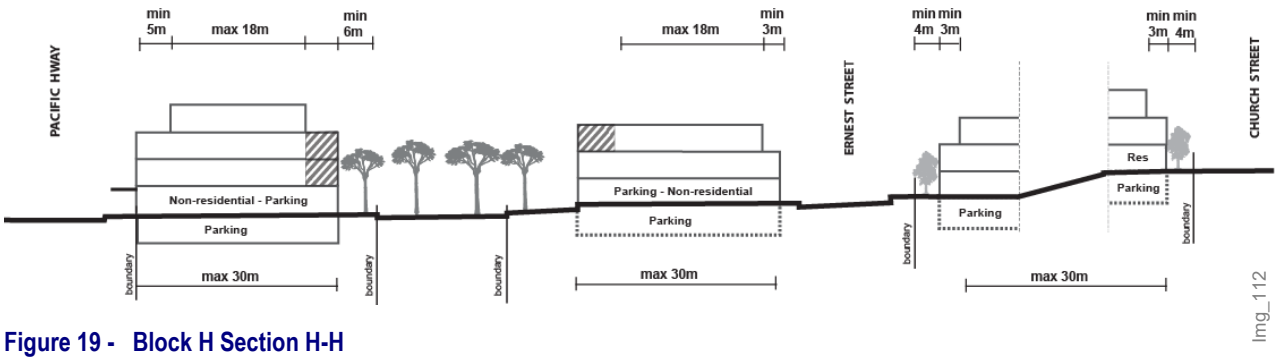


Figure 19 - Block H Section H-H

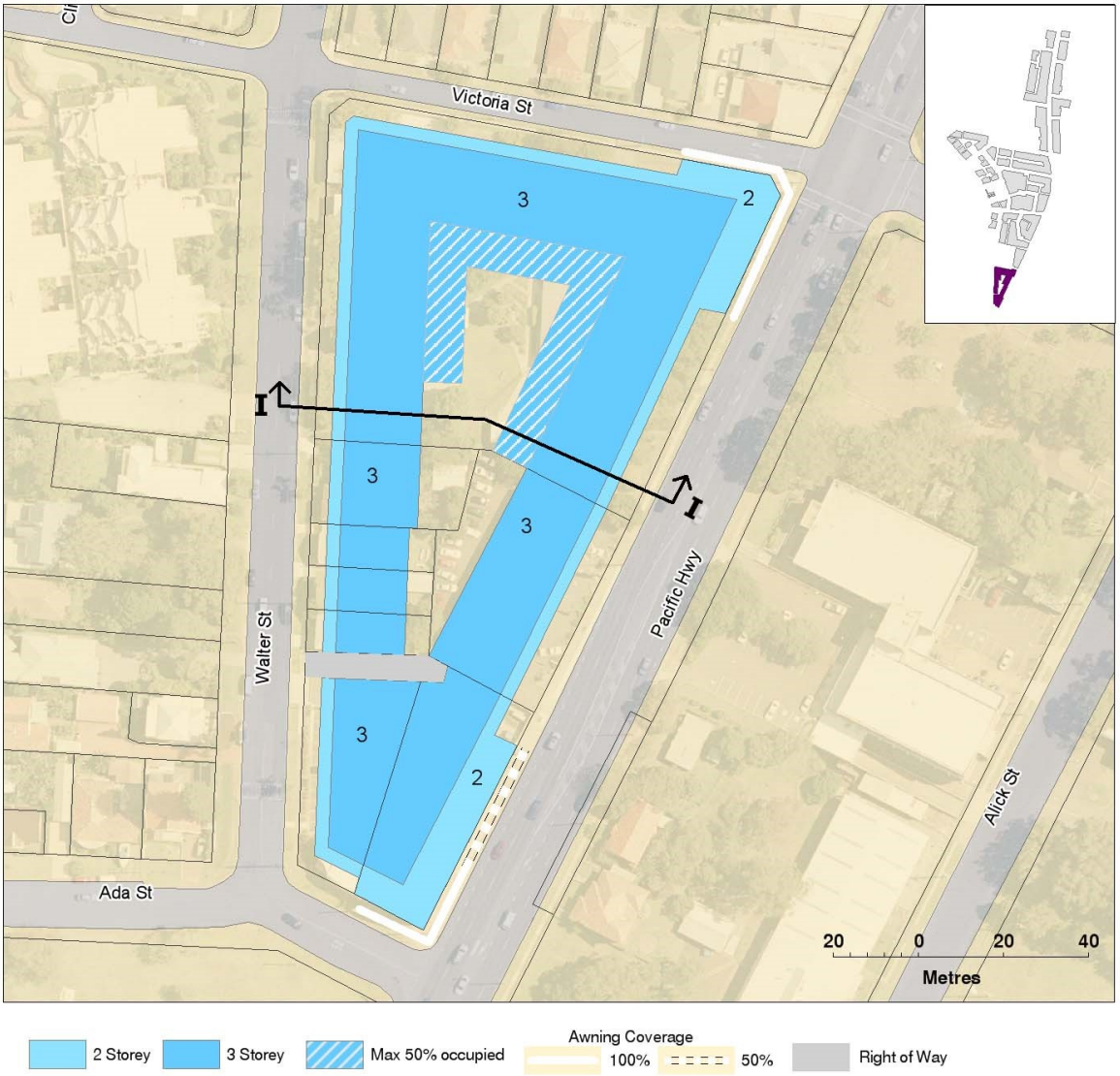


Figure 20 - Block I Control Plan

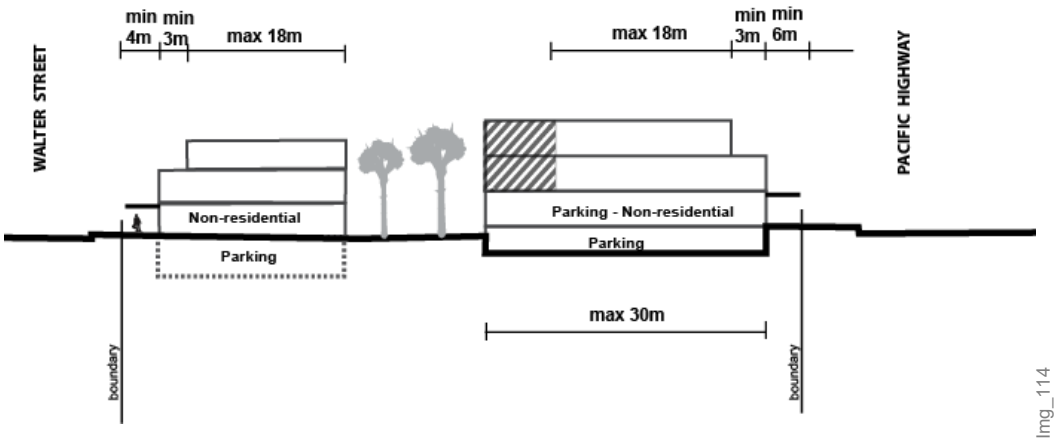
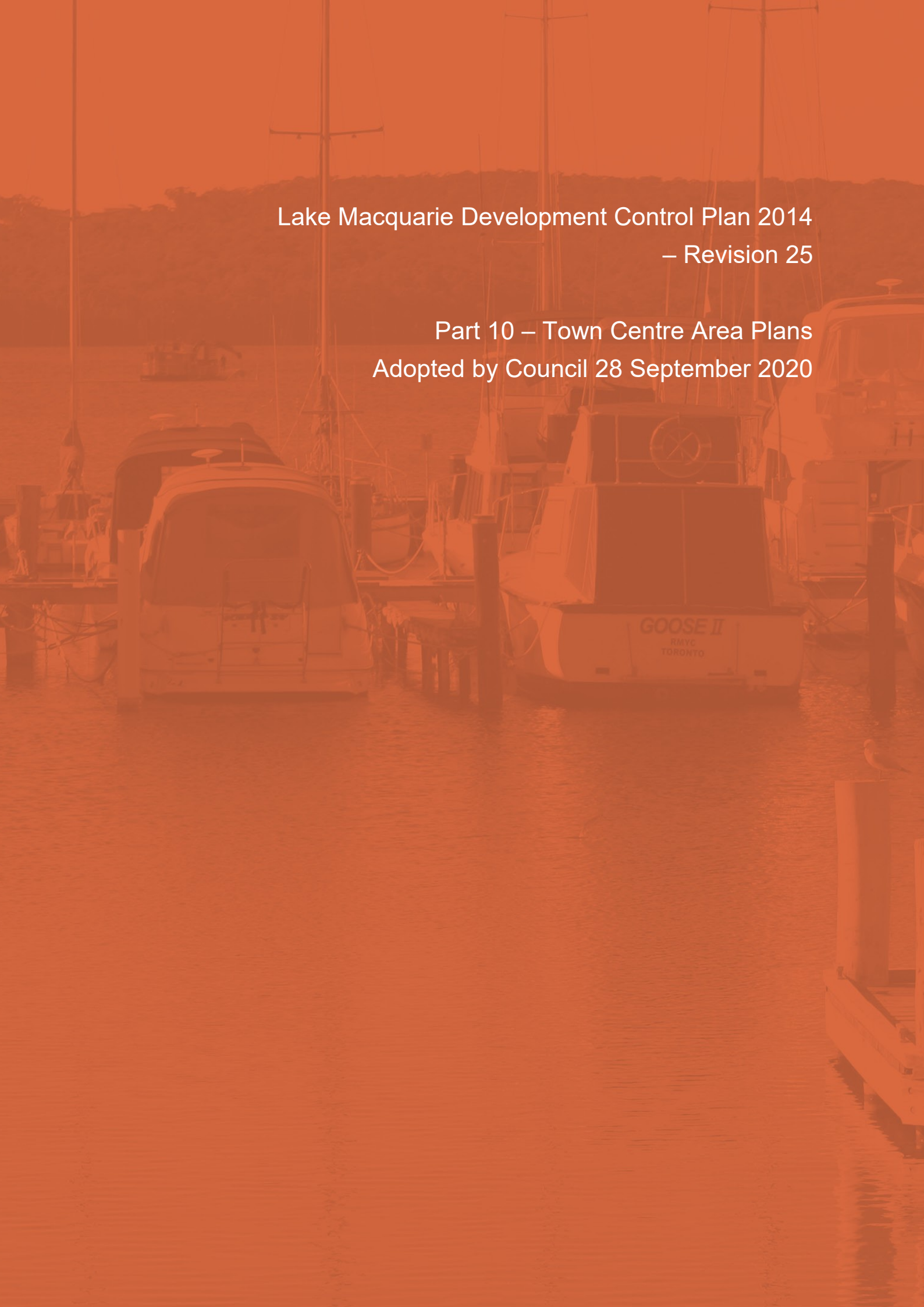


Figure 21 - Block I Section I-I



Lake Macquarie Development Control Plan 2014 – Revision 25

Part 10 – Town Centre Area Plans

Adopted by Council 28 September 2020

CONTENTS:

Part 10 – Town Centre Area Plans section contains the following:

CONTENTS:

TABLES:

FIGURES:

1 INTRODUCTION

This section contains local objectives and controls for development in Charlestown town centre and are in addition to the general provision contained in Part 4 – Development in the Business Zones. Where conflict arises between this section and Part 4, the controls in the Charlestown Town Centre Area Plan take precedence.

1.1 BACKGROUND

The Charlestown town centre is the major commercial centre in Lake Macquarie and provides high order retail, commercial and community facilities for the city and region.

Charlestown is located in the north eastern corner of the Lake Macquarie Local Government Area (LGA) and is relatively close to the shopping centres at Glendale, Kotara and the Newcastle City Centre.

History

The Waratah Mining Company began mining operations in 1873 at Raspberry Gully north of the present day town centre. The company created the town's first subdivision in 1876, including original street alignments along the current Pacific Highway, and Pearson, Smith and Ridley Streets. The emerging settlement probably takes its name from Charles Smith, the company manager.

The Charlestown Oval was also established at this time, and bequeathed by the mining industry to the community of Charlestown. Within several years, the settlement had rapidly developed, with 50 houses, a post office, three hotels, a school of arts and several stores.

Charlestown's position on the road to Newcastle created and sustained commercial activity and contributed to its growth, particularly as a residential area. As traffic flows increased, the highway has become a barrier between the two sides of the town centre.

Charlestown Square, which opened in 1979, has had significant impact on the town centre, shifting the retail focus to the west and becoming a major employer in the region.

1.2 EXISTING CHARACTER

Topography

Charlestown is located on a ridge that runs north-south through the region - this ridge is defined primarily by the path of highway as it passes through the town centre. The landform falls away from the highway into a number of valleys, which contain remnant vegetation.

Charlestown is at the top of the catchment of four local creek systems that have cut gullies through the surrounding landscape with remnant vegetation. The elevated position of the town and the steep topography offers dramatic views throughout the region and to the vegetated creek lines and remaining bushland areas.

Open Space

There are two significant areas of park in the town centre - Charlestown/Ferris Ovals and parks adjacent to the Charlestown Swim Centre.

Natural areas of remnant bushland are mostly along creek lines and within valleys, such as those adjacent to Hallvert Crescent, Daisley Crescent and Griffiths Street. These areas of vegetation connect to the regional green space network, notably at the southern end of the town centre, which is transversed by the Great North Walk. Raspberry Gully, located to the north of the town centre, is steep sided and heavily vegetated valley. Currently, there is limited visual connection between the town centre and this natural feature, with development along Charlestown Road creating a physical barrier. To the south of the town centre, there is an area of natural bushland near the junction of the highway and Warners Bay Road. Again, access to this area is limited.

Built Form

Traditionally, building lots in the town centre were relatively small, accommodating single dwellings, shops, factories and community buildings. Smith Street one of the earliest streets established has a range of uses, from retail and commercial buildings, to community, civic, educational and residential buildings which create a transition between the town centre core and low density residential areas to the east.

For most of its length, the Pacific Highway is addressed on both sides by retail frontages, with some commercial spaces on ground and upper levels. This mix of uses also extends along Charlestown Road, with this street and the highway forming the original commercial hub of the town centre. Many for these buildings are constructed over several amalgamated lots.

Similarly, an extremely large site has been assembled to develop Charlestown Square. The shopping centre complex has shifted the focus of retail uses to the western side of the town centre. The large enclosed building creates a physical and visual barrier along Chapman Street and sections of Pearson Street, resulting in an abrupt change from retail to older residential uses on the western side of the town centre with no retail activity along the southern end of Pearson Street.

Further south, where building forms are located at varying distances from the highway's edge, the streetscape is undefined. Outside the town centre core, single residences predominate.

Public Domain

Charlestown has well established pedestrian flows on Pearson and Smart Streets. While these malls create generous space for pedestrian movement, they complicate the servicing of retail and commercial buildings, and are generally perceived to be unsafe places at night. Materials and detailing vary across the town centre, creating an inconsistency in the character of Charlestown's public domain.

Community Facilities

There are a number of community uses spread throughout Charlestown, with no distinct focus for these facilities.

Vehicular Movement

The Pacific Highway and Charlestown Road are busy state roads with up to 32,000 cars per day along the highway. The West Charlestown Bypass, opened in 2003, resulted in an initial 25% reduction in traffic along these streets, although volumes are now increasing. The original town centre grid of streets (including Smith, Ridley, Smart and Frederick Streets) has been essentially retained, with some streets closed, or disconnected by the Charlestown Square redevelopment.

Restrictions on right turning movements along the Pacific Highway creates circuitous routes to access Smith Street and Charlestown Square. Pearson Street, south of Smart Street, is a three lane one-way road that encourages higher traffic speed that is unsafe in a town centre.

The streets through residential areas extend the grid pattern. Several streets in residential areas, such as Dickinson and Marie Streets, have been disconnected from their cross streets, limiting the flow of vehicular traffic.

Pedestrian Movement

The volume and speed of traffic along the highway conflicts with the comfort and safety of pedestrians. There are only limited opportunities to cross the Highway (at Smart, Ridley and Frederick Streets). Pedestrian arcades create additional pedestrian connections within the town centre.

The palisade fencing along the centre of the Highway has discouraged unsafe pedestrian crossing of the street, but has also created an unsightly visual barrier and encourages a higher traffic speed along the Highway. Traffic roundabouts at Charlestown Road and Chapman Street hinder pedestrian movement and safety.

Buses

The Charlestown town centre is strategically located as a focus of the regional bus transport network, and is serviced by a number of bus routes. Fifteen Newcastle Bus services connect Charlestown to the Newcastle centre, Wallsend, Belmont, Dudley, Warners Bay and Swansea. Additionally, there are 3 private bus routes and 4 long-distance coach routes that stop in the town centre.

The bus terminus is located in Pearson/Smart Streets, adjacent to Charlestown Square, accommodates bus stops as well as a lay-over area. The location of the terminus favours the western half of the town centre. Shelters or awnings at stops are inadequate to accommodate the number of patrons waiting, provide minimal shelter and have poor security. Charlestown has been identified as the location for a new regional bus interchange.

Parking Facilities

There is a range of car parking options within the town centre, including private and public, timed and unrestricted parking. Charlestown Square provides about 3600 car parking spaces. The Council car park on Tallara Street has 300 spaces

1.3 ENVIRONMENTAL CONSTRAINTS

Mine Subsidence

The risk of mine subsidence is the single biggest constraint on increasing density within the Charlestown Centre. Historical coal mining within the area has resulted in the majority of the centre being either directly undermined, or within the angle of draw for mine workings. As concurrence from the Mine Subsidence Board is required for the majority of development within the centre, Council recommends that the Board be consulted early in the concept design phase for any new development.

1.4 DESIRED FUTURE CHARACTER

Charlestown Master Plan

In 2008, Council adopted the Charlestown Master Plan after extensive community participation and consultation. The Master Plan provides the urban design principles and strategies to ensure that development of this major regional centre supports the overall objective of making Charlestown an 'accessible, vibrant, healthy, beautiful, and sustainable place to live, work and play.'

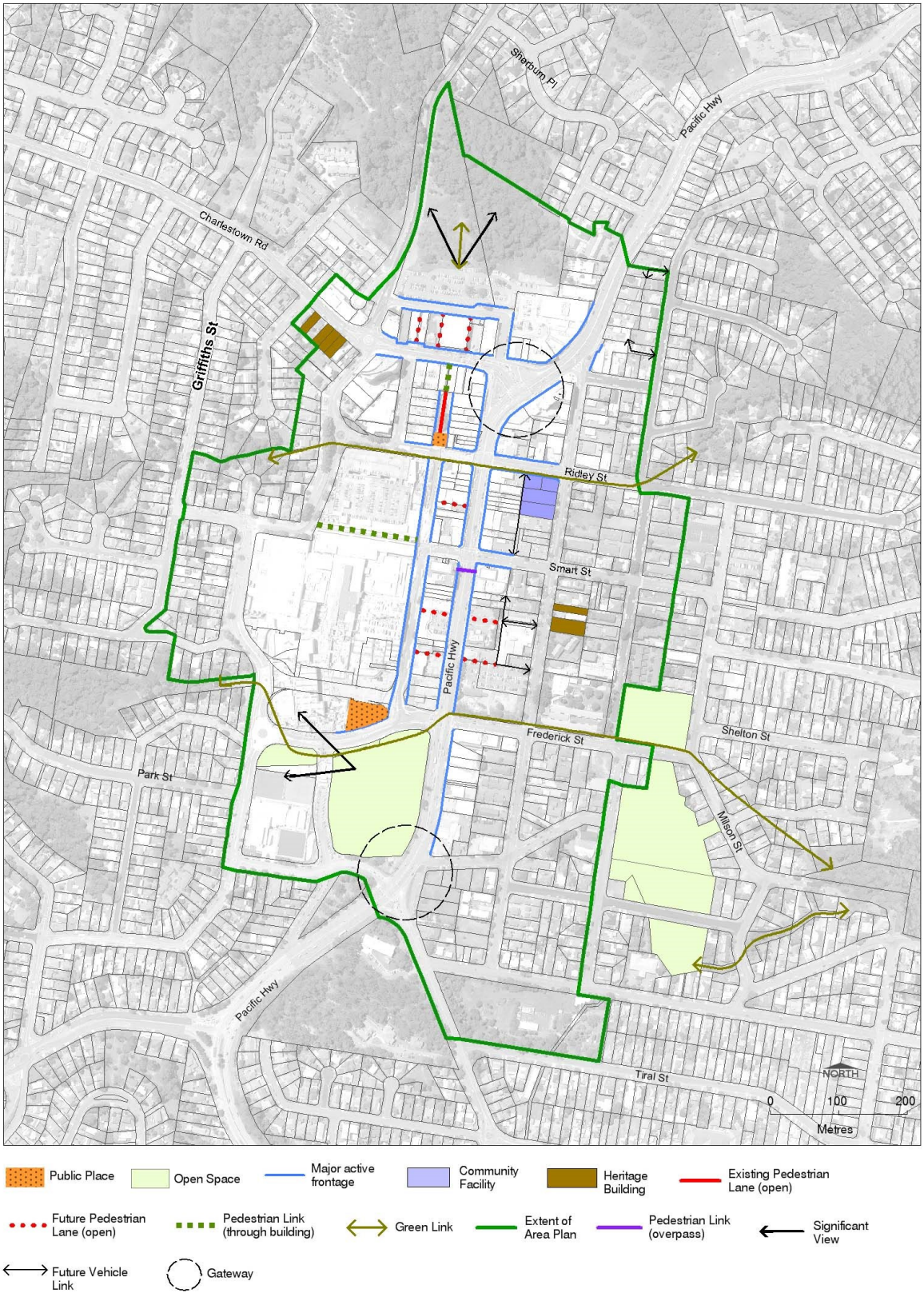


Figure 1 - Charlestown Town Centre Structure Plan

Town Centre Structure

The Charlestown Master Plan has established the desired future town centre structure (as shown in Figure 1). The structure incorporates:

a. two gateways to Charlestown, one at the northern and southern end of the Pacific Highway;

b. a consolidated retail precinct in the central area;

c. a traditional street grid with reinstatement of connections where required.;

d. higher residential buildings in the south;

e. higher commercial buildings to the north of the centre;

f. a series of public urban spaces along Pearson Street

g. stronger east-west linkages to remnant bushland;

h. a network of diverse and accessible green spaces;

i. public transport facilities and car parking in safe accessible locations

j. improved traffic circulation within the centre

Built Form

The focus of taller development at either end of the town centre will emphasise the natural landform of Charlestown, while creating gateways that mark the entries to the centre.

Generally, buildings on busier streets in the north and central area would include a podium of three storeys built up to the primary street boundary to define the public realm. These developments have potential for residential towers above the commercial podium, but set well back to protect amenity. These apartments could then capture views to the ocean, to the city in the north or the forested ridgelines to the west.

A group of taller buildings up to nine storeys within the northern gateway will create the distinctive urban form of Charlestown at the intersection of the Pacific Highway and Charlestown Road.

Development at the south between Frederick Street and Tiral Street would be setback from the front boundary to allow space for landscape planting that reinforces the greener character of the oval and open space precinct.

Public gathering places would be located at key places in the centre and provide high amenity paved and shaded with seating and other facilities.

Building Character

Charlestown is a busy urban and regional centre. Building character and finish should be associated with higher end commercial and retail functions and high quality residential apartments..

Lower levels would include extensive areas of glazing and window display. Upper residential levels would include part recessed and part projecting balconies with suitable awnings, screens and shutters for sun and wind protection.

Use of contemporary sheet materials, high quality metal products and high performance glazing would be expected.

2 DEVELOPMENT CONTROLS

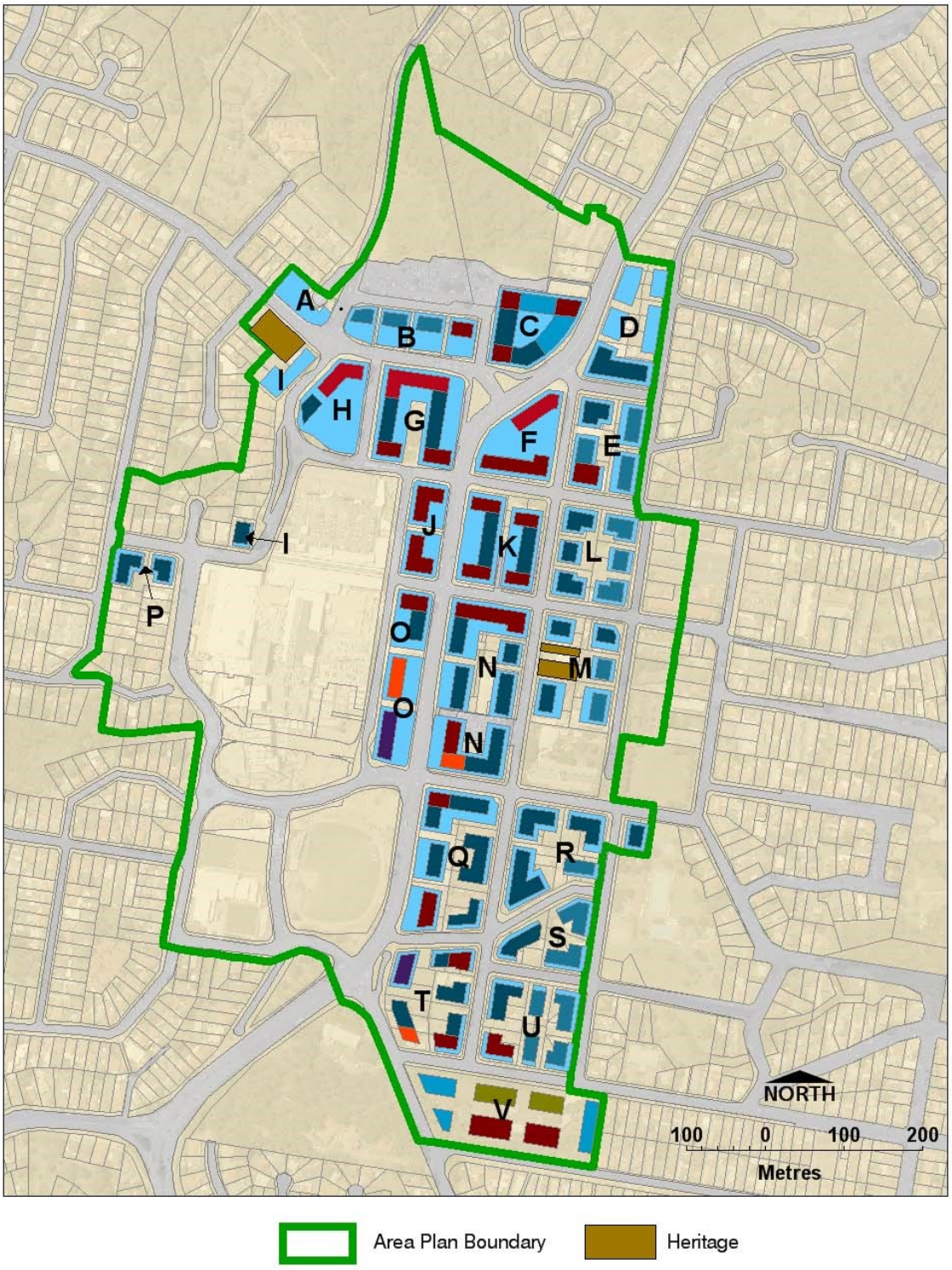


Figure 2 - Extent of Area Plan and Key to Block Plans (see Figures 5-49)

2.1 BLOCK CONTROLS

The Block Plans show the overall desired structure of development, and the spatial relationship between development and the street at a block-by-block view. They are based on site context, existing street character, and the desired future character of the town centre.

The Block Plans and sections provide general building envelopes including heights in storeys and indicative building footprints. They do not dictate lot amalgamations, or describe the design of future buildings.

Block Plans and Sections show the key built form outcomes Council is seeking and include:

- The location of public open space, public pedestrian links, and street awnings.
- The location of new vehicle links
- The location of non-residential uses
- Front setbacks at street level and upper levels
- The desired location of building mass close to the street
- The overall maximum depth of development
- The expected provision of basement car parking
- Aspects where building mass should be broken up (i.e. 50% occupied areas)

Site planning and building design should be informed by both the Block Controls and a detailed site and context analysis.

Objectives:

a. To improve the amenity and connectivity of the public domain.

b. To improve vehicle circulation and access to public transport.

c. To ensure that building scale, height and setback contributes to the desired future character of the town centre.

Controls

1. Development must make a positive contribution to the desired future character of the town centre as described in Section 1.4.

2. A development proposal must address the requirements of the relevant Block Plan and Section(s), as shown in Figures 5-49.

   Site planning and building design must be based on a comprehensive site and context analysis.

3 STREETS AND PUBLIC SPACE

3.1 PEARSON STREET MALL

Objectives:

a. To provide a pleasant, safe and lively public space for community and social activity.

b. To maximise commercial floor space surrounding the Pearson Street Mall.

c. To provide active retail frontages and footpath uses within the Pearson Street Mall.

d. To provide a visual link from the Pearson Street Mall to Charlestown Road and beyond.

Controls:

1 Ground floor uses fronting the Pearson Street Mall (north of Ridley Street) must be pedestrian-based retail uses, or entries to upper level floor space.

2 Development fronting the Pearson Street Mall must provide smaller shop frontages for use as cafes or restaurants.

3 Upper levels must include balconies or terraces overlooking the Mall.

4 Redevelopment of Lots A and B in DP 173101 (current Hilltop Plaza site) must include provision for a pedestrian link through the building, as shown on the Block Plan (Figures 14 and 15). The pedestrian link should:

i. Provide an unobscured line of sight to Charlestown Road;

ii. Provide active frontages on both sides of the linkage.

3.2 PEDESTRIAN LINKS

Objectives:

a. To provide pleasant, safe, well-lit, and interesting pedestrian links through street blocks.

b. To maintain and improve access in Charlestown by providing pedestrian links as redevelopment occurs.

c. To ensure that pedestrian links are open to the air with active frontages along their length.

Controls:

1 Pedestrian links must be constructed in accordance with the relevant Block Plans.

2 Proposals for pedestrian links not shown in the Block Plans will be assessed by Council on a merits basis.

3.3 OVERPASSES

Objectives:

a. To encourage pedestrian circulation at street level.

b. To protect views and vistas along streets.

Controls:

1. New overpasses over streets are not encouraged.

2. Overpasses over service lanes may be considered, subject to the assessment of impacts on streetscape amenity, activation of the public domain, and safety and crime prevention.

3.4 FOOTPATH DINING

Objectives:

a. To support footpath dining in appropriate locations where pedestrian access can be maintained.

b. To support buildings with large wall openings and retractable windows or doors at street level that provide an open-air café and dining experience.

Controls:

1 Where possible footpath dining must be located within the Pearson Street Mall. Footpath dining is not encouraged on the Pacific Highway or Charlestown Road.

2 Footpath dining must be located in areas where it is possible to maintain a clear pedestrian traffic route that is at least two metres wide.

3.5 STREET AWNINGS

Objectives:

a. To provide awnings for pedestrian and footpath activity which complement the scale of development.

b. To provide weather protection for pedestrians.

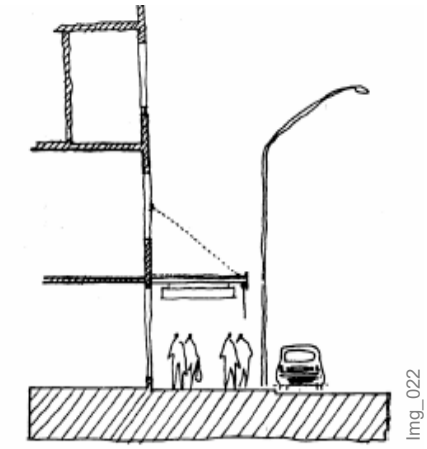


Figure 3 - Cantilever Box Awning to Street

Controls:

1. Where shown in the Block Controls Plans, development must provide a continuous or stepped low profile awning that is at least three metres wide, or that extends to within 600mm of the kerb face for the full extent of the building frontage.

2. The vertical distance from the footpath to the underside of the awning should be between 3.2 and four metres at any point. Heights exceeding the maximum may be considered on merit.

Note: Council may require an awning setback of 1.5 metres from the kerb line to accommodate street planting or banner poles within the footpath area.

4 CONCEPT PLAN SITE

4.1 FORMER TAFE SITE

Objectives

a. To ensure that development on the former TAFE site capitalises on the opportunities presented by a single consolidated site, in close proximity to a major regional centre.
b. To ensure that development on the former TAFE site occurs in an orderly manner.
c. To ensure that development on the former TAFE site contributes to the range of community facilities and/or services available in Charlestown.

Controls

1. Prior to Council consenting to any significant development on Lot 223 in DP 551260, a Concept Plan for the site must be approved by Council.
2. The Concept Plan must include the following:
   i. A comprehensive site and context analysis
   ii. Measures to retain views and vistas;
   iii. Measures to retain significant vegetation;
   iv. Proposed uses and facilities
   v. Site plan and elevations showing built form, heights, setbacks;
   vi. Indicative building character and materials
   vii. Measures to minimise impacts on adjoining residential areas.

5 ACCESS AND PARKING

5.1 SITE ACCESS

Objectives

a. To minimise the impact of vehicle access points on the streetscape.
b. To maximise the retail frontage to primary streets.
c. To make vehicle access to buildings compatible with pedestrian movements.
d. To create a pedestrian-friendly core in Pearson Street.

Controls

1. Where appropriate, buildings fronting the Pacific Highway and Charlestown Road are to share or amalgamate vehicular access points. New developments should provide vehicle access points which enable them to become a shared access point, as development of adjoining sites occurs.
2. Where access can be gained from a secondary street or rear lane, vehicle access to on-site car parking or service areas must not be located on the primary street frontage.
3. Vehicle access points should take into account any services within the road reserve, such as power poles, drainage inlet pits and existing street trees.
4. Driveway crossovers at the boundary must be no wider than the minimum design width required to meet Council requirements.
5. Access to on-site car parking and servicing facilities must be designed perpendicular to the street alignment, and must not ramp along a street or lane alignment.
6. Vehicle access points should not be located adjacent to doors or windows of the habitable rooms of any residential development.
7. Where there is no alternative to access at the primary street frontage, the crossover must not occupy more than 25% of that frontage.
8. Vehicle entries are to have high quality finishes to walls and ceilings.
9. No service ducts or pipes are to be visible from public places.

Note: Generally, a development site must have a minimum street frontage of 25 metres for a two-way driveway crossing.

5.2 CAR PARKING

Objectives

a. To encourage basement level car parking within Charlestown.
b. To allow car parking at ground level or above to be converted to retail or commercial floor space.

Controls

1. Car parking must be provided in basement levels, where feasible.
2. Car parking at ground level must be sleeved by retail or commercial floor space along the total length of the primary road frontage, and for at least 60% of the secondary street frontage.
3. Where all car parking cannot be accommodated at basement and ground level, car parking above ground level may be considered, provided that it is fully integrated into the building design, and adequately screened by a high quality architectural façade on all elevations.
4. For car parking at ground level or above, the floor to ceiling height must be a minimum of 3.2 metres.

5. Proposals for car parking at ground level must clearly demonstrate how the area used for car parking can be converted to other permissible uses in the future.

6 BUILDING DESIGN

6.1 BUILDING TO THE STREET BOUNDARY

Objectives

a. To maximise building mass and floor space at the street boundary.

b. To define the spatial character of the street.

Controls

1. Developments fronting the Pacific Highway and Charlestown Road must be built to the street boundary for the first three storeys.
2. On corner lots, the front façade may include a chamfer or splay across the corner, provided that the chamfer wall length does not exceed five metres, and it includes an entry door with clear glazing or window with clear glazing.

6.2 SETBACKS TO LANEWAYS

Objectives:

a. To ensure adequate turning space from a laneway into private property.

Controls:

1.. Where the existing laneway width is less than eight metres, development must be setback a minimum of one metre from the lane.

6.3 FRONT SETBACKS

Objectives

a. To establish the desired spatial proportions of the street, and define the street edge.

b. To locate active uses such as shop fronts closer to pedestrian activity areas.

c. To allow for street landscape character, where appropriate.

Controls

1. Where applicable, front building setbacks are to comply with the Block Control Plans (Figures 5 - 49)
2. Development must be built to the street boundary on lots nominated in the Block Control Plans (Figures 5 - 49).
3. Balconies may project up to a maximum of 600mm into the front setback, provided that the total width of all balconies at that particular storey equates to a maximum of 50% of horizontal width of the building façade, measured at the applicable storey.
4. Minor projections into the front setback for entry awnings, sun shading devices, cornices and the like are permitted.

6.4 SIDE AND REAR SETBACKS

Objectives

a. To ensure an appropriate level of amenity for building occupants in terms of daylight, outlook, view sharing, ventilation, wind mitigation and privacy.

b. To allow natural light and ventilation from the front and rear of properties.

Controls

1. Where applicable, side and rear building setbacks must comply with the Block Control Plans (Figures 5 - 49)
2. Residential development must satisfy the building separation, solar access and amenity requirements of *State Environmental Planning Policy No. 65 – Quality Design of Residential Flat Development*.
3. When an existing building is being refurbished or converted to another use, and applicable setback distances cannot be achieved, alternative measures such as privacy screens must be used to achieve appropriate visual privacy levels.

6.5 FAÇADE ARTICULATION

Definition: ***Articulation*** is the change in the external alignment of walls (or other elements) that expresses the way that the parts of the building fit together.

Objectives

a. To define smaller scale shop fronts, windows and doorways by articulation of the building façade.

b. To provide interest and detail at a pedestrian scale and level.

c. To avoid potentially unsafe places or opportunities for anti-social behaviour.

Controls

1. Building design must include façade articulation, smaller scale shop fronts, and smaller floor plate shop or office premises at the street level.
2. Entries must not be recessed more than one metre from the surrounding façade wall.
3. The change in wall alignment for all other façade elements must not exceed 600mm.
4. Blank façade walls must not exceed 15 metres in length.

6.6 BUILDING HEIGHT

Objectives:

a. To ensure that developments do not overwhelm the public street, and are of compatible scale with the surrounding, or desired future built environment.

b. To encourage higher density development in the northern and southern gateway areas.

Controls:

1. Development must not exceed the maximum number of storeys shown in the Block Control Plans (Figures 5 - 49)
2. Development must not exceed the maximum height in metres shown in Table 1.
3. Where an Area Plan does not specify height in storeys development must not exceed three storeys and 13m in height.

Note 1: Calculation of the maximum building heights has included allowance for sloping sites, greater floor to ceiling heights on retail and commercial floors, and the design of architectural roof forms. A development proposal may reach the maximum number of storeys without reaching the maximum permissible height.

Note 2: Approval must be granted by the Mine Subsidence Board for development within Charlestown. The Mine Subsidence Board may limit building heights, depending on the design and proposed use of a building.

Table 1 - Maximum building heights

Storeys	Height (m)
2	10
3	13
4	16.5
5	20
6	23.0
7	26.5
8	30
9	33
10	36.5
11	39.5
12	43
13	46
14	49.5
15	53

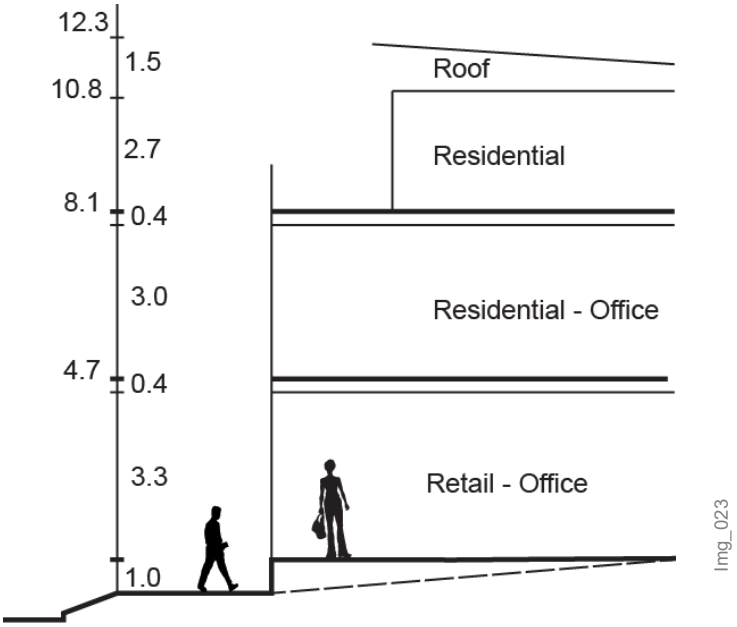


Figure 4 - Indicative heights for three storey development on sloping site

6.7 BUILDING HEIGHT AT THE STREET

Objectives:

a. To maximise the building mass and floor space along the Pacific Highway and Charlestown Road.

b. To define and reinforce the spatial character of the street.

c. To emphasise each corner of a block with additional height and/or building mass.

Controls:

1. Development must provide at least three storeys in height along the Pacific Highway and Charlestown Road.
2. On corner lots, the maximum height of development should occur at the corner element.
3. On corner lots, development must provide a minimum of three storeys on the secondary frontage for a minimum length of 15 metres, measured from the corner.

6.8 BALCONIES

Objectives:

a. To reinforce the street wall by recessing lower level balconies in the building volume.

b. To provide suitable privacy and amenity for users of balconies close to the street.

Controls:

1. Balconies at the first three levels above the street must be recessed in the building façade.

Note: Balconies at upper levels may project from the building volume, provided that minimum setback requirements are met.

7 LANDSCAPE

7.1 DEEP SOIL AREAS

Objectives:

a. To allow for planting and healthy growth of large canopy trees across the town centre.

b. To provide for stormwater infiltration on site.

Controls:

1. Development in Blocks A, C, and N must reserve at least 10% of the site area for deep soil planting.
2. Development in blocks D, E, I, L, M, P, Q, R, S, T and U must reserve at least 15% of the site area for deep soil planting.
3. Each deep soil area must have a minimum dimension of at least two metres and a minimum area of $6m^{2.}$
4. Deep soil areas must be located to accommodate tree planting requirements.
5. Each deep soil area allocated to tree planting must have a corresponding clear air space that is at least eight metres high and six metres in width.

7.2 TREE PLANTING

Objectives:

a. To provide broad-canopy tree cover in car parks for shade, shelter and screening.

b. To provide tree cover in front setback areas to enhance street character.

c. To improve the amenity for residents within developments in regard to privacy, outlook, views and recreation opportunities.

d. To improve the amenity of private open space.

Controls:

1. Tree planting in car parks must provide general shade and shelter to the car park.
2. Remnant vegetation must be maintained on the site wherever practical.
3. Where a front setback of three metres or more exists, developments must provide tree planting within the front setback.

Development must contribute to street tree planting, in accordance with the *Charlestown Streetscape Master Plan* and Council's *Streetscape Technical Guidelines*.

8 BLOCK CONTROLS

Note: Uses shown in the sections are indicative only.

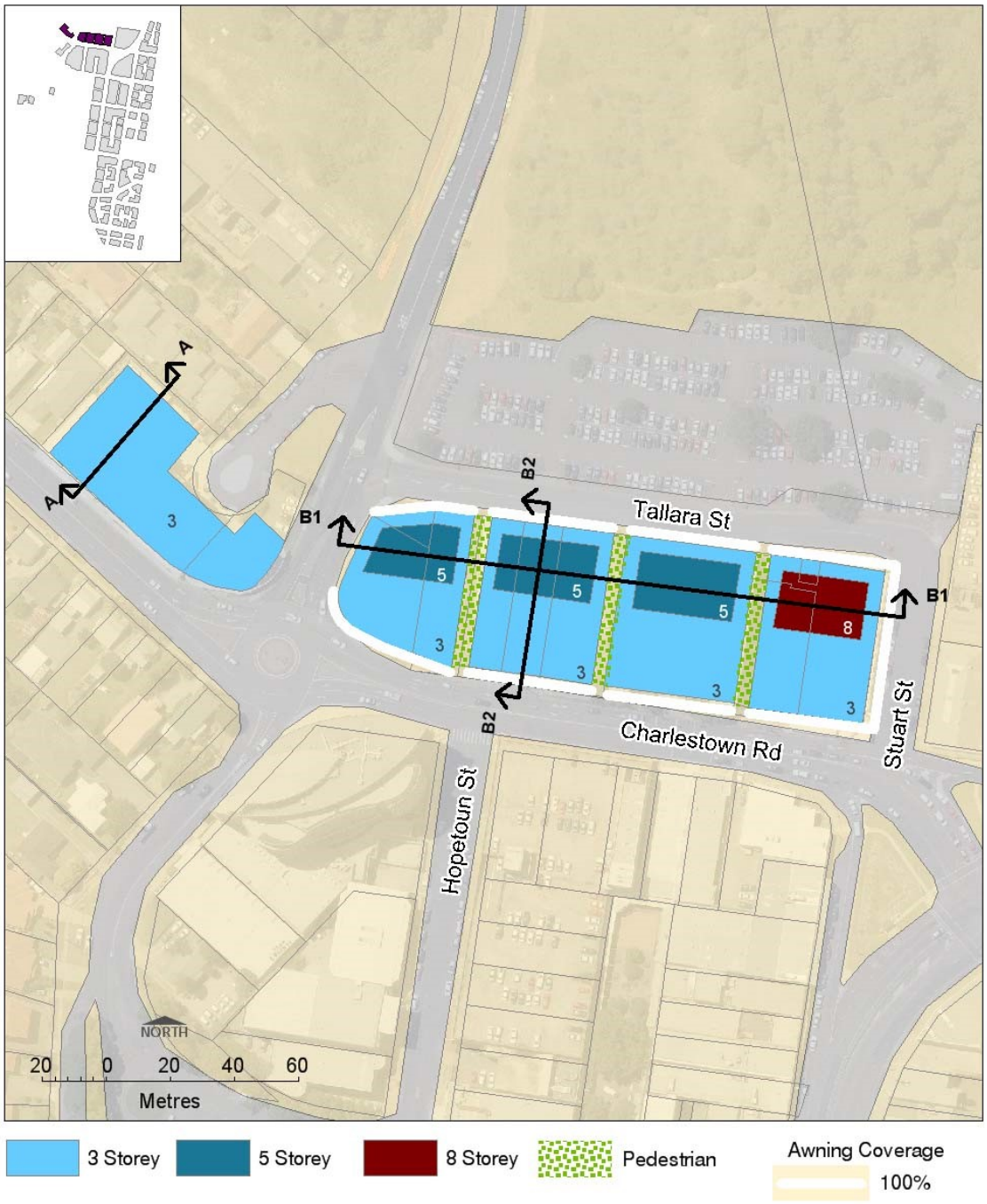


Figure 5 - Block A and B Control Plan

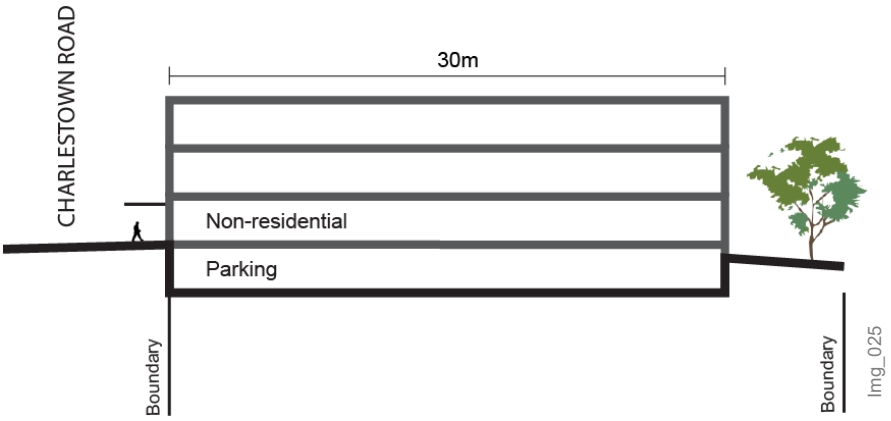


Figure 6 - Block A - Section A1–A1

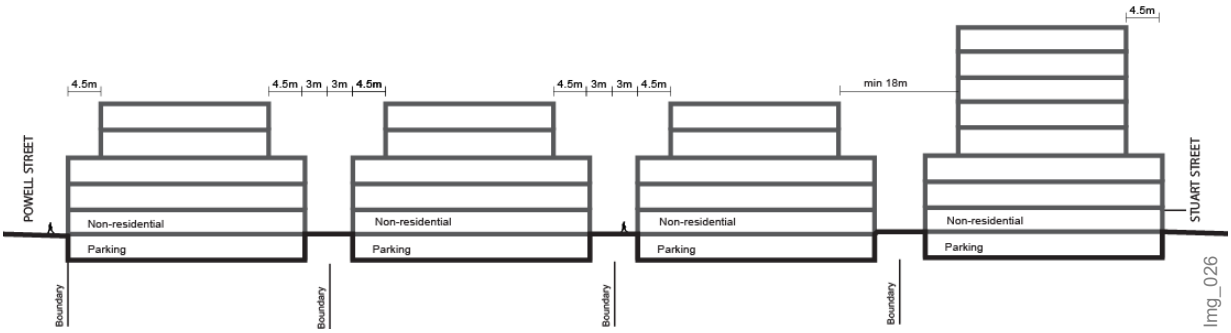


Figure 7 - Block B – Section B1-B1

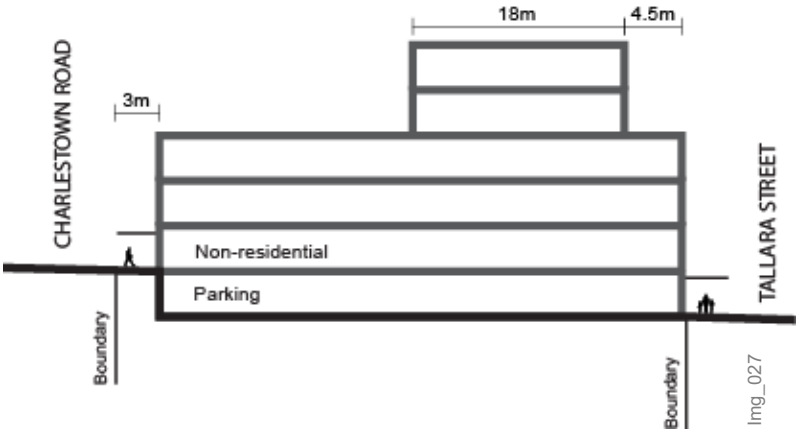


Figure 8 - Block B – Section B2 –B2

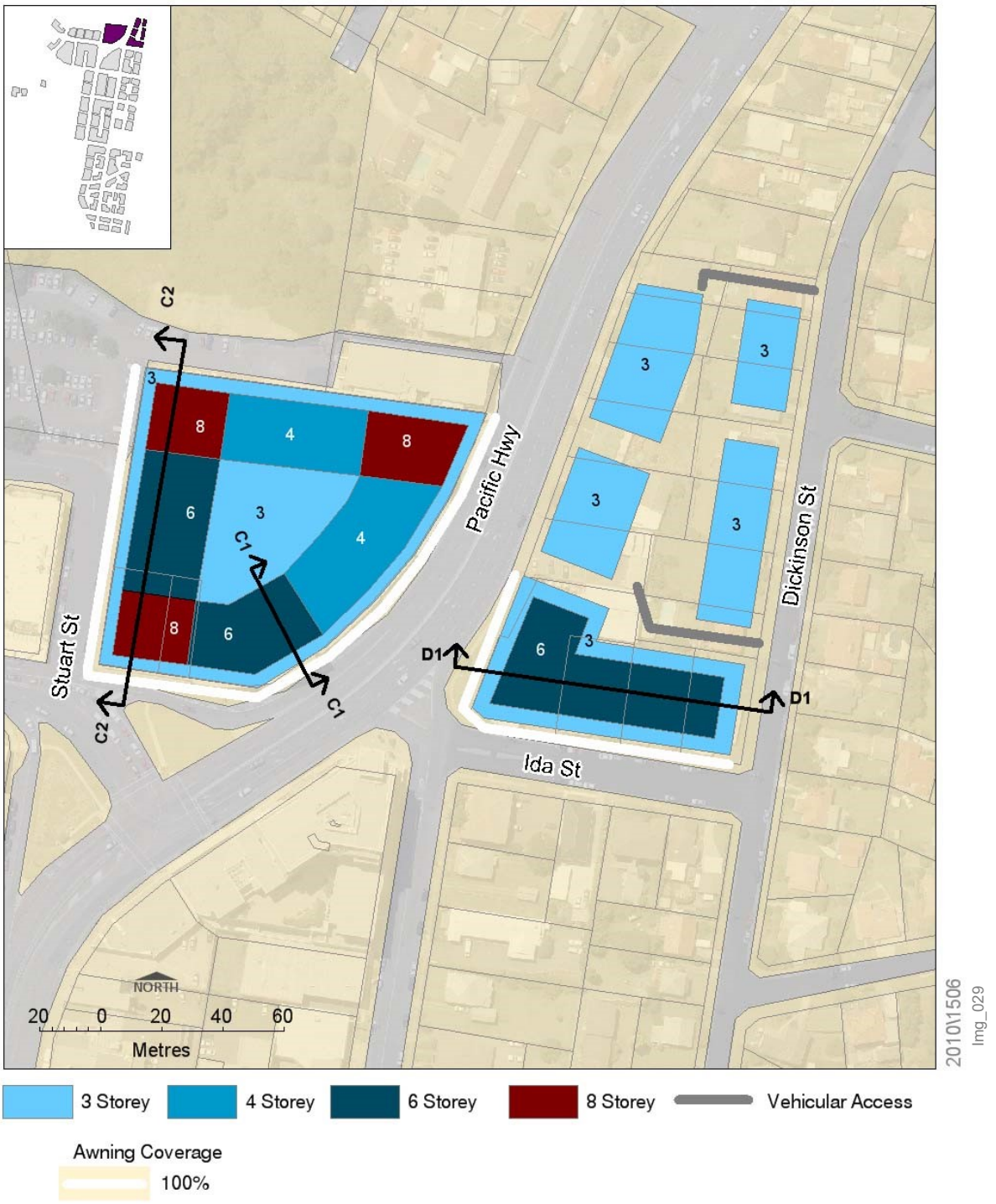


Figure 9 - Block C and D Control Plan

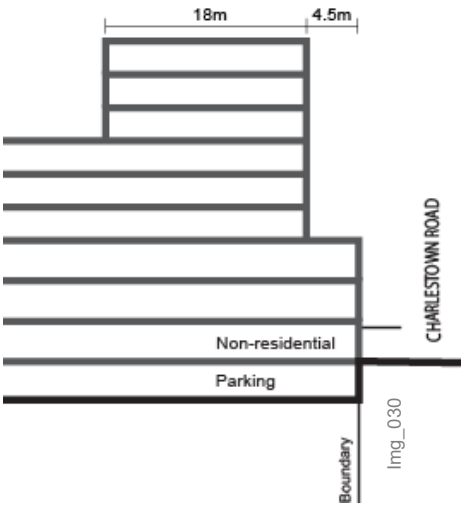


Figure 10 - Block C – Section C1-C1

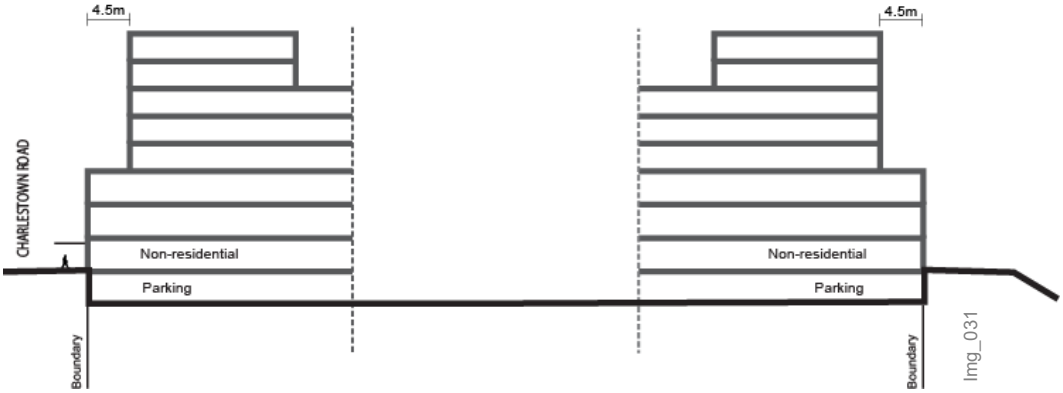


Figure 11 - Block C – Section C2-C2

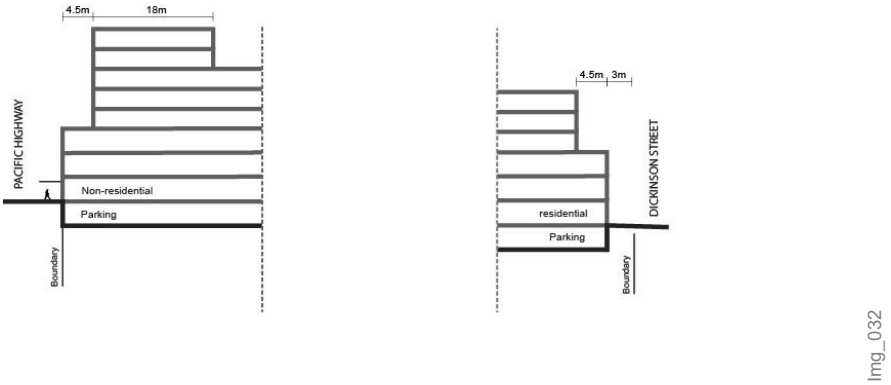


Figure 12 - Block D – Section D1-D1

Figure 13 - Block E and F Control Plan

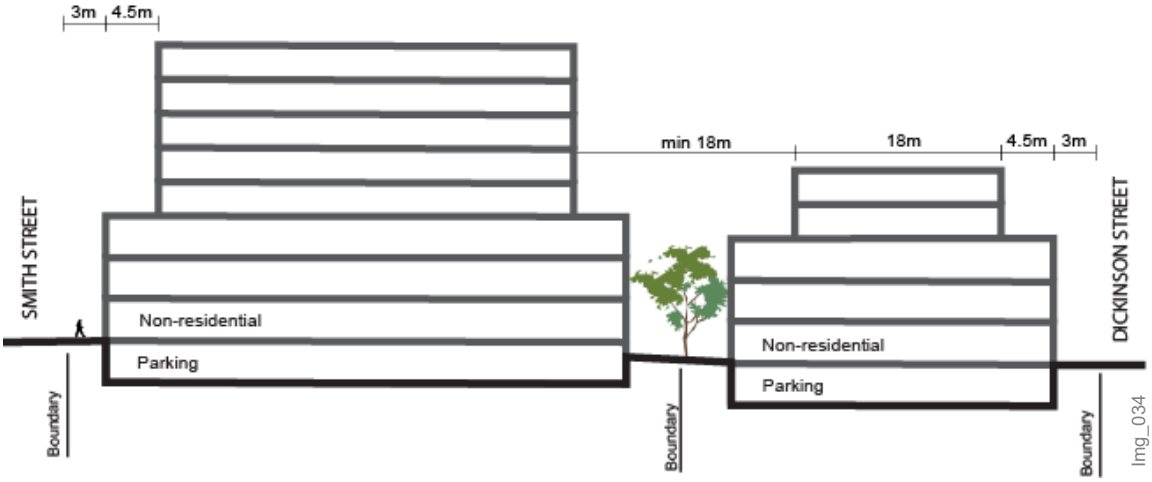


Figure 14 - Block E – Section E1-E1

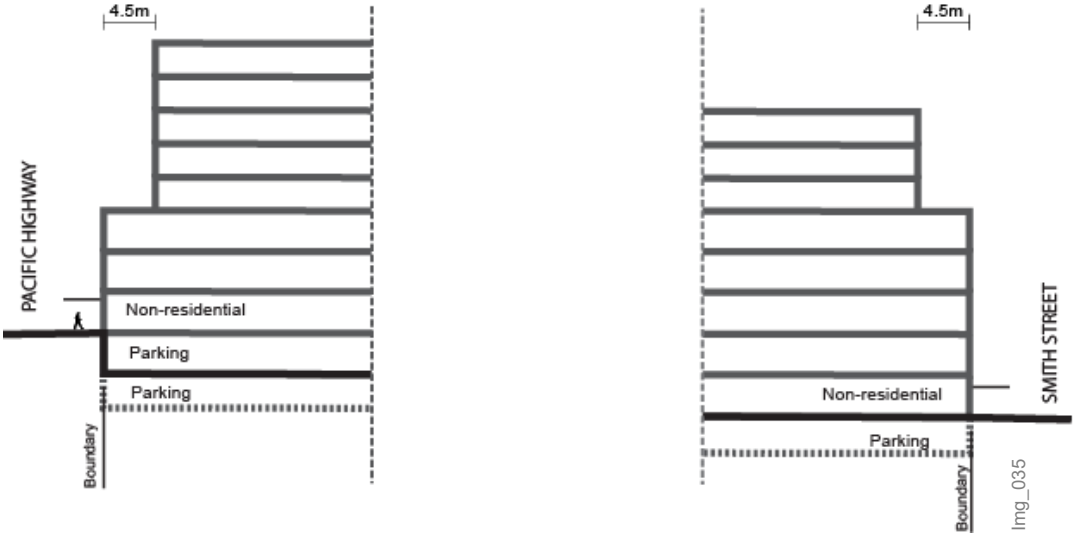


Figure 15 - Block F – Section F1-F1

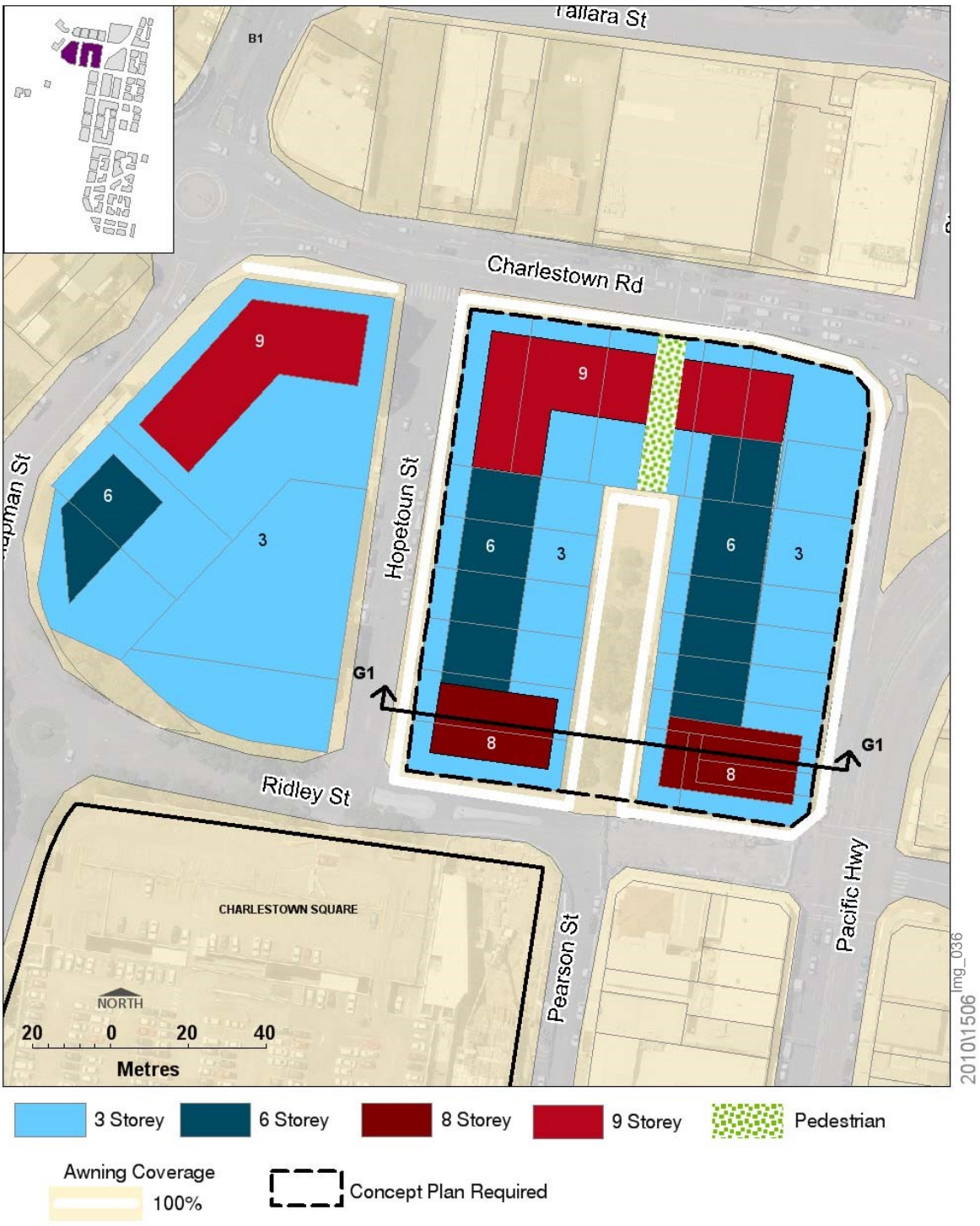


Figure 16 - Block G and H Control Plan

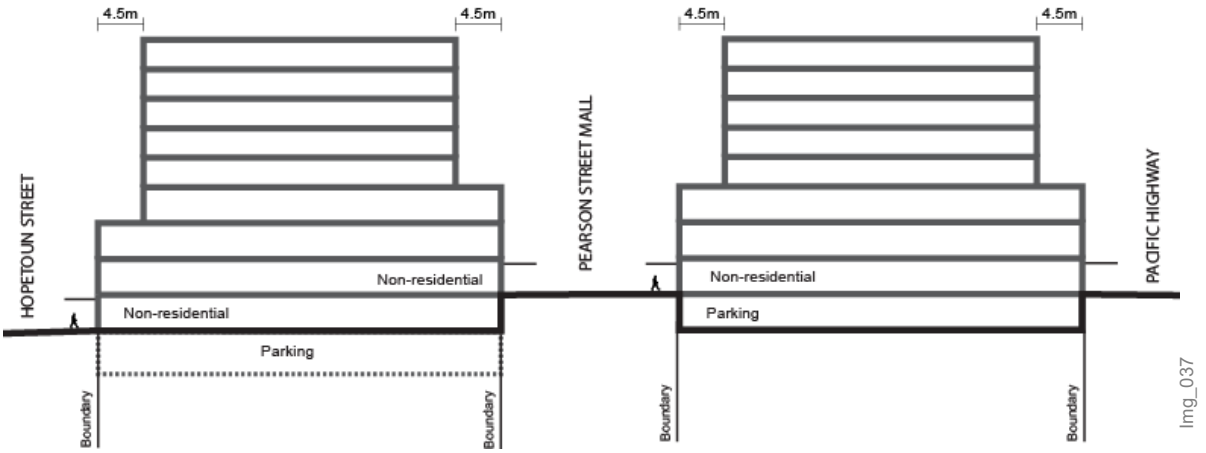


Figure 17 - Block G – Section G1-G1

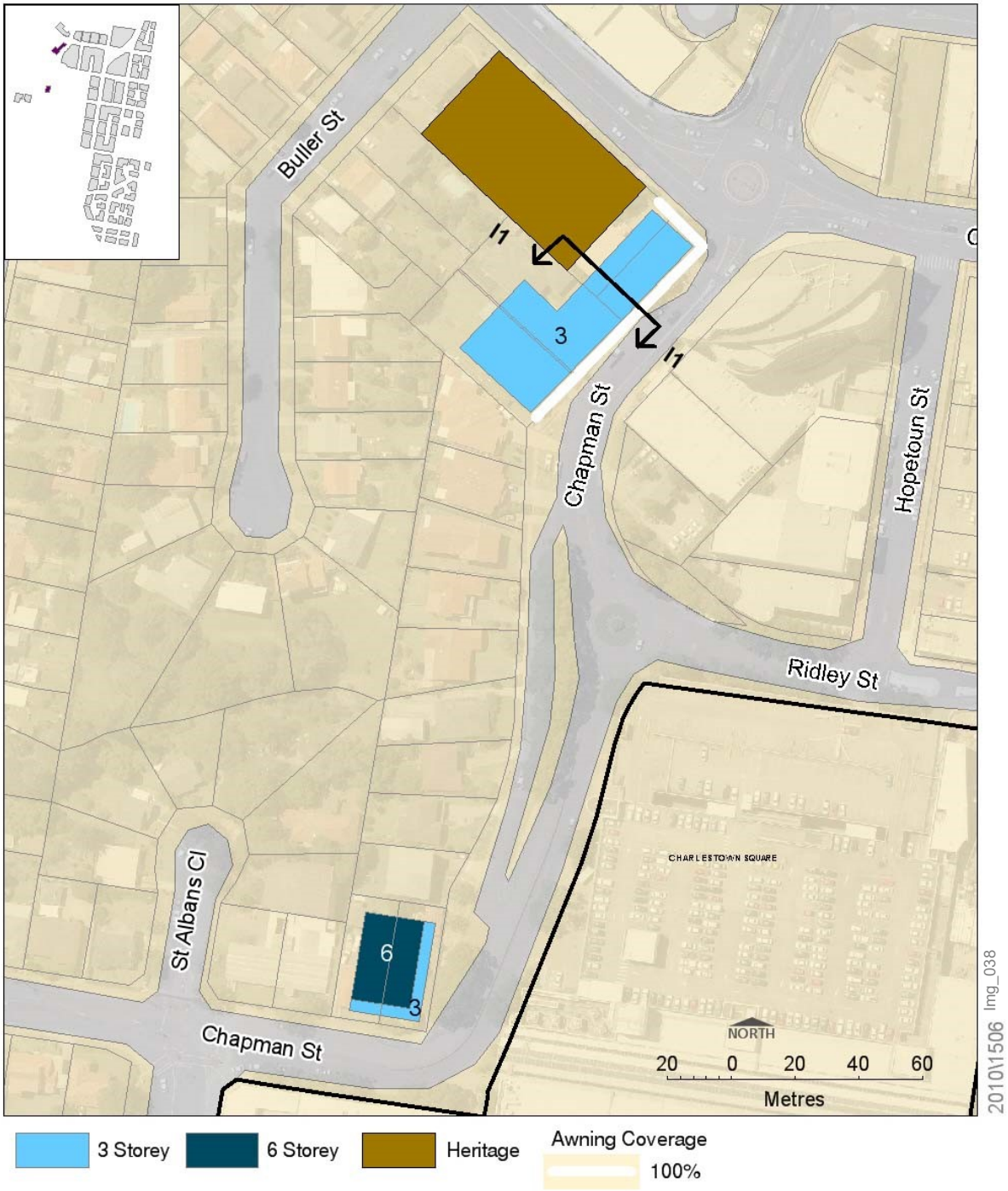


Figure 18 - Block I Control Plan

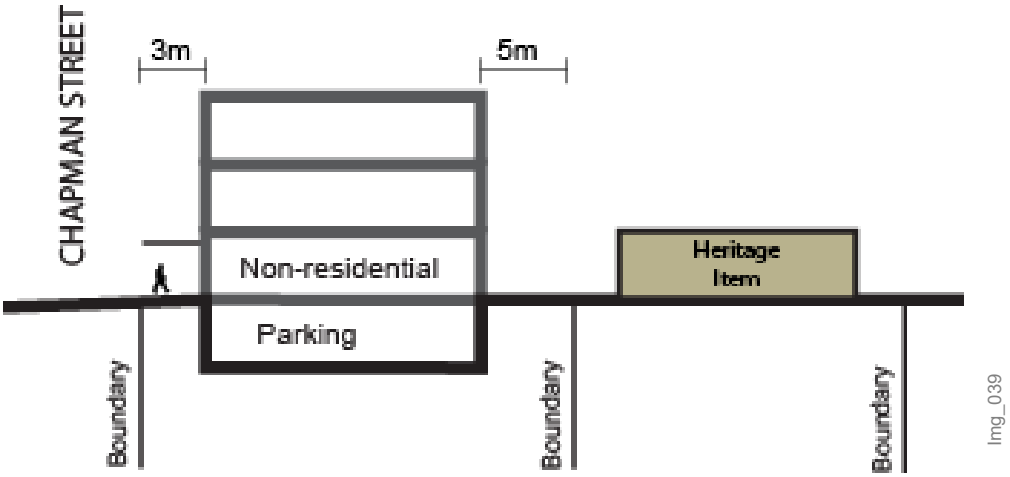


Figure 19 - Block I – Section I1-I1

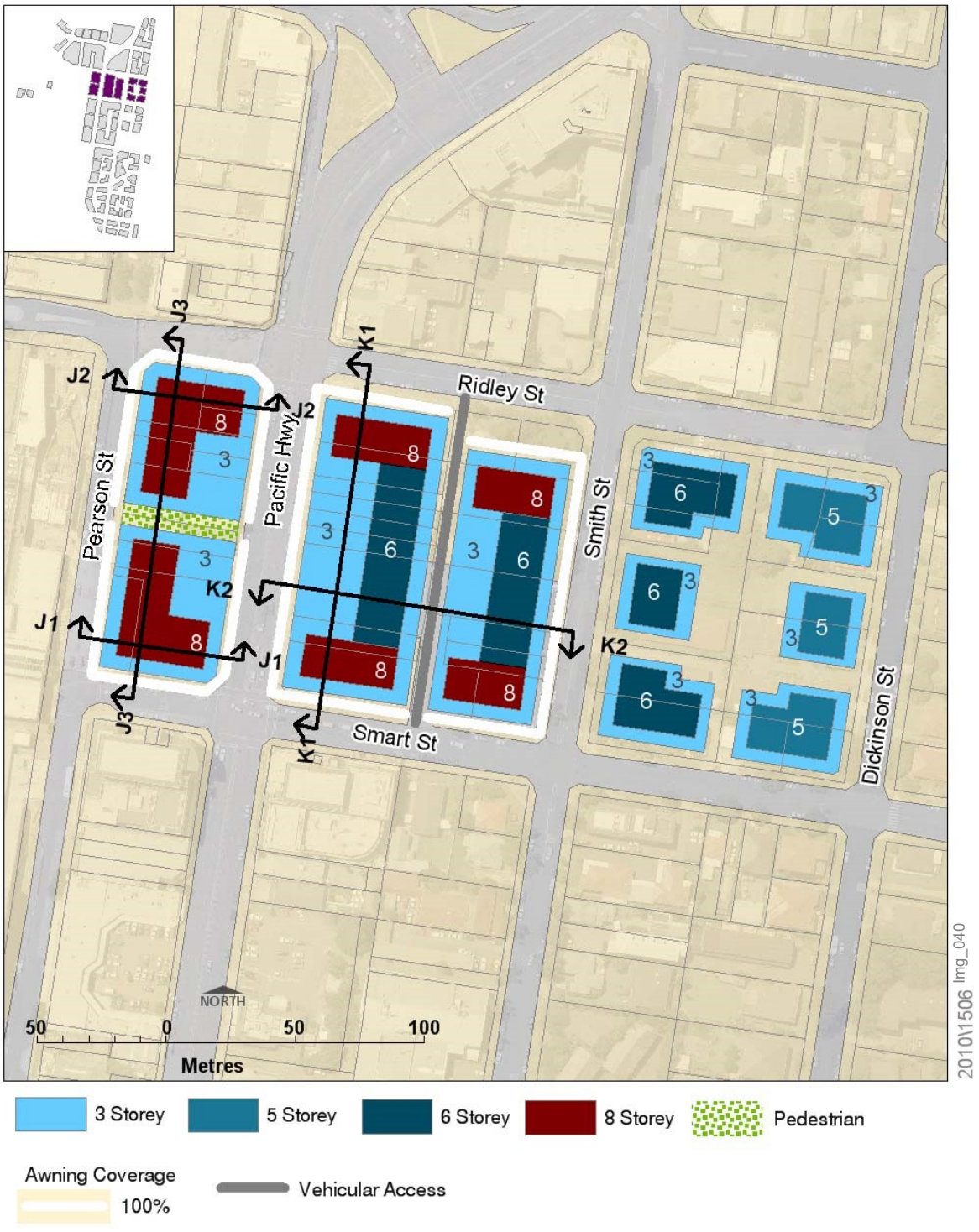


Figure 20 - Block J, K and L Control Plan

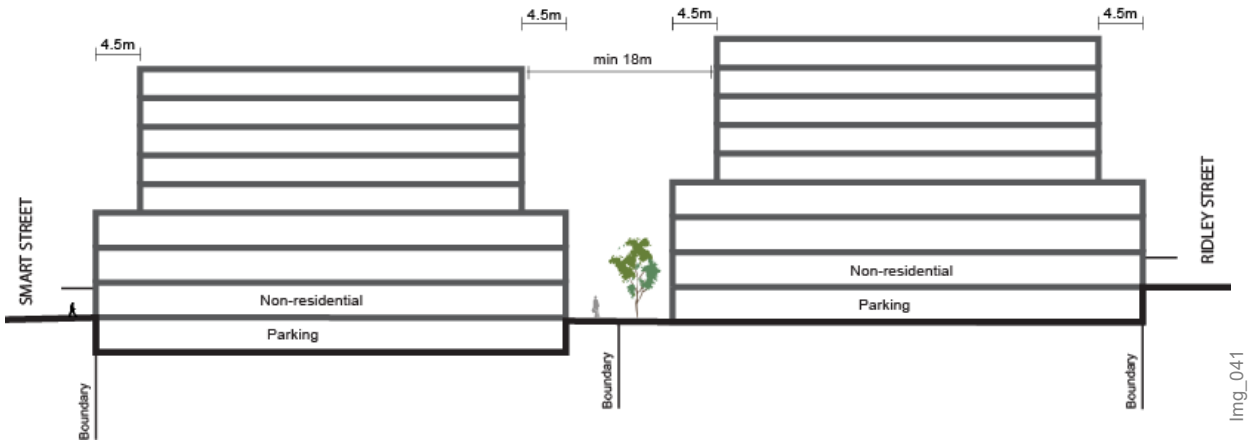


Figure 21 - Block J – Section J1-J1

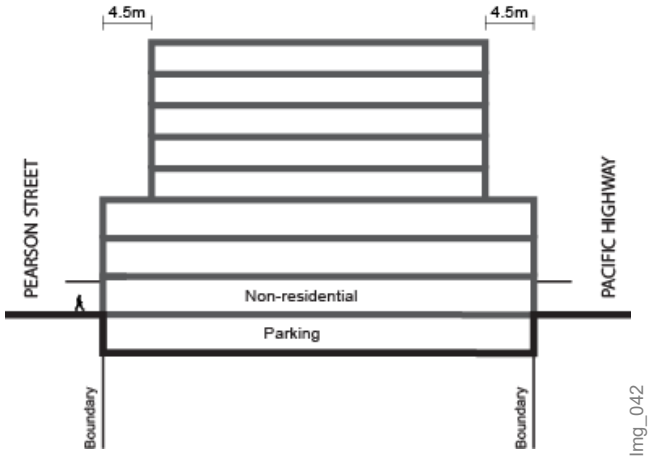


Figure 22 - Block J – Section J2-J2

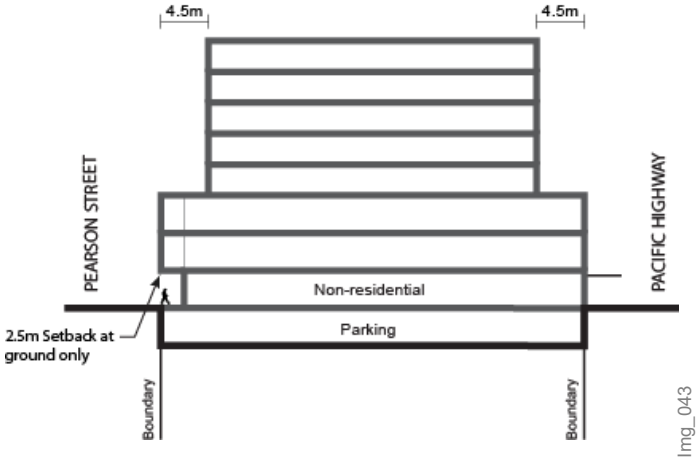


Figure 23 - Block J – Section J3-J3

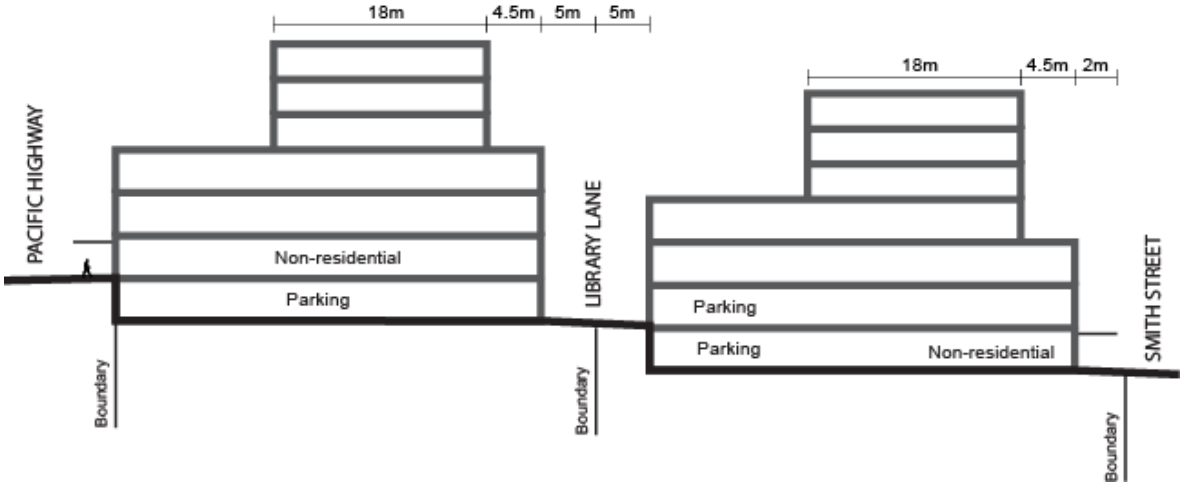


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Figure 24 - Block K – Section K1-K1

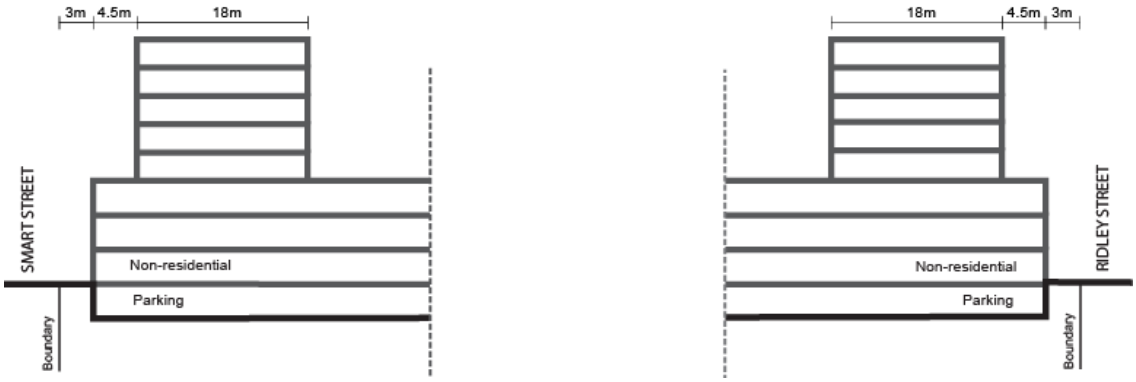

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Figure 25 - Block K – Section K2-K2

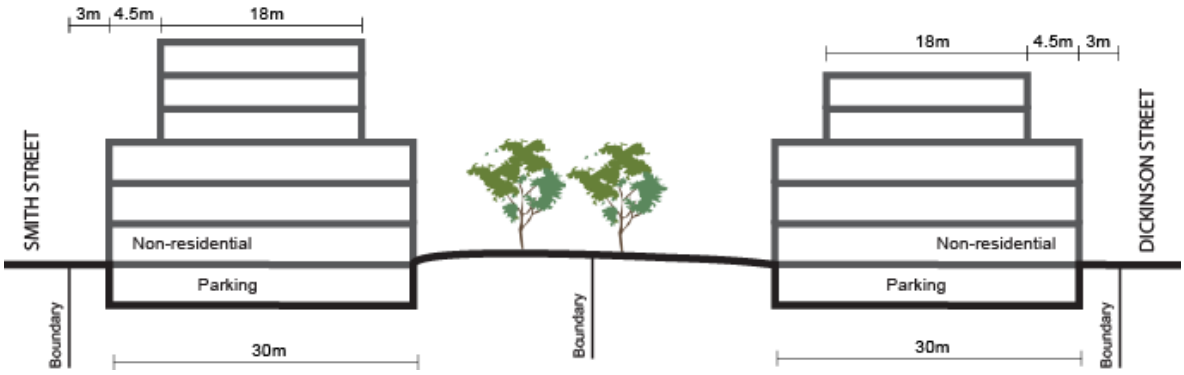

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Figure 26 - Block L – Section L1-L1

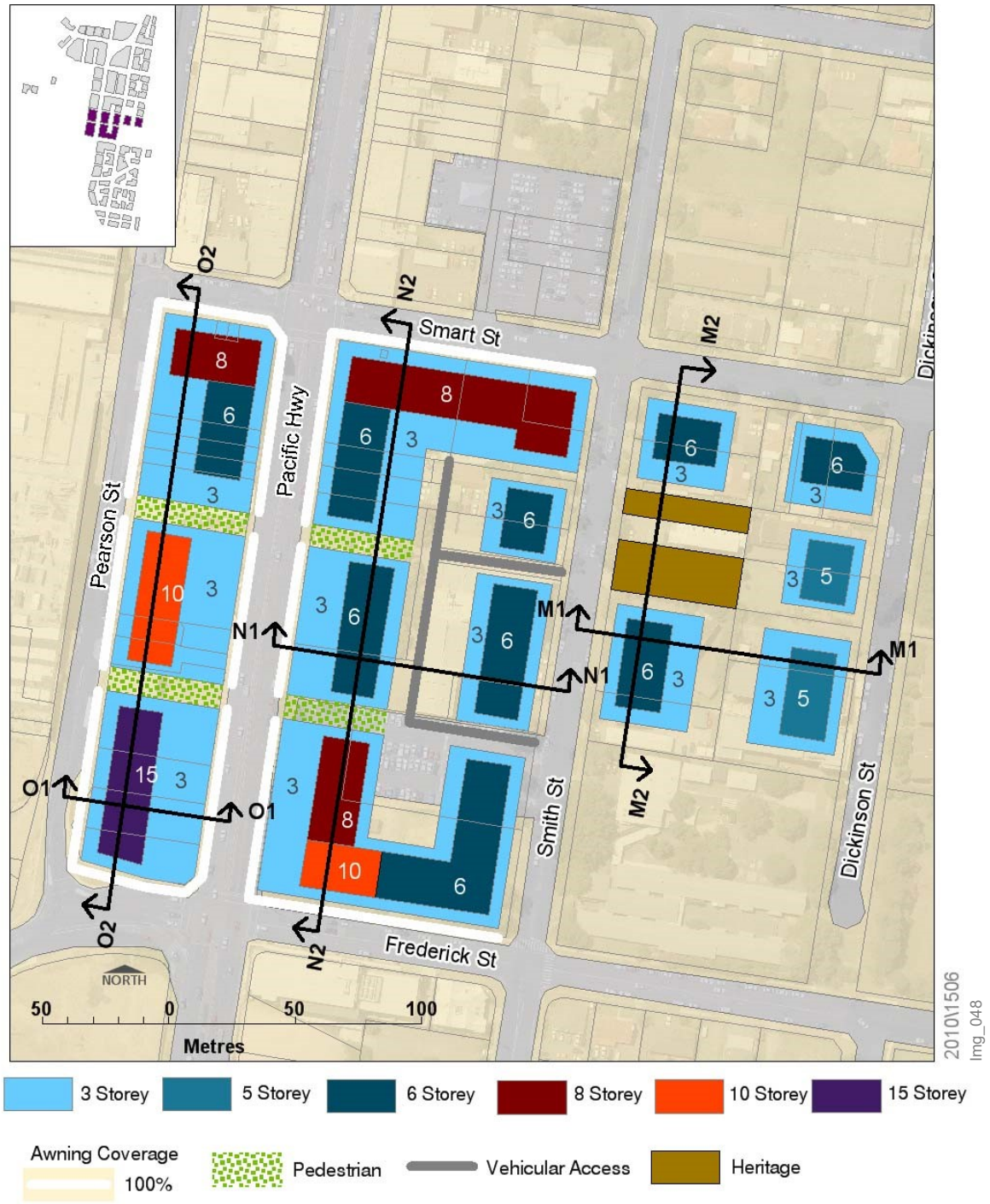

Figure 27 - Block M, N and O Control Plan

Figure 28 - Block M – Section M1-M1

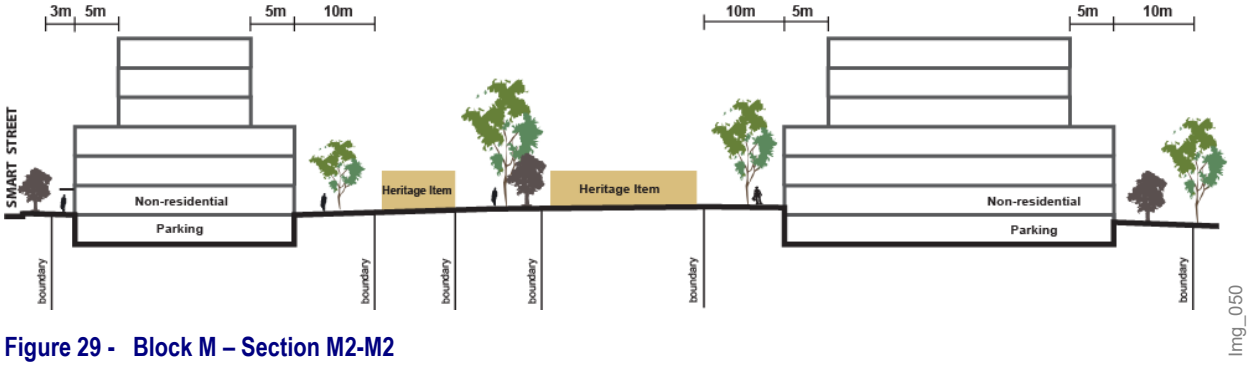

Figure 29 - Block M – Section M2-M2

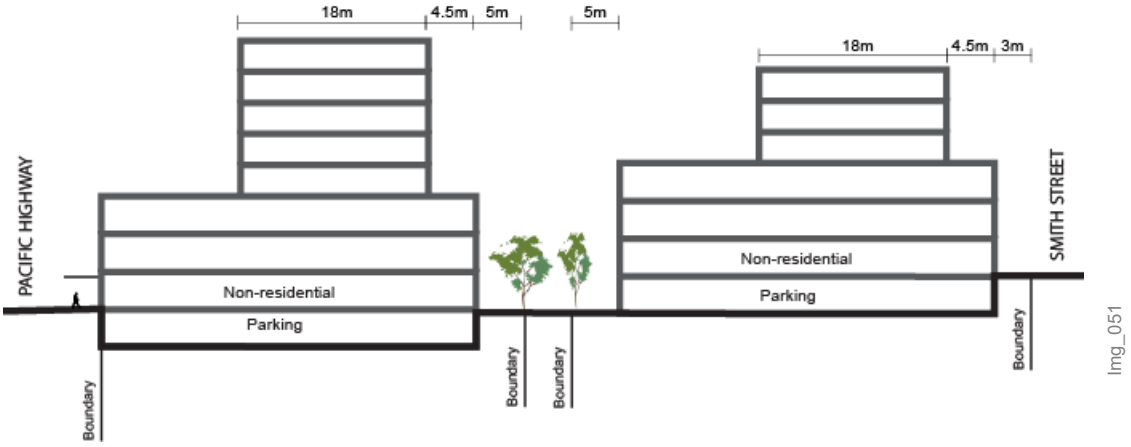

Figure 30 - Block N – Section N1-N1

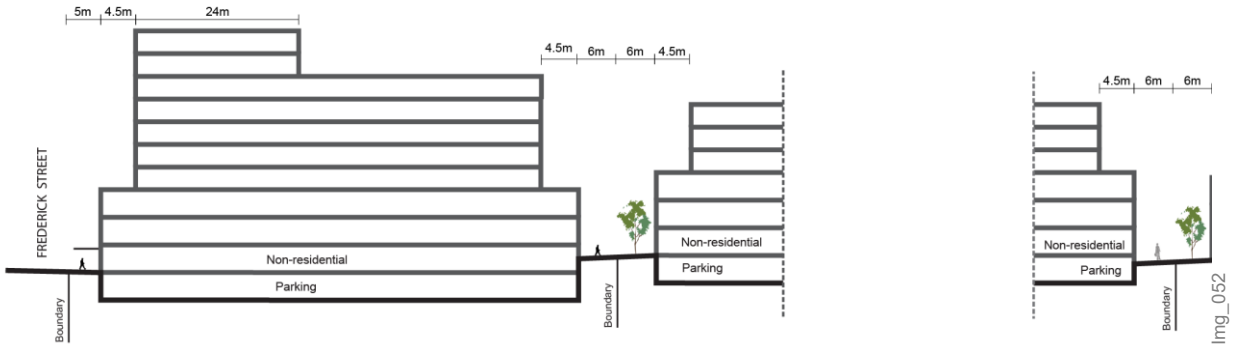

Figure 31 - Block N – Section N2-N2 South

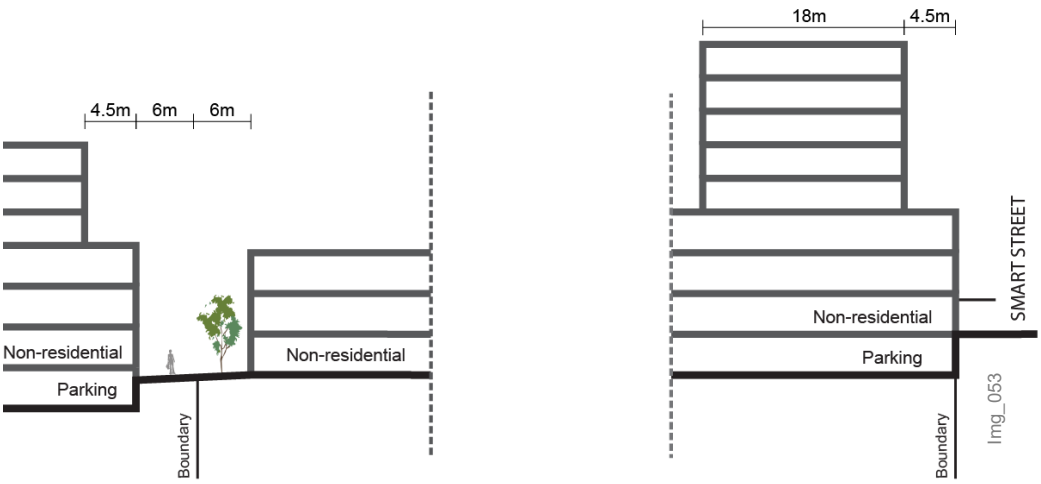

Figure 32 - Block N – Section N2-N2 North

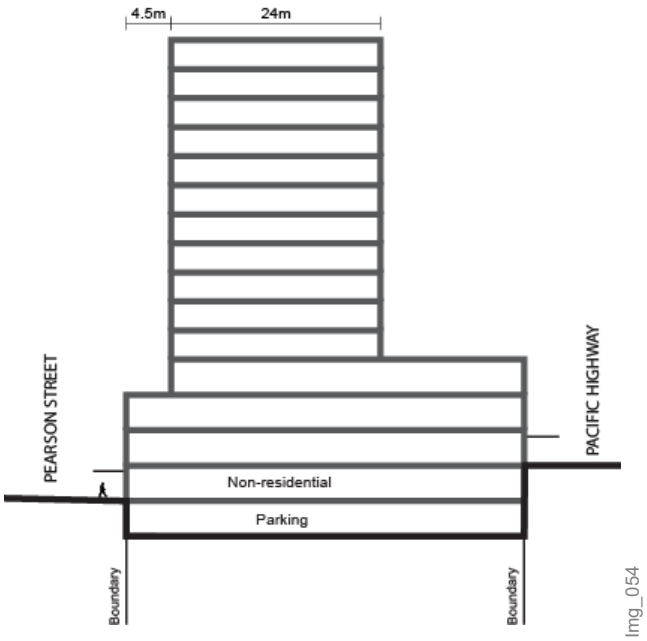

Figure 33 - Block O – Section O1-O1

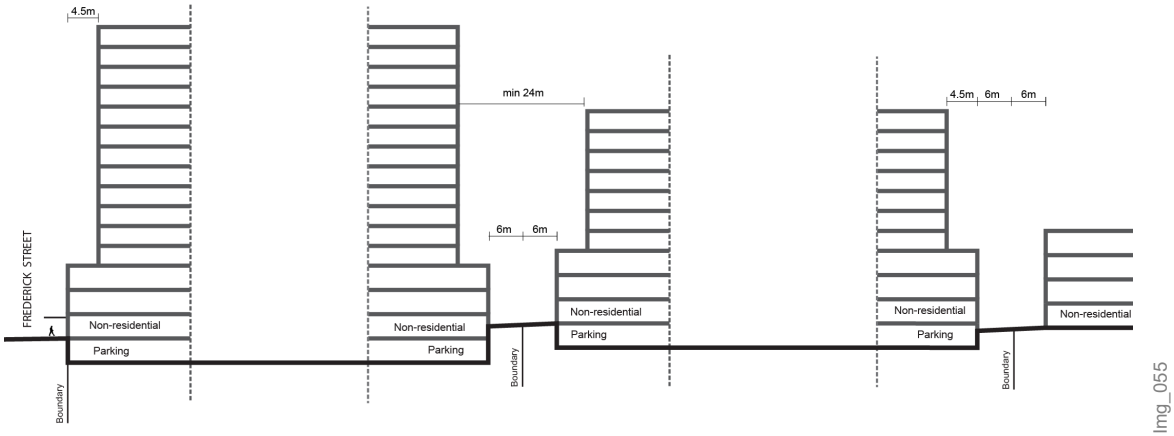

Figure 34 - Block O – Section O2-O2 South

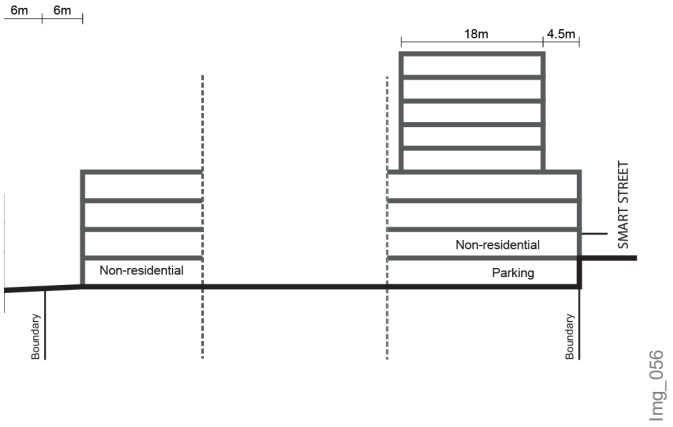

Figure 35 - Block O – Section O2-O2 North

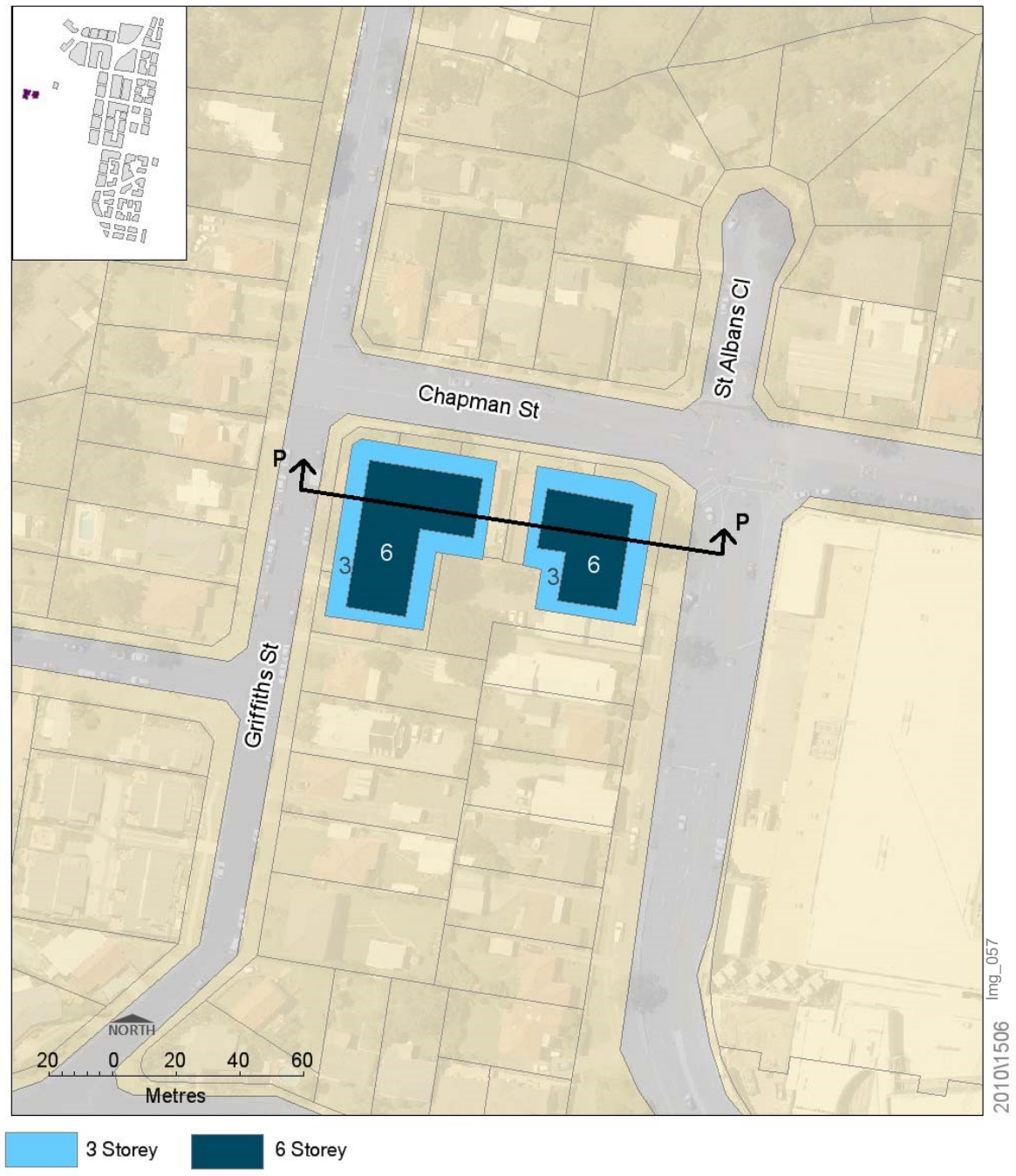

Figure 36 - Block P Control Plan

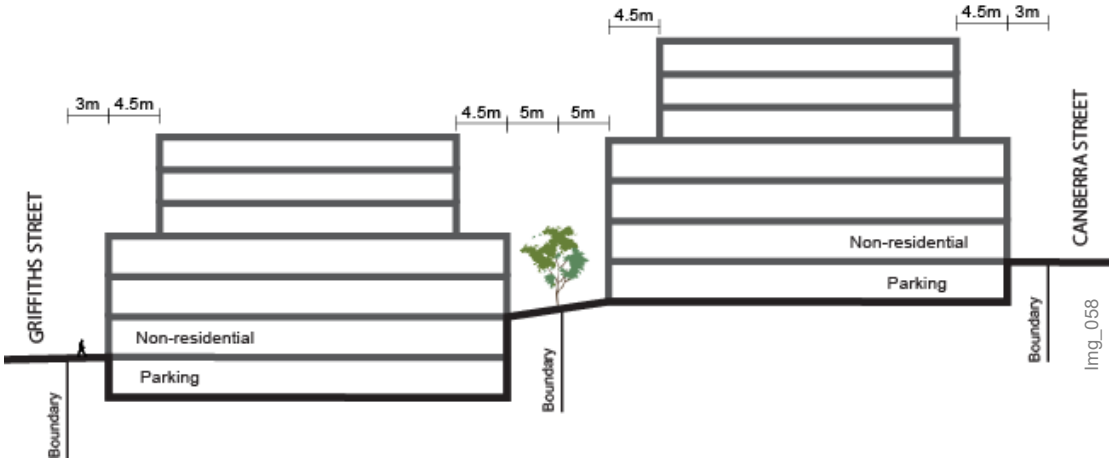

Figure 37 - Block P – Section P1-P1

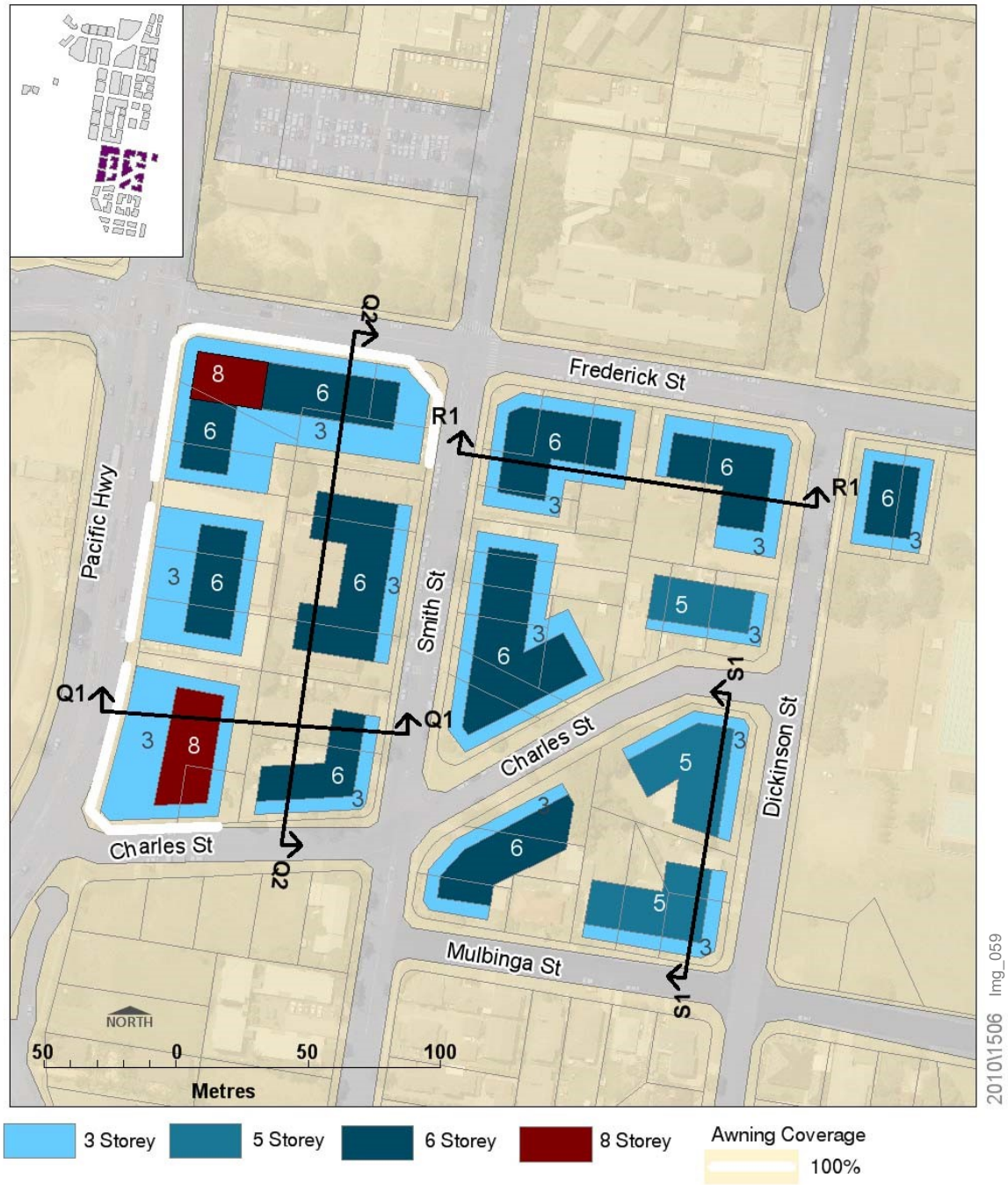

Figure 38 - Block Q, R and S Control Plan

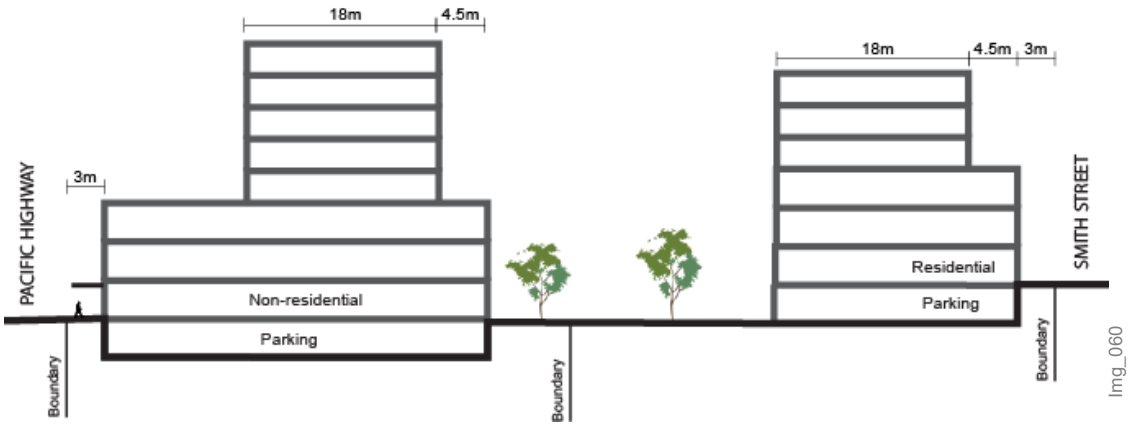

Figure 39 - Block Q – Section Q1-Q1

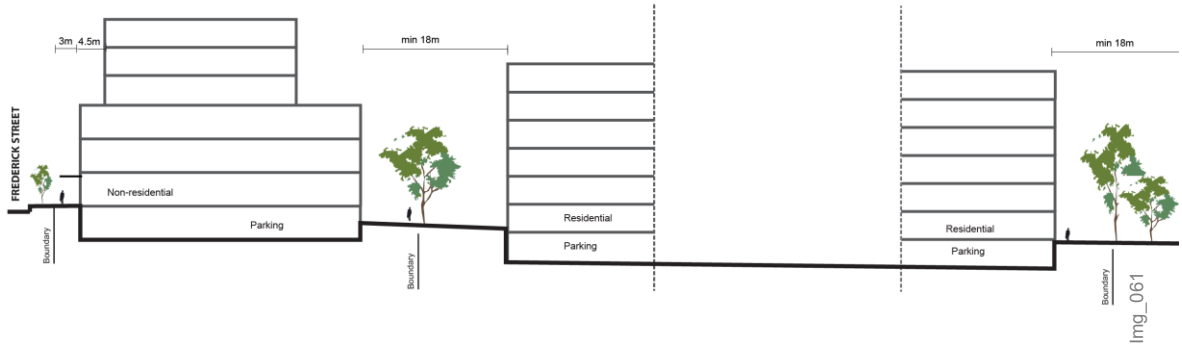

Figure 40 - Block Q – Section Q2-Q2 North

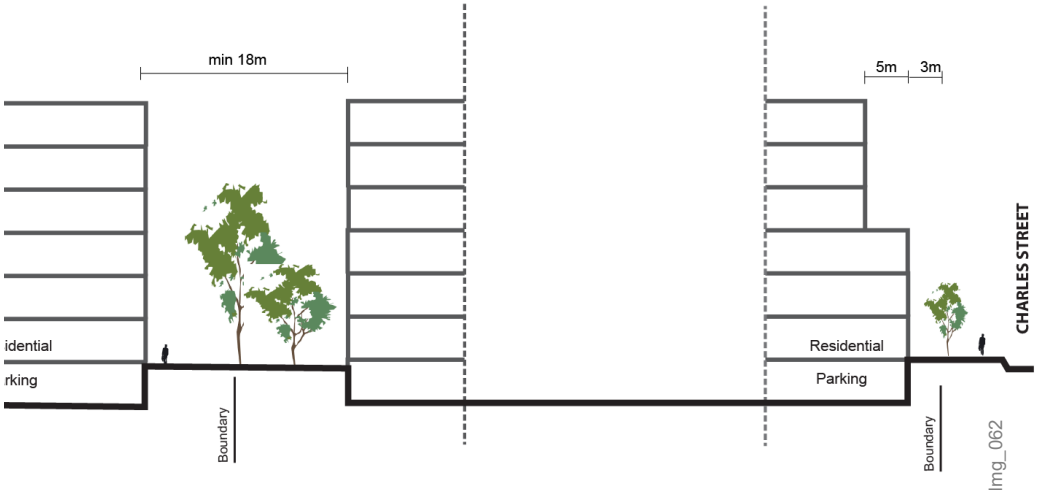

Figure 41 - Block Q – Section Q2-Q2 South

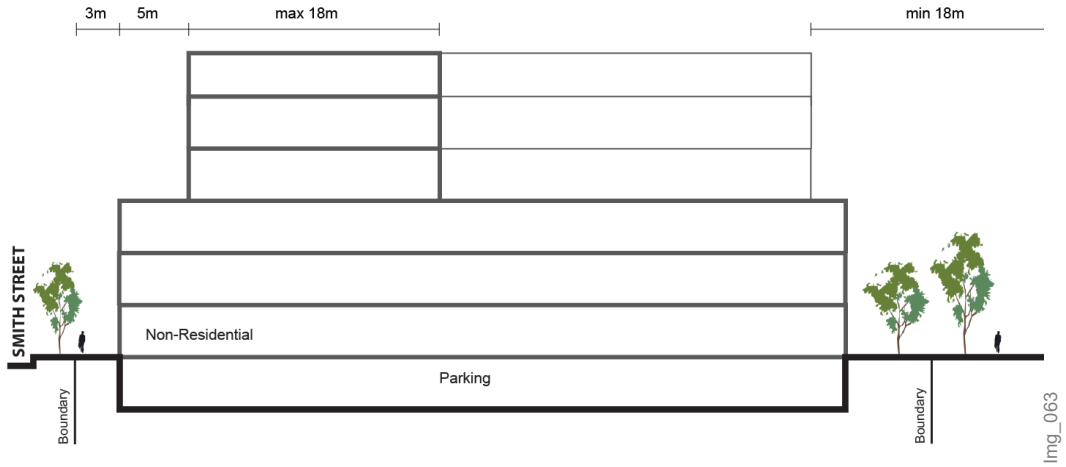

Figure 42 - Block R – Section R1-R1 West

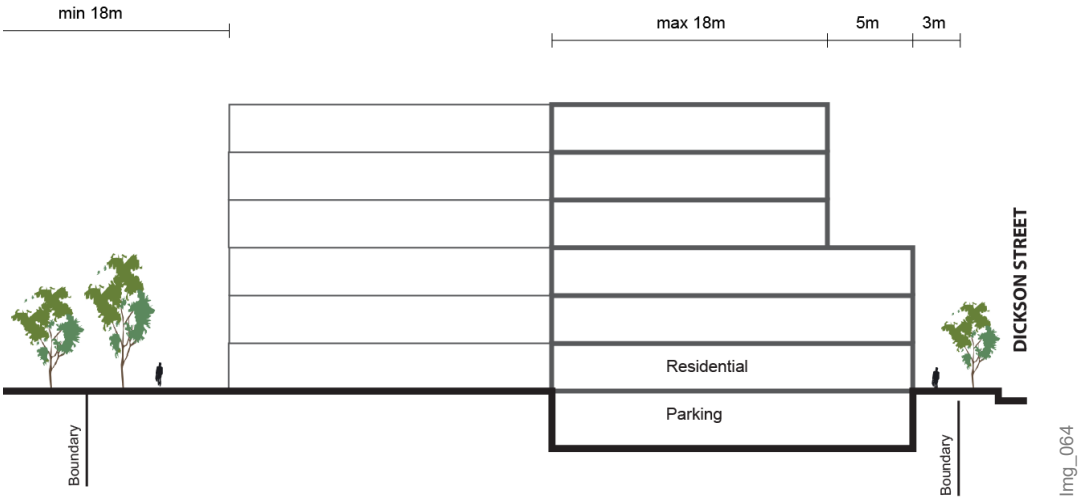

Figure 43 - Block R – Section R1-R1 East

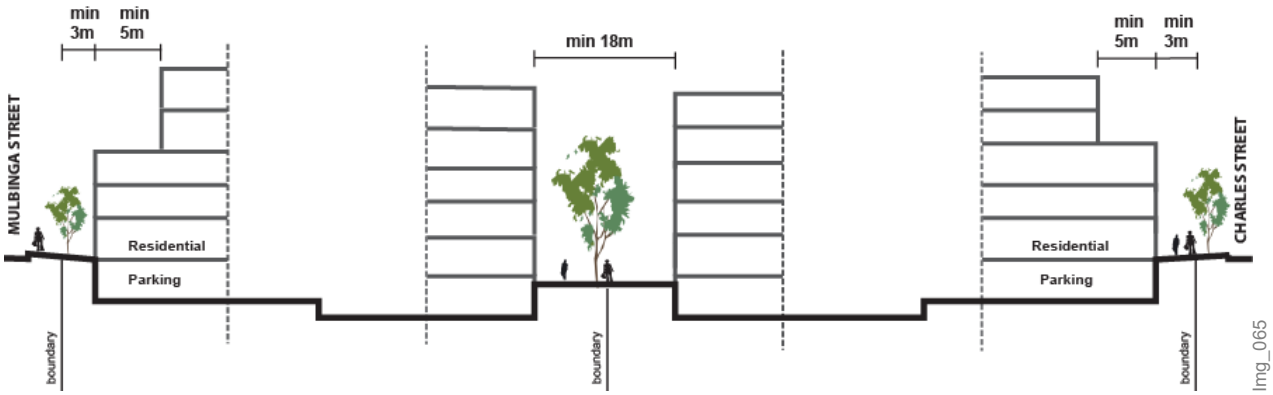

Figure 44 - Block S – Section S1-S1

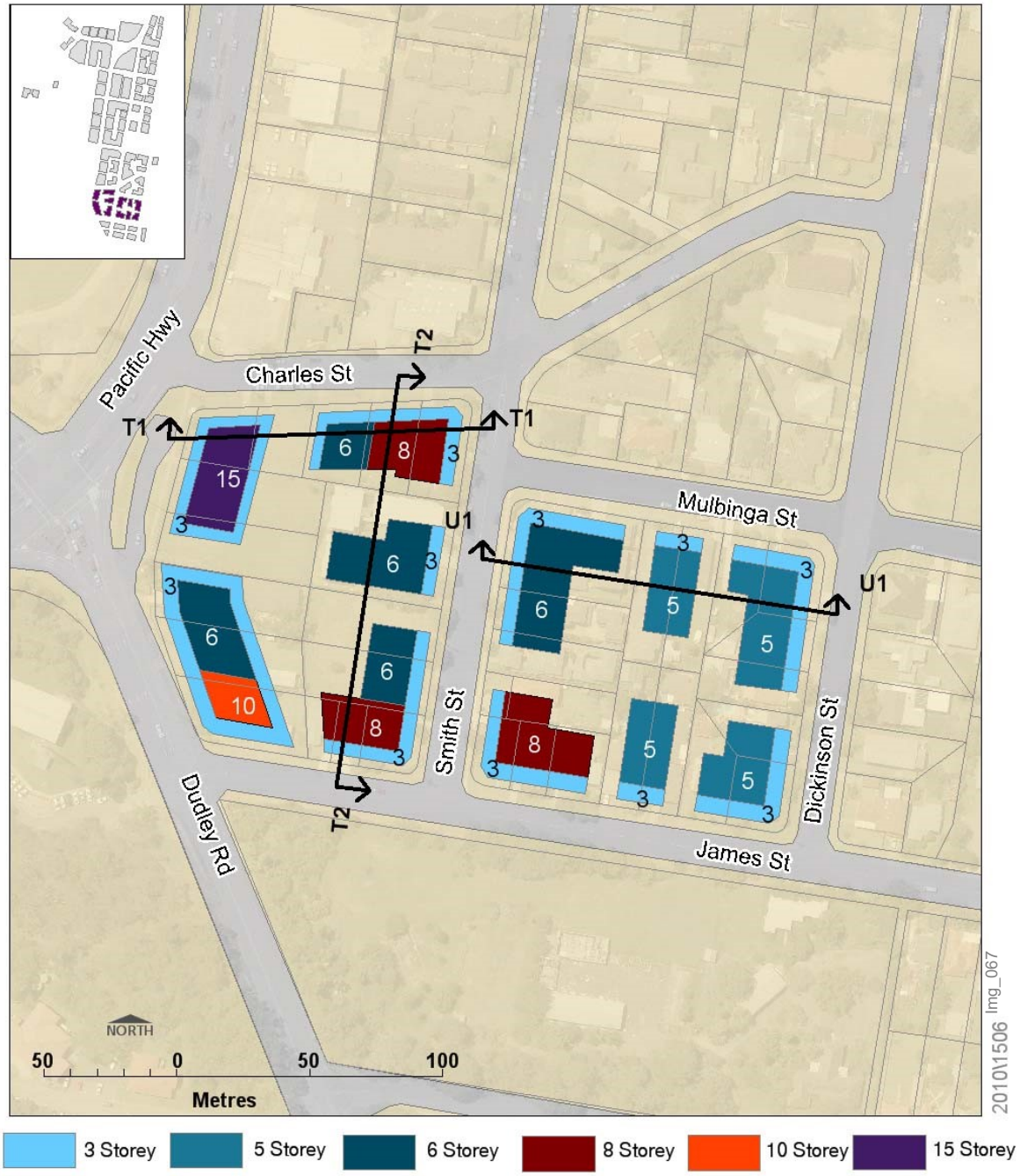

Figure 45 - Block T and U Control Plan

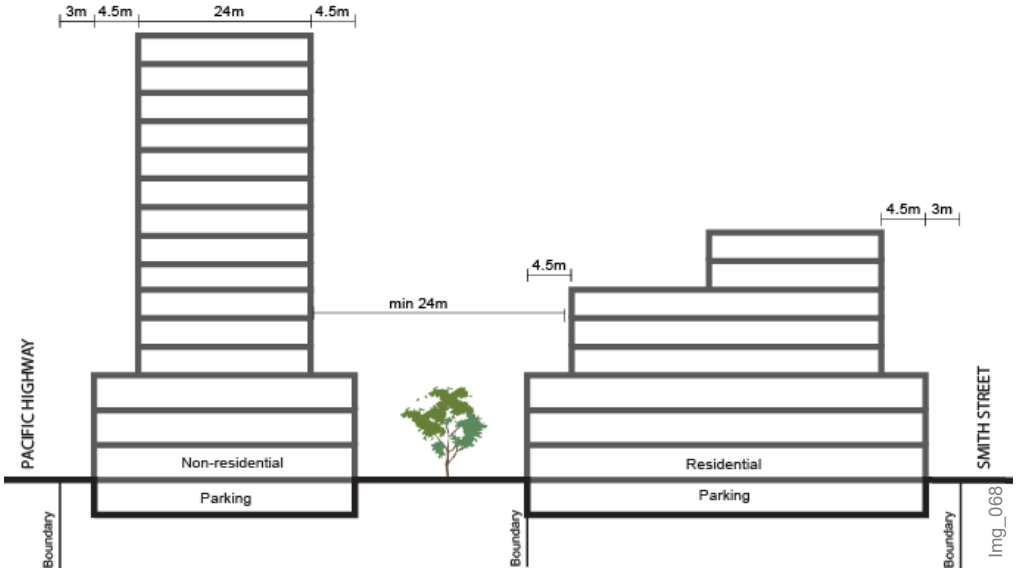

Figure 46 - Block T – Section T1-T1

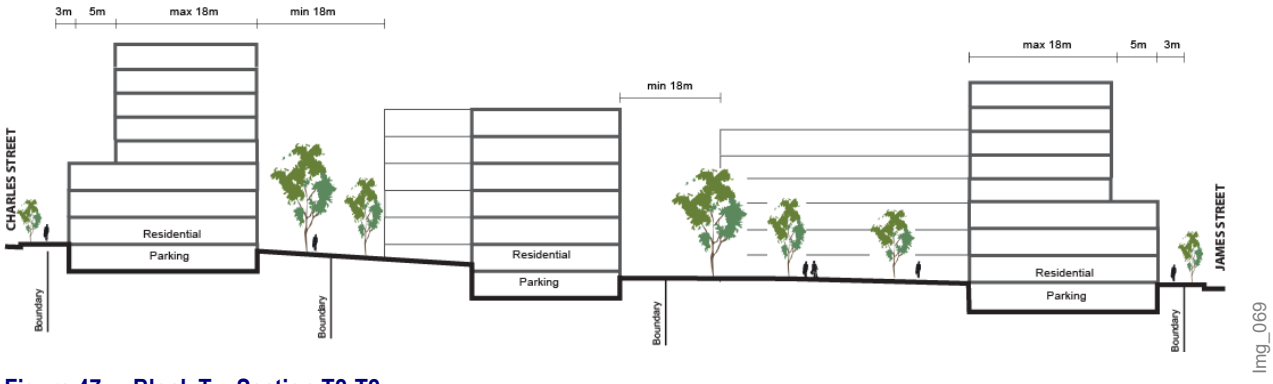

Figure 47 - Block T – Section T2-T2

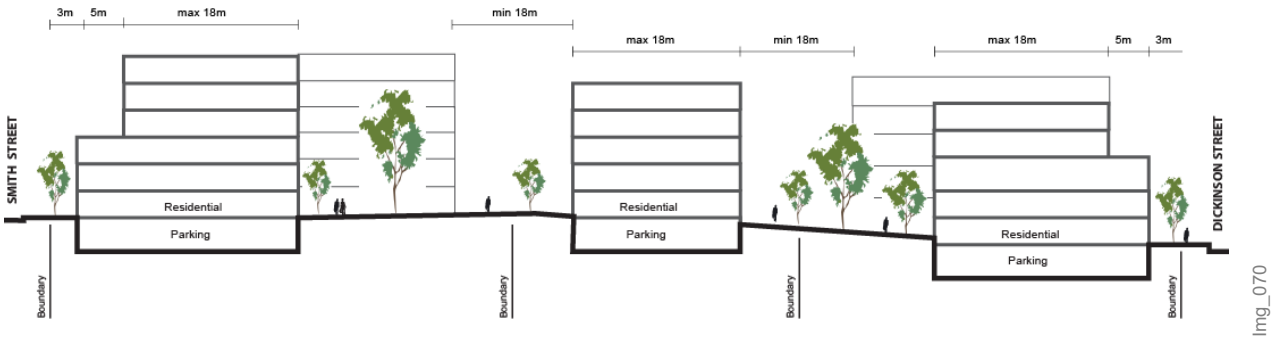

Figure 48 - Block U – Section U1-U1

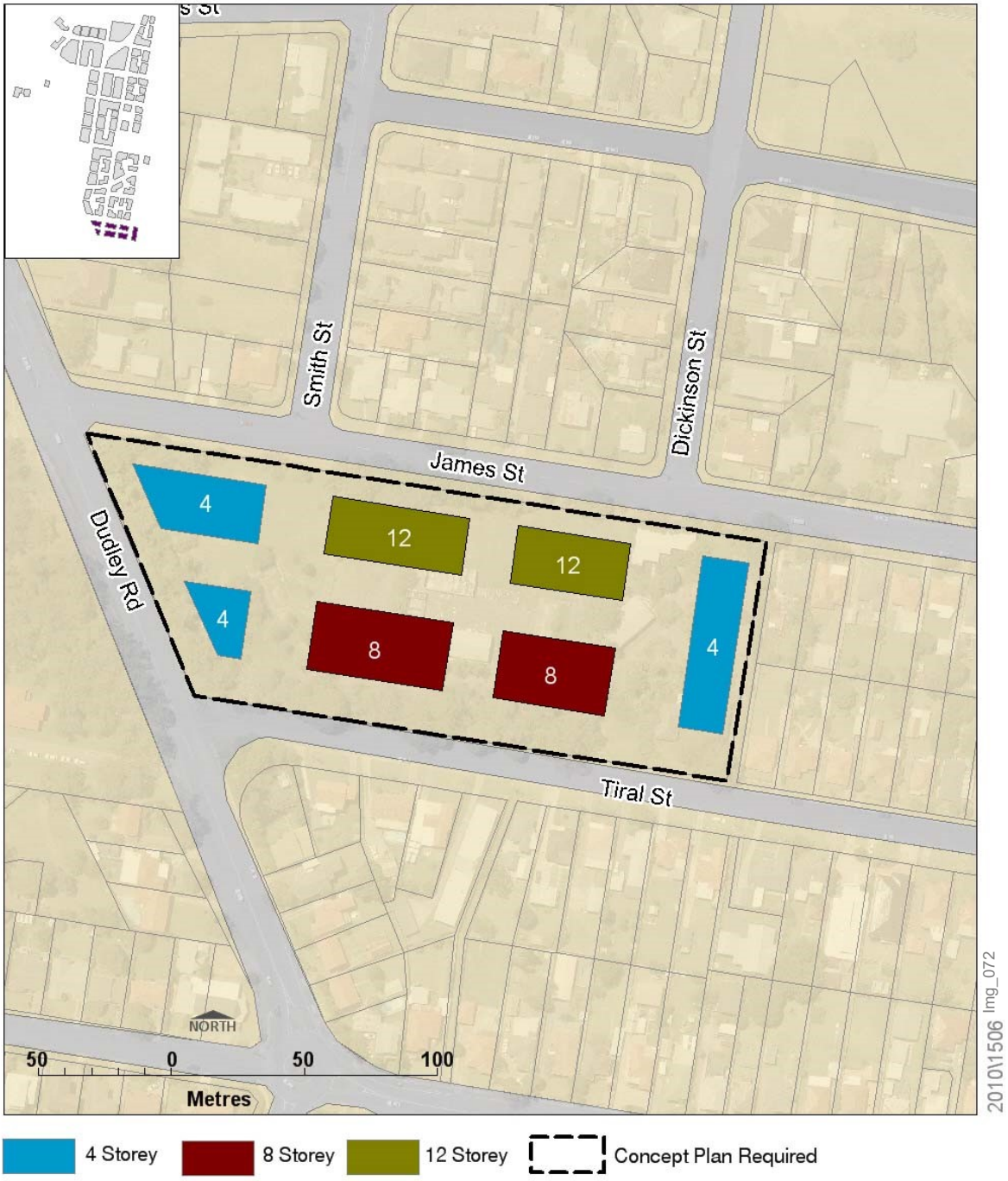

Figure 49 - Block V Control Plan

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LIST OF FIGURES

1 INTRODUCTION

Glendale is a major emerging regional centre within the Lake Macquarie local government area that provides high order retail, commercial and community facilities to the Lower Hunter region. This section contains local objectives and controls for development in the Glendale regional centre, which are in addition to the general provisions contained in:

- Part 4 - Development in Business Zones
- Part 5 - Development in Industrial, Business Park and Infrastructure Zones
- Part 7 - Development in Environment Protection Zones
- Part 8 - Subdivision Development

Where conflict arises between this section and others parts of the DCP, the controls in this Area Plan take precedence.

Note: For details of the matters considered as part of preparing this Area Plan, refer to the 'Glendale Regional Centre Planning Report'. Additional planning for the Glendale regional centre is also in progress and includes planning for the Lake Macquarie Transport Interchange and Section 7.11 development contributions. This Area Plan will be updated as the additional planning is completed.

1.1 EXTENT OF AREA PLAN

The Glendale regional centre is located at the northern end of the Lake Macquarie local government area, approximately 16km southwest of Newcastle CBD and 7km northwest of Charlestown. This Area Plan applies to the land shown in Figure 1.

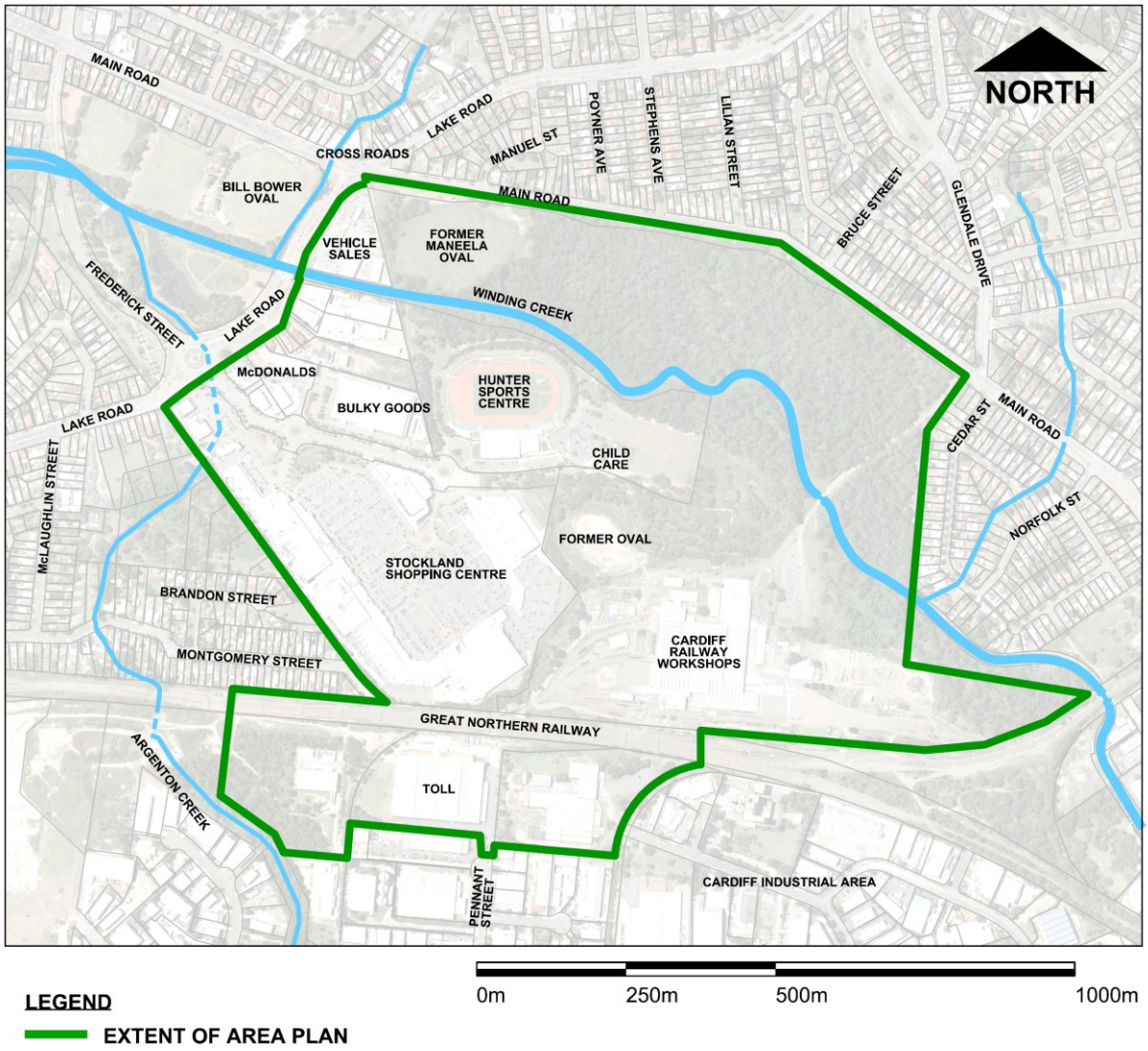


Figure 1 - Extent of the Area Plan

1.2 HISTORY

The Glendale regional centre is located within the traditional country of the Awabakal people. European settlement in the area began in the 1830-40s and consisted of small-scale agriculture and coalmining.

The Cardiff Railway Workshops commenced operations in the 1920s. The workshops played an important role in the manufacture and maintenance of locomotives and rolling stock within NSW – a role continuing to this day.

Commercial and retail activity was initially located at the intersection of Main Road and Lake Road (the 'cross roads'). Major retail development commenced south of the cross roads during the late 1980s and continued during the 1990s. Development of the Hunter Sports Centre occurred during the mid-1990s.

1.3 EXISTING CHARACTER

Topography

The Glendale regional centre is located on a flat valley floor surrounded by hills and ridgelines. Winding Creek is a natural watercourse that flows through the middle of the regional centre. Munibung Hill and the Watagan Mountains are visible in certain locations.

Activities and uses

The Glendale regional centre includes a range of existing retail, sporting and industrial uses. Retail uses include major discount department stores, supermarkets, cafes and fast food outlets. A cinema complex is also present as well as a service station, hardware stores and car yards. Sporting uses include regional level athletics, gymnastics and trampoline facilities (Hunter Sports Centre). Industrial uses include railway workshops and a transport depot. Remnant native vegetation also covers a significant portion of the regional centre area.

Built form

The built form within the Glendale regional centre varies reflecting the retail, sporting and industrial uses of the buildings. Buildings are all generally single storey.

1.4 ENVIRONMENTAL ATTRIBUTES AND CONSTRAINTS

Winding Creek Water Course

Winding Creek is a significant landscape feature located in the middle of the Glendale regional centre, however, land adjacent to Winding Creek is also flood prone as shown in Figure 2.

Biodiversity values

Remnant native vegetation is located within the Glendale regional centre as shown in Figure 2 and contains significant biodiversity values including threatened species of flora and fauna and an endangered ecological community. The remnant vegetation also has very high scenic values, bushfire risk and includes an Aboriginal scar tree.

Mine Subsidence

Abandoned underground coal seam mine workings are located north of the Great Northern Railway as shown in Figure 2. Mine subsidence is anticipated in this area and is likely to limit building heights.

Land contamination

The Glendale regional centre has potential land contamination. The regional centre was previously zoned for industrial uses and past/ongoing activities on the land, and in the surrounding area, have included the Cardiff Railway Workshops, Great Northern Railway and the former Pasminco Lead Smelter.

Noise and Vibration

Lake Road and Main Road experience high levels of road traffic noise, and movement along the Great Northern Railway generates railway noise and vibration.

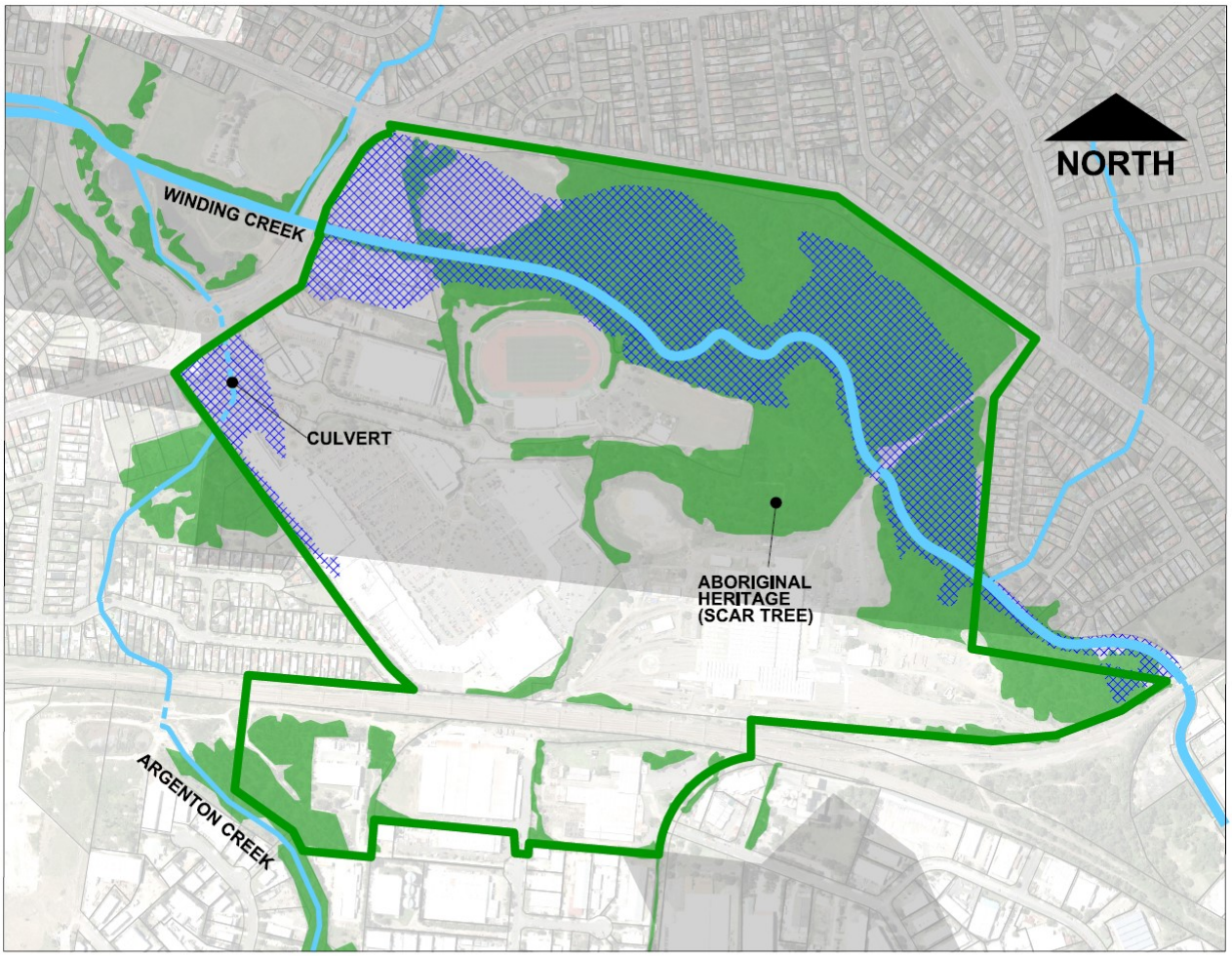


Figure 2 - Indicative extent of flood prone land, native vegetation and mine subsidence

1.5 DESIRED FUTURE REGIONAL CENTRE CHARACTER

Glendale Regional Centre Master Plan

In 2010, Council adopted the Glendale Regional Centre Master Plan following public exhibition. The vision outlined by the Master Plan is that "*Glendale will become the major urban focus for the City of Lake Macquarie",* and that the Glendale regional centre will provide intensive retail, office, entertainment, sporting and residential activities and uses.

Regional Centre Structure

The desired urban structure for the Glendale regional centre is outlined in Figure 3, and intends to provide an overall structure to allow the regional centre to develop in accordance with the Glendale Regional Centre Master Plan vision in the long-term. The regional centre structure is based on the following principles:

- Principle 1: To encourage expansion of the regional centre
- Principle 2: To establish the Winding Creek environmental corridor
- Principle 3: To provide additional open spaces and community facilities
- Principle 4: To allow development of the potential future Lake Macquarie Transport Interchange (LMTI)
- Principle 5: To allow potential future road network upgrades
- Principle 6: To enhance pedestrian and bicycle movement through the regional centre
- Principle 7: To provide gateway entry points to the regional centre

Streetscape and open spaces

Winding Creek is a significant landscape feature within the regional centre and offers a point of difference to other town centres in Lake Macquarie, such as Charlestown, Warners Bay, Belmont and Toronto. Winding Creek is largely a natural waterway surrounded by dense native vegetation. The streetscapes and public open space should enhance the natural environment, utilising native vegetation and water sensitive urban design principles to enhance the quality of Winding Creek and its surrounding bushland.

Built Form

Building character and finishes should be similar to higher end retail, commercial and entertainment activities and high quality residential apartments. Visually identifiable buildings and/or landscaping will be provided at 'gateway entry points' to the regional centre. Buildings will be up to three storeys high.

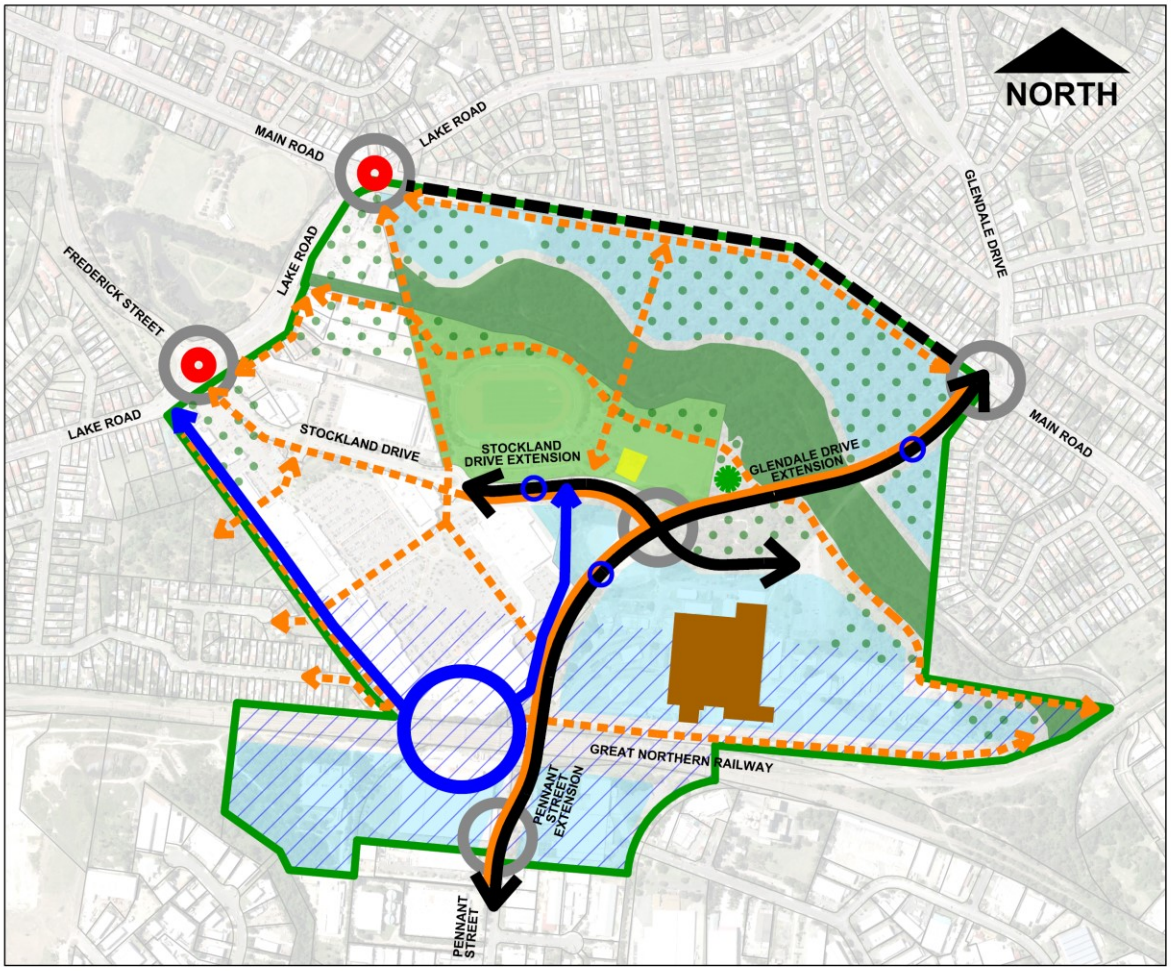


Figure 3 - Glendale regional centre structure plan

1.5.1 EXISTING USES

The desired future character for the Glendale regional centre represents a long-term vision. In the short-to-medium term the continuation and expansion of existing uses, such as industrial uses, may be appropriate where the proposal does not compromise the ability of the regional centre to develop in accordance with the desired regional centre character in the long-term.

1.5.2 POTENTIAL DEVELOPMENT INTENSIFICATION

As indicated in Figure 3, the centre contains a number of prominent entry points referred to as 'gateways'. Development in these locations should reflect the importance of these sites through architectural merit and greater building heights compared to other sites. It should be noted, however, that development over three storeys may be restricted due to the presence of abandoned underground coal seam mine workings

Land adjacent to the Great Northern Railway is free from abandoned underground coal seam mine workings, however, some of this land may be required for the potential future Lake Macquarie Transport Interchange (LMTI).

Increased building heights above three storeys may be possible in both these locations, however, are subject to further investigations including but not limited to:

- geotechnical investigations,
- visual impact and overshadowing assessments, and
- determination of the future land requirements for the LMTI train station, bus interchange and park & ride.

2 REGIONAL CENTRE DEVELOPMENT CONTROLS

2.1 LAKE MACQUARIE TRANSPORT INTERCHANGE

Objectives

a. To allow for the development of the potential future Lake Macquarie Transport Interchange (LMTI) train station, bus interchange and park & ride.

Controls

1. Development should be designed to allow for the construction of the potential future LMTI train station, bus interchange, and park & ride shown indicatively in Figure 3.

Note: Prior to lodging an application for development adjacent to the potential future LMTI, consultation with Council and Transport for NSW should occur to determine the future land requirements for the LMTI train station, bus interchange and park & ride.

2.2 FUTURE ROAD NETWORK UPGRADES

Objectives

a. To allow for the development of the potential future road network upgrades.

b. To minimise the impacts of traffic generation.

c. To facilitate safe pedestrian and bicycle crossings.

Controls

1. Future development should be designed to allow for the construction of the potential future road network upgrades shown in Figure 3.
2. A Traffic Impact Statement must be prepared and submitted where more than 1000m^2 Gross Floor Area is proposed.

Note: Traffic Impact Statements should include road traffic modelling as directed by Council and RMS.

3. Any future intersection upgrades at the intersections of Lake Road, Frederick Street and Stockland Drive, and Lake Road and Main Road, should include safe pedestrian and bicycle crossing facilities on all approaches.

2.3 INTERNAL ROADS

Objectives

a. To ensure roads links are designed to appropriate standards.

Controls

1. Roads within the regional centre should be consistent with ‘commercial/business’ area road types in Section 3.20 in Part 8 of LMDCP 2014, which includes footpaths on both sides of the street and on-road cycling, and Section 3.4 to 3.6 in Part 4 of LMDCP 2014.

Note: This control does not apply to the Stockland Drive, Pennant Street and Glendale Drive extensions.

2.4 EXISTING USES

Objectives

a. To ensure the continuation or expansion of existing uses, such as industrial uses, do not adversely affect the achievement of the desired regional centre character.

Controls

1. The continuation or expansion of existing uses must not result in the subdivision of land that is inconsistent with the structure plan and precinct plan principles outlined in this Area Plan.

2.5 GATEWAY ENTRY POINTS

Objectives

a. To promote high quality, visually identifiable development at gateway entry points.

b. To maximise building mass at the gateway entry points.

Controls

1. Development at gateway entry points shown in Figure 3 should be designed with:

   i. nil setbacks from gateway entry point street frontages or category 3 landscaping along the gateway entry point street frontages;

Note: See Section 7.1 under Part 4 of LMDCP 2014 for category 3 landscaping details.

   ii. building frontages, windows and entries clearly visible from the gateway entry point; and

   iii. vehicle car parking and service areas located at the side or rear of buildings, and not along gateway intersection street frontages.

2.6 STREETSCAPE AND LANDSCAPING

Objectives

a. To enhance the natural landscape character of Winding Creek.

b. To promote a consistent landscape theme throughout the regional centre.

Controls

1. Street trees and landscaping plantings in road reserves, street setbacks and open spaces should include native species such as those found along the Winding Creek corridor, and be consistent with Council's adopted Streetscape Master Plan for the town centre.

3 PRECINCT PLANS

Precinct plans and additional development controls apply to precincts A to E shown in Figure 4, and provide additional guidance on the desired future character for the Glendale regional centre.

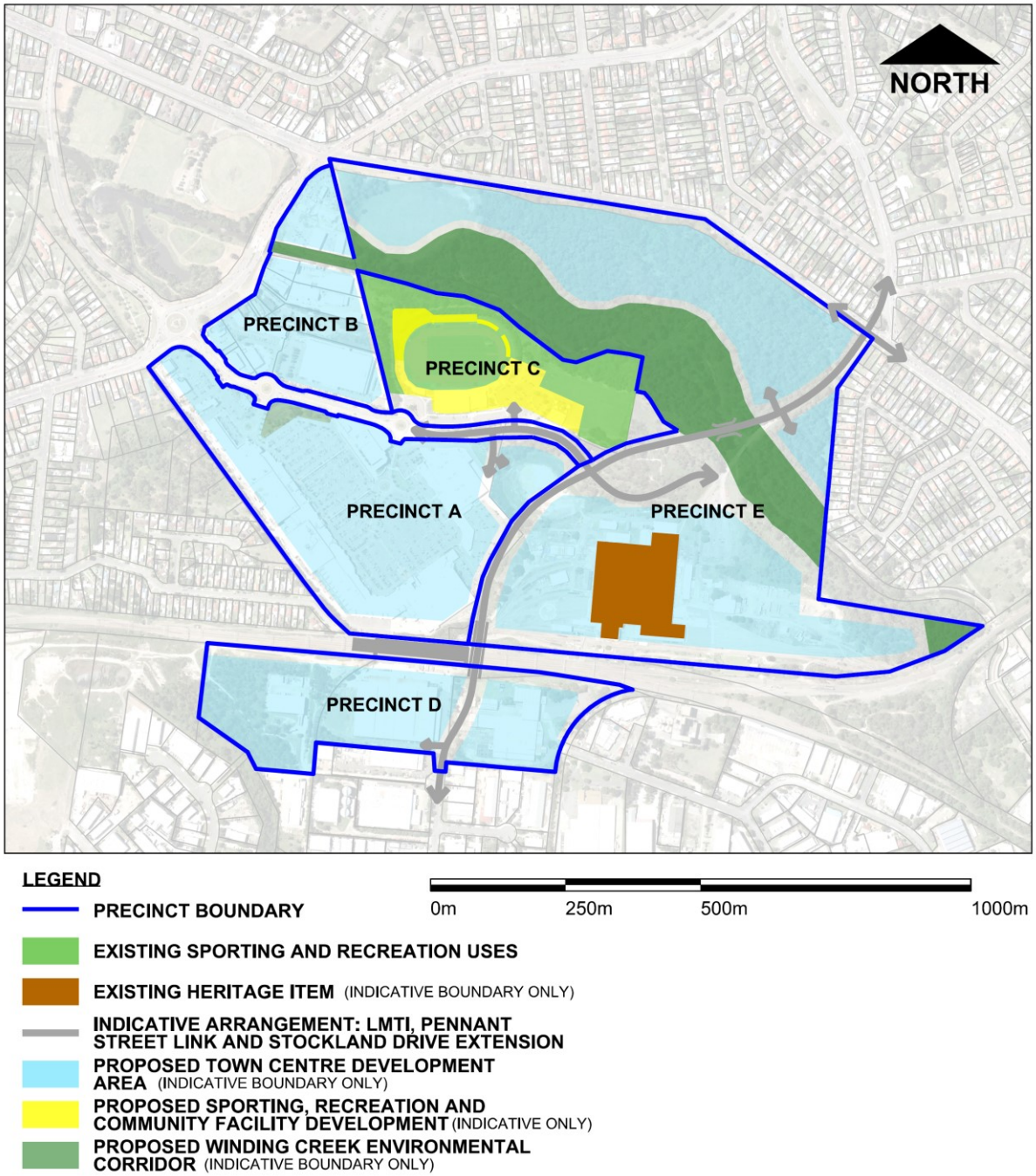


Figure 4 - Precinct boundaries within the Glendale regional centre

4 PRECINCT A

Retail and entertainment activities and uses should occur in this precinct, with entertainment uses co-located with existing entertainment uses. Business services, housing and tourism are also encouraged.

Precinct Plan

Future development within Precinct A should be consistent with the following principles:

- Principle 1: To ensure future development integrates with the potential future LMTI
- Principle 2: To deliver a grid-based internal road network
- Principle 3: To deliver a mixture of main street-style development and enclosed shopping malls
- Principle 4: To provide active street frontages along Main Road
- Principle 5: To enhance passive surveillance within the precinct and of the surrounding area
- Principle 6: To allow pedestrian and bicycle movement to and through the precinct and to the potential future LMTI
- Principle 7: To provide open-air, landscaped areas within the precinct such as plazas

Built Form

Building character and finishes should be similar to higher end retail, commercial and entertainment development and high quality residential apartments. Buildings should be up to three storeys high.

4.1 CONCEPT PLAN

Objectives

a. To identify land requiring a 'concept plan'.

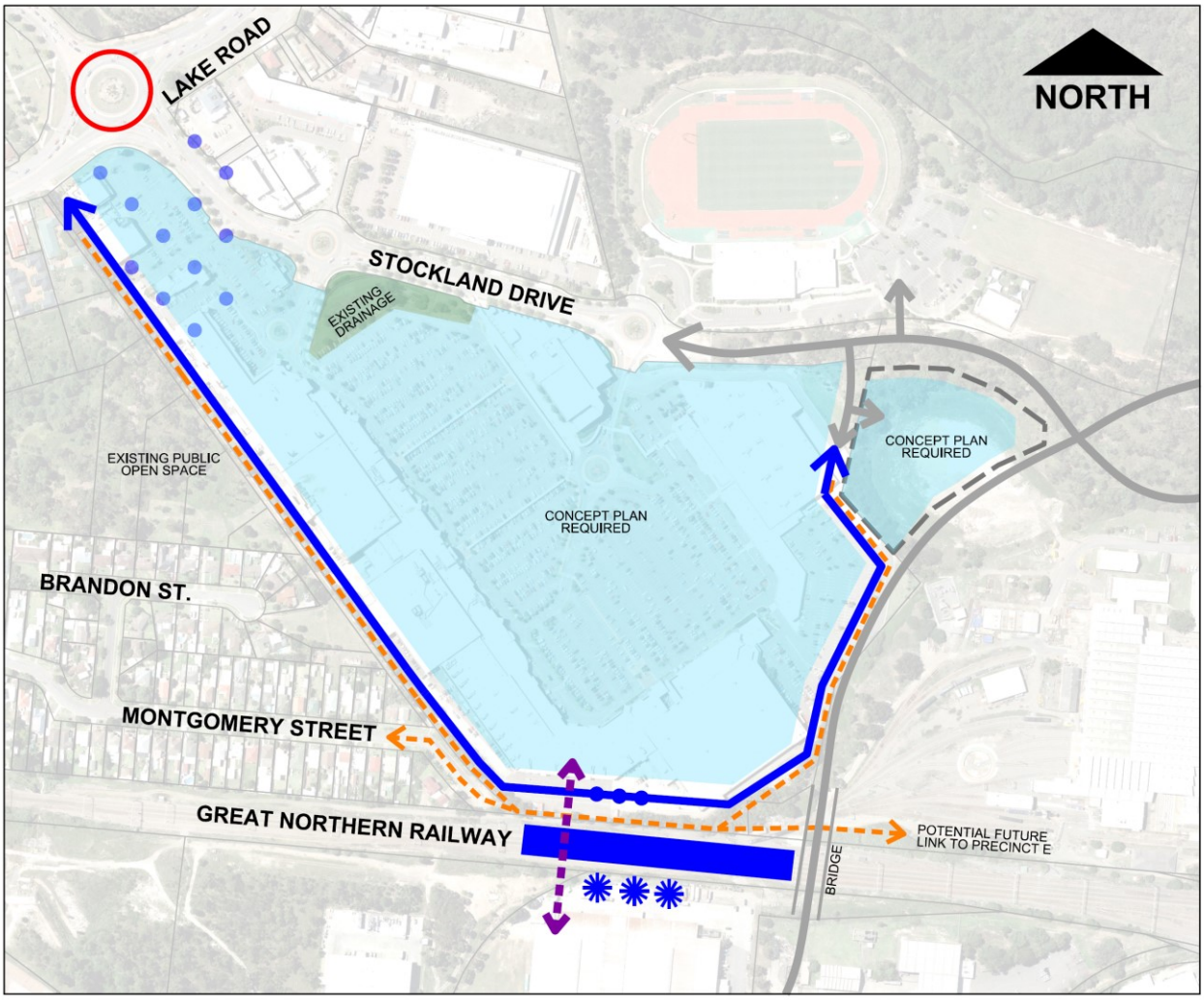
b. To ensure that concept plans are consistent with the precinct plan principles.

Controls

1. A concept plan must be prepared for precinct A in accordance with Section 2.22, Part 4 of LMDCP 2014.

2. The concept plan must demonstrate consistency with the precinct plan principles.

Note: Precinct A contains the Stockland Supercentre site (Lot 1 DP 860494) and Site 'A' (a land parcel proposed to be created as part of the extension of the Stockland Drive extension), as shown in Figure 5, and individual concept plans may be prepared for each site.



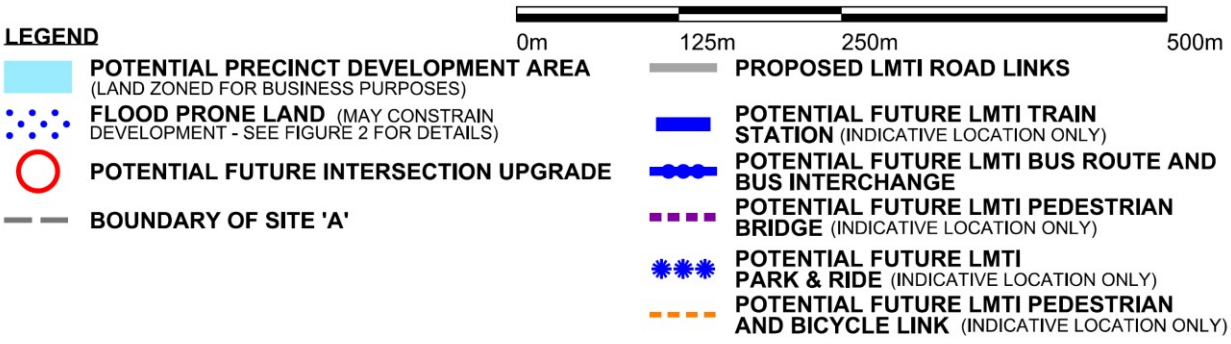


Figure 5 - Precinct Plan: Precinct A

4.2 PEDESTRIAN AND BICYCLE LINKS

Objectives

a. To ensure pedestrian and bicycle links are designed to appropriate standards and are well connected, functional and attractive.

b. To ensure that pedestrian and bicycle movement through the precinct is not constrained.

Controls

1. Pedestrian and bicycle links should be consistent with Section 3.1 and 3.2 in Part 4 of LMDCP 2014.

2. Where pedestrian and bicycle links are not proposed to be dedicated to Council, the links must provide 24-hour pedestrian and bicycle access through the precinct.

5 PRECINCT B

Bulky goods premises should be the predominant use in this precinct.

Precinct Plan

The precinct plan for Precinct B is outlined in Figure 6, and is based on the following principles:

- Principle 1: To promote a grid based internal road network
- Principle 2: To enhance pedestrian and bicycle movement through the precinct regional centre
- Principle 3: To enhance passive surveillance of the Hunter Sport Centre, the Winding Creek environmental corridor, and along Lake Road, Stockland Drive
- Principle 4: To allow potential future road network upgrades

Built Form

Building character and finishes should be similar to higher end retail and commercial development. Buildings should be up to three storeys.

5.1 PRECINCT PLAN

Objectives

a. To ensure development is consistent with the precinct plan.

Controls

1. Development should be consistent with the precinct plan shown in Figure 6, or demonstrate consistency with the precinct plan principles.

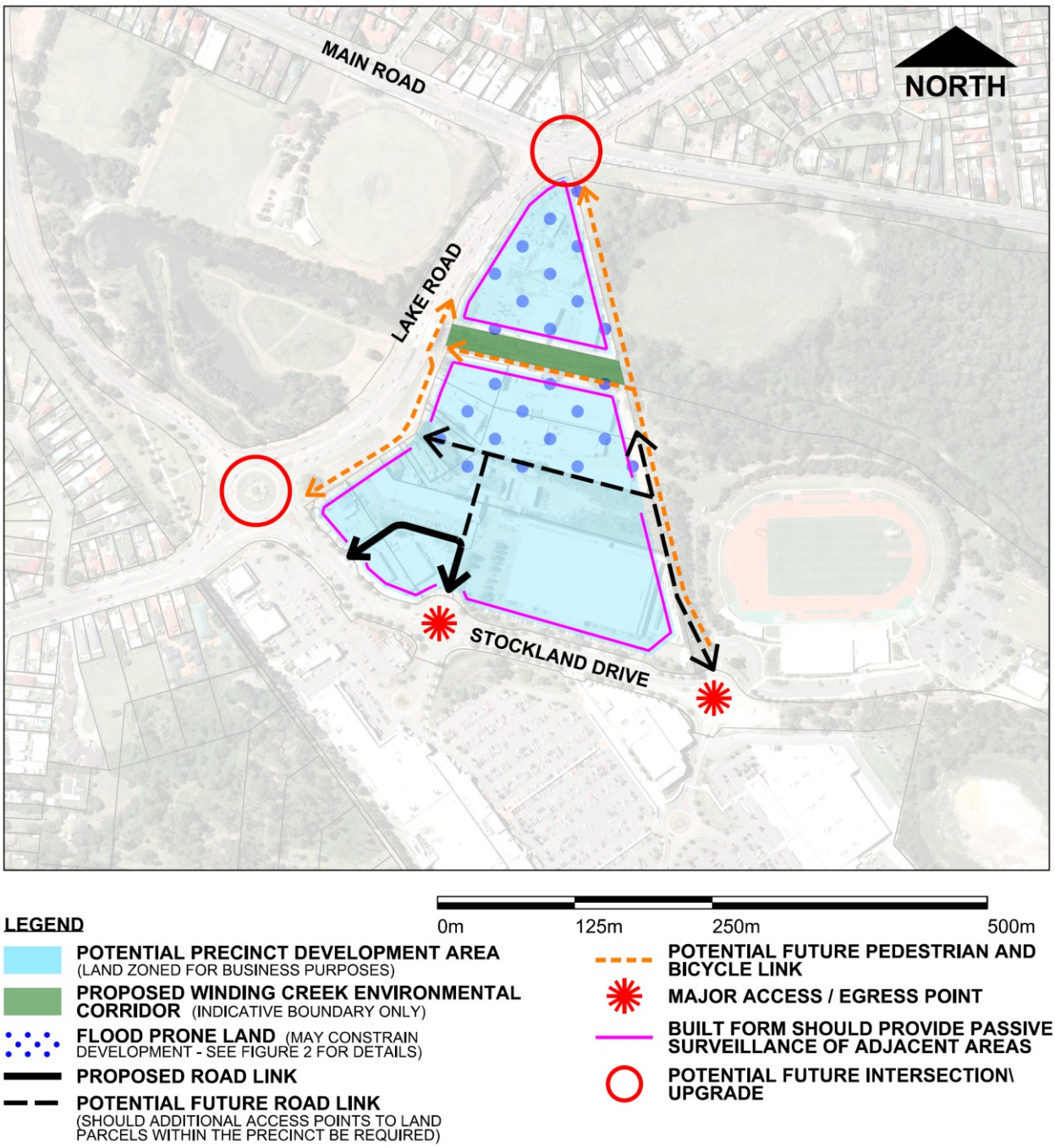


Figure 6 - Precinct Plan: Precinct B

6 PRECINCT C

The precinct should consist of major sporting facilities and multipurpose community uses.

Precinct Plan

The precinct plan for Precinct c is outlined in Figure 7, and is based on the following principles:

- Principle 1: To ensure consistency with the Hunter Sports Centre Master Plan
- Principle 2: To provide additional open spaces and community facilities
- Principle 3: To ensure future development integrates with the potential future LMTI
- Principle 4: To enhance pedestrian and bicycle movement through the regional centre
- Principle 5: To enhance passive surveillance of the Winding Creek environmental corridor and Stockland Drive

Built Form

Building character and finishes should be similar to higher end retail and commercial development. Buildings should be up to three storeys.

6.1 PRECINCT PLAN

Objectives

a. To ensure development is consistent with the precinct plan.

b. To plan appropriately for public open space within the precinct.

Controls

1. Development should be consistent with the precinct plan shown in Figure 7, or demonstrate consistency with the precinct plan principles.
2. Prior to lodging a development application for ‘site B’, consultation with Council should occur to determine if the land is required under Council’s Development Contributions Plan for a future park.

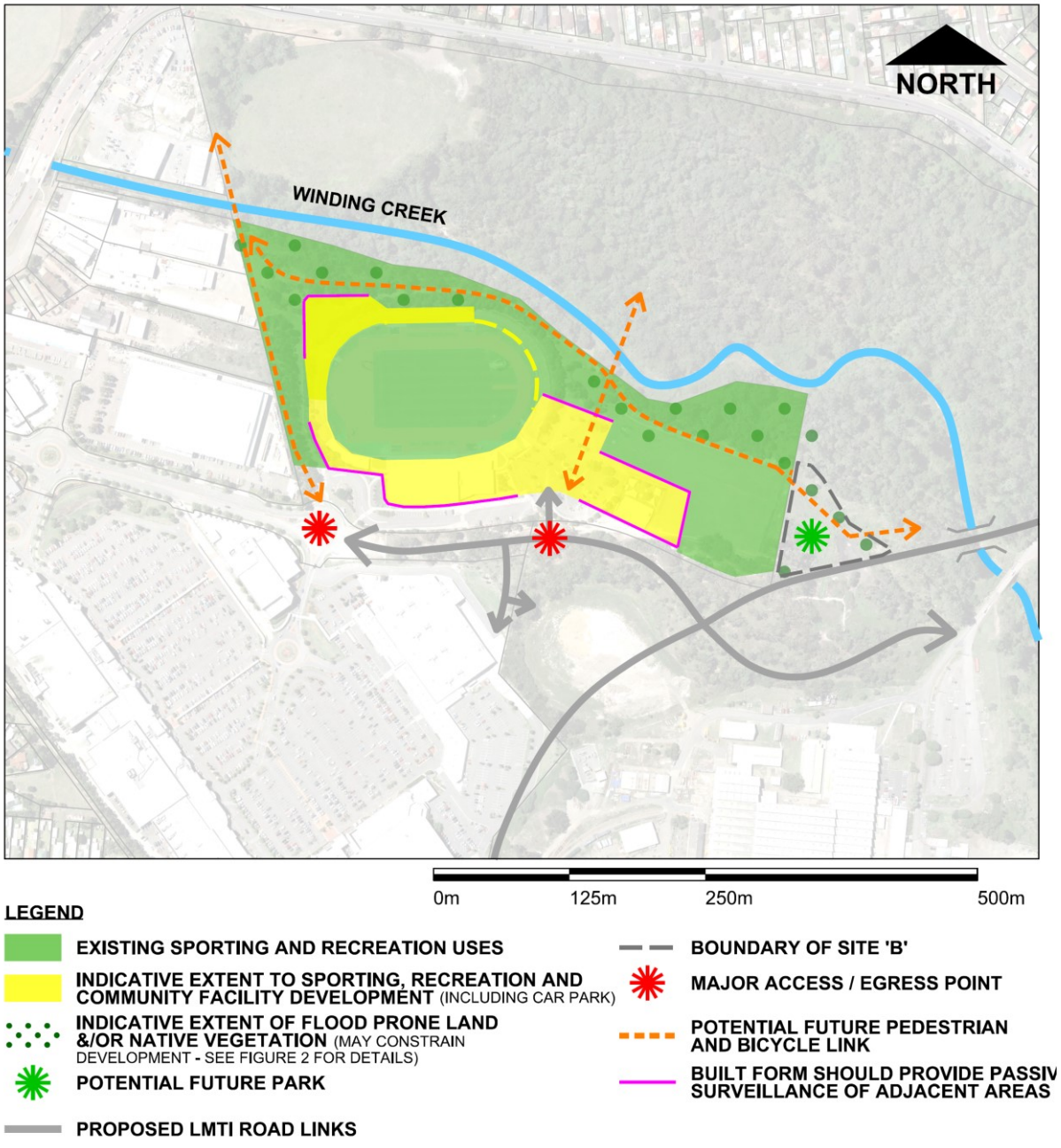


Figure 7 - Precinct Plan: Precinct C

7 PRECINCT D

In the future, mixed use and intensive commercial development should occur in this precinct.

Precinct Plan

The precinct plan for Precinct D is outlined in Figure 8, and is based on the following principles:

- Principle 1: To ensure future development integrates with the potential future LMTI
- Principle 2: To deliver a grid based internal road network
- Principle 3: To enhance pedestrian and bicycle movement through the regional centre
- Principle 4: To ensure passive surveillance of the potential future LMTI and pedestrian and bicycle links

Built Form

Building character and finishes should reflect a vibrant commercial precinct. Buildings should be up to 15m high.

7.1 CONCEPT PLAN

Objectives

a. To identify land requiring a 'concept plan'.

b. To ensure that concept plans are consistent with the precinct plan principles.

Controls

1. Where proposed development is inconsistent with the precinct plan shown in Figure 8, a concept plan must be prepared in accordance with Section 2.22, Part 4 of LMDCP 2014.

2. Concept plans must demonstrate consistency with the precinct plan principles.

Note: Precinct D contains three lots (Lot 11 D.P. 806924, Lot 11 D.P. 537508, and Lot 137 D.P. 529121), and concept plans may be prepared for each individual lot.

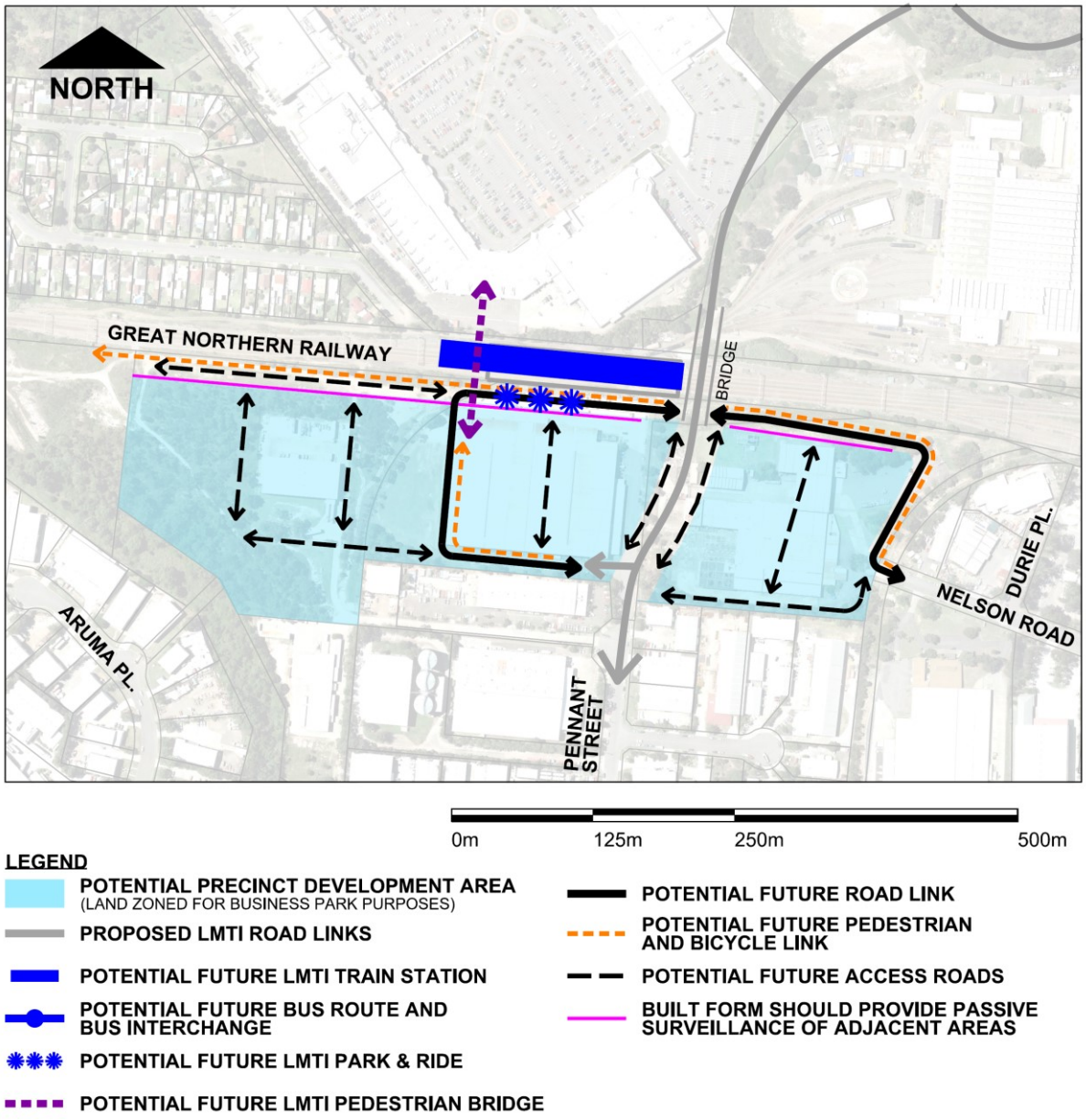


Figure 8 - Precinct Plan: Precinct D

8 PRECINCT E

In the future, mixed use development, commercial development, intensive residential development should occur in this precinct.

Precinct Plan

The precinct plan for Precinct E is outlined in Figure 9, and is based on the following principles:

- Principle 1: To encourage expansion of the regional centre
- Principle 2: To establish the proposed Winding Creek environmental corridor
- Principle 3: To allow development of the potential future LMTI
- Principle 4: To allow potential future road network upgrades
- Principle 5: To deliver a grid based internal road network
- Principle 6: To enhance pedestrian and bicycle movement through the regional centre
- Principle 7: To encourage active street frontages along Main Road and Glendale Drive
- Principle 8: To provide passive surveillance of the proposed Winding Creek environmental corridor, pedestrian and bicycle links, and the potential future LMTI
- Principle 9: To encourage adaptive reuse of the Cardiff railway workshop buildings should the facility cease manufacturing operations in the future.

Built Form

Building character and finishes should be similar to higher end retail, commercial and entertainment development and high quality residential apartments. Buildings should be up to three storeys high.

8.1 CONCEPT PLAN

Objectives

a. To identify land that requires a 'concept plan' in accordance with Section 2.22, Part 4 of LMDCP 2014.

b. To ensure the concept plan is consistent with the precinct plan.

Controls

1. Where proposed development is inconsistent with the precinct plan shown in Figure 9, a concept plan must be prepared in accordance with Section 2.22, Part 4 of LMDCP 2014.

2. The concept plan must demonstrate consistency with the precinct plan principles.

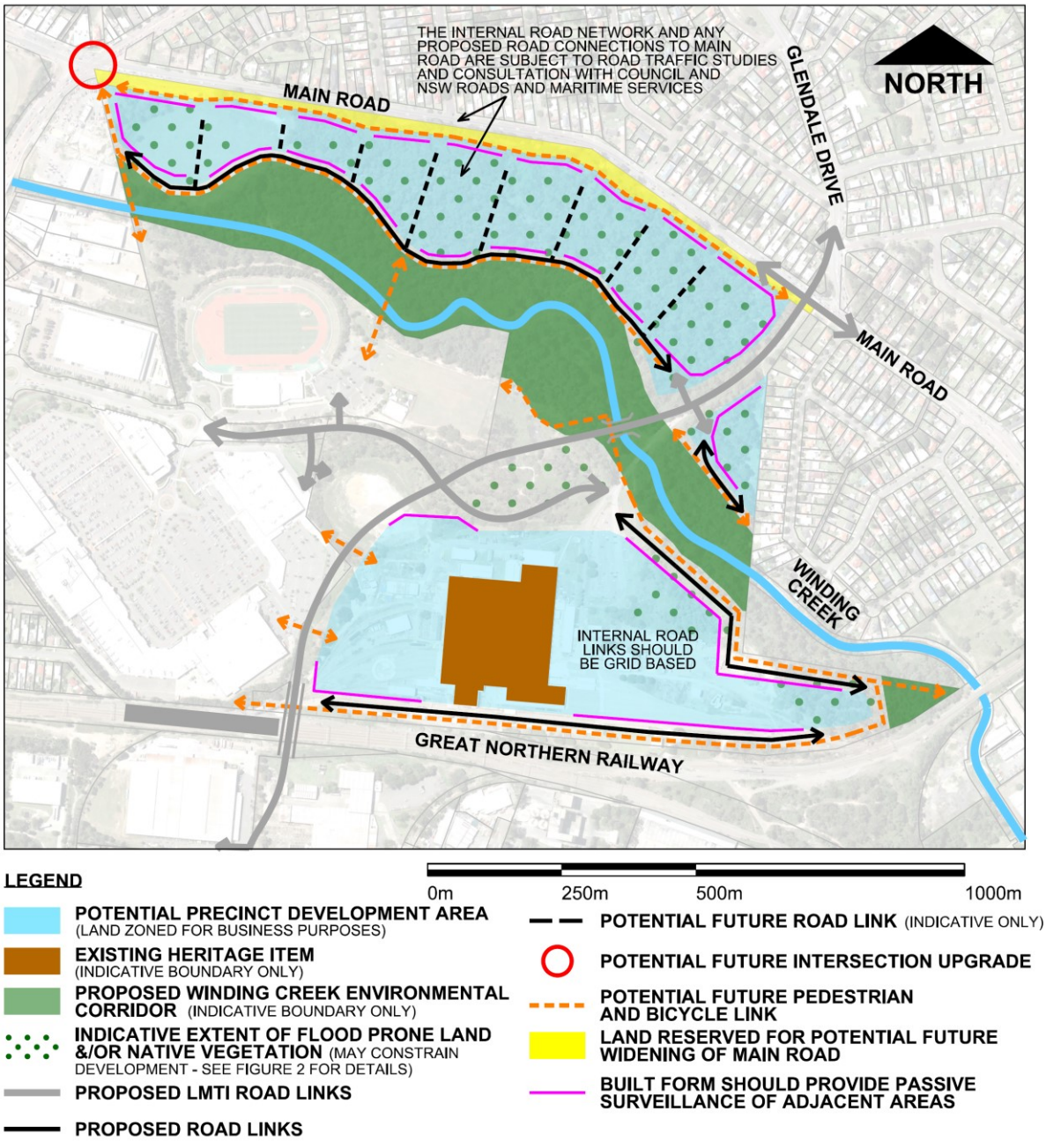


Figure 9 - Precinct Plan: Precinct E

8.2 WINDING CREEK ENVIRONMENTAL CORRIDOR

Objectives

a. To ensure Winding Creek is rehabilitated and environmental values appropriately managed.

Controls

1. An environmental corridor must be established around Winding Creek as part of the development of the land north of Winding Creek, as indicatively shown in Figure 9.
2. The width of the Winding Creek environmental corridor should be determined in consultation with Council and include the Winding Creek waterway, riparian vegetation, land with native vegetation not proposed to be developed, and flood prone land not suitable for development.
3. A funded rehabilitation and management plan must be prepared for the Winding Creek environmental corridor to the satisfaction of Council.

Note: The establishment of the Winding Creek environmental corridor may be able to be included as part of any proposed biodiversity offsets for the development of the land north of Winding Creek.

8.3 LANDSCAPING

Objectives

a. To retain the landscape character of the site and Winding Creek.

Controls

1. Where possible existing mature trees should be retained in road reserves, street setbacks and car parking areas, including along Main Road.
2. Where existing mature trees cannot be retained, road reserves, street setbacks and car parking areas should be planted with native tree species including those found along the Winding Creek corridor.

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FIGURES:

1 INTRODUCTION

This section contains local objectives and controls for development in Morisset town centre as defined in Figure 5; Extent of Area Plan and are in addition to the general provision contained in Part 4 – Development in Business Zones. For general development controls, see Part 4 – Development in Business Zones. Where conflict arises between this section and Part 4, the controls in the Morisset Area Plan take precedence.

1.1 BACKGROUND

Morisset is located on the south-western side of Lake Macquarie on the Main Northern Railway, two kilometres from the F3 Freeway. It is 45 kilometres by road, from Newcastle and 110 kilometres from Sydney. It is the rail terminus for local services to and from Newcastle, and a major stop for intercity services between Newcastle and Sydney.

Morisset is also the service centre and transport hub for the surrounding villages of Cooranbong, Dora Creek, Bonnells Bay and the other suburbs of the Morisset peninsula.

The town has been identified as an emerging Major Regional Centre in the *Lower Hunter Regional Strategy 2006*, and Council adopted a broad Structure Plan for Morisset in November 2008. This Area Plan now provides objectives and controls for development within the town centre.

1.2 EXISTING CHARACTER

The township of Morisset dates back to 1887 when the two main industries in the area were sawmilling and the construction of the Great Northern Railway.

The town centre is located on land that falls from elevated areas in the northeast sector (between Bridge Street and Wharf Streets), to low-lying areas at the northwest corner (near Doyalson and Newcastle Streets). Many sites have broad views to the Watagan Ranges in the northwest.

Dora Street is a busy through road, and the traditional shopping street. It runs along the ridge and parallel to the railway line. The remaining town centre has a regular street grid. Most blocks are bisected east-west by 6-metre-wide lanes that provide rear access to each lot. Whilst the streets are well connected in plan, the steep topography restricts pedestrian movement and access.

Traditional building design includes smaller scale frontages on sloping sites with masonry façades, deep box awnings over the footpath, pitched or raked sheet steel roofs behind parapets, and façade walls with punched windows and entries, as shown in Figure 1 - Mullards Building on Dora Street, Morisset.

Figure 1 - Mullards Building on Dora Street, Morisset

1.3 DESIRED FUTURE CHARACTER

The hilly topography and open northern aspect lends itself to a pleasant mix of shady and sunny public spaces and streets, with outlook to the Watagans. Morisset has the potential to develop pedestrian-friendly and comfortable-scale streets that are edged by two to four storey buildings up to the street boundary.

Town Centre Structure

The desired Morisset town centre structure (see Figure 2 - Morisset: desired town centre structure):

1. Recognises the rail line as the southern edge of the centre;
2. Recognises Dora Street as the existing shopping strip and main vehicle route, until construction of a bypass for through traffic, as recommended in *Morisset Structure Plan 2008*;
3. Provides for new pedestrian links across the long east-west blocks at street level;
4. Establishes Station Street as a pedestrian and cycle 'spine', linking the rail station to the main recreation reserve;
5. Recovers Kahibah Street road reserve to form an integrated recreation reserve north of the town;
6. Retains the existing street and lane grid, and inserts new pedestrian and vehicle laneway links; and
7. Establishes the Town Square and the future town hub, to be surrounded by development suited to extended hours activity such as retail, cafès and takeaway food retailing, and community and function facilities.

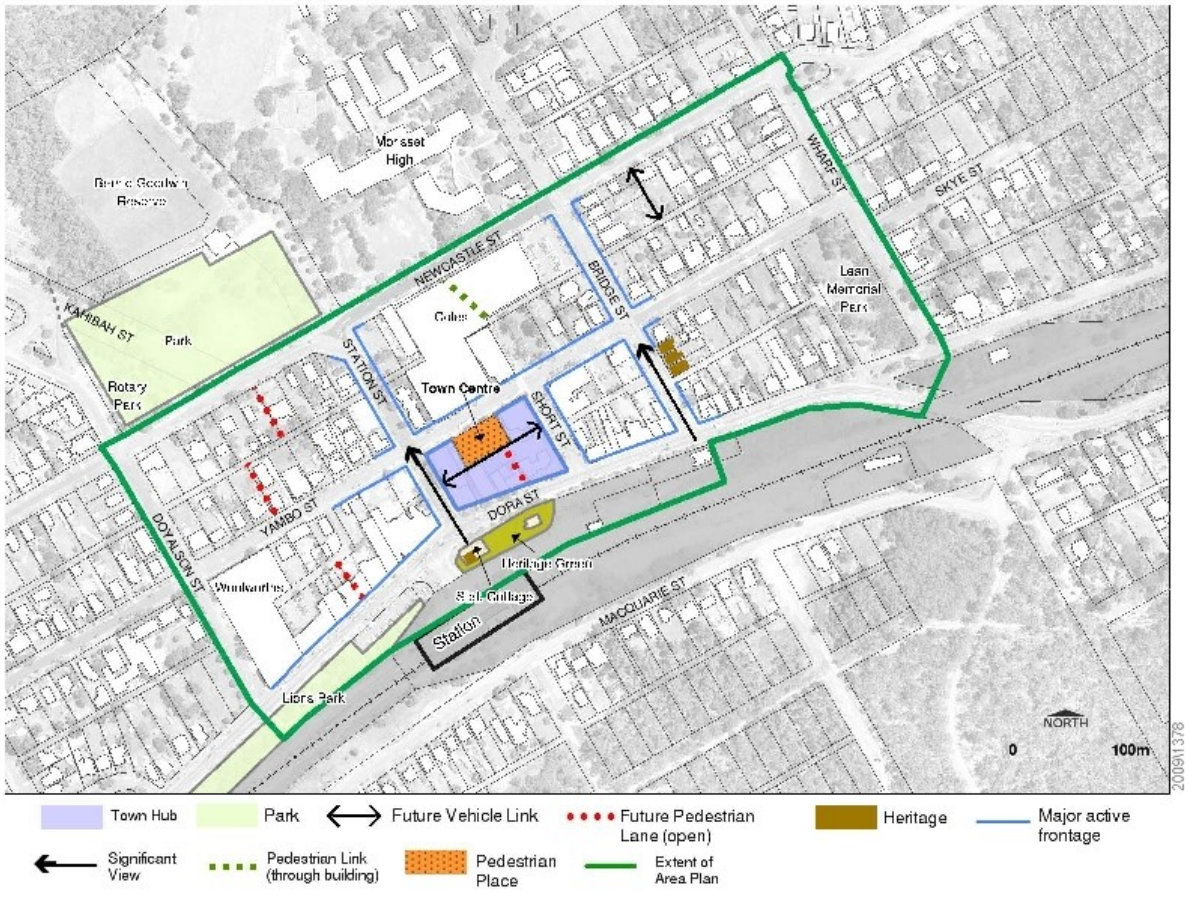


Figure 2 - Morisset: desired town centre structure

Town Square

Morisset currently lacks any central public place. This plan includes a Town Square that would provide residents, visitors and shoppers with a pleasant, lively and safe place for waiting, meeting, relaxing, or engaging in community life.

Activation of a Town Square

The proposed Town Square is centrally located, close to rail and bus interchange services. The development sites surrounding the Town Square provide the opportunity for mixed-use development that would support activity over extended hours. Development overlooking, or opening onto the town square could accommodate office space, community facilities, function rooms, entertainment facilities, cafès and retail space, as shown in Figure 3 - Impression of future Town Square and surrounding development.

Key Location of Crown Reserve

The Crown Reserve at 73 Dora Street (DP 1141789 Lot 7325 is an area of 2810m^2 reserved for Police Purposes (gazettal 5.2.1913). The police station occupies the southeast section whilst the northwest section is currently unoccupied. This part of the Crown Reserve fronting Yambo Street is ideally located for a future town square.

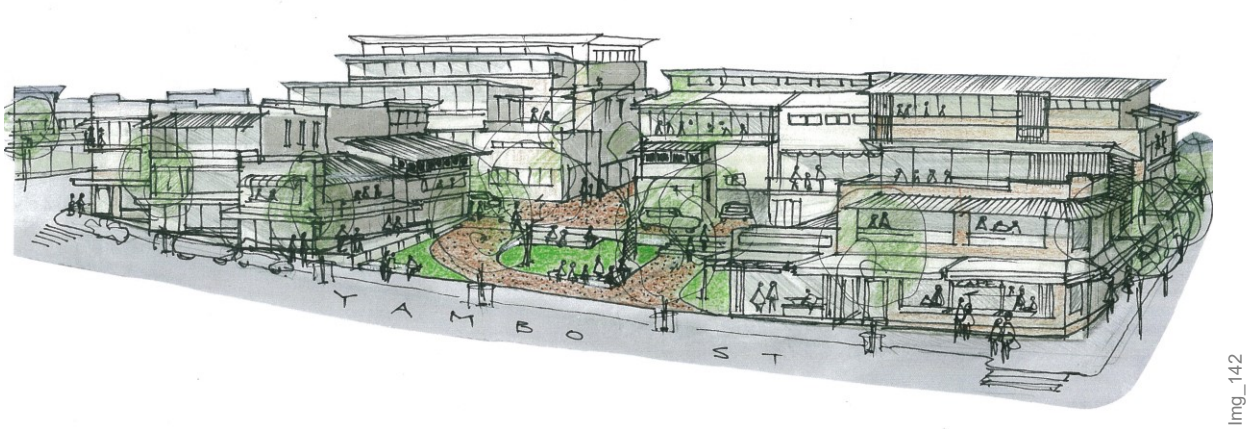


Figure 3 - Impression of future Town Square and surrounding development

Built Form

The desired built form of the town centre, as shown in Figure 4 - Development scenario based on built form principles, and in the Area Plan controls, would be achieved by ensuring that:

1. Development around the town square maximises site coverage and height, includes basement parking, and activates the edges of the town square;
2. Development along the pedestrian-based retail streets is built to the street boundary and side boundary;
3. Parking and service areas are located towards the rear or middle of a lot, and accessed from the rear lane;
4. Building floor levels step with the street slope;
5. Development in the northeastern blocks is primarily freestanding buildings for residential use and secondary commercial use;
6. Lots are amalgamated to allow building footprints on an east-west axis, and to maximise views and solar access to the north; and
7. Off-street public parking facilities are provided for long term growth of the centre.

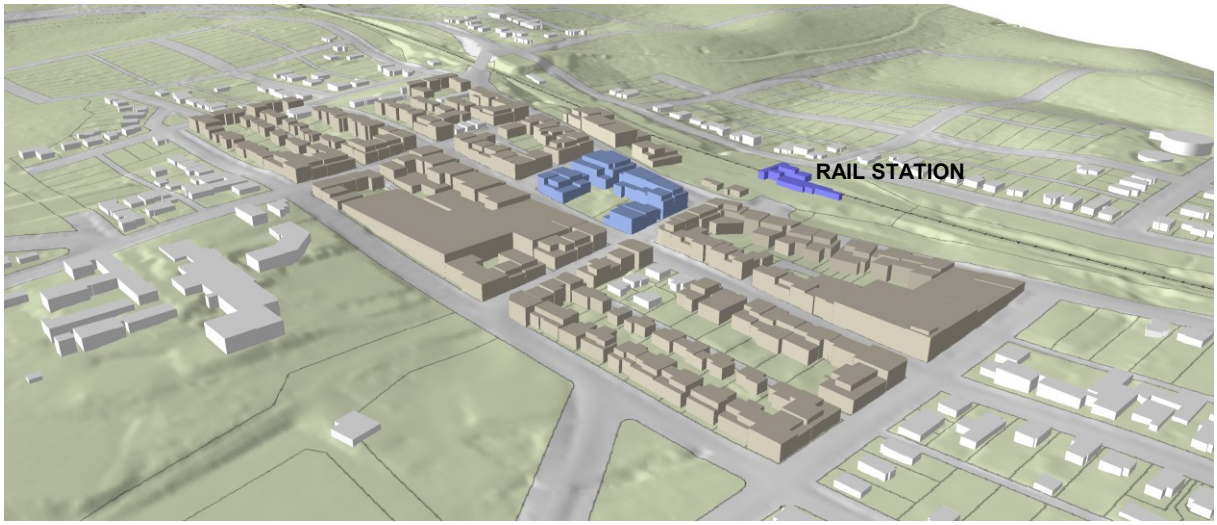


Figure 4 - Development scenario based on built form principles and the Area Plan controls

Built Character

Characteristic and desirable elements for future buildings in Morisset are:

- Smaller scale frontages on sloping sites;
- Deep box awnings over footpath;
- Masonry façades with parapets;
- Pitched or raked sheet steel roofs behind parapets;
- Façade walls with punched windows and entries; and
- Recessed balconies on the first level above the street.

Landscape Character

Morisset can take advantage of its open northern aspect and the outlook to the Watagans. Tree plantings along public streets, at the rear of lots along the laneways, and in the middle of lots would all contribute to a pleasant green outlook from sites that are more elevated.

Development should:

- Maximise advanced tree plantings in the street of broad-canopy native trees and selected exotic trees that have a traditional presence in Morisset; and
- Maximise plantings of evergreen trees within the lot and in car parks in order to reduce heat load, and provide visual softening from overlooking buildings and sites.

2 DEVELOPMENT CONTROLS

This Area Plan applies to the area bounded by the green line, as shown in Figure 5 - Extent of Area Plan.

Plans and sections are provided for each of the town centre blocks. The Block Controls are designed to respond to the topography, aspect and context of each block and street frontage, in order to support the desired future structure, built form and character of the Morisset town centre (Figures 8-22).

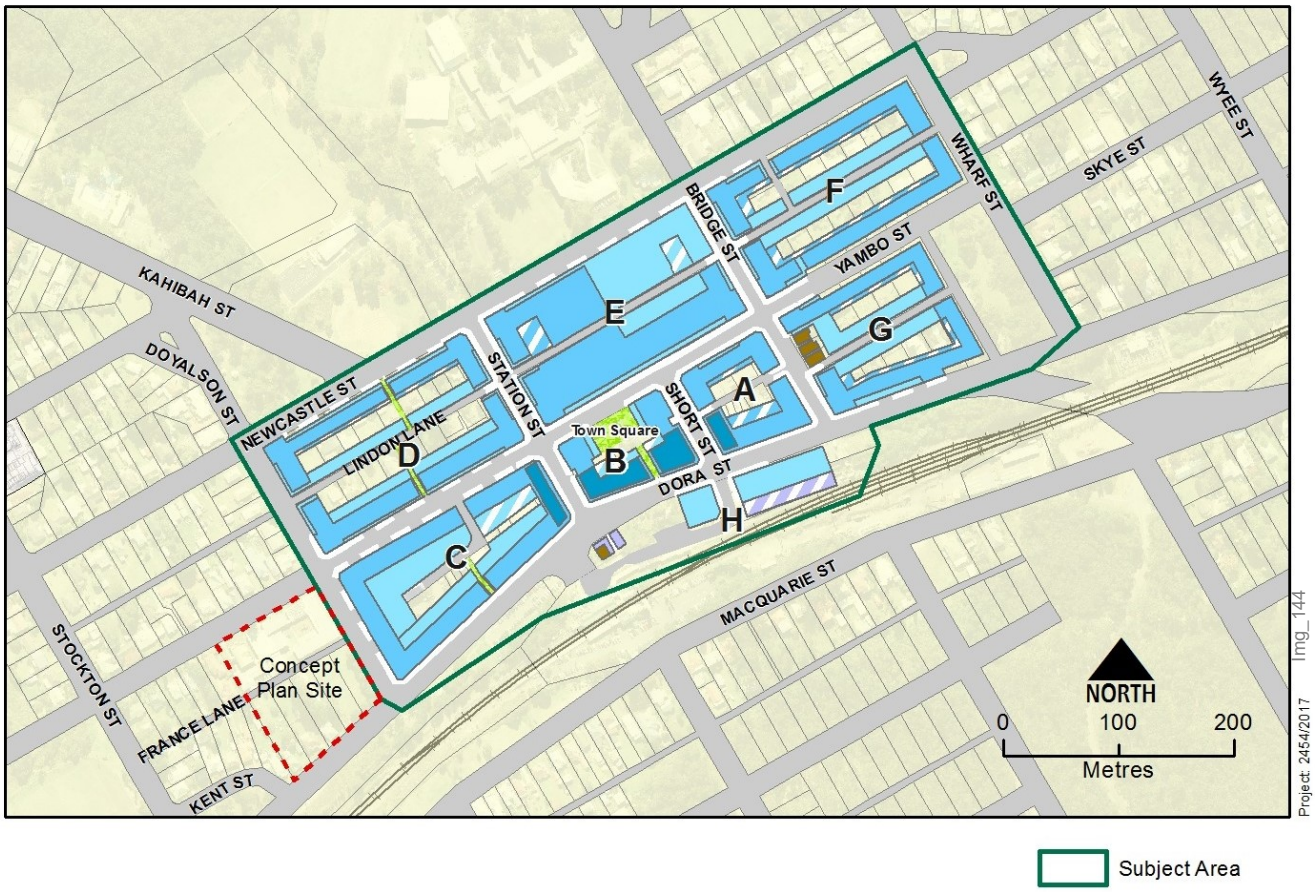


Figure 5 - Extent of Area Plan and Key to Block Controls

In the event of a development proposal that cannot be accommodated on existing commercially zoned land, such as a large floor-plate discount department store, the Potential Commercial Area fronting Doyalson Street would be subject to further investigations.

Any request for rezoning must detail the requirements of development. It must demonstrate that these requirements cannot be physically accommodated on another site, or that all reasonable attempts to assemble an alternate development site have been unsuccessful.

2.1 BLOCK CONTROLS

The Block Plans show the overall desired structure of development, and the spatial relationship between development and the street at a block-by-block view. They are based on site context, existing street character, and the desired future character of the town centre.

The Block Plans and sections provide general building envelopes including heights in storeys and indicative building footprints. They do not dictate lot amalgamations, or describe the design of future buildings.

Block Plans and Sections show the key built form outcomes Council is seeking and include:

- The location of public open space, public pedestrian links, and street awnings
- The location of new vehicle links
- The location of non-residential uses
- Front setbacks at street level and upper levels
- The desired location of building mass close to the street
- The overall maximum depth of development
- The expected provision of basement car parking
- Aspects where building mass should be broken up (i.e. 50% occupied areas)

Site planning and building design should be informed by both the Block Controls and a detailed site and context analysis.

Objectives

a. To improve the amenity and connectivity of the public domain.

b. To improve vehicle circulation and access to public transport.

c. To ensure that building scale, height and setback contributes to the desired future character of the town centre.

Controls

1. Development must make a positive contribution to the desired future character of the town centre as described in Section 1.3.

2. A development proposal must address the requirements of the relevant Block Plan and Section(s), as shown in Figures 8-22.

3. Site planning and building design must be based on a comprehensive site and context analysis.

3 STREETS AND PUBLIC SPACE

3.1 TOWN SQUARE DEVELOPMENT

Objectives

a. To provide a pleasant, safe and lively public space for community and social activity.
b. To maximise commercial floor space surrounding the town square.
c. To provide active retail frontages and *al fresco* uses at the edges of the town square.
d. To support a mix of commercial and community uses on upper levels overlooking the town square.
e. To provide a rear lane for access to service areas and basement parking.

Controls

1 Ground floor uses fronting the town square and Yambo Street between Station and Short Streets must be pedestrian-based retail uses, active community space or entries to upper level floor space.

2 Development on sites with a frontage to Yambo Street and the town square must provide a footpath trading area or internal floor space with large retractable wall or window area, suited to future café trading.

3 Upper levels must include balconies or terraces overlooking the town square.

4 Development of Lot 5 DP758707 (current Westpac site) must include provision of a pedestrian lane with a minimum width of 4 metres, as shown on the Block B Plan (see Figure 8 - Block A B and H Control Plan). It must also meet all the criteria set out below for pedestrian lanes.

5 Development of Lot 7325 DP 1141789 (Police Station site) must include an 8 metre wide vehicle laneway on the alignment, as shown in the Block B Plan (see Figure 8 - Block A B and H Control Plan).

Note: Council may vary the provisions for the vehicle and pedestrian lanes in Block B Plan, subject to the resolution of the Town Square proposal.

3.2 PEDESTRIAN LANES

Objectives

a. To improve north-south access for pedestrians and cyclists.

b. To provide a pleasant, safe, well-lit and interesting pedestrian corridor.

Controls

1 Development must include an open pedestrian lane where the development site coincides with, or is immediately adjacent to, the nominated location of the pedestrian lane, as shown on the Block Controls (Figures 8-22).

2 Each pedestrian lane must be a minimum 4 metres in width.

3 The lane alignment must ensure a clear line of sight from end to end.

4 The building elevation fronting the lane must include windows, entries, cantilevered awnings and architectural detail that support casual surveillance and visual interest.

5 The building elevation fronting the lane must include lighting to the lane.

6 Where ground floor residential floor space is fronting a pedestrian lane, there must be a setback of at least 1 metre from the lane. Windows overlooking the lane must be screened. Blank walls facing a lane are not acceptable.

Note: Council may require the property owner to maintain the lane as an open access way, or for the land to be dedicated to Council as a public laneway.

3.3 FOOTPATH DINING

Objectives

a. To support footpath dining in appropriate locations and maintain through pedestrian access.

b. To support buildings with large wall openings and retractable windows or doors at the street level that provide an open-air café and dining experience.

Controls

1 Footpath dining must be located in areas where it is possible to maintain a two metre-wide clear pedestrian through route.

2 Development for café use must provide a large wall opening and retractable windows or doors below awning level, and which occupy at least 75% of the façade area.

Note: The *Street Improvement Plan* identifies areas suited for footpath dining, including the Town Square, the Stationmaster's Cottage and the upper end of Station Street.

3.4 STREET IMPROVEMENT PLAN

Objectives

a. To provide high quality infrastructure for walking, cycling and access to public transport.

Controls

1 The interface between development and the public domain must be consistent with the provisions of the *Street Improvement Plan*, as shown in Figures 23-27.

2 Works undertaken within the public domain must be consistent with the provisions of the Street Improvement Plan.

Note: The *Street Improvement Plan* identifies works that support public transport access, walking and cycling. Council may determine that funding or undertaking of these works is a suitable offset for a shortfall in commercial on-site parking.

3.5 GROUND FLOOR LEVELS

Objectives

a. To ensure a visual connection between the street and ground level activity where practical.

b. To allow for practical floor-plate areas on steeper streets.

Controls

1 For development on 23 Yambo St (Lot 2, DP 508750), 24 Yambo St (Lot 2 DP 758707), 25 Yambo St (Lot 13, DP 758707), and 29 Yambo St (Lot 56, DP 1007560), the difference in level between the public footpath and the internal floor level at any point on the street boundary must not exceed 1.8 metres.

2 For development on all other lots, the difference in level between the public footpath and the internal floor level at any point on the street boundary must not exceed 1 metre, as shown in Figure 6 - Level change between footpath and ground floor level.

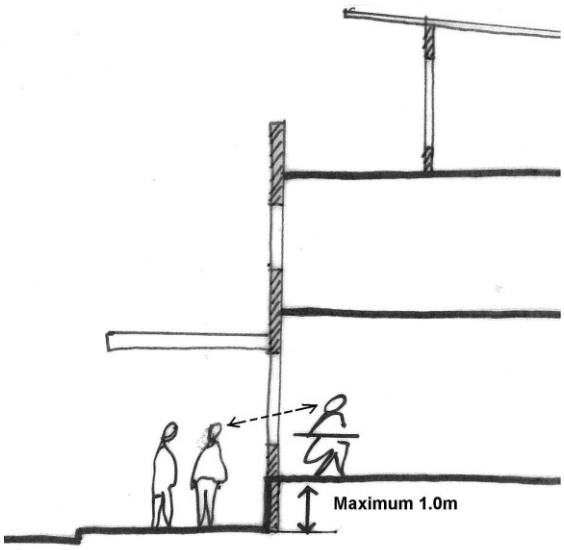


Figure 6 - Level change between footpath and ground floor level

3.6 STREET AWNINGS

Objectives

a. To provide shelter and shade for pedestrians and footpath activity in pedestrian priority areas.

b. To allow for awning design on steeper streets.

Controls

1 Where shown in the Block Controls, (Figures 8-22), development must provide a continuous or stepped solid box awning for the full extent of the building frontage. It must be at least 3 metres wide, or extend to within 600mm of the kerb face.

2 Where shown in the Block Controls, development must provide a solid box awning for at least 50% of the building frontage, including the entrance to the building. It must be at least two metres wide, or extend to within 600mm of the kerb face.

3 The vertical distance from the footpath to the underside of the awning must be between three and four metres at any point.

4 Despite the above, Council may require an awning setback of 1.5 metres from the kerb line, to accommodate street planting within the footpath area.

Note: Layout and location of street trees are indicated generally in the *Street Improvement Plan* (Figures 23-27).

4 ACCESS AND PARKING

4.1 SITE ACCESS

Objectives

a. To maximise the retail frontage to streets in the town centre.

b. To minimise vehicle movements across pedestrian footpaths.

c. To create a pedestrian-friendly core in Station Street, and in Yambo Street between Station and Bridge Streets.

Controls

1 Heavy vehicle movements to any site in the town centre must be designed to avoid Station Street and Yambo Street, between Station and Bridge Streets.

2 Vehicle access to on-site car parking or service areas must not be located on the primary street frontage, wherever access can be gained from a secondary street or rear lane.

3 Site access must comply with the locations shown in Block Controls (Figures 8-22).

4 The driveway crossover at the boundary must not exceed the minimum design width required to meet Council traffic requirements.

5 Access to on-site car parking and servicing facilities must be designed perpendicular to the street alignment and must not ramp along a street or lane alignment.

6 Where there is no alternative to access at the primary street frontage, the crossover must not occupy more than 25% of that frontage.

Note: Generally, a development site must have a minimum street frontage of 25 metres for a two way driveway crossing.

4.2 PARKING PROVISION

Objectives

a. To maximise commercial floor space yield on priority development sites within the town core, as shown in Figure 7 - Priority Development Sites.

b. To maximise parking spaces in basement excavations.

c. To reduce the demand for parking facilities through improvements to public transport, cycling and walking facilities.

d. To support the provision of public car parking facilities.

Controls

1 For Priority Development sites, as shown in Figure 7 - Priority Development Sites, where the required parking cannot be entirely provided on-site, alternative provisions for car parking may be made, in accordance with the relevant *Section 7.11 Contributions Plan(s)* and/or *Council's Policy – Planning Agreement – Car Parking Deficiencies*.

Figure 7 - Priority Development Sites

5 BUILDING DESIGN

5.1 BUILDING TO THE STREET BOUNDARY

Objectives

a. To maximise building mass and floor space at the street boundary.

b. To define the spatial character of the street.

Controls

1 Development must be built to the street boundary on any lot unless otherwise nominated in the Block Control (Figures 8-22).

2 On corner lots, the front façade may include a chamfer or splay across the corner, provided that the chamfer wall length does not exceed 5 metres, and it includes an entry door or window with clear glazing.

Note: See Access and Parking for setbacks to laneways.

5.2 FRONT SETBACKS

Objectives

a. To provide for privacy and amenity for residential floor space at street level.

b. To allow for landscaping and street tree planting on Newcastle Road.

Controls

1 Buildings on Newcastle Street between Station and Doyalson Streets must be set back a minimum of 3 metres from the street boundary (Figure 16 - Block D Section D-D).

2 Where ground floor residential use is permitted the building must be setback a minimum of 4 metres from the street boundary (Figure 20 - Block F Section F-F, and Figure 22 - Block G Section G-G).

3 Where ground floor residential use is permitted, up to 40% of the building frontage may encroach up to 1 metre into the front setback area. In this situation, however, development must retain adequate aerial space and deep soil volume for the planting of shade trees within the front setback area.

Note: Ground floor residential use is restricted to lots northeast of Bridge Street in Block F and Block G.

5.3 SETBACKS TO LANEWAYS

Objectives

a. To ensure adequate turning space from a laneway into private property.

Controls

1 Where the existing laneway width is less than 8 metres, development must be set back a minimum of 1 metre from the lane.

Note: Most rear lanes in the town centre are 6 metres in width and require a building setback at the lane boundary. Fences are encouraged on the lane boundary.

5.4 MAXIMUM OCCUPIED AREA

Definition

One hundred percent (100%) occupied area means that the floor space on that level completely fills the maximum possible area within the setbacks from each boundary.

Fifty percent (50%) occupied area means that the floor space on that level occupies no more than 50% of the maximum possible area within the setbacks from each boundary.

Objectives

a. To reduce the bulk and visual impact of building mass.

Controls

1 Development must comply with maximum occupied areas, as shown on the Block Controls and Sections (Figures 8-22).

5.5 BUILDING HEIGHT

Objectives

a. To allow sufficient height to accommodate buildings with a reasonable floor-plate area on steeper sites.

b. To encourage higher density development in the town core, and around the Town Square.

Controls

1 The maximum number of storeys must comply with the Block Controls (Figures 8-22).

2 Where an Area Plan does not specify height in storeys development must not exceed 3 storeys and 13 m in height.

5.6 BUILDING HEIGHT AT THE STREET

Objectives

a. To maximise the building mass and floor space in the town centre.

b. To define and reinforce the spatial character of the street.

c. To emphasise each corner of a block with additional height and/or building mass.

Controls

1 Development must provide at least two storeys in height along the primary street frontage.

2 On corner lots, the maximum height of development must occur at the corner element.

3 On corner lots, development must provide a minimum of two storeys on the secondary frontage for a minimum length of 10 metres, measured from the corner.

6 LANDSCAPE

6.1 DEEP SOIL AREAS

Objectives

a. To allow for planting and healthy growth of large-canopy trees across the town centre.

b. To provide for stormwater infiltration on-site.

Controls

1 Development in Blocks A and D must reserve at least 10% of the site area for deep soil planting.

2 Development in Blocks F and G must reserve at least 15% of the site area for deep soil planting.

3 Each deep soil area must have a minimum dimension of at least 2 metres and a minimum area of $6m^{2.}$.

4 Each deep soil area allocated to tree planting must have a corresponding clear air space that is at least 8 metres high and 6 metres in width.

6.2 TREE PLANTING

The following requirements relate to trees on private land. For street tree planting requirements, refer to the Street Improvement Plan (Figures 23-27).

Objectives

a. To provide broad-canopy tree cover in car parks for shade, shelter and screening.

b. To provide broad-canopy trees which define the edge of rear laneways.

c. To provide tree cover in front setback areas to enhance street character.

d. To provide shade for private open space areas.

Controls

1 Development must include installation and maintenance of at least one advanced clear-trunked broad-canopy tree per $20m^2$ of deep soil area, or installation and maintenance of at least one advanced clear-trunked broad-canopy tree per four at-grade car parking spaces (whichever is the greater).

2 Tree planting must be located to reinforce the rear lane boundary.

3 Tree planting in car parks must provide general shade and shelter to the car park.

4 Development in Blocks D, F, and G must provide tree planting within the front setback area.

5 All trees must be advanced stock, and at least 45L container size.

Note: Root volume for trees in car parks trees may be achieved using load-bearing soils below the vehicle pavement.

7 BLOCK CONTROLS

Note: The uses mentioned in the cross sections below are indicative only.

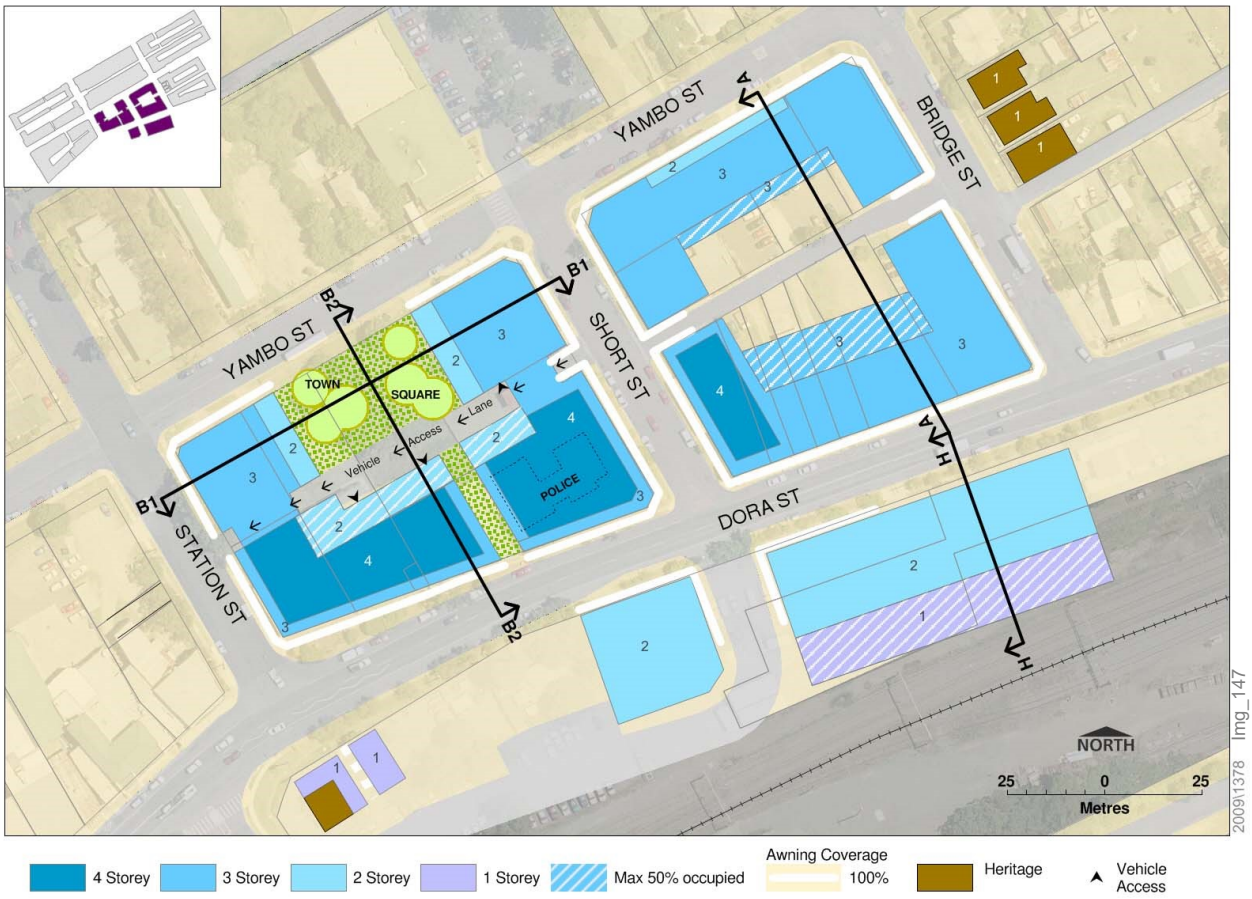


Figure 8 - Block A B and H Control Plan

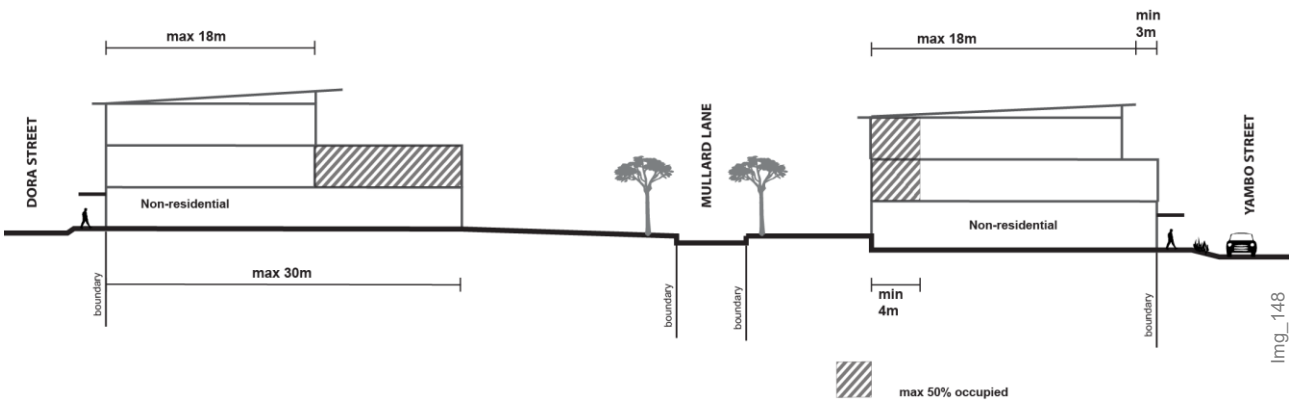


Figure 9 - Block A Section A-A

Figure 10 - Block B Section B1-B1

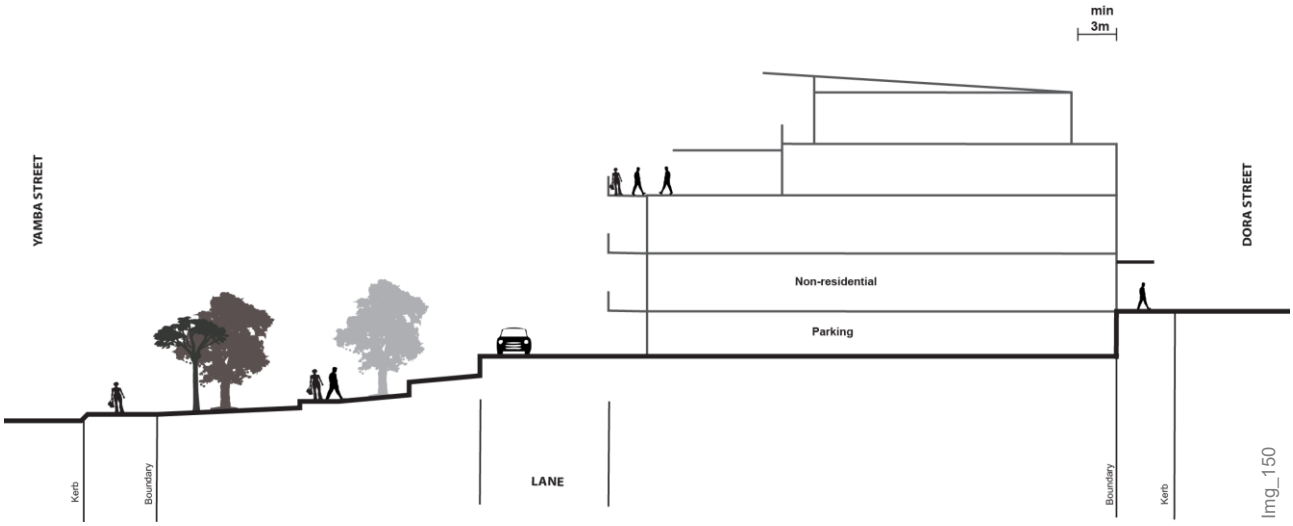


Figure 11 - Block B Section B2-B2

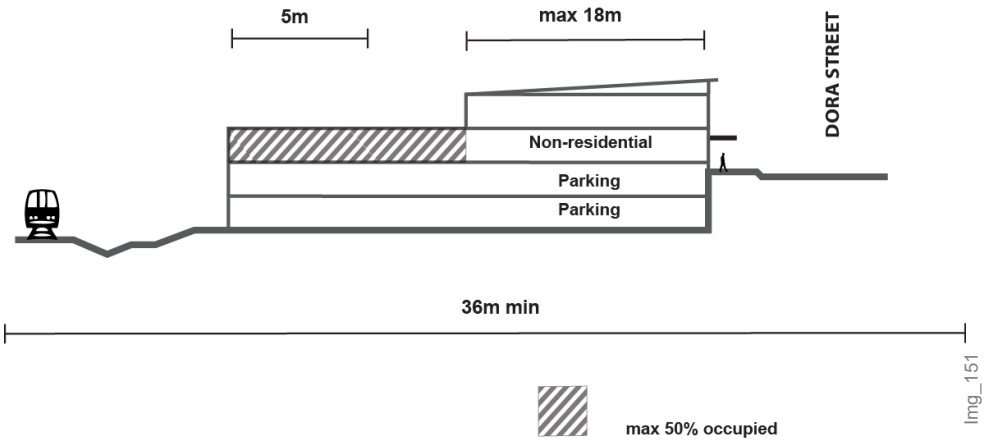


Figure 12 - Block H Section H-H

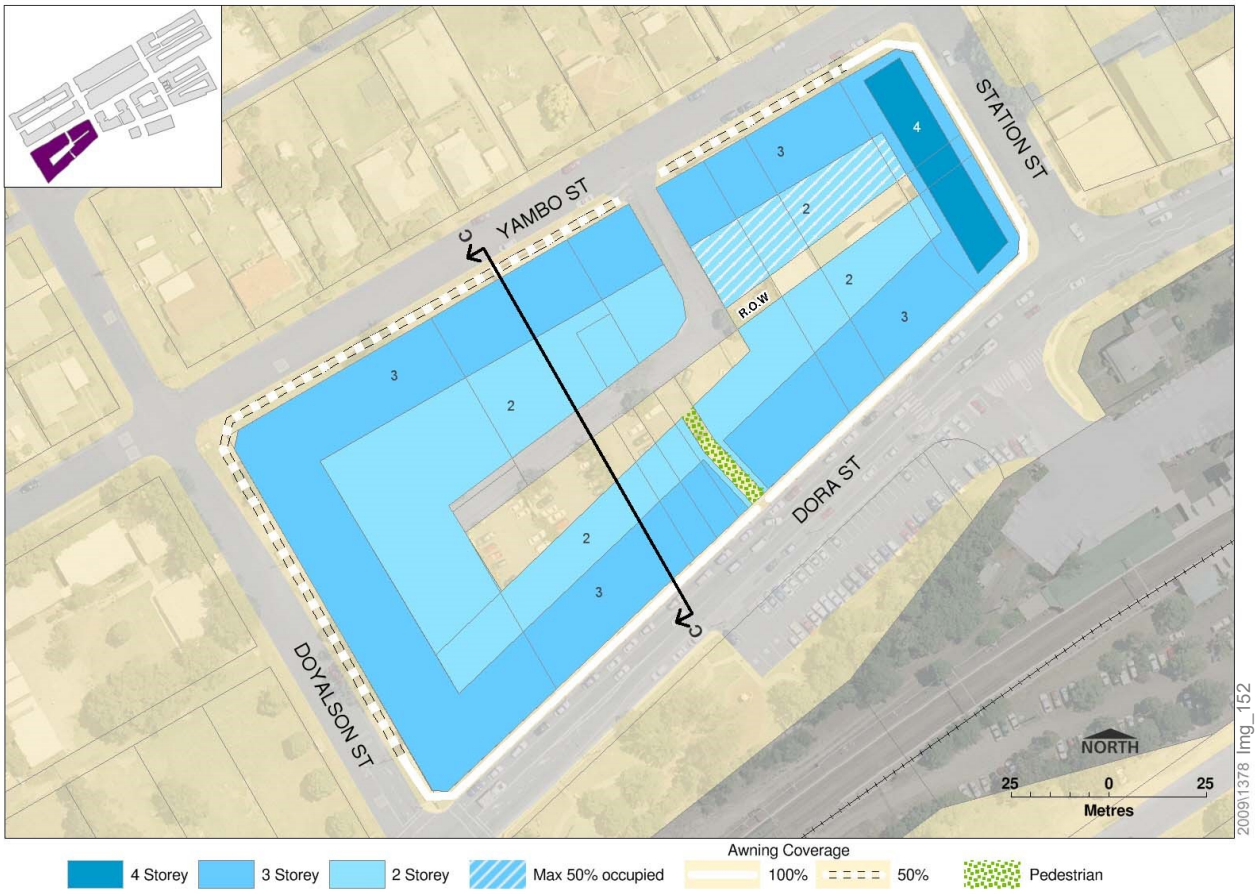


Figure 13 - Block C Control Plan

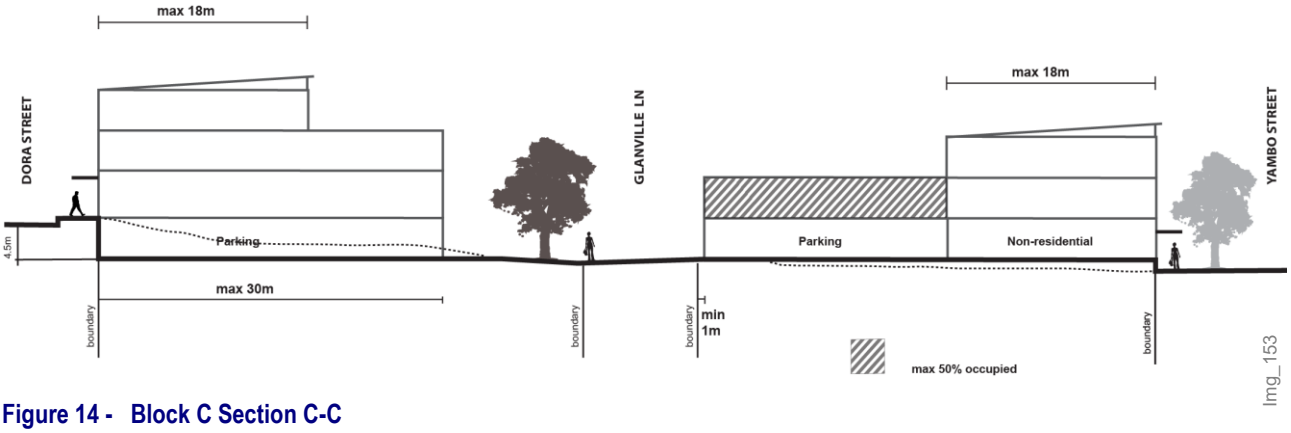


Figure 14 - Block C Section C-C

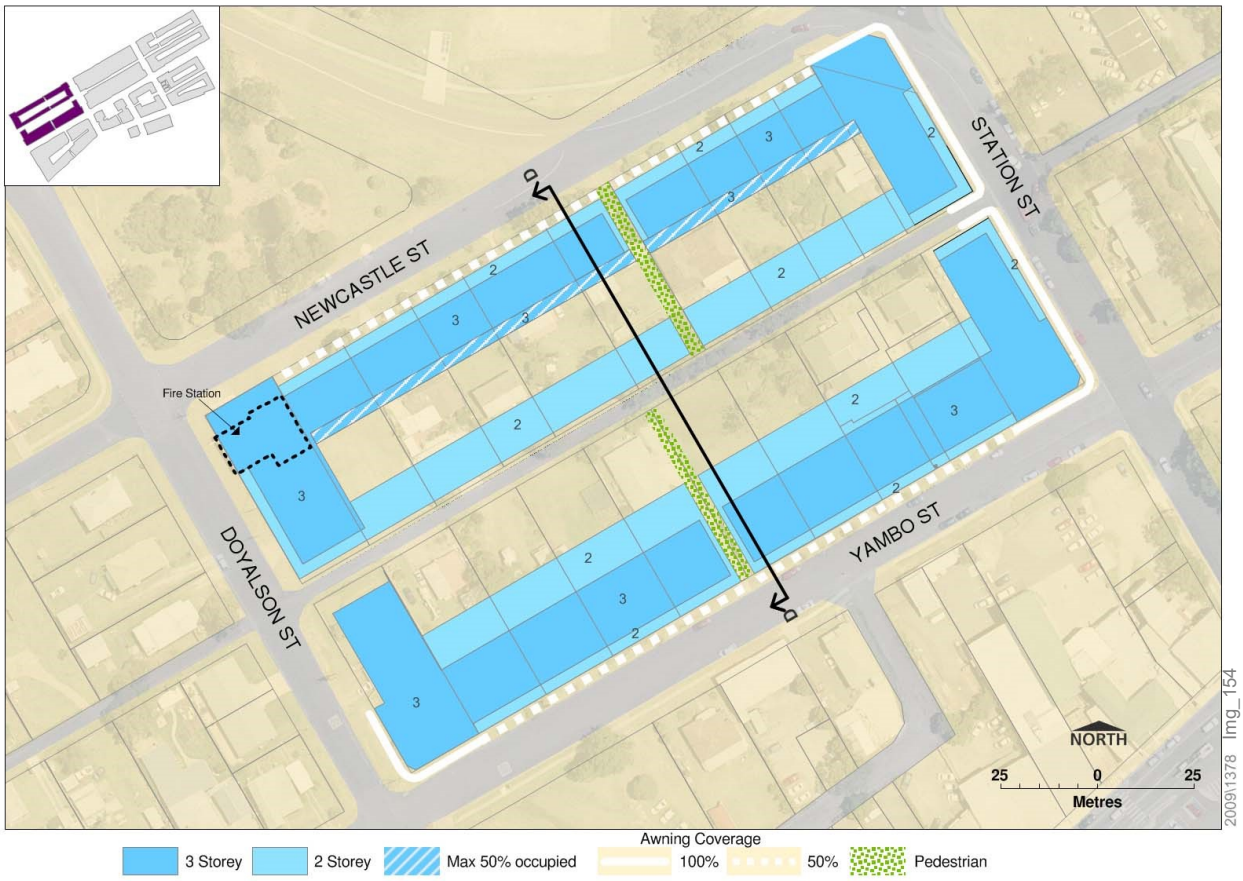


Figure 15 - Block D Control Plan

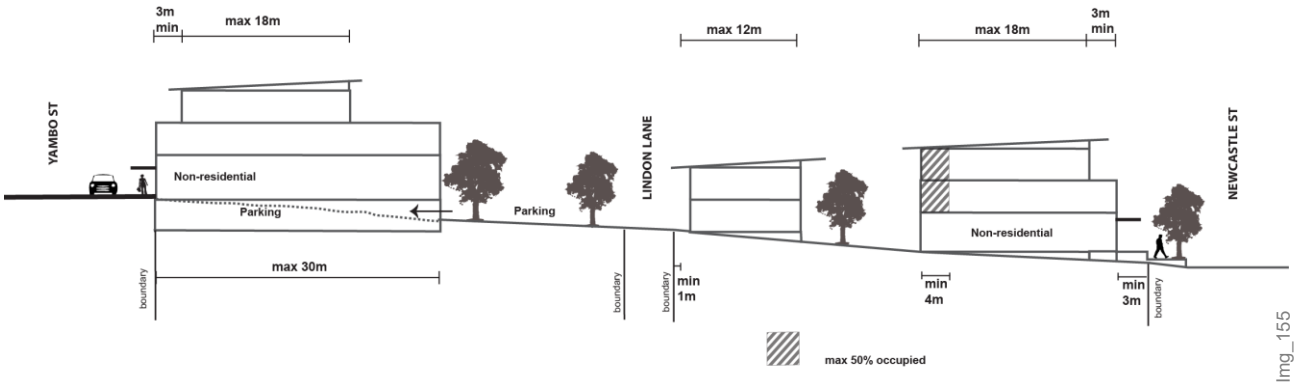


Figure 16 - Block D Section D-D

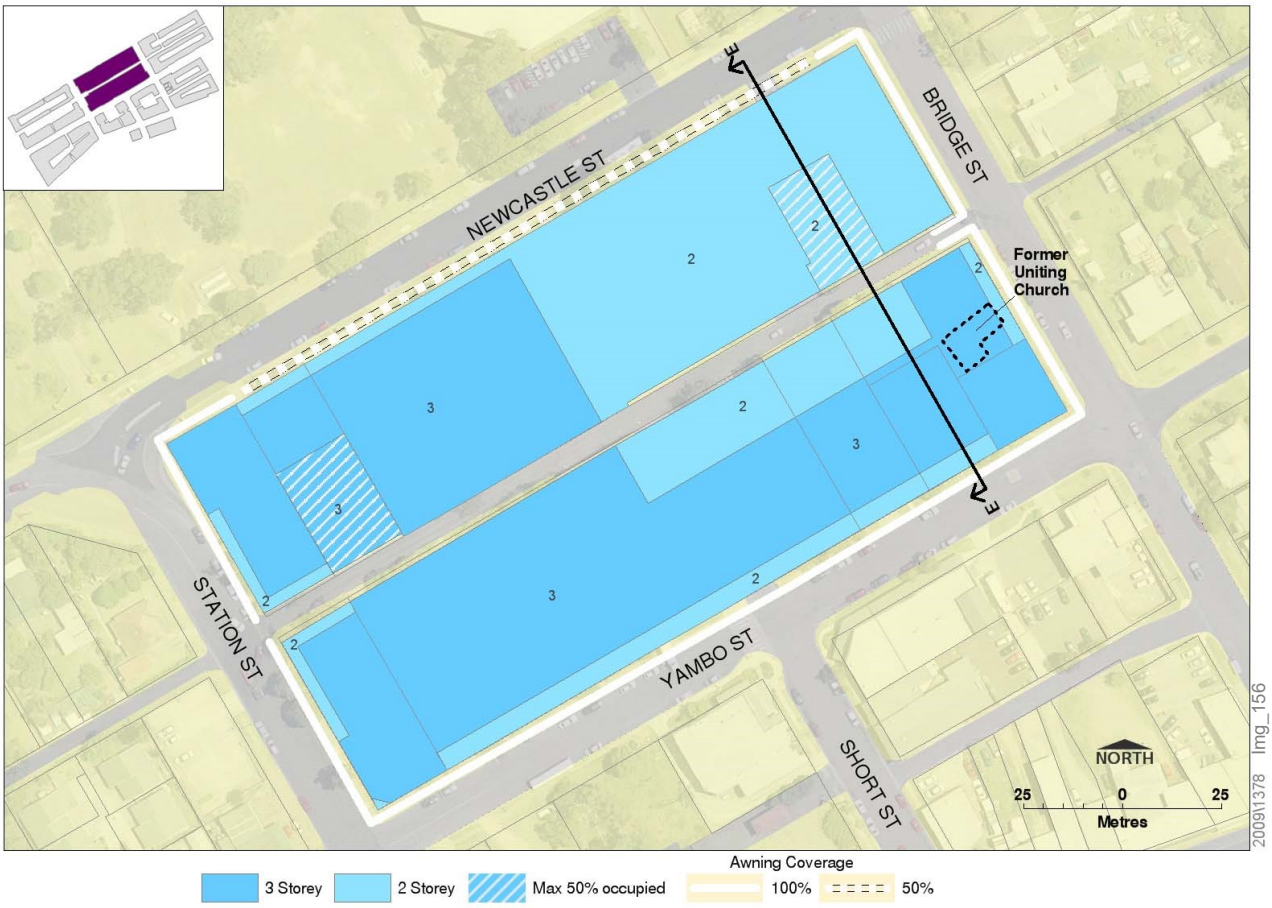


Figure 17 - Block E Control Plan

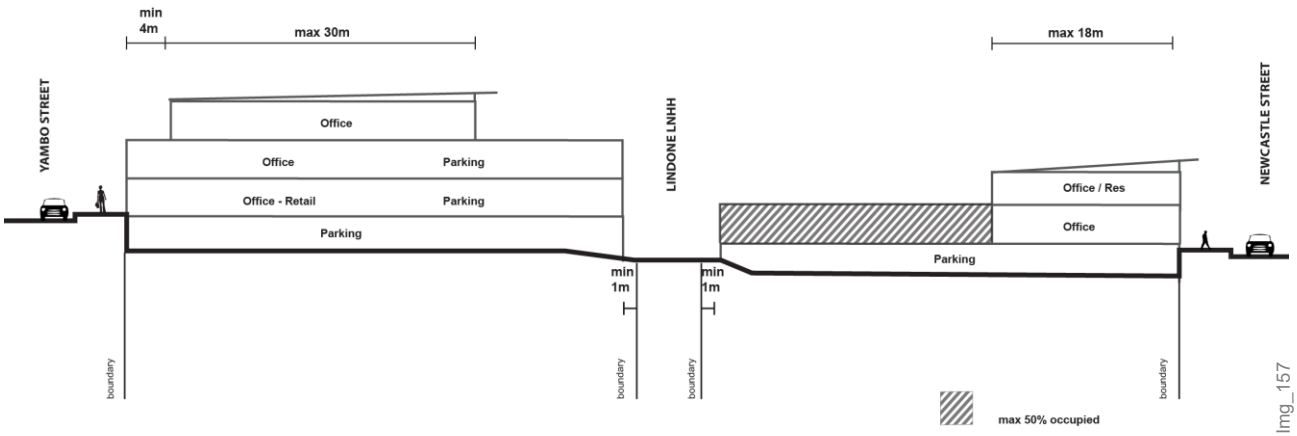


Figure 18 - Block E Section E-E

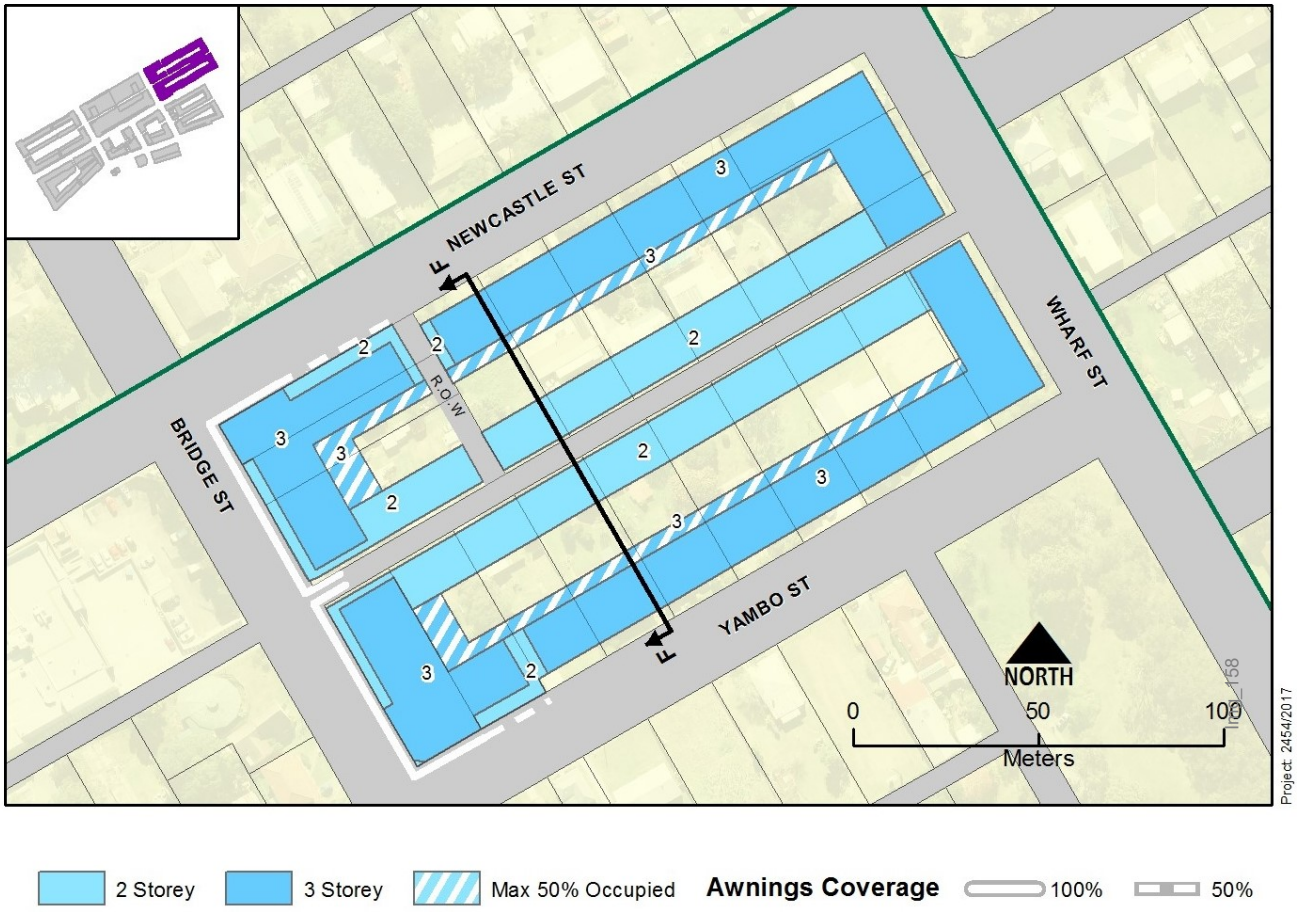


Figure 19 - Block F Control Plan

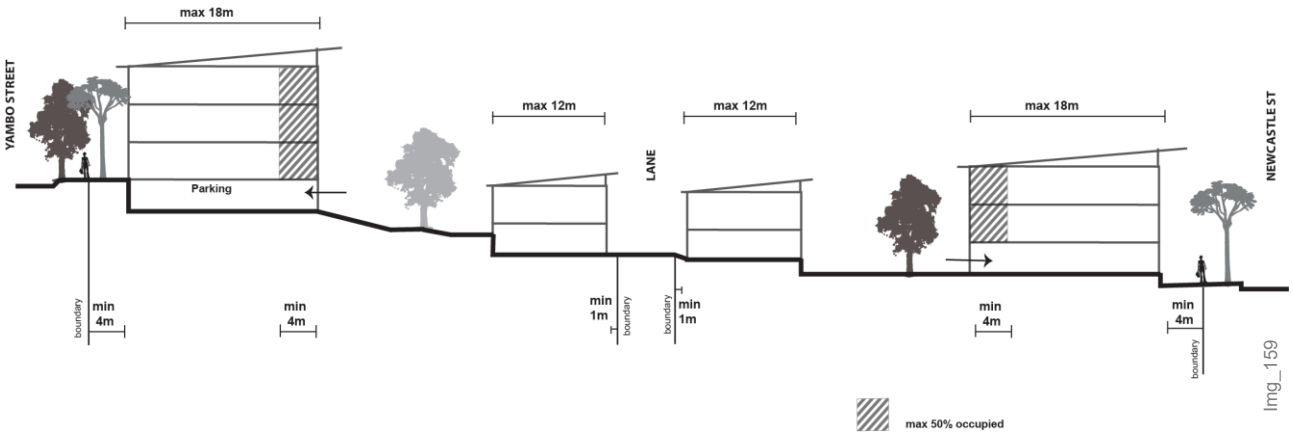


Figure 20 - Block F Section F-F

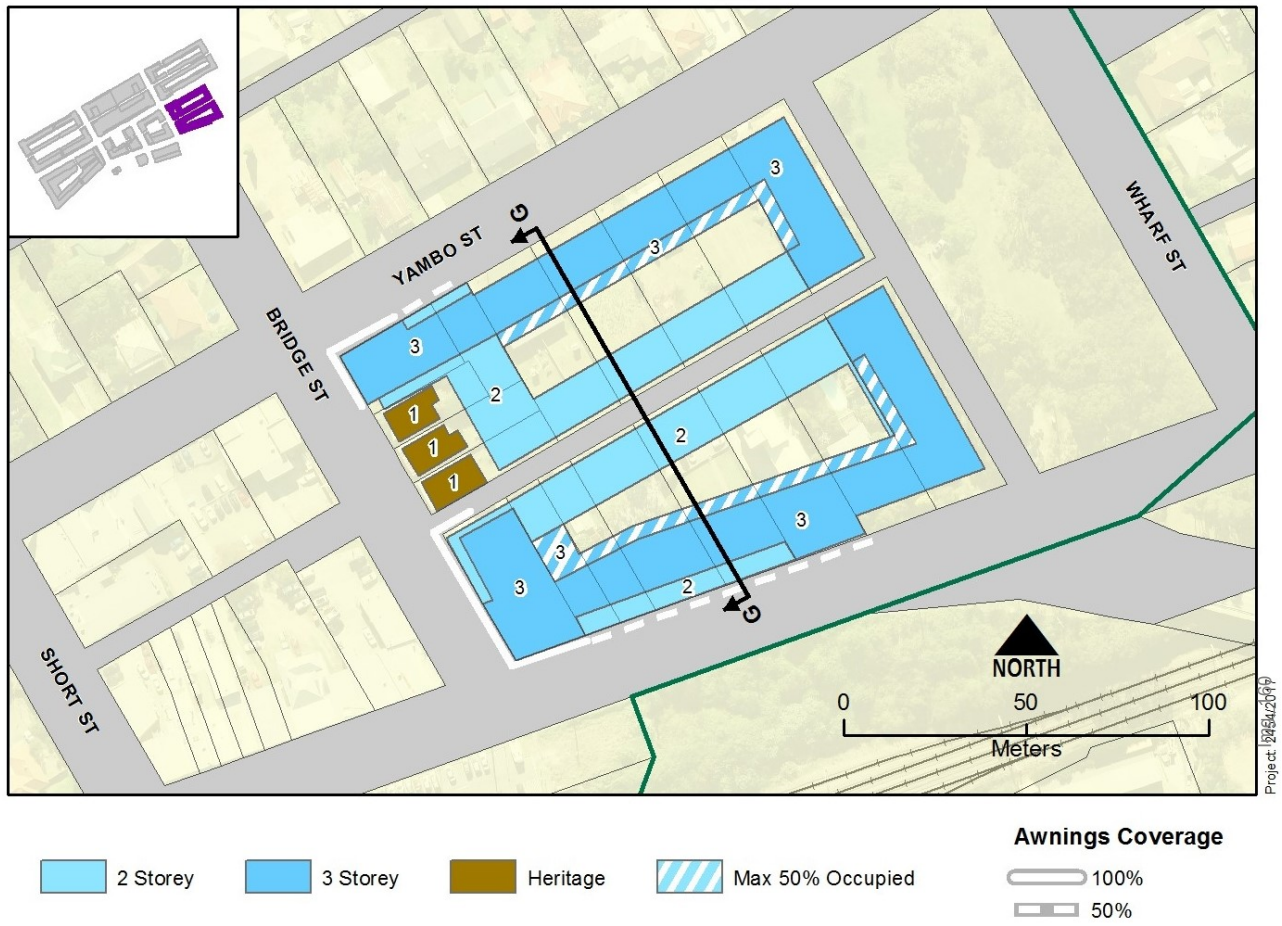


Figure 21 - Block G Control Plan

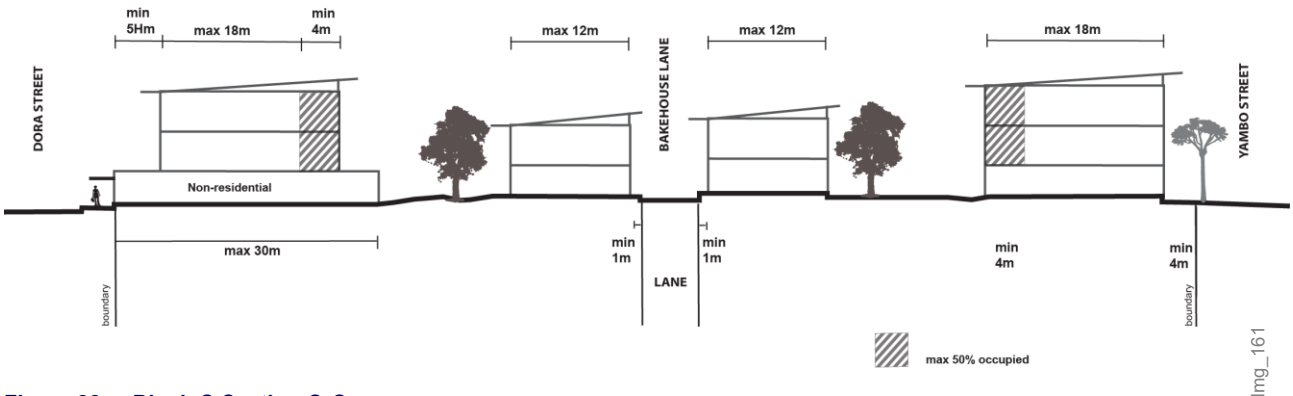
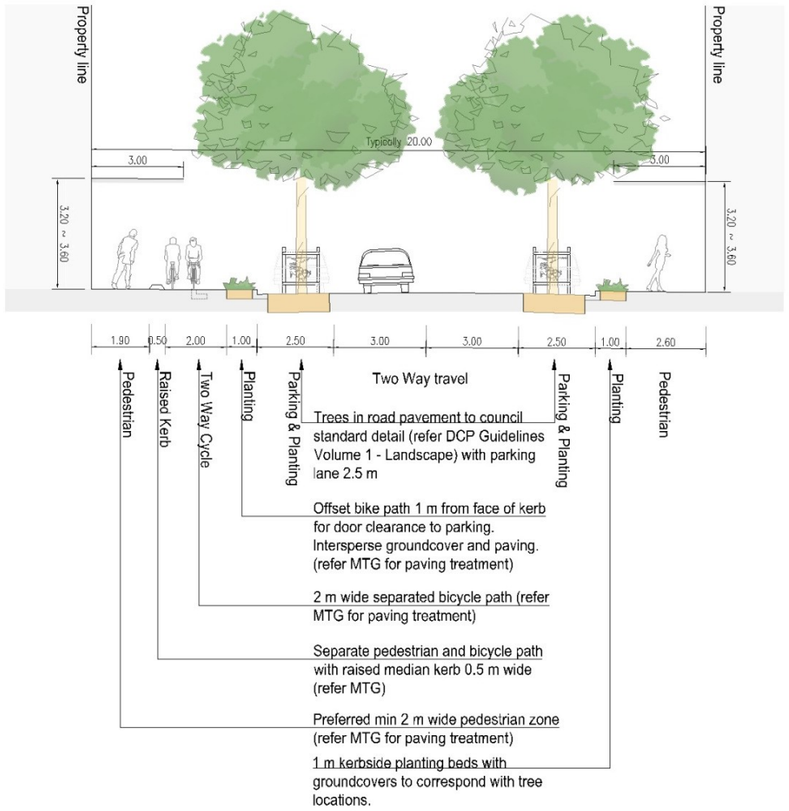


Figure 22 - Block G Section G-G

Figure 23 - Street Improvement Plan Overview



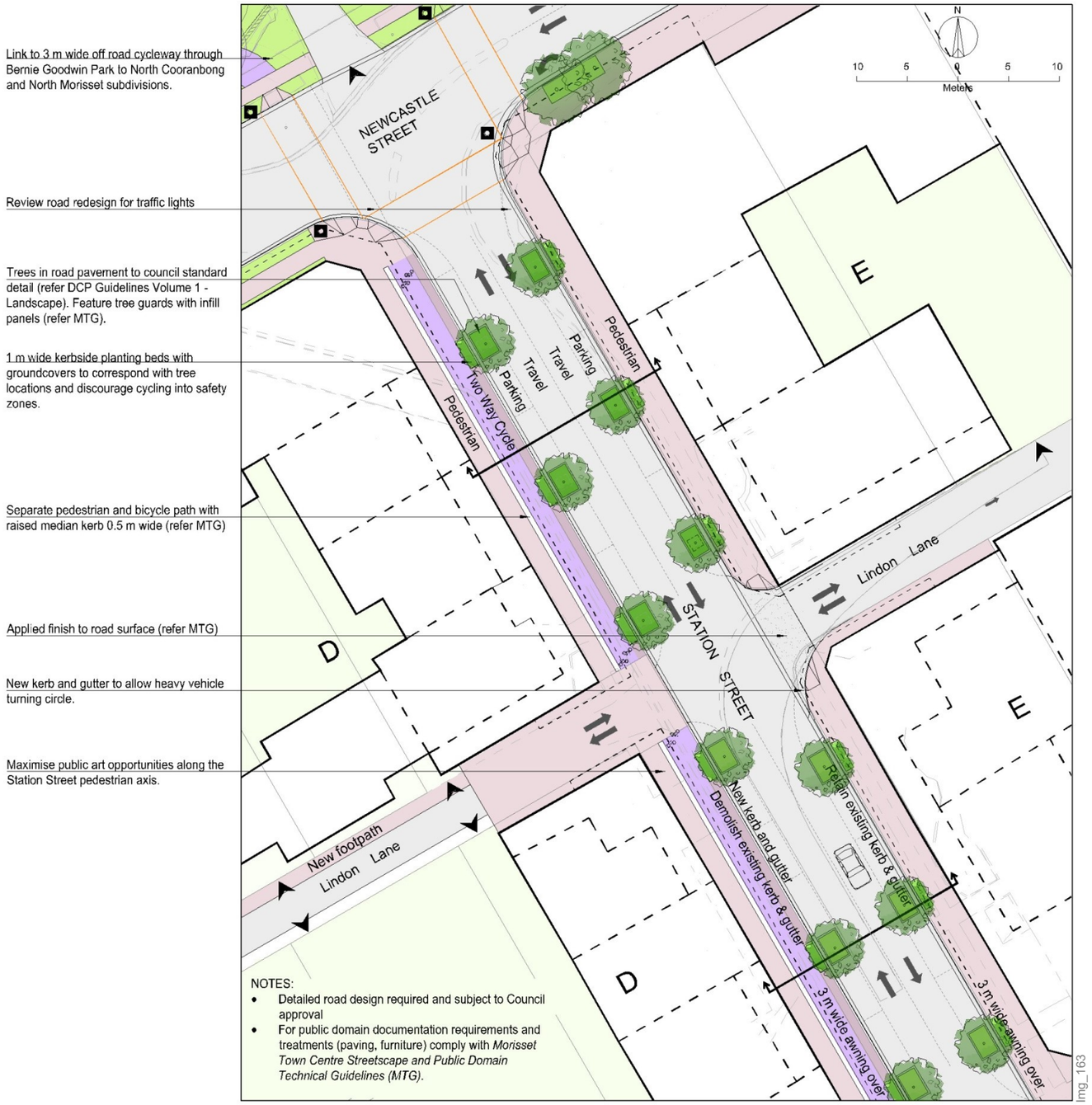


Figure 24 - Street Improvement Plan Station Street North

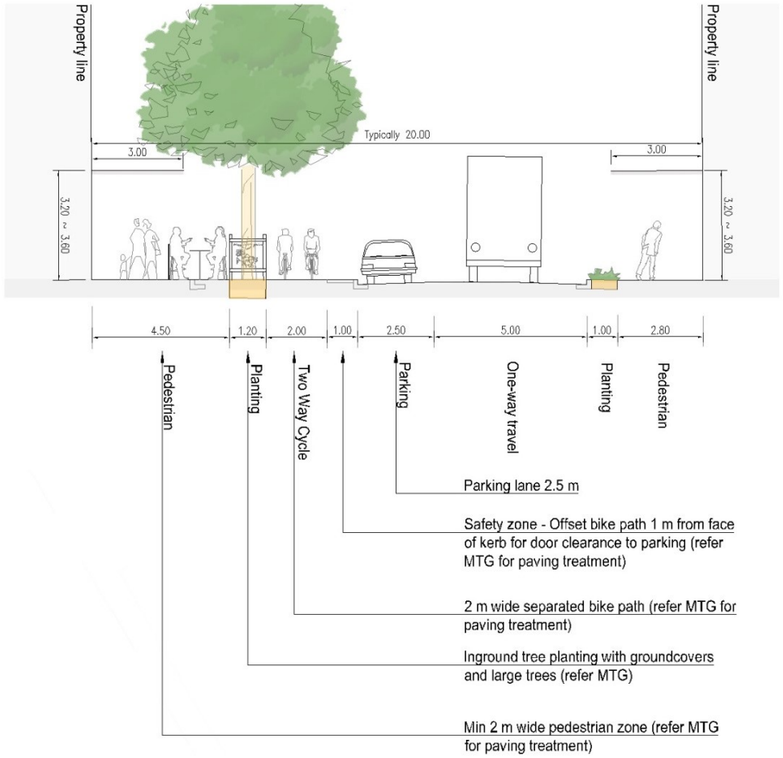


Figure 25 - Street Improvement Plan Station Street South

Figure 26 - Street Improvement Plan Stationmaster's Cottage

Figure 27 - Street Improvement Plan Yambo and Short Streets Precinct

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1 INTRODUCTION

This section contains additional local objectives and controls for development in Mount Hutton Centre. Where there is an inconsistency between the controls within the Area Plan and the controls within another Part of the DCP, the controls within the Area Plan prevail.

For development in the B1 Neighbourhood Centre on Dunkley Parade, refer to Part 4 – Development in Business Zones.

1.1 EXISTING CHARACTER

Mount Hutton is a residential area with ready access to the lake at Warners Bay, and to Charlestown. A large shopping precinct on Wilsons Road and neighbourhood shops on Dunkley Parade support the area. The area also contains a range of stand-alone uses, including nurseries and aged care facilities.

Residential development is mostly low-density, with recent townhouse, villa and aged care facilities on larger sites

Commercial Centre

The main retail and commercial focus of Mount Hutton Centre is Centro Lake Macquarie and Mount Hutton Plaza on Wilsons Road, both built in the early 1980s. They are freestanding shopping centres separated by a single lane roadway and surrounded by large car parking areas. They are now in common ownership. The adjoining Lake Macquarie Tavern supports the centre.

Business zoned land along Wilsons Road from Warners Bay Road to Centro Lake Macquarie contains the Ford's Corner Shops. This commercial strip is intended to support the main shopping centre.

Two large, mostly vacant sites to the east of the shopping centre at 72 and 74 Wilsons Road overlook Scrubby Creek, and have the potential for commercial, retail, medium density residential, seniors living, and community or recreational development.

Cycling and walking

Mount Hutton is not a particularly walkable town centre due to a lack of infrastructure and the low density of existing development around the centre. However, the area is suitable for walking and cycling due to the relatively flat topography.

The route between the subject land and the lake foreshore area is suitable for cycling, but there is no dedicated cycling infrastructure in place to facilitate safe movement.

Traffic and Transport

The centre is reliant on traffic movement along Wilsons Road.

Scrubby Creek

Mount Hutton town centre is in a sub-catchment of Scrubby Creek. The creek flows past the shopping centre from the northwest to the southeast. Scrubby Creek eventually flows into the Jewells Wetlands.

Scrubby Creek riparian corridor is in need of maintenance and rehabilitation and is underused.

1.2 ENVIRONMENTAL CONSTRAINTS

Stormwater Management

Maintenance and rehabilitation of the Scrubby Creek riparian corridor will ensure the long-term quality of the receiving waters at Jewells Wetland and help to manage flooding impacts.

Any significant development in the Wilsons Road South sub-catchment will require a Stormwater Management Plan that ensures that run-off does not exceed current levels, and that sufficient water quality filtering is undertaken before water enters the Scrubby Creek system. The Stormwater Management Plan should be consistent with *Jewells Wetland Catchment Management Strategy (JWCMS)*.

Soils and Stability

Soils in the area are susceptible to erosion and landslip on steep slopes. The area is subject to seasonal water logging, high run-off with moderate to high shrinkage, and strongly acid soils of low fertility.

1.3 DESIRED FUTURE CHARACTER

The desired future character for Mount Hutton Centre is a convenient and active retail centre, accessible by vehicle or public transport from surrounding suburbs and within safe, pleasant walking or cycling reach of the local community.

As the main access corridor, Wilsons Road should be enhanced as a pleasant tree-lined road with buildings setback for tree and landscape planting.

The intersection of Merrigum Street and South Street will be upgraded to traffic lights to facilitate safe movement between the two roads and keep the intersection working at an acceptable level into the future.

The western side of Wilsons Road should provide low scale development oriented to the street. This area is suitable for small-scale retail and local services, such as health consulting rooms and personal services.

The Centro standalone shopping centre should provide convenient access to the larger scale retail, offices, medical, and entertainment facilities required by the wider community. Future development should provide for outdoor public space and trading areas.

New development on larger sites east of the standalone shopping centre at 72-74 Wilsons Road should provide a compatible mix of office and residential or community buildings in a landscape setting. Commercial and residential mixed use development will overlook the street. Residential development to the rear of the sites will overlook the creek and riparian vegetation. Vehicle access will be via a perimeter road and a shared path along Scrubby Creek will provide walking and cycle access to the shops. Further standalone retail activities are not encouraged on these sites, although small-scale retail could be incorporated at street level on Wilsons Road.

Pedestrian and cycle movement should be provided along Scrubby Creek from the shopping centre to residential areas to the east and north.

1.4 DESIRED FUTURE TOWN STRUCTURE

The Mount Hutton Centre Structure (Figure 1 - Mount Hutton Centre Structure Plan) includes:

- Development and landscape works fronting and activating Wilsons Road.
- Safe and legible shared paths from surrounding areas to the shopping centre entries.
- Improved use and rehabilitation of the Scrubby Creek open space corridor.
- Outdoor trading places at Lake Macquarie Shopping Centre.
- Perimeter road to the edge of the creek corridor.

Note: Future traffic, transport, walking and cycling infrastructure works are subject to a review of the *Development Contributions Plan - Charlestown Contributions Catchment.*

1.5 DESIRED FUTURE BUILT FORM

The Centro Lake Macquarie Shopping Centre should be extended to provide a retail and office frontage to Wilsons Road. The Mount Hutton Plaza should be redeveloped and new retail space integrated with the existing Centro building to provide direct pedestrian connections between the two buildings. The northern aspect of Centro Lake Macquarie Shopping Centre should provide quality pedestrian areas activated by a lively mix of smaller shopfronts and food retailers.

Development on the western end of Wilsons Road should be lower scale two storey buildings with deep awnings set back behind landscape areas with generous tree planting. Parking would be to the side or rear of the lot.

Proposals on larger sites at 72 and 74 Wilsons Road should be supported by a Master Plan, which provides a compatible mix of office, residential, recreation or community uses. Buildings should address Scrubby Creek and Wilsons Road, and incorporate water sensitive urban design measures.

1.6 DESIRED FUTURE BUILDING CHARACTER

Buildings on the western section of Wilsons Road should incorporate rendered and painted finishes, low pitched roofs and deep cantilever awnings, with tree planting in the front setback.

Smaller scale retail and office units, along the Wilsons road aspect, should sleeve the standalone shopping centre. These should incorporate rendered and painted finishes, low pitched roofs and deep cantilever awnings, and tree planting in the front setback on Wilsons Road.

Larger scale development at 72-74 Wilsons Road should present well-articulated façades to the road, as well as dwellings with recessed and projecting balconies, overlooking the shared path and the creek corridor.

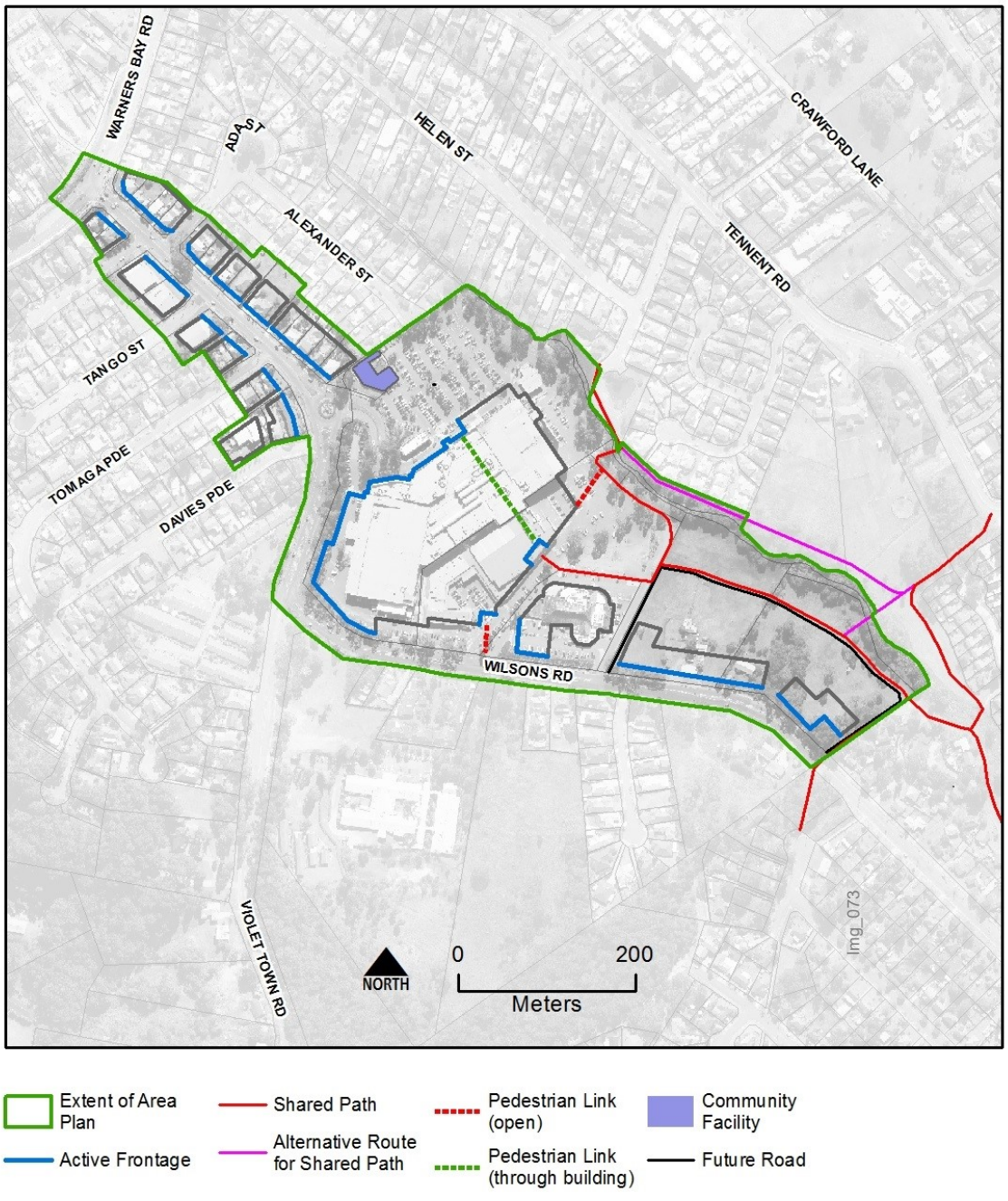

Figure 1 - Mount Hutton Centre Structure Plan

1.7 INVESTMENT IN INFRASTRUCTURE AND OPEN SPACE IMPROVEMENTS

The future of Mount Hutton Centre as a residential and commercial hub is dependent on investment in infrastructure and open space improvements including:

- A shared path along Scrubby Creek linking to the shopping centre;
- Rehabilitation and maintenance of the natural environment and stormwater drainage along Scrubby Creek, and
- Stormwater management infrastructure.

There are several options available to deliver these items, including:

- Conditions of consent;
- Dedication of land to Council;
- Voluntary planning agreements;
- Section 94 contribution plans; and
- Works in kind.

2 DEVELOPMENT CONTROLS

This Area Plan applies to the area bounded by the green line, as shown in Figure 2 - Extent of Area Plan and Key to Block Plans.

Plans and sections are provided for each of the town centre blocks. The Block Controls are designed to respond to the topography, aspect and context of each block and street frontage, in order to support the desired future structure, built form and character of the Mount Hutton Centre (Figures 3-9).

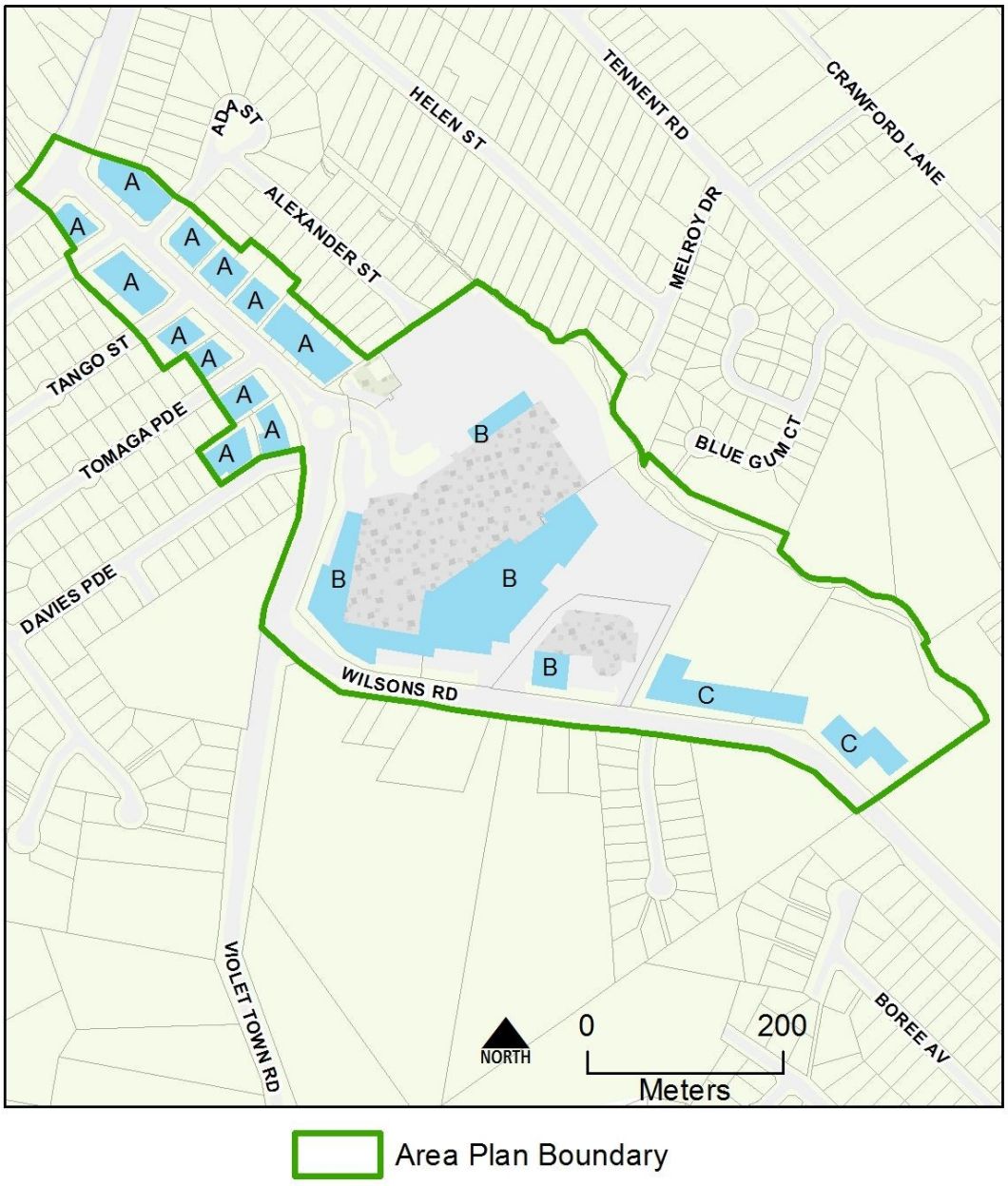

Figure 2 - Extent of Area Plan and Key to Block Plans

2.1 VARIATIONS TO CONTROLS

Any variations to the controls should be assessed against the relevant objective. Any proposed variation must achieve a comparable or better outcome than the outcome that would be achieved by compliance with the controls.

2.2 BLOCK CONTROLS

Objectives

a. To improve the amenity and connectivity of the public domain.

b. To improve vehicle circulation and active transport choices.

c. To ensure that building scale, height and setback contributes to active, safe and pleasant streets.

d. To ensure that development improves natural surveillance, safety, access and amenity for the creek corridor.

Controls

1. Development must comply with the Block Controls, as shown in Figures 3-9.

3 STREETS AND PUBLIC SPACE

3.1 SCRUBBY CREEK RESERVE

Objectives

a. To ensure that development addresses and overlooks Scrubby Creek and the open space areas.

b. To ensure that development is sited and designed to minimise the flooding impacts of Scrubby Creek.

c. To ensure that development does not adversely affect water quality or availability in Scrubby Creek.

d. To ensure that Scrubby Creek and associated riparian vegetation is maintained and rehabilitated, in order to contribute to water quality, and to mitigate sedimentation of Jewells Wetland.

e. To incorporate Water Sensitive Urban Design techniques in all new developments.

f. To minimise the volume and rate of stormwater leaving a development site.

g. To develop a reserve with an informal native landscape, and pedestrian and cycle paths.

h. To provide pedestrian and cycle paths along Scrubby Creek.

Controls

For proposals on sites between 46 and 74 Wilsons Rd:

1. Development must not result in any net increase in peak stormwater flows to Scrubby Creek.
2. Development must not result in any net increase of pollutant loads to Scrubby Creek.
3. Development proposals must include a Stormwater Management Plan that is consistent with *Jewells Wetland Catchment Management Strategy.*
4. Development must include Water Sensitive Urban Design (WSUD) measures to manage stormwater, erosion, and water quality of stormwater leaving the site.
5. The elements of the drainage system and stormwater treatment devices must be visually unobtrusive and integrated within individual sites, landscaped areas, roads and open space areas. They must be designed in accordance with Council's *Water Cycle Management Guidelines* and *Engineering Guidelines*.
6. Development must include revegetation along Scrubby Creek using local native species.
7. Development must include pedestrian and cycle paths along Scrubby Creek that are readily visible, as shown in Figure 1 - Mount Hutton Centre Structure Plan.

For proposals on sites at 72-74 Wilsons Road:

8. Development must be designed to address both Wilsons Rd and Scrubby Creek.
9. Development must include an access road located on the southern edge of the riparian zone.
10. Development must provide a suitable shared path located within the riparian zone of Scrubby Creek, as shown in Figure 1 - Mount Hutton Centre Structure Plan. It must be well lit and located to maximise passive surveillance.

3.2 PUBLIC SPACE AT CENTRO LAKE MACQUARIE

Objectives

a. To establish a convenient pedestrian link from the Centro Lake Macquarie Shopping Centre to Wilsons Road and bus facilities.

b. To provide open air public spaces at busy pedestrian areas on the northern aspect of Centro Lake Macquarie Shopping Centre.

Controls

1. Development of Centro Lake Macquarie Shopping Centre (see Block B Control Plan) must include a direct open-air pedestrian walkway with a minimum width of four metres from the existing shopping centre to the bus stop on Wilsons Road.
2. Development of Centro Lake Macquarie Shopping Centre (see Block B Control Plan) must include two high quality footpath trading spaces of at least 15m x 10m within the pedestrian area, as shown on Block B Control Plan. These spaces must have:
    i. At least three hours sun access from 9am to 3pm in mid-winter; and
    ii. Appropriate shade awnings, paving, lighting, seating and other furniture.

3.3 STREET AWNINGS

Objectives

a. To ensure that building design contributes to pedestrian amenity.

Controls

1. Development on Wilsons Road between Warners Bay Road and Violet Town Road must provide cantilever awnings, with a minimum depth of three metres to at least 50% of the building frontage.
2. Development on Wilsons Road between Violet Town Road and 74 Wilsons Road must provide cantilever awnings, with a minimum depth of three metres to building entries.
3. Development of Centro Lake Macquarie must provide continuous cantilever awnings to the pedestrian walkway and footpath trading spaces on the northwestern, and western aspects of the building.

4 CONCEPT PLAN SITE - 72 AND 74 WILSONS ROAD

Objectives

a. To investigate site layout, approximate yield, public benefit, and building scale, form and height early in the development design and assessment process.
b. To demonstrate the capacity of a development to deliver walking, cycling and open space improvements and the resulting social, community and economic benefits for the town centre.
c. To support the delivery of affordable dwellings with good amenity and with easy access via a shared path to the shopping centre and open space.
d. To allow consideration of a proposal that varies from Figure 8: Block C Control Plan.

Controls

1. A comprehensive site and context analysis must be undertaken to inform a Concept Plan for the site.
2. The Concept Plan must address and resolve the following:
   - i Building form and mix of uses that address and activate Wilsons Road;
   - ii Integration of existing native trees into a small urban place at the south-eastern corner of 74 Wilsons Road;
   - iii Provision of access road and shared path along the south-eastern boundary;
   - iv Provision of access road and shared path along Scrubby Creek;
   - v Stormwater management and Water Sensitive Urban Design measures to improve water quality to Scrubby Creek; and
   - vi Provision for future management of the creek corridor.

5 ACCESS AND PARKING

5.1 SITE ACCESS – WILSONS ROAD WEST

Objectives

a. To enhance the pedestrian amenity of Wilsons Road (western section).

Controls

1. For the western section of Wilsons Road, vehicle access to a development site must be obtained from a side street or from the rear of the lot where feasible.
2. Parking areas must be located at the side or rear of the lot.
3. Shared vehicle access must be considered for multiple developments.
4. Car parking areas must be designed to meet the *Crime Prevention Through Environmental Design (CPTED) Guidelines.*

5.2 PARKING PROVISION – STAND-ALONE SHOPPING CENTRE

Objectives

a. To provide new parking at basement level, or under a podium level in the Centro Lake Macquarie shopping centre.

b. To ensure safety and security of car parking areas in the Centro Lake Macquarie shopping centre.

Controls

1. Redevelopment of the Mount Hutton Plaza section of Centro Lake Macquarie must include basement level parking, as shown in Block B Control Plan and Section.
2. Car parking areas must be designed to meet the *Crime Prevention Through Environmental Design (CPTED) Guidelines.*

6 BUILDING DESIGN

6.1 SETBACKS ON WILSONS ROAD

Objectives

a. To define the spatial character of Wilsons Road.

b. To provide a landscape setback to Wilsons Road with space for broad canopy trees.

c. To provide active office and retail frontages to the street and pedestrian footpaths.

Controls

1. Development on Wilsons Road must be set back a minimum of five metres from the road boundary. The setback area must be reserved for tree planting, and must not include car parking.
2. Development of Centro Lake Macquarie Shopping Centre (see Block B Control Plan) must achieve at least two storeys built up to the minimum front setback line for at least 30% of the lot frontage.

6.2 SIDE AND REAR SETBACKS

Objectives

a. To ensure an appropriate level of amenity for occupants of the development and neighbouring buildings, including natural light and ventilation, outlook, view sharing, wind shelter and privacy.

Controls

1. Side and rear building setbacks must be consistent with the Block Control Plans and Sections (Figures 3-9).
2. Buildings must be set back a minimum of 1.5 metres from side and rear boundaries for the first level, and three metres for upper levels.
3. Development adjacent to a residential zoned lot at the rear must be set back a minimum of six metres from the rear boundary.

6.3 MAXIMUM BUILDING HEIGHT

Objectives

a. To ensure that developments are of a compatible scale with the surrounding built environment.

Controls

1. The maximum number of storeys must comply with the Block Controls and Sections (Figures 3-9).

Note: ***Building height*** is defined as the vertical distance between ground level (existing) at any point to the highest point of the building, **including plant and lift overruns**, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.

6.4 MAXIMUM OCCUPIED AREA

Objectives

a. To reduce the bulk and impact of building mass on residential amenity within the development site or on neighbouring sites.

Controls

1. Development must be consistent with the maximum occupied area controls, as shown in the Block Controls and Sections (Figures 3-9).

Note: ***100% occupied area*** means that the floor space on that level completely fills the maximum possible area within the setbacks from each boundary.

Note*: 50% occupied area* means that the floor space on that level occupies no more than 50% of the maximum possible area within the setbacks from each boundary.

7 LANDSCAPE

7.1 PLANTING ON PRIVATE LAND

Objectives

a. To enhance the amenity of Wilsons Road with landscape and tree planting within the street and front setback area.

Controls

1. Development on Wilsons Road must include retention, or installation and maintenance of at least one advanced clear-trunked broad-canopy tree within the front setback area, for every six metres of frontage.
2. Development must provide streetscape planting and street improvements consistent with Council's Mount Hutton Streetscape Master Plan.

7.2 PLANTING IN THE RIPARIAN ZONE

Objectives

a. To rehabilitate native vegetation within the riparian zone.

Controls

1. Trees planted in the riparian zone must be selected from the list provided in Table 1 – Native Trees for the riparian zone.

Table 1 - Native Trees for the riparian zone

Botanical Name	Common Name	Botanical Name	Common Name
Acmena smithii	Lillypilly	*Eucalyptus piperita*	Sydney peppermint
Alectyron subcinereus	Native Quince	*Eucalyptus punctata*	Grey gum
Alphitonia excelsa	Red ash	*Eucalyptus robusta*	Swamp mahogany
Angophora hispida	Dwarf apple	*Eucalyptus saligna*	Sydney blue gum
Angophora floribunda	Rough barked apple	*Eucalyptus tereticornis*	Forest red gum
Backhousia myrtifolia	Grey myrtle	*Glochidion ferdinandii*	Cheese tree
Backhousia anisata	Aniseed Myrtle	*Gmelina leichhardtii*	White beach
Banksia integrifolia	Coast Banksia	*Guioa semiglauca*	Guioa
Banksia serrata	Old man Banksia	*Hakea salicifolia*	Willow leaved Hakea
Banksia aemula	Wallum Banksia	*Hymenosporum flavum*	Native frangipani
Banksia marginata	Silver Banksia	*Livistona australis*	Cabbage tree palm
Brachychiton populneus	Kurrajong	*Melaleuca linariifolia*	Snow in summer
Callicoma serratifolia	Black wattle	*Melaleuca quinquenervia*	Broad leaved paperbark
Callistemon salignus	Willow bottlebrush	*Melaleuca sieberi*	Sieber's paperback
Callistemon citrinus	Red bottlebrush	*Melaleuca stypheliodies*	Prickly leaved paperback
Callistemon nearis	Narrow leaved bottlebush	*Podocarpus elatus*	Plum pine
Callistemon 'Dawson River'	Bottlebrush	*Rapanea variabilis*	Muttonwood
Callitris collumellaris	Cypress pine	*Stenocarpus salignus*	Scrub beefwood
Ceratopetalum apetalum	Coachwood	*Syncarpia glomulifera*	Turpentine

Botanical Name	Common Name	Botanical Name	Common Name
Corymbia maculata	Spotted gum	*Synoum glandulosum*	Scentless rosewood
Cupaniopsis anarcardioides	Tuckeroo	*Syzygium australe*	Brush cherry
Diospyros australis	Ebony myrtle	*Syzygium paniculatum*	Magenta lillypilly
Dysoxylom fraseriana	Rosewood	*Tristaniopsis laurina*	Kanooka, water gum
Endiandra sieberi	Hard corkwood		
Elaeocarpus obovatus	Hard quandong		
Elaeocarpus reticulatus	Blueberry ash		
Eucalyptus gummifera	Red bloodwood		

8 BLOCK CONTROLS

Figure 3 - Block A Control Plan

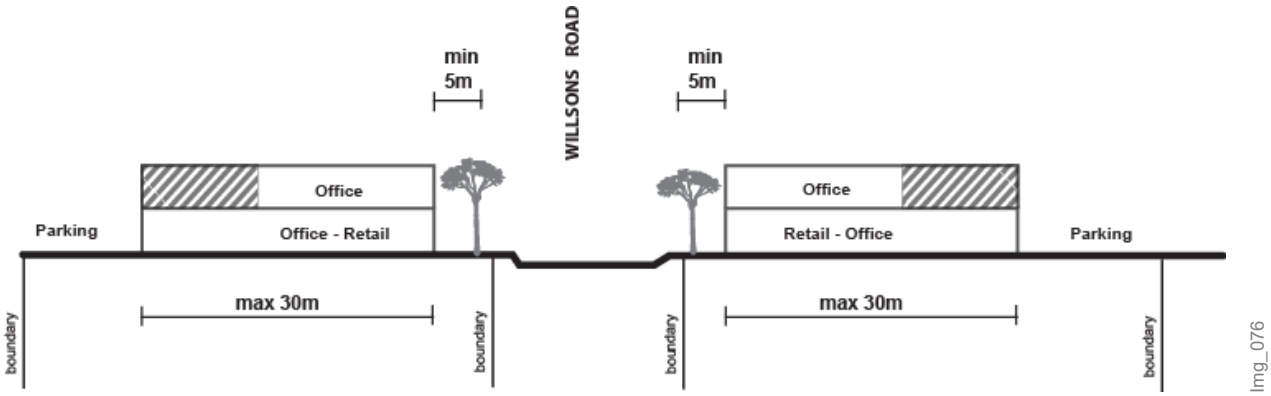

Figure 4 - Block A Section A-A

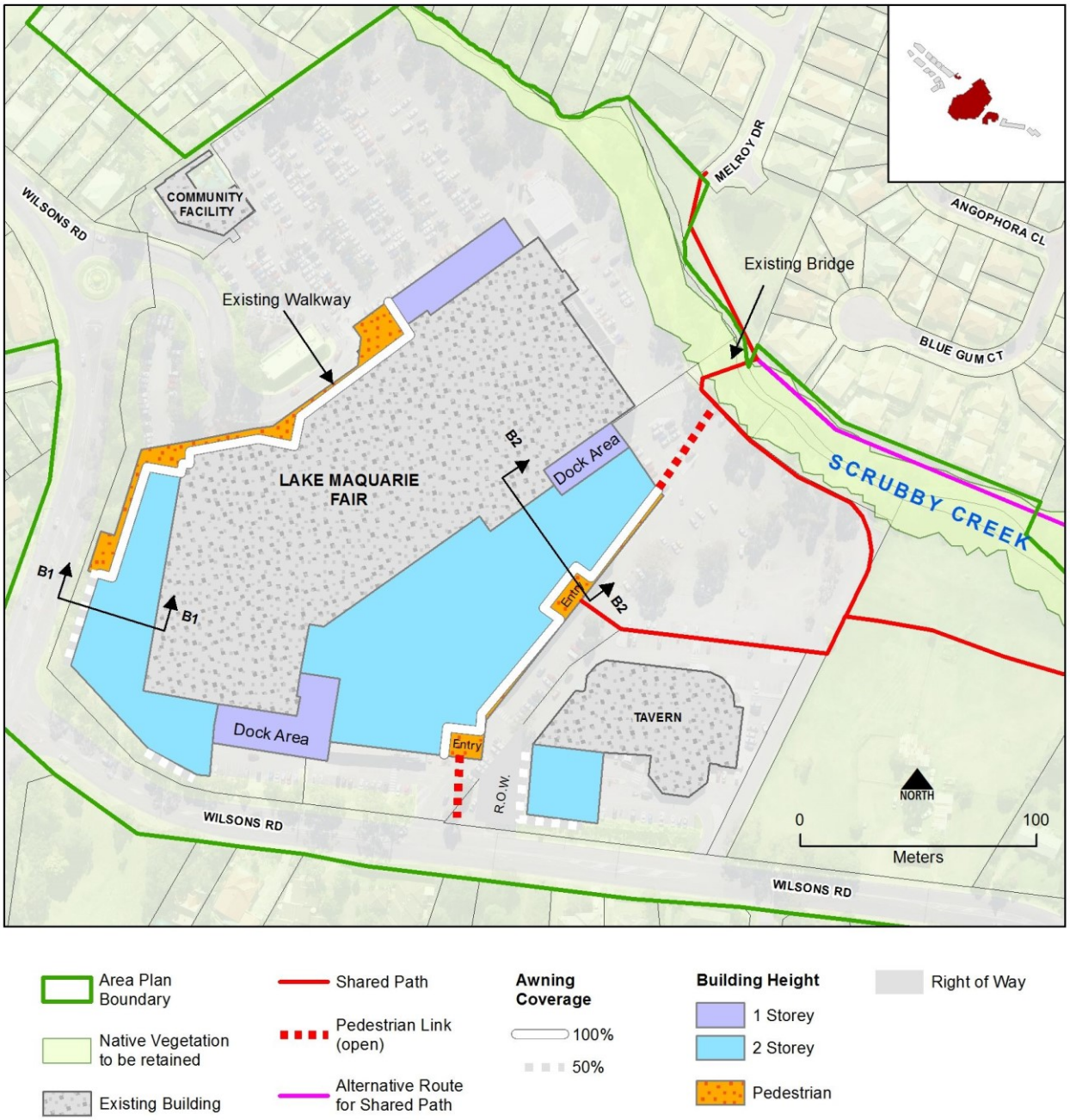

Figure 5 - Block B Control Plan

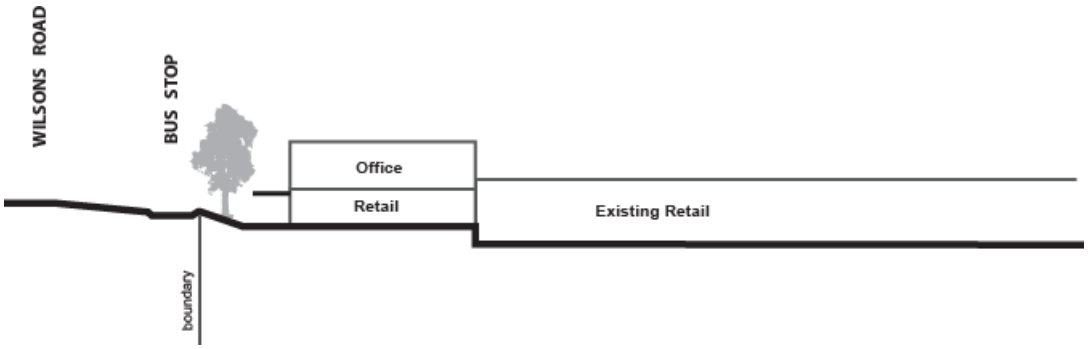

Figure 6 - Block B Section B1-B1

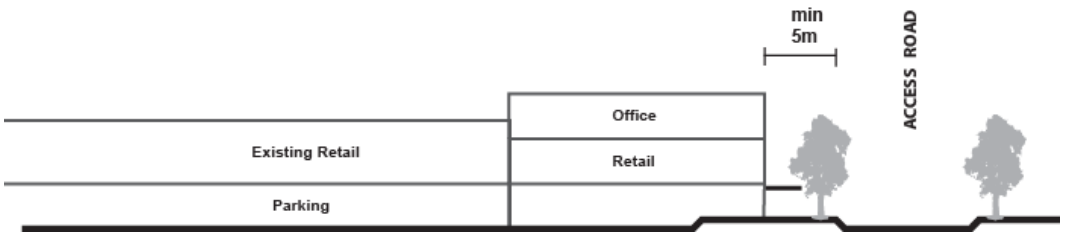

Figure 7 - Block B Section B2-B2

Figure 8 - Block C Control Plan

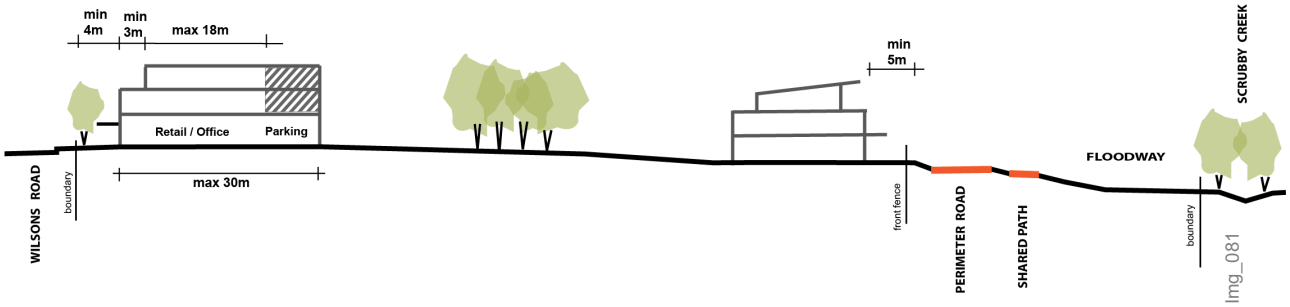

Figure 9 - Block C Section C-C (indicative section only)

CONTENTS:

FIGURES:

1 INTRODUCTION

This section contains specific local objectives and controls for development in Toronto town centre as defined in Figure 4; Extent of Area Plan and are in addition to the general provision contained in Part 4. For general development controls, see Part 4 – Development in Business Zones. Where conflict arises between this section and Part 4, the controls in the Toronto Area Plan take precedence.

1.1 BACKGROUND

Toronto is the major commercial centre on the western side of Lake Macquarie. Located on the Lake foreshore approximately 30 kilometres south of Newcastle, Toronto has evolved from an essentially tourism-based past into a key local centre servicing adjoining residential areas.

Whilst maintaining the qualities that give Toronto town centre its identity, Toronto needs to adapt and develop in response to broader issues of economic, demographic and structural change within the region.

Img_115

Figure 1 - Toronto viewed from Lake Macquarie

1.2 EXISTING CHARACTER

The character of the town centre is defined by its close connection to Lake Macquarie, ready public access to the lake foreshore, generally low scale development and a treed backdrop, as demonstrated in Figures 1 and 2.

The Town Centre is bounded by a significant ridgeline to the south, Cary Street (a busy collector road) to the west, by the lake to the east and a residential heritage precinct to the north.

European Heritage

Toronto was the earliest settlement of the area on the shores of Lake Macquarie. The Victory Parade foreshore area was the location of this original settlement, which centred on the bluff overlooking the lake.

In 1831, the Reverend Threlkeld was granted land on the current town site, which extended as far as LT Creek (Lancelot Threlkeld Creek) at Fassifern. The same year, he established an Aboriginal Mission on the site now occupied by the Toronto Hotel. The land was later farmed until purchased and subdivided in 1887 by Excelsior Land Investment as a sublime nineteenth century recreational resort, surrounded by small residential lots. The Fassifern-Toronto rail opened in 1891, supporting development of the area as a holiday destination.

The historic Toronto Hotel was built in 1888. It survives as the centrepiece of the resort 'pleasure grounds' that extended from Victory Parade to The Boulevarde and Cary Street. The Toronto Railway Station remains on the rail alignment below the hotel and bluff, along with three vernacular lakeside cottages on the lake edge.

Aboriginal Heritage

The area along Victory Parade and the foreshore has particular interest and significance for the Aboriginal community who camped on the former mission site. It is identified as Sensitive Aboriginal Cultural Landscape.

Figure 2 - View from marina to bluff with Toronto Hotel located above the railway station

Scenic Quality

Views to and from the lake play a vital part in Toronto's character and sense of place, as demonstrated in Figures 1 and 2.

From the lake, the tree line along the ridge of Excelsior Parade – at an elevation of about 40 metres above the lake – forms a green backdrop to the town. The canopy of trees in the foreshore park, Goffet Park, and the large figs along The Boulevarde are readily visible with the current scale of development. The Toronto Hotel and its Canary Island Date Palms are located on the bluff, which rises about 16 metres above the lake at Victory Parade. The hotel and bluff form the central landmark of the town.

The spire of the Anglican Church at the corner of Cary Street and Brighton Avenue is also a distinctive landmark on higher ground to the southwest of the town core.

From the town centre, there are lake vistas from Brighton Avenue, the Toronto Hotel, Victory Parade and Bath Street adjacent the Toronto Yacht Club area, as shown in Figure 3 - Toronto Town Centre Structure Plan.

The scale, height and form of future development should not detract from these scenic qualities or interrupt the identified vistas.

Vehicle Access and Movement

The town core is within a triangle formed by Cary Street, Victory Parade and The Boulevarde. The majority of retail activity fronts The Boulevarde, which forms a traditional main street. Other significant retail is located within large floor space retail development associated with Coles, Woolworths or Aldi.

The Boulevarde between Cary Street and Victory Parade is about 450 metres long, with only one connecting street (Pemmell Street) running south. Traffic circulation is constrained by this lack of street connectivity.

Off-street car parking is distributed either side of The Boulevarde: at the Council multi-deck car park adjacent Woolworths in Hinton Lane; at grade adjacent to the Aldi development; at grade off Donnelly Avenue adjacent Coles and the Toronto Hotel; and in the basement level of the Coles development.

Cary Street is an RMS Main Road (MR 217) with up to four travel lanes. It forms a physical barrier between western and eastern parts of the town. The western sector of the town is more suited to vehicle-oriented businesses.

Future development in the core of the town may provide the opportunity for improved north-south links and for basement or multi-deck car parking.

Pedestrian Circulation and Public Places

Most pedestrian activity is focussed on the south side of The Boulevarde, the southern end of Victory Parade, The Town Square, and the link to Hinton Lane adjacent to the Frith's Store. Generally, the town centre is not well served by pedestrian connections or adequate gathering places.

Future development should make north-south connections more readily visible and accessible. It should also improve the extent and quality of *al fresco* space on The Boulevarde, and provide pedestrian space with active frontage on the Post Office site.

Built Form

The town centre contains a mixture of building styles dating from the 1890s to the present, ranging in height between one and three storeys.

Lots and building footprints on The Boulevarde generally reflect the historic pattern of subdivision in the former Excelsior's Estate, although there are few instances of significant lot consolidation. Buildings on The Boulevarde address the street, are built to the street boundary, and have established street planting.

Cary Street features commercial and vehicle related uses that have various setbacks and little active frontage to the street boundary. Retail uses include McDonalds, car yards and service stations, RTA offices, a telephone exchange and the Toronto District Court House.

Prominent built forms within the Town Centre include the Toronto Hotel, Coles and Woolworths supermarkets, Council Library, the Court House, the Uniting Church and Anglican Churches. These buildings, due either to their recent construction or heritage value, are unlikely to change in the medium to long term.

Post Office Site

Redevelopment of the Post Office site should provide a new one way vehicle lane from the Donnelly Avenue car park south to The Boulevarde. It should also improve pedestrian space either side of the new lane and provide retail floor space with an active retail frontage to the new lane.

1.3 ENVIRONMENTAL CONSTRAINTS

Sensitive Aboriginal Cultural Landscape

The foreshore area and land around the present hotel are identified as Sensitive Aboriginal Cultural Landscape. Development on sites in this area will be subject to the provisions of the *Lake Macquarie Aboriginal Heritage Management Strategy*.

1.4 DESIRED FUTURE CHARACTER

Activity and Uses

The desired future character for Toronto is an active pedestrian-friendly centre that supports the economic and cultural activities of the local population, visitors and tourists. The Town Centre would be made more vital and pedestrian-friendly by the introduction of increased residential population and strategically located mixed-use development. Victory Parade would be further developed as a restaurant, café and tourist area with tourist and visitor accommodation.

Town Centre Structure

The future structure of the Toronto town centre, as shown in Figure 3 - Toronto Town Centre Structure Plan should:

- Protect key views east to the lake, and west to the Watagans;
- Maintain the visual prominence of the Toronto Hotel from the water and the lake foreshore;
- Maintain the visual prominence of the Anglican Church spire at Cary Street and Brighton Avenue;
- Improve pedestrian connections throughout the Town Centre, particularly in the north-south direction;
- Activate the foreshore and Victory Parade as an interface between the lake and the town centre;
- Enhance the Town Square and connections to The Boulevarde; and
- Maximise use of the southern side of The Boulevarde for *al fresco* activity.

Built Form

Development should be of appropriate height and scale to avoid undesirable impacts on the scenic quality of the township, especially as it is viewed from the lake. Future development should establish a high quality built form, especially along the waterfront.

Development within the B2 Zone core of the town centre should generally be of a low scale (two to three stories) perimeter block form built to the street boundary and side boundaries, to provide a continuous pedestrian strip.

Where it is possible without having an adverse impact on the visual or physical access to the lake, additional height on Victory Parade and the north side of The Boulevarde should provide quality retail and office space, with residential and visitor accommodation on upper levels.

Other development on steeper B4 zoned land to the south should generally be smaller scale (two to three stories), with large rear setbacks in order to maintain tree cover and visual amenity from the lake and the foreshore.

Development on flatter land west of Cary Street should maximise façade length and floor space built to the street frontage.

Vehicle access points in the core area should be located to minimise pedestrian movement on active street frontages. Where achievable, vehicle parking should be located in basement excavations.

Building Character

Toronto development character should reflect the high amenity waterside location and its popularity as a social and recreational destination on the lake. Balconies and terraces should be oriented for water views and for sun access, and provide recessed areas sheltered from prevailing winds and westerly sun. Upper residential levels should be well set back and lighter weight in appearance. Light colours, awnings and moveable screening should be used to enhance the character of a contemporary waterside destination. Buildings on Cary Street should incorporate heavier masonry façades and smaller glazing areas to manage noise and air quality.

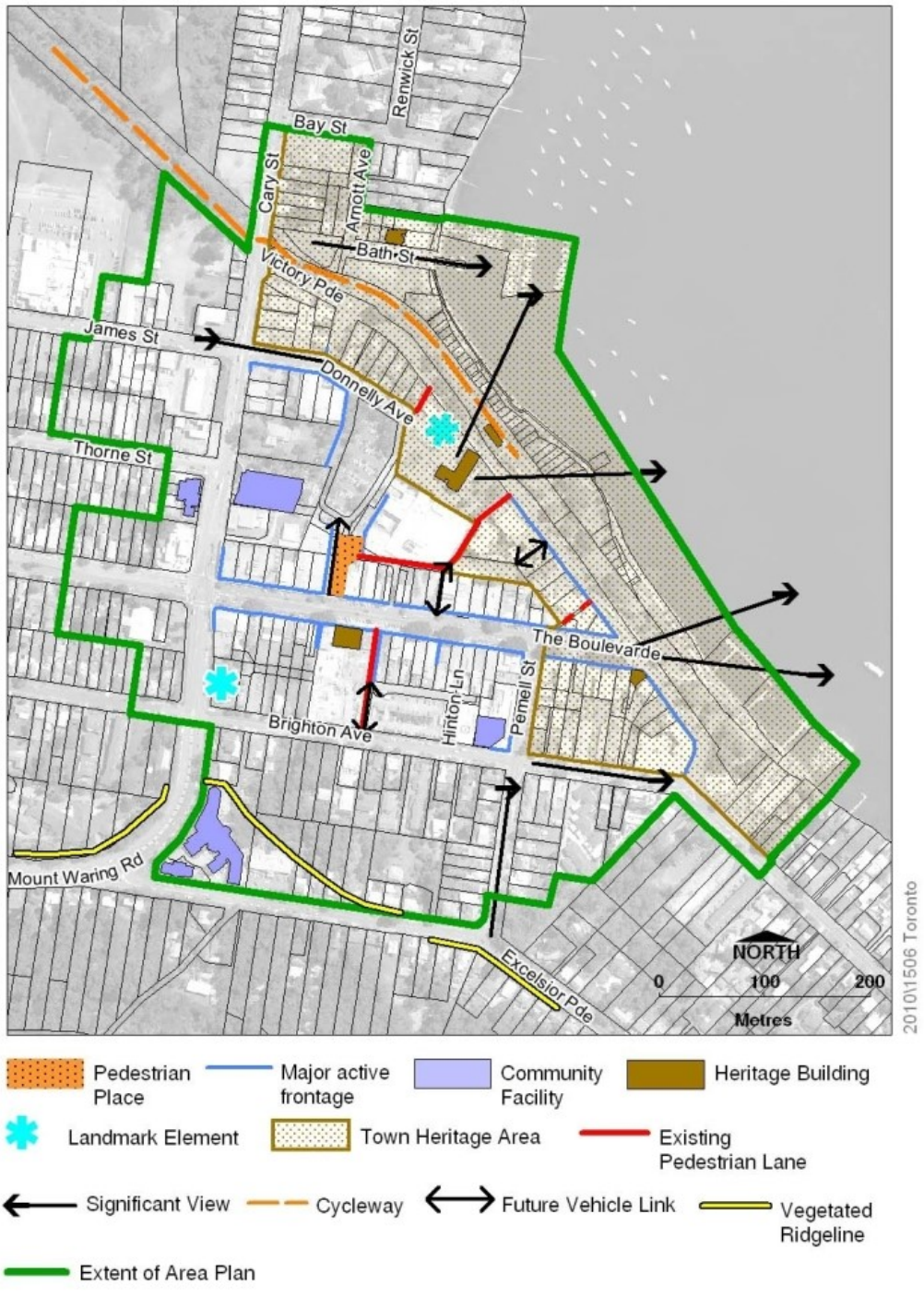

Figure 3 - Toronto Town Centre Structure Plan

2 DEVELOPMENT CONTROLS

This Area Plan applies to the area bounded by the green line, as shown in Figure 4 - Extent of Area Plan and Key to Block Plans.

Plans and sections are provided for each of the town centre blocks. The Block Controls are designed to respond to the topography, aspect and context of each block and street frontage, in order to support the desired future structure, built form and character of the Toronto town centre (Figures 6-26).

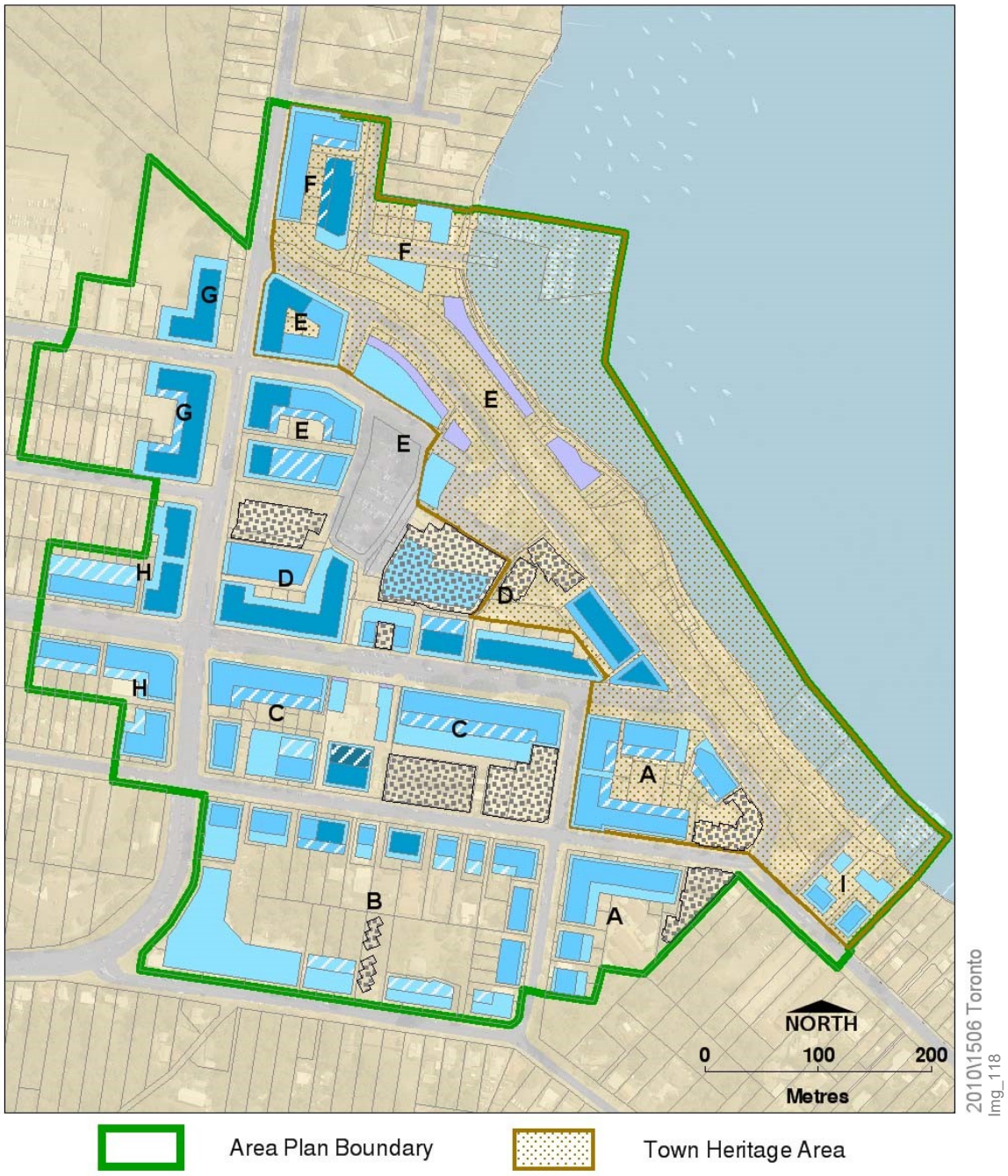

Figure 4 - Extent of Area Plan and Key to Block Plans (see Figures 6-26)

2.1 BLOCK CONTROLS

The Block Plans show the overall desired structure of development, and the spatial relationship between development and the street at a block-by-block view. They are based on site context, existing street character, and the desired future character of the town centre.

The Block Plans and sections provide general building envelopes including heights in storeys and indicative building footprints. They do not dictate lot amalgamations, or describe the design of future buildings.

Block Plans and Sections show the key built form outcomes Council is seeking and include:

- The location of public open space, public pedestrian links, and street awnings,
- The location of new vehicle links,
- The location of non-residential uses,
- Front setbacks at street level and upper levels,
- The desired location of building mass close to the street,
- The overall maximum depth of development,
- The expected provision of basement car parking,
- Aspects where building mass should be broken up (i.e. 50% occupied areas).

Site planning and building design should be informed by both the Block Controls and a detailed site and context analysis.

Objectives

a. To improve the amenity and connectivity of the public domain.

b. To improve vehicle circulation and access to public transport.

c. To ensure that building scale, height and setback contributes to the desired future character of the town centre.

Controls

1. Development must make a positive contribution to the desired future character of the town centre as described in Section 1.4.

2. A development proposal must address the requirements of the relevant Block Plan and Section(s), as shown in Figures 6-26.

3. Site planning and building design must be based on a comprehensive site and context analysis.

3 CONTEXT AND SETTING

3.1 SCENIC QUALITY

Objectives

a. To maintain and enhance street views from the town centre to Lake Macquarie.

b. To maintain and enhance street views from the town centre to the Watagans.

c. To maintain and enhance the visual prominence of the Toronto Hotel and the bluff, as viewed from the lake foreshore and from the water.

d. To maintain the visual prominence of the spire of the Anglican Church on the corner of Cary Street and Brighton Avenue.

e. To maintain and enhance the treed slope and ridgeline to the south of the town centre, as viewed from the lake foreshore, and from the water.

Controls

1. A development proposal must include a 3D electronic model of the development that can be viewed from the surrounding streets, the foreshore reserve, and from the lake, for selected development sites up to 500 metres from the foreshore.

2. The height, scale and setback of development in the area bounded by Victory Parade, Carey St and Brighton Avenue must be designed to protect the visual prominence of the Toronto Hotel and the spire of the Anglican Church, as shown in Figure 3 - Toronto Town Centre Structure Plan.

3. Development must maintain, or contribute to a continuous tree canopy on the ridgeline along Excelsior Parade when viewed from the lake foreshore, and from the lake.

Note: See Part 2 – General Provisions for general Site Analysis requirements.

3.2 SENSITIVE ABORIGINAL CULTURAL LANDSCAPE

Objectives

a. To ensure that the cultural and archaeological significance of a development site and its context are determined prior to any development.

b. To manage and interpret the Sensitive Aboriginal Cultural Landscape in consultation with the local Aboriginal community.

Controls

1. An Aboriginal Heritage Impact Statement must be prepared and lodged for a development proposal that is wholly or partly within the area shown cross hatched in Figure 5: Sensitive Aboriginal Cultural Landscape in Toronto.

2. The Aboriginal Heritage Impact Statement must be prepared in accordance with the *Lake Macquarie Aboriginal Heritage Management Strategy*.

Figure 5 - Sensitive Aboriginal Cultural Landscape in Toronto

3.3 TOWN CENTRE HERITAGE AREA

Objectives

a. To maintain, enhance, manage and interpret the European cultural landscape of the Town Heritage Area, as shown in Figure 4 - Extent of Area Plan and Key to Block Plans.

b. To maintain the visual prominence of the Toronto Hotel and the bluff, as viewed form the lake and the lake foreshore.

c. To maintain the physical structures and landform related to the construction and operation of the Fassifern-Toronto rail line.

d. To maintain the low small-scale built form between the lake and the rail line.

e. To maintain foreshore setbacks and heights compatible with the residential scale of historical development along the lake foreshore development.

Controls

1. A development proposal on a site within the Town Heritage Area, as shown in Figure 4 - Extent of Area Plan and Key to Block Plans, must include a detailed site and context analysis, accompanied by a 3D electronic model that includes:

   i. Views to both the proposed development and the Toronto Hotel and bluff, from a distance of between100 metres and 500 metres on Lake Macquarie;

   ii. Views to the proposed development from any point along the lake foreshore between the Yacht Club and the Toronto baths; and

   iii. Details of any adjoining identified heritage items.

2. A development proposal on a site within the Town Heritage Area must maintain the visual prominence of the Toronto Hotel and the bluff, as viewed from the lake and the lake foreshore.

3. A development proposal on a site within the Town Heritage Area must not disturb or otherwise alter the landform related to the construction and operation of the Fassifern-Toronto rail line.
4. A development proposal on Lot 1 DP 345150, Lot 45-57 DP 8868, Lot 72-75 DP 9111, and Lot 77-78 DP9120 on the foreshore, as shown in Block E Section E1-E1 and Figure 18 - Block E Section E2-E2, must:
    i. Be set back a minimum of 8 metres from the high water mark;
    ii. Not exceed one storey and 6 metres in height;
    iii. Not exceed a building footprint of 120m^2; and
    iv. Have a gable or hip roof form.
5. A development proposal on Lots 26, 28 and 29 DP 2505, and Lots A and B DP 412432 must be set back from the lake foreshore a minimum of 25 metres from median high watermark, and comply with the controls, as shown in Block I Control Plan and Section (Figure 25 - Block I Control Plan and Figure 26 - Block I Section I- I).
6. A development proposal adjacent to or within the curtilage of a listed heritage item must include:
    i. A heritage assessment;
    ii. Statement of heritage impact; and
    iii. A streetscape analysis.

4 STREETS AND PUBLIC SPACE

4.1 PEDESTRIAN LANES

Objectives

a. To establish and enhance pedestrian links that are open to the sky for north-south movement between Brighton Avenue, Hinton Lane, The Boulevarde and Victory Parade.

b. To establish new pedestrian and vehicle connections from the future retail core to the north.

Controls

1. Development on Lot C in DP 390795 (see Block C Control Plan) must include a pedestrian lane on a single alignment, with a minimum clear corridor width of 6 metres and open to the sky, as shown in Block C Control Plan.
2. Development on Lot 109 in DP243194 and Part 39 Section 11 in DP 2505 must include a vehicle lane and pedestrian lane on a single alignment, with a minimum total corridor width of 15 metres and open to the sky, as shown in Block C Control Plan.
3. Development on SP 42812 must be setback 1 metre from its western boundary at street level to provide for an active frontage to the pedestrian lane.
4. Development along each pedestrian lane must provide retail, office or business floor space on the lane frontage at street level.
5. The lane must be free of visual intrusions, including occupiable floor space, and signage structures. Slim profile cantilever awnings are encouraged, to provide intermittent shelter.

4.2 THE BOULEVARDE - SOUTH SIDE FOOTPATH

Objectives

a. To maximise the area of high quality footpath dining and public space for pedestrians on the south side of The Boulevarde.

Controls

1. Works undertaken within the public domain must be consistent with the provisions of the *Toronto Streetscape Masterplan* and *Streetscape Technical Guidelines*.
2. Development on lots on the south side of The Boulevarde between Cary Street and Victory Parade must include works to minimise pavement level changes, improve pavement finishes and allow for pleasant outdoor dining areas.

4.3 TOWN SQUARE EXTENSION - POST OFFICE SITE

Objectives

a. To provide a one-way vehicle lane between Donnelly Avenue and The Boulevarde.

b. To improve pedestrian amenity and activity on both sides of the vehicle lane between the Town Square and The Boulevarde.

Controls

1. Development on Lot A in DP 953214 must include a one-way vehicle lane on a single alignment, with a maximum width of 3.6 metres, as shown in Block D Control Plan.
2. Development on Lot A in DP 953214 must include a footpath with minimum width of 5 metres, as shown in Block D Control Plan and Section.
3. Ground floor uses on Lot A in DP 953214 and Lot 1 in DP 1075158 fronting the new laneway must be pedestrian-based retail uses, active community space or entries to upper level floor space.
4. Development on Lot 1 in DP 1075158 must be set back 3 metres from the eastern boundary, and provide a footpath with minimum width of 5 metres, as shown in Block D Control Plan and Section.
5. Development on Lot A in DP 953214 and Lot 1 in DP 1075158 must include appropriate shade awnings, paving, lighting, seating and bins, and tree and landscape planting to integrate with the existing Town Square.

5 ACCESS AND PARKING

5.1 VEHICLE ACCESS – NORTH SIDE OF THE BOULEVARDE

Objectives

a. To maximise active retail frontage on the Post Office site, to both The Boulevarde and the pedestrian access to the Town Square.

b. To provide vehicle access and servicing to the Post Office site from the rear lane.

c. To provide a two-way vehicle lane from The Boulevarde to the car park located at the rear of the RSL.

Controls

As shown in Block D Control Plan and Section:

1. Development on Lot A in DP953214 and Lot 33 in DP 1098243 must provide a Right of Carriageway that is a minimum 4 metres wide, along the rear boundary.
2. Development on Lots 341 and 342 in DP 786435 must provide a Right of Carriageway that is a minimum 3 metres wide, along the rear boundary.
3. A two way vehicle lane, that is a minimum of 6 metres wide, must be provided from The Boulevarde to the car park located at the rear of the RSL by:
    i. Development on Lot 37 in DP7601 providing a Right of Carriageway that is a minimum of 3 metres wide along the lots eastern boundary; and
    ii. Development on Lot 83 in DP9673 providing a Right of Carriageway that is a minimum 3 metres wide, along the lots western boundary.
4. Development proposals on Lot A in DP953214 that seek to provide an active street frontage, alternative provisions for on-site car parking may be made, in accordance with the relevant *Section 7.11 Contributions Plan(s)* and/or *Council's Policy – Planning Agreement – Car Parking Deficiencies*.

5.2 SITE ACCESS – CARY STREET

Objectives

a. To minimise impacts on traffic flow in Cary Street.

Controls

1. For lots with frontage to Cary Street, a development application for intensification of use must include an investigation of an alternative vehicle access to the site other than Cary Street.

6 BUILDING DESIGN

6.1 BUILDING TO THE STREET BOUNDARY

Objectives

a. To maximise building mass, floor space and activity at the street boundary in the town core.

b. To define the spatial character of Cary Street as the main through route.

Controls

1. Development must be built to the street boundary, as shown in the Block Control Plans and Sections (Figures 6-26).
2. Development on the west side of Cary Street between Bay Street and The Boulevarde must achieve at least one storey built up to the street boundary, for at least 50% of the lot frontage.
3. Development on the east side of Cary Street between Bay Street and The Boulevarde must achieve at least two storeys built up to the front setback line, for at least 75% of the lot frontage.
4. Development on The Boulevarde between Cary Street and Victory Parade must achieve at least two storeys built up to the boundary, for at least 90% of the lot frontage, except for sites with access lanes or heritage constraints.

6.2 BUILDING HEIGHT

Objectives

a. To minimise the visual bulk of buildings in the town centre and maintain the visual prominence of the Toronto Hotel, as viewed from the lake foreshore and from the water.

b. To maintain views to the spire of the Anglican Church at the corner of Cary Street and Brighton Avenue.

c. To maintain views to the treed ridgeline as a backdrop to the south of the town centre, when viewed from the lake foreshore, and from the water.

Controls

1. The maximum number of storeys must comply with the Block Controls, as shown in Figures 6-26.
2. Where an Area Plan does not specify height in storeys development must not exceed 3 storeys and 13m in height.

6.3 MAXIMUM OCCUPIED AREA

Definition

100% occupied area means that the floor space on that level completely fills the maximum possible area within the setbacks from each boundary.

50% occupied area means that the floor space on that level occupies no more than 50% of the maximum possible area within the setbacks from each boundary.

Objectives

a. To reduce the bulk and impact of a building mass on residential amenity within the development site or on neighbouring sites.

Controls

1. Development must be consistent with the maximum occupied area controls, as shown in the Block Controls and Sections (Figures 6-26).

6.4 BUILDING EXTERIORS

Objectives

a. To reduce the visual impact of buildings viewed from the foreshore or from the lake.

Controls

1. Buildings visible from the foreshore or the lake must be predominantly finished in muted tones and neutral colours. White and brightly coloured finishes must be restricted to small detail elements.

7 LANDSCAPE

7.1 TREES ON PRIVATE LAND

Objectives

a. To reinforce the tree canopy on the slope and ridgeline south of Brighton Avenue.

b. To conserve and replace large canopy native trees in the triangle between The Boulevarde, Victory Parade and Cary Street.

c. To increase canopy tree planting on private land along Cary Street.

Controls

1. Development on sites south of Brighton Avenue must provide at least a 10 metre rear setback for the retention of existing trees and the planting of new trees.

2. Development on sites south of Brighton Avenue must include planting and maintenance of at least one advanced local native tree for every 100m² of site area.

3. Development on sites with frontage to Cary Street must include installation and maintenance of at least one advanced local native tree for every 5 metres of frontage not occupied by the building, in addition to general tree planting required for car parking areas. The additional trees must be installed within 5 metres of the front boundary, to maximise their visibility from Cary Street.

Note: See Part 2 – General Provisions for general tree planting details.

8 BLOCK CONTROLS

Note: Uses shown in the sections are indicative only.

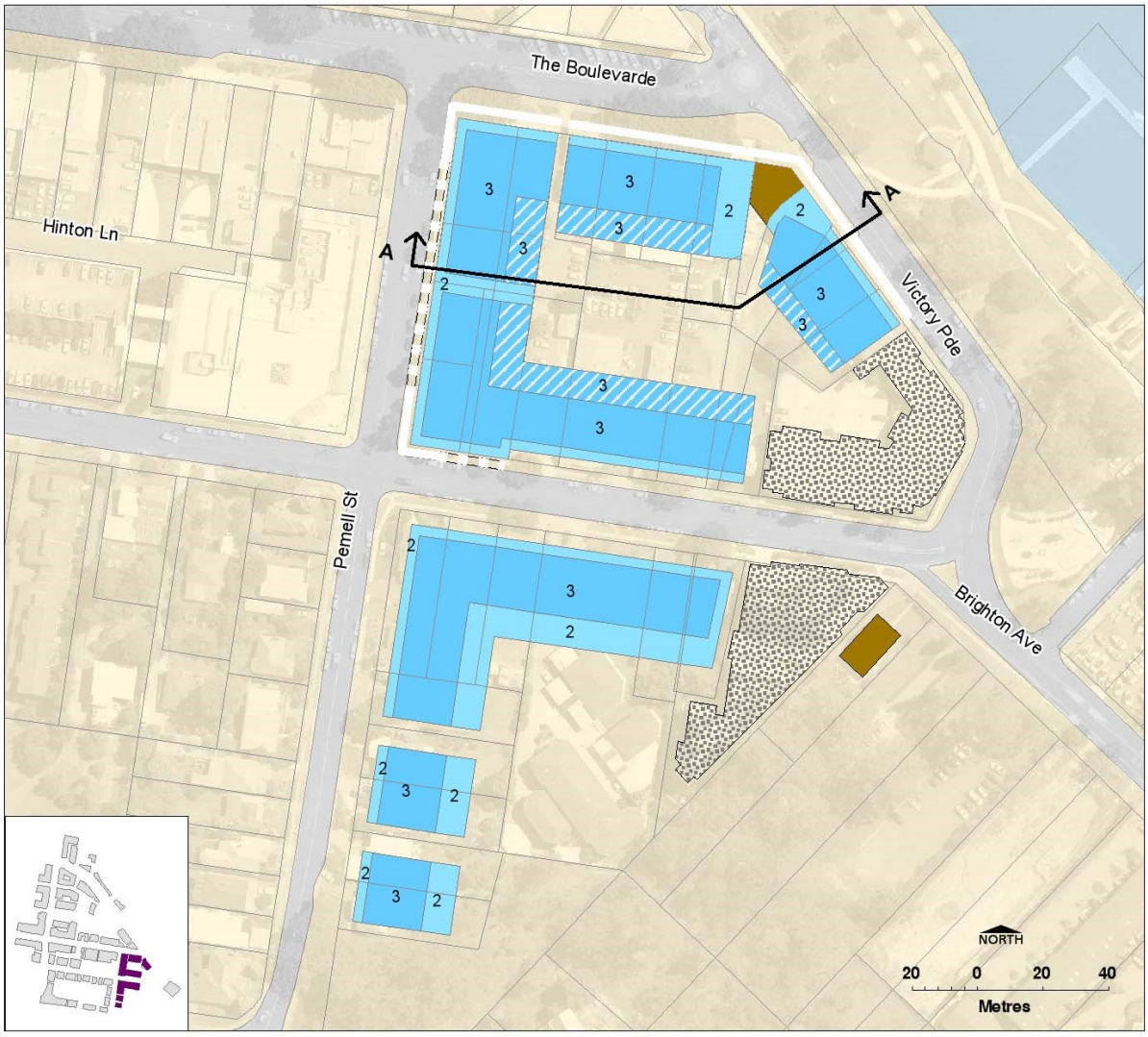

Figure 6 - Block A Control Plan

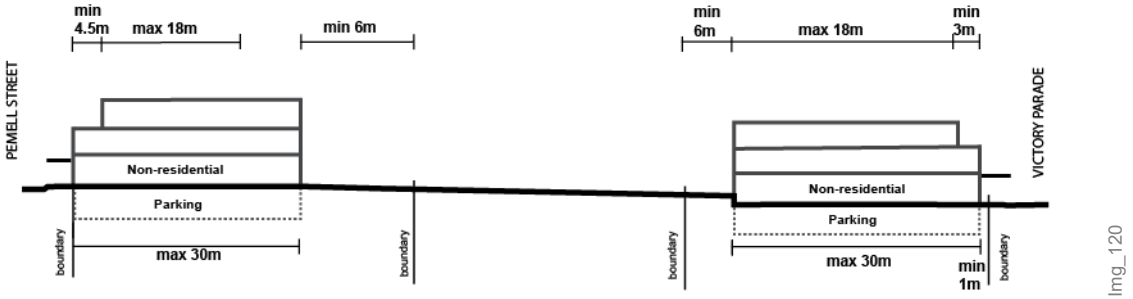

Figure 7 - Block A Section A-A

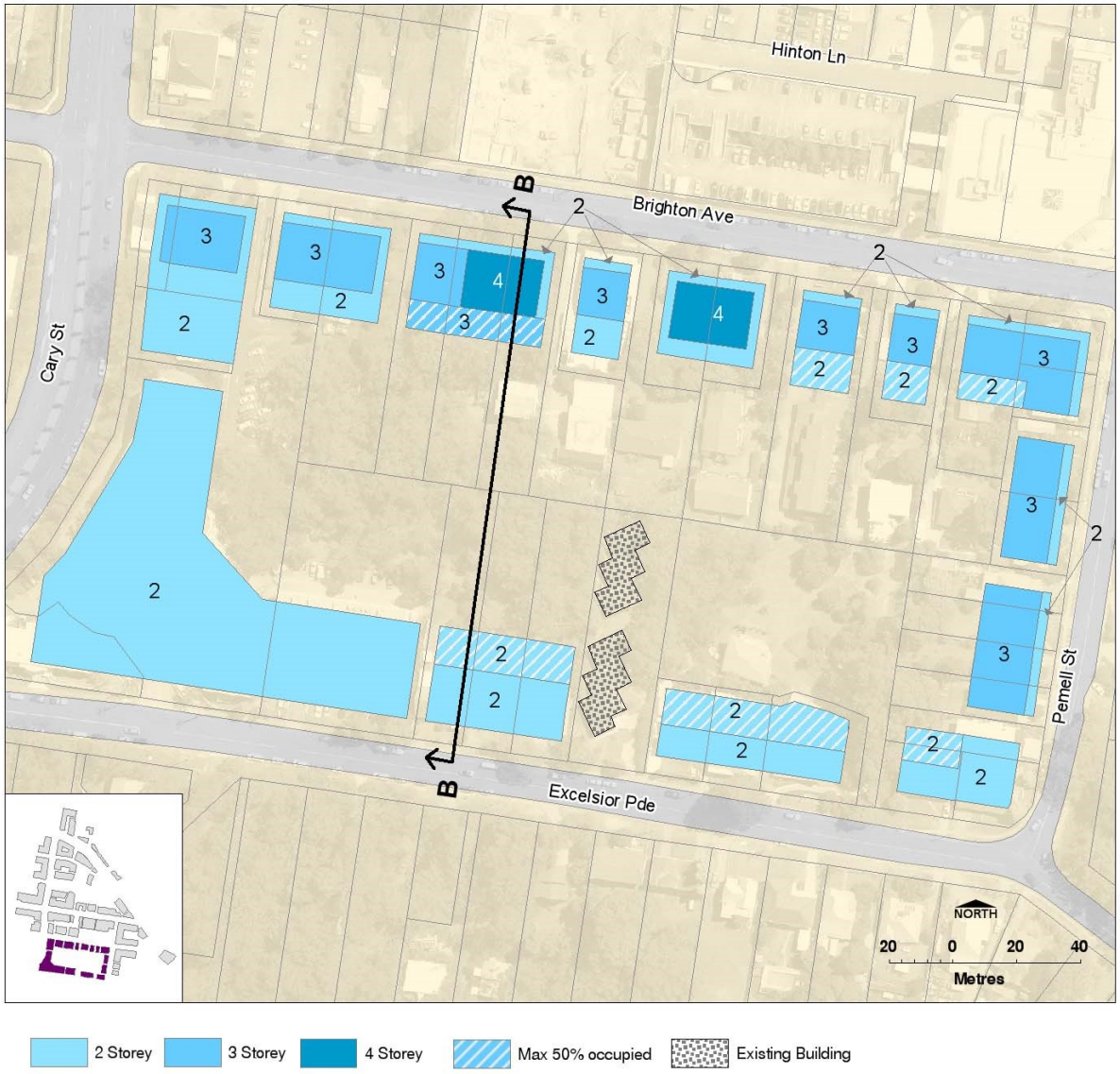

Figure 8 - Block B Control Plan

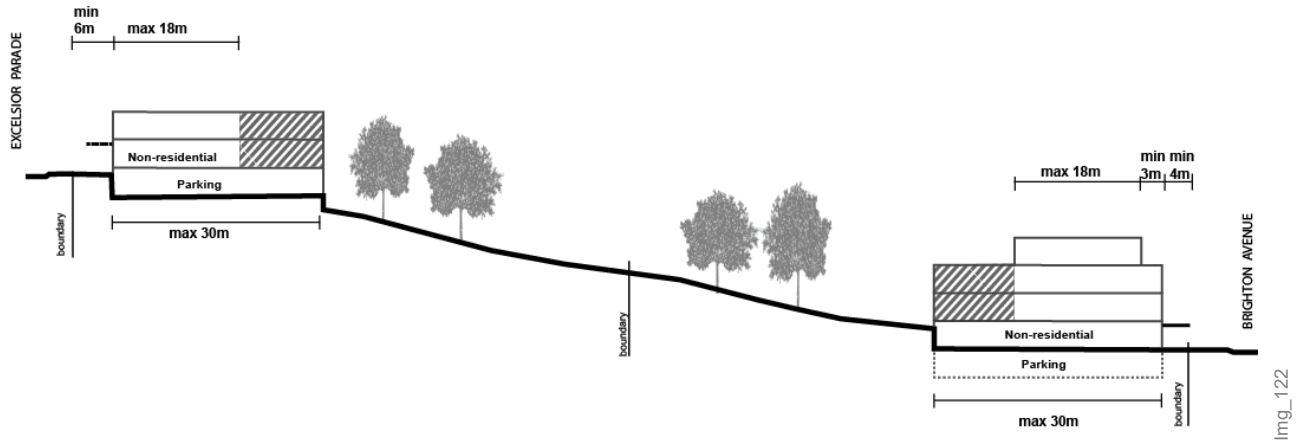

Figure 9 - Block B Section B-B

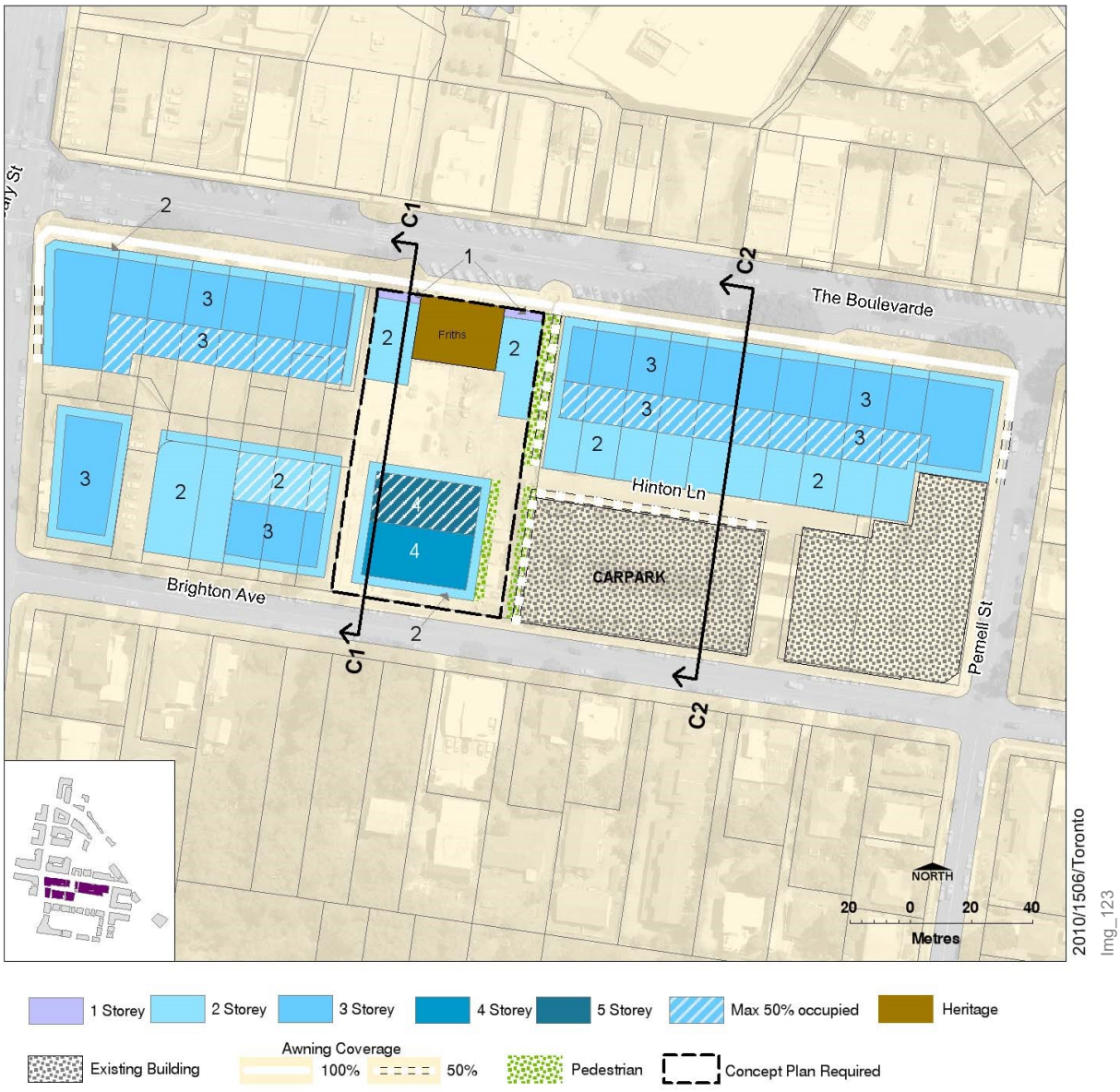

Figure 10 - Block C Control Plan

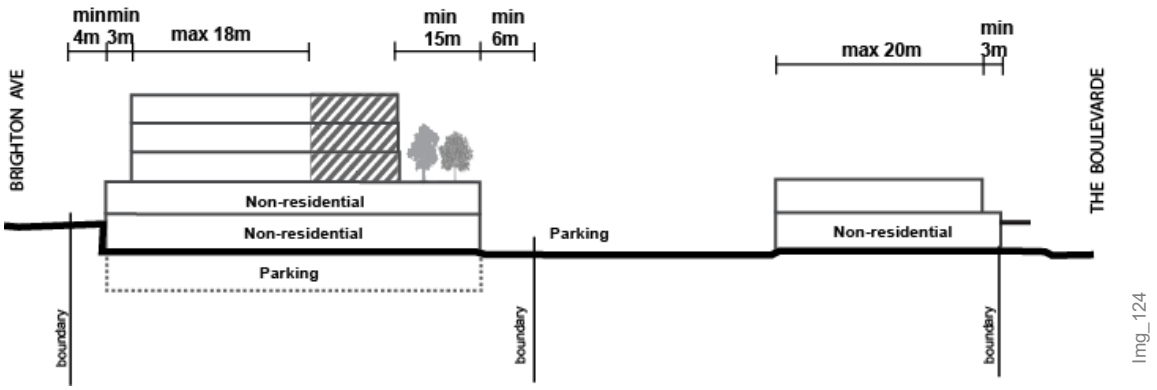

Figure 11 - Block C Section C1-C1

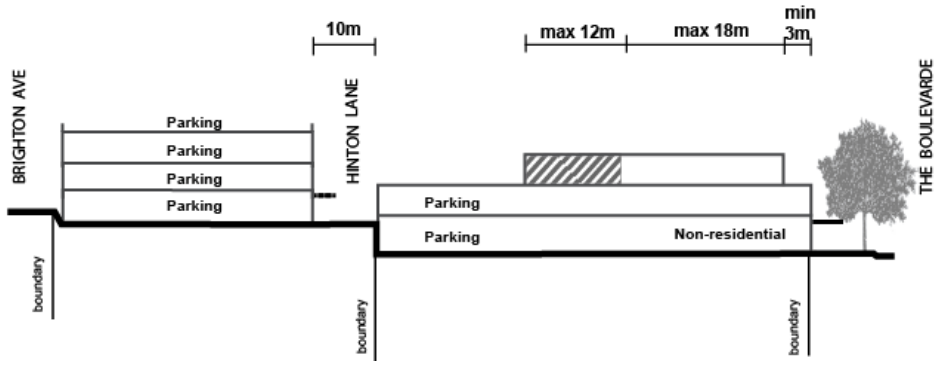

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Figure 12 - Block C Section C2-C2

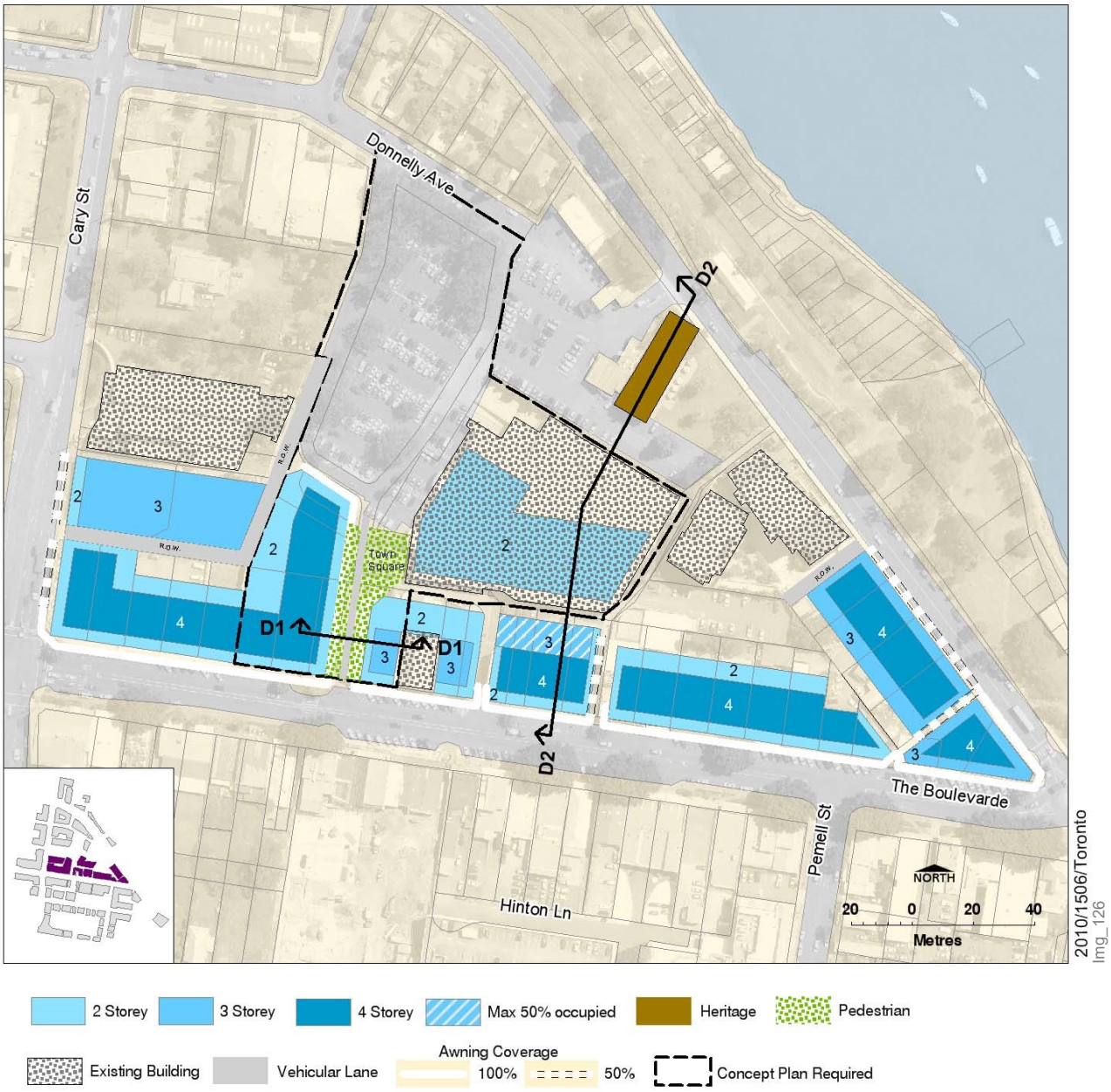


Figure 13 - Block D Control Plan

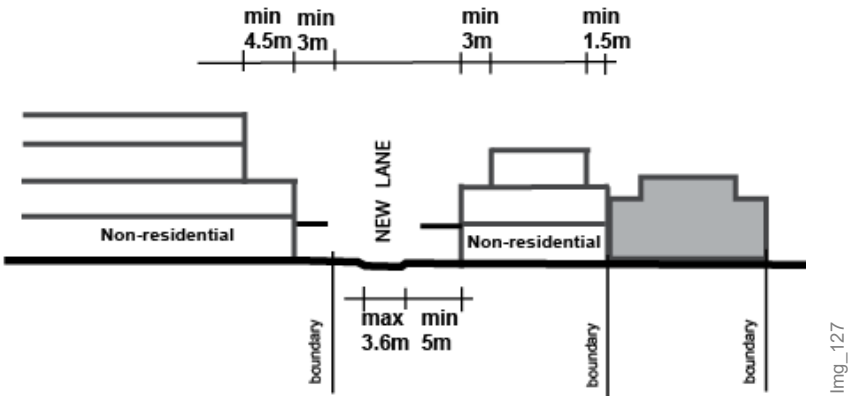


Figure 14 - Block D Section D1-D1

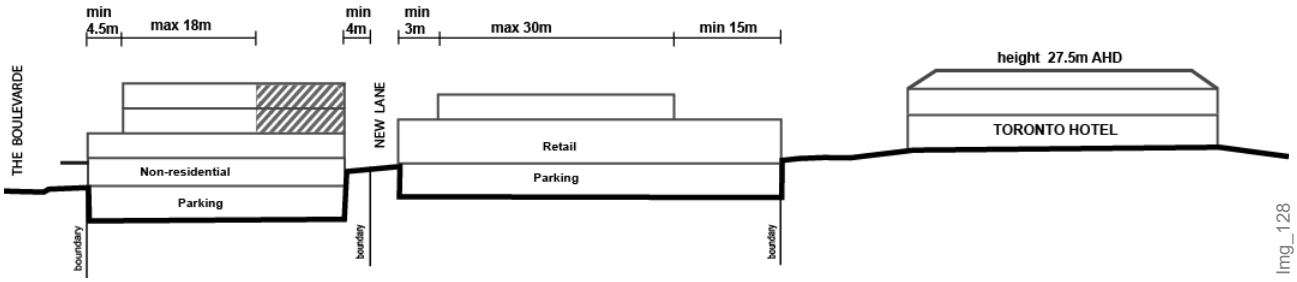


Figure 15 - Block D Section D2-D2

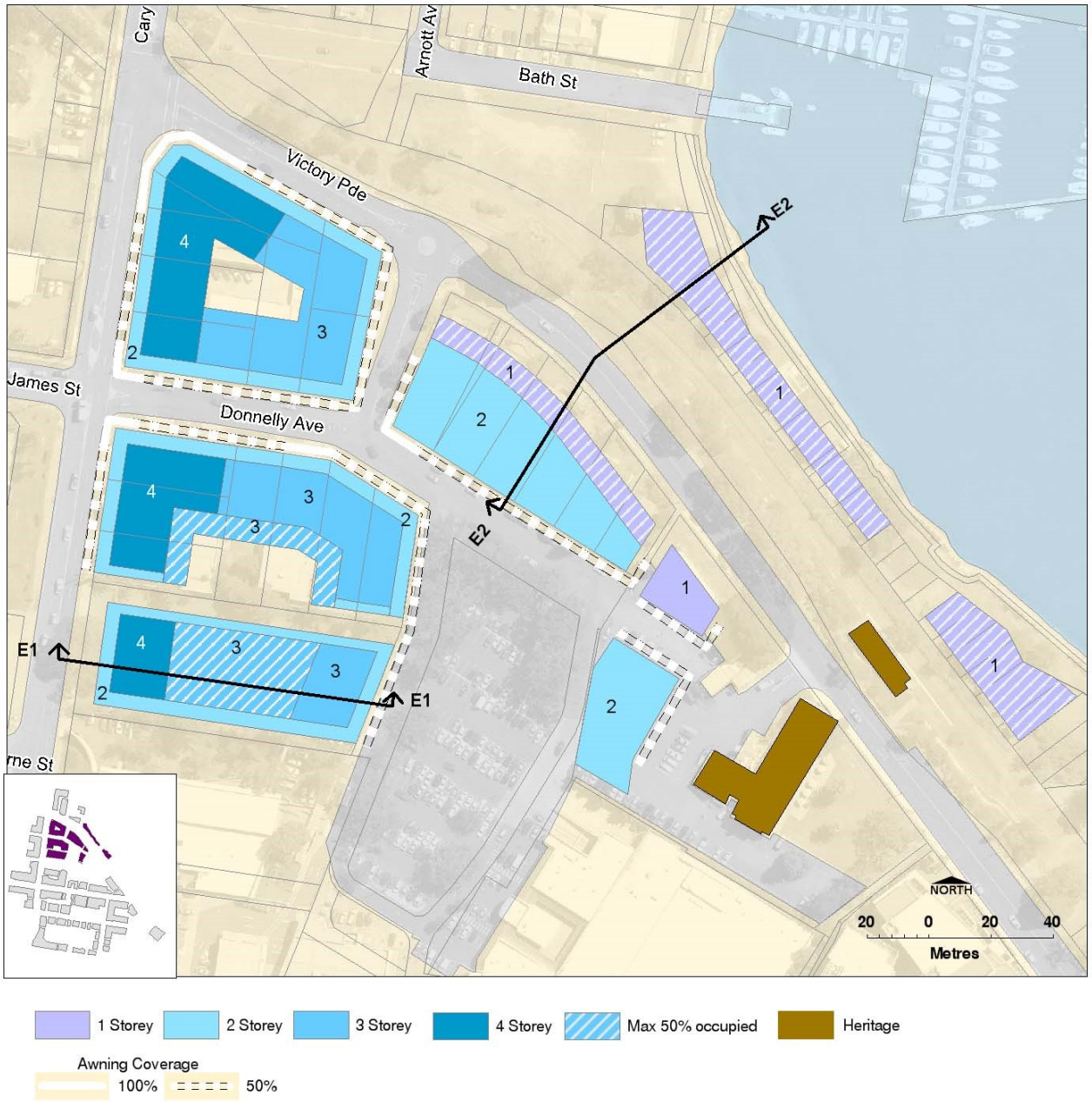


Figure 16 - Block E Control Plan

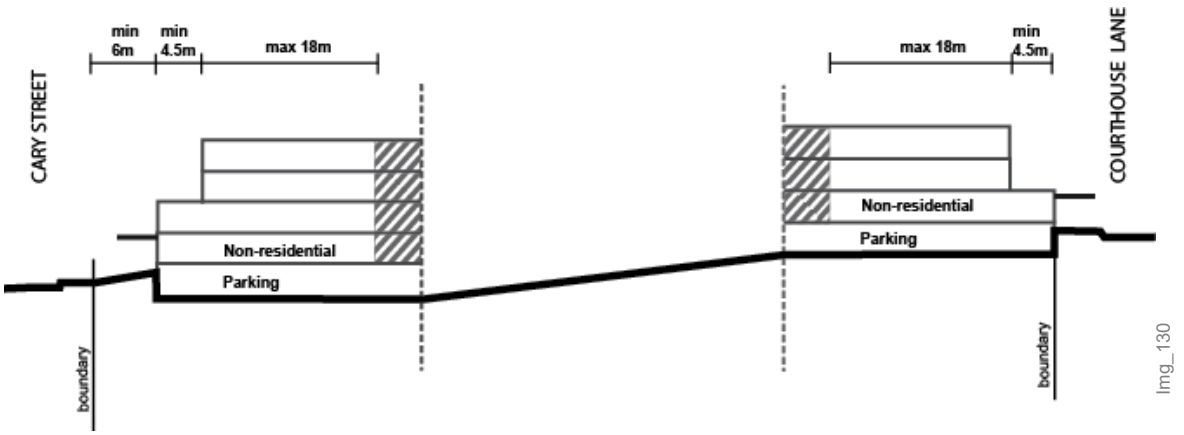


Figure 17 - Block E Section E1-E1

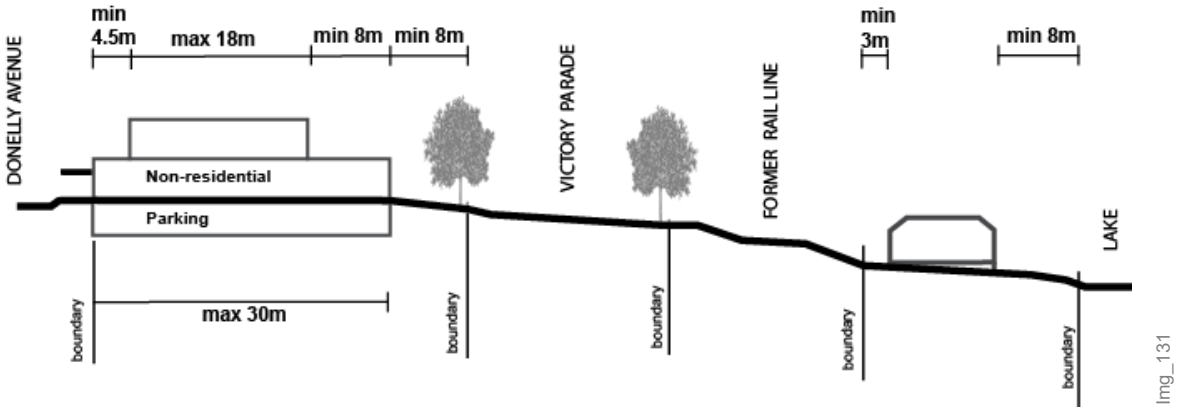


Figure 18 - Block E Section E2-E2

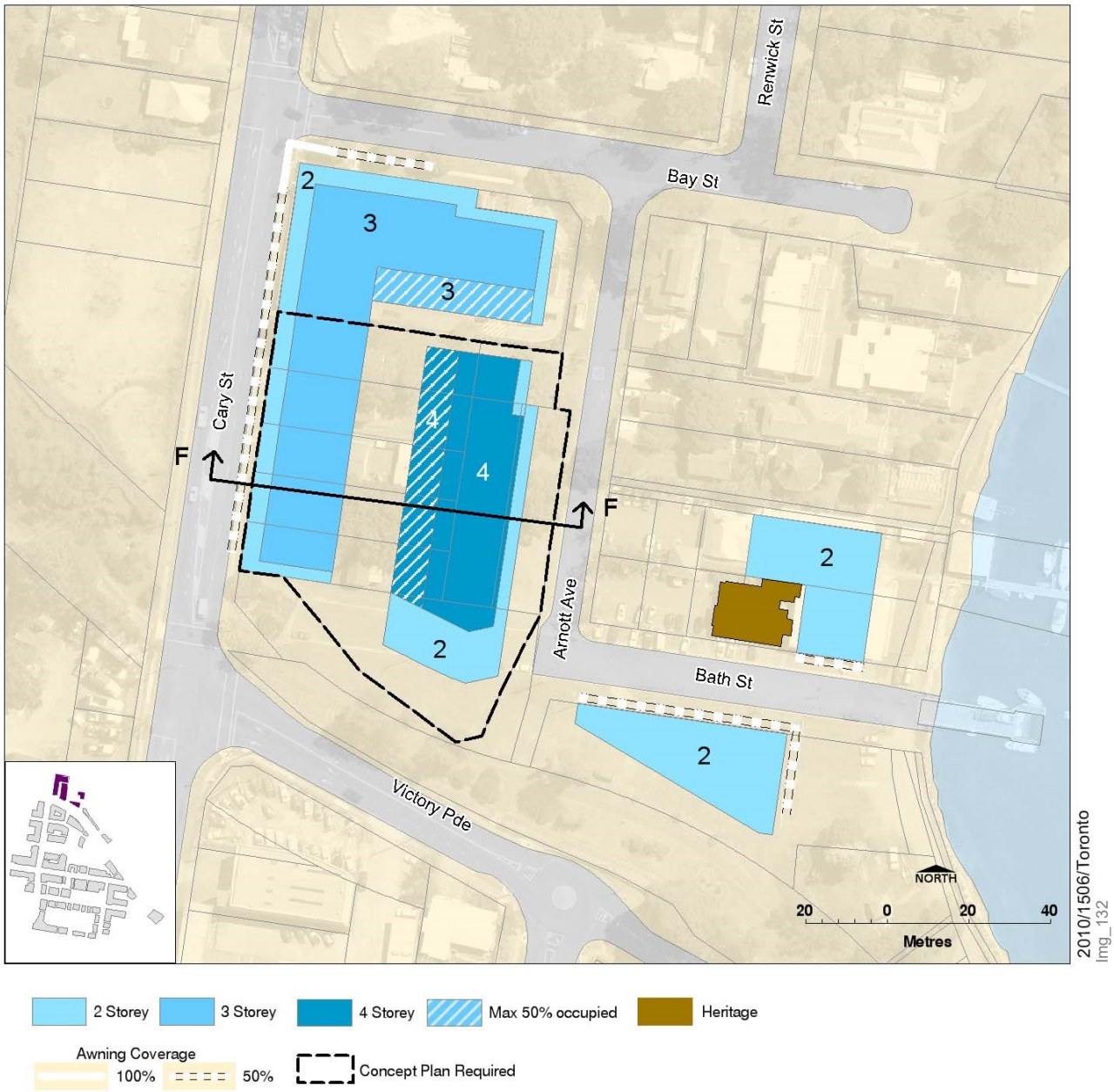


Figure 19 - Block F Control Plan

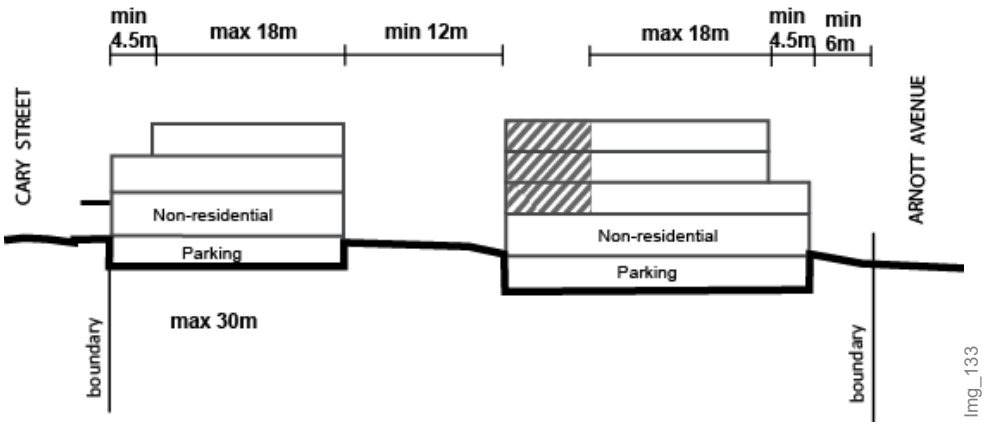


Figure 20 - Block F Section F-F

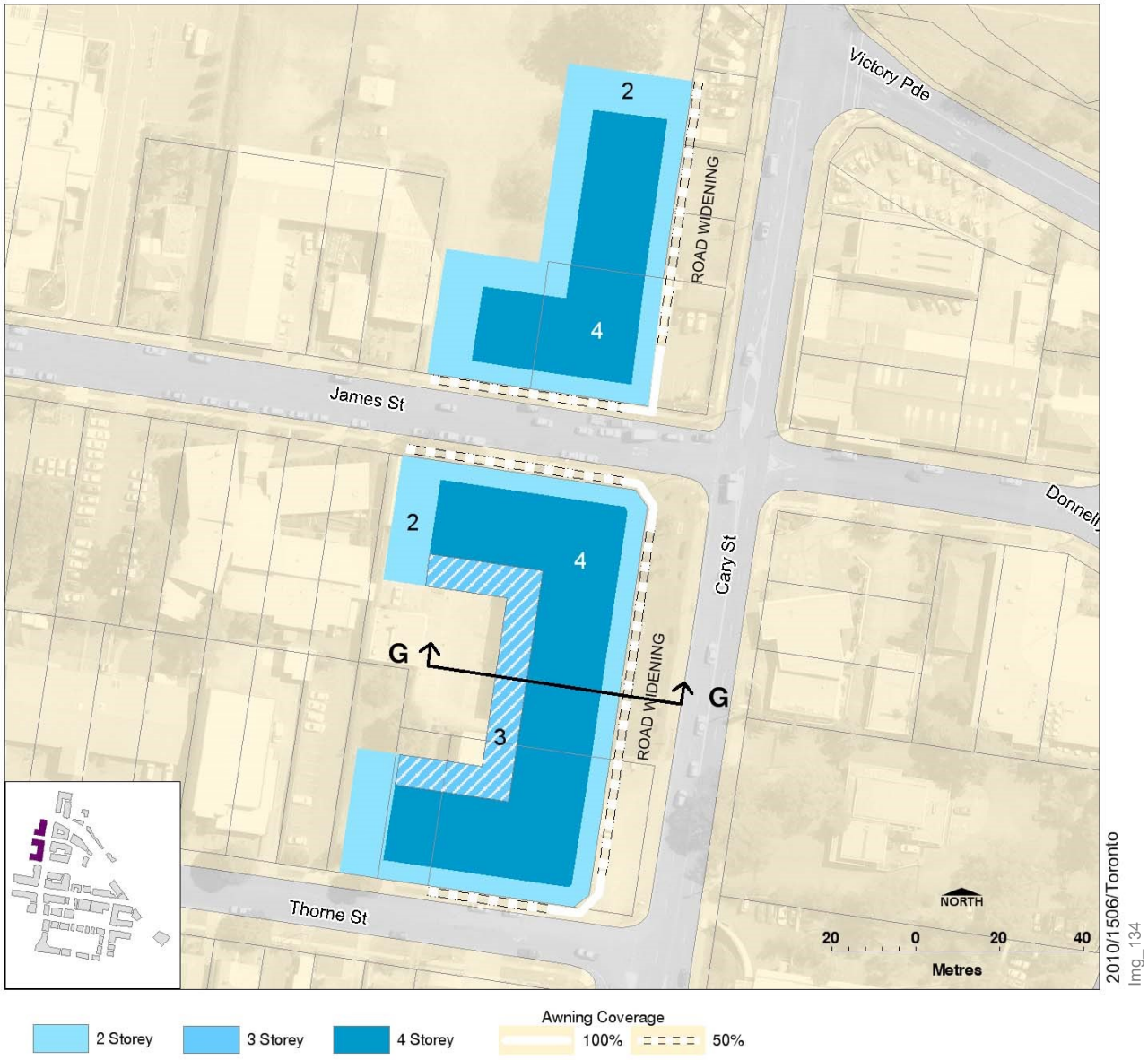


Figure 21 - Block G Control Plan

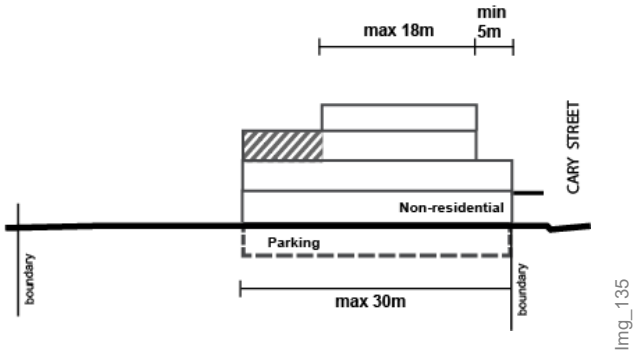


Figure 22 - Block G Section G-G

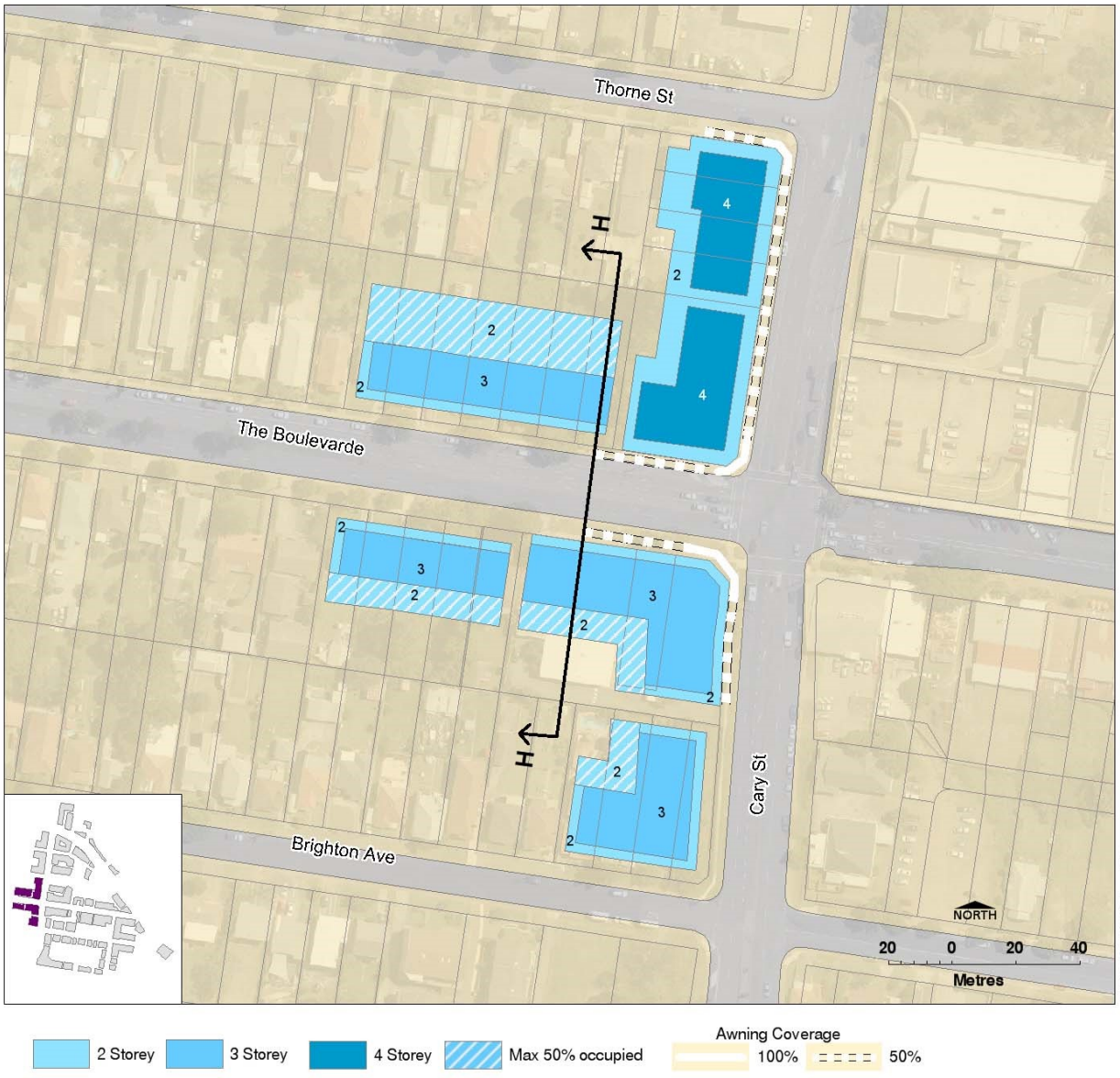


Figure 23 - Block H Control Plan

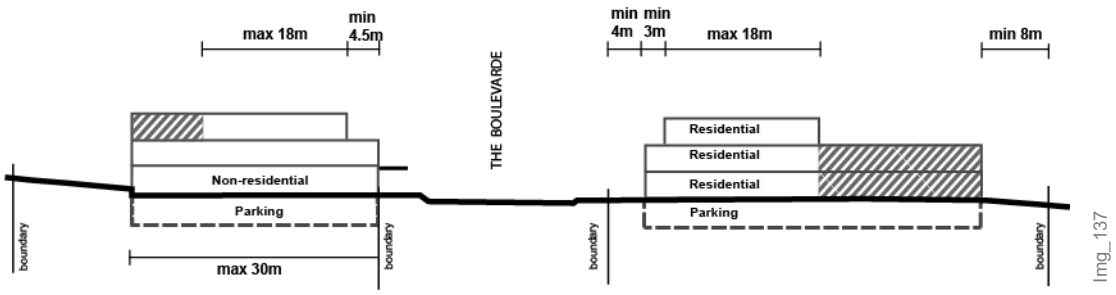


Figure 24 - Block H Section H-H

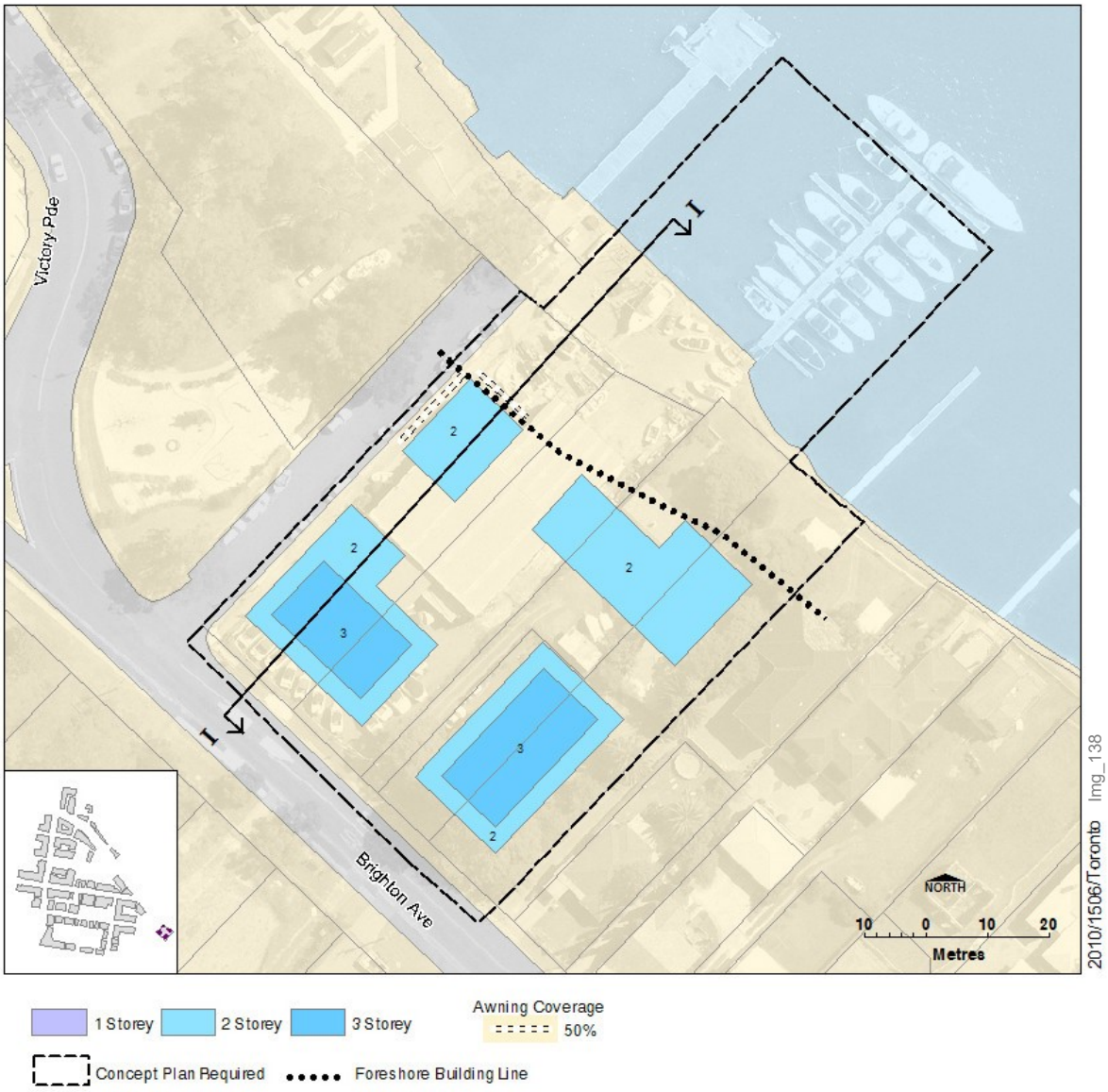


Figure 25 - Block I Control Plan

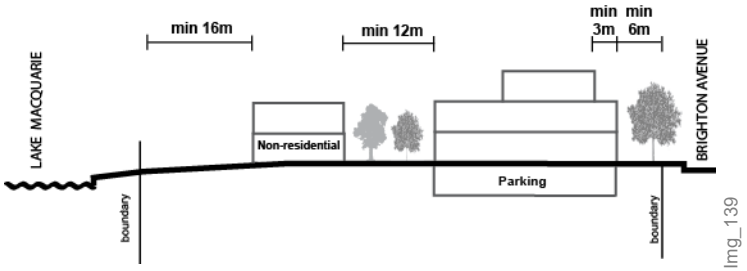


Figure 26 - Block I Section I-I

CONTENTS:

FIGURES:

TABLE:

1 INTRODUCTION

This section contains local objectives and controls for development in Warners Bay Town Centre as defined in Figure 5 - Extent of Area Plan and are in addition to the general provisions contained in Part 4. For general development controls, see Part 4 - General Provisions. Where conflict arises between this section and the general controls, the controls in the Warners Bay Area Plan take precedence.

1.1 BACKGROUND

Warners Bay Town Centre is located on the north eastern shore of Lake Macquarie.

Aboriginal Heritage

Lake Macquarie Local Government Area (LGA) is part of the traditional country of the Awabakal people. People from the Awabakal tribe or clan lived on the foreshore of Lake Macquarie around what is now called Warners Bay. The northern extremities of the Lake were important in the daily and ritual life of these people, although there is little visible evidence remaining to suggest their habitation.

In January 1825, the Reverend Threlkeld of the London Missionary Society made the decision to found a mission among the Awabakal at Lake Macquarie. The site “Biddobar” or “Biddaba” (meaning "silent resting place"), was chosen as the location of the mission. In a map accompanying a claim for land in 1829, Threlkeld marked the location at the lakeside of what is now Warners Bay.

European heritage

Jonathan Warner, a former soldier and surveyor selected his land in July 1829 and built a two-storey weatherboard house called "Biddaba" on a hill near the present Warners Bay Primary School, and established a farm and orange orchard. There was a horse and dray track to Newcastle, which was used to transport farm produce. The orchard was a showplace as late as 1870. The Warner homestead survived until 1932.

In 1840 Warner subdivided part of his grant, advertising it as allotments constituting the township of Lymington (his hometown in England) but the lots remained unsold until the third attempt in 1885.

The Warner family also had a small coal mine tunnel on the waterfront below their house, the coal being taken away by boat from a jetty there. The Warners Estate mine was closed in 1884.

In 1931, a private bus service operated from Speers Point to Broadmeadow via Warners Bay and Charlestown. In 1937, it was converted to a government service and extended to Newcastle. A railway was planned for Warners Bay on the narrow park between King and Queen Streets, but never eventuated.

The Warners Bay centre changed slowly during the first half of the 20th century. A 1927 subdivision including James, Mills and Beryl Streets developed slowly until the end of petrol

rationing post World War 2. With the widespread use of the private car, it became a popular residential area.

The shopping centre expanded rapidly from the 1980's. The Council created a reserve by filling and stabilising the edge of the lake to the west of The Esplanade. This reserve now forms a major recreational space adjacent to the Foreshore Park at the lake's edge.

1.2 EXISTING CHARACTER

Context and Setting

Warners Bay Town Centre has a memorable setting on the north-eastern foreshore of Lake Macquarie. The centre lies on low ground surrounded by an arc of vegetated ridgeline from Munibung Hill to Bayview Hill. The Warners Bay Town Centre is not only located on the lake, the main street buildings are aligned parallel to the lake foreshore.

The town centre setting can be best appreciated from Marmong Point Reserve across the lake to the west, from The Esplanade at Speers Point to the north-west, and from The Esplanade at Warners Bay Lions Park to the south, as well as from the open water of the lake. From these vantage points, the town centre is contained by the treed ridgeline behind, and the foreshore trees in front.

Figure 1 - Existing town centre and setting viewed from The Esplanade near Fairfax Road

Town Centre Activity

There are excellent views from The Esplanade at Warners Bay to the south and west across the lake, especially at sunset.

The foreshore has become a hub for recreational activity both on and off shore - sailing, fishing, kayaking and paddle boarding are all popular activities. The area also features a shared cycle path and walking track stretching from the Lake Macquarie Art Gallery at Booragul to Green Point that is widely used by the local community.

The Esplanade commercial strip has become a popular daytime and night-time gathering place, with a range of cafès and restaurants facing the lake. John Street is developing as the main commercial services area, with a supermarket and other service and specialty stores, the post office and banks. Generally, there is little permanent or short-term visitor accommodation within the town centre, and no people live within the commercial area.

Surrounding the town centre is a range of relatively low-density housing with some villa development and small apartment buildings.

Recreation and Cultural Activity

The Foreshore Park, the Performing Arts Centre on Lake Street and the large sports field between North Creek and the town centre are major assets to the amenity of Warners Bay.

The Foreshore Park between the lake and the town centre provides a range of recreational opportunities for residents and visitors, and is particularly busy at weekends. Live music performances in the rotunda attract crowds on Friday evenings during summer, and on some Sundays during winter. People of all ages use the walkway and cycleway throughout the day. The Great North Walk, linking Lane Cove in Sydney to Newcastle, passes through the foreshore park.

The Performing Arts Centre is the focus for a diverse community and cultural program of events. The adjacent park is used for community events such as the bicycle race 'Loop the Lake', Family Fun Days, the Children's Festival and the Lake Macquarie Festival.

Pedestrian Circulation

The Foreshore Park, The Esplanade and John Street run parallel to each other between Lake and King Streets. Smaller pedestrian arcades and lanes run east to west from John Street through some of The Esplanade buildings to the Foreshore Park. These links provide important pedestrian access from the shops to the lake, but only allow a limited visual connection to the water.

Traffic and Transport

King Street is a state road connecting Warners Bay to Charlestown via Hillsborough Rd. The Esplanade is also a major traffic route for vehicles travelling between centres on the lake. Both roads are managed by Roads and Maritime Services (RMS) who are responsible for maintaining the flow of vehicles on the state road network.

The circulation of traffic around the town centre is hampered by limited turning movements at the intersection of local roads with RMS roads. Pedestrian and cyclist access and safety is also affected by large traffic volumes and multiple travel lanes on The Esplanade and King Street.

Public buses from Toronto, Belmont, Glendale, Charlestown and Newcastle service the town centre, although these services are not frequent.

Car parking is provided in three main open parking areas and in a basement level below the supermarket development in John and Charles Streets.

Building Quality

Despite the superb natural setting, most of the town centre buildings are of poor or moderate quality. No buildings in the centre have great architectural merit or significant historical value.

The Esplanade has an eclectic mix of buildings that form a very low scale strip facing the Foreshore Reserve and the lake. The Esplanade footpath area is generally irregular in shape, uneven, sloping from the kerb line to the shop fronts with poor quality paving and minimal greenery. Tables and chairs located on the sloping pavement offer poor amenity, while the bus shelter on The Esplanade is old and intrusive.

Pedestrian areas on Lake, King and John Streets and through the car park are also poor quality spaces.

1.3 ENVIRONMENTAL CONSTRAINTS

Inundation - Flooding and Sea Level Rise

The northern areas of the centre around Lake Street are prone to flooding. Some sites will be affected by both flooding from North Creek and by flooding from the Lake Waterway.

All areas below 3m Australian Height Datum (AHD) will experience changes to flood depth and extent as sea level rise occurs. Minimum floor heights for new development will minimise the risk of flood damage.

Acid Sulphate Soils

The town centre is located on acid sulphate soils (Class 3 and Class 5). Development must ensure that disturbance of acid sulphate soils is minimised to prevent adverse impact on water quality and the receiving waters of the lake.

Mine Subsidence

The town centre is within a mine subsidence area and future development will require assessment and approval from the Mine Subsidence Board.

1.4 DESIRED FUTURE CHARACTER

Activity and Uses

The Area Plan envisages Warners Bay developing as a specialty centre with uses that are suited to smaller scale premises. This may include health and gourmet foods and products, medical and dental practices, wellness and leisure services, personal services such as hair and beauty businesses, and professional services such as accountants, solicitors or financial planners. The plan also promotes The Esplanade and new public spaces as vibrant, high amenity places for more cafes, restaurants and footpath dining.

The vitality of the town centre would be enhanced by providing residential, tourist and visitor accommodation within the core area. The presence of residents and visitors would extend the hours that the centre is active and provide natural surveillance and improved safety in streets, laneways and car park areas.

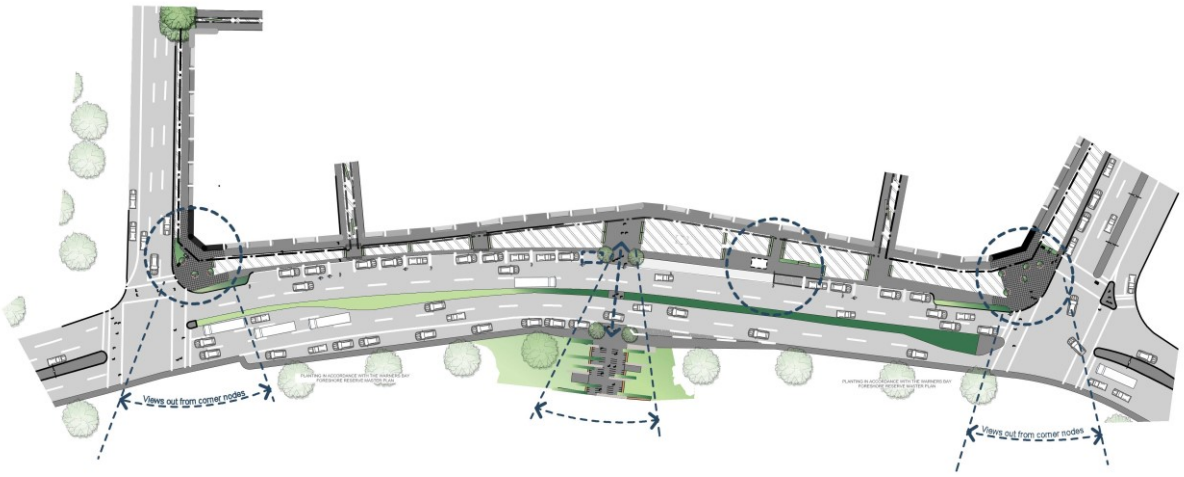


Figure 2 - Integration of trading activity on The Esplanade with Foreshore activity

Future Town Centre Structure

The Warners Bay town centre structure should establish a premier strip or Dress Circle on The Esplanade that provides the greatest opportunity for high amenity buildings, quality office space and residential apartments, as well as footpath trading space with outlook to the lake (as shown in Figure 3).

The structure should include clear physical and visual pedestrian connections from parking areas to the Dress Circle frontages and to the foreshore. The level of pedestrian activity on each street should be reflected in the future building form and character at the street.

Transport and Traffic

Transport and traffic improvements should:

- manage traffic speeds and flow on the RMS network,
- allow for efficient town centre traffic circulation and parking,
- support safer and more pleasant cycling and walking activity, and
- improve walking and cycle connections between the Foreshore and the Dress Circle.

Figure 3 - Warners Bay Town Centre Structure Plan

Future Built Form

The desired level of enclosure and the desired future character of each street would determine the scale and height of buildings:

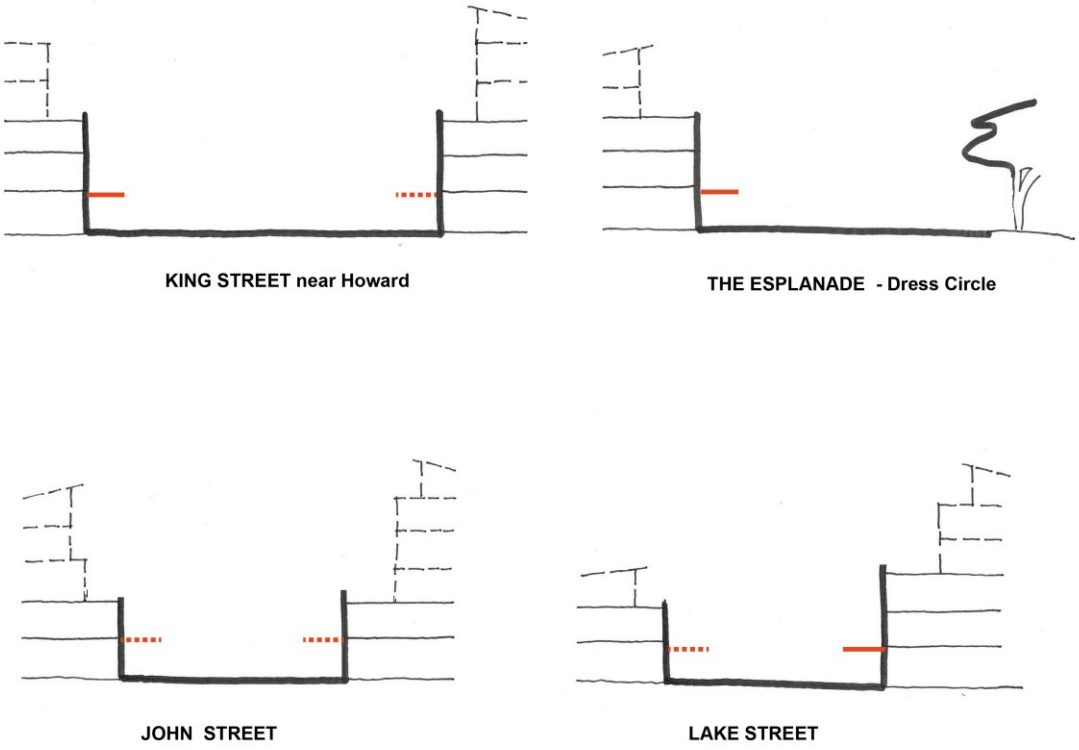


Figure 4 - Indicative enclosure and built form for each street

The Esplanade buildings on the Dress Circle should maximise the opportunity for floor space with an outlook to the lake whilst maintaining a fine grain of development. Taller, narrower buildings on existing lots would be desirable for this fine grain, and buildings could be serviced from the rear lane. Larger amalgamated sites should be discouraged on the Dress Circle.

Buildings facing the Market Square should provide active frontage built to the boundary of the plaza. This would include cafes, food and specialty retailers, community facilities and bicycle end of trip facilities. The upper levels on the north and east (across John Street) would be setback to maintain sun access all year round between 10am and 2pm, even in midwinter.

Built form should be established with a continuous street wall of narrow abutting facades, and a parapet line at three storeys. Small scale and varied shopfronts at the street level would provide a diverse, active and interesting pedestrian environment.

The site bounded by John Street and Postman's Lane should allow for a large footprint building that is sleeved by smaller retail at street level. This building should provide opportunity for a contemporary high quality architectural built form with a larger scale public art work integrated with the façade treatment.

Larger sites between Charles and John Streets and in the area south of King Street would support higher buildings and good quality residential apartments on the upper levels. The street would be defined by buildings with a consistent two storey façade with upper levels of buildings setback. At street level, shop fronts would be small to medium scale.

The area surrounding the town core would be lower scale buildings with a two-storey commercial façade and parapet line, with a setback to an upper level.

Future Building Character

Warners Bay development character should reflect the high amenity waterside location and its popularity as a social and recreational destination on the lake. All major active frontages would be characterised by shaded footpaths under solid cantilever box awnings.

On the Dress Circle, shop fronts and cafes would be smaller scale. Tall narrow facades would be designed with window and door openings punched in a masonry façade. High quality detailing and articulation would ensure interest and richness in the built character.

Balconies would be smaller scale, recessed with smaller balcony projections to maximise interest and human scale. Building elevations exposed to the wind would include moveable screens, louvers and shutters that would provide character elements.

On the larger sites along John, Charles and King Streets, building elevations would be assembled from several narrower facades to present a detailed and interesting frontage to the street. Articulation, awnings, architectural detailing, shadow lines and use of contrast materials should provide scale, detail and interest for pedestrians.

Materials in the buildings closer to the water would be generally painted or rendered masonry (without any face brick), with lighter weight sheet materials and more glazing to upper levels. Colours would be neutral and mid-tone neutral. Darker colours may be used on visually sensitive upper levels to reduce their visual impact. Use of white or bright colour would be limited to small detail elements.

Buildings in the urban support areas at a distance from the water would use a similar palette of materials and colours and could incorporate some face brick finishes as a transition to the character of surrounding residential areas.

2 DEVELOPMENT CONTROLS

This Area Plan applies to the area shown in Figure 5 - ***Extent of Area Plan***.

Figure 5 - Extent of Area Plan

2.1 FORM-BASED CONTROLS

The Warners Bay Town Centre Area Plan includes form-based controls in order to address:

- the scale and spatial qualities of each street,
- the form and mass of buildings in relation to the street and one another,
- the relationship between the ground floor of a building and the footpath,
- the extent of awnings,
- the overall maximum depth of development,
- the location of car parking at basement, ground or deck levels,
- aspects where building mass should be broken up (i.e. 50% occupied areas), and
- the type and character of openings for entries and windows and balconies.

Note: The Town Centre Structure Plan shown in Figure 3 should be referenced for the location of public open space, the location of public pedestrian links and the extent of street awnings.

2.2 BUILDING TYPES

Each building type is determined by:

- its relationship to the street,
- the height of the street wall,
- the maximum height in storeys, and
- setbacks for landscape.

Objectives

a. To ensure that building scale, height and setback contributes to the desired future character of the town centre and each street.
b. To increase the interest and activity of pedestrian street frontages.
c. To ensure the service functions of John Street do not compromise pedestrian amenity and access to transport facilities.

Controls

1 Development must make a positive contribution to the desired future character of the town centre as described in Section 1.4.
2 A development proposal must address the requirements of the Town Centre Structure Plan as shown in Figure 3.
3 A development must comply with the relevant building type shown in Figure 6 and the street sections and elevations, as shown in Figures 13 to 26.

4 A comprehensive site and context analysis must be undertaken prior to developing a site plan and a building. The Site Analysis must inform the subsequent design process.

Figure 6 - Town Centre Building Types

See Section 7 for detailed controls for Building Types A to G

2.3 CONCEPT PLAN SITES

Objectives

a. To provide an opportunity for site layout, building scale form and height, approximate yield and public benefit of a development proposal to be investigated and determined early in the development assessment process.

b. To demonstrate the capacity of a development proposal to deliver a high quality public space and the resulting social, community and economic benefits for the town centre.

c. To allow consideration of a proposal that varies from the Building Type Controls (Figures 13 to 26).

Controls

1 A comprehensive urban design analysis of the site and its urban context must be prepared for land shown as a Concept Plan site (Figure 7).

2 The urban design analysis will guide a preferred massing diagram for the site.

3 A Concept Plan must then be prepared based on the urban design analysis and preferred massing diagram and include:

i. A Market Square with capacity for a variety of social, community, cultural and trading activities,

ii. Appropriate building heights and setbacks to allow sun access to the Market Square and John Street entry to the Square in mid-winter,

iii. Clear and convenient pedestrian links and building entries in and out of the Market Square,

iv. Site layout and facilities that support walking, cycling and bus transport to the town centre,

v. Shop fronts and uses to activate the Bay Arcade and John Street frontage,

vi. Car parking to service the Dress Circle and development on the site,

vii. Vehicle circulation and car park entry and egress that maintains pedestrian amenity along Postman's Lane and John Street,

viii. Development staging and opportunity to deliver public space in early stages,

ix. Means to manage parking demand during construction,

x. Images, elevations and models of the proposed built form and public space.

Note: Detailed controls for Dress Circle sites, Development on the John Street car park and Market Square can be found in section 2.4, 2.5 and 4.1 respectively.

2.4 DRESS CIRCLE SITES

Objectives

a. To maximise pedestrian activity along Dress Circle frontages.

b. To provide suitable off-site parking locations that would enable redevelopment and activation of Dress Circle sites.

c. To maximise the amenity and floor space yield of Dress Circle development within the specified built form and height controls.

Controls

1 Development of Dress Circle sites must provide public access from the primary street frontage of Lake Street, The Esplanade or King Street. Only service access should be provided from Postman's Lane.

2 Sites identified as *Locations for Dress Circle Off-Site Parking* in Figure 7, may cater for a car parking space demand generated by additional commercial/retail floor space in the Dress Circle, in addition to the spaces required for uses on these sites.

3 Resident parking demand generated by redevelopment of Dress Circle sites should be provided on Site 1, if not able to be accommodated on the Dress Circle sites themselves.

Figure 7 - Concept Plan sites and locations for Dress Circle off-site parking.

2.5 DEVELOPMENT OF THE JOHN STREET CAR PARK SITE

Objectives

a. To provide active street frontage to John Street where footpath levels permit.

b. To ensure safe and convenient pedestrian movement from car parking to public space and shopfront areas.

c. To minimise vehicle traffic along Postmans Lane and provide a high amenity shared zone for pedestrians.

Controls

1 Development on the John Street car park site must be setback at least 2m from the western and northern boundary to Postman's Lane, to allow for a safe and pleasant pedestrian footpath.

2 Access to the basement car park must be located at the intersection with Lymington Street and egress located on Postmans Lane.

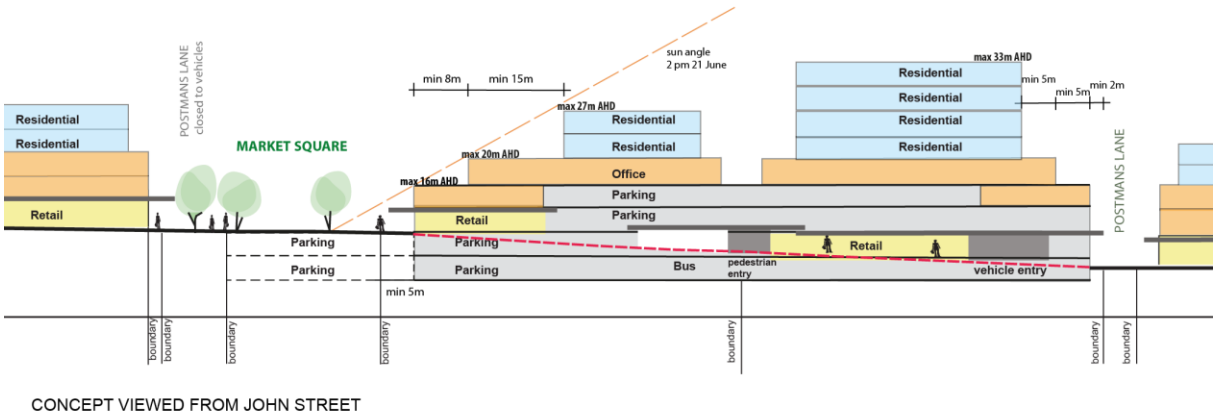
3 Development on the John Street car park site must include active retail uses at street level for at least 50% of the John Street frontage as shown in Figure 8.

4 Development on the corners of John Street and the Market Square must include openable walls to maximise outdoor trading areas.

5 Development must provide a pedestrian entry into the car park directly from the Market Square, from the John Street footpath, and on Postmans Lane near to the Lake Village Arcade.

6 Each pedestrian entry must be at least 4m wide with clear glazing and a solid sheltering awning.

7 Any loading dock or service areas must be contained within the building volume.



CONCEPT VIEWED FROM JOHN STREET

Figure 8 - John Street Concept with Market Square, car parking and indicative mixed use development.

Note: See Building Type B controls for more detailed building design requirements.

3 MIX OF USES

Objectives

a. To support cultural and recreation activity along the Foreshore and at the Performing Arts Centre.
b. To increase the availability of residential and short-term visitor accommodation in the centre.
c. To increase natural surveillance and safety in the town centre.
d. To support restaurants on The Esplanade with broader views to the lake.

Controls

1 Development must not reduce access to The Foreshore or the Performing Arts Centre or cause negative impacts on cultural activity in the town centre.
2 Development should incorporate uses that complement extended trading hours and cultural activities.
3 Development of buildings over three storeys in height must provide residential or tourist and visitor accommodation on the upper levels.
4 Development is encouraged on The Esplanade for restaurant uses on the first level above the street, provided the building design addresses the amenity impacts on adjoining and neighbouring residential dwellings.

4 PUBLIC DOMAIN

4.1 THE MARKET SQUARE

Objectives

a. To provide a sunny, sheltered, high amenity public plaza or Market Square on the elevated southern end of the John Street car park.
b. To maximise outdoor trading activity on the edges of the Market Square
c. To encourage outdoor markets that would support the trade of surrounding retail specialty shops.
d. To improve connectivity, amenity and convenience for pedestrians moving through the centre.
e. To ensure a clear line of sight from John Street across the Market Square and through the Bay Arcade.
f. To provide, and maximise the use of, balconies and terraces overlooking the Market Square.

Controls

1 Development on Lot 1 DP773475 must be setback 5m from the boundary of Lot 10 DP 1128914.
2 Development on any site that overlooks the Market Square must not overshadow:
   i. more than 40% of the Market Square area at 2pm on 21 June, and
   ii. any part of the public footpath at the corner of John Street and the Market Square at 10am on 21 June.
3 Development on any site that overlooks the Market Square must provide:
   i. high quality facades and materials on the elevation facing the Market Square,
   ii. balconies, terraces and habitable rooms that overlook the Market Square,
   iii. part solid balustrades, moveable screening and/or louvers for balconies and terraces that overlook the Market Square, and
   iv. cantilever awnings at street level.
4 Development on Lot 1 DP773475 must provide:
   i. end-of-trip cycle facilities with frontage and access onto the Market Square,
   ii. Direct pedestrian access between the car park and the Market Square, and
   iii. residential or commercial floor space between the Market Square facade of the building and any floor space provided for car parking.
5 Development on Lot 2 DP 719621 (PO site) and Lot 1 DP773475 (Auscoal car park site) must include outdoor dining areas on the Market Square and these must be consistent with Council's *Footway Dining Policy*.
6 Works undertaken within the public street and Market Square areas must be consistent with the provisions of Council's *Warners Bay Streetscape Master Plan*.

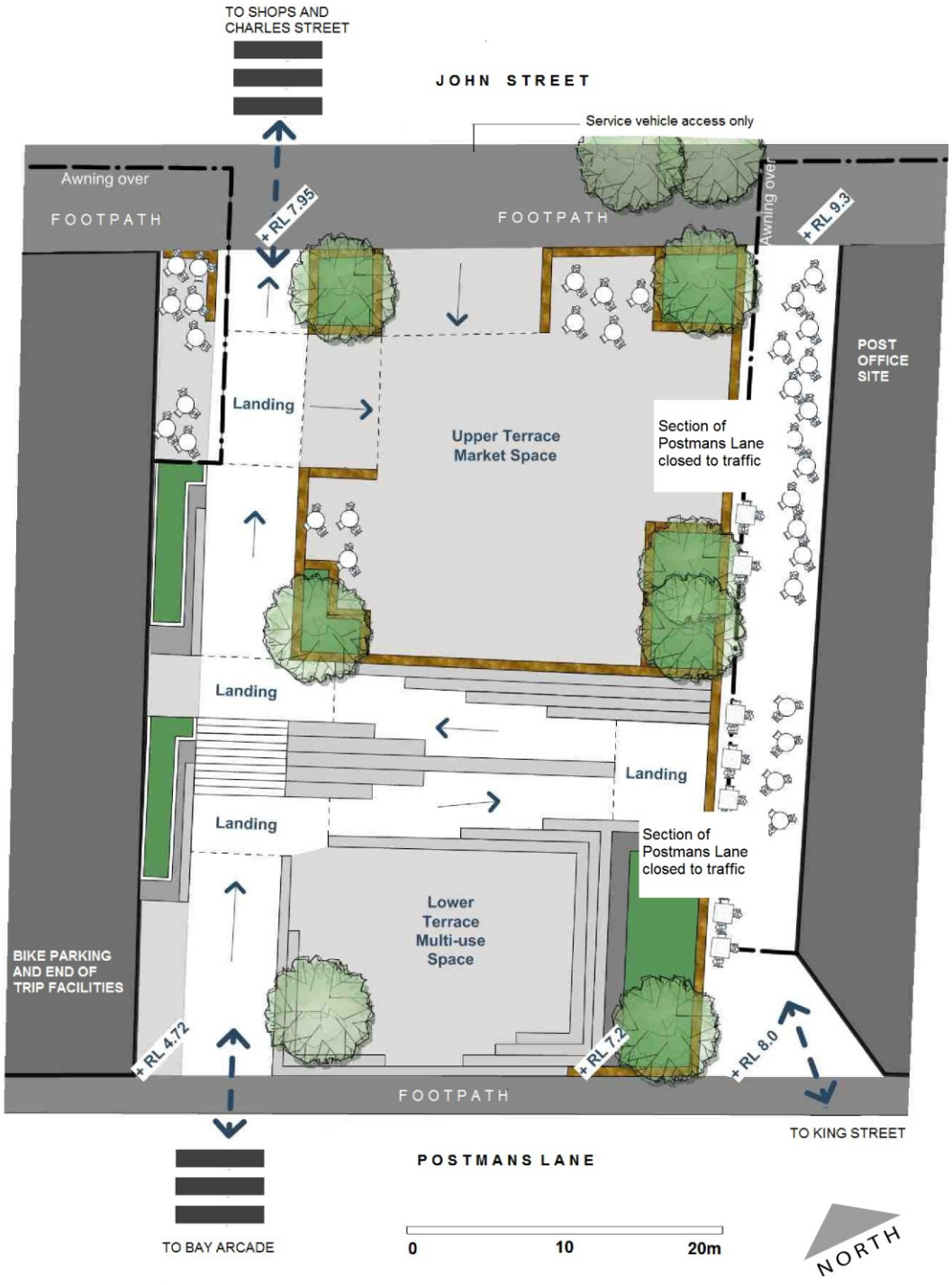


Figure 9 - Concept for Market Square with active frontage, outdoor dining, shade and seating and opportunity for markets.

4.2 PEDESTRIAN LANES

Objectives

a. To provide convenient and pleasant walking access to and from Dress Circle shop fronts and the Market Square.
b. To maximise the pedestrian flow along pedestrian lanes
c. To ensure pedestrian lanes are open safe, visible, convenient and have active frontage.
d. To provide intermittent shelter and sun access along each open pedestrian lane.
e. To ensure that pedestrian movement has priority at the intersection of each pedestrian lane and Postman's Lane.
f. To ensure pedestrian lanes are wide enough to support footpath trading as well as pedestrian accessibility.

Controls

1 Re-development of 478 The Esplanade (Lot 115 in DP 607605) and 470 The Esplanade (Lot 1 DP773457) must be setback 1.5m from the Bay Arcade boundary to provide an open pedestrian lane on a single alignment from Postman's Lane to The Esplanade.
2 Re-development on SP 48986, SP 74514 or Part 212 in DP 551611 (Lake Village Arcade), must include a pedestrian lane on a single alignment from Postmans Lane to The Esplanade, with a minimum clear corridor width of six metres and open to the sky.
3 Development on 36 John Street (Lot 21 DP1136755) and 32 John Street (Lot 1 DP1022769) must include a pedestrian lane on a single alignment between John Street and Charles Street (as shown in Figure 3: *Town Centre Structure Plan*) with a minimum clear corridor width of six metres and open to the sky.
4 Development on 22 Lake Street (Lot 53 in DP 603743) or 24 Lake Street (Lot 2 in DP 505075) must include a pedestrian lane on a single alignment from Postman's Lane to Lake Street, with a minimum clear width of five metres and open to the sky.
5 Each lane must be free of visual intrusions, including occupiable floor space, stairs, lifts and signage structures. Furniture, fixings and landscape works are encouraged where they provide high amenity footpath dining in accordance with Council's *Footway Dining Policy*.
6 The pedestrian crossing point at Postman's Lane into each lane must be clear of impediments to pedestrian safety and amenity, including level changes, loading and delivery docks, waste management facilities or car park entries.
7 Each pedestrian crossing point at Postman's Lane must be at the same grade as the footpath and clearly differentiated from the remainder of the carriageway through a change in pavement materials.

4.3 IMPROVEMENTS TO THE ESPLANADE

Objectives

a. To provide a high quality footpath trading area for properties fronting the foreshore between Lake and King Streets.

b. To minimise the impacts of through traffic movements along The Esplanade.

Controls

1 Development on Dress Circle sites should make provision for footpath dining areas that are relatively level and that maximise the usage of footpath dining space, and are consistent with Council's *Footway Dining Policy*.

2 Works undertaken within the public street and footpath areas must be consistent with the provisions of Council's *Warners Bay Streetscape Master Plan*.

4.4 STREET AND FORESHORE IMPROVEMENTS

Objectives

a. To provide high quality public spaces in the town centre and along the lake foreshore.

b. To support the growth of the Performing Arts Centre as a focus for cultural activity in the area.

Controls

1 Development in the town centre must complement use and activity on the Foreshore Reserve at the Performing Art Centre.

2 Works undertaken within the Warners Bay Foreshore Reserve, Warner Reserve or the public street and footpath areas, must be consistent with the provisions of Council's *Warners Bay Streetscape Master Plan* and the *Warners Bay Foreshore Reserve Plan of Management.*

5 TRANSPORT, ACCESS AND PARKING

5.1 PEDESTRIAN AND CYCLE FACILITIES

Objectives

a. To improve walking and cycling safety and accessibility around and within in the town centre.

Controls

1 Where a traffic generating development warrants new or improved pedestrian or cycle facilities, these facilities should be in accordance with Figure 3 and Figure 9.

5.2 PUBLIC TRANSPORT FACILITIES

Objectives

a. To provide convenient bus access in the town centre.
b. To activate the building frontage on John Street.

Controls

1 Development on the John Street car park site must include a new bus stop facility including a cantilever awning and seating on John Street at the location shown in Figure 9.
2 The awning and seating areas must be integrated with the overall building design to provide a high amenity area for public transport users.

5.3 UPGRADES FOR INTERSECTIONS AND ROAD FACILITIES

Objectives

a. To provide a convenient, safe, pleasant and interesting pedestrian environment that encourages walking.
b. To provide safe, efficient and well-connected routes for cyclists.
c. To manage traffic speeds and flow on the main roads network.
d. To allow for efficient low speed town centre traffic circulation.
e. To improve walking and cycle connections between the Foreshore, the Dress Circle and the Market Square.

Controls

1 Traffic generating development must address the impact of development on intersection operations as well as the desired outcomes for pedestrians and cyclists in the town centre.
2 Upgrades to intersections, cycling and walking facilities and bus facilities associated with traffic generating development must be consistent with the intersections and road facilities as shown in Figure 3: *Town Centre Structure Plan*.

Note: The implementation of each intersection upgrade would be required when traffic volumes reach the determined threshold level as the result of combined development and network growth.

5.4 PARKING PROVISION

Objectives

a. To moderate the demand for parking in the town centre.
b. To distribute town centre parking over several sites.
c. To provide alternatives to on-site parking that support viable re-development of Dress Circle sites.
d. To minimise adverse impacts of above ground level car parking spaces.
e. To maximise the use of basement level parking to reduce building bulk and height.
f. To ensure car parking at ground level or above can be converted to retail or commercial floor space at a later date.
g. To maximise the use of all town centre car parking space across all hours.

Controls

1 Car parking at ground level must be sleeved by retail or commercial floor space along the total length of the primary road frontage, and for at least 60% of the secondary street frontage.
2 Where not all car parking can be accommodated at basement and ground level, car parking above ground level may be considered, provided it is fully integrated into the building design, and adequately screened by a high quality architectural façade on all elevations.
3 For car parking at ground level or above, the floor to ceiling height must be a minimum of 3.2m.

5.5 CAR PARKING RATES

Objectives

a. To facilitate change of use between business, office and retail uses.
b. To ensure that the number of car parking spaces provided does not undermine incentives for alternative modes of transport.
c. To maximise the use of each parking space by multiple users and over extended hours.

Controls

1. The number of car parking spaces provided by development in the B2 Zone must be consistent with the specifications of Table 1.
2. Where the proposed number of car parking spaces is **less than** or **greater than** specified in Table 1, justification must be provided to support a variation.
3. Visitor car parking for residential uses is not required in the block bounded by The Esplanade, King Street, John Street and Lake Street.

Table 1 - Car Parking Rates for Development within the B2 Zone

Development Type	Car Parking Rate	
residential flat buildings, shop top housing, and including dwellings as a component of mixed use developments.	**Dwelling Type**	**Parking spaces per dwelling**
	1 bedroom	0.5
	2 bedrooms	0.75
	3 bedrooms	1.0
	visitor parking	0.25
serviced apartments	1 space per unit	
business premises **office premises** **retail premises**	1 space per 40m^2 GFA	
medical centres **health consulting rooms**	1 space per 40m^2 GFA	
community facilities	1 space per 40m^2 GFA	

Note: for all other parking rates see Part 4: Development in Business Zones

6 BUILDING DESIGN - GENERAL

6.1 BUILDING HEIGHT

Objectives

a. To ensure that buildings are lower than the treed ridgeline to the northeast when viewed from the lake.
b. To ensure that building heights allow contact between the building occupants and people in the street.
c. To ensure that building height and setbacks maintain sun access to public space
d. To establish consistent street wall height that provides a comfortable sense of enclosure for that street.
e. To maximise the potential of Dress Circle sites to deliver high amenity retail, office and residential floor space in the centre.
f. To provide a transition of height between lower scale residential development and higher buildings.
g. To locate higher buildings on larger sites that have the capacity to provide additional town parking.
h. To ensure that building heights are suitable to enable feasible development to occur when market conditions are favourable.

Controls

1 The maximum number of storeys must comply with the Building Type Controls (Figures 13 to 26).

6.2 MAXIMUM OCCUPIED AREA

Definition:

One hundred percent (100%) occupied area means that the floor space on that level completely fills the maximum possible area within the setbacks from each boundary.

Fifty percent (50%) occupied area means that the floor space on that level occupies no more than 50% of the maximum possible area within the setbacks from each boundary.

Objectives

a. To reduce the bulk and impact of a building mass on residential amenity within the site or on neighbouring sites.

Controls

1 Development must comply with the maximum occupied area controls, as shown in the Building Type Controls (Figures 13 to 26).

2 Residential development must satisfy the building separation, solar access and amenity requirements of State Environmental Planning Policy No. 65 – Quality Design of Residential Flat Development.

6.3 BALCONIES AND OPENINGS

Objectives

a. To reinforce the street wall and the sense of enclosure of the street.

b. To ensure that balconies offer adequate privacy and shelter and can be used frequently.

c. To ensure finer grain scale and vertical proportions of façade composition.

Controls

1 Balconies below the parapet line must be recessed in the street façade wall. Balcony projections up to a maximum of 600mm from the street wall are acceptable for balustrades and awnings as shown in Figure 10. Projecting balconies are acceptable on levels above the parapet line only.

2 Each balcony balustrade must be discrete from neighbouring balconies. Continuous balustrades across a façade are not acceptable on any level.

3 Each balcony must incorporate moveable shutters, louvers or screens that provide sun and wind protection.

4 Window and door openings above street level must emphasise a height to width ratio of at least 2:1 as shown in Figure 11.

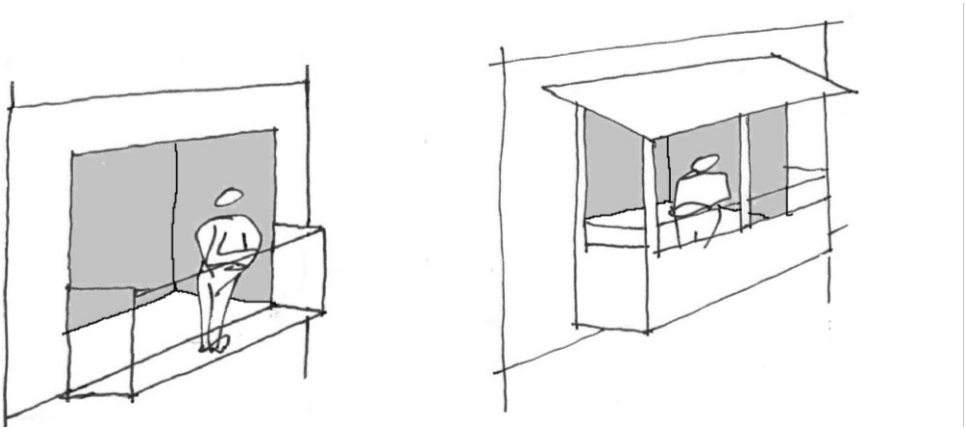


Figure 10 - Recessed balconies with small projections for balustrades and awnings

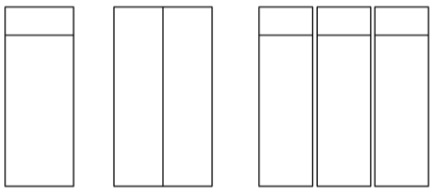


Figure 11 - Suitable window and door proportions

7 BUILDING TYPES

All uses shown on the Building Type Controls (Figures 13 to 26) are indicative only. The permitted uses are determined by Lake Macquarie LEP 2014.

7.1 BUILDING TYPE A

Objectives

a. To accommodate level changes between the footpath and the ground floor of development for sites subject to inundation.
b. To create vibrant trading spaces with an elevated outlook to the lake.
c. To reinforce the deflected alignment of The Esplanade between Lake and King Streets.
d. To maximise the number of shop fronts along the Dress Circle frontages.
e. To establish a street wall composed of narrow facades, active shop fronts and fine grain detailing.
f. To ensure that on larger sites the pattern of small scale shops and narrow vertical facades is maintained.
g. To ensure that upper levels on the Dress Circle are recessive and lightweight in appearance.
h. To provide high amenity residential apartments overlooking the lake.
i. To provide opportunity for smaller affordable residential units overlooking Postman's Lane.
j. To improve pedestrian amenity and safety on Postman's Lane.

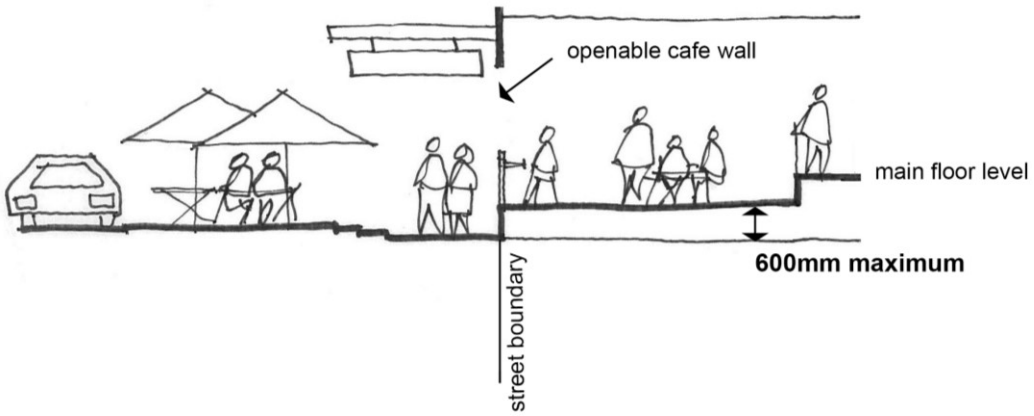


Figure 12 - Intermediate level between footpath and main ground floor suited to outdoor dining

Controls

1 Development must comply with the controls as set out in Figure 12 to 14.

2 Where floor levels are raised to accommodate risk of flooding, the building design must incorporate the level change from footpath to the ground floor within the building. Footpath ramps are not acceptable.

3 Where the level change is greater than 600mm between the footpath and the main ground floor, the building design must include an intermediate level that is:

- suitable for cafe/dining trading or shop front display;
- designed to withstand temporary inundation.

4 Café or dining activity on the intermediate level should maximise activity and amenity using a combination of openable walls, or retractable windows, half walls and bench seating.

5 The front façade of development fronting The Esplanade between Lake and King Streets must be aligned on the front property boundary, even when this is not orthogonal to the side boundary.

6 Façades Dress Circle sites must be three storeys high at the street boundary and finished by a parapet line.

7 Each shop front façade on Dress Circle sites should be a maximum of 6m in width as shown in Figure 14.

8 Wider building frontages must be composed of two or more narrower facades that are readily distinguished by a change of wall alignment, colour, surface finish, and/or fenestration pattern.

9 Each facade must be predominantly masonry construction with punched voids for balconies, windows and doors.

10 Shop front glazing at street level must occupy between 70-90% of the frontage width, with a maximum sill height of 700mm.

11 Development for café use must provide a large wall opening with retractable windows or doors that occupies at least 70% of the façade width.

12 Street level windows and entries must be clearly expressed with separate framing set within a solid masonry wall. Continuous glazing is not permitted.

13 Street level access to residential dwellings above must be clearly identified and must not occupy more than 20% of the street level facade.

14 Shop fronts may include recessed entries where this facilitates convenient and universal access. Entry ramps are not permitted within the public footpath.

15 Windows and balcony doors above street level must not occupy more than 60% of the facade width.

16 Each balcony must be protected by moveable shutters, louvers or screens that provide wind protection and allow views to the lake. Levels above the parapet line must be setback a minimum of 4.5m from the primary street frontage.

17 Levels above the parapet line must use lightweight materials and be finished in light to mid-tone neutral colours. Heavy masonry elements including large masonry columns and balconies are not acceptable.

18 Balcony balustrades, screening and detailing should be constructed of lightweight small section elements.

19 Development must include a masonry wall or fence at least 1.8m high on the rear boundary at Postmans Lane.

20 Development must provide architectural elements to the rear wall on Postmans Lane including wall articulation, awnings over vehicle and pedestrian entries, voids in the wall with louvers and screening treatments.

21 Development with residential dwellings facing Postman's Lane must be effectively sealed at the rear street level to minimise the impact of noise and odour on residents above.

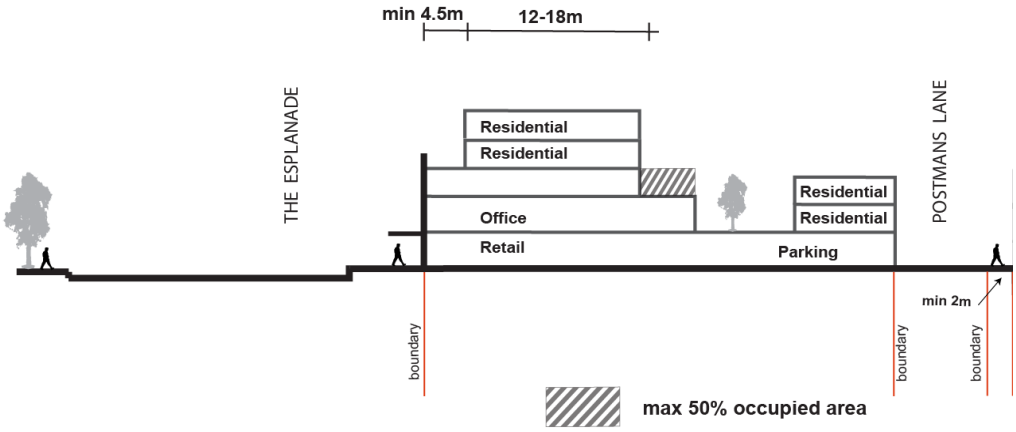


Figure 13 - Section - Type A Building on the Dress Circle with indicative uses

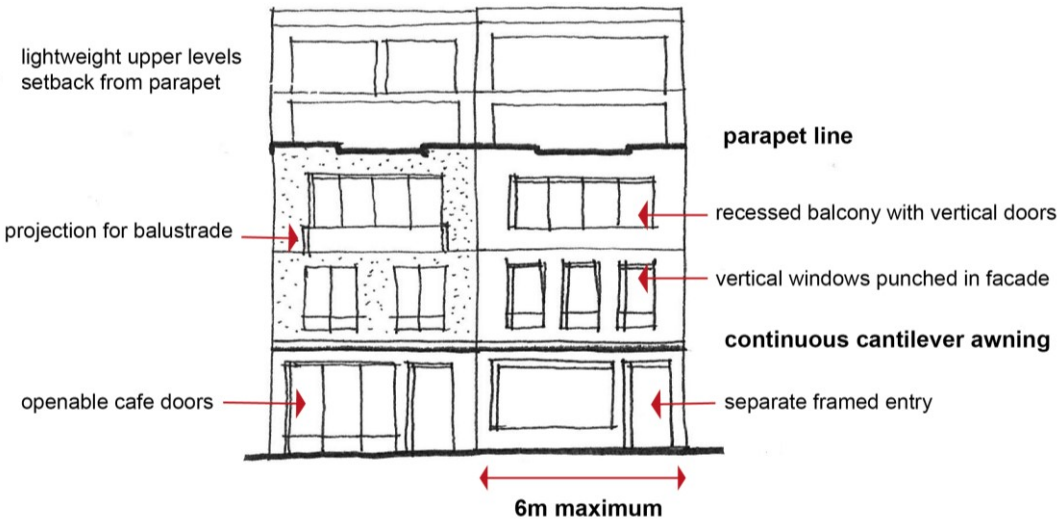


Figure 14 - Elevation – Type A building on the Dress Circle

7.2 BUILDING TYPE B

Objectives

a. To ensure that the street level façade provides an active frontage for pedestrians.
b. To ensure that multi-level deck car parking would not detract from the quality and amenity of the streetscape.
c. To ensure all facades of parking decks are integrated within the overall building design and finished with high quality architectural materials.
d. To provide an opportunity for large scale public art integrated with the building facade.

Controls

1 Development must incorporate retail shopfronts, pedestrian entry to parking and an integrated bus stop facility that occupies at least 50% of the street level frontage.
2 All car parking decks must be enclosed by a high quality architectural facade incorporating elements such as panels, louvers, glazed areas, punched mesh, lathe screening or green walls.
3 The overall facade must be composed of smaller façade elements each with a maximum width of 20m.
4 Screening to car parking must allow for suitable ventilation and natural day lighting.
5 Screening design must incorporate contemporary lightweight non-reflective materials on all elevations that enhance the character of the surrounding streets.
6 Building elevations to Postman's Lane must be finished to the same standard as the main building façade.
7 Public art should be incorporated into the façade design to express the emerging identity of Warners Bay and to enliven the street elevation.

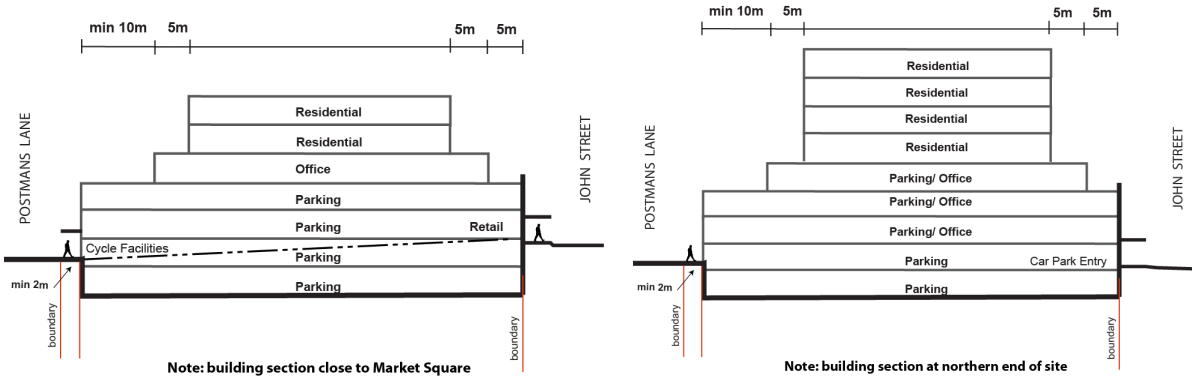


Figure 15 - Sections – Type B Building at southern end (left) and northern end, with indicative uses

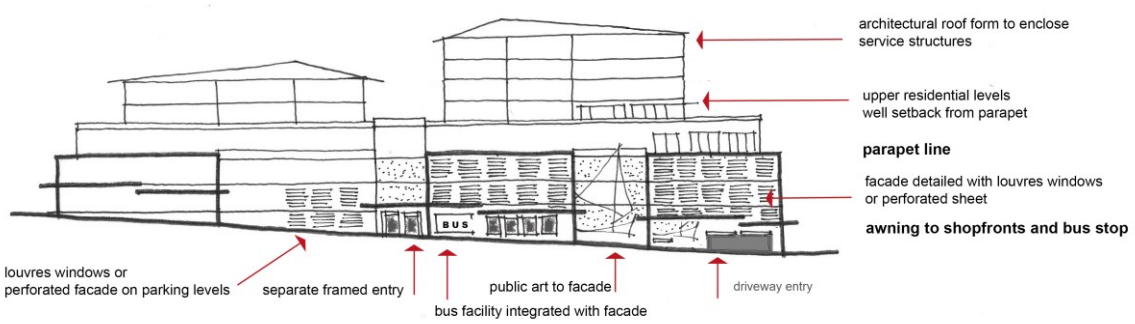


Figure 16 - John Street elevation – Type B Building

7.3 BUILDING TYPE C

Objectives

a. To ensure that higher buildings do not have an adverse visual impact on the treed ridgeline that forms a backdrop to Warners Bay.

b. To ensure that sites with larger frontages include a variety of 10-15 commercial premises every 100m of street frontage.

c. To establish a clear street wall composed of smaller facades with good quality architectural detailing.

Controls

1 Each façade must be at least three storeys high at the street boundary and finished by a parapet line.

2 Each façade must be no more than 10m in width.

3 Wider building frontages must be composed of two or more narrower facades that are readily distinguished by a change of wall alignment, colour, surface finish, and/or fenestration pattern.

4 Each facade must be predominantly masonry construction with punched voids for balconies, windows and doors.

5 Shop front glazing at street level must occupy between 70-90% of the frontage width.

6 Street level windows and entries must be clearly expressed with separate framing set within a solid masonry wall. Continuous glazing is not acceptable.

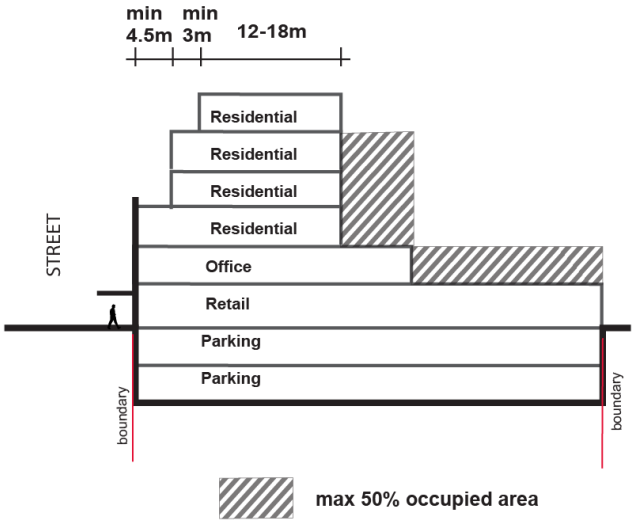


Figure 17 - Section - Type C Building with indicative uses

Figure 18 - Street elevation – Type C Building

7.4 BUILDING TYPE D

Objectives

a. To provide for a combination of basement parking and deck parking above the street.

b. To ensure that the larger frontage site includes a variety of small to medium commercial premises.

c. To ensure that the street level offers pedestrians interest, activity and detailed design elements.

Controls

1 Each façade must be 2-3 storeys high at the street boundary and finished by a parapet line.

2 Each façade must be no more than 12m in width.

3 Wider building frontages must be composed of two or more narrower facades that are readily distinguished by a change of wall alignment, colour, surface finish, and/or fenestration pattern.

4 Each facade must be predominantly masonry construction with punched voids for balconies, windows and doors.

5 Shop or office front glazing at street level must occupy between 70-90% of the frontage width.

6 Street level windows and entries must be clearly expressed with separate framing set within a solid masonry wall. Continuous glazing is not permitted.

7 Street level entries to residential dwellings above must be clearly identified.

8 Development on the north-west side of Lymington Way must be setback a minimum of 2m from the Lymington Way street boundary to allow for a bus layover area.

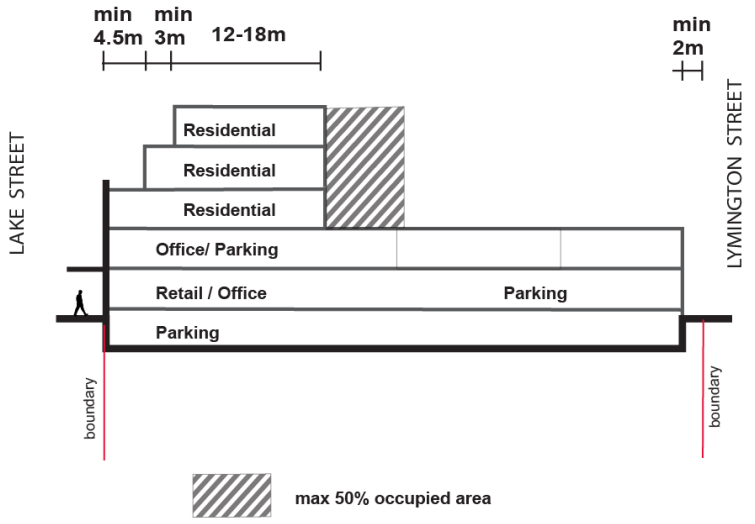


Figure 19 - Section - Type D Building with indicative uses

Figure 20 - Street elevation – Type D Building

7.5 BUILDING TYPE E

Objectives

a. To provide for mixed use sleeving development along Charles Street and larger floor plate retail behind.

b. To ensure that sites with larger frontages include a variety of 10-15 commercial premises every 100m of street frontage.

c. To establish a lower street wall composed of smaller facades with good quality architectural detailing.

Controls

1 Each façade must be at least two storeys high at the street boundary and finished by a parapet line.

2 Each façade must be a maximum of 10m in width.

3 Wider building frontages must be composed of two or more narrower facades that are readily distinguished by a change of wall alignment, colour, surface finish, and/or fenestration pattern.

4 Each facade must be predominantly masonry construction with punched voids for balconies, windows and doors.

5 Shop or office front glazing at street level must occupy between 70-90% of the frontage width.

6 Street level windows and entries must be clearly expressed with separate framing set within a solid masonry wall. Continuous glazing is not permitted.

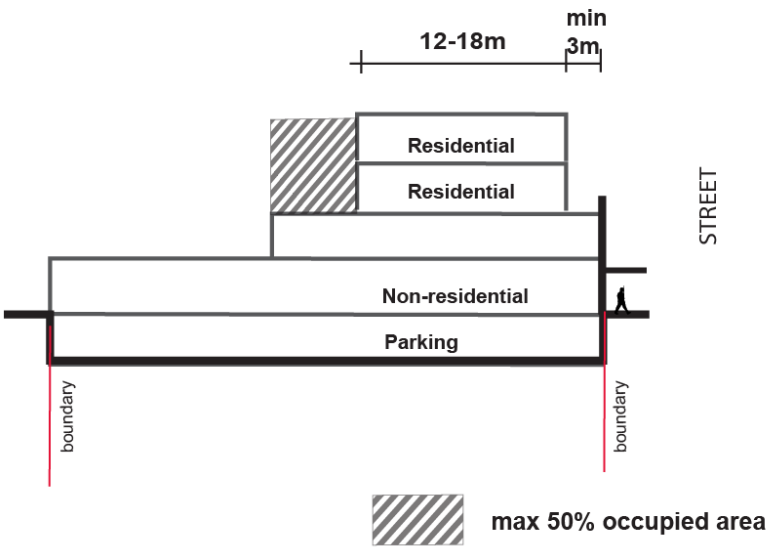


Figure 21 - Section - Type E Building with indicative uses

Figure 22 - Street elevation – Type E Building

7.6 BUILDING TYPE F

Objectives

a. To facilitate development of shallow depth commercial zoned lots on Lake Street
b. To establish a two storey street wall that defines the spatial extent of the street.
c. To ensure each building has a commercial façade at the street boundary that reinforces street character.
d. To ensure that each building has clearly distinguishable and separate entries for commercial areas and residential areas.

e. To ensure parking is included at the rear of the building or within the building volume.

f. To minimise the impact of garage doors and entries.

Controls

1 The building façade must be at least two storeys high and located on the street boundary.

2 Each façade must be a maximum of 10m in width and finished by a parapet line.

3 Wider building frontages must be composed of two or more narrower facades that are readily distinguished by a change of wall alignment, colour, surface finish, and/or fenestration pattern.

4 Each facade must be predominantly masonry construction with punched voids for balconies, windows and doors.

5 Shop front glazing at street level must occupy between 50-90% of the frontage width.

6 Street level windows and entries must be clearly expressed with separate framing set within a solid masonry wall. Continuous glazing is not permitted.

7 Street level entries to residential dwellings above must be clearly identified.

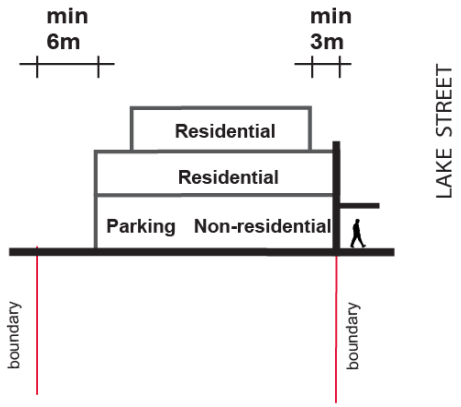


Figure 23 - Section - Type F Building with indicative uses

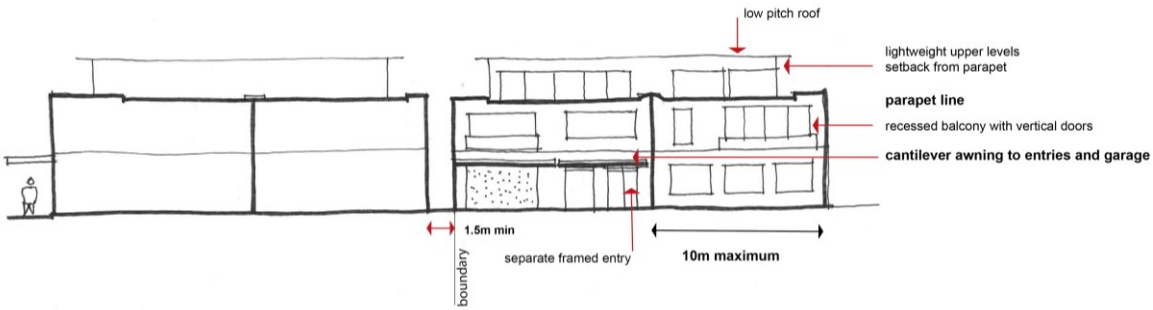


Figure 24 - Street elevation – Type F Building

7.7 BUILDING TYPE G

Objectives

a. To establish a two storey street wall that defines the spatial extent of the street.
b. To ensure each building has a commercial façade at the front setback line that reinforces street character.
c. To ensure that each building has clearly distinguishable and separate entries for commercial areas and residential areas.
d. To minimise the impact of parking areas.

Controls

1 The building façade must be at least two storeys high and located on the front setback line. Encroachments of up to 1m are permissible for articulation and entry elements.
2 Each facade must be predominantly masonry construction with punched voids for balconies, windows and doors.
3 Street level windows and entries must be clearly expressed with separate framing set within a solid masonry wall. Continuous glazing is not permitted.
4 Street level entries to residential dwellings must be clearly identified.

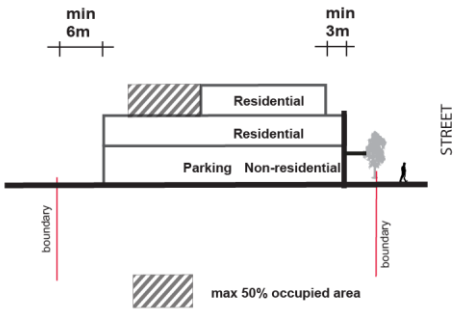


Figure 25 - Section - Building Type G with indicative uses

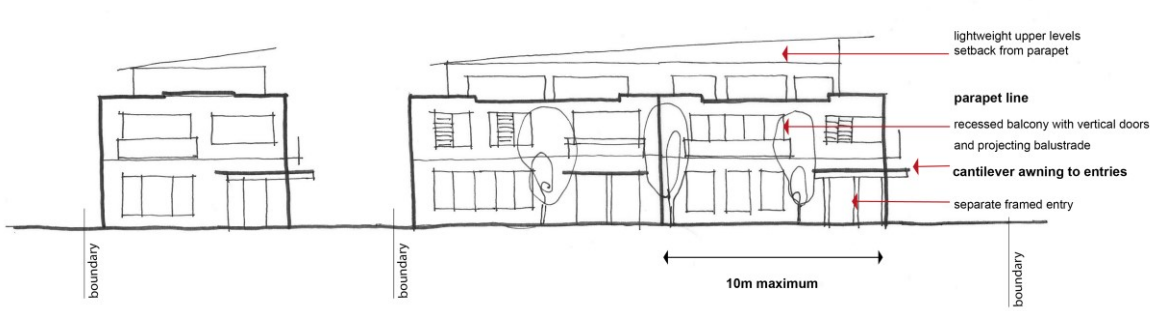


Figure 26 - Street elevation – Type G Building

Lake Macquarie Development Control Plan 2014 - Revision 25

Part 11 – Heritage Area Plans

Adopted by Council 28 September 2020

CONTENTS:

Part 11 – Heritage Area Plans contains area plans for the following:

TABLE OF CONTENTS:

FIGURES:

1 INTRODUCTION

1.1 BACKGROUND

The suburb of Boolaroo developed as a result of industrial activity, including coal mining (Stockton Borehole Colliery), the Sulphide Works (Pasminco), a construction company (G Hawkins & Sons) and sawmilling (Finlay's).

The Boolaroo area has been identified as requiring specific development solutions to suit the existing local character, and to address local issues.

Note: This Area Plan should be read in conjunction with Lake Macquarie City Council Heritage Guidelines, which provide additional development guidelines for Heritage Precincts.

1.2 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all the land outlined in heavy green edging, as shown within Figure 1 – *Boolaroo Heritage Precinct.*

Note: For heritage items or potential heritage sites located within the Heritage Precinct, refer to *Lake Macquarie Local Environmental Plan (LM LEP 2014)* and Lake Macquarie City Council Heritage Guidelines respectively.

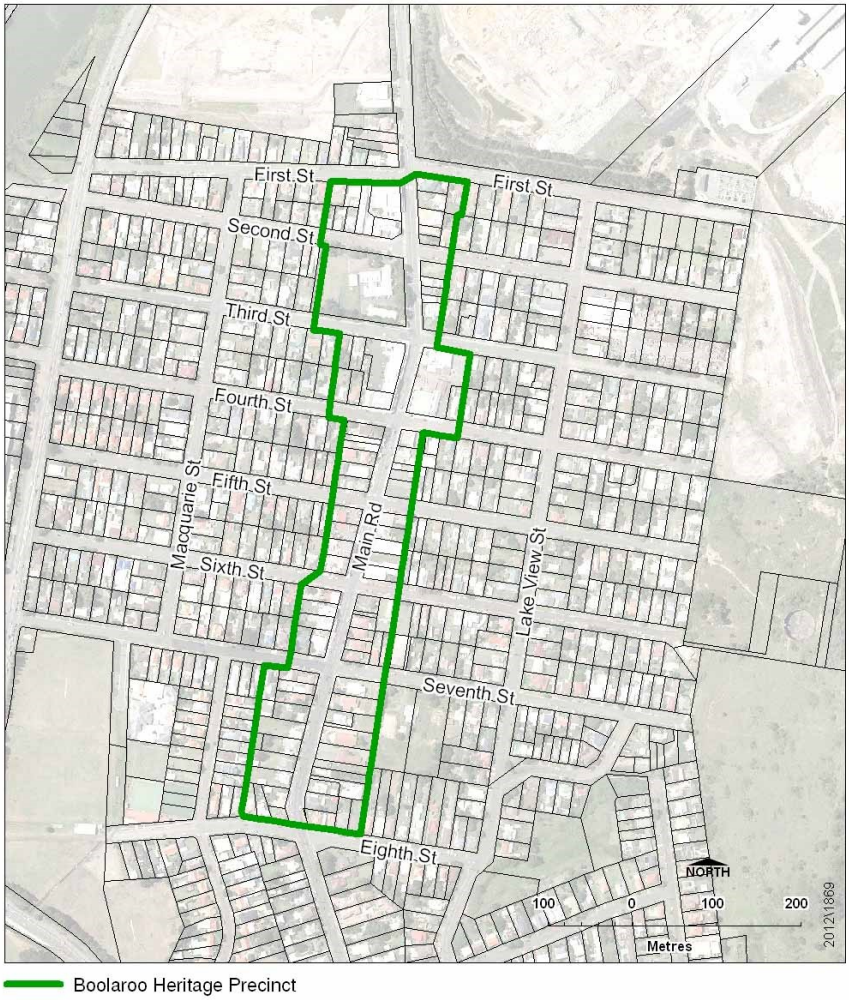


Figure 1 - Boolaroo Heritage Precinct

1.3 HISTORY AND EXISTING CHARACTER

Much of the area now known as Boolaroo was granted to William Brooks in 1839. By the mid 1880s, Sir James Fairfax was the owner, and it was around this time that the Stockton Borehole Colliery opened west of Boolaroo, across Cockle Creek. Fairfax subdivided his land in the 1890s and further subdivisions followed. By 1902, three subdivisions had taken place, setting up the residential allotments bounded by Main Road, Creek Road and Seventh Street.

In 1896, land was cleared north of First Street by the Sulphide Corporation (Ashcrofts Process) Ltd, for a lead and silver ore treatment plant. The construction expansion and continued operation of this plant led to increased demand for adjacent residential land, and Boolaroo began to thrive. Subsequently, several businesses established themselves in Boolaroo, including G Hawkins & Sons Transport and Construction firm, Finlay's sawmill, and TC Frith's grocery. It grew to include hardware and electrical goods, and still exists today.

The Boolaroo Public School officially opened in 1900. The Post Office (since demolished) soon followed in 1901. Continued prosperity was recognised with the opening of the Fire Brigade in 1901 and the Ambulance Station in 1922, the first ambulance station in the Newcastle area. Boolaroo has good access to the north, south and west, but limited access to the east due to Munibung Hill.

The street layout of Boolaroo generally follows a grid pattern, although Main Road takes a slightly meandering path following the line of Cockle Creek to the west. Boolaroo is serviced by regular bus and train services; Cockle Creek Station is within walking distance from the local centre.

The streets are nestled between the foot of Munibung Hill, Cockle Creek and the adjoining suburb of Speers Point. As a result, the area is quite compact and has a good walkable street network. The streets are wide with kerb and guttering, and characterised by some older exotic trees, such as camphor laurels. A more recent street tree planting program has been sponsored by the Pasminco Smelter as a community project.

Lot sizes are reasonably large, with an average size of about 800m². This presents opportunities for future incremental housing intensification and further subdivision. Dwellings are predominantly single storey weatherboard or fibro construction, with variable setbacks from the street. Newer dwellings are generally of brick and tiled roof construction.

1.4 SPECIFIC ISSUES RELATING TO THIS LOCALITY

Future development in the Boolaroo Heritage Precinct will need to consider:

- Removal of intrusive urban elements,
- Continuing improvements of the air quality,
- Provision of alternative forms of residential development and increasing population while maintaining compactness and accessibility,
- Revitalisation of the commercial centre while maintaining its unique spatial relationship,
- Retention of the sensitive elements of the topography and existing streetscapes,
- Preservation of important elements of the settlement pattern.

1.5 CONTEXT AND SETTINGS

Objectives

a. To safeguard the heritage and cultural values of the Boolaroo Heritage Precinct.

b. To ensure that development complements the existing streetscape, local architectural style, decoration and adornments.

c. To ensure that development does not detract from the significance of the dominant cultural and natural elements of the area.

Controls

1. A detailed analysis of the streetscape and surrounding environment must accompany development proposals.

2. Development proposals must incorporate bulk, form, scale and landscaping that is consistent with, and complements the historic development of the Boolaroo Heritage Precinct.

1.6 SITE COVERAGE

Objectives

a. To ensure the bulk and form of future development reflects the historic development of the Boolaroo Heritage Precinct.

b. To provide opportunities for the provision of landscaping and/or the enhancement of existing native vegetation.

c. To promote on-site stormwater infiltration by encouraging pervious surfaces and landscaped areas.

Controls

1. The maximum site coverage, including ancillary development, should not exceed 45%, unless it can be demonstrated that the proposal will not have a detrimental impact on the heritage values within the precinct.

TABLE OF CONTENTS:

FIGURES:

1 INTRODUCTION

1.1 BACKGROUND

The Catherine Hill Bay Heritage Conservation Area is located in the south eastern corner of the Lake Macquarie Local Government Area. The area is located on the Wallarah Peninsula, 26 kilometres south of Newcastle and 100 kilometres north of Sydney. It is bordered by Lake Macquarie to the west and the Pacific Ocean to the east.

Catherine Hill Bay is a former mining village and still maintains its unique heritage. The Catherine Hill Bay Cultural Precinct was listed in the State Heritage Register on 5 November 2010, and the Catherine Hill Bay Heritage Conservation Area is listed in the *Lake Macquarie Local Environmental Plan 2014 (LM LEP 2014)*.

Note: This Area Plan should be read in conjunction with *Lake Macquarie City Council Heritage Guidelines*, which provide additional development guidelines for Heritage Precincts.

1.2 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all the land outlined in heavy green edging, as shown within Map 1 – Catherine Hill Bay Heritage Conservation Area.

Note: For heritage items or potential heritage sites located within the Heritage Precinct, refer to *LM LEP 2014* and *Lake Macquarie City Council Heritage Guidelines* respectively.

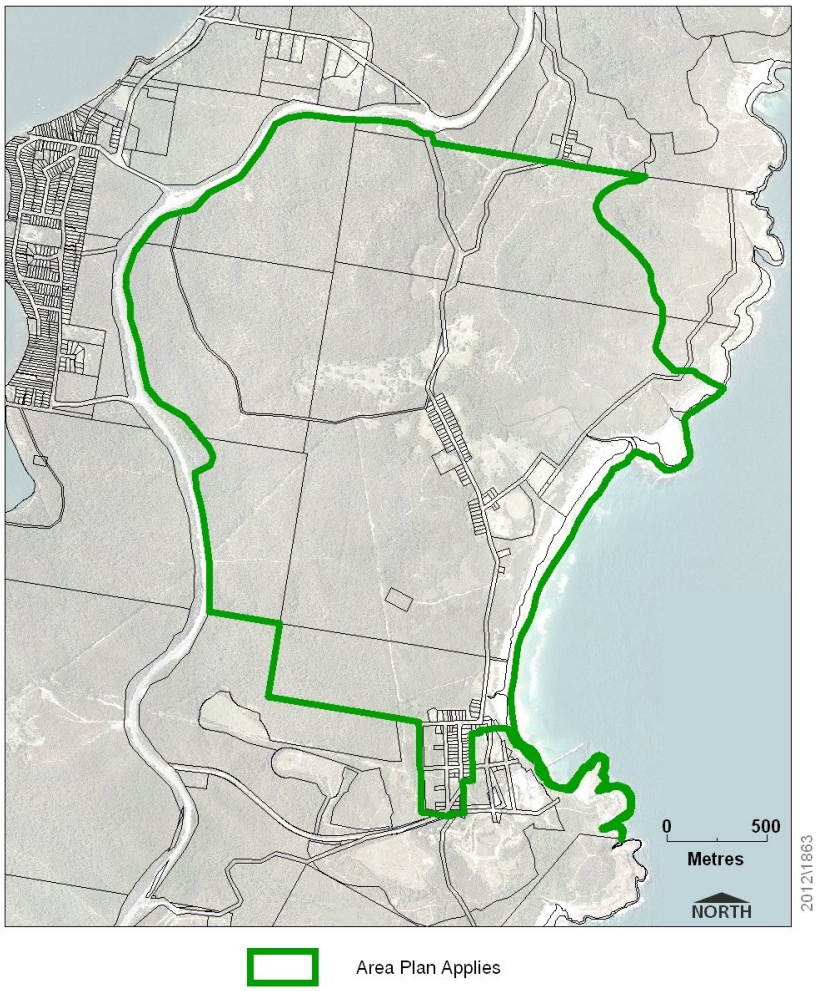


Figure 1 - Catherine Hill Bay Heritage Conservation Area

1.3 HISTORY AND EXISTING CHARACTER

Catherine Hill Bay was formed as a village in 1873, when the New Wallsend Coal Company opened a mine in the area and the jetty was built. This mine closed in 1877 and in 1889, the Wallarah Coal Company established a new mine three kilometres north, at a site referred to as Middle Camp. Middle Camp was located near the cemetery, and the mine was connected to the jetty via a railway line.

Mining was later overtaken by Coal and Allied, and later by Lake Coal. Coal mining continued to flourish throughout the 1990s, but all mining ceased in December 2002 due to declining profitability. Catherine Hill Bay still maintains its low scale former mining heritage setting with approximately 100 houses.

Recent approvals for a Concept Plan for Catherine Hill Bay will increase its size. *State Environmental Planning Policy (Major Development) Amendment (State Significant Sites – South Wallarah Peninsula) 2010* will allow residential development near the headland within a defined footprint, whilst retaining the Catherine Hill Bay headland and beachfront as open space. This Area Plan does not apply to this new area, however. Another Development Control Plan will be prepared in the future to address development controls for the heritage conservation area identified in the SEPP.

The Catherine Hill Bay Cultural Precinct was listed in the State Heritage Register on 5 November 2010, at the same time that the SEPP for South Wallarah Peninsula was enacted. The State Heritage listing recognises the significance of Catherine Hill Bay, but does not, however, apply to the jetty. Adaptive reuse/retention of the jetty is yet to be determined by the Department of Industry and Investment.

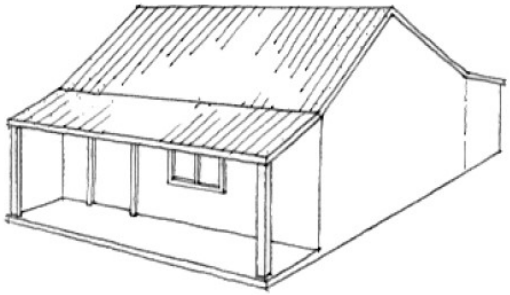
The Catherine Hill Bay Cultural Precinct comprises picturesque and distinctive historic townscapes, forming the oldest group of buildings in Lake Macquarie. It is set in land/seascapes of exceptional aesthetic and technical significance, both visually and as an archaeological resource for industrial heritage.

The boundary encompasses the distinctive dwellings and coal mining infrastructure of the villages of Catherine Hill Bay and Middle Camp. Significant features include the coal loader jetty and coal washery, the mine manager's residence, police station and the hotel. Some of the early houses in Clarke and Lindsley Streets and Middle Camp village date back to 1910. Also significant are the cemetery and the Village Hall, and the route of the former railway line to the jetty from Middle Camp.

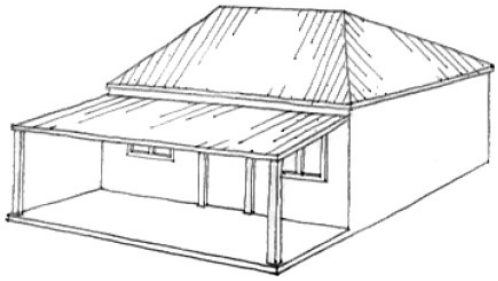
The original buildings, most of which are small vernacular cottages dating from the 1890s to the 1920s, form pleasing streetscapes, evoking the settlement's origins as a nineteenth century mining village. Figure 2 shows an example of the cottages and the existing views of Catherine Hill Bay. Although few buildings belong to a recognised style or period, each is distinctive, and all display a high degree of consistency in terms of size, scale, form, setbacks, siting and materials. The urban pattern of the Catherine Hill Bay Cultural Precinct can be appreciated in its bush, coastal and park-like setting, particularly on the northern approach.

The Precinct is set in a landscape that is now largely dedicated as a National Park. It is distinctive both for its coastal topography that creates a natural visual catchment, and for its evidence of coal mining dating from the 1890s.

The area is now rare, and survives as an intact example of "Company Town" development.



Gabled type with front verandah and rear skillion



Hipped type (less common) with front verandah

Img_179

Figure 2 - Examples of Typical Early Cottages found in Catherine Hill Bay and View of Cottages

1.4 SPECIFIC ISSUES RELATING TO THE CATHERINE HILL BAY CULTURAL PRECINCT

Future development in Catherine Hill Bay will need to consider:

- The sense of social identity resulting from the area's history;
- The physical boundaries of the locality, including the bushland setting and separation from adjoining areas;
- Development that is compact, and in scale with surroundings and sensitive to the area's heritage character;
- Significance of the Catherine Hill Bay Cultural Precinct State Heritage listing; and
- Sensitive elements of the local topography and existing streetscapes.

1.5 CONTEXT AND SETTINGS

Objectives

a. To protect the unique character of the Catherine Hill Bay Heritage Conservation Area.

b. To ensure that development occurs in a manner which has no adverse heritage impact on the level of significance of the area.

c. To ensure that development maintains established views to and from the Conservation Area, and/or to and from heritage items within it.

Controls

1. A detailed analysis of the streetscape and surrounding environment must accompany development proposals.
2. Development proposals must incorporate bulk, form, scale and landscaping that is consistent with, and complements the historic development of the Catherine Hill Bay Heritage Conservation Area.
3. New development must be designed to appear as a single storey when viewed from the street.
4. Development applications must include a Statement of Heritage Impact that identifies the potential impact of development on significance of the item or area.
5. The SOHI must identify the methods of ensuring that the identified levels of significance are not compromised by development. These methods must include:
    i. Details of form, scale, proportion, finishes, ridge levels and location of openings;
    ii. A statement identifying the level of visual integration of the development with the Conservation Area; and
    iii. Details of the means of ameliorating any adverse heritage impacts.
6. The SOHI must identify buildings, structures, landforms and landscape elements which are inconsistent (or "intrusive") visually, and outline how these can be removed to improve interpretation of the significance of the area.
7. Developments must not compromise the significance of existing buildings, their curtilage and setting.

1.6 SITE COVERAGE

Objectives

a. To ensure the bulk and form of future development reflects the historic development of the Catherine Hill Bay Heritage Conservation Area.
b. To provide opportunities for the provision of landscaping and/or the enhancement of existing native vegetation.
c. To promote on-site stormwater infiltration by encouraging pervious surfaces and landscaped areas.

Controls

1. The maximum site coverage, including ancillary development, must not exceed 35%, unless it can be demonstrated that the proposal will not have a detrimental impact on the heritage values within the precinct.

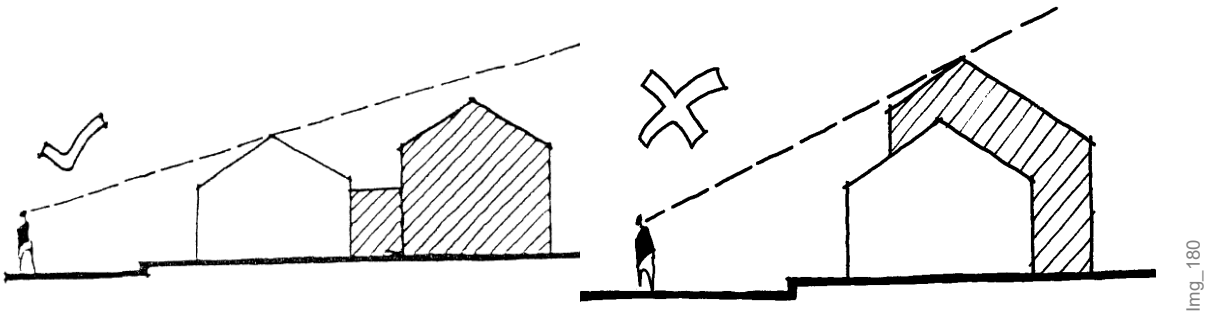
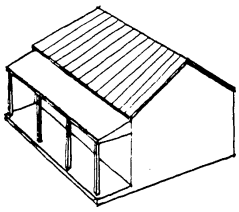
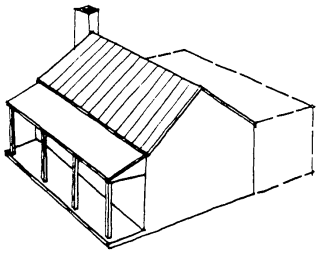


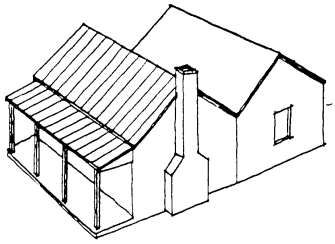
Figure 3 - Maintain scale and single storey appearance



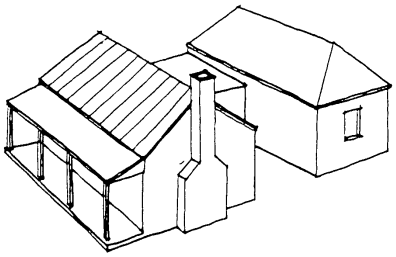
Typical existing cottage, simple form, with front verandah



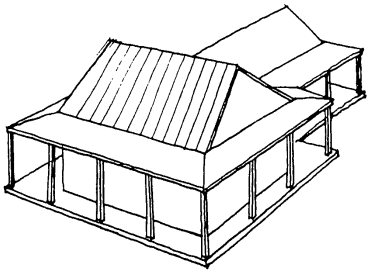
Existing cottage with a minor lean-to addition



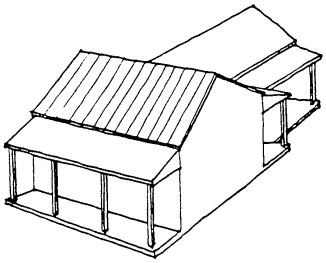
Addition to rear in similar form matching roof line. Acceptable only where the addition will not be seen from the street or other vantage point.



Pavilion type addition to rear. This is the preferred manner of additions for most Catherine Hill Bay buildings.



Minor wing extension to rear, with a wrapped verandah around the house. This form of verandah is not appropriate for Catherine Hill Bay.



Minor rear wing extension with additional verandah confined to the extension.

Img_181

Figure 4 - Examples of Options for Additions

TABLE OF CONTENTS:

FIGURES:

1 INTRODUCTION

This Area Plan contains local objectives and controls for development of the Cooranbong Seventh-day Adventist site.

Seven precincts are identified within the Cooranbong Seventh-day Adventist site for the purposes of this Area Plan with development controls specific to each precinct, as outlined below.

1.1 STRUCTURE OF THIS AREA PLAN

Part 1 – Introduction

This section contains information about the Cooranbong Seventh-day Adventist Site as a whole. Part 1 provides background information, defines the extent of the Area Plan and the location of the seven precincts, as well as describing the character of the area.

Part 2 – General controls

Part 2 contains general controls that apply to all development within the Cooranbong Seventh-day Adventist site.

Part 3 – Sanitarium factory

This section provides objectives and controls applying to development within the Sanitarium factory precinct.

Part 4 – Avondale College

This section provides objectives and controls applying to development within the Avondale College precinct.

Part 5 – Accommodation areas

This section provides objectives and controls applying to development within the accommodation areas precinct.

Part 6 –Avondale Church and associated buildings

This section provides objectives and controls applying to development within the Avondale Church precinct.

Part 7 – Retirement village

This section provides objectives and controls applying to development within the retirement village precinct.

Part 8 – Cemetery

This section provides objectives and controls applying to development within the cemetery precinct.

Part 9 – Former dairy and rural surrounds

This section provides objectives and controls applying to development within the former dairy precinct.

1.2 BACKGROUND

The Seventh-day Adventist Community at Cooranbong evolved from a vision to establish a model community on the site. The original 1500 acres was purchased in 1894, and the Seventh-day Adventists have been developing and thriving in Cooranbong ever since.

The Cooranbong Seventh-day Adventist area is a unique site that has heritage significance and therefore requires specific development controls to conserve the heritage significance of the site.

A *Conservation Management Plan (CMP)* and *Landscape Conservation Management Plan,* dated October 2009 have been prepared for the Seventh Day Adventist site by Carste Studio Pty Ltd. These plans include detailed information on the heritage and significance of this site. This Area Plan should be read in conjunction with the CMP and the Lake Macquarie City Council Development Control Plan (LMCCDCP) 2014 Heritage Guidelines.

A number of heritage items within the Cooranbong Seventh Day Adventist Site are listed within the *Lake Macquarie City Council Local Environmental Plan (LMCCLEP) 2014*. These include the water tower, Sanitarium Health Foods Factory, Auditorium, Bethel hall, College hall, House 'The Laurels', Science hall

and the Sanitarium dairy farm. In addition, the site contains provisional heritage items and has Aboriginal heritage significance. The weir is identified in the CMP as an item that should be listed as a local heritage item on the Lake Macquarie Local Environmental Plan.

1.3 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all the land outlined in heavy green edging, as shown within Figure 1 – Cooranbong Seventh-day Adventist Heritage Precinct.

Figure 1 - Cooranbong Seventh-day Adventist Heritage Area Plan

The seven precincts described in this Area Plan are shown in Figure 2.

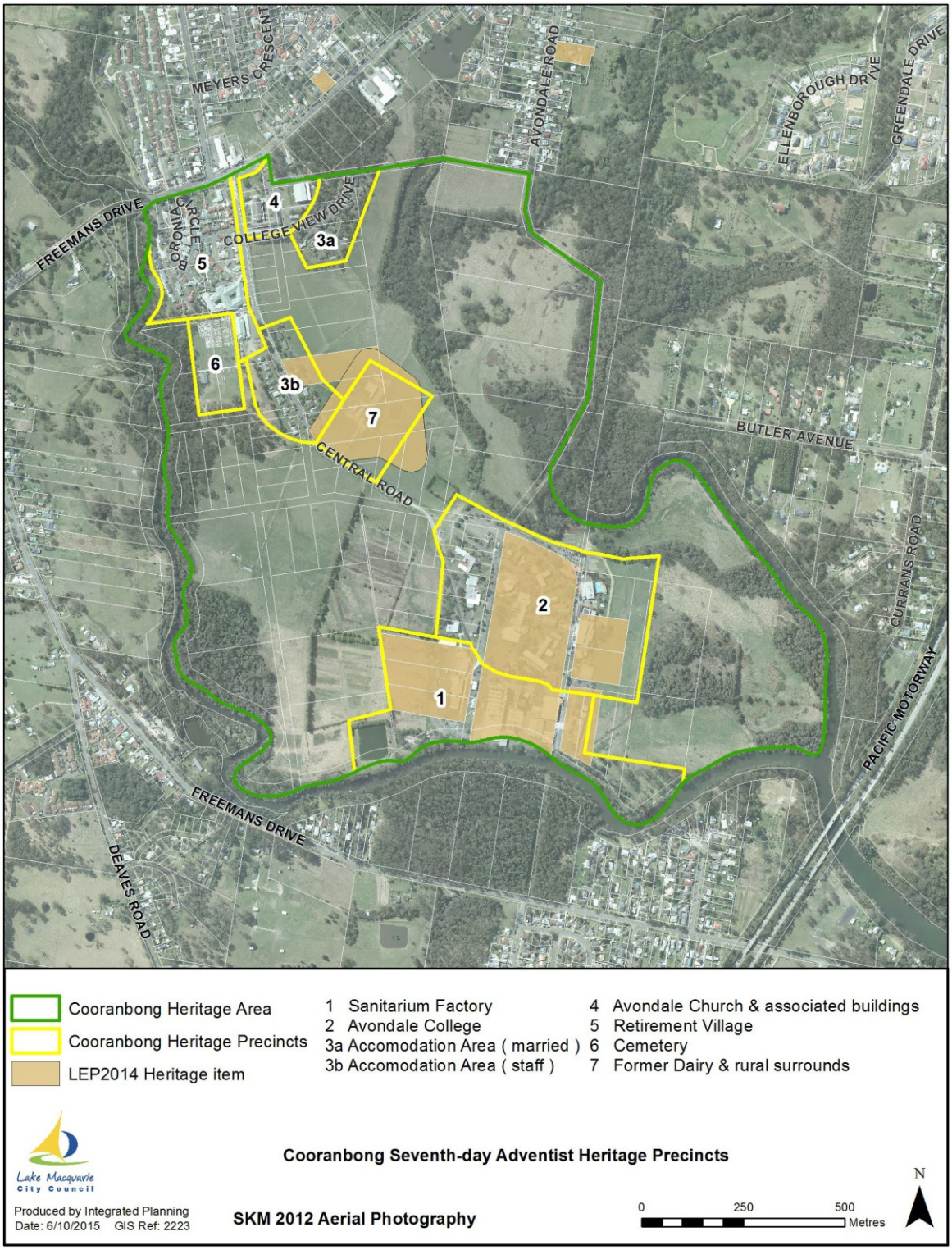


Figure 2- Seven heritage precincts within the Cooranbong Seventh-day Adventist establishment

Note: For listed heritage items or potential heritage items located within the Heritage Precinct, refer to *LMLEP 2014* and LMDCP 2014 Heritage Guidelines respectively.

1.4 HISTORY AND EXISTING CHARACTER

The Cooranbong Seventh-day Adventist Site covers approximately 640 hectares and consists of Avondale College, the Sanitarium Health Food Factory and associated offices and laboratories, Kressville Retirement Village, a Community Church and Cemetery, together with student and staff accommodation.

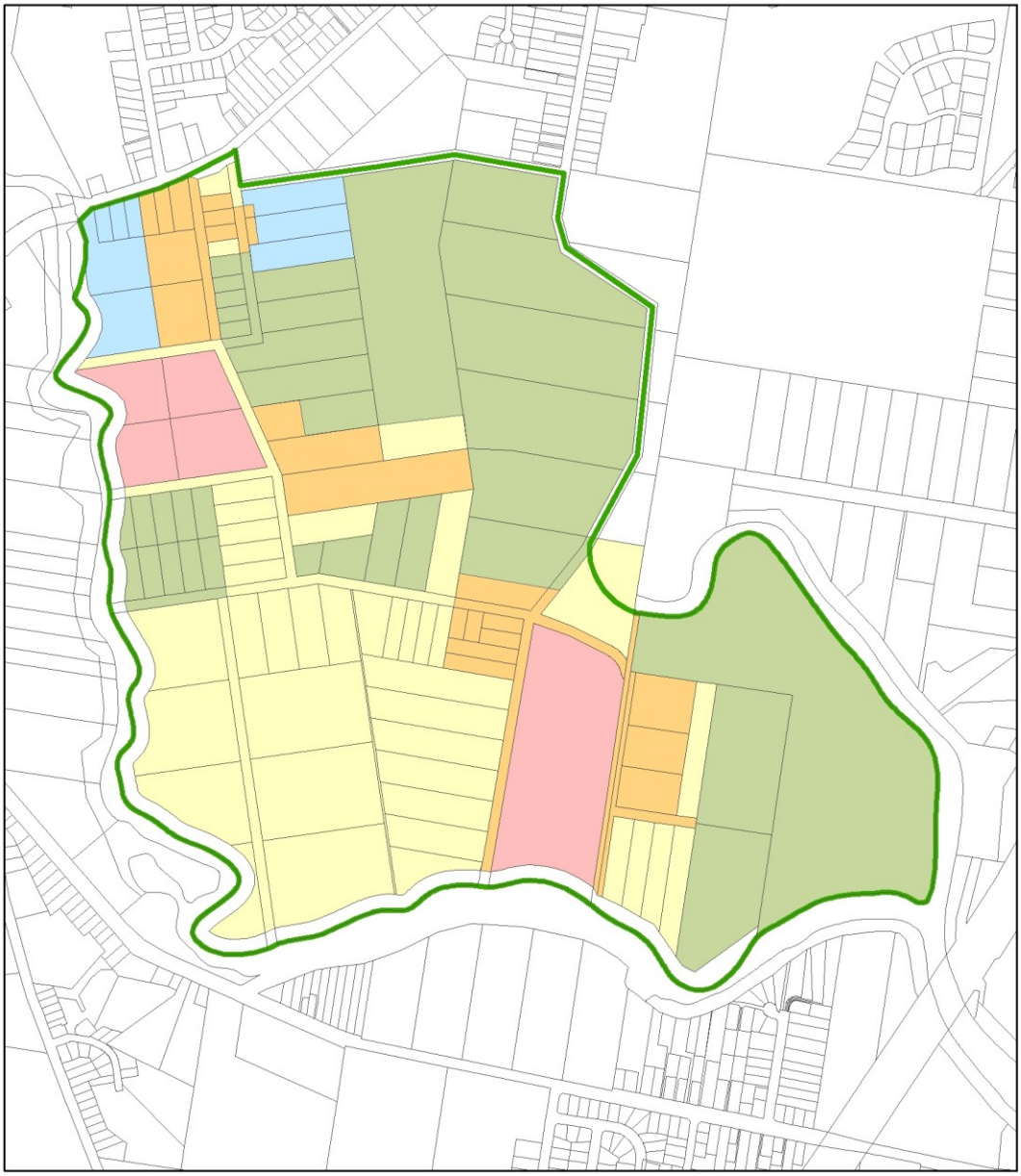
The site has heritage significance as a whole because it is associated with the earliest establishment of the Seventh-day Adventist Church outside of America, with their presence on the site dating from 1895. The Avondale venture is unique because it combines a religious community, college and a factory. It is also the only tertiary educational facility operated by the Seventh-day Adventist Church in Australia. The community was established in remote bushland, far from Newcastle and Sydney, with all members living by the Seventh-day Adventist philosophy of a model community. The key components of this philosophy were a combination of academic and religious studies, combined with the discipline of manual work, the aim of self-sufficiency, and a location away from the distractions of the city.

The landscape was a key element in the original design of the site, which was characterised by its openness and isolation. The original layout was also designed to reflect the ideologies of the Seventh-day Adventist Church in the built form, resulting in a development layout containing symmetry, a number of axes and naturally curving lines.

While existing development differs from the original built form, the site continues to be visually unique and retains a considerable degree of unity in its scale, form and materiality. Evidence of the historical layers of the site, through remnant landscaping, buildings, roads and the like, gives an appreciation of the initial vision of the Seventh-day Adventist community.

As well as being a heritage precinct, the site also has a unique collection of buildings of varying heritage significance, with aesthetic and architecture value. It includes the surviving Nineteenth Century College buildings that reflect American philosophies about work, while using local construction materials and technologies.

Given the history of the site, some areas have high potential for containing relics, protected under the Heritage Act 1977. Figure 3 is a plan of the Cooranbong Heritage Precinct showing potential areas for European relics. Development in areas assessed as having a high potential for European relics will require an excavation permit under section 139 of the Heritage Act.



Cooranbong Heritage Precinct showing potential areas for European Relics

Figure 3 - Plan showing the potential areas for European relics

1.5 PRECINCT 1 – SANITARIUM FACTORY

The Sanitarium Health Foods complex is one of the oldest and largest enterprises in Lake Macquarie. It is also a major employer in the area. However, it will be closing in 2018. Machinery for food manufacture and an original brick oven were installed on the site in 1899. In 1937, the old building was replaced with a new building to keep up with changing manufacturing processes and the demand for Sanitarium products. Very little has been added to the exterior of the factory since 1937, apart from the construction of giant silos. Most alterations appear to have been to the interior of the factory.

The Sanitarium factory main building is in the Inter-War Art Deco architectural style and encompasses a large area and is a 2 storey structure with a sawtooth roof, a 3 storey wing on the north end and 4 storey tower wing on the north east corner adjoining the bank of silos. The factory has a grand centrally placed entrance and is constructed of high-quality bricks and brickwork with Art Deco ornamentation. The building and its produce continue to reflect the philosophies of the pioneer Seventh-day Adventists that settled the site.

Other significant buildings within the factory precinct include the PTW group of three buildings that were designed by Peddle Thorpe Walker (PTW) Architects in 1935. The Services Building is another building with heritage significance, being one of the oldest surviving buildings within the factory precinct. The building was constructed in 1930 and services the factory and produces steam for the site.

The Sanitarium Factory is located near Dora Creek because the water was originally used as a form of transport to the site. A suspension footbridge known as the “Swing Bridge” and associated Riverside Picnic Area are located in proximity to the Factory. These significant landscape elements are located on Crown Land, but are the responsibility of Sanitarium. The swing bridge provides a convenient link to the site and is used by pedestrians and cyclists.

1.6 PRECINCT 2 – AVONDALE COLLEGE

Avondale College is a tertiary educational institution of the Seventh-day Adventist Church. The College consists of a cluster of buildings with varying ages, characteristics and uses, as follows:

- The educational facilities are generally located on the western part of the campus.
- The residential and academic facilities are generally located in the centre of the campus. This group of buildings includes some of the most significant buildings within the study area.
- Support facilities, such as gym, pool, auditorium and cafeteria are located on the eastern side of the campus.
- Staff residences are located on the northern side of the campus, above The Crescent. This area contains a heritage listed building known as the “Laurels”. The building was constructed in 1925 in the position of the present Andre Hall and was shifted to its present position in the 1950s.

Figure 4 shows the layout of the Avondale College Campus. The College is orientated around an axis line referred to as the “Academic Axis”, which runs through the campus in an east-west orientation. The axis is a pathway that visually and physically connects the Faculty of Education to College Hall via a “breezeway” through the White Building. The planning of this axis through the campus is emphasised with mature Canary Date Palms and Hoop Pines that line either side of the pathway and are a remnant of the mid-20th century layout and planting scheme for Avondale College. The axis also segregates the sexes in the original planning layout of the college, with single boy’s accommodation on one side and girls on the other.

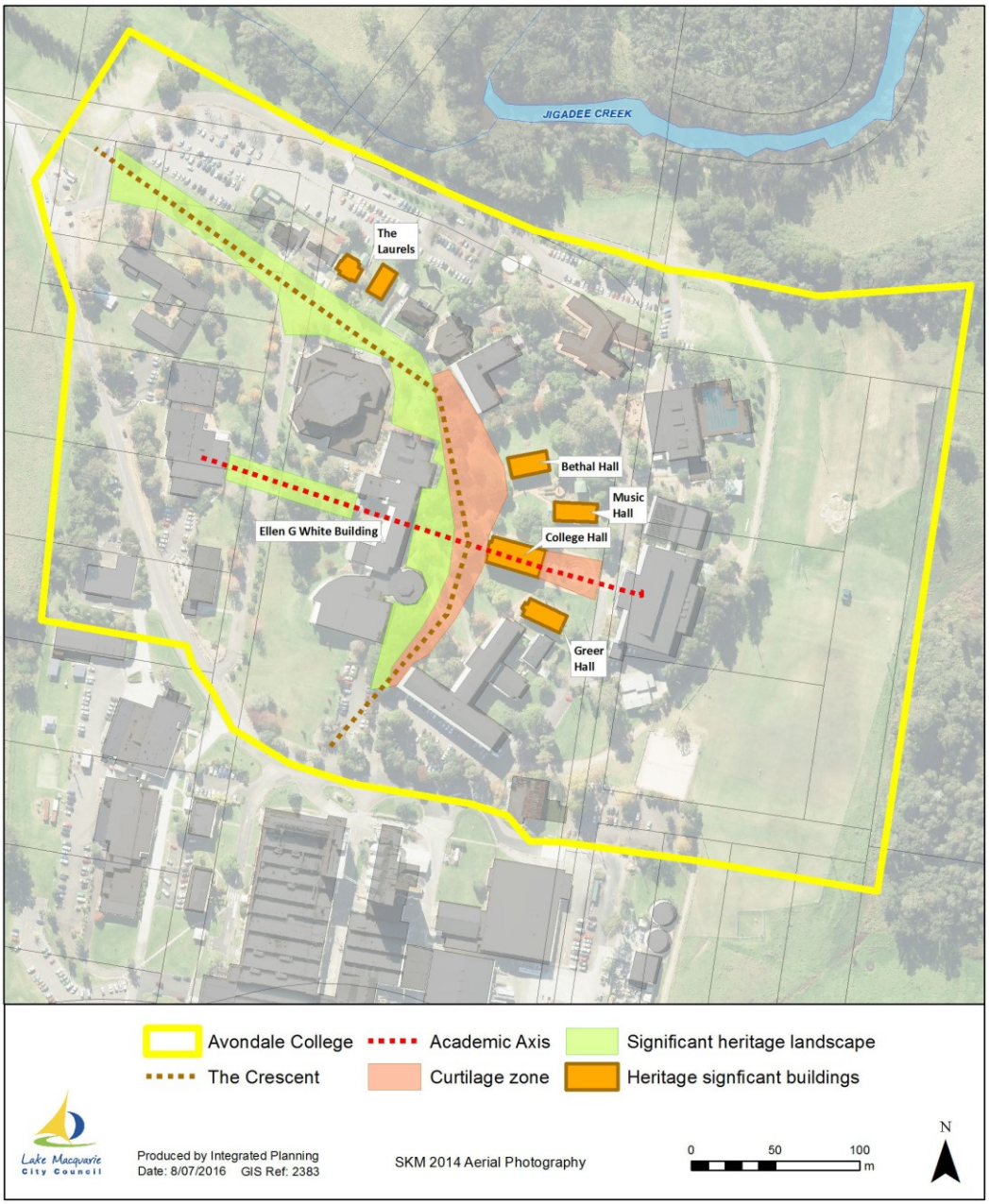


Figure 4 - Avondale College layout showing the main buildings and spatial relationships on the site and the heritage curtilage zone

For the purposes of this Area Plan, a heritage curtilage zone has been identified in the open space around Bethel Hall, Music Hall, Greer / Science Hall and College Hall and along “the Crescent”, as shown in Figure 4. The open space helps to adequately appreciate and interpret these key heritage buildings and axes. The main heritage buildings address the curvature of “the Crescent”, which is considered significant in interpreting the original layout for the site. The heritage curtilage zone seeks to protect and encompass adequate open space to enable ongoing interpretation and appreciation of this area. The “Academic Axis” and “the Crescent” have high heritage significance and should be conserved and reinforced as an organising and orienting element to ensure the correct interpretation of the original layout.

College and Bethel Halls are the oldest surviving buildings on the Seventh-day Adventist site. Bethel Hall was one of the first buildings built between 1896-1897 and was originally used as the girl's dormitory. College Hall was built in 1899 and was originally the classroom block for the College. Music Hall and Greer Hall are aesthetically significant and are markers for a new stage of development at the College when buildings moved from timber to brick construction. The Music Hall was constructed in 1925 and is the first building constructed entirely of brick on the campus. Greer Hall was constructed in 1928.

Although the precinct contains a number of significant heritage items and heritage areas, the heritage significance of the campus precinct should also be viewed as a whole. While the site has lost some of the intent of the original model, the whole campus continues to reflect the lifestyle, philosophy and practice of the Seventh Day Adventist community.

1.7 PRECINCT 3 – ACCOMMODATION AREAS

Married student accommodation is located east of Central Drive near the entry to the Cooranbong Seventh-Day Adventist site off Freemans' Drive. It contains a cluster of eleven self-contained units of relatively recent construction. The units are almost hidden from Central Drive due to the topography that slopes away to the east and the small-scale single storey nature of the dwellings. The units are of exposed brick construction, surrounded by a scattering of trees and grassed lawn with no formal plantings and no evidence of boundary fencing. The south-eastern aspect of the site is natural open space with site lines to the main college campus.

Further south of the married student accommodation on Central Drive are a number of small-scale detached dwellings that line both sides of the access road used as academic staff housing. The dwellings are of weatherboard and masonry construction and have a front setback of approximately 20 metres from Central Drive with no physical fencing to designate boundaries. The landscape is open and consists of grassed lawns and a scattering of trees.

Amongst the staff housing, to the east of Central Drive, is a water tower that has landmark value. Built in 1919, the tower was an integral part of the past infrastructure that supported the Seventh-day Adventist community. The tower is surrounded by a high chain mesh fence to prevent unauthorised entry and is no longer operational.

1.8 PRECINCT 4 – AVONDALE CHURCH AND ASSOCIATED BUILDINGS

The Avondale Memorial Church is located on the corner of Freemans Drive and Central Drive. The building is a prominent structure with a pinnacle style roof that is a landmark on Freemans Drive and a marker for the Seventh-day Adventist establishment at Cooranbong.

The Church has undergone numerous modifications over time with the 1897 timber church demolished to make way for the 1971 building. The new Church was built around the old one and then the old church was demolished.

The Avondale Memorial Church is a stand-alone building with an assemblage of associated buildings and car parking set within landscaped grounds.

1.9 PRECINCT 5 – RETIREMENT VILLAGE

The retirement village is a recent development containing 184 self-care units, as well as other care facilities. The village is located on both the northern and southern sides of Freemans Drive, but only that portion to the south of Freemans Drive is included in this Area Plan. The area of the retirement village was earlier the location of the Avondale Health Retreat (Hospital). The exact location of the former hospital facility has not been identified. A plaque commemorating this former facility is located on the lawn adjacent to Central Road.

The units themselves are of relatively recent construction and current building stock has no heritage significance. However, the site is located within the Area Plan and as such needs to be considered in the overall context of the site. The site is also identified as having moderate potential for European relics to be found (see Figure 3).

1.10 PRECINCT 6 – CEMETERY

The cemetery has been in continual use by the Cooranbong Seventh-day Adventist community since 1897 and has historical and spiritual significance. Land for the Cemetery was set aside in conjunction with the construction of the first Adventist Church to the east of the main road. The standardised headstones and grave surrounds reflect the egalitarian principles of the Church. The burials in the last few decades have been in a 'lawn cemetery' arrangement with rows of plaques marking graves.

In 2009, it was estimated that there was 8-12 years of use left in the cemetery. Future expansion is constrained by the rock shelf on the upper side (east) and the creek on the lower side (west).

1.11 PRECINCT 7 – FORMER DAIRY AND RURAL SURROUNDS

The dairy buildings were established for the College to be self-sufficient in supplying its own produce, including fruit, vegetables, milk and eggs. Operating the dairy became part of the education of the students and students were able to earn part of their fees by working on the farm. Self-sufficiency and farming are consistent with the doctrine of the Seventh-day Adventists to encourage healthy eating, vegetarianism and study balanced by manual labour.

A number of steel clad machine sheds, a pair of silos, and a small residence are the only remnant buildings from the past agricultural use of this part of the site. The buildings are dilapidated, but are significant because they formed an important part of life at the College, echoing the discipline of manual labour and self-sufficiency that is part of the practice at the Seventh-day Adventist Church.

From the earliest days, the farm and Dairy were located on the river floodplain. The present dairy buildings represent only part of the earlier extent of structures at the farm. The original dairy was located on the site of the present car park area south of the existing dairy.

During the 1960s, the College Board modified the requirements for self-sufficiency and the College Farm was no longer required to produce food for the College. In 1990, a College sub-committee recommended closure of the Dairy. Today, the Dairy group of buildings are in a state of disrepair.

Coral Trees along the entry road, a row of mature Canary Island Date Palms near the long feed shed, and a pair of concrete silos contribute to the landmark quality of the dairy and are key features of the site.

PART 2 – GENERAL CONTROLS

2 GENERAL DEVELOPMENT CONTROLS

2.1 SPECIFIC ISSUES RELATING TO THIS LOCALITY

Future development in the area associated with the Cooranbong Seventh-day Adventist site will need to consider:

- The strong sense of social identity resulting from the area's history and development.
- Surviving heritage listed buildings demonstrate strong local influence in design and details, as well as support for local manufacturers of joinery and other materials.
- The physical boundaries of the locality including its bushland setting, Dora Creek and separation from adjoining developments.
- Sensitive cultural elements of the cultural landscape.

2.2 CONTEXT AND SETTINGS

Objectives

a. To safeguard the heritage and cultural values of the Cooranbong Seventh-day Adventist Heritage Precinct.

b. To ensure that development complements the existing local architectural style, decoration, and adornments.

c. To ensure that development does not detract from the significance of the dominant heritage and cultural elements of the area.

Controls

1. Development proposals must incorporate bulk, form, scale and landscaping that is consistent with, and complements the historic development of the Cooranbong Seventh-day Adventist Heritage Precinct.
2. Development proposals must complement the dominant architectural style of the locality.
3. Development proposals must maintain the separate identities of the different precincts identified in Figure 2.

2.3 EUROPEAN ARCHAEOLOGICAL ASSESSMENT

Objectives

a. To safeguard the archaeological heritage and cultural values of the Cooranbong Seventh-day Adventist site.

b. To ensure the protection of European heritage items.

Controls

1. An excavation permit, under section 139 of the Heritage Act 1977, will be required for any developments located in areas identified as having a high potential for relics in Figure 3.
2. Archaeological monitoring must be included for developments located in areas with moderate potential for relics in Figure 3.
3. Any development in an area identified as having a high potential for relics in Figure 3 must be assessed for archaeological relics and evidence of earlier human activity on the site under an excavation permit prior to any excavation for development
4. Any development in an area identified as having a medium potential for relics in Figure 3 must be monitored during excavation for archaeological relics and evidence of earlier human activity on the

site. This is particularly the case if development is in the vicinity of key existing and past buildings and structures.

5. Development consent conditions on any site where an archaeological investigation is required should provide the necessary requirements and procedures to be followed if archaeological relics are uncovered.

2.4 HERITAGE CONSERVATION AND ADAPTATION

Objectives

a. Ensure the conservation and sensitive adaptation of significant buildings, their settings and associated landscapes.

The impact of operational activities on the heritage values of the site are minimised. Controls

1. A Heritage Impact Statement will be required to accompany a Development Application within the Cooranbong Seventh-Day Adventist site in accordance with the guidance provided in the *Conservation Management Plan* and attached

Table 1: Assessment Requirements for New Development Applications.

2. The Heritage Impact Statement must be prepared taking into account the *Conservation Management Plan* prepared for the Seventh-day Adventist Site.
3. Work proposed to the historic fabric of significant buildings and their settings must be undertaken in accordance with the principles of *The Burra Charter: The Australia ICOMOS Charter for Places of Heritage Significance*, particularly the fundamental principle that requires the least intervention in the fabric as possible, while achieving the desired results.
4. Where there is an opportunity to remove existing insensitive or intrusive elements within a precinct or on a building of significance, preference should be given to returning the building or precinct to a known former state.
5. Changes to the original external fabric of significant heritage items must be avoided where possible.
6. Where a change to the original external fabric of significant heritage items is unavoidable, such as for repairs or to ensure safety, the work should occur in areas of lower significance, or should be designed to be readily reversible and to integrate into the character of the immediate precinct.
7. All changes to the fabric and use of the site will be carefully recorded.
8. Upgrading of buildings to comply with the requirements of the *Building Code of Australia*, the *Disability Discrimination Act 1992* or any other legislative requirement or standard will be undertaken in a way that preserves the heritage significance of the buildings and site.
9. New works and buildings will consider the historical significance of the surrounding landscape and buildings.
10. All conservation work undertaken within the Cooranbong Seventh-Day Adventist site must be in consultation with a qualified and experienced conservation professional.

Table 1: Assessment Requirements for New Development Applications

Precinct	Zone	Archaeological Assessment	Heritage Impact Statement/Assessment	Visual Assessment
Avondale College	Zone 1 - Refer to Figure 5	Required	Required	Required
	Zone 2 – Refer to Figure 5	Not required	Not required	Required
	Zone 3 – Refer to Figure 5	Not required	Not required	Not required
	Zone 4 – Refer to Figure 5	Not required	Required	Required
	Staff Accommodation	Not required	Required	Required
	Water Tower	Not required	Required	Required
	Married Accommodation	Not required	Not required	Not required
	Central Drive (academic Staff Accommodation Zone)	Required	Required	Required
	The Dairy	Not required	Required	Required
Sanitarium Health Foods	Zone 1 – Refer to Figure 6	Not required	Not required	Required
	Zone 2 – Refer to Figure 6	Not required	Required	Not required
	Zone 3 – Refer to Figure 6	Not required	Not required	Not required
	Swing Bridge and Avenue	Required	Required	Required
	Dora Creek Frontage/Weir	Required	Required	Required
Retirement Village	Central Drive and Freemans Drive	Required	Required	Required
Avondale Memorial Church	Only to the north and west of the church	Required	Required	Required
Cemetery		Not required	Not required	Not required
Freeman's Drive Gateway		Not required	Not required	Required

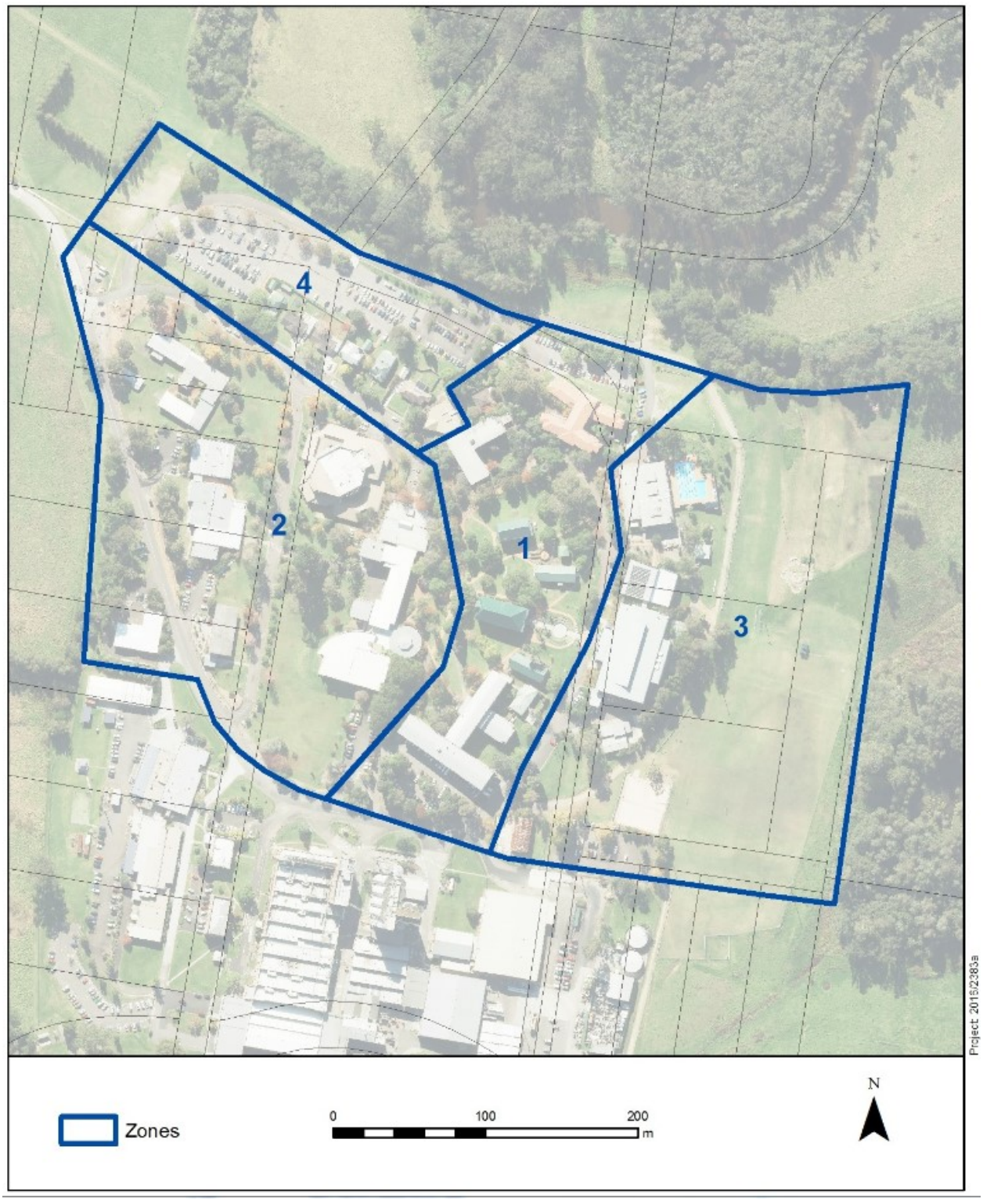


Figure 5: Avondale College Zones

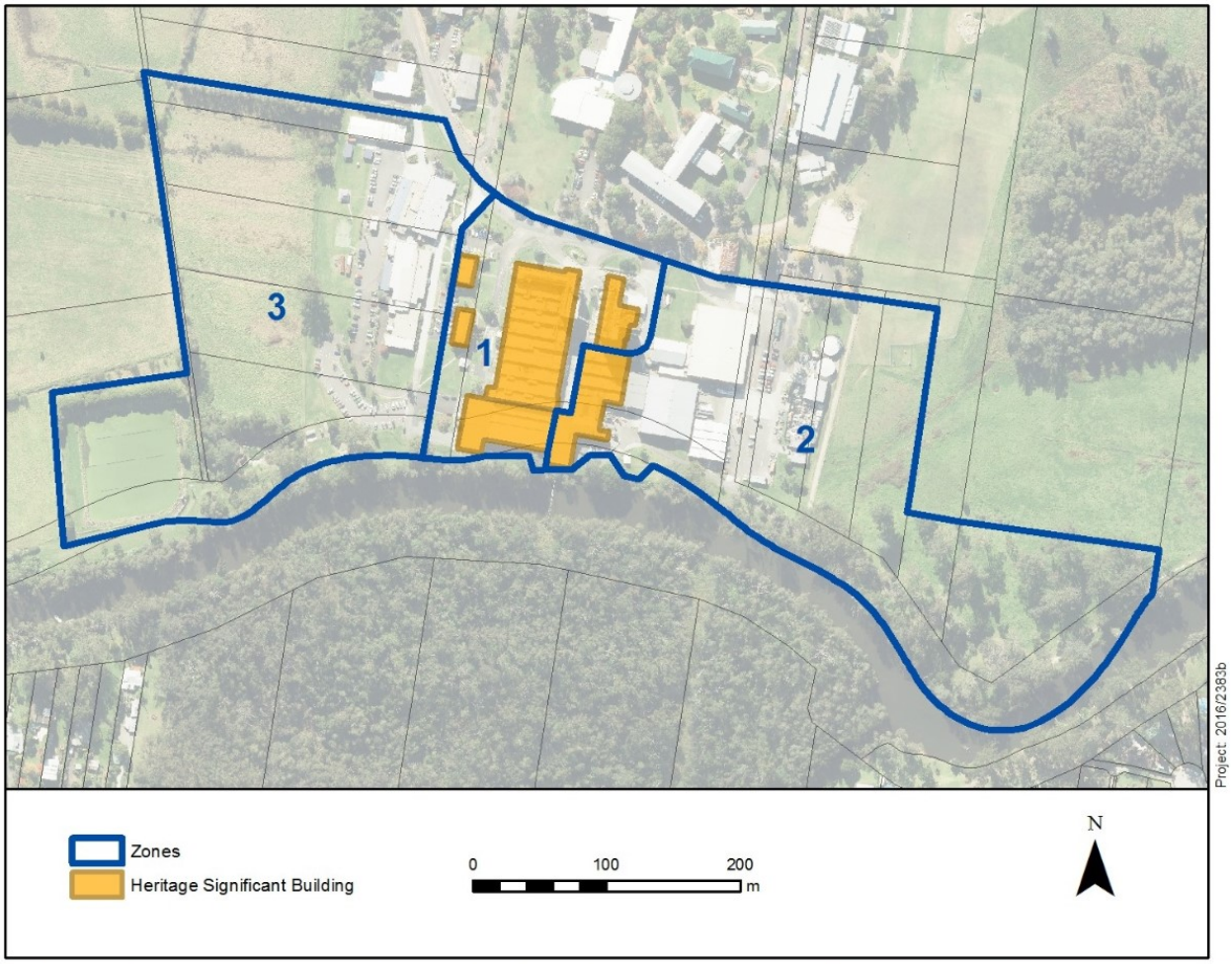


Figure 6: Sanitarium Factory Zones

2.5 ABORIGINAL HERITAGE AND CULTURAL SIGNIFICANCE

Objectives

a. To protect and conserve Aboriginal cultural, spiritual, and sacred sites within the City.

b. To ensure the impact of a proposed development on the heritage significance of an Aboriginal place or object is considered by adequate investigation and assessment.

Controls

1. Where a development will disturb the ground surface, the development application must demonstrate that due diligence has been undertaken in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*. This includes submitting the following documentation:

   i) A statement and results of an Aboriginal Heritage Information Management System (AHIMS) search.
   ii) Identify whether the development site is partially or wholly within the Sensitive Aboriginal Landscape map under the LMLEP2014 and whether the exemptions under the Exempt Development Criteria apply.
   iii) A statement indicating whether there are landscape features that indicate the potential presence of Aboriginal objects and whether any Aboriginal items or objects are likely to be impacted.

2. A Due Diligence Statement must be submitted by a suitably qualified person to determine whether the proposed development is likely to harm Aboriginal objects and identify whether an Aboriginal Heritage Impact Permit is required where:
    i) An AHIMS search has identified the likelihood of an Aboriginal item within 50m of the development site, and/or
    ii) The area to be developed is identified on the Sensitive Aboriginal Landscape map and the Exempt Development Criteria do not apply.
3. An Aboriginal Heritage Impact Statement must be prepared where:
    i) An assessment under the Due Diligence Statement has identified the potential for the development site to contain an Aboriginal object or is a place of significance, or
    ii) The development will have an impact on a known Aboriginal object or place.

2.6 DEMOLITION

Objectives

a. To avoid demolition of structures with high heritage significance.

b. To create a record of all existing structures and elements on the site prior to any demolition works.

Controls

1. No demolition or removal of structures will be undertaken without first determining the heritage significance of the building and surrounding areas, and considering whether conservation and adaptive re-use are a better option for items with heritage significance.
2. Photographic recording must be carried out prior to and during demolition of any element of a structure or a whole structure and the information provided to Council for their records,
3. The physical location of any element of a structure or a whole structure must be recorded prior to any demolition work being carried out and the information provided to Council for their records.

2.7 LANDSCAPING

Objectives

a. To ensure that landscaping complements and enhances the heritage significance of the Cooranbong Seventh-day Adventist site.

b. To ensure that development maintains significant views to and from within the Cooranbong Seventh-day Adventist site.

Controls

1. A Landscape Plan must be submitted with any application for development and be in accordance with the *Landscape Conservation Management Plan* prepared for the Seventh-day Adventist site.
2. Trees and other vegetation identified as having exceptional or high level of significance will be conserved and replaced with the same species when safe useful life expectancy has been reached, as demonstrated by an Arborist report.
3. Materials used in the maintenance or reconstruction of the landscape of the site will either be traditional materials already used in the construction of the landscape (e.g. stone, concrete, brick or timber) or materials that are consistent with the heritage character of the place.
4. The reinstatement of former landscape elements or the introduction of appropriate new elements will be guided by historical photographic and documentary evidence.
5. Given the importance of views to and within the site, new plantings will be located in such a way that they enhance views, not detract from them.
6. Choice of species for new plantings will be based on the relative significance of the area, appropriateness for the period, suitability for the location, ease of maintenance and use, and historical precedent. Considerations include whether the plantings are required for shade, revegetation, screening, visitor control, or floral display.
7. Significant landscape elements will be with the same or similar species in the same arrangement when existing species show signs of decline.
8. Where required, fences will be of recessive design, colour and finish such as to minimise visual impact.
9. New planting will strengthen and maintain existing avenues and axes, including Central Drive, the “Academic Axes” and “the Crescent”.
10. Landscaping of existing defined avenues and axes will ensure the health of existing trees and plants by directing drainage to root zones, avoiding soil compaction, and mulching root zones.

2.8 VIEWS AND VISUAL IMPACT

Objectives

a. To protect significant views into and within the Cooranbong Seventh-day Adventist site.

b. To maintain the rural outlook, landscape setting, curtilage and setting of heritage buildings.

Controls

1. A Visual Impact Statement must be submitted with any application for development that may impact on view corridors, heritage items, or the heritage significance of the site.

Table 1: Assessment Requirements for New Development Applications provides guidance on where a visual impact statement will be required.

2.9 HERITAGE INTERPRETATION

Objectives

a. To assist with the historical interpretation of the site.

b. To ensure that the design and configuration of signage positively contributes to the amenity of the building and streetscape.

c. To minimise incoherence of signage resulting from a proliferation of signs at a locality.

d. To provide consistent signage across the site.

e. To minimise the visual impact of signage.

Controls

1. Heritage interpretation will be required for areas of the site with heritage significance to provide details on the history and context of each precinct.
2. Heritage interpretation measures will use consistent, well-designed, vandal-resistant and visually unobtrusive media. These devices will not dominate, obscure or reduce the cultural significance of the interpreted fabric or place.

2.10 ACCESS

Objectives

a. Ensure that roads do not dominate the Cooranbong Seventh-day Adventist site.

b. Encourage pedestrian access through the site.

c. Maintain the hierarchy of roads within the site.

Controls

1. Roadway realignments and traffic control measures must avoid impacting on the entry gateway to the Cooranbong Seventh-day Adventist site from Freemans Drive.
2. Alternative access to the Cooranbong Seventh-day Adventist site will be considered where roadway interventions would otherwise destroy the sense of arrival and entry into the site.
3. Pedestrian access will be encouraged as a priority mode of movement through the site, particularly the Avondale College precinct.

2.11 CAR PARKING

Objectives

a. To ensure safe and efficient vehicle and pedestrian movements through the site.

b. To ensure that adequate car parking is provided in appropriate locations.

Controls

1. Car parking will be provided in visually unobtrusive locations on the perimeter of existing development.

PART 3 – SANITARIUM FACTORY

3 SANITARIUM FACILITY DEVELOPMENT CONTROLS

3.1 HERITAGE CONSERVATION

Objectives

a. To protect the unique character and heritage significance of the Sanitarium factory precinct.

b. To allow for the adaptive reuse of the Sanitarium facility.

c. To ensure that development maintains significant views to and from the factory precinct and to significant heritage items within the precinct.

Controls

1. . New development must not detract from the significance of the site and its principal significant buildings and spaces.
2. Internal adaptations and adaptive reuse to the factory and the Peddle Thorpe Walker buildings are acceptable, but must not adversely impact the external form, style and character of the buildings.
3. The boundary on the southern junction of the College and the Sanitarium Factory will include appropriate landscaping to ensure that the two precincts retain separate identities, to control traffic flow, maintain security, and ensure safety and efficiency.

3.2 BUILT FORM, SCALE AND BULK

Objectives

a. To ensure new buildings adopt and maintain the prevailing building scale.

b. To ensure future development responds to the desired future character of the area and that its bulk and scale is not excessive.

Controls

1. Future development in proximity to the three Peddle Thorpe Walker (PTW) buildings must not adversely affect the harmony, balance and character of this area.
2. Adequate open space must be maintained around the PTW buildings, particularly the open space in the first two ellipses of the historical road layout, to allow their ongoing interpretation as a group of buildings and of the original road layout. An appropriate heritage curtilage must be defined around the PTW buildings as part of any development application in this area and no new development or major additions will be permitted within the curtilage. Minor additions such as awnings are acceptable if they do not distort or obscure the cultural significance of the place or its interpretation.
3. Future development must take into consideration the buildings of significance, including the factory, the 1930 services building and the 1935 PTW group of buildings. Consideration will be given to form, scale, height, bulk as well as construction technology and materials.
4. New development must not be higher than the existing buildings unless it can be demonstrated that the views from the north western entrance into the site and from Central Road are not obscured or diminished.

3.3 LANDSCAPING

Objectives

a. To ensure that landscaping complements and enhances the heritage significance of the Sanitarium factory.

b. To maintain the landscape elements that contribute to the heritage significance of the factory.

c. To ensure that development maintains significant views to and from the factory.

Controls

1. New works will respect the 1937 layout of the factory complex and its associated lawns, tree plantings, shrubberies and loop roads. While it may not be practical to reinstate the previous elliptical road layout around the factory, the former layout should be highlighted with the use of paving, landscaping and/or interpretive signage to ensure correct interpretation of the original layout.
2. New tree planting and landscaping around the factory will respect the original formal layout and planting design by mainly using trees with a vertical and symmetrical habit (such as conifers and poplars). New tree plantings will be of species that are compatible with the originals.
3. New plantings will consider sight lines and views into the site as well as visibility within the site to ensure pedestrian safety.
4. The existing roadway and avenue of plantings (Date Palms and Oleander) that lead up to the Picnic Area and Swing Bridge on Dora Creek will be conserved. Consider creating a new landscaped pathway linking this roadway to the College site.
5. The park-like character and trees (native and planted Norfolk Island Pines) within the riverside picnic area beside the swing bridge, as well as the stone edging to the roadway, will be conserved.
6. Mature Blackbutt trees in the open lawn near the picnic area have habitat value and are highly ornamental and will be conserved and regenerated.
7. The swing bridge and its associated landscape setting will be conserved.
8. Landscaping should be used advantageously within the factory precinct to screen intrusive developments and highlight significant features.
9. Fencing will be visually permeable to maintain important views into the site.

3.4 VIEWS AND VISUAL IMPACT

Objectives

a. To protect significant views within the site.
b. To reduce the visual impact of development.
c. To preserve views out of the campus to the landscape beyond.

Controls

1. A visual impact statement must be submitted with any application for new development to ensure the objectives of this control are met.
2. A visual link between the access road and the Sanitarium factory will be maintained.
3. Development must maintain views to significant buildings.

3.5 ACCESS AND CAR PARKING

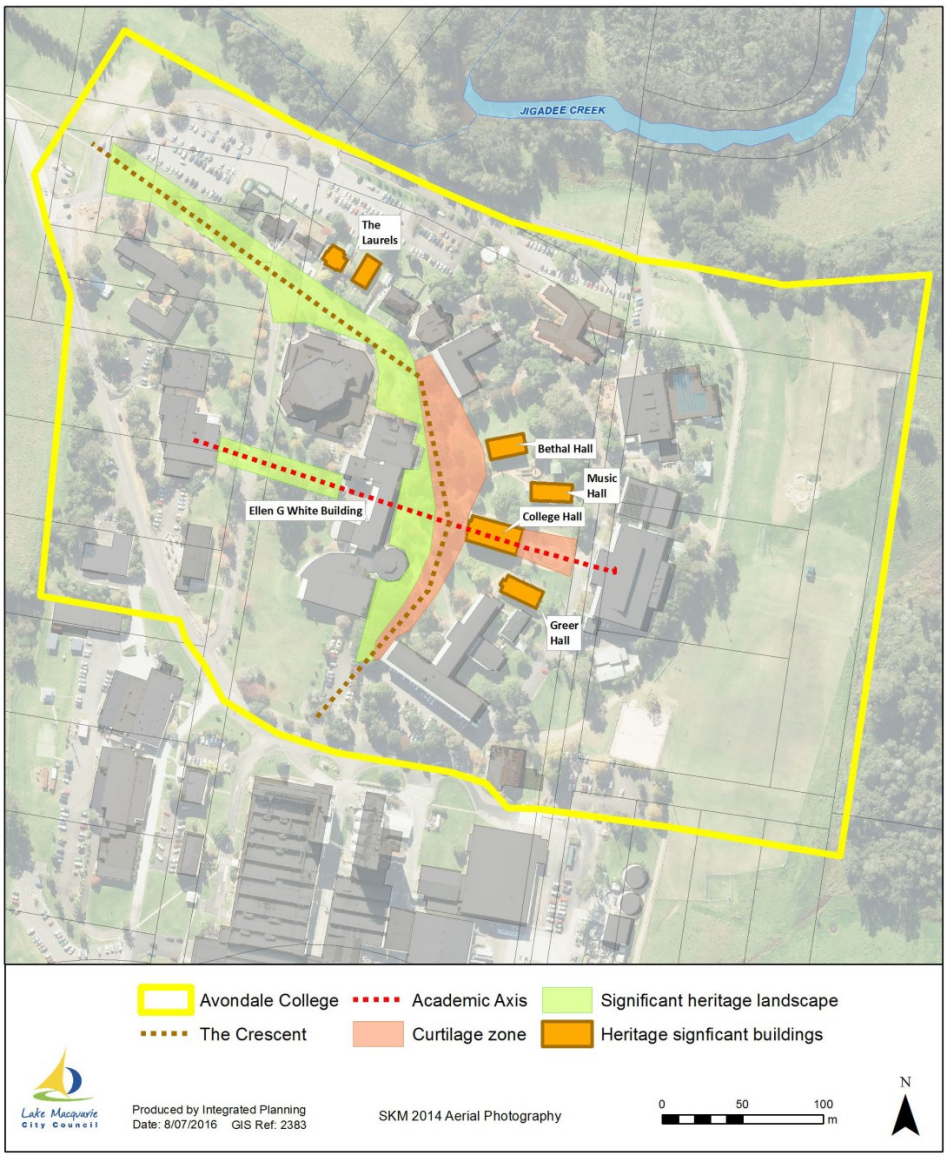
Objectives

a. To ensure safe and efficient vehicle and pedestrian movements through the site.
b. To ensure that adequate car parking is provided in appropriate locations.

Controls

1. Design of pathways through the site will consider the safety of pedestrians.
2. New development will consider the safety of pedestrians and vehicles moving on existing pathways and roads.
3. Parking in front of the factory building will be discouraged as it detracts from the setting.
4. Car parking must be provided in the less intrusive and sensitive locations within the factory precinct, such as peripheral areas.

PART 4 – AVONDALE COLLEGE



4 AVONDALE COLLEGE DEVELOPMENT CONTROLS

4.1 HERITAGE

Objectives

a. To ensure that new development occurs in a manner that that respects the historical layout of the Avondale College campus.

b. To protect the significant axes that exist through the Avondale College campus.

c. To protect the unique character and heritage significance of Avondale College.

d. To ensure that development maintains significant views to and from Avondale College and to and from heritage items within it.

e. To safeguard and protect the archaeological heritage.

Controls

1. No new development will occur in the Heritage Curtilage Zone shown in Figure 4.
2. The Heritage Curtilage Zone and significant heritage landscape in their current forms must be preserved, including building layouts, open spaces, paths and landscaping.
3. The layout of the paving network, alignment and scale of “the Crescent” and the “Academic Axis must be preserved.
4. New buildings must be setback from the “Academic Axis” and mature Canary Island Date Palms and Hoop Pines along the path.
5. College Hall must be kept as the dominant building at the top of the knoll in the midst of its open space curtilage. The placement and the height of new buildings and landscaping must take into consideration the prominent observation points to the College Hall.
6. Maintain or open up the “Breezeway” through the Ellen G. White building for any redevelopment or modification to the building.
7. New development around the staff residences must be small in scale and contribute to the character of this area and should not detract from the presentation or prominence of the “The Laurels”.
8. The “Laurels” and former Principal’s residence must remain legible from the entry road leading into the College campus from the west.
9. Remove elements of the site that intrude on the heritage significance if the opportunity arises.
10. Adaptive reuse of heritage buildings may be necessary and will be facilitated where possible without impacting on heritage significance.
11. Clearly define the boundary on the southern junction of the college and the Sanitarium Factory, including appropriate landscaping, to ensure that the two precincts retain separate identities, to control traffic flow, maintain security, and ensure safety and efficiency.
12. Interpretative signage should be implemented within the College grounds to identify precincts, and important buildings, axes and site features for easy way finding.
13. In addition to any archaeological investigations required for areas identified in Figure 3 – Plan showing the potential areas for European Relics, any development in the grounds of the retirement village must be monitored during excavation for archaeological relics and evidence of earlier human activity on the site.

4.2 BUILT FORM, SCALE AND BULK

Objectives

a. To ensure new buildings adopt and maintain the prevailing building scale.

b. To ensure future development responds to the desired future character of the area and that its bulk and scale is not excessive.

Controls

1. Future development must consider the form, scale, height, bulk, construction technology and materials of buildings of significance. Cues should be taken from key heritage buildings. The flanking structures of Ella Boyd Hall, Andre Hall and Watson Hall have lesser heritage significance and will not be used as cues for future campus development.
2. New development must not dominate the height, mass or scale of existing heritage-listed buildings.
3. New development must be of a scale and bulk that does not interrupt significant views to heritage buildings and axis lines.
4. New development and landscaping must respect the existing building alignment, curvature, setbacks and built form character along “the Crescent”.
5. Built form is to follow and respect the topography of the site.

4.3 LANDSCAPING

Objectives

a. To ensure that landscaping complements and enhances the heritage significance of Avondale College.

b. To maintain the landscape elements that contribute to the heritage significance of Avondale College.

c. To ensure that development maintains significant views to and from Avondale College and to and from heritage items within it.

Controls

1. A Landscape Plan that considers the historical significance of Avondale College must accompany any application for new development.
2. Landscaping must reinforce the clarity of the entrance to the College precinct, the hierarchy of open spaces, the principle axes, and not obscure views to key buildings and features.
3. Landscaping is permitted in the Heritage Curtilage Zone if it reinforces “the Crescent” and the “Academic Axis”.
4. Landscaping can be used in the Heritage Curtilage Zone to enhance elements with high heritage and cultural significance and screen intrusive elements.
5. Landscaping must seek to maintain significant views to and from Avondale College and to and from heritage items within the College.
6. Mature Jacarandas at the front of College Hall, around Bethel Hall, and along the Crescent, have high heritage and landscape significance and must be conserved as part of any development. When they show signs of deterioration, they will be replaced with the same species in the same formal arrangement.
7. Mature Canary Island Date Palms and Hoop Pines along the Academic Axis have high heritage and landscape significance and must be conserved as part of any development. When they show signs of deterioration, they will be replaced with the same species in the same formal arrangement.

8. Re-establish planting along historic roads and axes with appropriate species to enhance and reinforce their former predominance. Appropriate species are those with a historic precedent in the area.
9. Avoid any new tree planting that could detract from the visual dominance of the "Academic Axis" and "the Crescent".
10. Continue the established tree planting theme of Jacaranda in open lawn around Bethel Hall and consider the reconstruction of a rose garden around Bethel Hall.

4.4 VIEWS AND VISUAL IMPACT

Objectives

a. To protect significant views within the site.
b. To reduce the visual impact of development.
c. To preserve views out of the campus to the landscape beyond.

Controls

1. A visual impact statement must be submitted within any application for new development to ensure the objectives of this control are met.
2. The height of any new building must not obscure the silhouette formed by the roof lines of the heritage buildings abutting "the Crescent".
3. Development must maintain views to significant buildings.
4. Development must maintain views along the "Academic Axis", particularly through and around the White Building.
5. Development should consider views from the approach road to the Campus.
6. Development must maintain the ring of open space around the college (below the 1:100 year flood zone). Development should be focused on elevated areas around the existing College campus.
7. Development should maintain long vistas and expansive views towards the surrounding rural setting.

4.5 PEDESTRIAN AND VEHICLE ACCESS AND CAR PARKING

Objectives

a. To ensure that the core campus area is primarily a pedestrian area.
b. To reduce the visual impact of vehicle access and car parking areas.
c. To provide vehicle access and car parking on the periphery of the campus area.

Controls

1. Maintain historic roads as main access points and pedestrian thoroughfares, including the Central Road, "the Crescent", the "Academic Axis" and loop roads around the Sanitarium Buildings.
2. Establish a hierarchy of pathways through the Campus with widths and landscaping appropriate to their significance. Determine significance by recognising former roadways, key pedestrian pathways, and reflecting foot traffic volumes.
3. Protect and afford the highest significance in the hierarchy of paths to the main pedestrian pathways of "the Crescent" and the "Academic Axis".
4. Preserve path and pavement patterns that have significance for the College.
5. Where old brick kerbs remain, such as the southern section of "the Crescent" pathway, they must be conserved and integrated into the network of pathways.
6. Deter vehicle access within the Campus other than for emergency purposes.

7. Consider a secondary road or extension of existing roadways to access the support facilities in the east of the site and cater for deliveries. Reinstate the present vehicular access to the Cafeteria building as a pedestrian access to reinforce the pedestrian use of the campus with a new vehicular access to service the Cafeteria from Central Road.
8. Provide car parking areas in peripheral areas, out of sight of the main entry to the College, without visual intrusion into the core college precinct.
9. Appropriately landscape car parking areas to minimise their visual impact.

PART 5 – ACCOMMODATION AREAS

5 ACCOMMODATION DEVELOPMENT CONTROLS

5.1 BUILT FORM, SCALE AND BULK

Objectives

a. To ensure new buildings adopt and maintain the prevailing building scale.

b. To ensure future development responds to the desired future character of the area and that its bulk and scale is not excessive.

Controls

1. New development must be of a scale consistent with the prevailing staff housing development along Central Drive to preserve the small scale “cottage style” character of the zone.
2. Car parking and associated garaging must be set back and positioned to the side or rear of proposed dwellings in the staff housing development.
3. New development within the married housing should relate to the topography of the site.

5.2 SETBACKS

Objectives

a. To ensure that the development complements the existing setback pattern in the locality.

b. To ensure that development does not encroach on significant landmark features.

Controls

1. The front setback of staff housing off Central Drive must be respected and any new developments must comply with this existing and established setback.
2. New development must not encroach upon any significant landmark feature, such as the water tower.

5.3 LANDSCAPING

Objectives

a. To ensure landscape areas are integrated into the design of the development.

b. To ensure that landscaping complements and enhances the existing character of the area.

Controls

1. The established cottage garden character comprising of minimal fencing, specimen trees in lawns, small garden beds and the simple layout of dwellings within the staff housing area should be conserved.
2. Preserve the avenue of trees along Central Drive leading past the staff houses.
3. Maintain and provide a landscaped buffer between the married housing and Freemans Drive.

5.4 VIEWS AND VISUAL IMPACT

Objectives

a. To protect significant views.

b. To reduce the visual impact of development.

Controls

1. Development and landscaping must maintain visual curtilage from Central Drive through the academic residences to the Dairy buildings.
2. The open landscape nature of the site with views to the main college campus must be retained.

5.5 ACCESS

Objectives

a. To provide appropriate access to any future and existing development.

Controls

1. Access to the married housing should be formalised as part of any development.

PART 6 – AVONDALE MEMORIAL CHURCH AND ASSOCIATED BUILDINGS

6 AVONDALE MEMORIAL CHURCH DEVELOPMENT CONTROLS

6.1 SITE CHARACTER & HERITAGE

Objectives

a. To respect the curtilage, visual catchment and use of the Avondale Memorial Church and associated buildings.

b. To safeguard and protect the heritage significance of the Church.

Controls

1. Any development in the vicinity of the Avondale Memorial Church and Sabbath School site must be monitored during excavation for archaeological relics and evidence of earlier human activity on the site.
2. Compatible uses allied to the Avondale Memorial Church are the preferred use of the Church precinct. This may include, but is not limited to, ministry and counselling services, crisis assistance, and education and resources associated with the Sabbath School.
3. Any application relating to, or in the vicinity of, the timber Band Practice Building must ensure that the timber fabric of the building is conserved and that the stormwater is formalised.

6.2 BUILT FORM, SCALE AND BULK

Objectives

a. To ensure new buildings adopt and maintain the prevailing building scale.

b. To ensure future development responds to the desired future character of the area.

c. To ensure that the bulk and scale of future development is not excessive.

Controls

1. Development must use materials that contribute to the character of the zone in a contemporary way.
2. The height, scale and bulk of development must be designed to ensure that views into the Cooranbong Seventh-day Adventist site from Freemans Drive are maintained.
3. The development or alteration of steel clad buildings such as the Multipurpose Hall must be limited to the north eastern section of the site and must not encroach southwards towards the church, as the building form and fabric are incompatible with the prevailing character of the buildings in this area.

6.3 SETBACKS

Objectives

a. Maintain the existing setback of development from Freemans Drive.

b. Conserve the landmark value of the Avondale Memorial Church.

Controls

1. New development must maintain the existing and established setback from Freemans Drive.
2. An adequate curtilage of open space must be maintained around the Avondale Memorial Church to protect the landmark quality of the building and to ensure that the Church remains the dominant building when viewed from Freemans Drive and Central Drive.

6.4 LANDSCAPING

Objectives

a. To ensure landscape areas are integrated into the design of the development.

b. To ensure that landscaping complements and enhances the existing character of the area.

Controls

1. Landscaping within the Avondale Memorial Church precinct must ensure that the northern elevation of the Avondale Memorial Church is clearly visible from Freemans Drive.
2. Hard landscaping should be avoided between the Avondale Memorial Church and Freemans Drive.
3. Landscaping within the Church precinct should ensure continuity with existing landscaping on Central Drive and should reinforce the importance of Central Drive as the main entry to the site.
4. Car parking areas, buildings and other structures that are incompatible with the prevailing character of the Church precinct must be screened by trees and shrubs, particularly to reinforce the western elevation of Avondale Memorial Church.

6.5 VIEWS AND VISUAL IMPACT

Objectives

a. To protect significant views to and from the Avondale Memorial Church.

b. To reduce the visual impact of development.

c. Conserve the landmark value of the Avondale Memorial Church.

Controls

1. Development within the Church precinct needs to be considered within the context of the overall character of the Cooranbong Seventh-day Adventist site.
2. A visual impact assessment must be prepared for development in the vicinity of Avondale Memorial Church to ensure that an adequate curtilage of open space is maintained around the Church to protect the landmark quality of the building and to ensure that the Church remains the dominant building when viewed from Freemans Drive and Central Drive.
3. New development will ensure that the Church remains the dominant building on the street frontage and site.
4. Open views into the Cooranbong Seventh-day Adventist site from Freemans Drive must be maintained.

6.6 ACCESS AND TRAFFIC

Objectives

a. To provide appropriate access to any future and existing development.

b. To ensure traffic safety, visibility and convenience is maintained.

Controls

1. Maintain existing pathways through the Church precinct from Central Drive and the eastern car parking area.
2. Maintain the existing vehicle access to the Church from Central Drive.
3. Vehicle access must not be permitted between the Church and Freemans Drive.
4. The road junction where the general site traffic and the Church traffic meet at Central Drive should be reviewed to ensure safety, visibility and convenience.

PART 7 – RETIREMENT VILLAGE

7 RETIREMENT VILLAGE DEVELOPMENT CONTROLS

7.1 ARCHITECTURAL AND HERITAGE CONSIDERATIONS

Objectives

a. To ensure that new development achieves contemporary and sustainable design.

b. To minimise the impact of new development on nearby heritage items and landscapes.

c. To safeguard and protect the archaeological heritage.

Controls

1. Development applications on Freemans Drive, Central Drive, adjoining the Cemetery and on other visually prominent areas must respect the heritage character of the Church, the character of Central Drive, the timber buildings in the Staff Accommodation precinct, the Water Tower, and the entrance to the Seventh-Day Adventist site.
2. New buildings within the retirement village must not incorporate quasi heritage elements, but should adopt a contemporary style and materials that contribute to the character of the zone.
3. In addition to any archaeological investigations required for areas identified in Figure 3 – Plan showing the potential areas for European Relics, any development the in grounds of the retirement village must be monitored during excavation for archaeological relics and evidence of earlier human activity on the site.
4. Maintain and supplement the commemorative plaque relating to the Health Retreat by adding further historical information and photographic evidence.

7.2 BUILT FORM, SCALE AND BULK

Objectives

a. To ensure new buildings do not dominate heritage items and significant views.

b. To ensure future development responds to the desired future character of the area and that its bulk and scale is not excessive.

Controls

1. The height, scale, bulk and materials of new development on Freemans Drive and Central Drive must be designed to retain views into the Cooranbong Seventh-day Adventist site.
2. New development on Central Drive must maintain the dominance of the Church on this frontage.

7.3 SETBACKS

Objectives

a. To ensure that the development complements the existing setback pattern in the locality.

b. To ensure that development does not encroach on significant landmark features.

Controls

1. The existing north facing setback to Freemans Drive must be retained. The streetscape of the retirement village on this frontage should remain low key so as not detract from the landmark value of the Church.
2. New development must not encroach upon any significant landmark feature within the Cooranbong Seventh-day Adventist site, such as the Church.

7.4 LANDSCAPING

Objectives

a. To ensure landscape areas are integrated into the design of the development.

b. To ensure that landscaping complements and enhances the existing character of the area.

Controls

1. Landscaping adjacent to College Drive will ensure continuity and reinforce the character and importance of College Drive.
2. Undertake landscaping in key open spaces within the retirement village to ensure resident safety and amenity.

7.5 VIEWS AND VISUAL IMPACT

Objectives

a. To protect significant views.

b. To reduce the visual impact of development.

Controls

1. Development within the retirement village needs to be considered within the context of the overall character of the Cooranbong Seventh-day Adventist site.
2. A Visual Impact Statement must be submitted for development on Freemans Drive and Central Drive and other visually prominent development within the retirement village. The Statement will determine whether new development respects the visual catchment of the Church, the character of Central Drive, the timber buildings in the Staff Accommodation precinct, the Water Tower, and the entrance to the Seventh-Day Adventist site, as well as maintaining views into and through the site.

7.6 ACCESS

Objectives

a. To provide appropriate access to any future and existing development.

Controls

1. Access will continue to be provided to the retirement village from Central Drive.
2. Intersections on Central Drive should be kept clear of low landscape elements to ensure visibility for traffic.

PART 8 – CEMETERY

8 CEMETERY DEVELOPMENT CONTROLS

8.1 HERITAGE

Objectives

a. To ensure that the heritage and character of the Cemetery is conserved.

Controls

1. A statement of heritage significance for the cemetery must be prepared.
2. A Plan of Management addressing the conservation of headstones and plots must accompany any development application within the Cemetery precinct to ensure that they do not deteriorate and their heritage value is maintained.
3. The expansion of the Cemetery should be limited with some expansion to support the increasing numbers of people who wish to be buried with their deceased family members and followers of the Seventh-day Adventist Religion.
4. A linear planning arrangement similar to the existing should be used for any future expansion of the Cemetery.
5. A recording and location key database system should be established for plot locations and dates of openings of graves.
6. Future headstones must be sympathetic in size, colour, material and style to the existing historic headstones or alternative lawn plaques.

8.2 LANDSCAPING

Objectives

a. To ensure that this existing landscape character of the cemetery is conserved.

Controls

1. Conserve the established landscape character and layout of the cemetery.
2. The low scale and open space character of the Cemetery must be retained and conserved.
3. The lawns and established landscape character must be conserved.

8.3 ACCESS

Objectives

a. To provide appropriate access to any future and existing development.

Controls

1. The existing access road will be used to service the needs of the cemetery.

8.4 DRAINAGE

Objectives

a. To address drainage issues in the location of the Cemetery site and potential impacts on Dora Creek.

Controls

1. Investigate drainage control strategies for the site as a matter of priority.

PART 9 – FORMER DAIRY AND RURAL SURROUNDS

9 DAIRY AND RURAL SURROUNDS DEVELOPMENT CONTROLS

9.1 HERITAGE

Objectives

a. To ensure that new development occurs in a manner that respects the historical significance of the Dairy.

b. To ensure that development maintains significant views to and from the Dairy, and to and from heritage items within the Dairy site.

Controls

1. Adaptive re-use of the existing buildings or sensitive new development is permitted, as long as key landscape features and the rural setting are retained.
2. New development must be designed using materials and finishes appropriate for the intended use and heritage significance of this zone.
3. Avoid 'ribbon' development along the road between the Dairy and the College to ensure that each precinct maintains its distinctive character and 'isolated' quality.

9.2 LANDSCAPING

Objectives

a. To ensure that landscaping complements and enhances the heritage significance of the Dairy.

b. To maintain the landscape elements that contribute to the heritage significance of the Dairy.

c. To ensure that development maintains significant views to and from the Dairy and to and from heritage items within it.

Controls

1. Any future development must conserve the Canary Island Date Palms and Coral Trees lining the laneway, as these act as landmarks for the area.
2. Any future development should maintain the remnant timber fencing that divides allotments and acts as physical markers for the past activities on the site.

9.3 VIEWS AND VISUAL IMPACT

Objectives

a. To protect significant views into and within the site.

b. To reduce the visual impact of development.

c. To preserve views out of the Dairy to the landscape beyond.

Controls

1. Any future development must conserve existing access road to the Dairy and the vista along the access road.
2. Future development must conserve the concrete silos that act as landmarks for the Dairy development.
3. Development must maintain the open paddock setting surrounding the Dairy building group. If development is proposed in this area, a curtilage assessment should be conducted to ensure that an appropriate amount of rural land is maintained around the Dairy.
4. Visual links between the College and Dairy zones must be maintained.

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FIGURES:

1 INTRODUCTION

The suburb of Dudley has developed as a result of various circumstances, including its topography, history and mineral resources.

The Dudley area has been identified as requiring specific development solutions to suit the existing local character and address local issues.

Note: This Area Plan should be read in conjunction with Lake Macquarie City Council Heritage Guidelines, which provide additional development guidelines for Heritage Precincts.

1.1 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all the land outlined in heavy green edging as shown within Map 1 –Dudley Heritage Precinct.

Note: For heritage items or potential heritage sites located within the Heritage Precinct, refer to LM LEP 2013 and Lake Macquarie City Council Heritage Guidelines respectively.

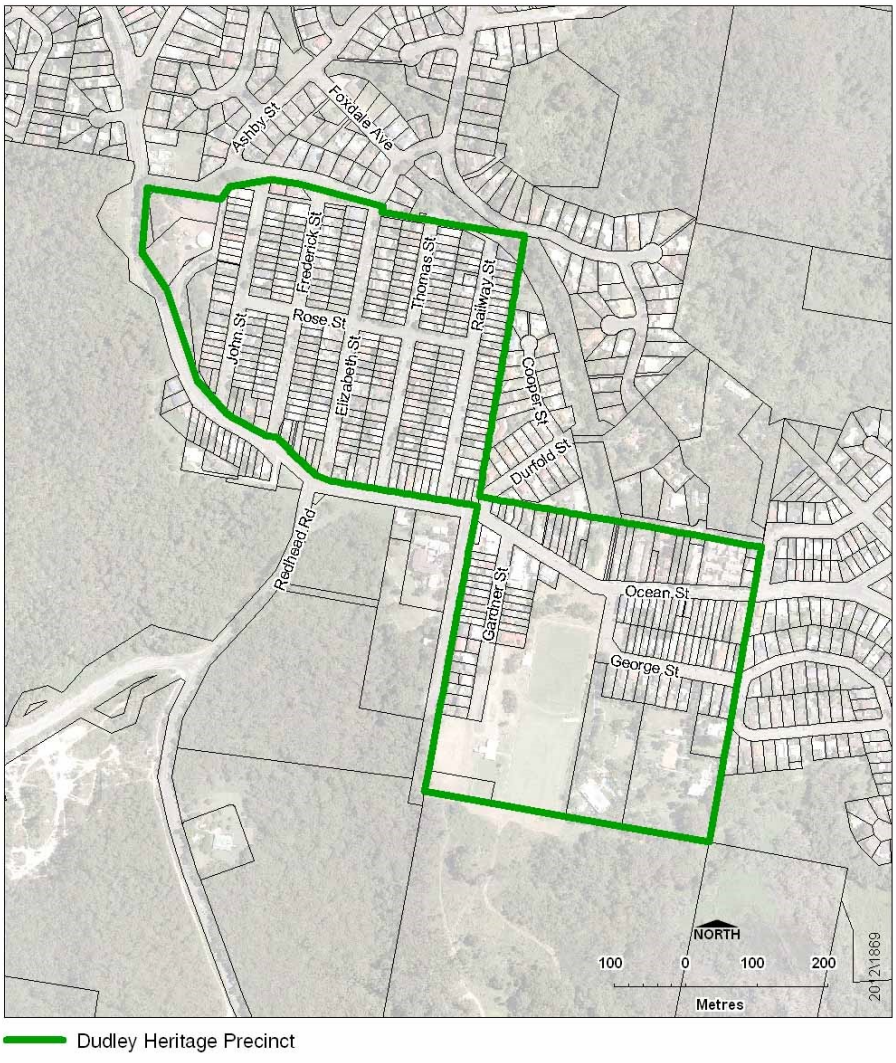

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Figure 1 - Dudley Heritage Precinct

1.2 HISTORY AND EXISTING CHARACTER

Dudley is an historic suburb located between the suburbs of Whitebridge and Redhead. Situated on a ridgeline, Dudley provides views over adjacent valleys and coastline. Dense coastal heath vegetation borders the suburb, with the Awabakal Nature Reserve located on the southern boundary and Glenrock State Recreation Area on the northern boundary. The prominent ridgelines and the steep valley slopes of the area have been developed for residential purposes. Dudley retains its historical significance, although development in recent years has impacted on the integrity of historic buildings.

The earlier dwellings of Dudley are characteristic of working-class cottages from the late nineteenth century coalfields. Despite their declining numbers, these dwellings remain in good condition and continue to make a major contribution to the character of Dudley.

The most significant original miners' cottages are listed as heritage items. These cottages generally conform to their original size, shape and building materials, reflecting the origins of this historical settlement.

As Dudley is one of Lake Macquarie's older precincts, it also has potentially important archaeological sites.

1.3 CONTEXT AND SETTINGS

Objectives

a. To safeguard the heritage and cultural values of the Dudley Heritage Precinct.

b. To ensure that development complements the existing streetscape, local architectural style, decoration and adornments.

c. To ensure that development does not detract from the significance of the dominant cultural and natural elements of the area.

Controls

1. A detailed analysis of the streetscape and surrounding environment including ridgelines must accompany development proposals.

2. Development proposals must incorporate bulk, form, scale and landscaping that is consistent with, and complements the historic development of the Dudley Heritage Precinct.

3. Development proposals must be consistent with the architectural style of the locality.

4. Building should present a narrow frontage to the primary street.

1.4 SITE COVERAGE

Objectives

a. To ensure the bulk and form of future development reflects the historic development of the Dudley Heritage Precinct.

b. To provide opportunities for the provision of landscaping and/or the enhancement of existing native vegetation.

c. To promote on-site stormwater infiltration by encouraging pervious surfaces and landscaped areas.

Controls

1. The maximum site coverage, including ancillary development, must not exceed 45% within the Dudley Heritage Precinct, unless it can be demonstrated that the proposal will not have a detrimental impact on the heritage values of the precinct.

1.5 GARAGES AND CAR PORTS

Objectives

a. To ensure that the streetscape of the Dudley Heritage Precinct is maintained.

Controls

1. Garages and carports must be located to the rear of dwellings.

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1 INTRODUCTION

1.1 BACKGROUND

The Morisset Hospital was first established as an 'asylum for the insane'. Today the role of the hospital and associated buildings and grounds has changed, and diversified land uses may occur in the future.

The Morisset hospital grounds and farm have been identified as requiring specific development solutions to suit the existing character and address local issues. Solutions relating to heritage can be achieved by the preparation of a Conservation Management Plan, which will in turn provide the guidelines for future development.

Note: This Area Plan should be read in conjunction with Lake Macquarie City Council Heritage Guidelines, which provide additional development guidelines for Heritage Precincts.

1.2 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all the land outlined in heavy green edging, as shown within Figure 1 –Morisset Hospital Grounds Heritage Precinct.

Note: For heritage items or potential heritage sites located within the Heritage Precinct, refer to LM LEP 2014 and Lake Macquarie City Council Heritage Guidelines respectively.

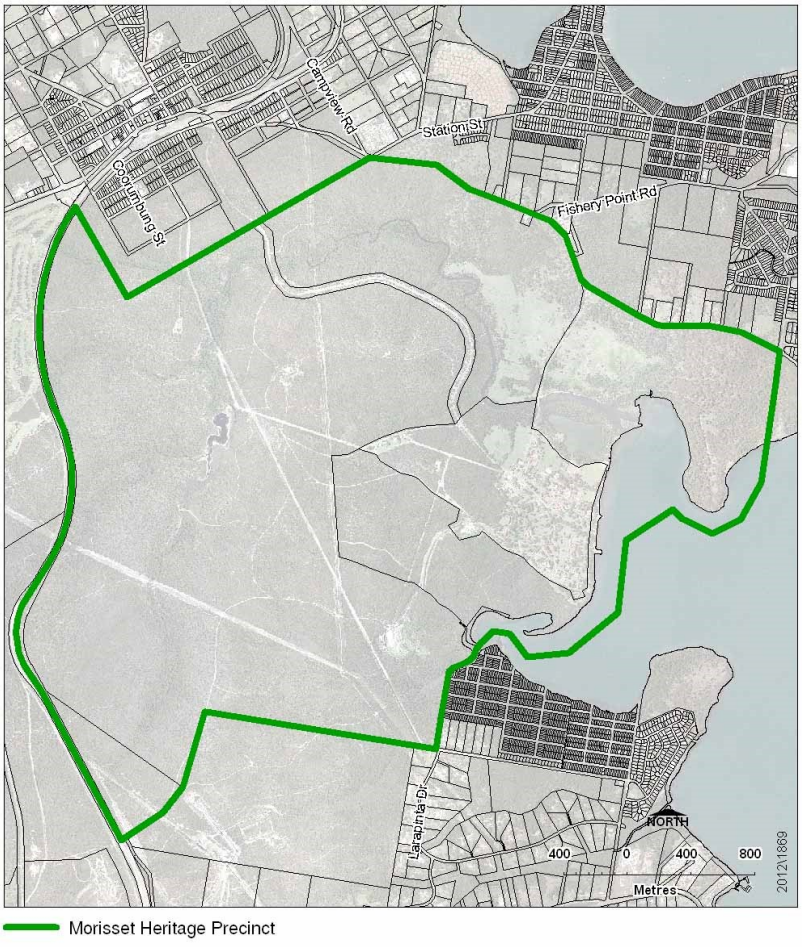

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Figure 1 - Morisset Hospital Grounds Heritage Precinct

1.3 HISTORY AND EXISTING CHARACTER

On 25 August 1900, a Government Gazette proclaimed that 1244 acres on the shores of Lake Macquarie had been reserved for an Asylum for the Insane. The Hospital is approximately 3.5 kilometres southeast of the town of Morisset and 45 kilometres southwest of Newcastle. The site extends from Lake Macquarie in the east to the Great Northern Railway in the west. The northern boundary is Fishery Point Road and Morisset Park Road.

Building work began in 1906 with a jetty, then a dam. The first ward was finished and occupied by 1909, with 78 male 'patients'. Other wards followed, and by 1960 the number of patients had grown to 1490. The most significant construction periods were 1910–1912, and in the 1930s.

Morisset Hospital for the Insane was the second most important such institution to be built in New South Wales outside the Sydney area. In the 1930s, the first prison specifically set up for the criminally insane was established on the site.

The whole development was extraordinary. It combined an idyllic concept of natural beauty as a catalyst for mental healing with a Nineteenth Century ideal of labour as a healing instrument, and the practice of isolating those considered abnormal.

The concept of beautiful surroundings was also embodied in some of the buildings, though not necessarily those inhabited by patients. Significant items include 26 buildings, trees and vegetation groups, a dam, a jetty, the farms and native fauna.

The developed hospital grounds are in two quite distinct sections. The large area of the general Hospital for the Insane is beautifully landscaped, with grounds sloping down to the waters of the Lake on the east. The much smaller area of the Hospital for the Criminally Insane is isolated in a cleared patch of bushland, and walled like a medieval city.

Apart from cleared land between Pourmalong Creek and Morisset Park Road and the landscaped grounds of the Hospital, most of the site is bushland. The cleared land is – or was – probably part of the original 'Industrial Farm Colony for Suitable Patients' proposed in 1906. There are almost 100 buildings within the hospital grounds.

The bushland is an important habitat for Regent Honeyeaters and Swift Parrots in Lake Macquarie. The Swift Parrots and Regent Honeyeaters in Lake Macquarie City Council area New South Wales report, prepared by Birdlife Australian for Lake Macquarie City Council, dated June 2014, identifies the Morisset Hospital Grounds Heritage Area as containing bushland with the most numerous and most recent records of Regent Honeyeater numbers recorded in Lake Macquarie. Records also show that Swift Parrots use the site.

1.4 SPECIFIC ISSUES RELATING TO THIS LOCALITY

Future development within the Morisset Hospital Grounds and Farm will need to consider:

- The sense of social identity resulting from the Hospital and Aboriginal history.
- The physical boundaries of the locality.
- Sensitive elements of the local topography and the existing farm and hospital.
- The importance of the bushland on the site as Regent Honeyeater and Swift Parrot habitat.

1.5 DEVELOPMENT DESIGN

Objectives

a. To safeguard the heritage, cultural and ecological values of the Morisset Hospital grounds.
b. To ensure that development complements the existing local architectural style, decoration and adornments.
c. To ensure that development does not detract from the significance of the dominant cultural and natural elements of the grounds.

Controls

1. A Conservation Management Plan for the entire Morisset Hospital Grounds site must be submitted and approved by Council for any development that may impact on the heritage or cultural values of the grounds.
2. Development proposals must have a bulk, form and scale that is consistent with, and compliments the historic development of the Morisset Hospital Grounds.
3. Development must provide a delineated buffer to the historic uses of the land and its curtilage.
4. Development must avoid impacting on Regent Honeyeater and Swift Parrot habitat.

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1.1 BACKGROUND

The Rathmines RAAF Base is culturally significant on a national level because of its association with World War II, and with pivotal operational events such as the Coral Sea Battle, coast watchers and mine laying. All of these wartime events involved, to some degree, the Catalina aircraft which were based at Rathmines. Equally important were the technical training, services and support activities that were carried out at the base.

A Conservation Management Plan and a draft Plan of Management have been prepared for the base. These documents provide the guidance to support the solutions and issues identified in this Area Plan.

Note: This Area Plan should be read in conjunction with Lake Macquarie City Council Heritage Guidelines, which provide additional development guidelines for Heritage Precincts.

1.2 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all the land outlined in heavy green edging, as shown within Figure 1 – Rathmines RAAF Base Heritage Precinct.

Note: For heritage items or potential heritage sites located within the Heritage Precinct, refer to *Lake Macquarie Local Environmental Plan (LM LEP 2014)* and Lake Macquarie City Council Heritage Guidelines respectively.

Img_176

Figure 1 - Rathmines RAAF Base Heritage Precinct

1.3 HISTORY AND EXISTING CHARACTER

Rathmines RAAF Base (1939-1952) had a profound effect on post-WW II development in Lake Macquarie. Rathmines was the largest flying-boat base in Australia, and the location for the Seaplane Training Flight, seamanship and gunnery courses, and trades training. It housed the main repair shops for all flying-boats, and was a major RAAF communications centre.

Many men and women who came to work at the base stayed in the area after the war and formed a technology skilled army. They helped develop power stations, mechanised coalmines and much of the present private industrial and commercial base of the City. Surviving structures in the subject area are an important heritage resource for the City of Lake Macquarie.

This area is largely parkland at present, with a few scattered buildings. East and south of the Catalina Memorial Nursing Home, the parkland consists of indigenous and introduced trees. Land west of the nursing home is mostly uncleared bushland.

The area has lost a large part of the atmosphere of a military base because most of the buildings that were once densely packed on the peninsular north and east of the Hospital and Rosemary Row have been demolished. A huge hangar and extensive barracks have gone. Of the buildings that survive, many seem to have been moved from their wartime positions.

The broad concrete Catalina slips remain untouched, and a boat slip on Styles Point is still recognisable.

1.4 SPECIFIC ISSUES RELATING TO THIS LOCALITY

Future development in the vicinity of the Rathmines RAAF Base will need to consider:

- The existing Conservation Management Plan and the Draft Plan of Management covering the site.
- Sensitive elements of the local topography, and existing streetscapes.

1.5 CONTEXT AND SETTINGS

Objectives

a. To safeguard the heritage and cultural values of the Rathmines RAAF Base.

b. To ensure that development complements the existing architectural style, decoration and adornments.

c. To ensure that development does not detract from the significance of the dominant cultural and natural elements of the base.

Controls

1. Development on the Rathmines RAAF Base must be in accordance with the adopted Conservation Management Plan and Plan of Management.

2. Development proposals must incorporate bulk, form, scale and landscaping that is consistent with, and complements the historic development of the Rathmines Heritage Precinct.

3. Development must provide a delineated buffer to the historic uses of the land and its curtilage.

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The suburb of Teralba developed as a result of various circumstances including coal mining, the railway, its location and topography.

Teralba has been identified as requiring specific development solutions to suit the existing local character and address local issues.

Note: This Area Plan should be read in conjunction with Lake Macquarie City Council Heritage Guidelines, which provide additional development guidelines for Heritage Precincts.

1.1 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all the land outlined in heavy green edging as shown within Figure 1 – Teralba Heritage Precinct.

Note: For heritage items or potential heritage sites located within the Heritage Precinct, refer to *Lake Macquarie Local Environmental Plan (LM LEP 2014)* and Lake Macquarie City Council Heritage Guidelines respectively.

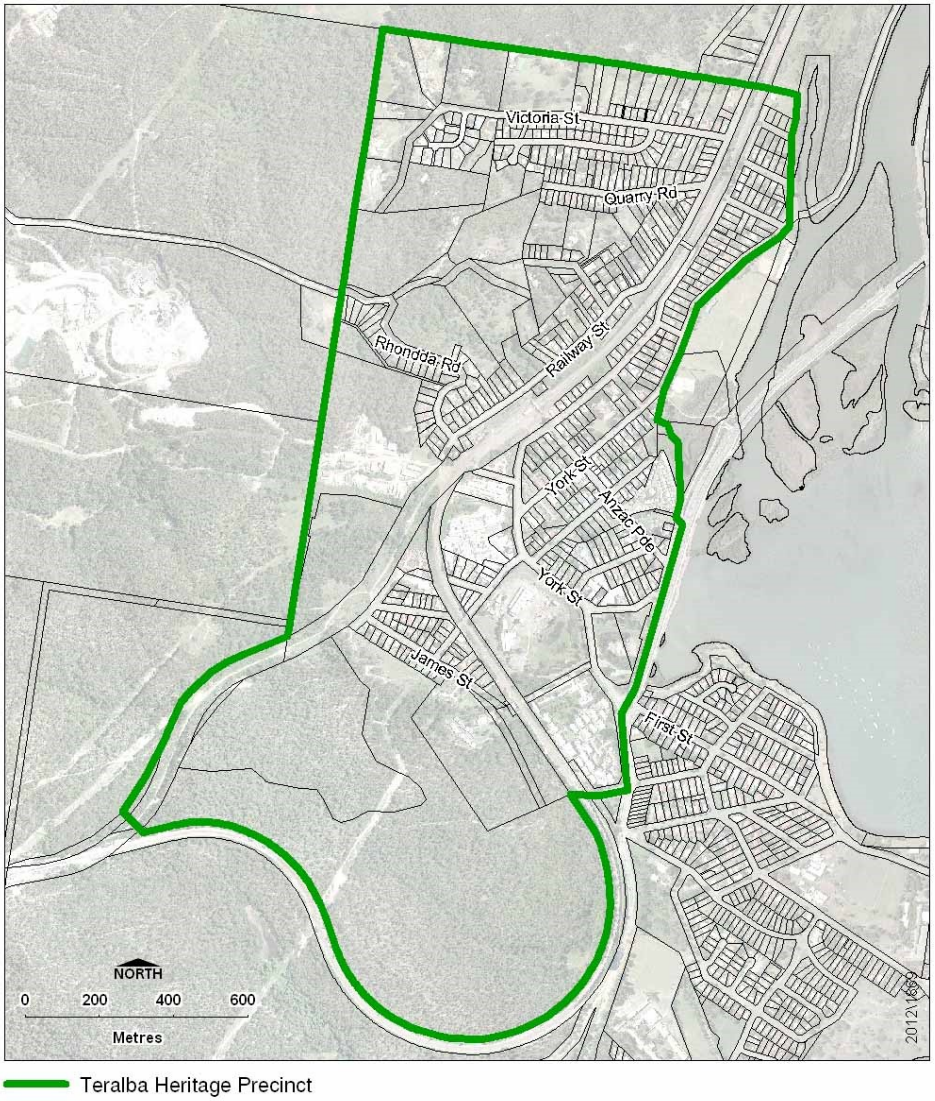

Figure 1 - Teralba Heritage Precinct

1.2 HISTORY AND EXISTING CHARACTER

The suburb of Teralba has considerable social and historical significance as one of the earliest railway and mining settlements in Lake Macquarie. The suburb also retains a distinctive traditional early Twentieth Century period character, due mainly to the consistency of timber and iron buildings and the cohesive streetscapes they form. The suburb is set in a semi-rural landscape with well-defined boundaries on the edge of Lake Macquarie and rising up a steep hillside to the west. This area enjoys views over Cockle Creek and the Lake.

Teralba was an important railway settlement and quarry site for several decades, and the railway and the station remain dominant physical elements in the landscape. The settlement is divided by the railway with each side of the suburb having its own distinct historical and aesthetic importance.

The original settlement, established in 1886, marked the arrival of both the railway and mining and was located on the west side of the railway line. Apart from the street layout, all that survives of the original settlement is a handful of original cottages.

The area east of the railway line developed later, as an extension to the town. It features a more formal street layout. Although most early cottages have disappeared, later cottages have adopted the traditional scale and form. There are also several individual buildings of note such as the Co-op Store and Post Office, located in the vicinity of the main commercial centre. The main street (York Street) was bypassed as a major route with the creation of Toronto Road. The original connection to Boolaroo was broken with the removal of Watkins Bridge.

Despite the loss of many early buildings, the settlement remains one of the notable historic precincts in Lake Macquarie. In particular the eastern precinct of the suburb continues to feature unified streetscapes characteristic of the early Twentieth Century. Although the settlement has taken on a predominantly suburban role, it retains its own distinct physical character and cultural identity.

The close physical proximity of the mines underlies the strong historical relationships between home and workplace. The location of the mines, in turn, was closely related to the siting of the railway station. The boundaries of the Teralba Heritage Precinct include several of these mining sites.

This precinct is therefore an important archaeological resource for Lake Macquarie, with considerable potential as an industrial heritage site.

1.3 SPECIFIC ISSUES RELATING TO THIS LOCALITY

Future development in Teralba will need to consider:

- The sense of social identity resulting from the area's history,
- The physical boundaries of the locality including the bushland setting and separation from adjoining areas,
- Heavy vehicle traffic from the mines and other industries generating noise and other pollutants,
- Development that is compact and in scale with surroundings, including medium density and mixed-use development sensitive to the area's heritage character,
- The proximity of the railway and provision of large lots that are appropriate for higher residential population densities,
- Business growth that is based on unique local character. This needs to complement growing competition from larger town and regional centres,
- Sensitive elements of the local topography and existing streetscapes.

1.4 CONTEXT AND SETTING

Objectives

a. To safeguard the heritage and cultural values of the Teralba Heritage Precinct.

b. To ensure that development complements the existing streetscape, local architectural style, decoration and adornments.

c. To ensure that development does not detract from the significance of the dominant cultural and natural elements of the area.

Controls

1. A detailed analysis of the streetscape and surrounding environment must accompany development proposals.

2. Development proposals must incorporate bulk, form, scale and landscaping that is consistent with, and complements the historic development of the Teralba Heritage Precinct.

1.5 SITE COVERAGE

Objectives

a. To ensure the bulk and form of future development reflects the historic development of the Teralba Heritage Precinct.

b. To provide opportunities for the provision of landscaping and/or the enhancement of existing native vegetation.

c. To promote on-site stormwater infiltration by encouraging pervious surfaces and landscaped areas.

Controls

1. The maximum site coverage, including ancillary development, must not exceed 45%, unless it can be demonstrated that the proposal will not have a detrimental impact on the heritage values within the precinct.

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1.1 BACKGROUND

The suburb of Toronto developed as a result of early pastoral activities and then, more significantly, as a holiday and recreation resort. The area subsequently developed as a residential area as improved infrastructure and services were provided.

Areas of Toronto have been identified as requiring specific development solutions to suit the existing character and address local issues.

Note: This Area Plan should be read in conjunction with Lake Macquarie City Council Heritage Guidelines, which provide additional development guidelines for Heritage Precincts.

1.2 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all the land outlined in heavy green edging, as shown within Figure 1 –Toronto Heritage Precinct.

Note: For heritage items or potential heritage sites located within the Heritage Precinct, refer to *Lake Macquarie Local Environmental Plan (LM LEP 2014)* and Lake Macquarie City Council Heritage Guidelines respectively.

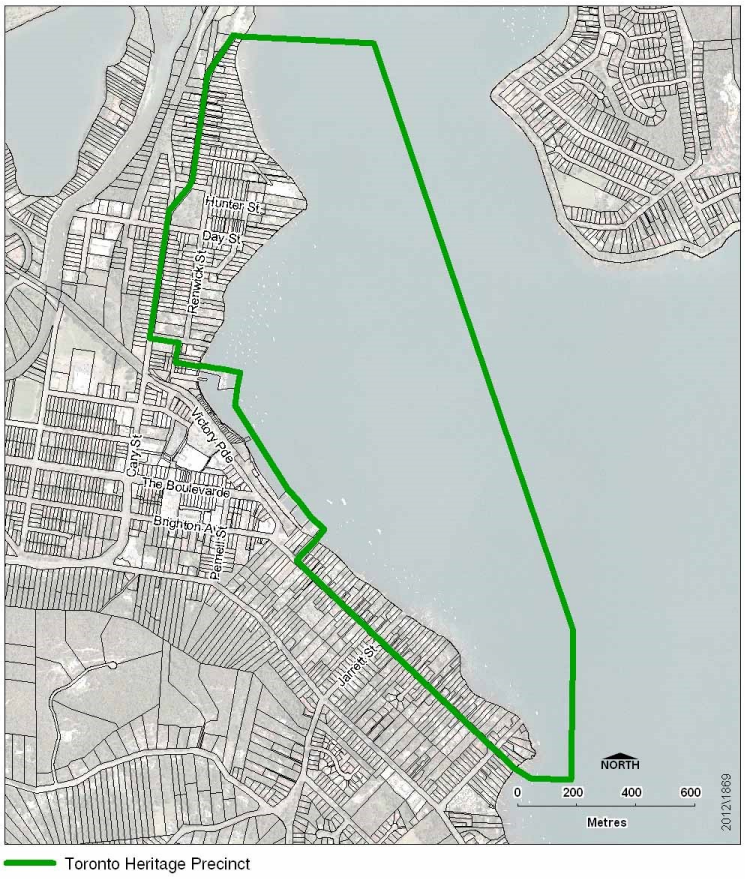

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Figure 1 - Toronto Heritage Precinct

1.3 HISTORY AND EXISTING CHARACTER

The identified Heritage Precinct of Toronto has social and historical significance for its association with the earliest settlement of the area on the shores of Lake Macquarie. The heritage area includes the foreshore and commercial area along Victory Parade, the foreshore residential strip east of Brighton Avenue, and the residential peninsula to the north. Each area has its own notable elements. The unifying theme in all cases is the proximity to the foreshore that has aesthetic and historical significance in these locations.

The Victory Parade foreshore area was the location of the original European settlement, which centred on the hill overlooking the lake. The historic hotel retains its position on the hilltop, providing a continuing reminder of the settlement's origins as a unique Nineteenth Century recreational resort. Below the hill is the former railway station, which provided access to the area and contributed to its development as a holiday destination. Several vernacular lakeside cottages survive on Victory Row, adjacent to the former railway station.

The southern foreshore residential area from Brighton Avenue southwards is no longer recognisable as an historic precinct. However, views from the lake reveal numerous older boatsheds, jetties, fishermen's cottages and several grand period homes. This area is very closely built.

The northern residential part of the precinct features a collection of houses from the late Nineteenth to the late Twentieth Century, indicating gradual development over a long period. Despite variations in style, period and type, the area is unified by its street planting and generously planted private gardens. There is also reasonable consistency in the use of timber and iron for construction. The presence of several good period homes dating from the 1890s to the 1950s provide a significant historical emphasis.

The foreshore of the northern area is generally more open than the southern residential precinct, with fewer structures. Generous private gardens extend down to the lake edge with houses located further up the slope.

Despite the predominance of post-war buildings, the identified heritage precinct features one of the better surviving collections of period buildings in the City of Lake Macquarie. There are many individual buildings of importance within the precinct, several of which are listed as Identified Heritage Items.

Although the settlement has taken on a suburban role, it retains its own distinct physical character and cultural identity. The relationship between the lake and settlement remains a strong theme.

1.4 SPECIFIC ISSUES RELATING TO THIS LOCALITY

Future development in Toronto will need to consider:

- Good urban design of public and private developments to sustain growth.
- The physical boundaries of the locality including bushland, lake and surviving heritage fabric.
- Increased development needing additional infrastructure and services, for example roads and public transport.
- Development that is in scale with surroundings.
- Business growth that is based on local character and an increasing population. This needs to stimulate competition between other district and regional centres.
- Opportunities for medium density residential development that is sensitive to the heritage characteristics of the locality.
- The potential for mixed-use tourism for Lake Macquarie.
- Sensitive elements of the local topography, foreshore and existing streetscapes.

1.5 CONTEXT AND SETTINGS

Objectives

a. To safeguard the heritage and cultural values of the Toronto Heritage Precinct.

b. To ensure that development complements the existing streetscape, local architectural style, decoration and adornments.

c. To ensure that development does not detract from the significance of the dominant cultural and natural elements of the area.

Controls

1. A detailed analysis of the streetscape and surrounding environment must accompany development proposals.

2. Development proposals must incorporate bulk, form, scale and landscaping that is consistent with, and complements the historic development of the Toronto Heritage Precinct.

1.6 SITE COVERAGE

Objectives

a. To ensure the bulk and form of future development reflects the historic development of the Toronto Heritage Precinct.

b. To provide opportunities for the provision of landscaping and/or the enhancement of existing native vegetation.

c. To promote on-site stormwater infiltration by encouraging pervious surfaces and landscaped areas.

Controls

1. The maximum site coverage, including ancillary development must not exceed 40%, unless it can be demonstrated that the proposal will not have a detrimental impact on the heritage values within the precinct.

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1 INTRODUCTION

This Area Plan contains local objectives and controls for the development of the Wangi Power Station Precinct as shown in Figure 2. It aims to provide guidance for development to ensure the vision and principles outlined in the Wangi Power Station Master Plan 2006; and in the Wangi Power Station: Conservation Management Plan by Paul Davies Architects P/L June 2006, are realised.

The Wangi Power Station Precinct has three distinct sub-precincts. First, the Wangi Power Station Building Precinct, zoned to enable adaptive reuse of the building and its immediate surrounds. Second, there is the Residential Subdivision Precinct. The canal, built to support the Power Station Building, separates these two precincts, and leads into Lake Macquarie. Third is the Myuna Colliery Precinct that includes the balance of the land identified in the State Heritage Register.

Figure 1 shows the Wangi power station building. This aerial photograph, taken from above Lake Macquarie, shows the canal that flows into the lake in the foreground. Myuna Colliery can be seen in the background, directly behind the power station building.

Figure 1 - Aerial of the Wangi Power Station

1.1 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all the land outlined in heavy green edging as shown in Figure 2 – Area Plan Boundary for Wangi Power Station Heritage Precinct.

Figure 2 - Area Plan Boundary for the Wangi Power Station Heritage Precinct

1.2 BACKGROUND

Wangi Power Station is a unique building that is aesthetically distinctive in its design and setting. This complex has been a strong visual and social identify of the Wangi Area since its construction commenced in the 1940's. It is associated with leading the evolution of coalfields – sited power stations and power generation in NSW. For these and other reasons, it has heritage significance. Following its decommissioning in 1986 the station building and its surrounds were listed on the State Heritage Register. The property was sold to a private company in 1999 and the land was rezoned to a mixed use and medium density residential zone in 2010.

The proposed adaptive reuse of the Wangi Power Station building and surrounds is a project in an interesting and scenic location. Special controls are provided to protect the character and heritage

significance of the building and to coordinate the future development in a way that also protects the existing town of Wangi and its environment.

Prior to the development of the Wangi Power Station Site, Lake Macquarie Local Environmental Plan 2014 requires an Area Plan be prepared. This is to supplement Lake Macquarie Development Control Plan 2014, and provide guidance for future development in the Wangi Power Station Building and surrounding land.

1.3 STATE HERITAGE SIGNIFICANCE

The State Heritage Register (SHR) of the NSW Office of Environment and Heritage lists the "Wangi Power Station Complex" as an item of local/regional and state heritage significance. The land affected by the SHR listing of the Wangi Power Station Complex, is shown in Figure 2. This land comprises the power station building, the Myuna Colliery and further land bounded partially by Summerhill Drive, Wangi Road and Donnelly Road. The area mapped by the SHR, in part crosses over these roads to the north, south and east respectively. The Wangi Power Station Complex is listed due to its significance to the state for historic, aesthetic, and social importance, as well as reasons relating to research, and its architectural rarity.

The Wangi Power Station Conservation Management Plan (CMP) (2006, Paul Davies P/L; 2000, EJE Architecture) provides further information. The CMP is to guide for any development proposal for this land and for Council and the NSW Office of Environment and Heritage, to consider in the assessment of any proposed development. It affords the greatest level of heritage significance to the area shown as the curtilage shaded in Figure 3 below.

Figure 3 - Wangi Power Station Heritage and Curtilage Zone

1.4 EXEMPTION FOR CERTAIN DEVELOPMENT

Any changes to items listed on the State Heritage Register need to retain the qualities and characteristics that make the heritage place special. Any major works proposed for items on the State Heritage Register need to be assessed and approved by the Heritage Council.

The assessment process can waste the time and resources of both the owner and the Heritage Council if the works are minor and will have minimal impact on the heritage significance of the place. The Minister for Planning has granted exemptions for certain activities that would otherwise require approval under the NSW Heritage Act.

The exemptions that apply to the Wangi Power Station Complex are:

1. **standard exemptions** for all items on the State Heritage Register. Typical activities that are exempted include building maintenance, minor repairs, alterations to certain interiors or areas and change of use; and
2. **site specific exemptions** for a particular heritage item can be approved by the Minister on the recommendation of the Heritage

Section 5 of this Area Plan lists the exemptions. It is important to check whether or not the activity you propose is exempted from referral to the Heritage Council. Before developing firm proposals to change a heritage item, the following actions should be taken:

3. Check the boundaries of the item to which the State Heritage Register listing applies;
4. Check the exemptions, which apply to your heritage item;
5. Read these explanatory notes to ensure that the work you propose is exempted, and check if prior Heritage Council notification and endorsement is required before the works are commenced;
6. If the work is not exempted, apply to the Heritage Council for approval under section 60 of the Heritage Act;
7. Check with the council about any other approvals that may be required;
8. Check with the Heritage Branch if the work you propose involves the disturbance of relics more than 50 years old.

After checking the above, various exemptions for maintenance and cleaning, and repairs are incorporated into this Area Plan to ensure that the Heritage Office does not need to receive referrals for.

2 WANGI POWER STATION COMPLEX - ENVIRONMENT

Located for its proximity to water and coal, Wangi Power Station was the last of the Railway's power stations built, and the last one to close. For a time it was the largest power station in NSW, representing the transition from Railways to Elcom as the predominant power generation authority in NSW. The range of parcels comprising the "Wangi Power Station Complex" is not all in the one ownership. It includes the Myuna Colliery, the Station Building, the canal, and a curtilage extending over the otherwise bounding roads of Donnelly Road, Wangi Road and Summerhill Drive. Figure 4 shows a sketch of the station building by (CMP, Davies 2006).

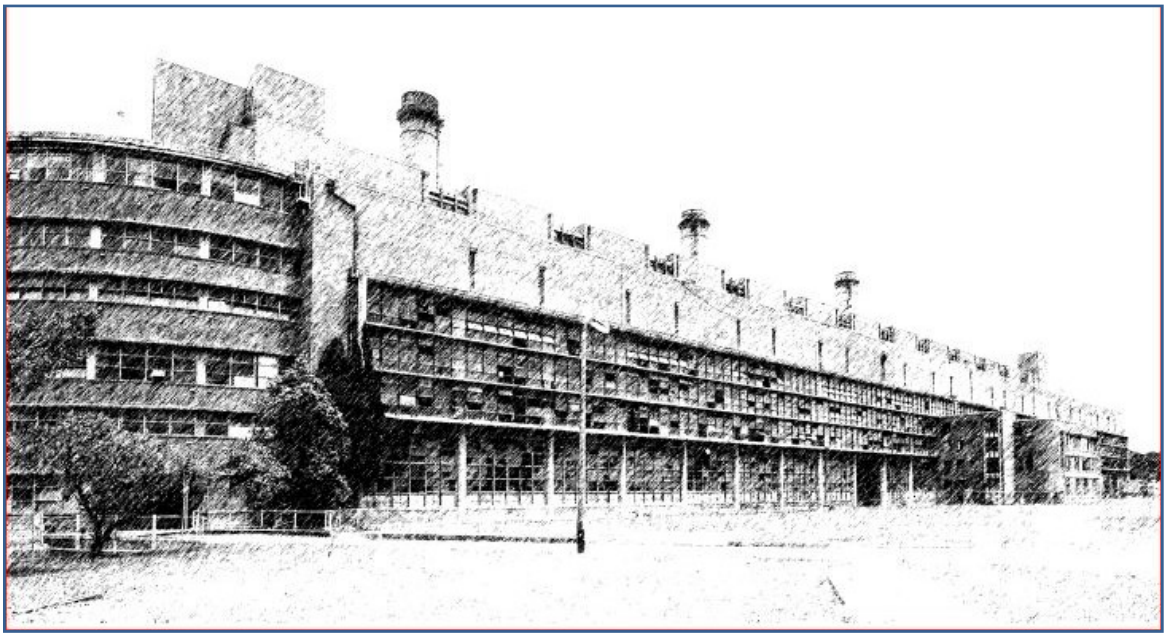

Figure 4 - Sketch of the Wangi Power Station Building

2.1 HISTORY

The Wangi Power station opened on 7 November 1958, operations as a power station ceased in 1986, and the formal decommission was 31 April 1989. The significance of the Complex is due in part to the leading role the Wangi Power Station had in the evolution of coalfield –sited power stations and power generation in New South Wales. A similar level of significance is attributed to it for being the largest power station in NSW for at least the first five years of operation. It also had a pre-eminent part in relieving NSW from drastic power shortages and blackouts in the late 1950's, and playing a major role in restoring power supply to NSW after the total state power shutdown of 10 June 1964 (CMP, by EJE Architecture, Jan 2000).

2.2 TOPOGRAPHY AND VEGETATION

The power station building and associated canal sit at the base of the valley that rises up from Wangi Creek. Irregular slopes rise from this flatter base at the station building forming gradients ranging from approximately 5-10% in the northern and south western portions. The development of the power station saw Wangi Creek reformed from a meandering creek through the swampy valley

base, into a concrete lined channel connected directly to Lake Macquarie. Figure 5 provides the topography of the area (CMP, Davies 2006).

The topography is an important characteristic of the Wangi Power Station Complex and should be acknowledged and incorporated into the design of any future development of the site.

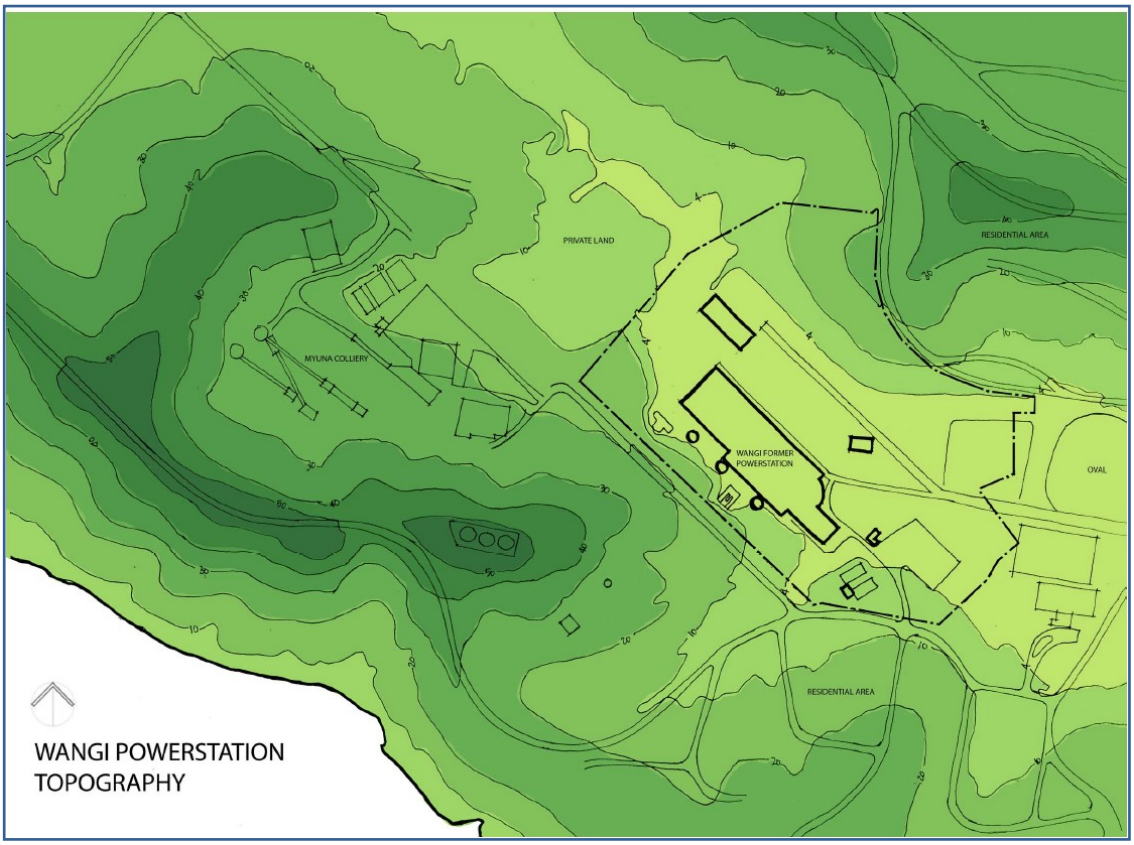

Figure 5 - Topography of the Wangi Power Station Complex

Fragmented native vegetation is evident, much of which includes regrowth. The most heavily vegetated areas are situated on the northeast slopes up to Donnelly Road and to the south, and southwest slopes on both sides of Summerhill Drive.

The ecological assessment of this land has focussed on only part of the Complex, the Wangi Power Station Precinct and the Residential Subdivision Precinct. These two precincts have vegetation in two major canopy associations – Swamp Mahogany in the lower areas along the channel, and Smooth-barked Apple further up the slope. Figure 6 presents the findings of the ecological study (HWR Ecological, 2005). The Swamp Mahogany Forest is an Endangered Ecological Community – Swamp Sclerophyll Forest on Coastal Floodplains.

Native vegetation corridors have also been mapped on the complex. There is the potential to rehabilitate a native vegetation corridor along the boundary between the B4 and SP1 Landuse zones.

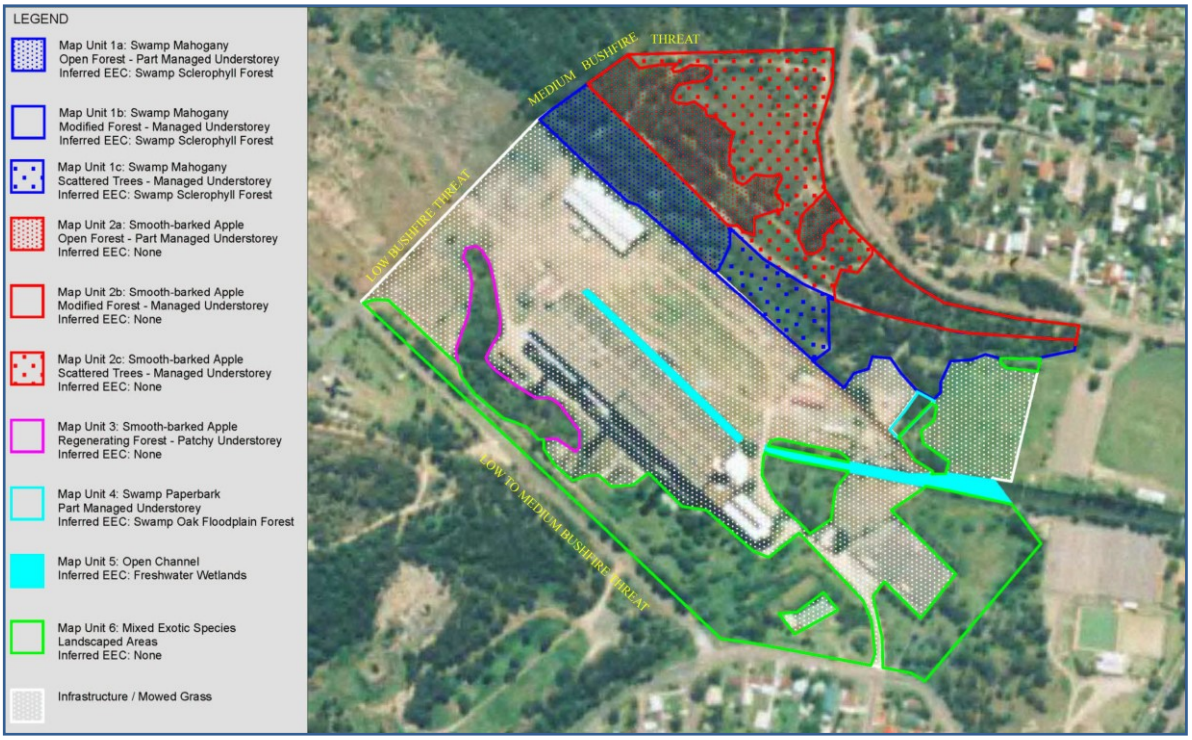

Figure 6 - Vegetation – for Part of the Wangi Power Station Complex

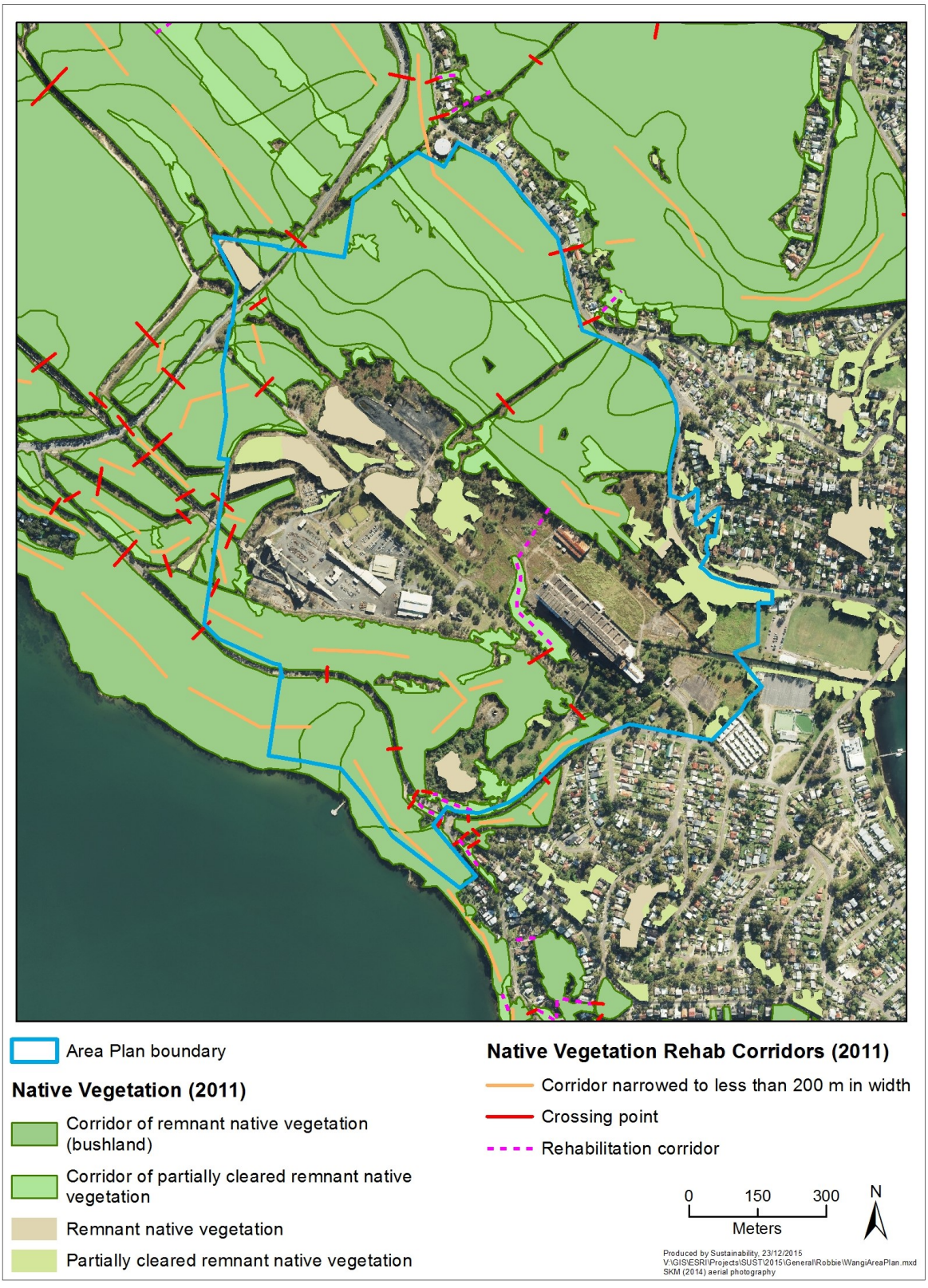

Figure 7 - Native Vegetation Corridors for Wangi Power Station Complex

2.3 FLOODING

Wangi Power Station Complex is close to the shores of Lake Macquarie and the lower lying land is subject to flooding as shown in Figure 8 shows the narrow sliver of the site affected by the 1:100-year flood event, this is the canal.

Lots affected by the 1:100-year flood and which are below the 500 mm freeboard level have development controls applied to manage food hazard. All areas below the 3 m Australian Height Datum (AHD) are subject to Council's Sea Level Rise provisions. Thus, flood controls affect part of the land on either side of the canal, being the lower land zoned for residential development and part of the land zoned for mixed use.

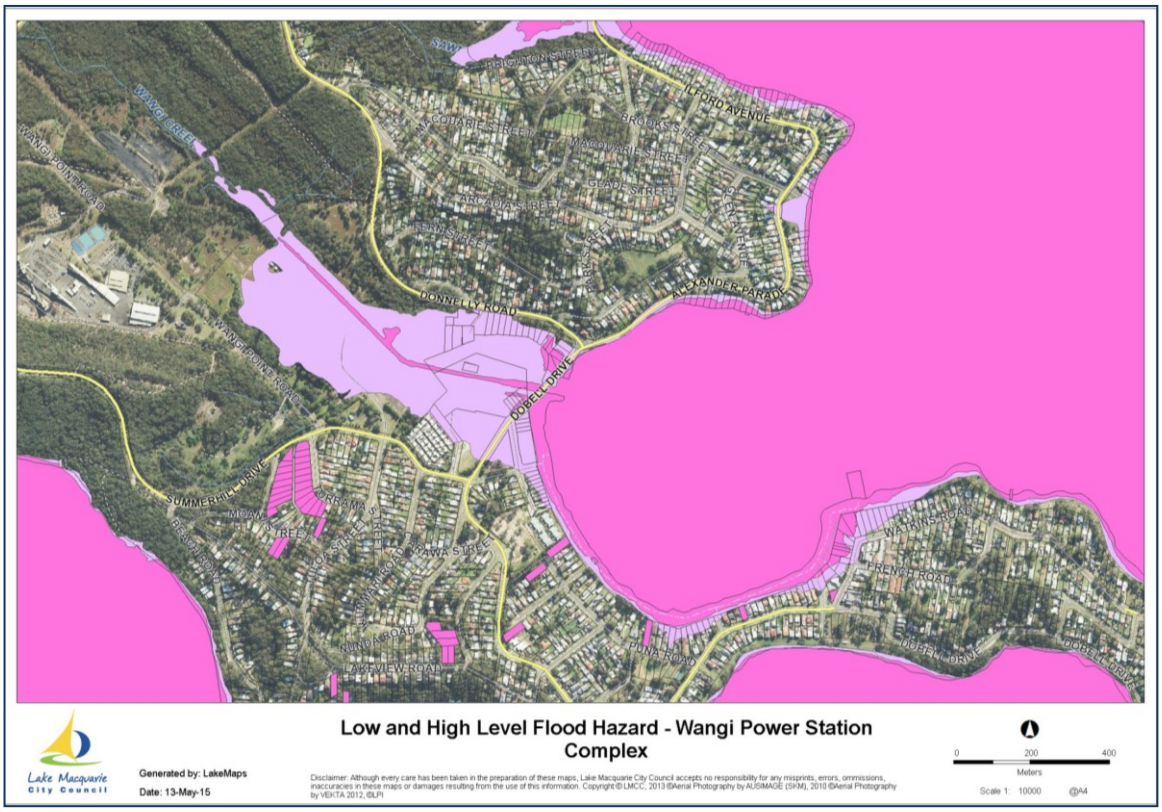

Figure 8 - Wangi Power Station Complex and Flooding

2.4 LAND USE

Lake Macquarie Local Environmental Plan (LEP) 2014 provides the land use zones for this area. Within the Wangi Power Station Complex, are various land use zones as shown in Figure 9.

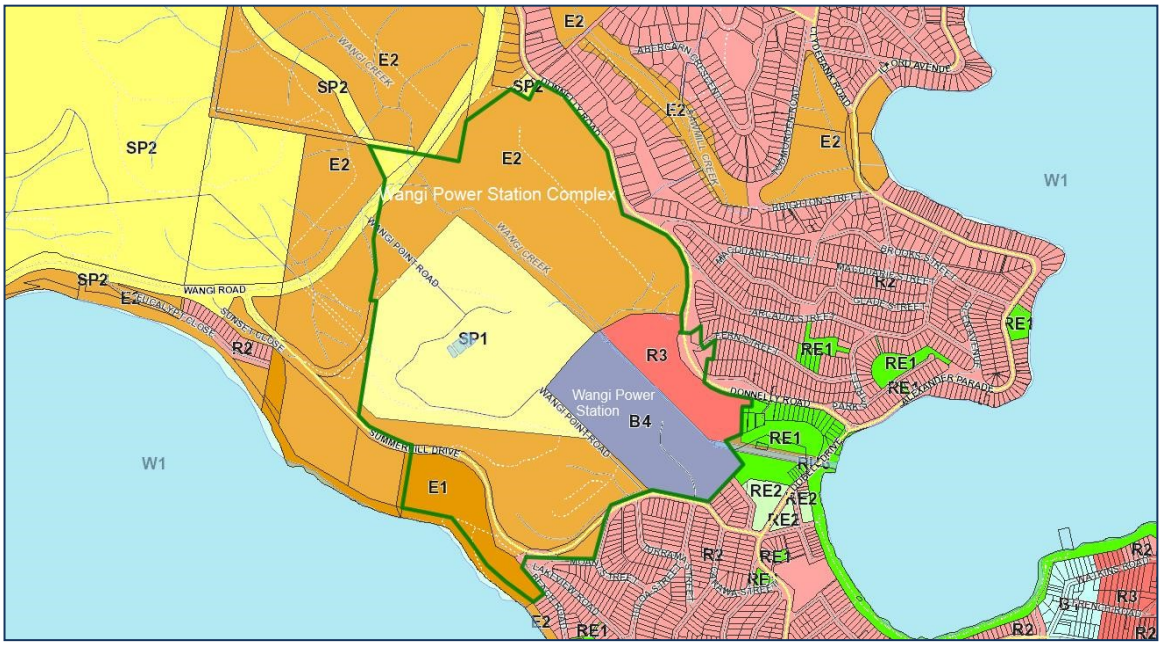

Figure 9 - Wangi Power Station Complex and Land Use Zones

The land use zones include SP1 -Special Uses Zone (Myuna Colliery), B4 - Mixed Uses Zone (power station building and immediate surrounds), R3 – Medium Density Residential (for a future residential subdivision south of Donnelly Road, and E2 Environmental Conservation Zones for the land immediately north and south of the Colliery. The Complex also includes to a lesser extent, areas of land zoned E1 National Parks and Nature Reserves to the south of Summerhill Drive and a very small area zoned R2 - Low Density Residential on Donnelly Road.

2.5 SOCIAL AND ECONOMIC CONTEXT

The closest settlement is the neighbourhood centre of Wangi Wangi, approximately 1.5km away. At full capacity, the Wangi Power Station building could include 5,000 m^2 of new retail space and a mix of residential and commercial development along with entertainment, tourist and recreation facilities.

Development on the R3 medium density residential zoned land could house between 100 – 300 people or more, depending on the mix of development type, dwelling sizes and other uses.

The development of the Wangi Power Station Complex must support the LMCC centres hierarchy. This involves protecting the hierarchy, and recognising and reinforcing the role of the Wangi Wangi neighbourhood centre, and the roles of the town centres of Toronto and Morisset. The scale and mix of uses within the station building must therefore support this hierarchy.

The existing sporting grounds to the east of the Wangi Power Station Complex provides access to the lake and beyond and forms a potentially significant link for recreation opportunities for new residents.

2.6 MOVEMENT SYSTEMS

The integration of the development into the broader environment is important. Movement systems should provide straightforward connections into and between the station building, residential subdivision component, and the existing networks. This includes connecting pathways for vehicles, pedestrians and cycles. These pathways need to ensure the canal is not a deterrent for movement around the site.

2.7 WANGI POWER STATION COMPLEX: DEVELOPMENT STAGING

The Residential Subdivision precinct is zoned to enable a new medium density residential subdivision. LEP 2014 requires the subdivision is to occur after the adaptive reuse of the station building is underway.

2.8 INTERFACE BETWEEN LAND USES

The existing and proposed land uses within and adjoining the Wangi Power Station Complex varies significantly, in type and intensity. It is particularly important to ensure future development is designed to minimise potential conflict between these different land use types.

The adaptive reuse of the station building and the proposed residential subdivision have the potential to introduce many more people that will spend time (living, working and visiting) close to the Myuna Colliery. The nature of the Colliery operations must be considered alongside the likely expectations of new residents, workers and visitors.

Design, through built form and positioning, must minimise the conflict between existing mining operations and adjoining land uses. This means design to minimise, in particular, noise, dust and visual impacts. Similarly, ongoing mining operations need protection. Careful planning and design of future development is required so Colliery operations are not influenced, with the consequence of affecting possible petroleum exploration and resource recovery.

Noise, Visual and Dust Impacts

The colliery operates 24 hours a day, seven days a week. The basic standard for night time residential amenity must be protected to a level of 36 dB(A) (HLA Envirosciences P/L Aug 2001). All parts of the site are exposed to noise from the colliery in excess of this level, with the least affected being any eastern facing residential development within the station building, (which would be somewhat protected by the shielding by the building itself).

The topography and the height of noise sources and receivers exclude the use of acoustic barriers or landscaping as effective ways to address noise from the Colliery. Levels are below the criterion for commercial and industrial development.

The hours and nature of the colliery include activity 24 hours a day and the emission of dust. These characteristics mean that the design of future development must take into account the likely effects on the visual amenity and air quality of that development.

2.9 CONTAMINATION

The historic use of the site for coal fired power generation involved activities that can generate contamination. Figure 10 below shows the location of known contamination on the site based on findings from a series of contamination assessments, including site history reviews, sampling and testing, and analysis. The main and final assessment undertaken was under the supervision of a Third-Party Contamination Auditor.

Reference should be made to the *Remedial Action Plan for the Former Wangi Power Station prepared by RCA Australia July 2005*. In addition, refer to State Environmental Planning Policy 55

– Remediation of Land and to the Managing Land Contamination: Planning Guidelines (Section 4.3) for further details on 'contamination risk' (SEPP 55).

Site remediation of hydrocarbon contaminants present within fill and natural soils is required prior to the redevelopment of the site.

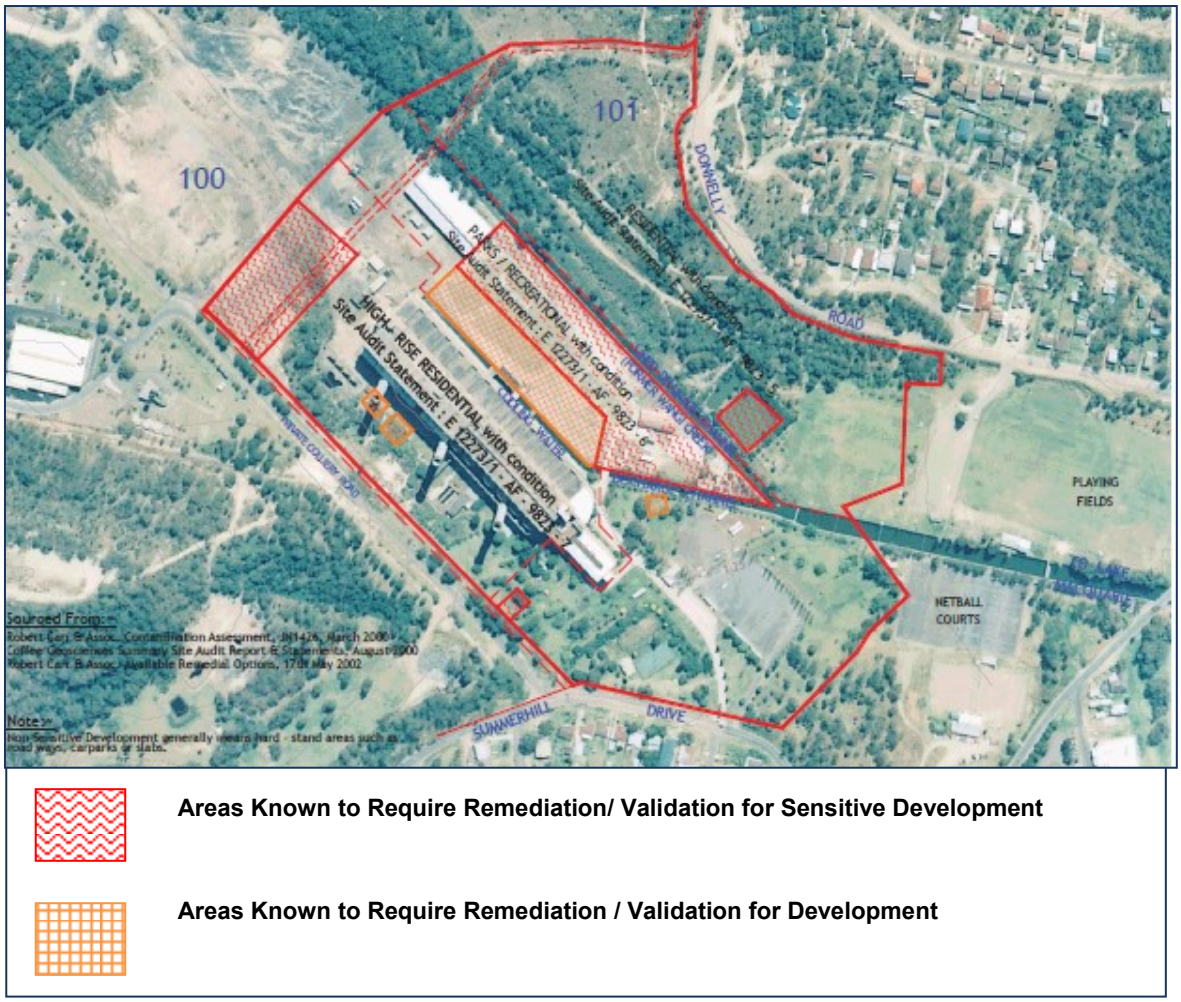

Figure 10 - Areas Known to Require Remediation for Contamination

3 WANGI POWER STATION COMPLEX - PRECINCTS

The Wangi Power Station complex has historic significance at several levels. For that reason, the area is described in three precincts that aim to capture particular characteristics in each. The distinct character of the precincts making up the Wangi Power Station Complex is described below.

3.1 WANGI POWER STATION BUILDING PRECINCT

Existing Character

The Wangi Power Station Building Precinct is characterised by the dominant large-scale power station building, its setting, and in particular its design. The design is an eclectic and unusual for a utilitarian building form, evidently implemented to showcase the move to coal-field based power generation. The building design is important, including its position and presentation to the main road, the landscaped entry court, and the relative importance of the administration facilities.

The overall design of Wangi power station is unattributed to a particular designer. It is likely according to architectural assessment, that the chief railway's electrical engineer of the time developed the station building, as the design is balanced and competent but lacks in its execution. This is evident in the poor integration of systems and the building's administrative parts.

Figure 11 - Wangi Power Station Building Precinct

The extensive use of brickwork on the building is of high significance. It is the only station of the modern era (post second world war) in NSW to use brick cladding over a riveted steel frame (and it is a very late example of the use of riveted steel). (Davies, 2006)

The Wangi Power Station Precinct is shown in Figure 11. It is characterised by the strong visual impact the station building has on the area. It has significant scale and massing and distinctive chimneystacks. In a small and remote community, this is testimonial to the importance of coal mining and power generation in the region and State. Its location is of particular significance, marking the shift from locating power stations at population centres to locating them adjacent to fuel supplies. The building presents a contrast in the otherwise small village character and landscape setting. Aesthetic value is evident in the design and form of the building.

This precinct includes the canal, which runs the length of the eastern side of the building to join Wangi Creek (that bounds the Precinct to the northeast).

There is aesthetic significance in the setting of the building, set deep into the narrow strip of land, where it sits obliquely to the principal view locations. This achieved a minimisation of impact of the large building form in the locality.

Figure 12 - Wangi Power Station Views Analysis

Figure 12 provides a view analysis of the station building, showing that the station building is well screened for a building its size. The narrow view corridor to the east offers the best views of the building and the design of any future development should honour this.

There are filtered glimpses from the north and southeast. The topography and the Colliery's private lease limit views from the south to the northwest are as shown by the large arc (refer to Figure 12). Mature trees screen much of Dobell Drive on the foreshore and Donnelly Road between the site and the residential area. Whilst the building is not always visible, the chimneystacks are another dominant feature of the precinct, and these are visible from many more vantage points.

Desired Future Character

The future desired character of this precinct is a vibrant mix of residential, tourism and commercial development, which service residents and complements the small township of Wangi Wangi. The station building is to retain its significant design features.

Outside the station building, the design, setting and landscaping of new development is to support the unique nature of the station building, its setting and views and addresses any potential impacts on the identified views and design features.

Clear and effective links will connect the Wangi Power Station Precinct to and from the adjoining residential development, and the existing facilities and environment.

Rehabilitation of a native vegetation corridor along the western edge of the precinct will create a link for native fauna to move between existing remnant native vegetation patches to the north west and south west of the site. Such rehabilitation would provide a buffer and visual relief from the adjacent mine site.

3.2 WANGI POWER STATION - RESIDENTIAL SUBDIVISION PRECINCT

Existing Character

The Residential Subdivision Precinct is bounded by the station building and associated canal to the west. The Myuna Colliery is to the north-west of this Precinct and to the east is an area of low density residential housing on Donnelly Road. The canal forms the southwest boundary, dividing this Precinct from the Wangi Power Station Precinct. To the south and southeast is low density residential development, and recreation areas.

The Residential Precinct is characterised by its vegetation, aspect and slope. The land forms a cross slope, that slopes down from Donnelly Road to the canal.

Desired Future Character

The design of future development in the Residential Precinct is to recognise the landscape and surrounds, in particular the interface between the new medium density development form and the three adjoining precincts. It is important to minimise conflict between land uses and to enable integration where appropriate.

Links to and from this Precinct are important and should enable the integration of functions between the adapted power station building, and the new and existing residential development. The density of residential development in this location is specifically reliant upon the facilities and services envisaged within the station building. Figure 13 shows the extent of the Residential Precinct.

Figure 13 - Wangi Power Station – Residential Subdivision Precinct

Residential development should also respect the ecological attributes of the precinct including retention of the higher quality native vegetation such as the Swamp Mahogany Open Forest, existing and rehabilitated native vegetation corridors and identified habitat (including hollow bearing trees). More detailed site based ecological investigations will be required to ascertain how this can be achieved.

3.3 WANGI POWER STATION – COLLIERY PRECINCT

The Wangi Power Station–Colliery Precinct includes the balance of the land identified in the State Heritage Register. The operating Myuna Colliery dominates this precinct, also characterised by its topography, which forms a backdrop to the station building, and reinforces its setting. The Colliery Precinct is shown in Figure 14 below. This area includes the balance of the land listed by the NSW Office of Environment and Heritage, excluding the Power Station and Residential Subdivision Precincts. Proposals for development in the Colliery Precinct must recognise the heritage listing of this land as being of state significance.

Figure 14 - Wangi Power Station– Colliery Precinct

4 ISSUES SPECIFIC TO THE WANGI POWER STATION COMPLEX

The adaptive reuse of the station building and subdivision of part of the site for residential development must consider the site-specific issues identified in this Area Plan.

4.1 SPECIFIC ISSUES RELATING TO THIS LOCALITY

Future development in the Wangi Power Station Complex must address the following:

- Design principles that respond to the iconic nature of the power station building, its unique built form including its scale, mass, position, proximity to the lake, and visual impacts of development on its integrity and on view corridors,
- The characteristics of the Precinct in which it is proposed,
- The sensitive elements of the local topography,
- The conservation and interpretation of the heritage significance of the site and an approved conservation management plan,
- The intended adaptive re-use of the station building, the proportionate mix of uses proposed, and the preservation of the integrity of the Wangi Wangi neighbourhood centre,
- Integration of pedestrian and cycle and vehicle networks into and around the complex,
- The location of significant flora and fauna, vegetation corridors, and revegetation areas,
- Rehabilitation of native vegetation corridor across the site,
- Mitigation measures for potential conflicts with adjoining land uses,
- Identification of future recreation, community and /or social facilities,
- Development staging and sequencing, in particular relating to the residential subdivision,
- Management of waste and demolition material from the past use of the site including land that has been identified as, or is potentially, contaminated, and
- Sustainable stormwater management including water reuse.

5 DEVELOPMENT CONTROLS

In addition to the general controls for development found in LM DCP 2014, the following controls apply to development applications within the Wangi Power Station Complex:

5.1 CONTEXT AND SETTING

Objectives:

a. To protect the views of the station building from the lake and ridgelines.

b. To protect the heritage significance to the state for historic, aesthetic, and social importance, as well as reasons relating to research, and its architectural rarity heritage, of the Wangi Power Station Complex.

c. To ensure development does not detract from the dominant cultural and natural elements of the area and complements the landform and setting of the precinct.

d. To complement and reinforce the form and architectural style of the station building.

e. To integrate the Wangi Power Station Complex with the surrounding environment.

f. To ensure built form defines and contributes to the desired character of each Precinct.

Controls:

1. Development proposals must address impacts on the view corridors shown in Figure 12.

2. Built structures and landscaping works must respect the state heritage significance of the station building and its curtilage, and design to address any impacts on this.

3. Development proposals must incorporate bulk, form, scale and landscaping consistent with, and complementary to the historic station building and Complex whilst recognising and contributing to the desired future character of each of the Precincts that it affects.

4. Development of the land associated with the station building may be required to include a Heritage Assessment and Statement of Heritage Impact, and must outline:

   i. appropriate curtilage for the Wangi Power Station Complex; and

   ii. development and landscaping adjacent to the station building has appropriate setbacks, and building bulk, form, scale and height.

5. Practical and legible connections must be made between the Complex and the existing community.

***Note**: The Wangi Power Station Complex precinct forms a curtilage in the absence of a clearly defined curtilage, endorsed by the NSW Office of Environment and Heritage. Two Conservation Management Plans (CMPs) (2000, EJE; 2006, Davies) have been submitted in support of future development of this Complex. At the time this Area Plan was prepared, these were not endorsed by the NSW Office of Environment and Heritage.*

5.2 CONTAMINATION

Objectives

a. To ensure contaminated land is identified within the Wangi Power Station Complex.

b. To ensure contaminated land within in the Wangi Power Station Complex is remediated to be suitable for the purpose of the proposed development and prior to the commencement of that use.

c. To ensure no exposure to contaminated material occurs with the use of the site.

***Note:** Contamination risk includes contaminating substances moving from the areas identified and placed on the site as fill. Refer to Section 4.3 of the Managing Land Contamination: Planning Guidelines SEPP 55 –*

Remediation of Land for further details on 'contamination risk'. Refer also to the Remedial Action Plan by RCA Australia July 2005.

Controls

1 Where a Detailed Site Investigation Report identifies the need for remediation, a Remedial Action Plan must be prepared and submitted with the application.

2 A Phase 2 Detailed Contamination Site Assessment (as outlined in State Environmental Planning Policy 55) must be provided for an application to develop or subdivide land within areas identified as potential contamination sites Figure 8 – Areas Known to Require Remediation for Contamination.

3 Further investigation must be undertaken to determine the extent of extraction and treatment to remediate the specific areas identified with significant hydrocarbon contamination, (see Figure 8) which may include:

i Removing ash fill found present in areas of the site prior to approval for uses such as commercial., retail, residential and recreational, tourism uses, or the like,

ii Remediation by excavation and treatment of land affected by hydrocarbon contamination by either land farming, or offsite disposal,

iii Capping areas of low level hydrocarbon contaminants used for open space, with 0.5m clean soil to reduce exposure (not required in areas of permanent paving).

5.3 SUBDIVISION AND MOVEMENT

Objectives

a. To stage the development of the Wangi Power Station Complex, including subdivision, in a logical and well coordinated manner.

b. To integrate the development of the Complex with the existing subdivision pattern of adjoining lands.

c. To create a transport network that provides access, mobility and connectivity within the site and to adjoining areas for pedestrians, bicycles and vehicles.

d. To encourage safe and effective pedestrian and cycle networks.

e. To ensure services are available to the Wangi Power Station Complex when developed.

Controls

1. The medium density residential development component of the Wangi Power Station Precinct must occur after the Wangi Power Station Building adaptive reuse is approved and complete.

2. The movement network for pedestrians, cycles and vehicles should be designed to:

i. provide a subdivision pattern consistent with the existing grid subdivision pattern of residential lots and with good solar access;

ii. integrate and connect well with existing local roads to Council's satisfaction;

iii. provide a low speed environment (50 km/h speed zoning); and

iv. encourage walkable, permeable movement networks with short distances to intersections and through connections.

3. Pedestrian and cycleway networks must connect to the sportsgrounds east of the Complex and to the broader Lake Macquarie bicycle and footpath network.

4. Safe pedestrian and cyclist crossings should be provided across Donnelly Road and Summerhill Drive.
5. The implications of the proposed road network on the efficiency and safety of traffic movement into and around the Complex must be investigated and mitigation measures included in development applications proposing changes to the existing road network.

Note: *To limit adverse impacts on the existing local road network, traffic management measures may be required to limit traffic volumes entering existing local roads during peak periods.*

5.4 SOCIAL AND ECONOMIC IMPACTS

Objectives

a. To support the Lake Macquarie City Council centres hierarchy.

b. To ensure protection and recognition of the role of the Wangi Wangi neighbourhood centre and the roles of the town centres of Toronto and Morisset.

c. To promote mixed use development and quality urban design, which safeguards the amenity of the residential uses whilst integrating the other permissible uses including commercial, retail, recreational, service and tourism facilities.

Controls

1. The gross floor area of all buildings to be used for retail development (that is retail premises, shops and shop top housing) must not exceed 5,000 m^2 or be disproportionally larger than the Wangi Wangi neighbourhood centre.
2. The balance of the non – residential component of the station building i.e. excluding the retail mentioned in control 1 above, is to be a combination of uses permitted on the land other than retail development.
3. The scale and mix of uses within the station building must support the town centres hierarchy.
4. Appropriate services for the anticipated population must be designed and incorporated into the development of this complex and recognising the remote location.
5. The design and placing of mixed uses in the Power Station Precinct must be logical and provide a variety of interests and opportunities for residents and visitors whilst protecting amenity and minimising conflict.

5.5 LAND USE INTERACTIONS

Objectives

a. To minimise land use conflicts between the various different land uses within and adjoining the Wangi Power Station Complex.

b. To protect the ongoing operations of the Myuna Colliery.

c. To ensure residential and public amenity is designed into any future development.

Controls

1. All residential development must ensure night time residential amenity is protected to a level of 36 dB(A) as a standard base level. Internal noise levels may be attained through:

    i. Appropriate detailed design of residential apartments, e.g. thicker glass, smaller windows or apartment designs do not expose sleeping areas to the Colliery;

    ii. The inclusion of high mass building materials, sound insulation including thicker glazing and appropriate arrangement of rooms and building layout;

iii. Acoustic amenity on the western face of the building could be achieved by using thicker glass and /or smaller windows, or sleeping areas design/location.

iv. Any development incorporates all practical mitigation measures for the management of noise, visual, dust and odour impacts from the adjoining Myuna Colliery.

v. Any proposed residential development will not, or is unlikely to be, adversely affected by noise, visual or odour impacts from the adjoining mining and petroleum production operation

2. Residential development on Donnelly Road should be designed sensitively to recognise the low density residential development across the road, through various design methods such as setbacks, stepping building facades and landscaping.

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PART 1 – WEST WALLSEND / HOLMESVILLE HERITAGE AREA PLAN

1.1 INTRODUCTION

This Area Plan contains local objectives and controls for development in West Wallsend and Holmesville.

The locality of West Wallsend and Holmesville includes a new sector known as the Appletree Grove Estate, which adjoins the existing residential areas of West Wallsend and Holmesville. This sector has its own specific development controls.

The parts of this Area Plan are outlined below:

Part 1 – West Wallsend & Holmesville Heritage Area Plan - General

This section contains information on the background and extent of the Area Plan for West Wallsend and Holmesville.

Part 2 – West Wallsend & Holmesville Heritage Area Plan – Specific

This section contains specific provisions for West Wallsend and Holmesville and the protection of heritage character.

Note: Part 2 of the Area Plan should be read in conjunction with Lake Macquarie City Council Heritage Guidelines, which provide additional development guidelines.

Part 3 – Appletree Grove Estate

This section contains development controls that apply specifically to the Appletree Grove Estate. In the event of an inconsistency between Part 2 and 3 of this Area Plan, Part 3 will prevail for development located within the Appletree Grove Estate.

1.2 BACKGROUND

The suburbs of West Wallsend and Holmesville developed as a result of coal resources. Although coal mining ceased with the closure of the coalmine in 1923, the towns have continued to develop as a residential area in a semi-rural and environmental setting.

The West Wallsend and Holmesville areas, including the Appletree Grove Estate, have been identified as requiring specific development solutions to suit the existing local character and address local issues.

1.3 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all the land outlined in green edging, as shown within Figure 1 – West Wallsend and Holmesville Area Plan Boundary. The Appletree Grove Estate precinct is shown in Figure 2 – Appletree Grove Estate.

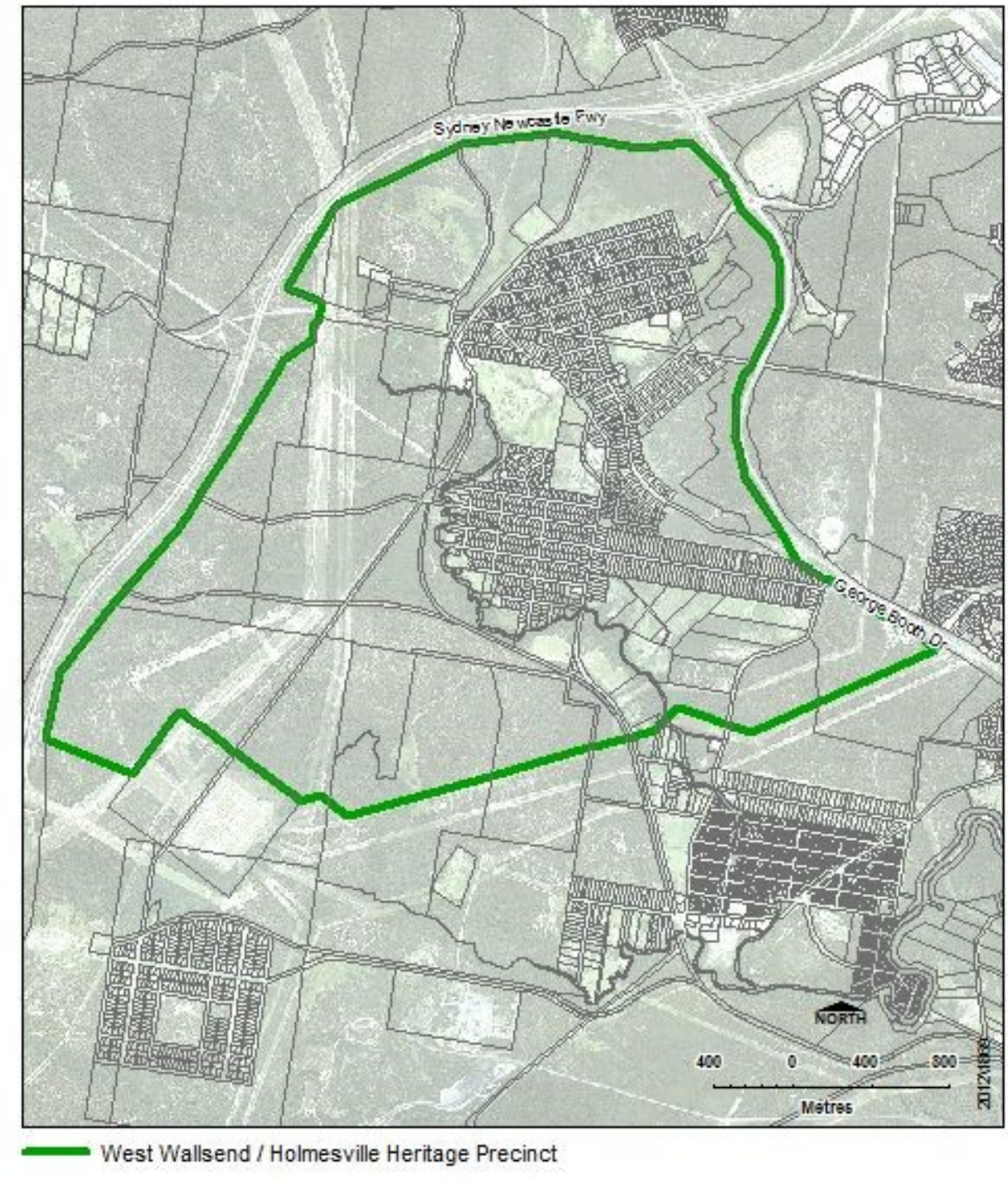

Figure 1 - **West Wallsend & Holmesville Area Plan Boundary**

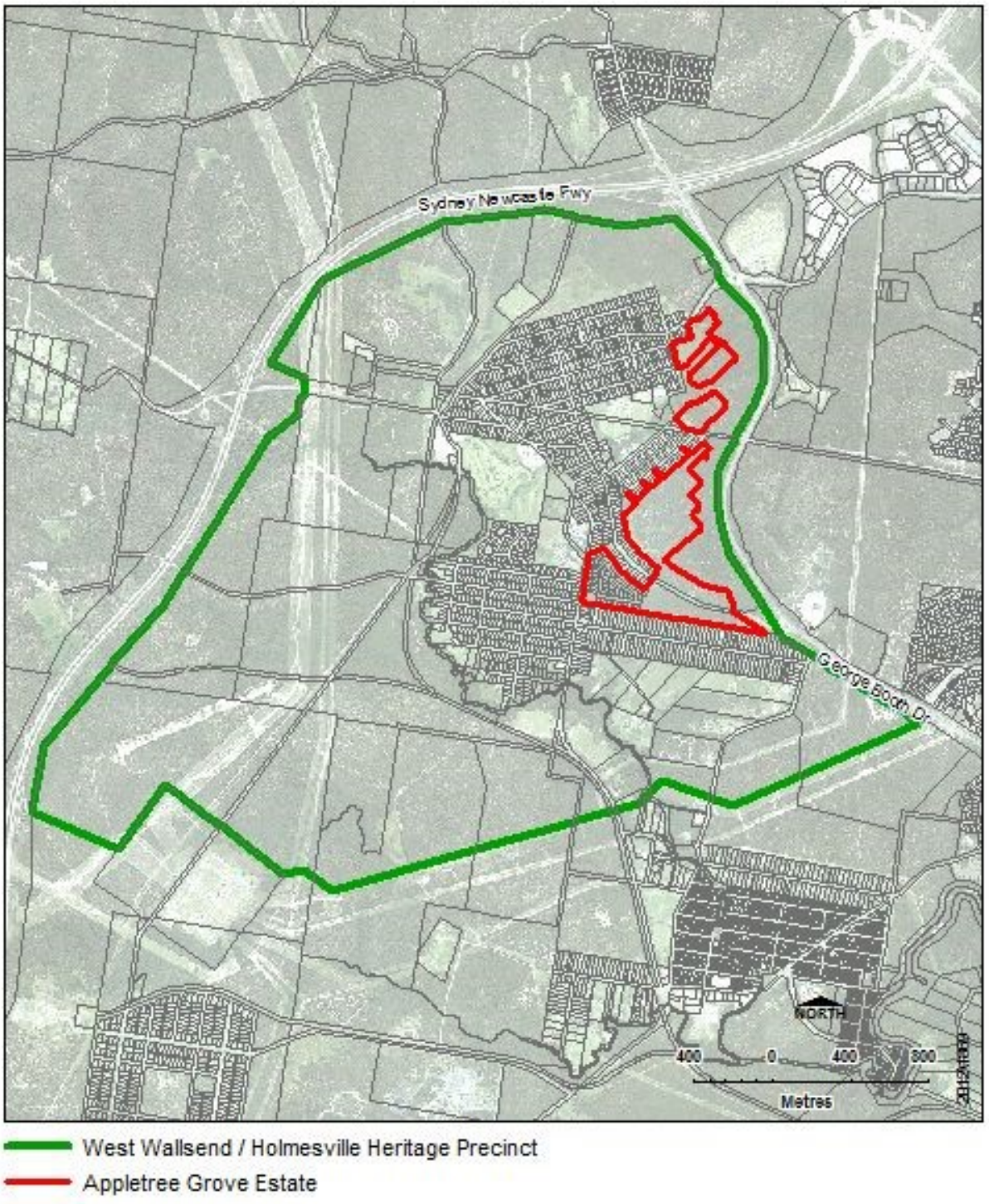

Figure 2 - **Appletree Grove Estate**

PART 2 – WEST WALLSEND / HOLMESVILLE HERITAGE AREA PLAN – SPECIFIC

2.1 HISTORY AND EXISTING CHARACTER

West Wallsend is a good example of a Nineteenth Century mining town. It was planned and developed by the mining company, West Wallsend Coal Company, to house its own workers. It was large enough to support many commercial and community services, and was a centre for smaller villages in the district. It retains its vitality as a town, and its role as a district centre, despite the colliery closing in 1923.

Holmesville is an extension of West Wallsend, created by the private subdivision of land owned by Joseph Holmes. It owes its existence to the same mining activity, but was not a direct creation of the same mining company.

West Wallsend and Holmesville are representative of the establishment and growth of towns, population and commerce in the Hunter Region. They are typical of those settlements closely linked to the fortunes of the coal mining industry. Although some modern and unsympathetic development has occurred, West Wallsend/Holmesville is regarded as the best preserved of all the early settlements in Lake Macquarie City.

West Wallsend's simple steep-roofed miners' cottages of symmetrical Georgian design with picket fence and grand main street buildings are a continuing reminder of the town's origins and early prosperity. Holmesville also retains many older cottages and a few individual buildings of importance, such as the town's impressive hotel. The areas include several good examples of late Nineteenth Century and early Twentieth Century dwellings, as well as examples from the Inter-War period. There are also numerous examples of more vernacular building types.

West Wallsend has a basic grid street pattern, with the main street following a ridge for the majority of its length. The town's built form is visible from a number of external vantage points, particularly the elevated slopes to the east. The town enjoys a magnificent setting, with views to the mountains from almost every part. The northern approach is particularly notable, descending from a high point with a clear transition from rural to urban. Both commercial and residential buildings within the town form good streetscapes. West Wallsend's main street has heritage interest in its own right. Being a prosperous early settlement in Lake Macquarie, the town retains the City's best examples of original grand late Nineteenth and early Twentieth Century commercial and community buildings.

Holmesville has more of a free-form street structure, though based on a modified grid. The topography is flatter, but the town also enjoys views to the mountains in the west.

2.2 SPECIFIC ISSUES RELATING TO THIS LOCALITY

Future development in the West Wallsend/Holmesville Heritage Precinct will need to consider:

- The strong sense of social identity, resulting from the area's history.
- The physical boundaries of the locality including the semi-rural bushland setting and separation from expanding suburban areas.
- Development that is compact and in scale with surroundings, including medium density development around West Wallsend and Holmesville, that is sensitive to the heritage characteristics of the locality.
- Business growth that will be based on unique local character and complements growing competition from larger district and regional centres.
- That business growth will be based on the area's strategic location, including proximity to major road transport links to Sydney and the Lower Hunter and North Coast Centres.
- The potential to create an industrial heritage precinct for Lake Macquarie.

- Sensitive elements of the local topography and existing streetscapes.

2.3 CONTEXT AND SETTING

Objectives

a. To safeguard the heritage and cultural values of the West Wallsend and Holmesville Heritage Precincts.

b. To ensure that development complements the existing streetscape, local architectural style, decoration and adornments.

c. To ensure that development does not detract from the significance of the dominant cultural and natural elements of the area.

Controls

1. A detailed analysis of the streetscape and surrounding environment must accompany development proposals.

2. Development proposals must incorporate bulk, form, scale and landscaping that is consistent with, and complements the historic development of the West Wallsend and Holmesville Heritage Precinct.

2.4 SITE COVERAGE

Objectives

a. To ensure the bulk and form of future development reflects the historic development of the West Wallsend and Holmesville Heritage Precinct.

b. To provide opportunities for the provision of landscaping and/or the enhancement of existing native vegetation.

c. To promote on-site stormwater infiltration by encouraging pervious surfaces and landscaped areas.

Controls

1. The maximum site coverage, including ancillary development, must not exceed 45%, unless it can be demonstrated that the proposal will not have a detrimental impact on the heritage values within the precinct.

PART 3 – APPLETREE GROVE ESTATE

3.1 INTRODUCTION

This section contains local objectives and controls for development in Appletree Grove Estate as shown in Figure 3 (areas shaded pink).

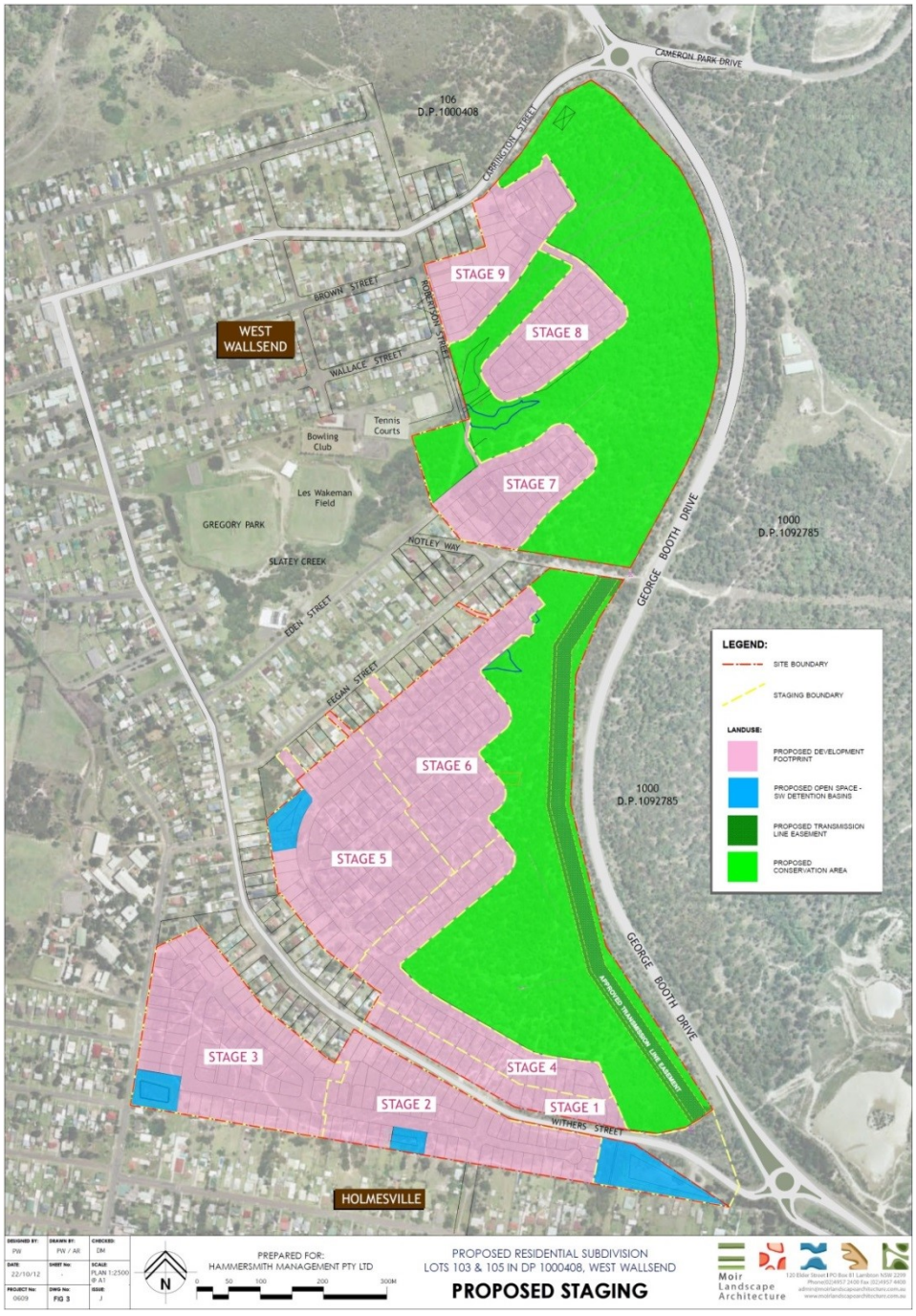

Figure 3 - **Appletree Grove Estate**

3.2 BACKGROUND

The Hunter and Central Coast Joint Regional Planning Panel determined the approval of the subdivision of the Appletree Grove Estate for 375 allotments in July 2012. Heritage and Urban Design Guidelines were prepared specifically for the estate to ensure development is sympathetic to the heritage character of West Wallsend and Holmesville. This section of the Area Plan aims to ensure the objectives and intent of the Heritage and Urban Design Guidelines for the estate are achieved.

3.3 CHARACTER STATEMENT

West Wallsend and Holmesville showcase an eclectic mix of architecture and building types with variable character elements. This character statement focuses on the best elements observed which are pivotal to preserve and enhance.

The area is characterised by undulations to the terrain with the historic West Wallsend Village Centre positioned on the most prominent hill-top location. The sloping streets capture views of both the local bushland hillsides and the distant mountains, with buildings and landscapes integrated with the terrain.

Continuity and discipline within streets is achieved by way of raised kerbs; on-street parking; and consistent street tree planting patterns and species. Key elements that contribute to the streetscape character of West Wallsend / Holmesville heritage precinct include setbacks, fences, verandahs and roofs.

Buildings are positioned closer to the street, which enables buildings to address the street and provide 'eyes on the streets' for safety. There is generous separation between buildings, particularly as a result of the garage being detached and located to the rear of the lot.

Front fences are common and are always low and relatively transparent. The best examples are constructed of timber and with integrated landscaping such as hedges and shrubs at the base of the fence. Poorer examples include chain wire.

Front verandahs are very common, built as lightweight attachments to the main building. The roofline of verandahs is consistently lower than the main roofline. Verandahs commonly extend across the majority of the building width and are elevated off the ground, typically with lightweight posts.

3.4 BUILDING DESIGN

The purpose of this section of the Area Plan is to ensure that new development respects and complements the natural and built character of the West Wallsend / Holmesville Heritage Precinct.

This is achieved by providing:

a. An understanding of the heritage character that is valued by the community;

b. Guidance about how new buildings can be developed to complement and continue this character;

c. A base line design quality for development;

d. A basis for creating a memorable place that is in harmony with the heritage character of the precinct.

3.5 DEVELOPMENT CONTROLS

3.5.1 BUILDING ORIENTATION

Objectives

a. To maximise solar access to private open space and habitable rooms, and to minimise overshadowing.

Controls

1. Siting of dwellings is to be generally consistent with the principles illustrated in Figure 4. Alternative dwelling siting may be considered where other amenities such as views and outlook over open space are available, and providing appropriate solar access and overshadowing outcomes can be achieved.

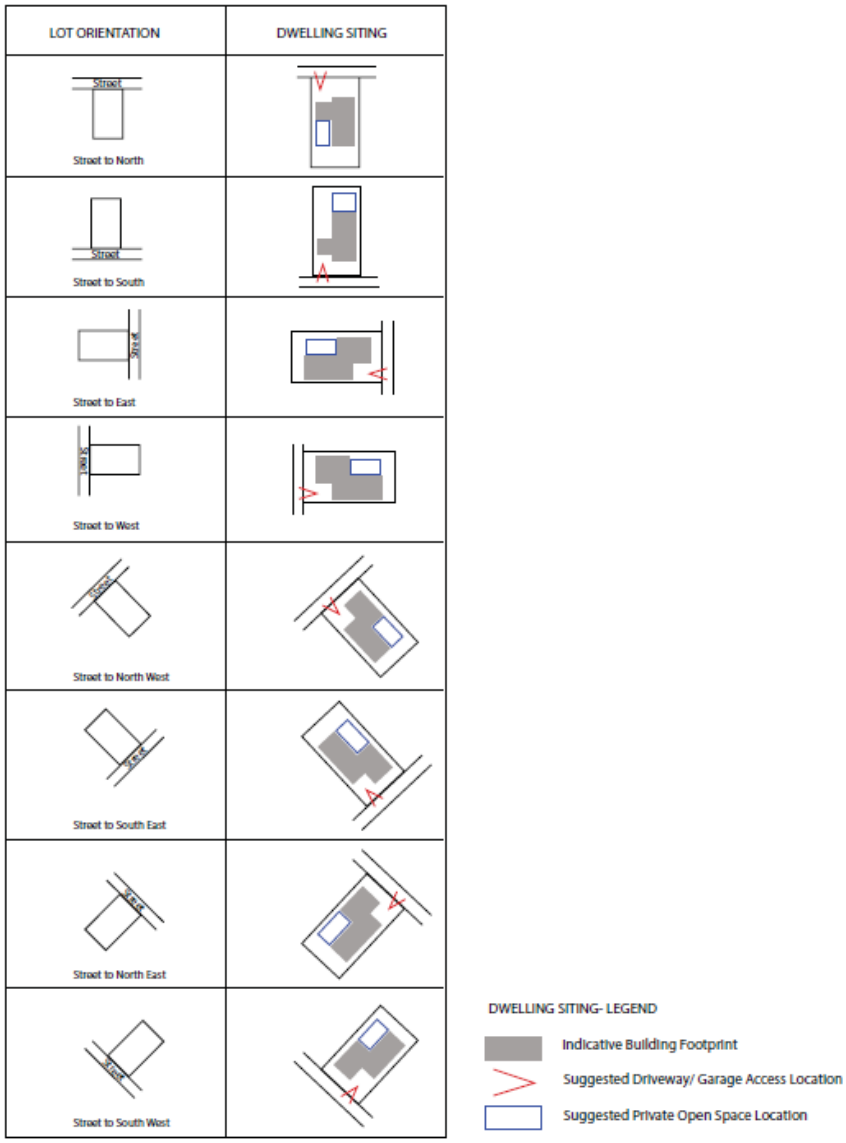

Figure 4 - **Dwelling Siting Diagram**

3.5.2 SITE COVERAGE

Objectives

a. To provide opportunities for the provision of landscaping and retention of existing native vegetation.

b. To promote on-site stormwater infiltration by encouraging pervious surfaces and landscaped areas.

Controls

1. The maximum site coverage, including ancillary development, must not exceed 50%.

3.5.3 RESPONSE TO TOPOGRAPHY

Objectives

a. To encourage the use of building designs that respond appropriately to the site topography.

b. To maintain visual amenity of the area by minimising cut and fill and the dominance of retaining walls on the streetscape and common boundaries.

c. To maintain visual amenity of the streetscape by reducing the bulk of development on steeply sloping sites by allowing additional cut at the rear.

Controls

1. Battered soil slopes with dense plantings must be used to accommodate level changes in preference to engineered retaining walls.
2. Excavation and fill on building sites must be limited to a maximum of 1 metre from natural ground level. Greater depth may be considered within the building envelope if it is suitably retained and/or stabilised and is not visible from the street.
3. Retaining walls must not exceed 1 metre in height.
4. Where terraced walls are proposed, the distance between each step must be at least 1 metre in order to provide adequate landscape areas and deep soil planting.
5. The integration of retaining walls into dwelling design and construction is encouraged to minimise visual dominance of retaining walls that are independent of the dwelling, and to minimise site earthworks and retaining at boundaries. (See Figure 5.)
6. Where the above requirements cannot be achieved, alternative construction methods should be considered including, but not limited to the following:
    i. Split-level housing,
    ii. Pole home construction, and/ or
    iii. Tiered benching of the lot.
7. On steeply sloping lots, cut of more than 1m may only be considered in the following circumstance:
    i. Excavation of more than 1m in depth is located at the rear of the site, and
    ii. The required front building setback and driveway grade of not more than 20% (1:5) cannot be achieved without excavating more than 1m in depth, and
    iii. Excavation of more than 1m in depth would result in a better visual outcome on the streetscape, for example, additional excavation at the rear of the lots will result in the dwelling being less visually prominent on the streetscape.

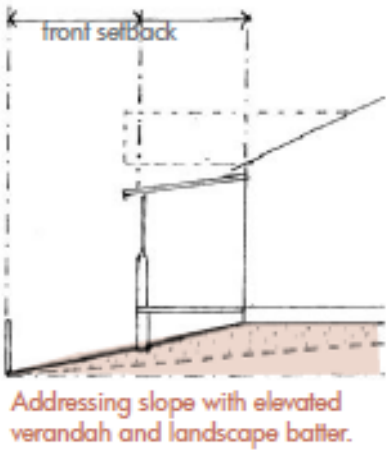

Figure 5 - **Options to address slope**

3.5.4 FRONT SETBACKS

Objectives

a. To ensure that development complements the existing setback pattern in the street.

Controls

1. The front building setback must be at least 5 metres (excluding battle-axe lots).
2. For battle-axe lots, front setback must be determined with regard to amenity and privacy.
3. An articulation zone must be provided within the 2 metres forward of the front setback at ground level. At least 50% of the width of the building façade (not including garage) must project into the articulation zone from the main building volume as a single storey gable roof structure, as shown in Figure 6.

Note: Refer to section 3.5.7 for further controls on ground floor verandahs within the articulation zone.

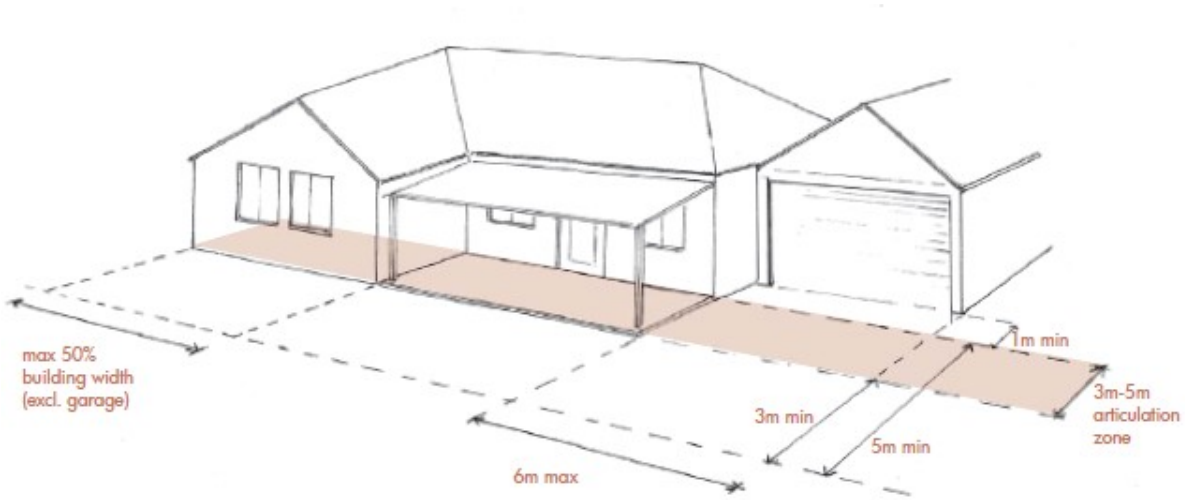

Figure 6 - **Front Setback**

3.5.5 SIDE AND REAR SETBACKS

Objectives

a. To provide a visual separation between buildings that is consistent with the existing West Wallsend settlement.

b. To provide adequate separation between buildings to ensure there is a reasonable level of privacy, solar access and natural ventilation.

c. To provide opportunities for the planting of vegetation.

Controls

1. Side setbacks, illustrated in Figure 7, must be as follows:
   i. Single storey buildings: one side at least 1.05 metres and one side at least 2 metres.
   ii. Two storey buildings: one side at least 1.05 metres for the ground floor and 3 metres for the first floor, and the other side at least 3 metres for the ground and first floor.
2. Rear setbacks must be at least 4 metres.

Note: A rear setback of 5m is required for certain lots. Refer to sections 3.5.13 and 3.5.14 for further details.

3.5.6 HEIGHT AND SCALE

Objectives

a. To ensure new dwellings are of a size and scale which is sympathetic to the character of the existing West Wallsend settlement.

Controls

1. Single storey buildings must not exceed 6 metres in height.
2. Two storey buildings must not exceed 8.5 metres in height.

Note: The building height is measured from the existing ground level to the highest point of the building, excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.

Figure 7 - **Side and Rear Setbacks and Height**

3.5.7 GARAGES

Objectives

a. To avoid the visual dominance of garages and minimise their impact on the streetscape

Controls

1. A garage must be set back:
   i. At least 6 metres from the front boundary; and
   ii. At least 1 metre behind the principal building façade.
2. Garages may be attached or detached from the dwelling and be no more than 6 metres wide.
3. Garages on corner lots should be located at the side of the dwelling away from the corner.

3.5.8 VERANDAHS

Objectives

a. To ensure that new dwellings are consistent with the character and streetscape of the existing West Wallsend and Holmesville settlements.

Controls

1. All houses must incorporate a verandah on the ground floor for at least 50% of the width of building facade (not including garage).
2. Balconies on upper floors are also permitted, however these do not replace the requirement for a ground floor verandah.
3. The verandah must be an attachment to the principal building.
4. The verandah roof must sit below the eaves of the principal roof and have a lesser pitch than the principal roof (as illustrated in Figures 8 and 9).
5. Verandahs must be at least 2 metres deep.

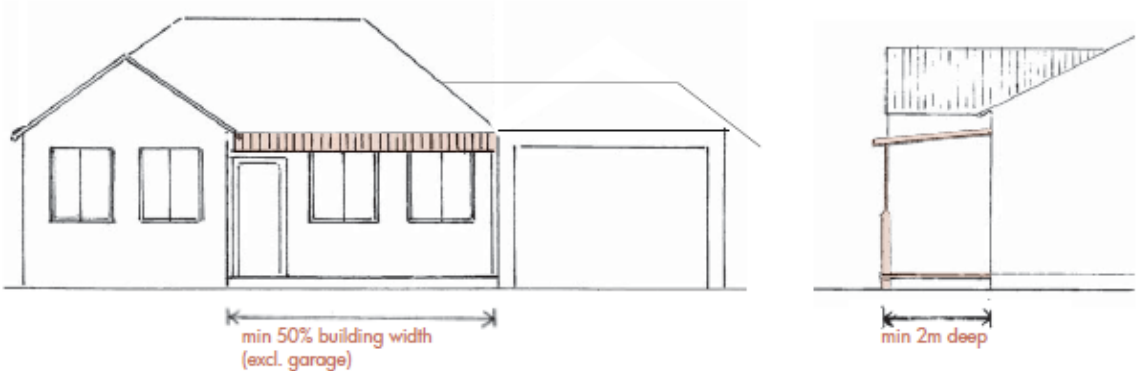

Figure 8 - **Verandah details**

Figure 9 - **Verandah option**

3.5.9 FENCING

Objectives

a. To require new dwellings to have a front boundary fence.

b. To ensure fencing is sympathetic to the character of the area.

Controls

1. All houses must incorporate a fence on the front boundary between 0.7 and 1.2 m in height.
2. The fence is to be a vertical-picket style, constructed in timber or powder-coated aluminium, be light or neutral in colour, and must be between 30% and 50% transparent (see example in Figure 10). Note that pool-style fencing is not compatible with this control.
3. Any side boundary fencing that extends forward of the garage setback line must be consistent with the height and style of the front fence

Figure 10 - **Compliant Fencing**

3.5.10 MATERIALS AND COLOURS

Objectives

a. To ensure development contains materials and colours that are sympathetic to the heritage character of West Wallsend and Holmesville.

Controls

1. External colours and materials must be in natural and earthy colours and muted in tone.
2. Roofs must be constructed using corrugated metal profile or low profile tile in a neutral and non-reflective colour.
3. A colour schedule must be included with all development applications demonstrating compliance with the above controls. (Examples of colours and materials found in West Wallsend are shown in Figure 11)

Figure 11 - **Colours and Materials found in West Wallsend**

3.5.11 ROOFS

Objectives

a. To ensure that dwelling roof design is consistent with roofs within the existing West Wallsend settlement.

Controls

1. Roofs for the principal building and garage must be hipped or gabled with a minimum roof pitch of 20 degrees, as depicted in Figures 12 and 13.
2. All roofs must include eaves that extend a minimum of 600mm from all exterior walls. The eaves may project into the setback zone.
3. Single-storey dwellings must have a minimum floor to ceiling height of 2.7m to increase the prominence of the roof, particularly as a separate element to the verandah attachment.
4. Roof height, measured vertically from eaves to the highest ridge, must not exceed 3 metres

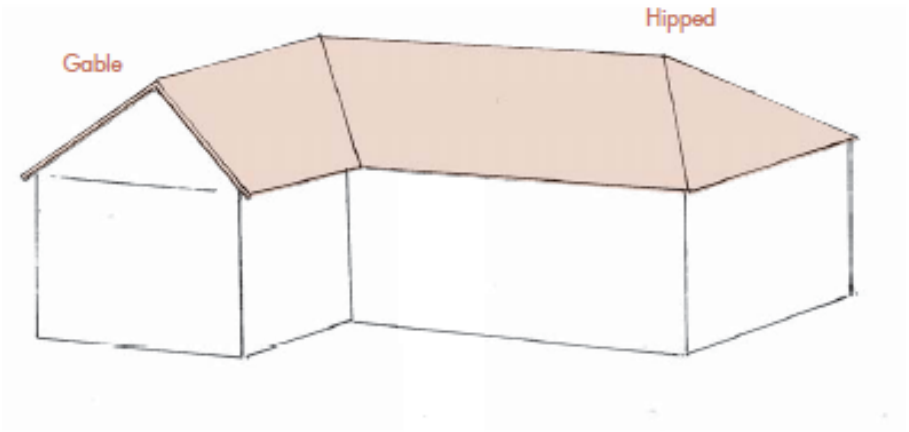

Figure 12 - **Roof Details**

Figure 13 - **Compliant Roof**

3.5.12 LANDSCAPING

Objectives

a. To lessen the visual impact of development on the landscape character.

Controls

1. At least one 45-litre canopy tree (minimum 7 metres tall and 5 metres wide at maturity) must be planted on each dwelling house lot prior to the issuing of the Occupation Certificate.
2. Soft landscaping incorporating shrub vegetation at least 2 metres in height at maturity must be planted within the front and largest side setback of each dwelling house lot.

3.5.13 LOTS BACKING ONTO WITHERS STREET

The following controls apply to lots identified in Figure 14.

Figure 14 - **Lots Backing onto Withers Street**

Objectives

a. To ensure lots backing onto Withers Street are appropriately screened to reduce the impact on the streetscape.

b. To ensure rear fencing is sympathetic to the existing streetscape.

Controls

1. Landscaping shall be provided to the rear 3 metres of the lot to provide screening from Withers Street. The screen planting shall comprise a minimum of 3 native trees reaching a height of at least 5m at maturity.
2. Dwellings must be set back a minimum of 5 metres from the rear boundary.
3. Rear fences must:
    i. Be constructed in lightweight materials (such as timber picket or the like) that are at least 30% open and evenly distributed along the full length of the fence, and
    ii. Be between 0.7m and 1.2m in height, and
    iii. Include a pedestrian access to Withers Street.

3.5.14 LOTS ADJOINING EXISTING RESIDENTIAL LOTS

The following controls apply to lots identified in Figure 15.

Figure 15 - **Lots Adjoining Existing Streets**

Objectives

a. To minimise the impact of new development on existing development.

b. To maximise consistency between new development and existing development.

Controls

1. Dwellings must be setback a minimum of 5m from the rear boundary.
2. A minimum of two native trees (greater than 6m in height at maturity) shall be planted to the rear of the lot.

3.5.15 DUAL OCCUPANCIES AND SECONDARY DWELLINGS

Objectives

a. To ensure that dual occupancies and secondary dwellings do not detract from the heritage values of the area.

b. To maximise permeable surfaces and maintain a balance between built and unbuilt areas.

Controls

1. A minimum site area of 600m2 for corner lots and 700m2 for all other lots is required for dual occupancy or secondary dwelling developments.
2. Total site coverage of both dwellings, including ancillary development, must not exceed 50%. (Site coverage is defined in Clause 3.5.2)
3. Dual occupancies and secondary dwellings on corner allotments should result in a dwelling addressing each street frontage.
4. Dual occupancies on non-corner lots must present to the street as a single dwelling and have a single driveway no wider than 5 metres at the lot boundary and 4 metres at the apron.

3.5.16 ANCILLARY DEVELOPMENT

Objectives

a. To ensure that ancillary structures, outbuildings and swimming pools do not detract from the streetscape through inappropriate siting, or excessive scale, bulk or visibility.

Controls

1. Ancillary structures, including clothes lines, waste and recycling bins, rainwater tanks, air conditioning units and hot water heaters/tanks, should be located at the side or rear of the property. Fixed screening or planting must be employed where necessary to obscure visibility of ancillary structures from the street
2. Swimming pools and outbuildings must be located in the rear of the yard

Note: An “outbuilding” is a freestanding building not being attached to any dwelling on the site, which may or may not be enclosed on the side elevations, and includes cabanas, sheds, gazebos, greenhouses and the like.

TABLE OF CONTENTS

LIST OF FIGURES

1 INTRODUCTION

The purpose of this Area Plan is to provide a strategic and coordinated approach to the development of land near Ada Street Cardiff, labelled "Cardiff Area 1" on the Urban Release Area Map in Lake Macquarie Local Environmental Plan 2014 (LMLEP 2014).

This area plan is to be read in conjunction with the relevant part(s) of LMLEP 2014 and Lake Macquarie Development Control Plan 2014 (LMDCP 2014). Where the provisions of this area plan are inconsistent with the controls in the relevant part of LMDCP 2014, the provisions of this area plan will prevail.

1.1 LAND TO WHICH THIS PRECINCT AREA PLAN APPLIES

This Precinct Area Plan applies to the land outlined in **Figure 1**. The following lots combined make up the "Cardiff Area 1".

Address	Property Description
50 Ada Street, Cardiff	Lot 1 DP 788892
158 Macquarie Road, Cardiff	Lot 2 DP 788892
116 Macquarie Road, Cardiff (bushland)	Lot A DP 398188

The total area of the Cardiff Area 1 precinct is **12.8 ha** comprising 10.9 ha (Lots 1 & 2 DP788892) and 1.9 ha (Lot A DP398188). Cardiff Area 1 is situated on the western side of Macquarie Road to the south of Ada Street and to the north and west of existing residential areas.

The Area Plan will ensure the land is developed in an efficient manner, and considers the environmental, social, and economic issues associated with the site. The Area Plan will also ensure that necessary infrastructure is provided to service future residents.

Figure 1: Cardiff Area 1

1.2 EXISTING CHARACTER

The site is located approximately 12km south west of Newcastle CBD. The closest town centre is Cardiff about 1.4km directly north along Macquarie Road. Cardiff contains local services such as restaurants, supermarkets and local shops, Cardiff RSL Club and medical centres. The site is located approximately 1.5km from Warners Bay High School and 2.5km distance from the Warners Bay town centre which contains local services such as restaurants, local shops, dentist, banks etc. A number of other centres are within a 5km radius including Glendale and Charlestown, and the John Hunter Hospital is approximately 8km to the north.

The site is bound along its northern boundary by Ada Street and along its eastern side by an undeveloped open strip of land that contains a heritage listed former tramline corridor which provides a green buffer to the adjoining residential subdivision. To the west it is bound by Macquarie Road/residential subdivision; and to the south by a residential subdivision. Immediately adjacent to the north is the Lake Macquarie Tennis Centre and Cardiff Sports Centre, within which a medical centre has recently been approved. There are industrial and retail uses to the north-east along Pendlebury Road.

The northern portion of the Cardiff Area 1 site (Lot 1 DP 788892), known as 50 Ada Street, comprises a disused sports field and informal parking area. There is some remnant bushland adjacent to the western boundary and partly cleared remnant vegetation on the eastern sides of the site. A drainage line traverses the south eastern corner of the property and a residential subdivision comprising single dwellings and villa housing adjoins the remainder of the eastern boundary.

The southern portion of Cardiff Area 1 (Lot 2 DP 788892), known as 158 Macquarie Road, is within a south-north valley with average side slopes of approximately 3 degrees down to the east and west. There is a small unlined drainage line running in a south-north direction in the centre of the site. This area is open grassland with several groups of trees of up to about 20m in height along the western side and south-eastern corner. The site is largely cleared to facilitate the golf range use, however there is some canopy vegetation remaining on the site. An electricity transmission easement comprising lines and towers diagonally traverses the site from the NW corner to the SE corner.

The western portion of Cardiff Area 1 (Lot A DP 398188), known as 116 Macquarie Road, consists of council-owned bushland reserve which separates the remainder of the site from Macquarie Road. The land within this lot is relatively steep, sloping down from Macquarie Road towards Lots 1 and 2.

There is access to buses near the subject site (bus routes 334 and 339) which provide access to Cardiff train station.

1.3 EASEMENTS

There are a number of easements traversing the sites including sewer, telecommunications, water and stormwater infrastructure together with overhead transmission line - an easement of some 46m width spanning diagonally across 158 Macquarie Road and partly into Lot A (116 Macquarie) and 50 Ada Street properties. Plantings within the transmission easement are limited to 4m height. Subject to Ausgrid approval, stormwater detention facilities and surface car parking may be appropriate land uses within the electricity easement. 158 Macquarie Road property also benefits from a Right of Carriageway across 50 Ada Street.

A summary of the above easements and other site constraints are incorporated into **Figure 2 – Environmental Attributes and Constraints Plan**.

Figure 2 – Environmental Attributes and Constraints

1.4 DESIRED FUTURE CHARACTER

The proposed future character is to provide;

50 Ada Street / 158 Macquarie Road:- Generally low-scale urban development including residential subdivision, with a component of medium density housing on R3 zoned land. The location of medium density housing utilises a relatively less-constrained part of the site, with good walkability to shops, services and transport. The site is also suited to housing for seniors or people with a disability. At least two points of vehicular/pedestrian access are to be provided (from Ada Street and Macquarie Road). Development will be complemented by retention of mature canopy trees, attractive streetscapes (street trees, footpaths etc.) internal accessibility and good external connections to the existing street network. Drainage and stormwater management will be an integral part of the site's development.

116 Macquarie Road: - The strip of land is zoned E3, and is to be retained as a natural bushland buffer with appropriate weed management.

A Structure Plan indicating these desired future characteristics for the study area is presented in **Figure 3** – Structure Plan.

1.5 STRUCTURE PLAN

The Structure Plan shown in **Figure 3** is indicative of how development will occur in the future.

The structure plan aims to:

- Provide an outline for future development of Lot 1 DP 788892 (northern lot) and Lot 2 DP 788892 (southern lot) for residential subdivision, medium density residential development, and/or housing for seniors or people with a disability,
- Locate roads and separate entries for efficient access to both Lots 1 and 2 DP 788892,
- Provide safe pedestrian and cycle paths linking to the existing road network,
- Encourage the use of existing infrastructure and facilities in the neighbourhood,
- Provide range of lot sizes to accommodate a variety of dwelling types, and
- Minimise potential for risk from bushfire, flooding and mine subsidence.

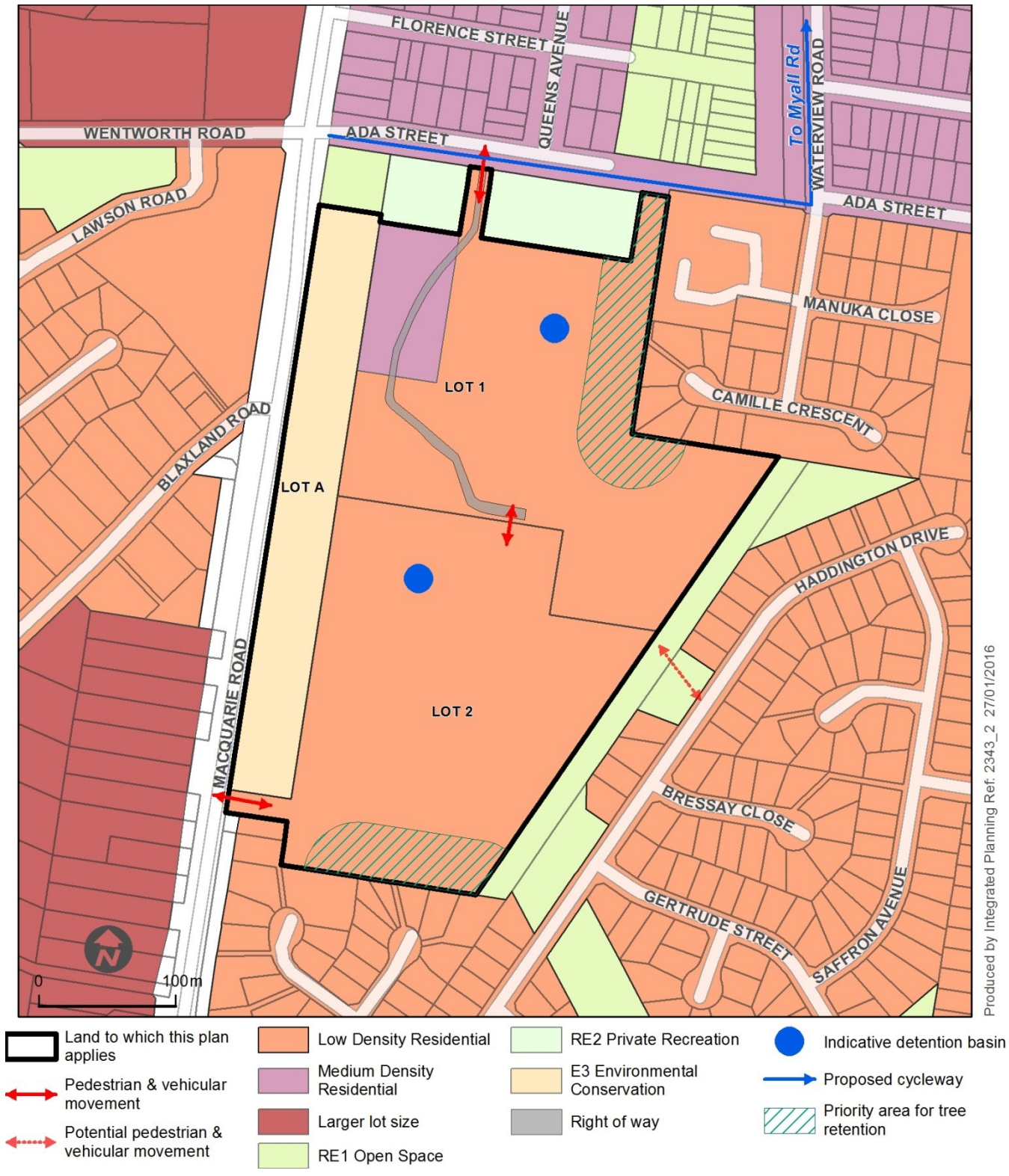

Figure 3 - Structure Plan

1.6 DESIGN AND LAYOUT FOR DEVELOPMENT

Objectives

a. To ensure the residential subdivision accessed from Ada Street is designed in an efficient and coordinated manner.

b. To provide an appropriate road network that connects with the existing road network.

c. To ensure that adequate pedestrian and cycle facilities are available to link the developments with existing and proposed facilities surrounding the area.

d. To ensure the aged care development achieves a safe and accessible design/layout suitable for the occupation of aged/disabled persons.

Controls

1. Development must be designed having regard to the Structure Plan at **Figure 3.**

1.7 STORMWATER MANAGEMENT

Objectives

a. To ensure development on the site will not have an adverse effect on flooding downstream or upstream.

b. To minimise erosion and control the quality of stormwater leaving the site.

c. To ensure appropriate design having regard to flood risk and stormwater management.

d. To ensure that development is sited and designed to minimise potentially adverse impacts of flooding on the proposed development, or on other properties and to manage the discharge of stormwater from the Cardiff Area 1 developed area.

e. To ensure that measures are implemented that reduce the impact of flooding on flood prone property within Cardiff Area 1.

Controls

1. Where any stormwater detention exists on the site, it must be retained in addition to any stormwater detention required by the proposed development, either within the boundaries of the site, or at an alternative location approved by Council.

2. Any development proposal must comply with Council's requirements for appropriate management of water flow across the site. A drainage corridor, restored to accord with Clauses 2.7 and 2.10 in Part 3 of Lake Macquarie DCP 2014, is to be vegetated and managed in a form that takes into account the bushfire requirements for Lot 2.

3. Development must be consistent with the current version of the NSW Floodplain Development Manual, and any relevant local flood study, floodplain management study or plan.

4. Buildings must not be located in an identified floodway, and buildings and other structures, including fences, must be designed so as not to impede the flow of floodwaters or entrap debris.

5. Fill is not permitted within the extent of the 100 year probable ARI (1% AEP) flood event, unless it can be demonstrated by way of a local flood study, that any such fill and associated mitigation measures do not result in flood impacts on other urban-zoned land.

1.8 BUSHFIRE MANAGEMENT

Objectives

a. To minimise any risks to life and property from bushfire hazards.

b. To ensure that any risks associated with bushfire are appropriately managed.

Controls

1. The subdivision plan should provide for a perimeter road between the bushfire prone land and the development lots / housing for seniors or people with a disability.

2. Asset Protection Zones must be established within the residential zoned part of the site and require minimal maintenance.

3. Development must achieve compliance with the Planning for Bushfire Protection (2006) guide and satisfy requirements of the Rural Fire Service (RFS).

1.9 TRANSPORT AND ACCESS

Objectives

a. To ensure a safe and efficient road layout within Lot 1 and Lot 2 that provides safe access and ease of movement for vehicles, cyclists and pedestrians and meet Roads and Maritime Services (RMS) requirements.

b. To ensure suitable provision is made to facilitate access into / around the site by emergency vehicles including fire trucks.

Controls

1. Primary vehicle access to Lot 1 must be via Ada Street (between Lot 22 DP 245962 and Lot 23 DP 245962).

2. Access to Lot 2 from Macquarie Road is subject to Roads and Maritime Services (RMS) approval.

3. Pursuant to the terms of the existing Right of Carriageway over Lot 1 benefiting Lot 2, any future development of Lot 1 must retain a (two-way) vehicular connection to Lot 2, preferably by way of a public road.

4. Any development of Lot 1 shall maintain the opportunity for provision of a pedestrian connection to Haddington Drive, adjacent to 43 Haddington Drive.

1.10 ECOLOGICAL VALUES AND SCENIC AMENITY

Objectives

a. To protect and enhance biodiversity values within land zoned for environmental management and public recreation.

b. To ensure the loss of biodiversity arising from development of the land is minimised and/or offset to mitigate the impact of that development.

c. To protect the scenic landscape, amenity and microclimate benefits provided by on-site vegetation.

Controls

1. Development must be designed to allow maximum retention of native vegetation, in particular mature and hollow-bearing trees.
2. Within Lot 1, a minimum of twenty (20) structurally sound medium-large trees must be retained within 40 metres of the site's common boundary with 2 Bancks Avenue and 10-12 Camille Crescent. Any subdivision plan for the site must indicate where the trees being retained are located relative to building envelopes for the affected lots.
3. Within Lot 2, a minimum of twenty (20) structurally sound medium-large trees must be retained within 40 metres of the site's common boundary with 14 – 20 Almora Close.
4. Development must be enhanced by comprehensive landscaping with preference given to the specification of endemic species.

Note: regarding control 2 and 3, a structurally sound medium-large tree is defined as being at least 10 metres in height and with at least 4 metres canopy spread.

1.11 VISUAL IMPACT AND LANDSCAPING

Objectives

a. To ensure Lots 1 & 2 are appropriately landscaped to enhance the amenity of the area and minimise potential visual impacts.

b. Minimise potential for light spill and noise impacts from the existing tennis courts.

c. To retain canopy trees to the greatest extent within areas of subdivision.

Controls

1. Street trees must be planted along both sides of new residential subdivision roads.
2. Street tree plantings must be in accordance with Lake Macquarie street tree planting guidelines contained within DCP Part 8 Clause 3.28 – *Street Trees and Streetscape Improvements.*
3. The creation of any residential lots adjoining the existing tennis centre at 40 Ada Street must include appropriate fencing to mitigate the impact of light and noise emanating from the tennis centre.

1.12 MINE SUBSIDENCE

Parts of the site are known to be affected by historic shallow mine workings. These areas may require some form of remediation and/or be subject to stringent structural design requirements imposed by the Mine Subsidence Board.

Objectives

a. To ensure the hazard posed by mine subsidence within the subject site is adequately addressed.

Controls

1. Any development proposed for the site must be approved by the Mine Subsidence Board prior to determination by the relevant consent authority.

CONTENTS:

FIGURES:

1 INTRODUCTION

1.1 BACKGROUND

The Buttaba Hills South Area Plan supplements Lake Macquarie Development Control Plan 2014 for the future development of the land known as Buttaba Hills South Estate, Buttaba. Any application within the subject land needs to address the provisions of this area plan along with the relevant provisions of other parts of Lake Macquarie Development Control Plan 2014 particularly Part 8 -Subdivision Development.

The estate is located on the western slopes of Lake Macquarie, south of Toronto, and accessed from Buttaba Hills Road. It is largely forested land without any formed roads or other essential services such as electricity, drainage, and water and sewerage. The subdivision on paper was registered with the Lands Department in 1922 and resulted in 123 allotments with a size ranging from 1000 m² to 1500m².

In October 2000, Amendment 111 to *Lake Macquarie Local Environmental Plan 1984* was published to rezone the estate from a rural zoning, to a mix of Low Density Residential, and Environmental Conservation zones. This Area Plan is to facilitate the orderly development of the site in line with current planning practice through consolidation of parcels and re-subdivision consistent with the relevant planning legislation.

1.2 EXTENT OF AREA PLAN

This Area Plan applies to all the land within Buttaba Hills South Estate as shown in Figure 1 below.

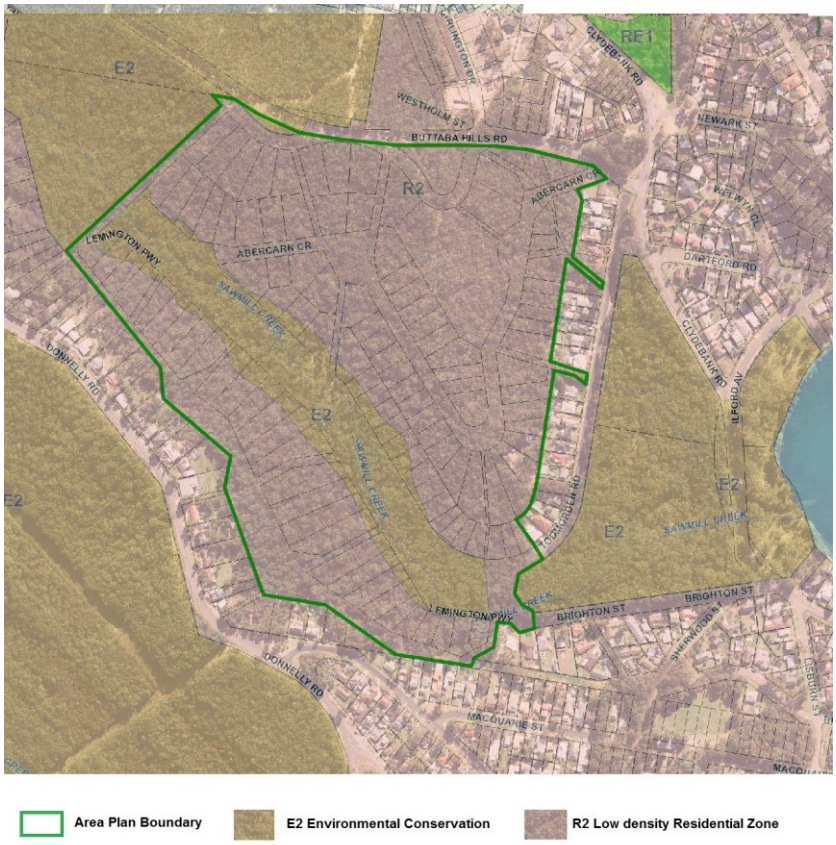

Figure 1 - Extent of Buttaba Hills South Area Plan

1.3 EXISTING CHARACTER

Buttaba Hills South Estate is a 34ha bushland area situated on the vegetated slopes above the western foreshore of Lake Macquarie. The sloping land rises to about 50m elevation above the lake. To the north and west are extensive areas of native vegetation. Recent low density residential subdivision extends to the north. The estate is separated on the east from the lake foreshore by a strip of residential dwellings and an area of dense bushland on a lower lying reserve.

The estate is covered by a relatively close forest canopy with open and low understory vegetation, providing habitat to a wide variety of flora and fauna.

The higher slopes are visible from areas of the lake and surrounding residential areas. Sawmill Creek runs through the lower southern area of the estate. The slopes are crossed by several informal trails.

1.4 HISTORY

Paper Subdivision
The Buttaba Hills South Paper Subdivision (Deposited Plan 12507) pre-dates the legislative requirements for anyone subdividing land to construct essential infrastructure. The land has had limited development prospects because of its rural zoning and because of the lack of infrastructure.

In October 2000 Amendment 111 to Lake Macquarie LEP1984 rezoned, the majority of lots within the paper subdivision from rural to low density residential, with the Sawmill Creek corridor (approximately 60m wide) being zoned for environmental conservation. The LEP amendment included a clause requiring a development control plan (DCP) be approved by Council before development consent is granted for any development on the land. The usual environmental studies were not undertaken at the time of rezoning.

The paper subdivision road network and lot layouts set out on paper are not consistent with socially, economically, or environmentally sensitive development. The estate has no formed roads or essential service infrastructure. It is anticipated that land will need to be consolidated and re-subdivided to meet current planning practices and policies.

Most lots in the paper subdivision estate were sold to individuals around 2003 and as a result, there are currently 99 different landowners. Individual landowners have acquired property for a range of purposes and with varied expectations about development of the site, and future plans for building a dwelling in the estate.

In 2010, the Buttaba Hills South Action Committee (BHSAC) was registered to represent landowner interests. The Committee commissioned a *Flora and Fauna Study* (Conacher Environmental 2013) which has determined a range of important habitat and biodiversity values of the estate. The BHSAC have been in on-going consultation with Council to determine potential development options for the estate and the appropriate planning processes. These options and the implications are detailed below and in the development controls.

Once a new subdivision plan has development consent, the landowners would be responsible for the costs of construction of the new subdivision roads, infrastructure and necessary services.

1.5 ENVIRONMENTAL ATTRIBUTES AND CONSTRAINTS

Scenic Quality

The estate is part of a vegetated ridge and hillside that provides a strong visual backdrop to views from the lake and foreshore. Future development in this area should have regard to protecting native vegetation, providing vegetation around dwellings and avoiding substantial alteration of ground levels. Opportunities to rehabilitate any degraded areas should be supported.

The design of future single or two storey dwellings should incorporate articulated walls, simple roof forms and mid-tone exterior finishes.

A landscape and visual impact assessment would be required as part of a development application for subdivision.

Aboriginal Heritage

The area is on the traditional land of the Biriban people, which extends from the western edge of the lake inland to the Watagans. The Biriban Aboriginal Land Council has identified two registered scar trees to the north-west of Buttaba Hills South estate.

Prior to preparing a sub-division proposal a survey would be necessary to determine if there are any Aboriginal scar trees located within the estate, and to allow for appropriate measures to protect those trees.

Biodiversity

The Area Plan addresses the impacts of future residential development on biodiversity values, as required by Council policy and guidelines and state legislation. The plan provides for appropriate protection and ongoing management of biodiversity conservation land that would offset the impacts of development.

Studies show that the estate has high biodiversity values supporting good quality habitat for a range of fauna species. The recorded values include Swamp Mahogany Paperbark Forest (an Endangered Ecological Community) and several threatened species being Squirrel Gliders, *Tetratheca juncea* and large forest owls.

In 2012 Council undertook to develop the Councils *Large Forest Owl Planning and Management Guidelines*. Council commissioned field ornithologist John Young to conduct a survey of large forest owl habitat across the western side of the lake. A specialist panel of recognised owl experts including Michael Murray, Dr David Bain, Dr Rod Kavanagh and John Young used the survey results to develop the guidelines.

Independently BHSAC commissioned Conacher Environmental to prepare the *Buttaba Hills South Flora and Fauna Study* (2013). Conacher Environmental accepted the results of John Young's owl survey related to the Buttaba land and incorporated the findings into the overall *Buttaba Hills South Flora and Fauna Study*. BHSAC has also commissioned and submitted two further consultant reports regarding forest owls (Kaplan, May 2015 and Kaplan, Feb 2016) which refute the presence of owls on the site.

The lack of evidence of owl occupation reported by Kaplan (2015) does not mean the site has not been used in the past and will not be used in the future by owls. Since the Buttaba site has been observed being used for breeding of both Masked and Powerful Owls, it is regarded as owl habitat.

At development assessment stage the *Environmental Planning and Assessment Act 1979* requires that Council apply a seven-part test to assess if a proposed development will have a significant impact on biodiversity. Should Council assessment of the seven-part test conclude that a significant impact will result from development of the land, then development and offset arrangements will require the concurrence of the NSW Office of Environment and Heritage. The Office of Environmental and Heritage would then use the Biobanking Methodology to assess the impact of the development proposal and determine the quantum of offsets required.

Mine Subsidence

The estate area has not been undermined. However, Centennial Coal has indicated the area is within a zone that may be affected by future underground mining operations should the Newstan Lochiel project proceed.

A development application would require the concurrence of Mines Subsidence Board. The concurrence should take into account the possible future extension of mining operations in the area by Centennial Coal.

Bushfire

The estate is almost entirely on bushfire-prone land with buffers provided by established housing on the east and south-west boundaries. Any future housing areas located upslope from steeper forested areas would be most prone to bushfire attack.

Bushfire risk can partly be addressed by providing adequate asset protection zones (that have reduced vegetation and fuel load) to buffer all future dwellings. Perimeter roads along the edge of areas of retained vegetation can form an effective part of the asset protection zone. Suitable through road access is also required for emergency services.

Any subdivision proposal will need to meet the requirements of Planning for Bush Fire Protection (Rural Fire Service 2006).

Sloping Land

A large proportion of the site has slopes in excess of 10% and land slope ranges up to 20% in the steeper north-west areas. A specialist report should identify appropriate strategies for development on steeper land. Some areas may require site benching at subdivision stage for efficient use of the available development area. Dwelling types will need to be adapted for steeper lots, with elements like split-level design, and pier and beam construction.

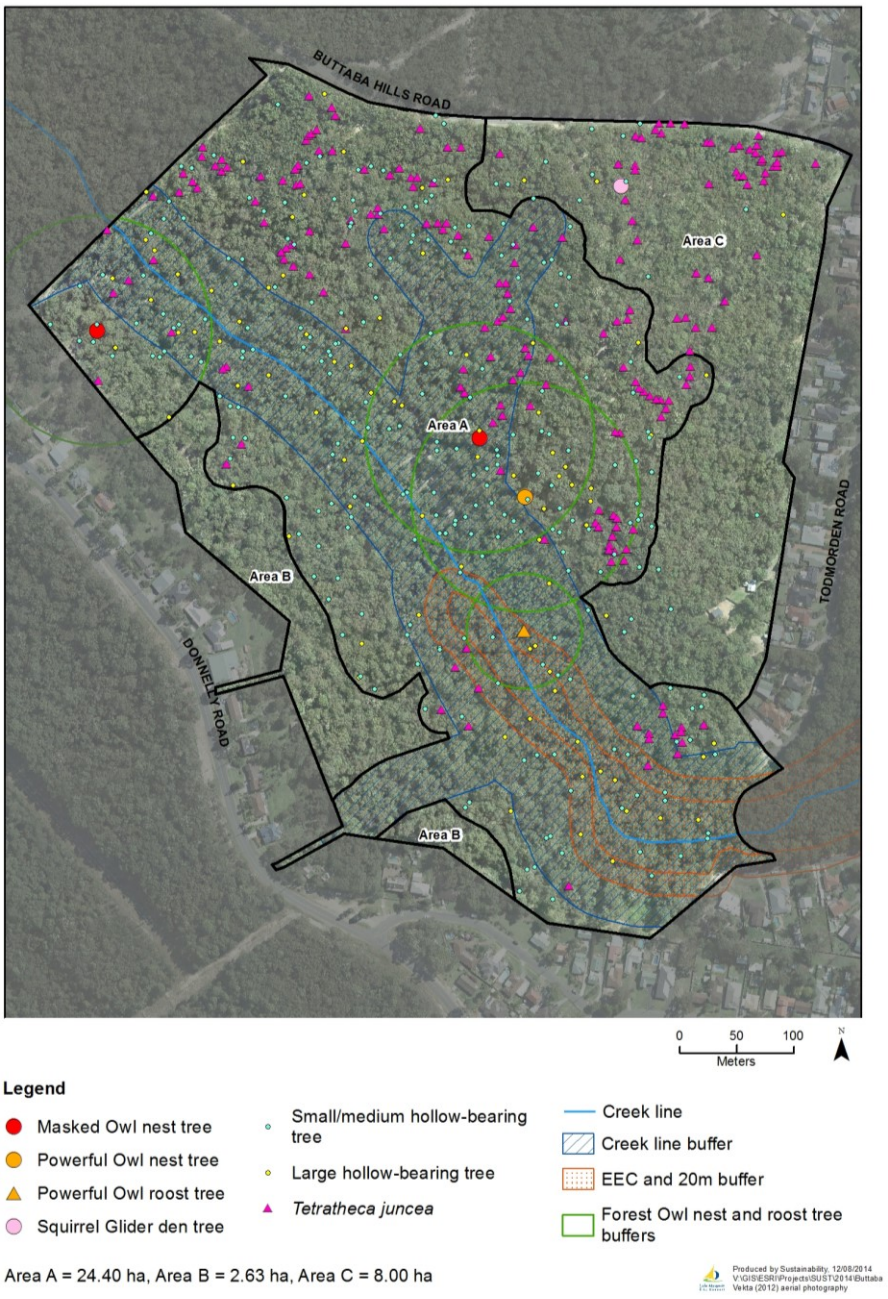

Figure 2 - Buttaba Hills South Summary of Biodiversity Values*

(*from Flora and Fauna Study, Conacher Environmental 2013, mapping by LMCC 2014)

1.6 DESIRED FUTURE CHARACTER

Buttaba Hills South will develop as a compact high amenity residential neighbourhood in an attractive bushland setting on the western shore of the lake. It will have ready access north to services and facilities in Toronto town centre and south to Morisset town centre. Housing situated on elevated slopes would enjoy the outlook to the native bushland reserve and the creek corridor, conserved to protect valuable flora and fauna habitat.

This neighbourhood would have convenient links to the existing road network. A perimeter road and shared walking/ cycling path would form a pleasant access along the edge of the bushland area. This perimeter road layout will provide a buffer to the sensitive habitat areas, and provide residents with essential protection from bushfire threats.

Dwelling design would be a mix of one and two story dwellings that are stepping with the slope along the street. Colours, materials and roof design would complement the bushland setting and minimise the impact on scenic views from the lake.

1.7 DEVELOPMENT OPTIONS

Development Options A and B are set out in the development objectives and controls. Option C is an alternative use of the site available under the Biobanking scheme.

OPTION A
This option (Figure 3) allows for protection of the land with high biodiversity values and more contained development on the residential zoned land. This option would likely avoid significant impacts on biodiversity values. In this case Council would apply the criteria and targets for conservation that enable the impacts of development on biodiversity to be offset by retaining land within the estate for conservation. This option would avoid the cost of investigations, studies and the purchase of additional land as offsite offsets.

This development option is most compatible with the ecological and environmental constraints of the site and consistent with current planning legislation, policy and practice.

OPTION B
This option (Figure 4) allows for protection of the E2 Environmental zoned land and other land with high biodiversity values. It includes moderate development in parts of the residential zoned land. However, the impacts of development on biodiversity may be assessed as significant. In this case the proponent may need to undertake a Species Impact Statement and secure additional biodiversity conservation land to offset the impacts of development. This proposal would likely need the concurrence of the NSW Office of Environment and Heritage.

This option may or may not be compatible with the ecological and environmental constraints of the site.

OPTION C
This option recognises the high biodiversity values of the site. Landowners could pool their land and commission an accredited consultant to apply the biobanking methodology, prepare a report and obtain a Biobanking Statement, which confirms the number and type of biodiversity credits associated with on-site management measures that will improve or maintain biodiversity values. The site could then be sold to a developer seeking biodiversity offsets or to a biodiversity offset provider for the purposes of establishing a Biobanking site. The landowners could share the proceeds of the sale of the estate.

This option is compatible with Council policies. It does not involve any development and no structure plan or development controls are provided for this option.

Note: The *Environmental Planning and Assessment Act 1979* allows landowners to submit an alternative development option at development application stage. This application and any supporting documentation provided by the applicant would be considered and assessed against the requirements of Council policy and legislation.

1.8 STRUCTURE PLANS

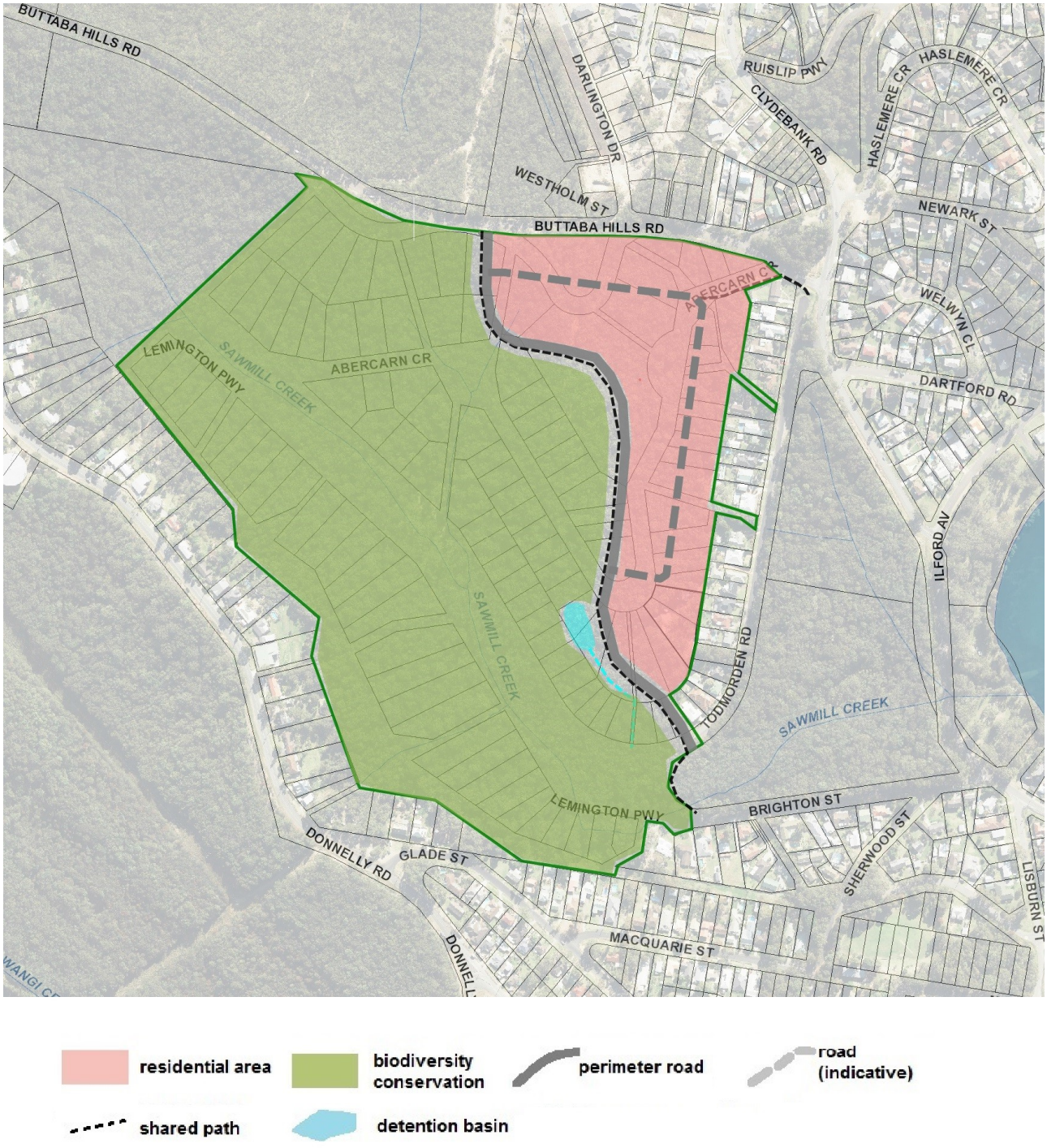

Figure 3 - Buttaba Hills South Structure Plan OPTION A

Note: OPTION A is most likely to satisfy the requirements of Council guidelines and state legislation.

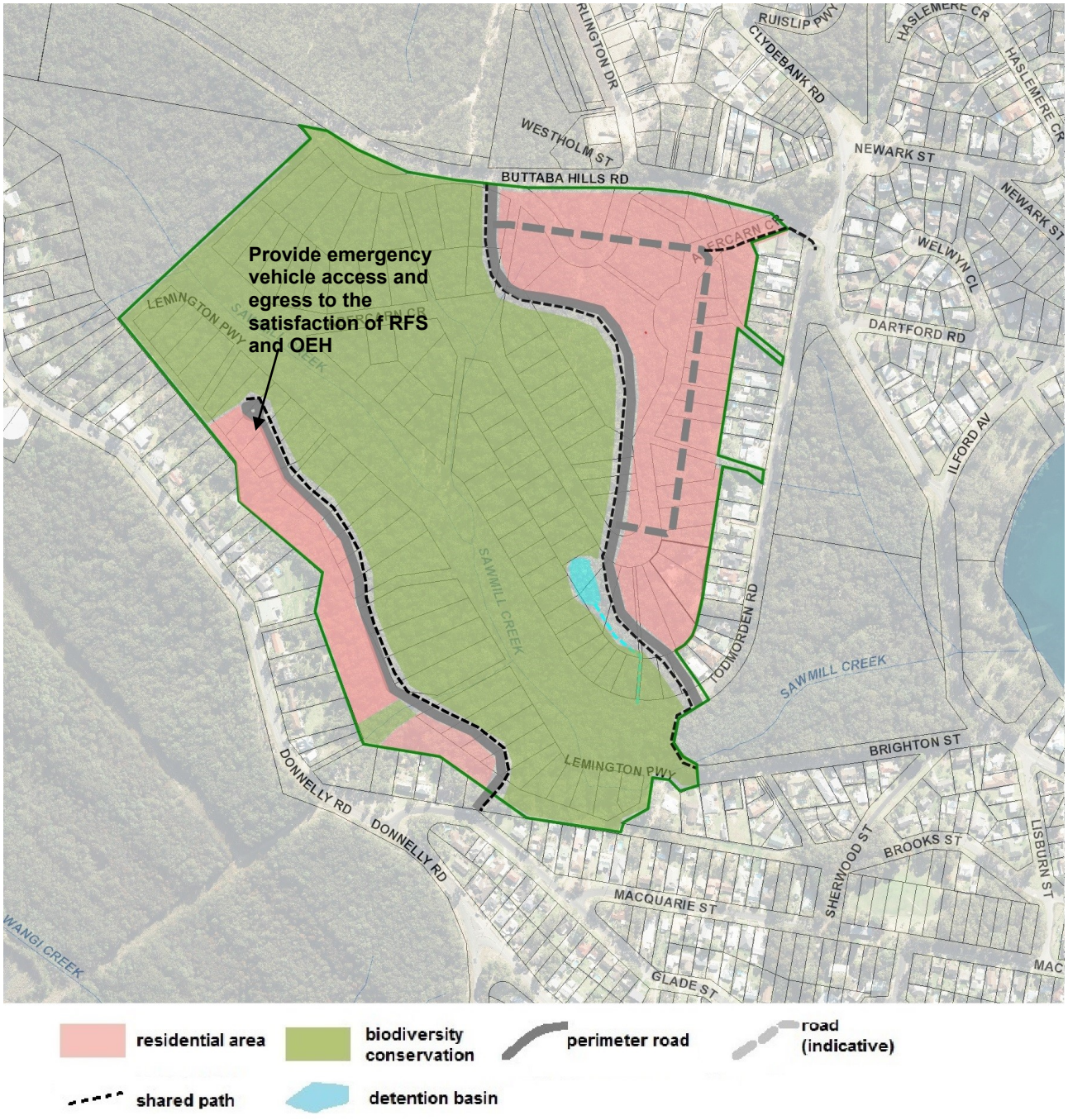

Figure 4 - Buttaba Hills South Structure Plan OPTION B

Note: OPTION B is less likely to satisfy the requirements of Council guidelines and state legislation.

2 DEVELOPMENT CONTROLS

2.1 DEVELOPMENT COORDINATION

Objectives:

a. To ensure that development of Buttaba Hills South estate is undertaken in a coordinated and consistent manner.

Controls:

1. Prior to consent being issued for any form of residential accommodation, the re-subdivision of the land generally consistent with Figure 3 – Buttaba Hills South Structure Plan OPTION A or Figure 4 – Buttaba Hills South Structure Plan OPTION B must be approved and constructed in accordance with the subdivision consent.
2. The owner of any land occupied by roads must be a party to any subdivision application.

Note: this includes any land occupied by roads in the proposed residential development areas and the proposed biodiversity conservation areas.

3. Subdivision development must include the orderly delivery of essential infrastructure for the entire estate, including:
    i. Reticulated water;
    ii. Reticulated sewerage;
    iii. Legal access and roads constructed in accordance with Part 8 of DCP 2014;
    iv. Stormwater drainage;
    v. Electricity; and
    vi. Telecommunications.

2.2 SCENIC VALUES

Objectives

a. To ensure that the scenic values of the lake and vegetated slopes are protected.
b. To ensure that development visible from the lake and ridgelines maintains and enhances the scenic value of these features.

Controls

1 A landscape and visual impact assessment is required for subdivision development where 10 or more lots are proposed or where there is a loss of native tree cover of one hectare or more,
2 A landscape and visual impact assessment must be prepared in accordance with Council's *Scenic Management Guidelines*.
3 Developments must be designed and sited to complement their location through:
    i. the retention of existing vegetation,
    ii. incorporating appropriate landscaping,
    iii. minimising cut and fill, and
    iv. subdivision design and layout being compatible with its natural context

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2.3 ABORIGINAL HERITAGE

Objectives

a. To protect and conserve Aboriginal cultural, spiritual, and sacred sites, estate including any Aboriginal scar trees, within the estate.

Controls

1 An Aboriginal Archaeology Report must be prepared and submitted in accordance with the *Lake Macquarie Aboriginal Heritage Management Strategy*

2 The report must be undertaken in consultation with Aboriginal groups and representatives as set out in the *Lake Macquarie Aboriginal Heritage Management Strategy*.

2.4 BUSHFIRE MANAGEMENT

Objectives:

a. To ensure that the subdivision layout and design includes measures to manage the significant threat of bushfires without adverse impacts on land identified for conservation purposes.

b. To ensure that utility services are adequate and readily located for fire-fighting.

Controls:

1 A development proposal must be supported by a Bushfire Planning Report prepared by a suitably qualified professional and in accordance with the *NSW Planning for Bushfire Protection Guidelines*.

2 Bushfire prone areas and Asset Protection Zones must be identified on the Site Analysis

3 Asset Protection Zones must be wholly contained within the development area and not impinge on land retained for biodiversity conservation

4 Asset Protection Zones must incorporate the perimeter road and any shared path as shown in Figure 5

5 Mains water supply must be available for firefighting. All connections and pumps must be clearly marked and visible.

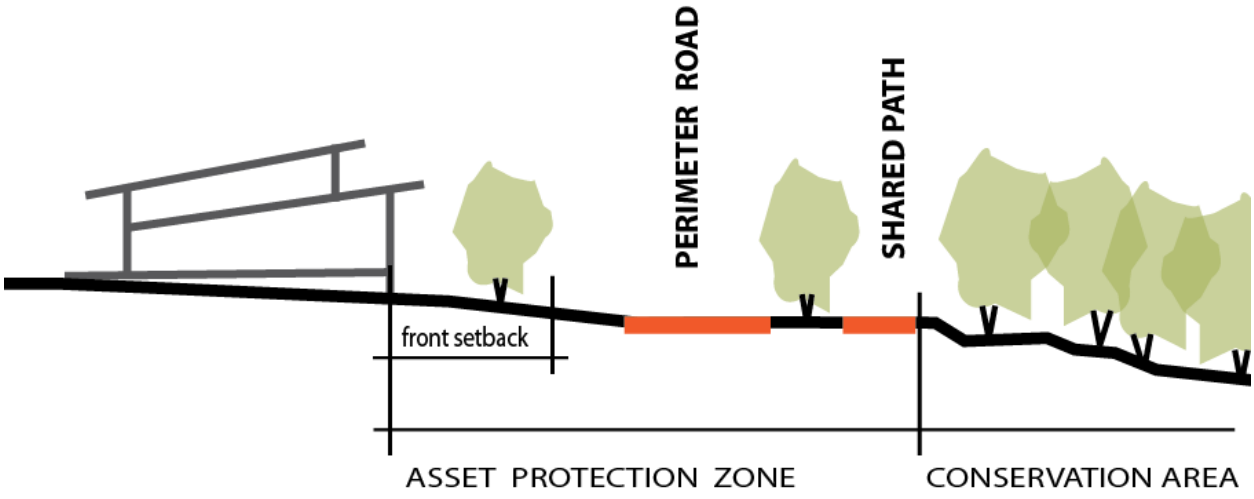

Figure 5 - Shared path and perimeter road in the asset protection zone

2.5 BIODIVERSITY

Objectives:

a. To avoid and minimise biodiversity loss.

b. To protect and enhance biodiversity values within land identified for biodiversity conservation.

c. To ensure the riparian and wildlife corridors associated with Sawmill Creek and its tributaries are rehabilitated and appropriately managed.

d. To provide for the long-term rehabilitation and management of any land retained for biodiversity conservation.

Controls:

1 Development of land must not occur where it may have an adverse effect on the biodiversity values of the land identified as biodiversity conservation. Development includes fill or excavation, stormwater treatment devices, services, retaining walls, roads and bridges or culverts, pathways, bushfire asset protection works.

2 Development for urban purposes (including services) must provide for adequate and appropriate measures to protect land zoned E2 Conservation and biodiversity conservation land (biodiversity offsets) , including access control, bushfire asset protection zones, perimeter roads, drainage and weed controls, and the like.

3 Should impacts to biodiversity be found to be unavoidable and justified via the seven part test assessment process then biodiversity offsets will be required. The quantum of any biodiversity offset proposal must be based on the principle of 'net gain' in terms of both the areas of native vegetation and biodiversity values protected.

4 biodiversity offsets (i.e. including the amount and type of offset vegetation / habitat) must be consistent with one or more of the following:

i. The principles standards and targets of LMCC Biodiversity Offset requirements as set out in Table 1 below;

ii. OEH principles for the use of biodiversity offsets in NSW http://www.environment.nsw.gov.au/biodivoffsets/oehoffsetprincip.htm: and

iii. The Biobanking Assessment Methodology and Credit Calculator Operational Manual https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/biodiversity-assessment-method

Note: Should Councils assessment and seven-part test conclude that a significant impact will result from development of the land then development and offset arrangements will require the concurrence of the NSW Office of Environment and Heritage (ii) and (iii) will be used in determining offset requirements.

5. Any proposed biodiversity offset lands must have secure land tenure. Secure land tenure includes the dedication of the land under the National Parks and Wildlife Act 1974, or land dedicated to Council or establishment of a biobank site extinguishing any credits generated.

6. A vegetation management plan for all conservation areas and biodiversity offset lands must be prepared, with a suitable endowment fund or similar arrangement established to implement the plan and provide for ongoing maintenance in perpetuity.

7. The endowment fund or similar arrangement must be cost neutral to the land management agency responsible for managing the conservation areas and biodiversity offset lands, and take into account any foreseeable risks.

8. Where conservation area and/or biodiversity offset land is to be dedicated to Council or a government agency, a legally binding agreement (a planning agreement prepared under the Environmental Planning and Assessment Act 1979 or similar) must be prepared.

9. The legally binding agreement must be enforceable and include appropriate transfer arrangement including, but not limited to:

i. All lots and existing unconstructed (paper) roads within the land zoned E2 and or identified as a biodiversity offset being consolidated prior to the issue of the first subdivision certificate that would create allotments capable of supporting dwellings.

ii. Ensure appropriate management of offset lands up to, and including the period of transfer, and suitable timing or staging of the offset transfer.

10. If any biodiversity offset land is to be managed by or dedicated to any other organisation or trust, suitable documentation is to be provided to Lake Macquarie City Council to provide certainty that the criteria and arrangements provided for are satisfied, and that adequate financial resources have been secured for management in perpetuity.

11. A biodiversity offset package must be submitted to Council for approval in principle prior to the submission of a development application. Strict like for like may not be required if a superior biodiversity outcome can be achieved in another way.

Table 1: LMCC Biodiversity Offset Requirements

Biodiversity Value	Replacement Requirements
Native Vegetation	The ratio for the biodiversity off set area must not be less than 2.5:1 (for native vegetation communities that are not endangered). That is, for each hectare of native vegetation cleared (for urban purposes including APZs, services and the like), 2.5 hectares of native vegetation is to be secured as a biodiversity offset.
Hollow bearing trees	For each hollow removed for development, one additional hollow of the same size category is to be provided in the offset area. The preference is for natural hollows in standing trees however, additional hollows may include a proportion of hollows salvaged from the development site supplemented with nest boxes. This is a biodiversity offset ratio of 2:1.
Threatened species	For each threatened species removed, five times the individuals or area of threatened species habitat is to be provided in the offset area. This is a biodiversity offset ratio of 5:1.
Native vegetation corridors	For any reduction in native vegetation corridor width, a biodiversity offset site with a corridor function is to be provided.

2.6 VEGETATION MANAGEMENT

Objectives:

a. To secure future management arrangements for the biodiversity conservation land including funding, monitoring and timeframes.

Controls:

1. A vegetation management plan for the conservation areas and biodiversity offset lands must be prepared in accordance Council's Vegetation Management Plan Guideline or State government equivalent and include all the matters referred to in those Guidelines.

2. The standard of rehabilitation should achieve a weed free ecosystem requiring minimal maintenance over the long term; and

3. If any land is to be managed by or dedicated to any other organisation or trust other than Lake Macquarie City Council, suitable documentation is to be provided to Council to demonstrate that:
   i. Adequate financial resources have been secured in perpetuity for the subject land.
   ii. Proposed buffers, edge treatments and management measures will reduce ongoing impacts and management costs at the interfaces between the conservation area, and urban areas.
   iii. areas for public walking paths and bushfire trails are located to minimise adverse impacts

Note: Council will not accept ownership or management responsibility for any land that is contaminated, including roads or stormwater infrastructure. Council will not consider accepting ownership or management responsibility of conservation land unless management plans have been prepared and implemented to the satisfaction of Council.

2.7 WATER QUALITY MANAGEMENT

Objectives

a. To ensure ecologically valuable land and associated watercourses are protected.
b. To ensure the stormwater drainage system is designed to maintain the natural watercourse and to minimise future environmental impacts.

Controls

1 Stormwater from developed areas must be treated prior to discharging into a natural watercourse or conservation area.
2 Stormwater and water quality structures must be located within the developable areas and not impinge on the biodiversity conservation area.
3 Any stormwater and water quality structures must be designed to integrate with landscaping, revegetation works and to ensure adequate flow paths are maintained.
4 Any stormwater and water quality structures must be designed to avoid and minimise impacts from construction and subsequent water discharge (quality and flow regimes including frequency height and duration of inundation) within the conservation area. This will involve mimicking the natural (pre development flows into the off-set area).
5 Stormwater and water quality structures must be designed in accordance with Council's Engineering Guidelines.

2.8 MINE SUBSIDENCE

Objectives

a. To minimise risk associated with possible future underground mining in the vicinity of the estate.

Controls

1. A development proposal must be supported by written concurrence from the Mine Subsidence Board. Written concurrence should be obtained prior to the application being submitted to Council.

2.9 GEOTECHNICAL

Objectives

a. To minimise the potential of damage to buildings and structures resulting from land movement.

Controls

1. A geotechnical / slope stability assessment prepared by a geotechnical engineer must accompany any application for subdivision of the estate.

2.10 SITE BENCHING

Objectives

a. To enable efficient use of sloping residential land.
b. To equitably distribute the cost of benching and retaining works between all landowners.

Controls:

1. For small lots where the lot area is less than 450m2 suitable site benching and retaining walls must be provided at subdivision stage.
2. The location of all retaining walls and the location of suitable building envelopes must be clearly shown on the plan of subdivision.
3. The subdivision plan must include cross sections to demonstrate the appropriate location of retaining walls, side setback areas and housing footprints.

2.11 MOVEMENT SYSTEM

Objectives:

a. To ensure safe, convenient and legible access from Buttaba Hills Road and Todmordon Ave to the estate.
b. To ensure a pleasant and convenient pedestrian and cycle links between the existing residential areas to the north, the bushland reserve and streets leading to the lake foreshore.

Controls:

1. A Traffic Study must be prepared and lodged with the subdivision application, supporting the proposed road layout and addressing any other traffic implications. See Council's *Traffic Impact Statement and Vehicle Access Guideline* for more information.
2. Development must provide safe and legible vehicle access off Buttaba Hills Road that facilitates all turning movements subject to the findings of the Traffic Study.
3. The road layout must provide interconnected streets resulting in a modified grid layout and that includes connections with surroundings streets where feasible.
4. The road hierarchy of the internal street network must include a perimeter road at the interface of any residential with biodiversity conservation land.
5. Any perimeter road must not impinge on Endangered Ecological Communities or the required buffer areas to these ecological communities.
6. Development must provide shared paths for cycle and walking access as shown in Figure 3 – Buttaba Hills South Structure Plan OPTION A or Figure 4 – Buttaba Hills South Structure Plan OPTION B.

2.12 SUBDIVISION DESIGN AND LAYOUT – OPTION A

Objectives:

a. To protect areas of high biodiversity value while allowing for development consistent with Figure 3 – Buttaba Hills South Structure Plan OPTION A.
b. To enable the impacts of development on biodiversity to be offset within the estate.
c. To allow for efficient and equitable redistribution of the developable land between all land owners in the estate.
d. To ensure the subdivision of the subject land provides adequate protection from hazards such as bushfire and slope instability.

e. To mitigate any adverse impacts of new intersections on the safety and amenity of existing residents and road users.

Controls:

1. The road layout, lot layout and yield must be generally consistent with Figure 3 – Buttaba Hills South Structure Plan OPTION A.
2. Biodiversity offsets must be provided generally in accordance with Table 1 and Section 2.5 of this Area Plan and would include the conservation area identified on Figure 3.
3. The street network must include a perimeter road at the interface of the proposed residential area with biodiversity conservation land.
4. The subdivision layout must include a perimeter road to biodiversity conservation areas that also forms part of the required Asset Protection Zones (APZ) as shown in Figure 5.
5. A perimeter road must connect Buttaba Hills Road to Todmordon Avenue subject to the findings of the Traffic Study.
6. The subdivision plan must identify the location of all trees to be retained within the asset protection zone and stormwater detention areas.
7. For lots less than 450m2 the subdivision plan must include building envelope plans, showing the location of garages, driveways and street tree planting within the road reserve.
8. Development consent must not be granted for any lot in the 1922 subdivision plan prior to the construction and registration of the new subdivision (consistent with this area plan), notwithstanding that lot may have existing access to Buttaba Hills Road.

Note: OPTION A is most likely to satisfy the requirements of Council guidelines and state legislation

2.13 SUBDIVISION DESIGN AND LAYOUT – OPTION B

Objectives:

a. To protect areas of high biodiversity value while allowing for development consistent with Figure 4 – Buttaba Hills South Structure Plan OPTION B.

b. To enable the impacts of development on biodiversity to be offset.

c. To allow for a potential area of residential development fronting Sawmill Creek that could deliver a number of moderate size residential lots.

d. To allow for the additional impacts of development on biodiversity to be addressed to the satisfaction of the NSW Office of Environment and Heritage.

Controls:

1. The subdivision layout should be generally consistent with Figure 4– Buttaba Hills South Structure Plan OPTION B, and include provision of emergency access required by *Planning for Bushfire Protection 2006*.
2. Development south of Sawmill Creek must provide a through road for emergency use to the satisfaction of the Rural Fire Service and Office of Environment and Heritage.
3. The street network must include a perimeter road at the interface of the proposed residential area with biodiversity conservation land.
4. The location of any perimeter road and extent of the asset protection zone must be consistent with Figure 5. The asset protection zone may be partly contained within the front setback of each lot.
5. A perimeter road and shared path must connect Buttaba Hills Road to Todmordon Avenue subject to the findings of the Traffic Study.

6. The subdivision plan must identify the location of all trees to be retained within the asset protection zone and stormwater detention areas.
7. For lots less than 450m2 the subdivision plan must include building envelope plans, showing the location of garages, driveways and street tree planting within the road reserve.
8. Development consent must not be granted for any lot in the 1922 subdivision plan prior to the construction and registration of the new subdivision (consistent with this area plan), notwithstanding that lot may have existing access to Buttaba Hills Road.
9. Development is likely to require the concurrence of the Office of Environment and Heritage.
10. Development must satisfy the biodiversity offset requirements of the Office of Environment and Heritage and Section 2.5 of this Area Plan.

Note: OPTION B:

- requires an emergency access or egress route that may have significant impacts on the biodiversity values of conservation land; and
- is less likely to satisfy Council guidelines and state legislation.

2.14 TREES IN ROAD RESERVES

Objectives:

a. To minimise the visual impact of subdivision and residential development.
b. To maximise the tree canopy cover within the residential area, without compromising bushfire safety.
c. To integrate street tree selection with the surrounding bushland.

Controls:

1. The sub-division plan must be accompanied by a landscape plan for streets and drainage reserve areas that details tree planting, including species, tree stock and size, tree guards and protection and planting methodology.
2. Subdivision consent must include a condition requiring establishment, maintenance and replacement as necessary of each street tree for a minimum period of 2 years.
3. The landscape plan must nominate broad canopy street trees that are compatible with native vegetation and acceptable for APZ requirements.
4. Street trees should be selected from the following species:
   i. *Angophora costata* for perimeter roads
   ii. *Glochidon ferdinandii* for smaller streets and private lots

Note: the location of any trees to be retained or any street trees must be shown on the sub-division plan.

2.15 DWELLING DESIGN

Objectives:

a. To minimise the visual impact of dwelling development as viewed from the lake, lake foreshore areas, and neighbouring residential areas.

Controls:

1 Dwelling design must incorporate the following design features to effectively minimise bulk, scale and visual impact of each dwelling:
   i. Articulated wall surfaces,
   ii. Upper level setbacks for two storey dwellings,

iii. Smaller roof volumes with lower pitch skillion, rake, hip or gable forms,
iv. Neutral and/or medium tone exterior wall and roof finishes; and
v. Avoiding white finishes, bright colours, dark colours, black and/or reflective finishes including reflective glazing and bright zincalume

2. Dwelling consent must include at least one medium sized canopy tree planted in the front or rear setback area. Planting of Cheese Tree (*Glochidon ferdinandii*) or Blueberry Ash (*Eleocarpus reticulatus*) is preferred.

Note: The requirements in Part 3 – Development in Residential Zones also need to be addressed for future development of dwellings.

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FIGURES

1 INTRODUCTION

The purpose of this Area Plan is to provide a strategic and coordinated approach to the development of land between Coorumbung and Gradwells Road, Dora Creek, situated at the western edge of the existing Dora Creek residential area. The Area Plan will ensure the land is developed in an efficient manner, and considers the environmental, social, and economic issues associated with the site. The Area Plan will also ensure that necessary infrastructure and community facilities are provided to service the future residents.

Where the provisions of this area plan conflict with the controls in general sections of the Lake Macquarie Development Control Plan 2014, the provisions of this Area Plan will take precedence.

1.1 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all land outlined and as shown in Figure 1: Coorumbung Road Dora Creek Area Plan Boundary.

Figure 1 - Coorumbung Road Dora Creek Area Plan Boundary

1.2 CHARACTER STATEMENT

The site is located on the north-western boundary of the existing Dora Creek residential area. The southern boundary of the site directly adjoins existing residential housing. To the north, the land is predominantly rural. Immediately to the west of the site is a heavily vegetated bushland reserve, and to the east is a SEPP 14 wetland known as Muddy Lake. Dora Creek, a significant regional waterway, is located to the south of the site.

The land has previously been utilised for agricultural purposes, primarily intensive livestock activities associated with poultry sheds, egg production, and egg sorting. The land is gently sloping and predominantly cleared with some remnant vegetation.

A variety of community facilities are located within 1 km of the site including local shops on Walmsley Street, the Dora Creek railway station, Dora Creek primary school, playing fields, community hall, and the District Workers' Club.

It is envisaged that the Coorumbung Road Dora Creek area will become an extension of the existing Dora Creek village and develop into a quality residential neighbourhood that is integrated with the natural environment. It is anticipated that the enhancement of the riparian corridors will add a high degree of visual amenity to the site and assist in preserving the visual, ecological, and social values of the site.

The Area Plan has identified required roads that provide a link with the existing road network, and that provide perimeter boundaries to conservation and open space areas.

The proposed open space network, complete with walking and cycling tracks, will link the neighbourhood with existing community facilities and recreation areas in Dora Creek including nearby community facilities, Dora Creek railway station, and Dora Creek Neighbourhood Centre.

A designated local park area will be provided within the site and in a central location.

The existing homestead on the northern part of the site should be retained to ensure connections with the district's rural history are maintained. With appropriate works, the homestead and surrounding area has the potential to be used for low impact commercial operations permissible within the zone, such as a bed and breakfast facility. Any proposed redevelopment of the existing rural homestead will require an assessment of the heritage significance of the homestead.

Due to the proximity of the site to a registered SEPP 14 wetland the development must give due consideration to the protection of this area. This will be achieved through the utilisation of best practice water sensitive urban design and strategies that ensure water quality is enhanced.

1.3 STRUCTURE PLAN

The Structure Plan shown in Figure 2 is indicative of how development will occur in the future.

The structure plan aims to:

- Maintain and enhance riparian corridors that serve as buffers to the adjoining SEPP 14 Wetland
- Encourage the conservation and adaptive reuse of the existing historic homestead
- Establish a perimeter road to define the edge of open space and conservation areas
- Locate roads and entries for efficient access
- Provide a local park with playground facilities
- Provide safe pedestrian and cycle paths linking to the existing road network
- Encourage the use of existing infrastructure and facilities in the neighbourhood
- Provide range of lot sizes to accommodate a variety of dwelling types
- Minimise potential for risk from bushfire, flooding, landslip, and soil contamination

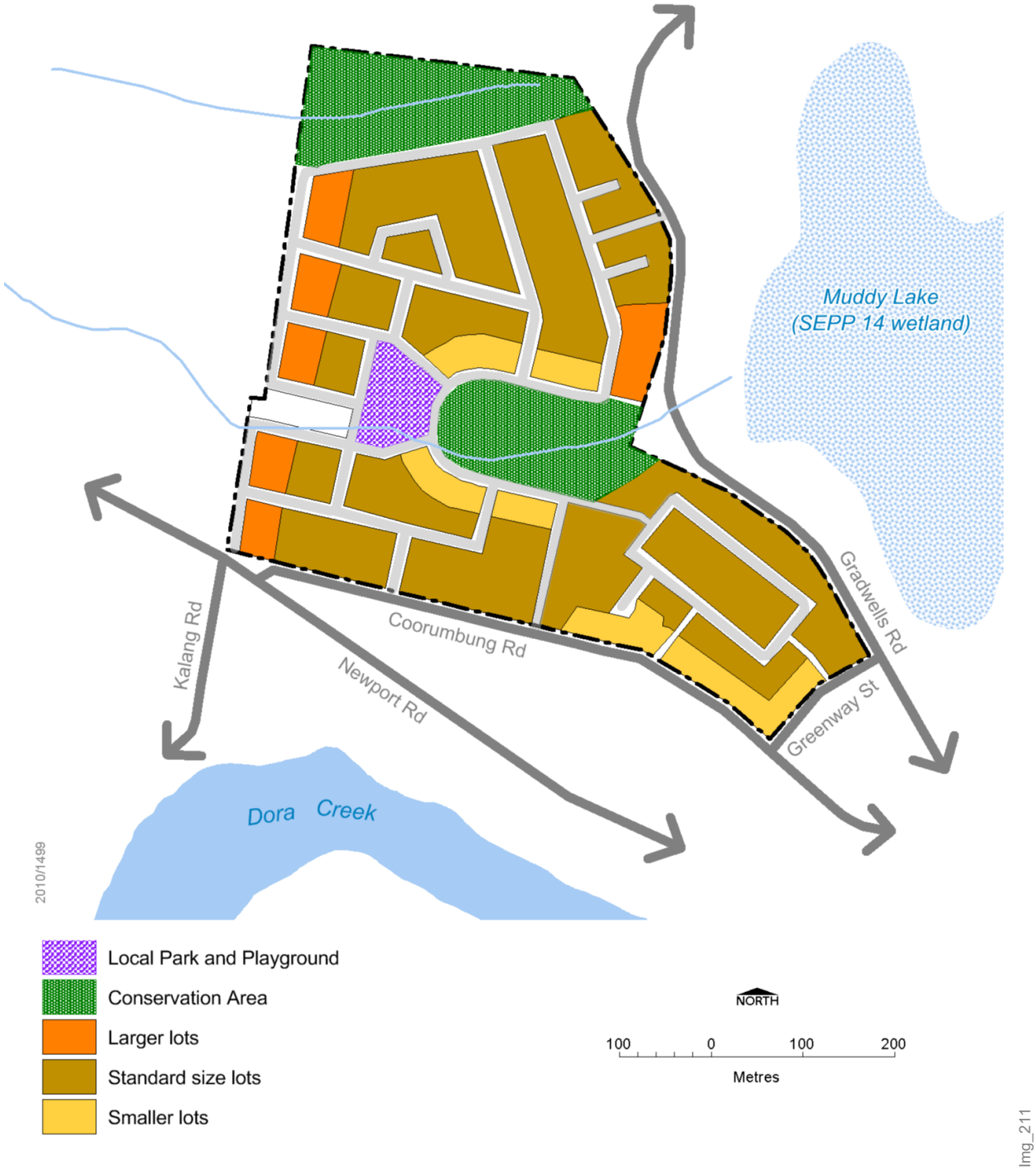

Figure 2 - Structure Plan

1.4 DEVELOPER CONTRIBUTIONS

Several items need to be provided to achieve the environmental and development objectives of the site.

These include:

- pedestrian/cycleway links;
- road and traffic infrastructure;
- stormwater management infrastructure;
- vegetation rehabilitation in conservation zoned land; and
- provision of a local park with play equipment.

There are several options available to deliver these items, including:

- conditions of consent for future development applications;
- section 94 contributions;
- dedication of land to Council;
- works in kind; and
- voluntary planning agreements.

The most suitable option(s) will be identified at the development application stage for subdivision.

1.5 SUBDIVISION DESIGN AND LAYOUT

Objectives

a. Ensure development of the site complements the surrounding natural and built environment, creating an interesting and liveable neighbourhood, which incorporates a mix of housing types.

Controls

1. Lot type and size must be generally consistent with Figure 2.
2. A suitable curtilage must be provided to the existing homestead building if it is retained.

Note: The locations of roads and the lot layout identified in Figure 2 are approximate and will be subject to final survey and design.

1.6 FRONTAGE TO EXISTING STREETS

Objectives

a. To ensure new dwellings are oriented to existing residential streets where feasible.

b. To avoid inconsistent and unsightly rear fences presenting to Gradwells Road.

Controls

1. Lots along Greenway Street and Coorumbung Road must be configured so that new dwellings face the existing street. Rear fences on the street boundary of Greenway Street or Coorumbung Road are not acceptable.
2. For lots with a rear boundary to Gradwells Road, rear fences must be at least 50% open, and landscape planting must be provided to achieve necessary screening for privacy. Sheet steel fencing is not acceptable.
3. For lots with a rear boundary to Gradwells Road, a consistent approach to rear fences must be resolved at subdivision stage to protect the visual amenity of Gradwells Road.

1.7 LOCAL PARK AND PLAYGROUND

Objectives

a. To provide community open space for recreation within the site.

b. To provide a local playground facility.

Controls

1. A local park with a minimum area of 5000m² must be provided for community use. Conservation areas, watercourses, drainage areas, or detention basins must not be included in the calculation of the park area.
2. The park must be located generally in accordance with Figure 2 and must not be within a conservation area.
3. The area for the park must:
    i. be generally square or rectangular in configuration;
    ii. be easily accessible through cycleway or walkway linkages from all lots in the subdivision;
    iii. have a minimum street frontage of 60m for visibility and passive surveillance;
    iv. be on a slope less than 1 in 10;
    v. not include senescent habitat trees to be retained (that are prone to dropping limbs);
    vi. not include a transmission line easement; and
    vii. be free of contamination, weeds, building rubbish, debris, or encroachments, and be able to be developed for the purpose of a local park.
4. The developed park must include pathways into the park, a children's playground and equipment, park benches and table, a water bubbler, and tree planting for shade.
5. The park may be dedicated to Council as community land subject to meeting all the requirements outlined above.

Note: The location of the local park as depicted on Figure 2 is approximate and subject to final survey and design.

1.8 VEGETATION MANAGEMENT

Objectives

a. To protect and revegetate riparian corridors within the site.

b. To reinforce the role of riparian corridors within the site as buffers to the SEPP 14 wetland.

Controls

1. Core riparian zones on watercourses must be revegetated with appropriate, locally occurring, native species.
2. A Vegetation Management Plan prepared in accordance with Council's Guidelines for Vegetation Management Plans must accompany any Development Application for the subdivision of the site. The plan is to outline the following:
    i. Location of SEPP 14 wetland boundaries and buffer areas
    ii. Hydrological characteristics and flood probability for riparian areas and downstream wetlands
    iii. Location of stormwater detention structures or water-sensitive urban design works

iv. Full list of existing plant species occurring in riparian corridors within the site

v. Full list of proposed species for revegetation work

vi. Extent and nature of revegetation works

vii. Future management arrangements for conservation areas

3. Pedestrian and cycle links must be constructed close to a road and at least 5m from the edge of a core riparian zone.
4. Stormwater detention structures or water sensitive urban design works located in a Conservation Zone must be integrated with revegetation works, and have minimal impact on the hydrological cycle of the adjacent SEPP 14 wetland.
5. Conservation areas may be dedicated to Council following satisfactory revegetation, and where arrangements have been made to fund ongoing management for an appropriate period post-development of at least five years.

1.9 PEDESTRIAN AND CYCLE LINKS

Objectives

a. To ensure development provides a pedestrian and cycle network with access to key destinations within the site and surrounding area, including Dora Creek Neighbourhood Centre, Dora Creek Public School, and Dora Creek railway station.

Controls

1. Development must provide pedestrian and cycle routes generally in accordance with Figure 3.
2. Pedestrian and cycle routes must be conveniently linked to the external road network.

1.10 TRAFFIC AND TRANSPORT

Objectives

a. To provide an efficient and effective road network which facilitates increased usage of public transport and other non-motorised forms of transport.

Controls

1. The road network must be established generally in accordance with Figure 3.
2. The road network must facilitate efficient bus routes and safe pedestrian access to bus stops.

1.11 MOSQUITO MANAGEMENT

Objectives

a. To ensure the location and design of development considers the impact of mosquitoes on residents' health and wellbeing.

Controls:

1. All development must consider the type and extent of local mosquito populations, including seasonality and harbourage.
2. Development must minimise potential for human exposure to mosquito borne disease through measures such as:

i. locating outdoor living areas and structures as far as possible from any likely breeding sites;

ii. effective screening on all dwelling windows, doors, and openings;

iii. effective screening on all openings to rainwater tanks.

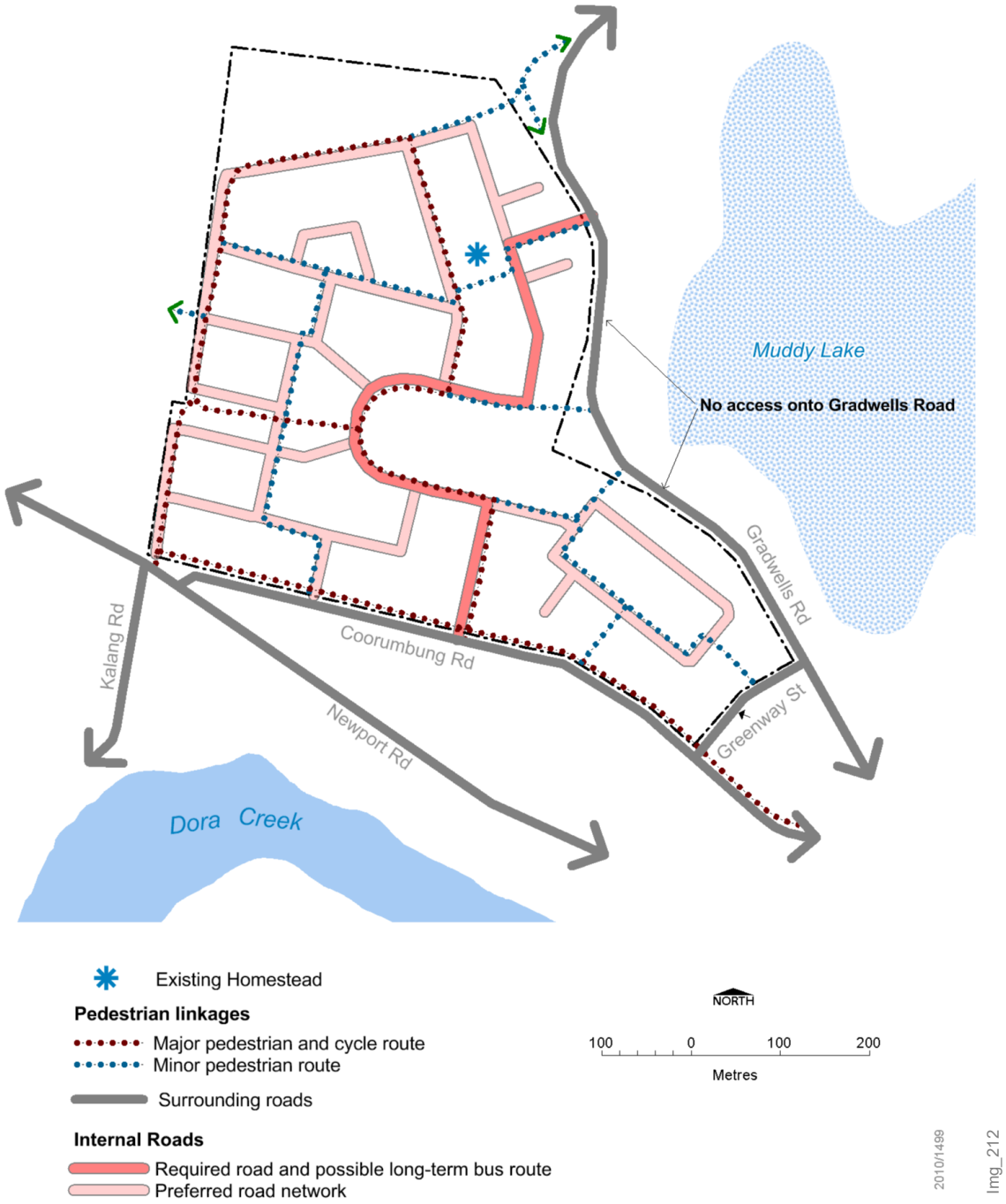

Figure 3 - Pedestrian and Traffic Movement

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1 INTRODUCTION

This section contains local objectives and controls for development in the flood prone areas of Dora Creek Township, as defined in Figure 1 - Area Plan Boundary. For general development controls including residential, commercial and sea/lake level rise, refer to Lake Macquarie Development Control Plan 2014 (LMDCP2014).

1.1 BACKGROUND

Dora Creek is located 30km southwest of Newcastle, rises in the Sugarloaf Ranges, some 460m above sea level and flows in an easterly direction to its mouth at Lake Macquarie. The township of Dora Creek is located about 3km from the mouth and is subject to flooding constraints. Flooding in Dora Creek is influenced both by rainfall over its catchment and high water levels in Lake Macquarie.

Inundation of overbank areas occurs when the carrying capacity of the Dora Creek channel is exceeded. Overbank flows where floodwaters do not return to the main creek channel, occur at several locations in the vicinity of the Dora Creek Township. Upstream of the Main Northern Railway, there are overflows to the north to Muddy Lake. Downstream of the railway, overflows occur to Muddy Lake and Lake Eraring in the north and to Bonnells Bay in the south.

One significant flooding event has affected the Dora Creek Catchment since the implementation of the original Area Plan. The June 2007 "Pasha Bulka" long weekend floods produced peak rainfall and flood levels consistent with the 1990 flood event, with the Martinsville and Mandalong catchments recording peak rainfall bursts. Overall, the 2007 flooding event at Dora Creek catchment was recorded at just below a 5% AEP event.

The *Dora Creek Floodplain Management Plan* 1998 provided the preliminary basis for the future management of flood liable lands and the management of development within the Dora Creek floodplain area. The *Dora Creek Floodplain Management Plan* 1998 has been replaced by the *Dora Creek Floodplain Risk Management Study and Plan 2015* in accordance with the *NSW Floodplain development Manual the management of flood liable land (April 2005)* and will provide the basis for the future management of flood liable land within the Dora Creek area.

The Dora Creek Floodplain Risk Management Study and Plan 2015 recommended that Development Control Plan (DCP) conditions be updated to reflect current details of floodways, flood storage areas and flood fringe areas, restrict development within high hazard flood prone lands (floodways, flood storage area, high velocity over 1.5m/s), prohibit development of Building Code of Australia Classes 1, 2, 3 4, 9a and 9c buildings in areas with flows in excess of 1.5 m/s, restrict development within low hazard flood prone lands and include clarity to development controls in relation to commercial and mixed use zones.

The *Dora Creek Floodplain Risk Management Study and Plan 2015* recommended revising Section 10.7 Certificates to contain property specific flooding information. This recommendation has been implemented through request of a 'Flood Certificate or Flood / Tidal Inundation Certificate' for lot specific flooding information. Alternatively, access to lot specific flood information via the On-line Flood Summary Information Tool is accessible through the *Lake Macquarie City Council website*.

In accordance with the *NSW Floodplain Development Manual (April 2005),* the *Dora Creek Floodplain Risk Management Study and Plan 2015* incorporated an assessment of climate change resulting in future sea and lake level rise. This assessment included projected estimations of a 0.4 metre and 0.9 metre rise in sea and lake levels by Years 2050 and 2100, with peak rainfall and storm volume expected to increase by an estimate of 10% (low), 20% (medium) and 30% (high) by designated timeframes.

Sections of the Dora Creek Catchment have been identified in Lake Macquarie's *Inundation Hazard Map* as having high hazard of permanent inundation through projected estimates of 0.4 metre and 0.9 metre sea level rise.

The *Dora Creek Floodplain Risk Management Study and Plan 2015* recommended undertaking a Local Adaptation Plan for the Dora Creek catchment and its implementation will provide further detailed

development conditions on completion, which will replace intermediate controls found under Section *1.4 Adaption to Sea and Lake Level Rise* of this Area Plan.

1.2 EXTENT OF AREA PLAN

This Area Plan applies to the flood prone areas shown in Figure 1.

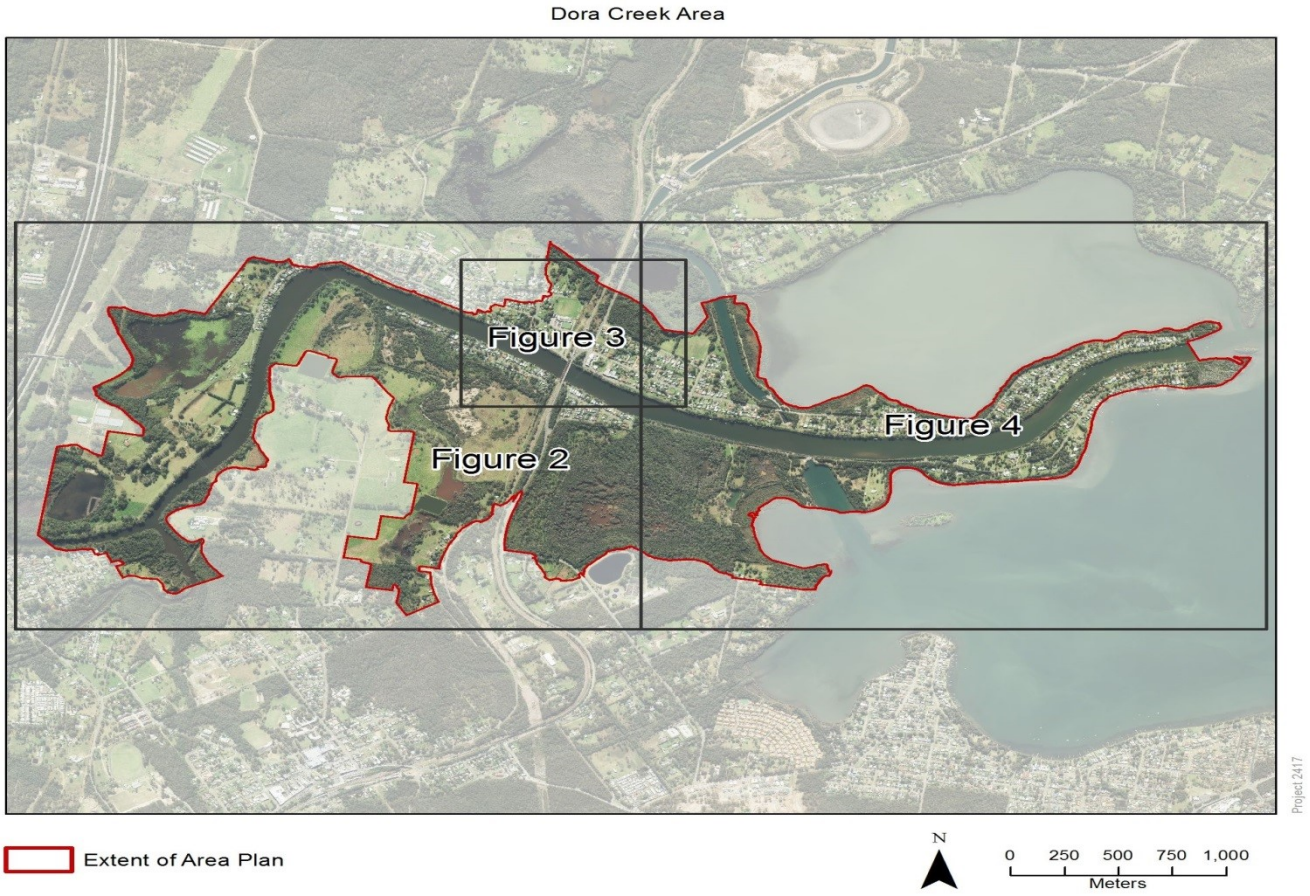

Figure 1 - Area Plan Boundary

1.3 FLOOD DEVELOPMENT CONTROLS AND FLOOD PLANNING LEVELS

Objectives

a. To ensure that more intensive forms of development in parts of the flood prone areas of Dora Creek are consistent with the requirements of Clause 7.3 Flood Planning of *LMLEP 2014*, the *Dora Creek Floodplain Risk Management Study Plan* 2015 and *Lake Macquarie Development Control Plan 2014*.

b. To ensure that subdivision and development is managed in accordance with the flood hazard identified in the *Dora Creek Floodplain Risk Management Study Plan* 2015 and Lake Macquarie Development Control Plan 2014.

c. To restrict more intensive forms of development in parts of the flood prone area of Dora Creek.

Controls

1. On flood prone land identified as a non-commercial area within Figures 2-4, the following forms of new development are not supported because of the risk to life and property. Any Development Applications submitted to Council in relation to the development types listed below, must be consistent with the requirements of Clause 7.3 Flood Planning of *LMLEP 2014*:

   i. Subdivision,

   ii. Dual Occupancy – Attached and Detached (Class 1A), Boarding House (Class 1B),

   iii. Small Lot Housing, Group Homes, Semi Detached Dwelling (Class 1A),

   iv. Multiple Dwelling Housing, Residential Flat Building (Class 2),

   v. Hostel, Hotel Accommodation (Class 3),

   vi. Sensitive Use Developments (Class 9), (e.g. Aged Care Building, Child Care Centres, Day Respite Care Centres, Place of Public Worship, Information and Educational Facilities), and

   vii. Healthcare Buildings (Class 9A).

   For additional DCP provisions:

   Refer to LMDCP 2014, Part 3 - Development in Residential Zones - Clause 2.8 Catchment Flood Management, and Clause 2.9 Lake Flooding and Tidal Inundation (Incorporating Sea Level Rise).

   Note: Section 1.5 Glossary provides definitions for various references in this DCP including “Class” in relation to building types.

2. On flood prone land identified as a commercial area within the Dora Creek township CBD (Wamsley Street, Dora Street and Doree Place) (Figure 3) the following new buildings types and uses are not supported because of the flood risk to life and property. Any Development Applications submitted to Council in relation to the development types listed below, must be consistent with the requirements of Clause 7.3 Flood Planning of *LMLEP 2014*:

   i. Boarding House,

   ii. Small Lot Housing, Group Homes, Multiple Dwelling Housing, Shop Top Housing; Residential Flat Buildings,

   iii. Hostels, and

   iv. Sensitive Use Developments (Class 9C), (e.g. Aged Care Building, Child Care Centres, Day Respite Care Centre, Places of Public Worship).

   For additional DCP provisions:

Refer to LMDCP 2014, Part 4 Development in Business Zones – Clause 2.9 Catchment Flood Management, and Clause 2.10 Lake Flooding and Tidal Inundation (Incorporating Sea Level Rise).

1.4 ADAPTATION TO SEA AND LAKE LEVEL RISE

Objectives

a. To ensure that development is designed to enable future adaptation if projections are realised, or that measures are implemented to mitigate any adverse impacts of climate change or sea level rise.

b. To encourage innovative responses to sea level rise impacts

c. To ensure that development adequately considers and responds to sea level rise projections, and the predicted effects on inundation, flooding and foreshore recession, and on groundwater levels.

General Provisions

1. General provisions related to adaptation to sea and lake level rise are provided in Councils DCP Flooding and Development Guidelines:

   i. *Flood Resilient Housing Guidelines*

   ii. *Flood Management Guidelines*

1.5 GLOSSARY

Annual Exceedance Probability (AEP): the chance of a flood of a given or larger size occurring in any one year, usually expressed as a percentage. For example, if a peak flood discharge of 500 m3/s has an AEP of 5%, it means that there is a 5% chance (that is one-in-20 chance) of a 500 m3/s or larger event occurring in any one year (see ARI).

Australian Height Datum (AHD): a common national surface level datum approximately corresponding to mean sea level.

Class 1-9C: refers to the NSW Building Code of Australia's building classification types.

Commercial area: is defined as an area that contains the following uses - commercial premises, business premises, office premises, retail premises.

Development: is defined in Part 4 of the Environmental Planning and Assessment Act (EP&A Act).

Flood: relatively high stream flow which overtops the natural or artificial banks in any part of a stream, river, estuary, lake or dam, and/or local overland flooding associated with major drainage before entering a watercourse, and/or coastal inundation resulting from super-elevated sea levels and/or waves overtopping coastline defences excluding tsunami.

Flood fringe areas: the remaining area of flood prone land after floodway and flood storage areas have been defined.

Flood Planning Level (FPL): means the level of a 1:100 ARI (Average recurrent interval) flood event plus 0.5 metre freeboard.

Flood prone land: land susceptible to flooding by the Probable Maximum Flood (PMF) event. Flood prone land is synonymous with flood liable land.

Flood storage areas: those parts of the floodplain that are important for the temporary storage of floodwaters during the passage of a flood. The extent and behaviour of flood storage areas may change with flood severity, and loss of flood storage can increase the severity of flood impacts by reducing natural flood attenuation. Hence, it is necessary to investigate a range of flood sizes before defining flood storage areas.

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

Freeboard: provides reasonable certainty that the risk exposure selected in deciding on a particular flood chosen as the basis for the FPL is actually provided. It is a factor of safety typically used in relation to the setting of floor levels, levee crest levels, etc. Freeboard is included in the flood planning level.

Habitable floors: in a residential situation: a living or working area, such as a lounge room, dining room, rumpus room, kitchen, bedroom or workroom. In an industrial or commercial situation: an area used for offices or to store valuable possessions susceptible to flood damage in the event of a flood.

New development: refers to development of a completely different nature to that associated with the former land use. For example, the urban subdivision of an area previously used for rural purposes. New developments involve rezoning and typically require major extensions of existing urban services, such as roads, water supply, sewerage and electric power.

Redevelopment: refers to rebuilding in an area. For example, as urban areas age, it may become necessary to demolish and reconstruct buildings on a relatively large scale. Redevelopment generally does not require either rezoning or major extensions to urban services.

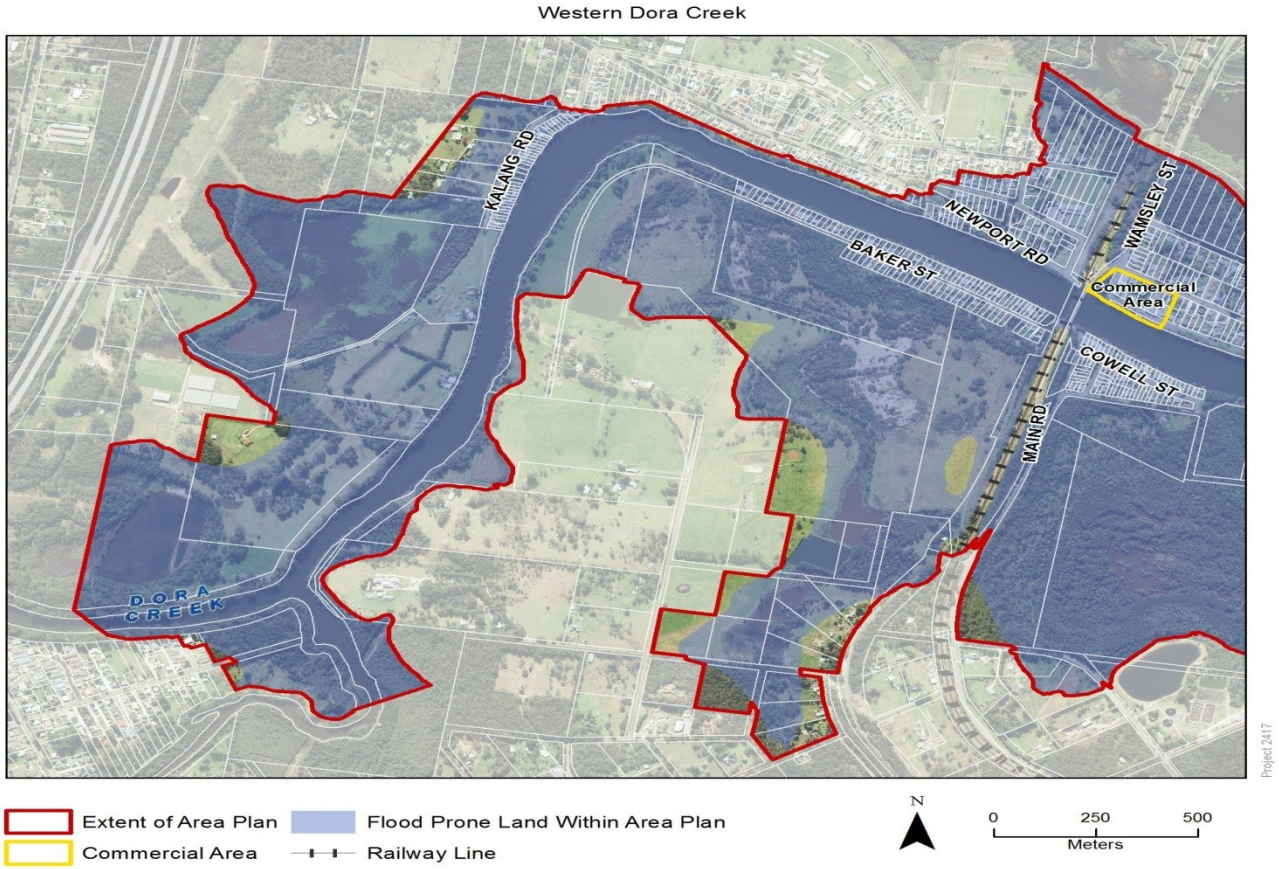

Figure 2 - Flood Prone Areas - Western Dora Creek

Figure 3 - Flood Prone Areas – Central Dora Creek

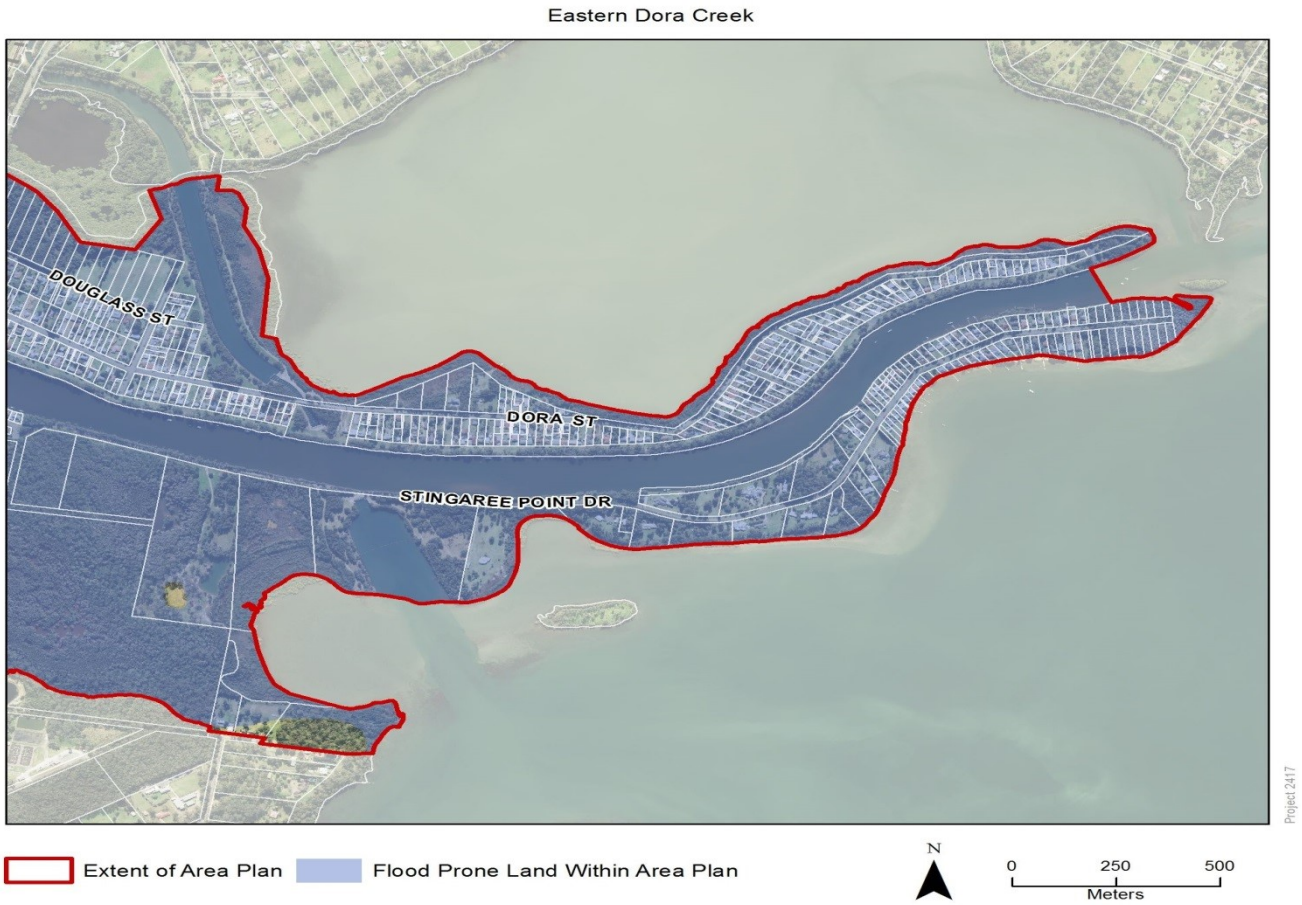

Figure 4 - Flood Prone Areas – Eastern Dora Creek

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1 INTRODUCTION

The purpose of the East Munibung Hill Area Plan is to provide a strategic approach to the development in the East Munibung Hill Area, as well as ensuring that land use is efficient and development is appropriate to the location. Land within the study area is in multiple ownership, resulting in a need for an integrated approach for future rezoning and development.

This area plan provides guidance for the development of East Munibung Hill.

1.1 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all the land outlined in heavy black edging as shown within Figure 1 –East Munibung Hill Area Plan Boundary.

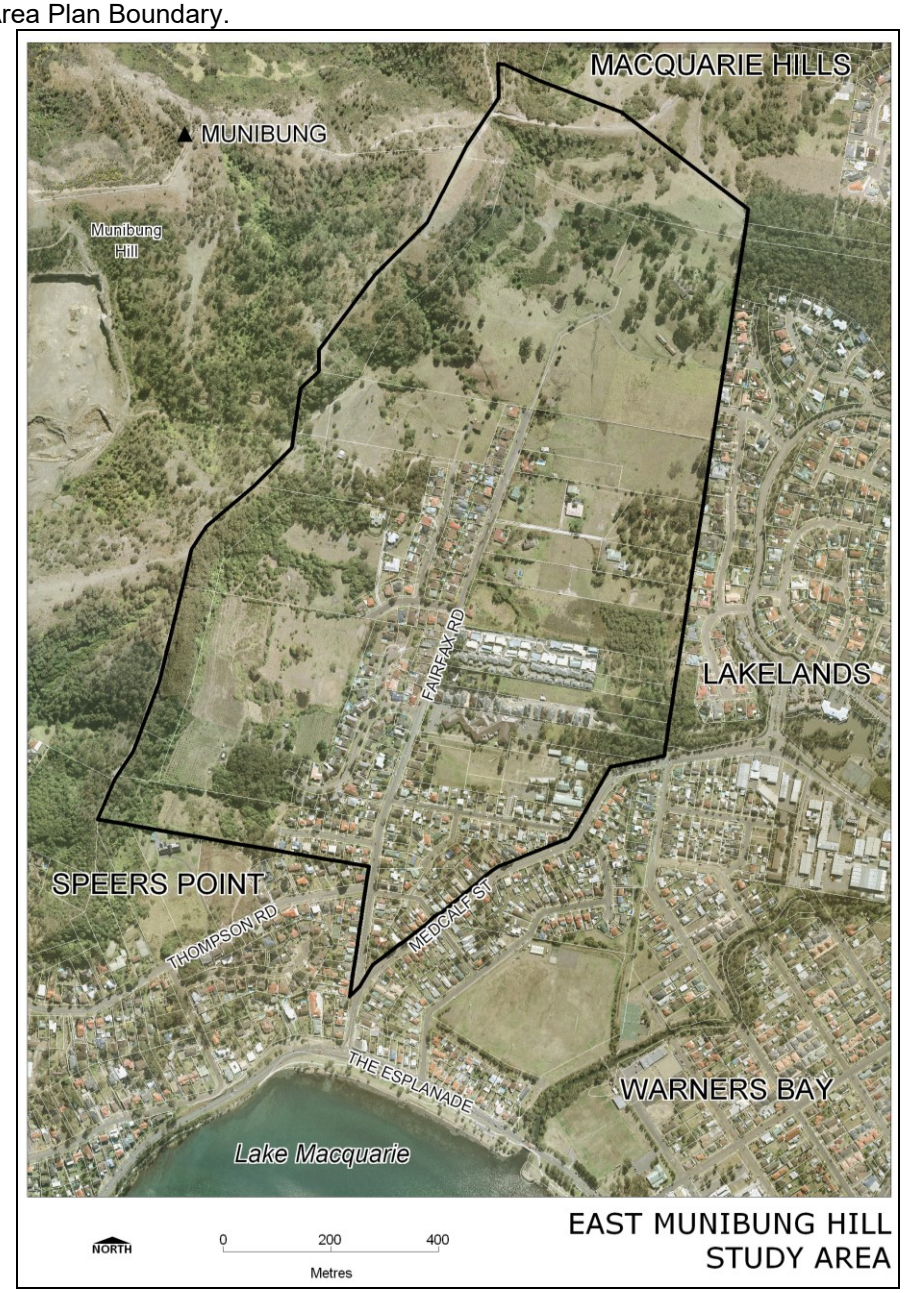

Figure 1 - East Munibung Hill Area Plan Boundary

1.2 CHARACTER STATEMENT

It is envisaged that the East Munibung Hill Area Plan will facilitate development including a range of housing types and lot sizes, which respect the natural setting and provide opportunities for views towards the Lake and Munibung Hill. It is anticipated that the area plan will also facilitate a well-designed urban environment that provides for ease of movement and accessibility to a range of transport options all within a walkable catchment of local services and facilities.

Medium density residential development is envisaged on the flat land in the south-eastern part of the study area. However, there is a need to ensure that medium density housing provides for a sympathetic transition at its interface with lower density housing. This will result in an extension to the land currently developed for medium density north of the private hospital. Pedestrian and road links through to Medcalf Street and Lakelands will provide access to public transport, local services, and higher order roads.

A pedestrian and cycle link is planned adjacent to the eastern edge of the riparian corridor, creating a distinct edge between the riparian corridor and the adjoining residential development. This link is proposed to be extended southwards through to Medcalf Street providing access to public transport and services within a walkable catchment.

Roads will be provided to enhance connectivity within the study area and provide traffic with linkages between Fairfax Road and Lakelands. A road linkage is to extend along the eastern edge of the proposed re-established riparian corridor, further differentiating residential development from the riparian corridor.

Future development along Fairfax Road is envisaged as being of low density and scale to complement the existing development and to maintain the low-density streetscape within the study area.

A riparian corridor will be re-established and planted with species indigenous to the site along the ephemeral stream to the east of Fairfax Road. The riparian corridor and conservation zoned land will be reserved for conservation and drainage purposes only. The conservation of the vegetation within the southeastern part of the study area will be extended northwards to protect the low-lying area containing various native wetland flora species and to provide improved fauna habitat.

It is envisaged that major stormwater management infrastructure will be provided and integrated within the riparian corridor to be re-established, through a series of smaller cascading stormwater ponds to reflect a natural system.

The foothills of Munibung Hill to the north and west of Fairfax Road will remain largely undeveloped with no further subdivision due to scenic quality, environmental and geotechnical constraints. It is proposed that the hillside to the west of Fairfax Road will be revegetated. Revegetation is also anticipated on the hillside in the north of the study area.

A Structure Plan indicating these desired future characteristics for the study area is presented in Figure 2 – Envisaged Urban Structure.

1.3 DEVELOPER CONTRIBUTIONS

Several items need to be provided to achieve the environmental and development objectives of the site. These include:

- Pedestrian/cycle links;
- Road and traffic infrastructure;
- Stormwater management infrastructure;
- Vegetation rehabilitation in conservation zoned land;
- Re-establishment and public ownership of a riparian corridor along the ephemeral creek to the east of Fairfax Road.

There are several options available to deliver these items, including:

- Conditions of consent;
- Dedication of land;
- Voluntary planning agreements;
- Section 7.11 contribution plans; and

- Works in kind.

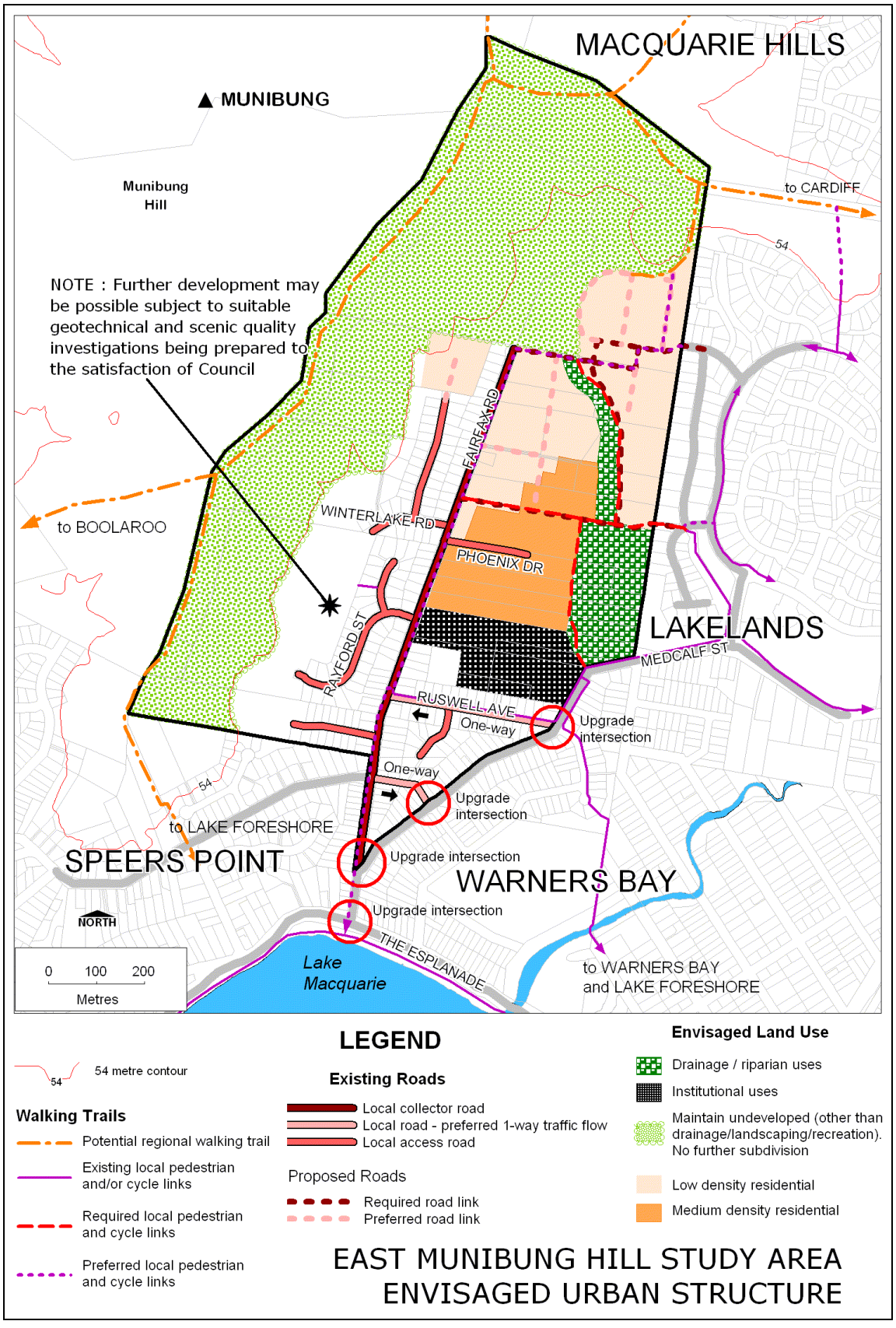

Figure 2 - Envisaged East Munibung Hill Structure Plan

1.4 FLORA AND FAUNA

Objectives

a. To ensure that ecologically valuable land is protected.

b. To ensure that biodiversity is maintained through the conservation and rehabilitation of vegetation habitat.

Controls

1. On Lot 112 in DP 264554, the *Eucalyptus robusta* (Swamp Mahogany) habitat trees located towards the southern boundary of Lot 112 in DP 264554, and the northern boundary of Lot 113 in DP 264554 as identified on Figure 3 should be retained, adequately protected, and incorporated as part of any future development.
2. Sufficient trees and canopy cover must be retained to provide a vegetation link from the *E. robusta* (Swamp Mahogany) habitat trees back to the riparian corridor.
3. A riparian corridor should be re-established and planted with species indigenous to the site along the ephemeral creek to the east of Fairfax Road.
4. Rehabilitation of the riparian corridor must be consistent with Figure 3 - Native Vegetation and Corridors.

1.5 SUBDIVISION DESIGN AND LAYOUT

Objectives

a. To ensure the subdivision of East Munibung Hills is undertaken in a coordinated manner.

Controls

1. The subdivision layout should generally be consistent with the East Munibung Hills Structure Plan (Figure 2).
2. The road layout should generally be consistent with the East Munibung Hills Vehicle Connection Map (Figure 4).
3. Finished floor levels (FFLs) must be located below RL 54 (AHD).

1.6 BUILT FORM

Objectives

a. The character and streetscape of Fairfax Road is maintained and enhanced.

b. Development should result in the sharing of views to Lake Macquarie and to Munibung Hill.

c. Building elements above the 54m contour (AHD) must minimise their impact on the scenic values of the area.

Controls

1. New dwellings with frontage to Fairfax Road should be detached to maintain the low-density streetscape.
2. Development within the study area must be consistent with the Lake Macquarie Scenic Quality Guidelines.
3. Development within the study area must not have a finished floor height above the 54 m contour (AHD).
4. Building elements above the 54m contour (AHD) must:

i. contain colours, tones and finishes that blend with and compliment the natural landscape i.e. earthen and green,

ii. minimise the use of reflective materials, and

iii. ensure the bulk and scale of the dwellings must not dominate the landscape.

1.7 LAND CONTAMINATION

Objectives

a. The level of contamination is clearly identified and addressed. There is the potential of contamination within the study area due to previous land use activities and the former lead smelter on the north-western side of the Munibung Hill at Boolaroo.

b. Areas of identified contamination are remediated and the works are reviewed and validated before the land is used for its proposed purpose.

Controls

1. A Phase 1 Preliminary Contaminated Site Investigation must be carried out by a suitably qualified contaminated site consultant in accordance with the current NSW EPA Guidelines for Consultants Reporting on Contaminated Sites.

2. In cases where the land has contained a potentially contaminating activity, a Phase 1 and Phase 2 Contaminated Site Investigation may need to be combined and a Site Remedial Action Plan prepared if necessary.

3. If the Phase 2 investigation identifies that contaminants will have an impact on the proposed development, or if the land requires remediation, a Remedial Action Plan must be prepared and lodged in accordance with the guidelines approved by the Department of Environment and Conservation and the NSW Contaminated Land Management Act, 1997.

4. Following remediation, the site must be validated by a site auditor in accordance with the NSW Contaminated Land Management Act, 1997.

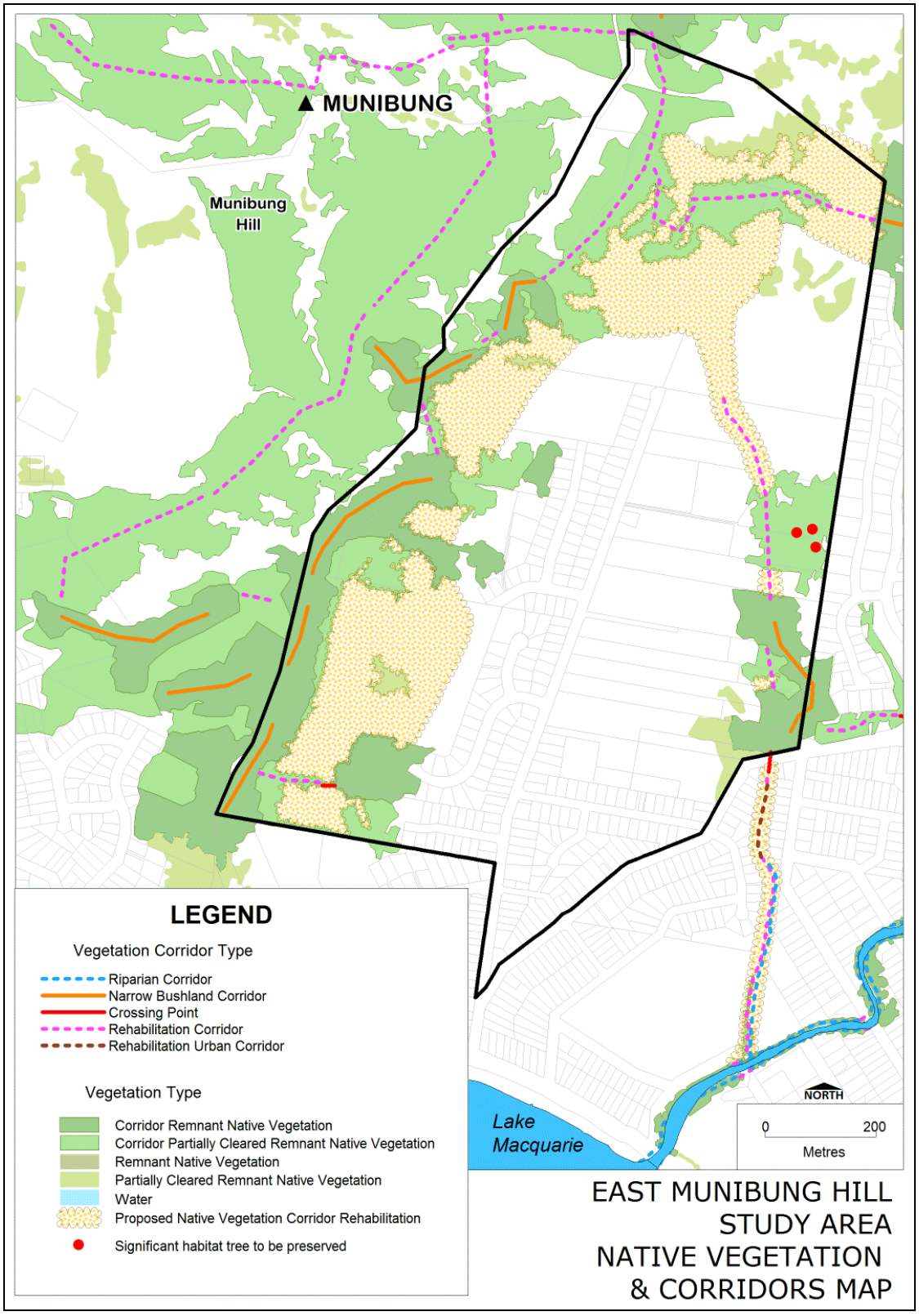

Figure 3 - East Munibung Hill Native Vegetation and Corridors

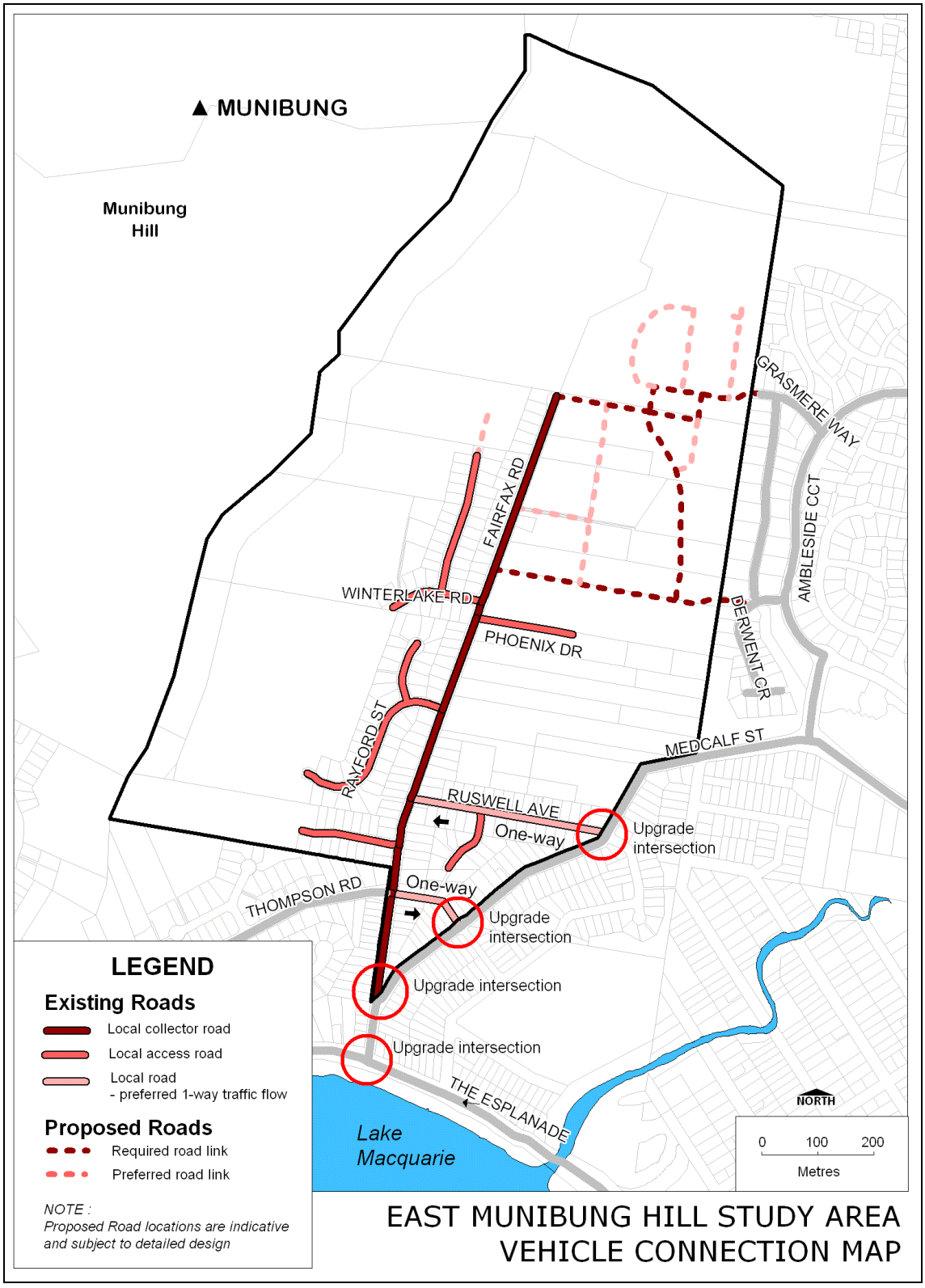

Figure 4 - East Munibung Hill Vehicle Connection Map

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1 INTRODUCTION

The Edgeworth Area 1 Precinct Area Plan supplements the Lake Macquarie Development Control Plan 2014 for future development requiring consent within the Edgeworth 1 Residential Estate. This Estate will be developed to allow approximately 117 residential lots and the conservation of the environmentally significant land buffering the 4th Order watercourse of Brush Creek.

1.1 LAND TO WHICH THIS PLAN APPLIES

This Precinct Area Plan applies to the land outlined in heavy red edging as shown within Figure 1 – Edgeworth Area 1 Precinct Area Plan Boundary (below).

Figure 1 - Land to which this plan applies

1.2 CHARACTER STATEMENT

It is envisaged that the Edgeworth Area 1 Precinct Area Plan will facilitate residential development including a range of housing types and lot sizes. This Plan will facilitate a well-designed urban environment that provides for ease of movement and accessibility to a range of transport options all within a walkable catchment of local services and facilities.

All roads will be provided with footpaths to create an environment that fosters walking and cycling. These roads have been designed to provide future connectivity to the northern urban release area known as Edgeworth Area 2. The stormwater management infrastructure (i.e. detention basin) will be buffered from the 4th Order Water Course of Brush Creek. A riparian corridor will be re-established and planted with species indigenous to the site. The riparian and land zoned E2 – Environmental Conservation will be reserved for conservation and drainage purposes only. The utilisation of the split-zone clause under the LEP will allow for the active management of this land.

1.3 STRUCTURE PLAN

The Edgeworth Area 1 Structure Plan (below) provides a concise schematic plan showing the appropriate design outcomes from the site and how the development is likely to occur in the future.

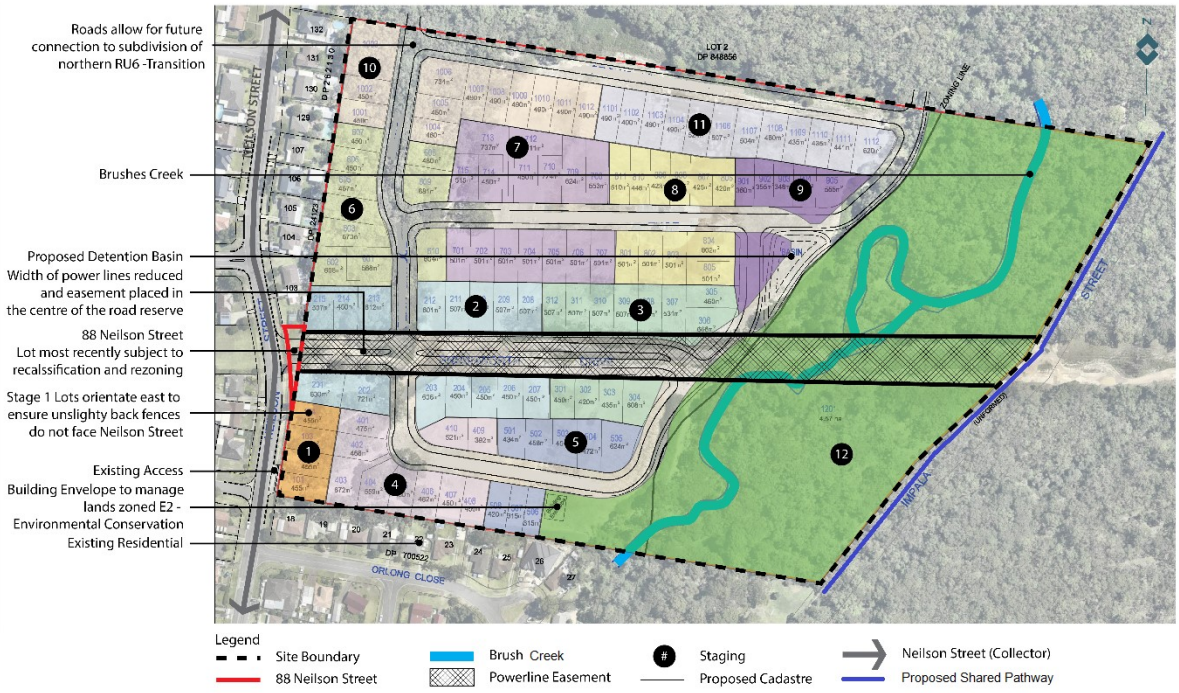

Figure 2 - Site Analysis and Local Structure Plan

1.4 DEVELOPER CONTRIBUTIONS

Several items need to be provided to achieve the environmental and development objectives of the site. These include:

- Road and traffic infrastructure;
- Stormwater management infrastructure;
- Vegetation rehabilitation in E2 – Environmental Conservation zoned land;

There are several options available to deliver these items, including:

- Conditions of consent;
- Dedication of land;
- Voluntary Planning Agreements (VPA's);
- Section 7.11 Contribution Plans; and
- Works in kind.

1.5 SUBDIVISION DESIGN AND LAYOUT

Objectives

a. To ensure the subdivision and development of Edgeworth Area 1 Residential Estate is undertaken in a coordinated manner.
b. To provide housing diversity.
c. To ensure the Edgeworth Area 1 Residential Estate will be developed to reflect the availability of services.

Controls

1. The subdivision layout should generally be consistent with Figure 2 – Edgeworth Area 1 Structure Plan.
2. Between 10% and 50% of lots must be between 300m^2 and 450m^2 in area.
3. Staging the development should be generally consistent with Figure 3 – Indicative Development Staging and Subdivision Plan, however stages may be constructed simultaneously.

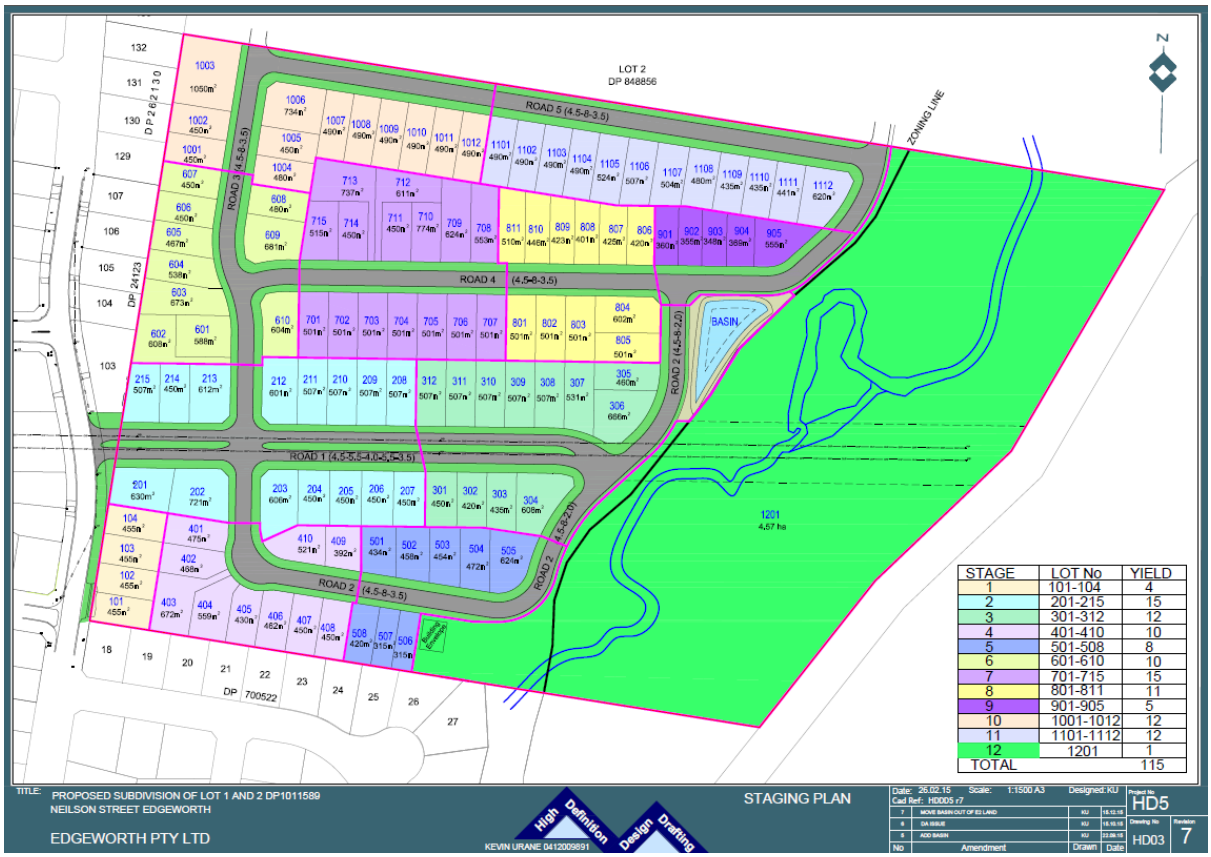

Figure 3 - Indicative Staging and Subdivision Plan

1.6 STREET LAYOUT

Objectives

a. To ensure the subdivision and development of Edgeworth Area 1 is undertaken in a coordinated manner and is well designed.

Controls

1. Street layout must reflect the principles illustrated in Figure 2 – Edgeworth Area 1 Structure Plan.
2. Road design must be consistent with Figure 4 - Road Cross Sections, which details:
   i. The main access road is a split load with a 5.5m carriageway in both directions and a 4m wide central median (Road 1);
   ii. Secondary roads are 16m wide with a 8m wide carriageway (Road 2, 3 & 4); and
   iii. All roads have a 20m centre line radius; and
   iv. Only the south to north roads are designed to be intersections for future development to the north.

Note: Roads are identified in Figure 5 – Road Number Identifiers.

3. The intersection treatment with Neilson Street is a basic right turn and basic left turn (BAR/BAL) intersection.

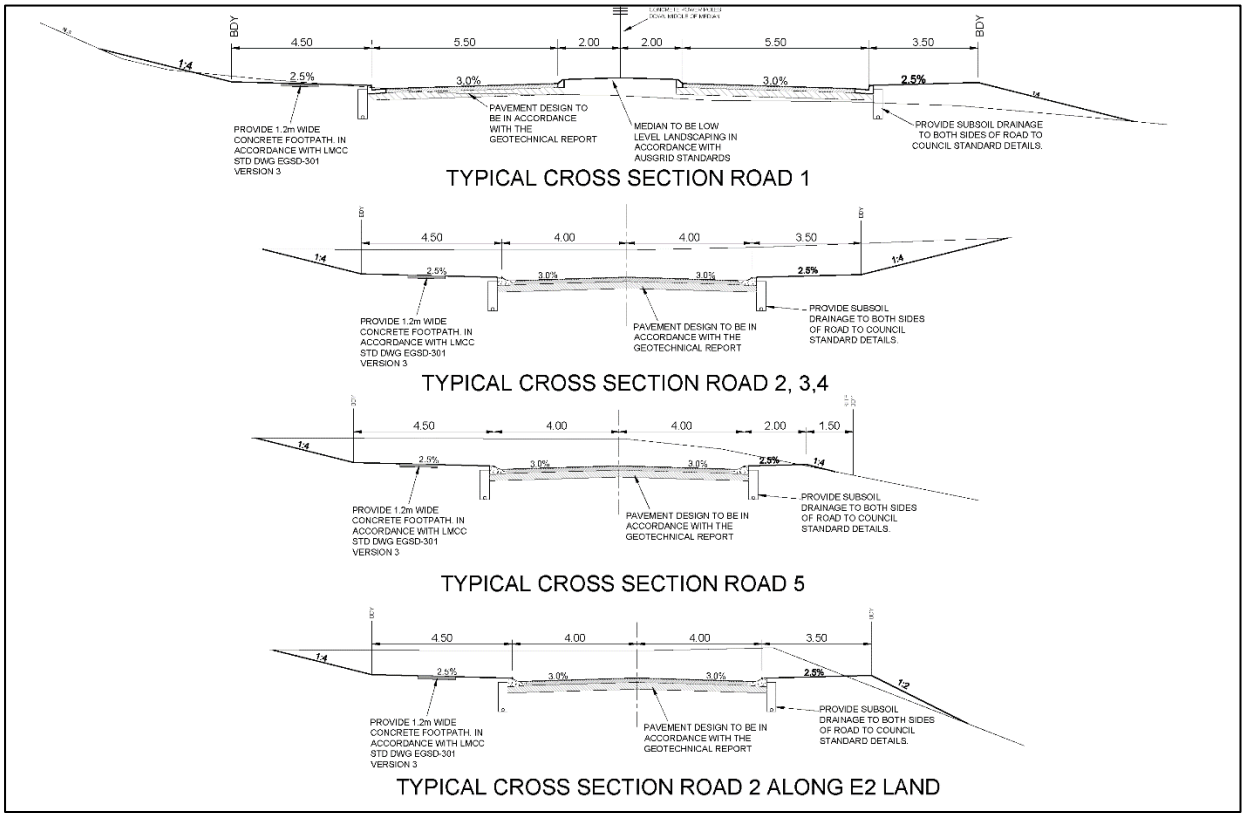

Figure 4 - Road Cross Sections

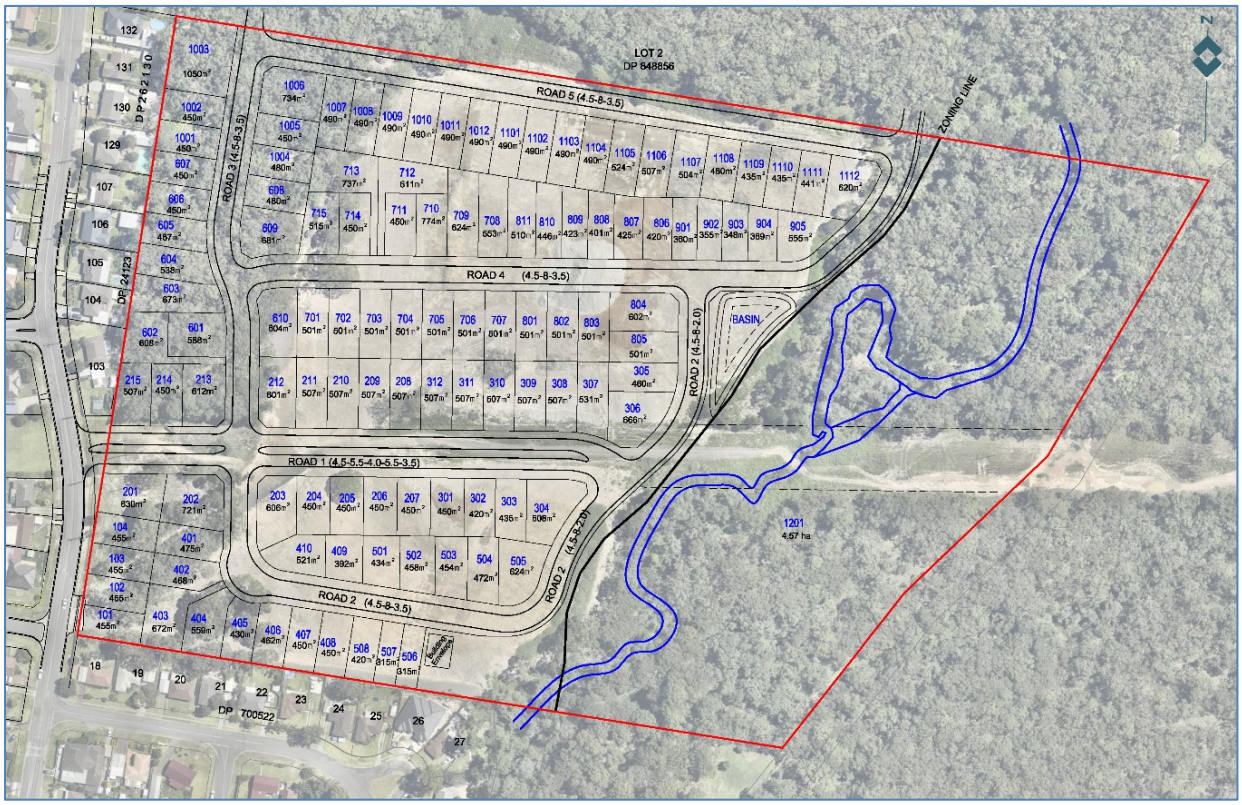

Figure 5 - Road Number Identifiers

1.7 FRONTAGE TO EXISTING STREETS

Objectives

a. To ensure new dwellings are orientated to existing residential streets where feasible.
b. To avoid inconsistent and unsightly rear fences presenting to Neilson Street.

Controls

1. Lots along Neilson Street must be configured so that new dwellings face the existing street. Rear fences on the street boundary of Neilson Street are not acceptable.
2. For lots with a primary and secondary frontage to a street, dwellings are to be appropriately designed and oriented to achieve passive surveillance and appropriate visual amenity in accordance with the Lake Macquarie Development Control Plan 2014.

1.8 VEGETATION MANAGEMENT

Objectives

a. To protect and re-vegetate riparian corridors within the site.
b. To reinforce the role of riparian corridors within the site as buffers to Edgeworth Area 1.

Controls

1. Core riparian zones on watercourses must be revegetated with appropriate, locally occurring, native species.

2. A Vegetation Management Plan prepared in accordance with Council's Guidelines for Vegetation Management Plans must accompany the application for the subdivision of the land that is zoned E2 – Environmental Conservation. The Plan is to outline the following:
   i. Location of the riparian buffer areas
   ii. Hydrological characteristics and flood probability for riparian areas and downstream wetlands
   iii. Location of stormwater detention structures or water –sensitive urban design works
   iv. Full list of existing plant species for revegetation work
   v. Extent and nature of revegetation works
   vi. Future management arrangements for conservation areas
3. Stormwater detention structures or water sensitive urban design works located in the E2 – Environmental Conservation zone must be integrated with the revegetation works and have a minimal impact on the hydrological cycle.

1.9 TRAFFIC AND TRANSPORT

Objectives

a. To provide an efficient and effective road network that facilitates increased usage of public transport and other non-motorised forms of transport.

Controls

1. The road network must be established generally in accordance with Figure 2 – Local Structure Plan.
2. The road network must facilitate efficient bus routes and safe pedestrian access to bus stops.
3. The road network must facilitate safe bicycle access to the surrounding cycling network (existing and proposed) identified in the Lake Macquarie Cycling Strategy.

1.10 WATER QUALITY MANAGEMENT

Objectives

a. To ensure ecologically valuable land and associated watercourses are protected.
b. To ensure the stormwater drainage system is designed to maintain the natural watercourse and to minimise environmental impacts.

Controls

1. If any stormwater and water quality structures are positioned within the land zoned E2 – Environmental Conservation, these facilities must be of a water sensitive design, integrated within any revegetation works and have minimal impact on water flows of the stream.
2. The design of drainage systems must provide both retention and water quality controls on stormwater flows prior to discharge into the riparian corridor and provided in accordance with Figure 2 – Structure Plan.
3. A suitable riparian corridor must be maintained along each side of the existing watercourse in accordance with State Government Guidelines.
4. Each lot must provide stormwater retention and water quality facilities to comply with maximum site discharge requirements and minimise environmental impacts.

1.11 BUSHFIRE MANAGEMENT

Objectives

a. Subdivision design in bushfire prone areas must include measures to manage the threat of bushfires without impact on land zoned for E2 – Environmental Conservation.

Controls

1. Asset Protection Zones (APZ's) must be incorporated in perimeter roads and where necessary the front property setbacks.
2. APZ's must not be located in any land zone for conservation.
3. Stormwater Detention basins may form part of an APZ.
4. APZ's are provided in accordance with Figure 6 – Asset Protection Zones.

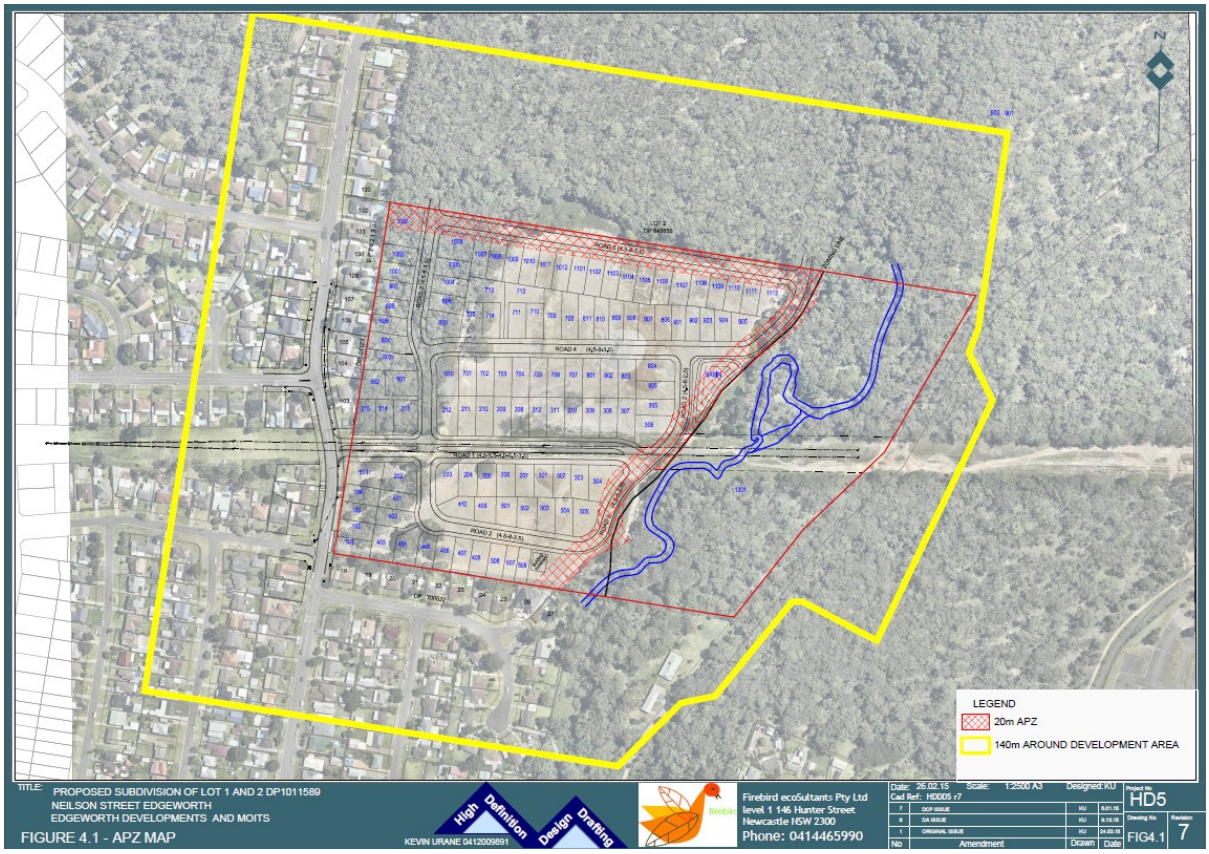

Figure 6 - Asset Protection Zones (APZ's)

1.12 NATIVE VEGETATION REHABILITATION AND MANAGEMENT

Objectives

a. To rehabilitate and enhance the ecological functions of the land zoned E2 – Environmental Conservation that adjoins Brushes Creek.

Controls

1. Land zoned E2 Environmental Conservation along Brushes Creek must be rehabilitated with locally indigenous native vegetation and will be maintained in accordance with a Vegetation Management Plan (VMP) that will be attached to the Land Title of the Residual Lot.
2. The Vegetation Management Plan must be submitted with the application for subdivision.

1.13 LANDSCAPE MASTERPLAN

Objectives

a. Subdivision within the study area adheres to an overall landscape plan for each precinct.

Controls

1. Street trees are consistent with Figure 7 – Landscape Plan and with reference to the following schedule:

Street Tree Species			
Code	**Botanical Names**	**Common Names**	**Pot Sizes**
BAC cit	*Backhousia citriodora*	Lemon Scented Myrtle	75 Litre
TRI lau	*Tristaniopsis laurina*	Water Gum	75 Litre
WAT flo	*Waterhousia floribunda*	Weeping Lilly Pilly	75 Litre
ELA ret	*Elaeocarpus reticulatus*	Blueberry Ash	75 Litre

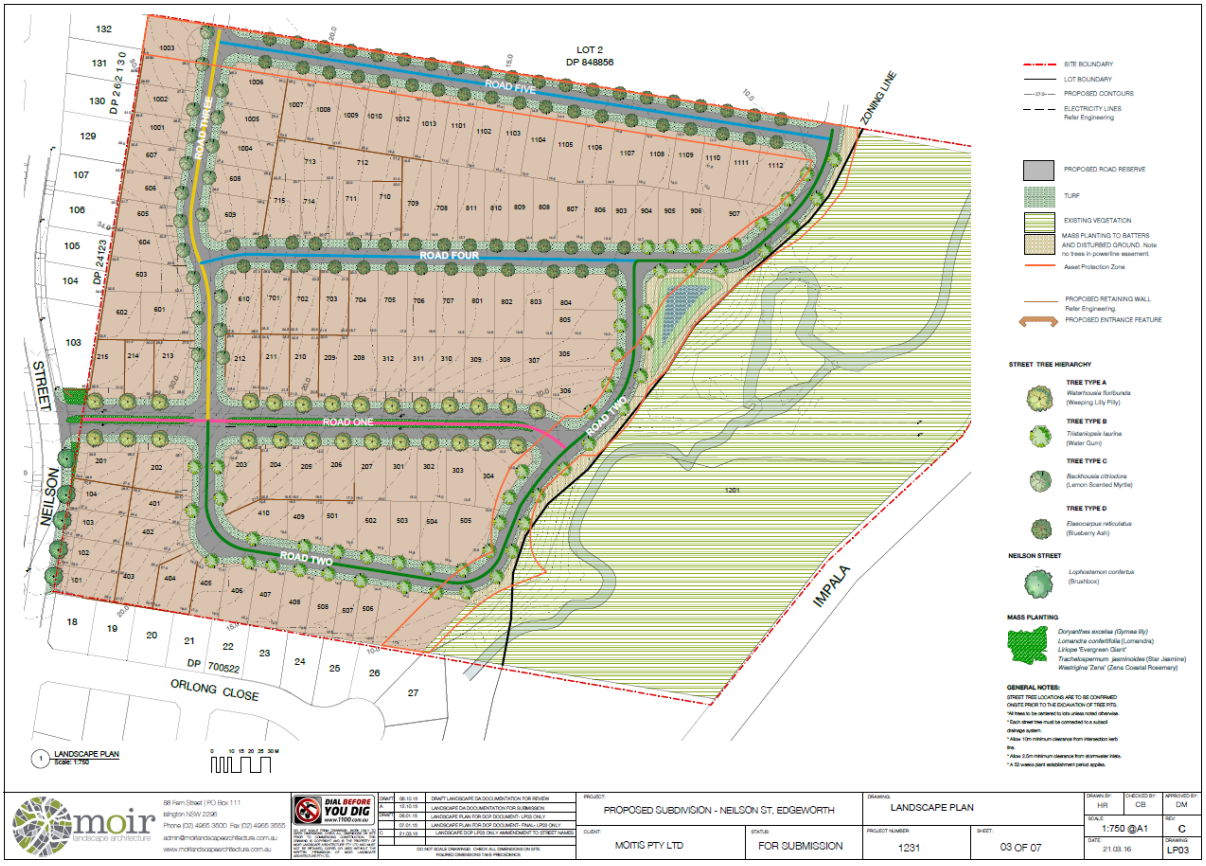

Figure 7 - Landscape Plan

1.14 GEOTECHNICAL

Objectives

a. To ensure that the land is suitable and stable for the proposed development.

Controls

1. Development is consistent with the guidelines and recommendations of the Geotechnical Report to ensure stability and safety;
   i. which in relation to slope states:
      - Lots along the western boundary (those west of Road 3 and along the southern boundary until Lot 403) be founded on rock as it appears shallow and will minimise the risk and potential damage of landslip failure.
      - Lots south of Road 2 (and east of Lot 403) should have a development restriction zone from the southern boundary of a minimum of 5m.
      - Development along the eastern side of Road 2 should be restricted to a minimum 7m from the top of the slope or remedial works must be undertaken to ensure the stability of the slope post construction.
      - Lots 305 to 312 north of Road 1 should have a development restriction zone from the southern boundary of a minimum of 5m.

   Note: A Geotechnical Engineer should be consulted during construction to confirm new cut and fill slopes will have an acceptably low risk of slope failure.

   Note: Roads are identified in Figure 5 – Road Number Identifiers.

   ii. which in relation to footing systems states:
      - Any proposed footing system be designed in accordance with AS2870 'Residential Slabs and Footings'. Consideration will need to be given to the required extent of excavation and filling of the site when selecting and designing the footing system.

   iii. which in relation to vegetation states:
      - Landscaping is provided in accordance with the Landscape Master Plan in order to maintain the integrity of site slopes.

   iv. which in relation to drainage states:
      - The property should be developed and maintained in accordance with the guidelines set out in Section 3 of the BCA and Appendix B of AS2870 – 2011
      - In particular, the following measures are recommended:
        - Catch/dish drains formed at the top of all batters.
        - Dish and rubble drains installed at the toe of all batters.
        - Subsoil drains installed behind new retaining walls.
        - Cut areas sloped to fall away from buildings and water not allowed to pond around buildings.
        - The site is graded to prevent water from ponding on any compacted fills.
        - Surface stormwater and subsoils water collected and disposed of to Council's requirements.
        - Erosion control measures to be undertaken during construction to Council's requirements.
        - That subsoil drain be constructed immediately upslope of any proposed residence to intercept and dispose of any groundwater seepage.
        - Infiltration of collected stormwater is not recommended on the site.
        - Fill Vegetating exposed permanent batters.

   v. which in relation to excavations states:

- Excavations in excess of 1.0m depth are supported by an engineered designed retaining wall.
- Unretained cuts in soils must be battered in accordance with the requirements of the Building Code of Australia, but in no case should be steeper than 2H:1V and must be protected from erosion. Unretained cuts in competent rock must be battered in accordance with the requirements of the Building Code of Australia, but in no case should be steeper than 1H:4V and must be protected from erosion.
- Where applicable, the excavation design should incorporate surcharge loads from slopes, retaining walls, structures and other improvements within the vicinity of the excavation.
- Drainage measures should be implemented above and behind all excavations to intercept both surface and subsurface movement.
- Tiered batter slopes must be separated by a minimum distance of 1.5m. Separation distances must not contain a slope in excess of 20H:1V.
- Maximum excavation height is not to exceed 3m without further geotechnical investigation and approval.
- Excavations should be undertaken as per AS3798-2007 'Guidelines on Earthworks for Commercial and Residential Development'.

vi. which in relation to filling states:

- Fill in excess of 1.0m must be retained by an engineer designed retaining wall.
- Unretained fill less than 1.0m in depth should be battered in accordance with the requirements of the Building Code of Australia, but in no case should be steeper than 2H:1V and must be protected from erosion.
- Fill should be placed in maximum 200mm deep layers and be compacted to 100% maximum dry relative density for cohesive material or 70% relative density for non-cohesive (sand) material.
- Where fill is placed on slopes greater than 8H:1V, the natural surface should be benched prior to the placement of fill material.
- Tiered batter slopes must be separated by a minimum distance of 1.5m. Separation distances must not contain a slope in excess of 20H:1V.
- Maximum filling height is not to exceed 3m without further geotechnical investigation and approval.

vii. which in relation to retaining walls states:

- Engineer designed retaining walls should be designed in accordance with the requirements of AS4678 'Earth-retaining Structures' to support, where appropriate, surcharge loading due to the upslope battered surface level above the retaining walls and the depth of cut or fill material. Retaining walls should be constructed with adequate surface and subsurface drainage to the Engineer's and Council's requirements.

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The Edgeworth Area 2 Precinct Plan supplements LMDCP 2014 for future development requiring consent on land north of Transfield Avenue and east of Minmi Road, Edgeworth. The provisions of this Area Plan are in addition to those contained within the broader LMDCP 2014. This area will be developed to allow residential dwellings and the conservation of a riparian corridor and land that is zoned E2 Environmental Conservation under *Lake Macquarie Local Environmental Plan 2014 (LMLEP 2014)*.

1.1 LAND TO WHICH THIS PLAN APPLIES

This Precinct Plan applies to all the land outlined in heavy yellow edging as shown within Figure 1 – Edgeworth Area 2 Precinct Area Plan Boundary. The subject site is described as being part of Lot 27 DP 202567, Lots 1 & 2 DP 250063, Lot 1 DP 900356, Lot 1 DP 900357, Lot 111 DP 665948, Lot 1 DP 921714 and Lot 1 DP 921545.

1.2 CHARACTER STATEMENT

It is envisaged that the Edgeworth Area 2 Precinct will facilitate low density residential development, with the inclusion of some smaller lots. The Edgeworth Area 2 Precinct is characterised by sloping topography and is traversed by a riparian corridor which crosses the site in the north-east corner with a tributary extending westward across the site.

The area is located in close proximity to Cameron Park residential areas and the existing Edgeworth Village Centre. It is anticipated that future residents will have a strong connection to these existing areas. A proposed entry boulevard off Minmi Road to the north of the subject site acts as a collector road and will ultimately connect the area to the other precincts north and south of the Newcastle Link Road urban release area as well as the Cameron Park Estate, Edgeworth and Glendale retail centres. The subdivision layout for the subject site will provide connection through future development of the Edgeworth Area 2 Precinct.

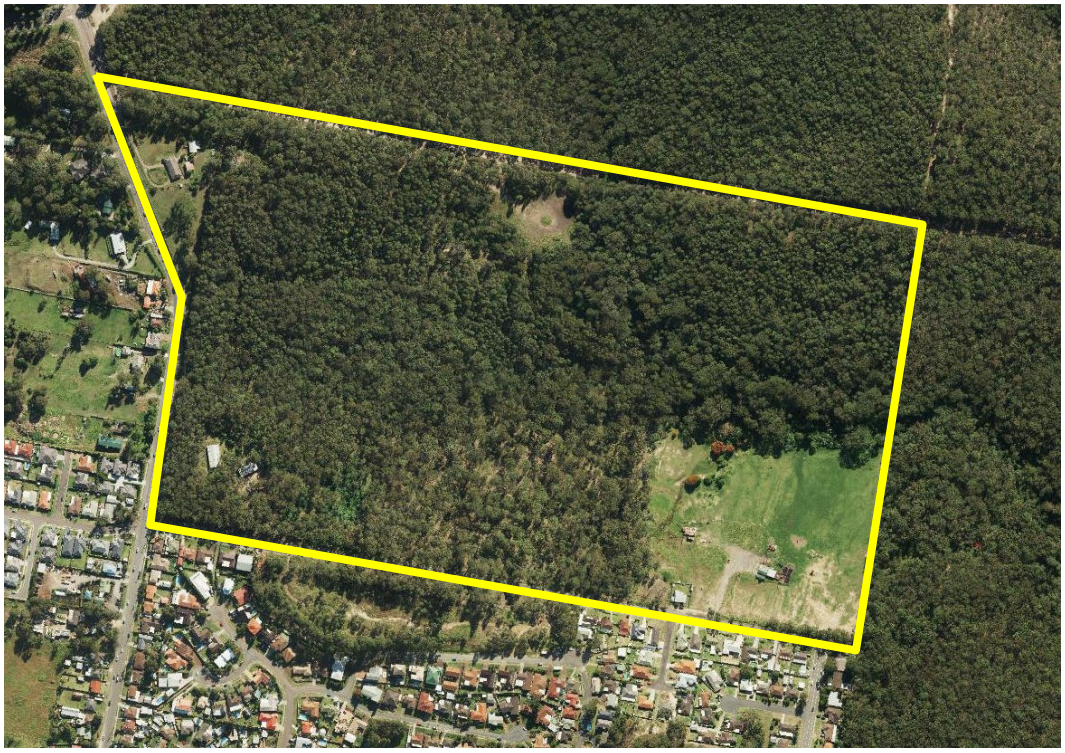

Figure 1 - Edgeworth Area 2 Plan Boundary

Subject Site

1.3 STRUCTURE PLAN

The Edgeworth Area 2 Indicative Structure Plan as provided in Figure 2 provides a plan showing an appropriate design outcome from the site and how the development may occur in the future.

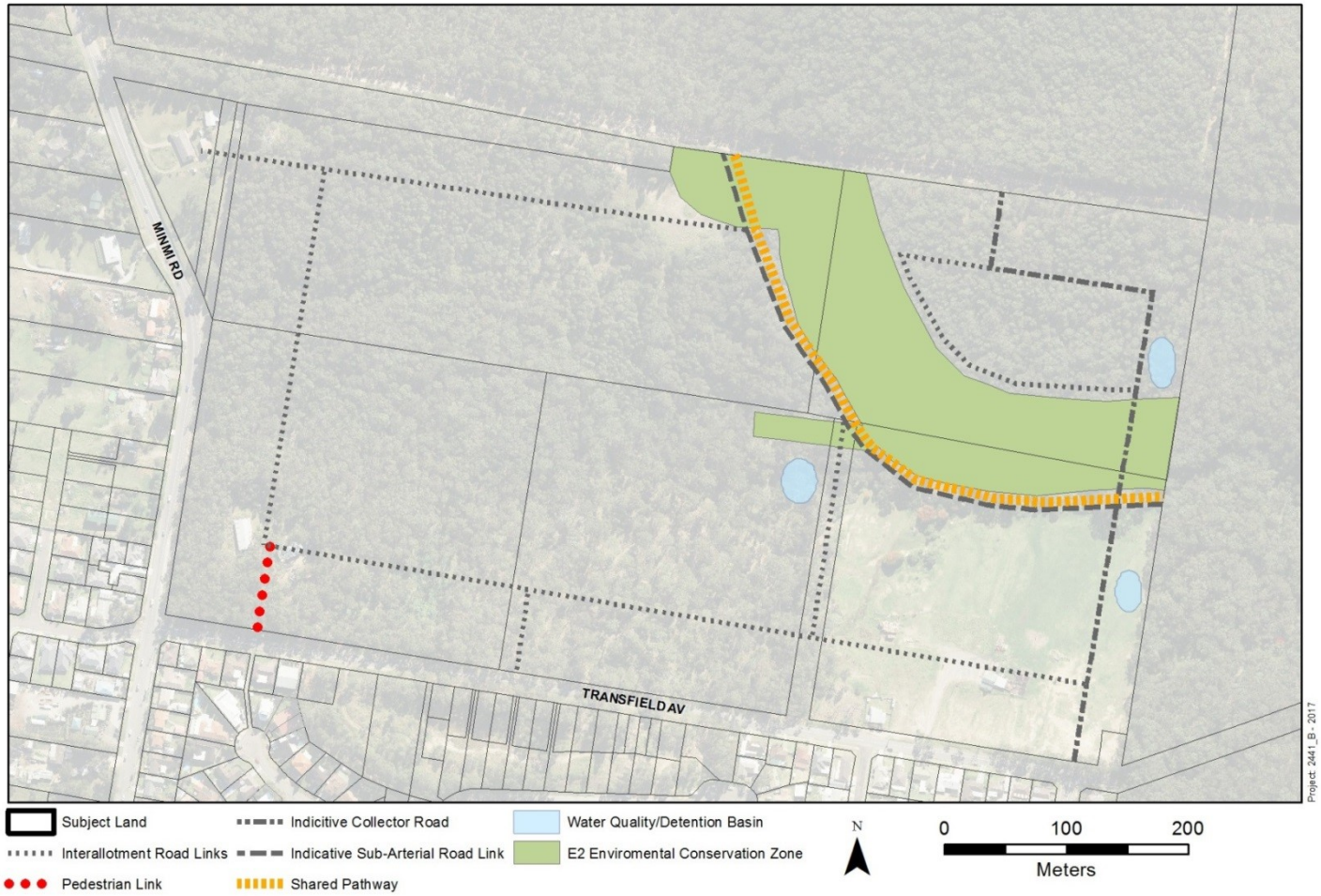

Figure 2 - Edgeworth Area 2 Indicative Structure Plan

2 DEVELOPMENT CONTROLS

2.1 SUBDIVISION DESIGN AND LAYOUT

Objectives

a. To ensure the subdivision and development of Edgeworth Area 2 is undertaken in a coordinated manner.
b. To ensure Edgeworth Area 2 will be developed to reflect the availability of services.
c. To provide suitable land for residential development that respond to the site's characteristics and assists in creating a walkable neighbourhood.
d. To provide opportunities for choice in housing to cater for changing demographics within the community.

Controls

1. The subdivision design and layout should generally be consistent with the Edgeworth Area 2 Indicative Structure Plan illustrated in Figure 2.
2. Public roads may be designed with maximum grades of 12.5% for designated bus routes, or maximum 16% for all other road types. Split level carriageways may also be used to address significant topographic constraints.
3. Location and width of Asset Protection Zones (APZ's) and Managed Fuel Zones are to be provided in accordance with *Planning for Bushfire Protection 2006*.
4. The road network should be designed to comply with the requirements of *Planning for Bushfire Protection 2006*.
5. The width and design of fire trails shall enable safe and ready access for fire fighting vehicles.
6. Fire trails are to be trafficable under all weather conditions. Where the fire trail joins a public road, access shall be controlled to prevent use by non-authorised persons.

2.2 TRANSPORT NETWORK

Objectives

a. To provide a movement network that provides multiple transport options to the community including efficient, effective, safe, and comfortable pedestrian and cycling networks and access to public transport.

Controls

1. The pedestrian, cycling, and road networks are to be established generally in accordance with Figure 2 – Edgeworth Area 2 Indicative Structure Plan.
2. The pedestrian, cycling, and road networks are to provide connectivity with the surrounding networks (existing and proposed).
3. The transport network is to provide efficient, effective, safe, and comfortable pedestrian and cycling access and connection to the existing surrounding network.
4. The transport network is to facilitate efficient bus routes and safe pedestrian access to bus stops.
5. The road network is to facilitate safe bicycle access to the surrounding cycling network (existing and proposed) identified in the Lake Macquarie Cycling Strategy.
6. Development of the land is to facilitate a sub-arterial road connection extending between Frederick Street and Minmi Roads, Edgeworth, as demonstrated by Figure 2 – Edgeworth Area 2 Indicative Structure Map.

Note: An Aboriginal scatter site has been identified in the vicinity of the indicative road alignment at the northern boundary of the subject land. In seeking to achieve a connection to the road network to the north, this scatter site will need to be considered in the road design and alignment in accordance with statutory requirements and Aboriginal Heritage development controls in Lake Macquarie Development Control Plan.

7. A collector road link is required to ensure connectivity between Neilson Street and Road No.5 of the concept approved development (known as Link Road South) to the north.

2.3 FRONTAGE TO EXISTING STREETS

Objectives

a. To ensure new dwellings are orientated to existing residential streets where feasible.
b. To avoid inconsistent and unsightly rear fences presenting to Transfield Avenue or Minmi Road.

Controls

1. Lots along Transfield Ave and Minmi Road must be configured so that new dwellings face the existing street. Rear fences on the street boundary of Transfield Ave or Minmi Road are not acceptable.
2. For lots with a primary and secondary frontage to a street, dwellings are to be appropriately designed and orientated to achieve passive surveillance and appropriate visual amenity in accordance with the elements of LMCC DCP 2014.

2.4 BIODIVERSITY

Objectives:

a. To offset biodiversity loss to meet a standard of 'net gain'.
b. To protect and enhance biodiversity values within land identified for biodiversity conservation.
c. To ensure the riparian and wildlife corridors and buffers associated with Brush Creek and its tributaries are rehabilitated and appropriately managed.
d. To provide for the long-term rehabilitation and management of any land retained for biodiversity conservation.

Controls:

1. Impacts on biodiversity must be assessed in accordance with relevant legislation. Given the proximity of the site to the Edgeworth Town Centre and nearby schools and community facilities, Council has agreed to accept off-site biodiversity offsets to compensate for the impact of development of the residential zoned areas of this site. The quantum of any biodiversity offset proposal must be based on the principle of 'net gain' in terms of both the areas of native vegetation and biodiversity values protected.
2. Flora and fauna surveys of the land to which the area plan applies are to be undertaken prior to the submission of any development application for the land, and will be undertaken in accordance with the requirements outlined in Lake Macquarie City Council's Flora and Fauna Survey Guidelines 2012 or as updated. The survey details and data are to be documented in accordance with the Guidelines, submitted with a development application, and must:
   i. Identify and map vegetation communities on the land, and areas of endangered ecological community occurring on the land.
   ii. Identify and map habitat trees.
   iii. Define and map the location of streams, stream banks, riparian vegetation and the boundary of all native vegetation occurring on the site.
   iv. Enable accurate determination of biodiversity offsets required to compensate for the removal of biodiversity on the land, consistent with the proposed method of offsetting applied.

3. Any development of land zoned E2 Environmental Conservation must minimise and offset biodiversity loss including, but not limited to any fill or excavation, stormwater treatment devices, services, retaining walls, roads and bridges or culverts, pathways, or bushfire asset protection works.
4. Development for urban purposes (including services) must provide for adequate and appropriate measures to protect land zoned E2 Environmental Conservation and other biodiversity conservation land, including access control, buffers, bushfire asset protection zones, perimeter roads, drainage and weed controls, and the like.

2.5 WATER QUALITY MANAGEMENT

Objectives

a. To ensure ecologically valuable land and associated watercourses are protected;
b. To ensure the stormwater drainage system is designed to maintain the natural watercourse and to minimise environmental impacts.

Controls

1. If any stormwater and water quality structures are positioned adjoining land zoned E2 Environmental Conservation, these facilities must be of a water sensitive design, integrated within any revegetation works and have minimal impact on water flows of the stream.
2. The design of drainage systems must provide both retention and water quality controls on stormwater flows to discharge into the riparian corridor and provided generally in accordance with Figure 2 – Edgeworth Area 2 Indicative Structure Plan.
3. A suitable riparian corridor must be maintained along each side of the existing watercourse in accordance with State Government Guidelines.

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1 INTRODUCTION

The Edgeworth Area 3 Precinct Area Plan supplements LMDCP 2014 for future subdivision requiring consent on land south of George Booth Drive, Edgeworth, south of the Cameron Park local centre. The provisions of this Precinct Area Plan are in addition to those contained within the broader LMDCP 2014. This area will be developed to allow subdivision for low and medium density residential housing adjoining conservation land.

1.1 LAND TO WHICH THIS PLAN APPLIES

This Precinct Area Plan applies to all the land outlined in heavy yellow edging as shown within Figure 1 – Edgeworth Area 3 Precinct Area Plan Boundary. The subject site is currently described as being Lots 1 & 2 DP 1180029 and Lots 6 & 7 DP 4647.

1.2 CHARACTER STATEMENT

It is envisaged that the Edgeworth Area 3 Precinct will facilitate medium density residential development, smaller lots located around the medium density area and low density residential development across the remaining urban release area. The pocket of housing adjoining Carinda Avenue will extend and complete the existing subdivision pattern.

The Edgeworth Area 3 Precinct is traversed by multiple major electricity easements and associated infrastructure and is surrounded to its east and south by conservation zoned lands, which will provide a bushland perimeter to the neighbourhood. The Precinct is characterised otherwise by sloping topography dominated by a low level ridgeline and rounded peak located in the centre of the site, with overland flow to Slatey Creek and Cocked Hat Creek off site. An isolated arc of the former West Wallsend Steam Tram Line local heritage item extends into the site, with limited physical evidence other than a section of embankment.

The area is located in close proximity to the Cameron Park local centre to the north of George Booth Drive and the signalised intersection. It is anticipated that future residents will have a strong connection to the local centre and off-site open space, recreation and community facilities via the constructed signalised intersection and pedestrian and cycling connections to it, and will support the role of that centre. It is also in proximity to and connected with the Edgeworth and Glendale retail centres via the existing transport network. Development of the urban release area will support housing opportunities in an identified growth and expansion area and adjoining the urban renewal corridor from Glendale.

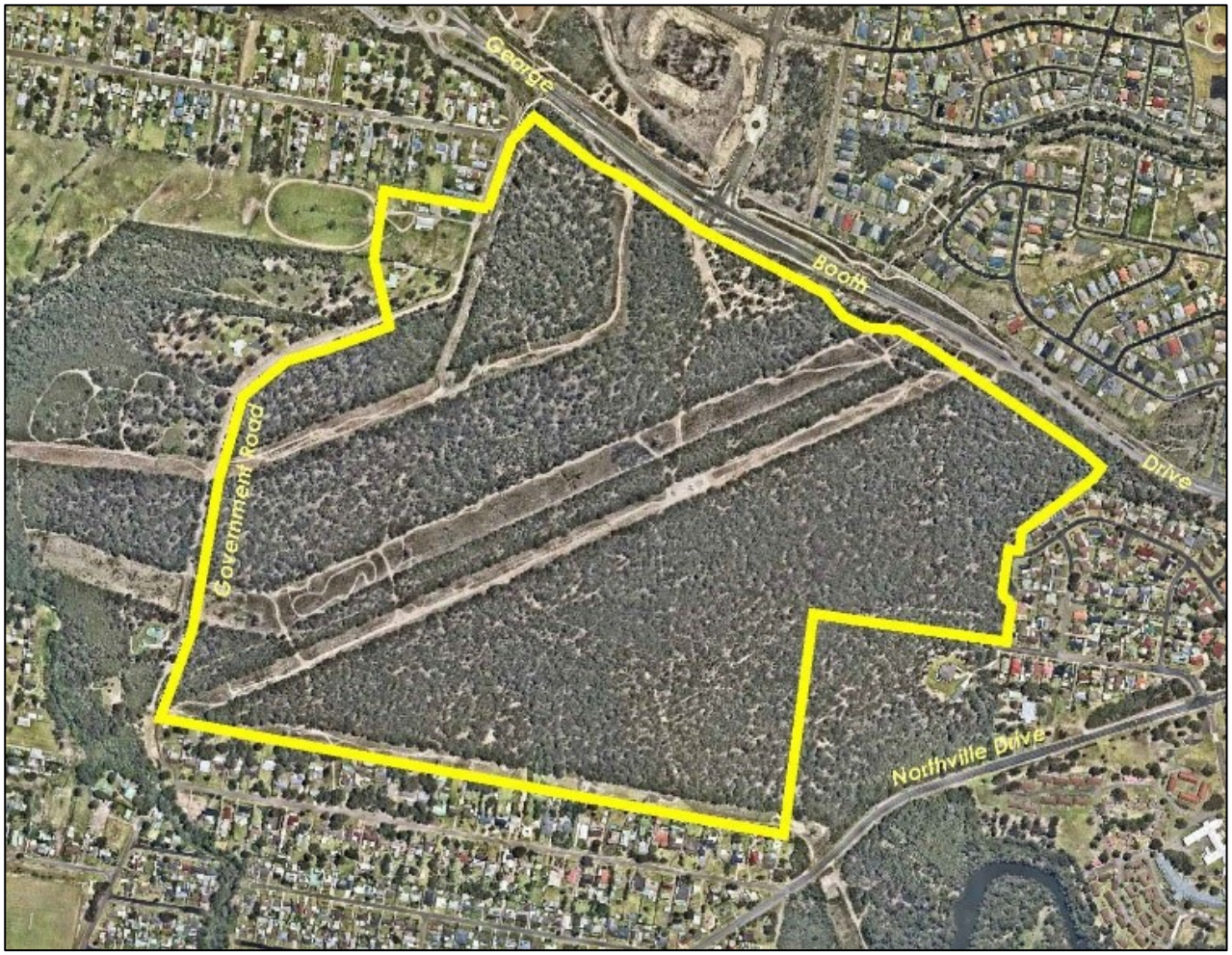

Figure 1 - Edgeworth Area 3 Precinct Area Plan Boundary

1.3 STRUCTURE PLAN

The Edgeworth Area 3 Precinct - Indicative Structure Plan is provided in Figure 2. The plan shows an appropriate design outcome for the site and how the development may occur in the future.

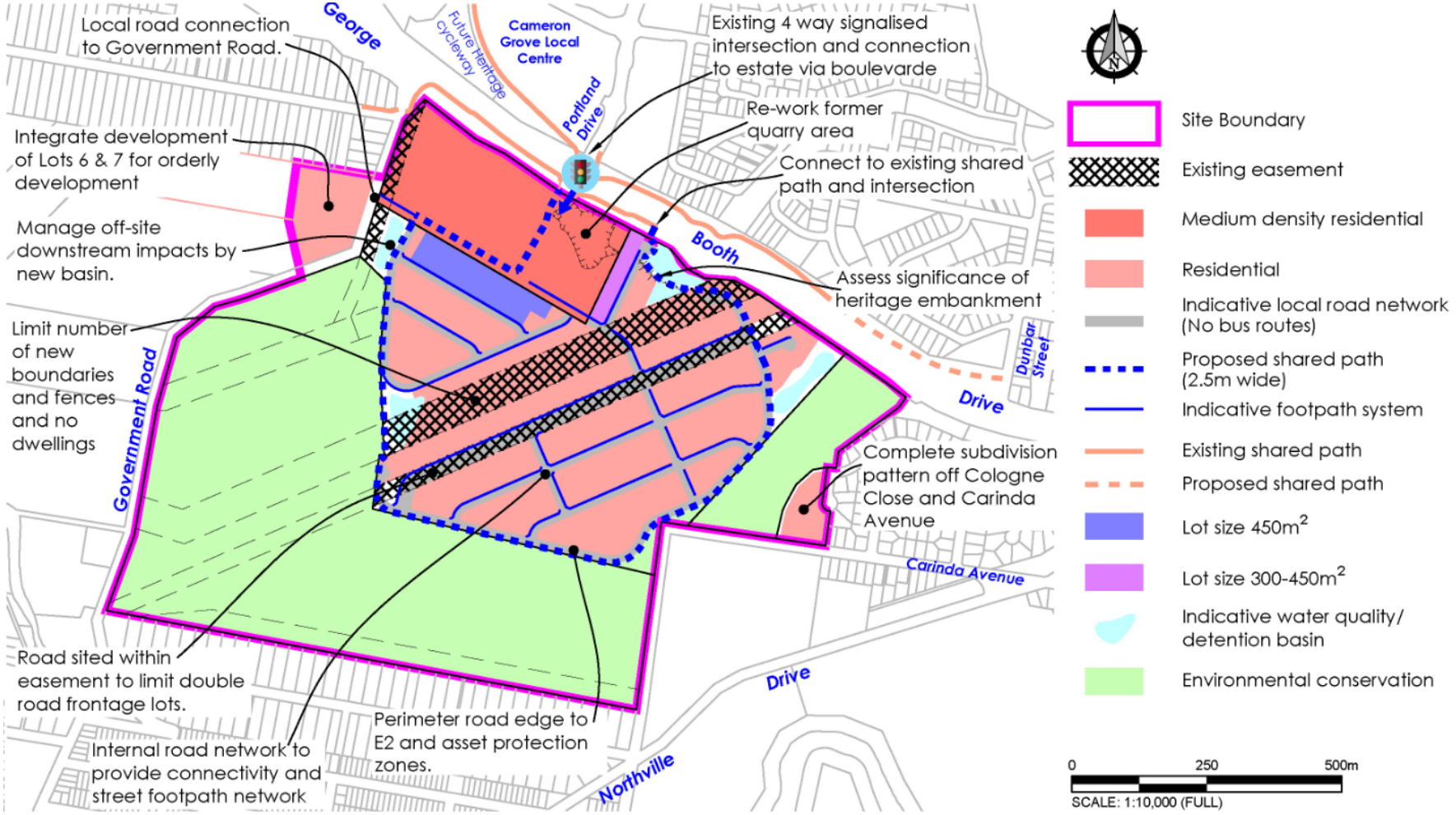

Figure 2 - Edgeworth Area 3 - Indicative Structure Plan

2 DEVELOPMENT CONTROLS

2.1 SUBDIVISION DESIGN AND LAYOUT

Objectives

a. To ensure the subdivision and development of Edgeworth Area 3 is undertaken in a coordinated manner.

b. To ensure Edgeworth Area 3 will be developed to reflect the availability of services.

c. To provide suitable land for residential development that respond to the site's characteristics and assists in creating a walkable neighbourhood with housing diversity.

Controls

1. The subdivision design and layout should generally be consistent with the Edgeworth Area 3 Indicative Structure Plan illustrated in Figure 2.

2. Land opposite and to the south of the medium density zoned land are to be for lots with areas generally at 450m^2 (without building envelopes), other than corner lots, as illustrated in Figure 2.

3. Land adjoining and to the east of the medium density zoned land are to be for lots with areas at least 300m^2 but no more than 450m^2, other than at the cul-de-sac head, as illustrated in Figure 2. A development lot that can be further subdivided to achieve lots at least 300m^2 but no more than 450m^2 in this area will be acceptable as part of initial development applications.

   This control meets the requirements of Clause 4.1B(4) of Lake Macquarie LEP 2014.

   Note: This does not prevent development consent otherwise being sought within Edgeworth Area 3 Precinct under Clause 4.1A of Lake Macquarie LEP 2014 for lots smaller than 450m^2 in the low and medium density zoned land.

4. The road network should be designed, and the location and width of Asset Protection Zones (APZ's) and Managed Fuel Zones are to be provided, in accordance with *Planning for Bushfire Protection 2006* and be located wholly within the residential zoned areas.

2.2 TRANSPORT NETWORK

Objectives

a. To provide a movement network that provides multiple transport options to the community including efficient, effective, safe, and comfortable pedestrian and cycling networks and access to public transport.

Controls

1. The pedestrian, cycling, and road networks are to be established generally in accordance with Figure 2 – Edgeworth Area 3 Indicative Structure Plan.

2. In addition to the internal networks illustrated in Figure 2, the shared path along the northern edge of George Booth Drive is to be extended through to the intersection with Dunbar Street, to contribute to wider network linkages towards Edgeworth and towards Pasterfield Reserve.

2.3 INTERFACE TO GEORGE BOOTH DRIVE

Objectives

a. To identify and manage road traffic noise impacts.

b. To avoid inconsistent and unsightly rear fences presenting to George Booth Drive.

Controls

1. A road traffic noise assessment must be prepared and lodged for subdivision applications relating to George Booth Drive road traffic noise impacts and identifying affected lots and noise mitigation. Any mitigation relevant to affected lots following subdivision, such as setbacks or future building requirements, must be registered on the deposited plan pursuant to section 88B of the Conveyancing Act 1919.
2. Where low density residential lots share a common boundary with George Booth Drive, one consistent suitable fence must be erected to that boundary to the satisfaction of Council. Fencing and landscaping incorporated into the road reserve to soften views and provide consistency are to be detailed in the Development Application for the relevant stage of subdivision and the fencing and landscape works are to be completed prior to the release of the related Subdivision Certificate.

2.4 EUROPEAN HERITAGE

Objectives

a. To investigate options relating to that section of the listed local heritage item (#92, West Wallsend steam tram line) that extends into the site, including the isolated intact section of embankment.
b. To consider visual and heritage impacts of development of that section affected by the West Wallsend/Holmesville Heritage Area Plan.

Controls

1. A Heritage Assessment and Statement of Heritage Impact must be prepared and submitted to Council for subdivision applications affected by the heritage item, investigating options relating to the former tramway alignment, with particular emphasis on the isolated intact section of embankment.
2. An Interpretation Strategy should be included with the Statement of Heritage Impact.
3. The Statement of Heritage Impact must also consider visual and heritage impacts of that part of the site affected by West Wallsend/Holmesville Heritage Area Plan.
4. The provisions of section 2.4 – Site Coverage of the West Wallsend / Holmesville Heritage Area Plan do not apply.

2.5 ABORIGINAL HERITAGE

Objectives

a. To protect and conserve Aboriginal cultural, spiritual, and sacred sites within the City.
b. To ensure the impact of a proposed development on the heritage significance of an Aboriginal place or object is considered by adequate investigation and assessment.

Controls

1. Assessment of Aboriginal heritage should occur in accordance with the Aboriginal heritage controls of the Lake Macquarie Development Control Plan 2014.

2.6 BIODIVERSITY

Objectives

a. To recognise flora and fauna assessment work undertaken throughout the rezoning process
b. To recognise the agreed conservation measures to offset impacts to biodiversity
c. To ensure the appropriate level of flora and fauna assessment is undertaken for the development application.

Controls

1. Provision and management in perpetuity of biodiversity offset land is to occur as per the Executed Voluntary Planning Agreement (VPA). Among other requirements, this includes the following offsite biodiversity offsets as illustrated in the VPA:
    - O'Donnell town land – Lot 2 DP 1050996,
    - Offset Land – Part Lot 9 DP 4647 and part of Lot 1 DP 1180029 and Lot 2 DP 1156170 and Part Lot 4000 DP 1248691.
2. Acquisition of additional ecosystem credits for Lower Hunter Spotted Gum Ironbark Forest in accordance with the VPA requirements.
3. Flora and fauna assessment must occur in accordance with the *Threatened Species Conservation Act* 1995. Should Council's assessment and the test of significance conclude that a significant impact will result from the development, then a Species Impact Statement and concurrence of the Office of Environment and Heritage (OEH) will be required.

Note: OEH has certified the site under clause 34A(4) of the *Biodiversity Conservation (Savings and Transitional) Regulation* 2017.

2.7 VEGETATION MANAGEMENT

Objectives:

a. To protect and enhance biodiversity values on land identified as environmental conservation.
b. To ensure no adverse direct or indirect impacts occur on native vegetation and fauna habitat on Lot 2 DP 1180029 (east of Government Road) that has been used as an offset for the West Wallsend/Apple tree Grove Estate Subdivision (DA/113/2011).
c. To ensure long term rehabilitation and management of land identified for environmental conservation occurs.

Controls

1. Works for the purposes of (or ancillary to) residential subdivision are to be conducted outside the environmental conservation area, this includes but is not limited to, access for works, services, bushfire asset protection zones, stormwater quality control structures, and drainage works.
2. Edge treatments and management measures are to be used to reduce short term and ongoing impacts as well as ongoing management costs at the interfaces between the Environmental conservation area, and developed areas. The preferred edge treatment is a perimeter road or hard edge, other than where a water quality control structure is proposed. The management of the interface edge of water quality control structures to the adjoining environmental conservation area is to be detailed and may include landscaping. Private residential lots directly adjoining the environmental conservation area is not preferred.
3. Planting and rehabilitation of disturbed land on the environmental conservation side of perimeter roads or edge treatments are not to consist of exotic or invasive species.
4. The approved Plan of Management for the adjoining Lot 2 West Wallsend Subdivision biodiversity offset lands is to be updated to cover residue areas of land that will be retained as native vegetation around the perimeter of the proposed subdivision and to ensure that the construction impacts and edge effects are mitigated.

2.8 CONTAMINATION

Objectives

a. To ensure the appropriate remediation of contaminated land for the purpose of reducing risk of harm and to facilitate residential use.

Controls

1. Development applications for subdivision creating residential lots on those areas of the site previously identified as potentially containing contaminated surface soils, generally associated with rubbish dumping near the north east boundary and the former quarry area, must be accompanied by a Phase 2 Detailed Contamination Site Assessment.

2.9 WATER QUALITY MANAGEMENT

Objectives

a. To minimise any adverse impacts of increased development on downstream built or natural environments or nearby land;

b. To minimise the volume and rate of stormwater leaving the development site.

Controls

1. A Water Cycle Management Plan must be prepared and submitted. It must detail the management of stormwater and any measures to mitigate the effects of stormwater on adjoining or downstream sites. The design of drainage systems must provide both retention and water quality controls and be provided generally in accordance with Figure 2 – Edgeworth Area 3 Indicative Structure Plan and located within residential zoned part of the site.

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1 INTRODUCTION

The Gimberts Road, Morisset Area Plan supplements Lake Macquarie Development Control Plan 2014 for future development of the industrial site. Ownership of the site is fragmented and this Area Plan seeks to achieve an integrated approach to the development of the Gimberts Road Industrial area.

1.1 EXTENT OF AREA PLAN

This area plan applies to all the land outlined in heavy black edging as shown in Figure 1 – Gimberts Road, Area Plan Boundary and outlined yellow in Figure 2 – Gimberts Road, Area Plan – Lot Descriptions.

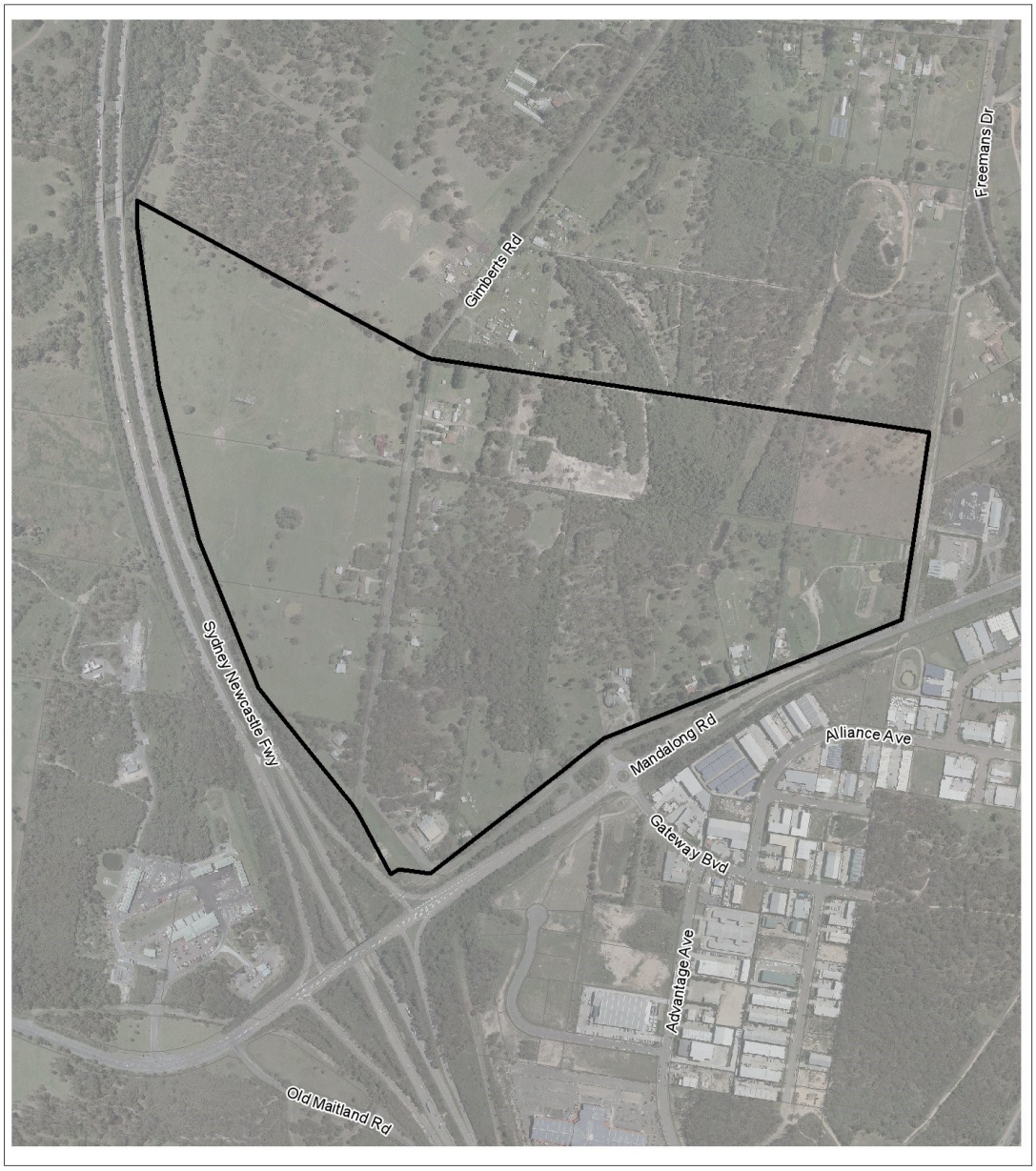

Figure 1 - Gimberts Road, Area Plan Boundary

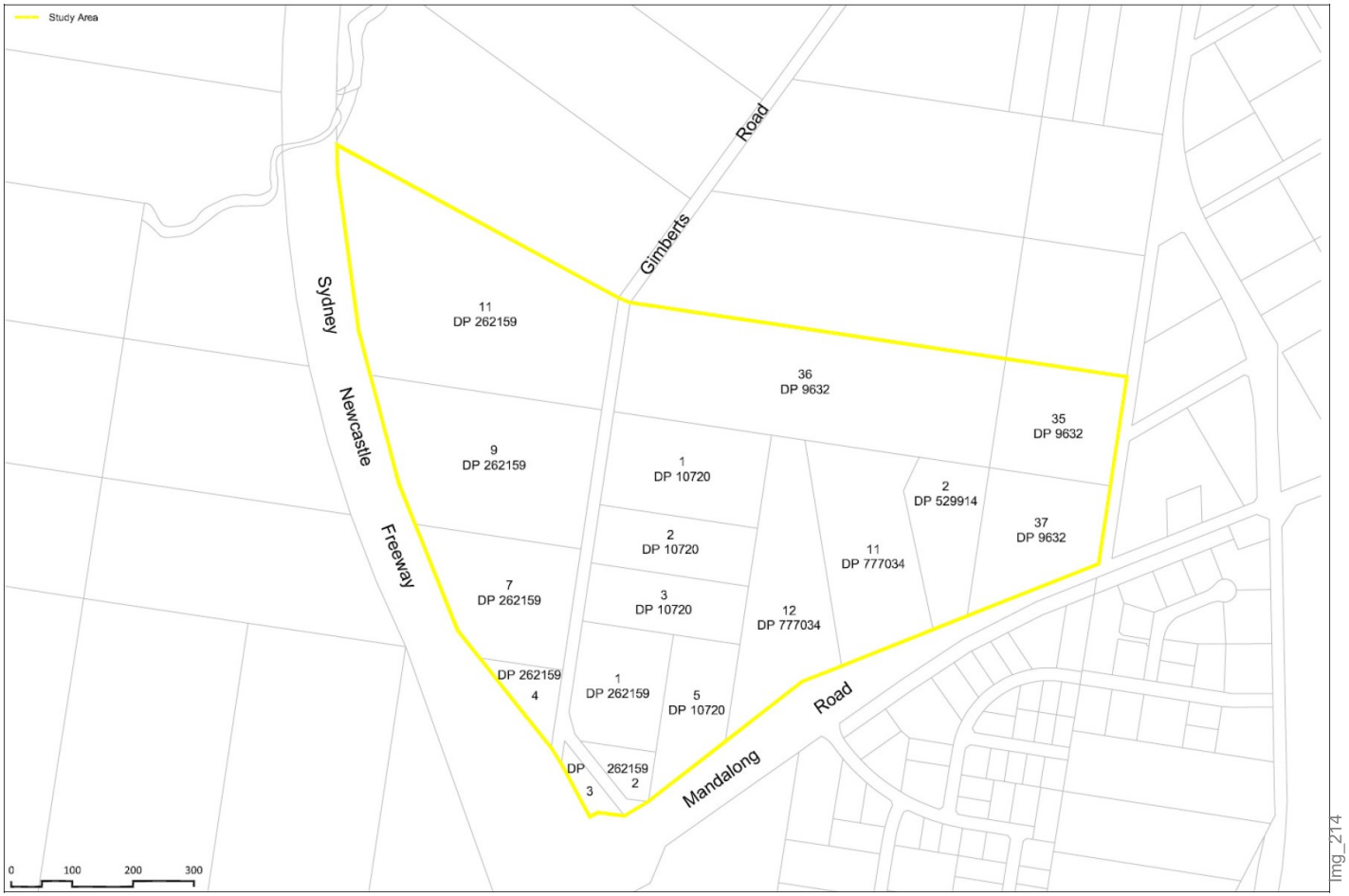

Figure 2 - Gimberts Road, Area Plan – Lot Descriptions

1.2 CHARACTER STATEMENT

The desired future character for the Gimberts Road Industrial area is a modern, well-presented business park / light industrial area that:

- features bulky goods retail development in that section of the site fronting Mandalong Road;
- contains a mix of employment-generating uses including research and development industries and large-scale commercial premises along the north-bearing section of Gimberts Road;
- contains general light industrial development in that section of the site adjacent the F3 Freeway
- caters for walking and cycling through the provision of footpaths and marked on-road cycle lanes; and,
- responds to the natural environment by retaining areas of significant native vegetation (including within road reserves) and keeping riparian corridors in their natural state.

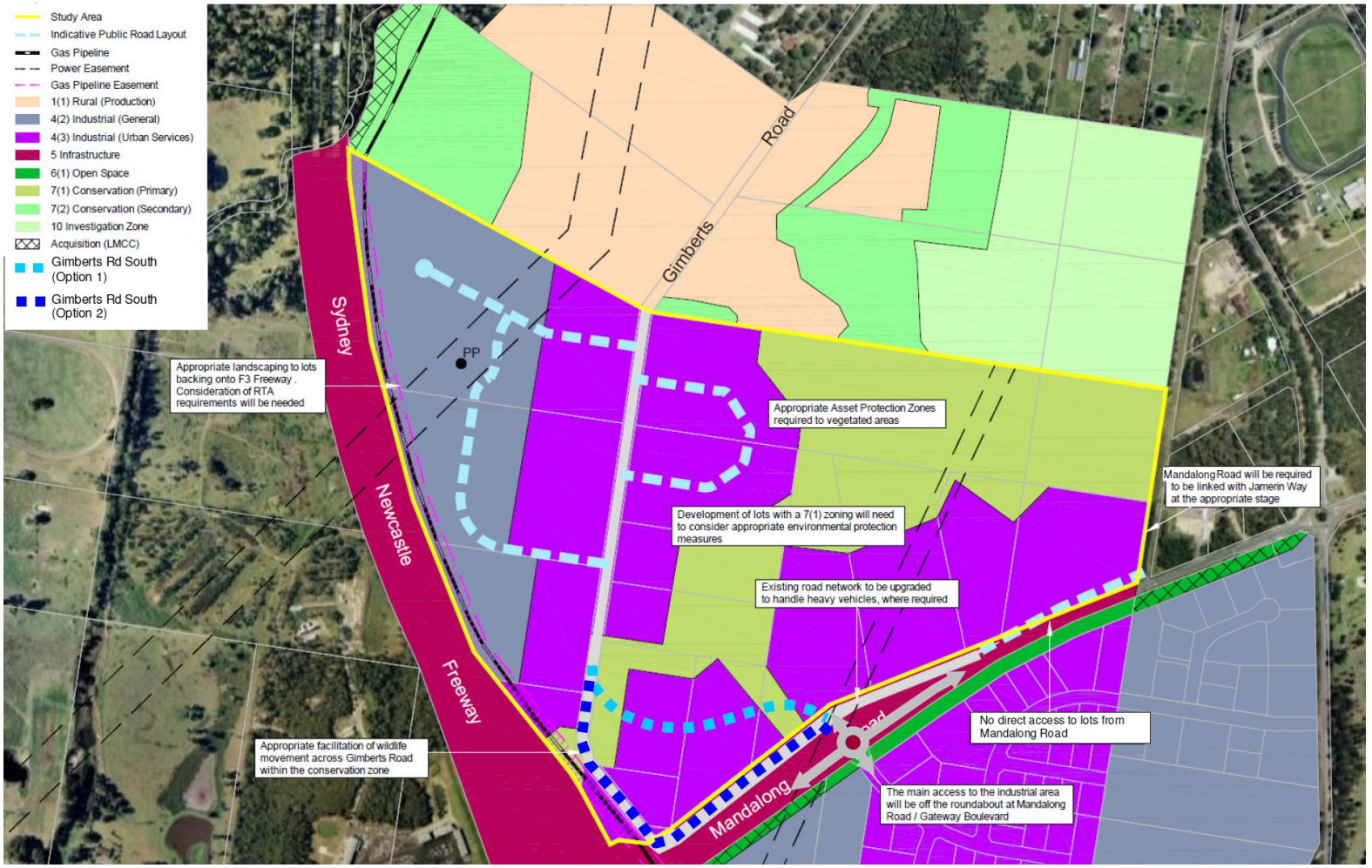

Figure 3 - Gimberts Road, Morisset Structure Plan

1.3 SUBDIVISION DESIGN AND LAYOUT

Objectives

a. To ensure the subdivision and development of Gimberts Road is undertaken in a coordinated manner and is well designed.

Controls

1. The subdivision layout should generally be consistent with and address the issues identified in Figure 3 – Gimberts Road Morisset Structure Plan.

1.4 TRANSPORT AND ACCESS

Objectives

a. To ensure a safe and efficient road layout for the Gimberts Road Industrial site that provides connectivity, safe access and ease of movement for vehicles, cyclists and pedestrians.
b. The road system is upgraded to cater for the increased development of the Industrial site, particularly with regard to heavy vehicle access.

Controls

1. The street layout is generally consistent with Figure 3 – Gimberts Road Morisset Structure Plan.
2. Gimberts Road must be realigned to traverse Lot 5 DP in 10720 and Lot 1 DP in 262159 as shown in Figure 4: Option 1: Potential realignment of Gimberts Road, or Gimberts Road is upgraded along its current alignment as shown in Figure 5: Option 2: Potential realignment of Gimberts Road.
3. Gimberts Road must be upgraded between the northernmost part of the B7 Business Park zoned land and the Mandalong Road roundabout to cater for heavy vehicle movements. Where development is proposed on one side of a road prior to any development on the opposite side of the road, the road pavement shall be constructed to a width of at least 11 metres.
4. The intersection of Gimberts Road and Mandalong Road must be upgraded in accordance with either Figure 6: Access Arrangements from Mandalong Road (Option 1), or Figure 7: Access Arrangements from Mandalong Road (Option 2). Detailed intersection and road design is to be based on traffic modelling that estimates traffic generation from full development of the study area.
5. Where Option 2 is selected, any driveway required for access to the B7 Business Park zoned part of Lot 1 DP 262159 should be no wider than 6.5 metres.
6. A public footpath must be constructed along one side of Gimberts Road.
7. Footpaths must be provided on both sides of all other new roads (including any realignment of Gimberts Road).
8. The width of the road pavement of the section of Gimberts Road traversing the environmental conservation area should be a maximum of 9 metres.
9. Appropriate traffic calming measures must be included as a condition of consent for any development that would cause the environmental capacity of the northern section of Gimberts Road to be exceeded.
10. A Left out only access on to Mandalong Road must be constructed approximately 250 metres northeast of the Gateway Boulevarde roundabout (subject to Roads and Marine Services (RMS) approval) in conjunction with development of Lot 2 in DP 529914 and/or Lot 37 in DP 9632.
11. Old Mandalong Road should be extended through Lot 2 in DP in 529914 and Lot 37 in DP 9632 upon development of these lots to provide access to the lots and a potential future link to Freemans Drive via Jamerin Way.

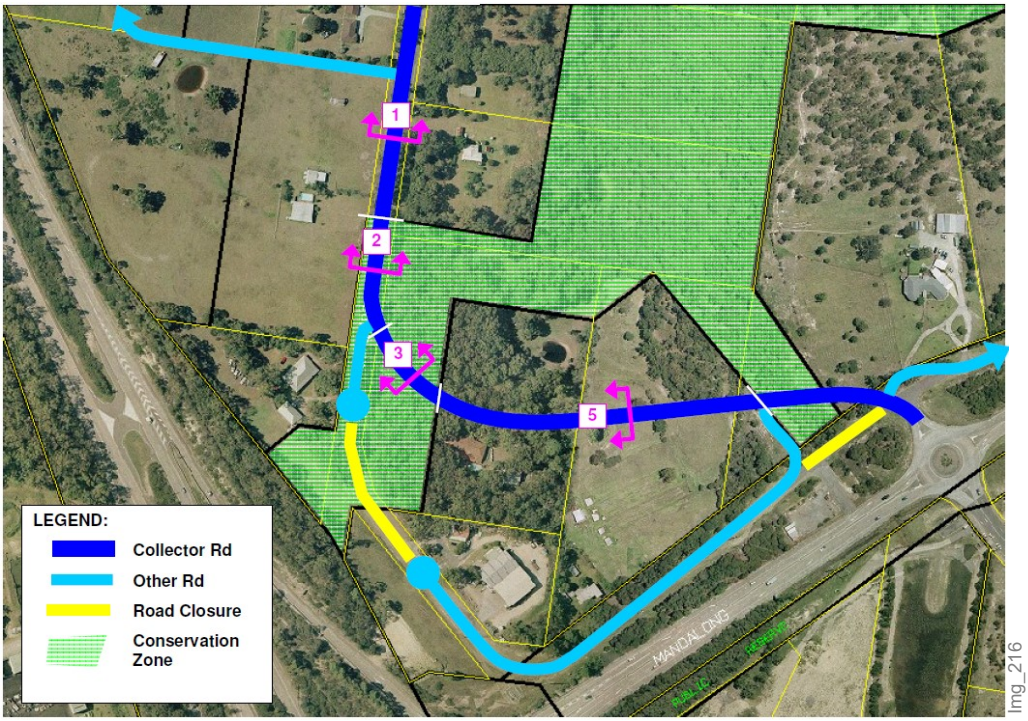

Figure 4 - Option 1: Potential realignment of Gimberts Road

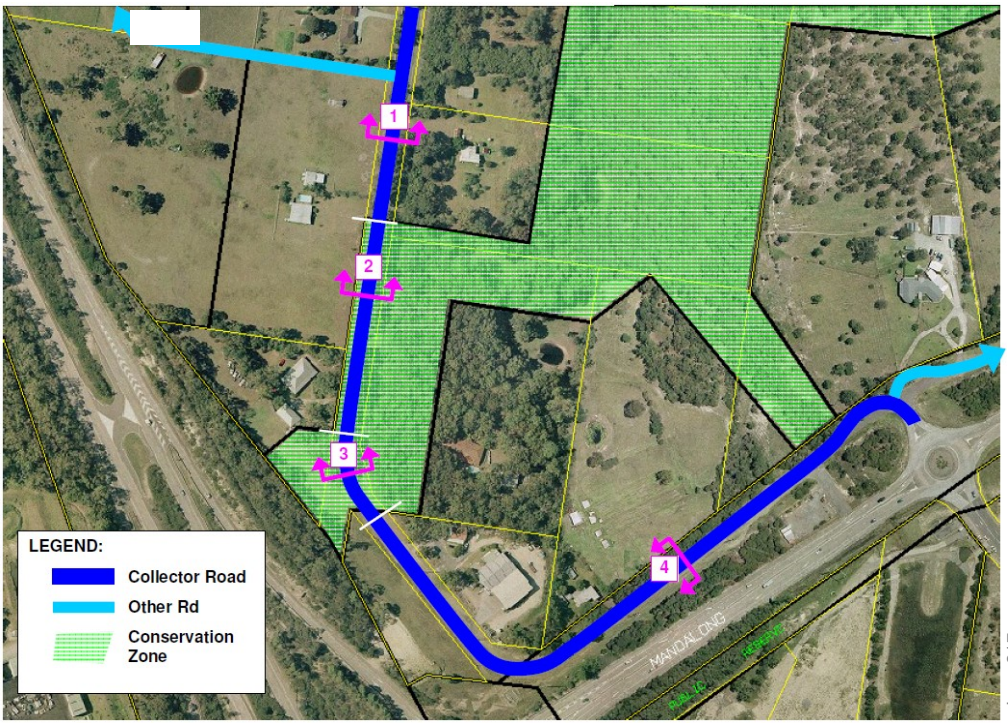

Figure 5 - Option 2: Potential realignment of Gimberts Road

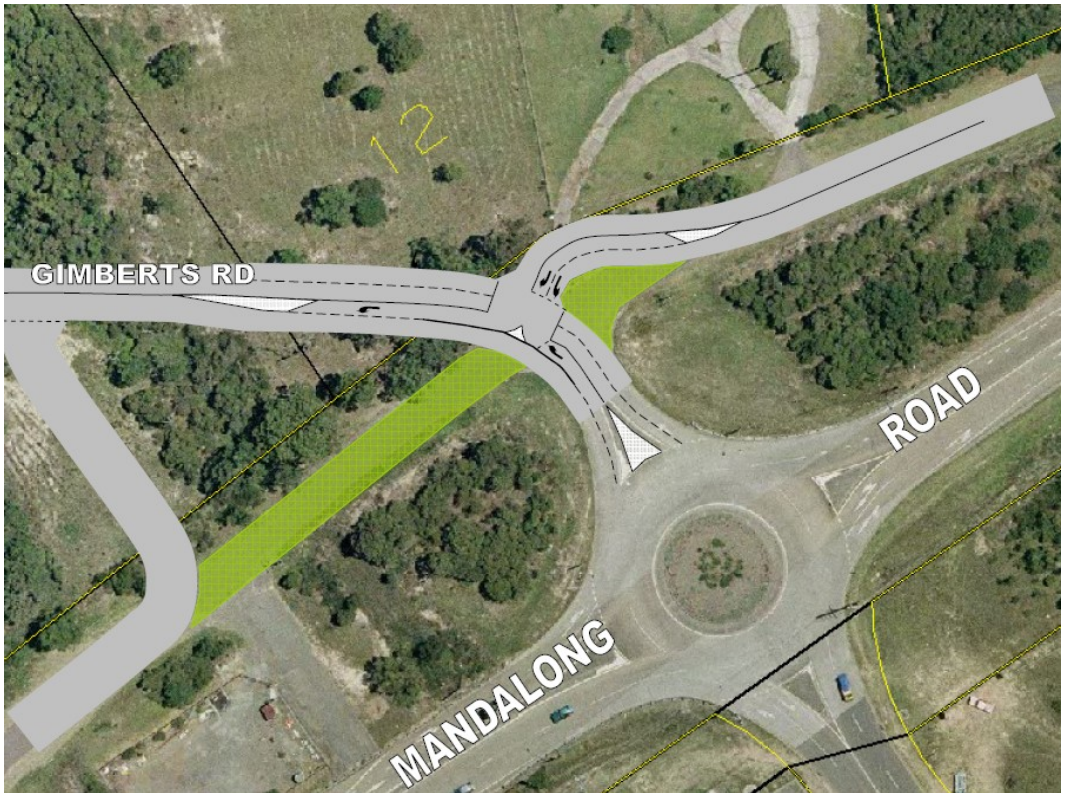

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Figure 6 - Access Arrangements from Mandalong Road (Option 1)

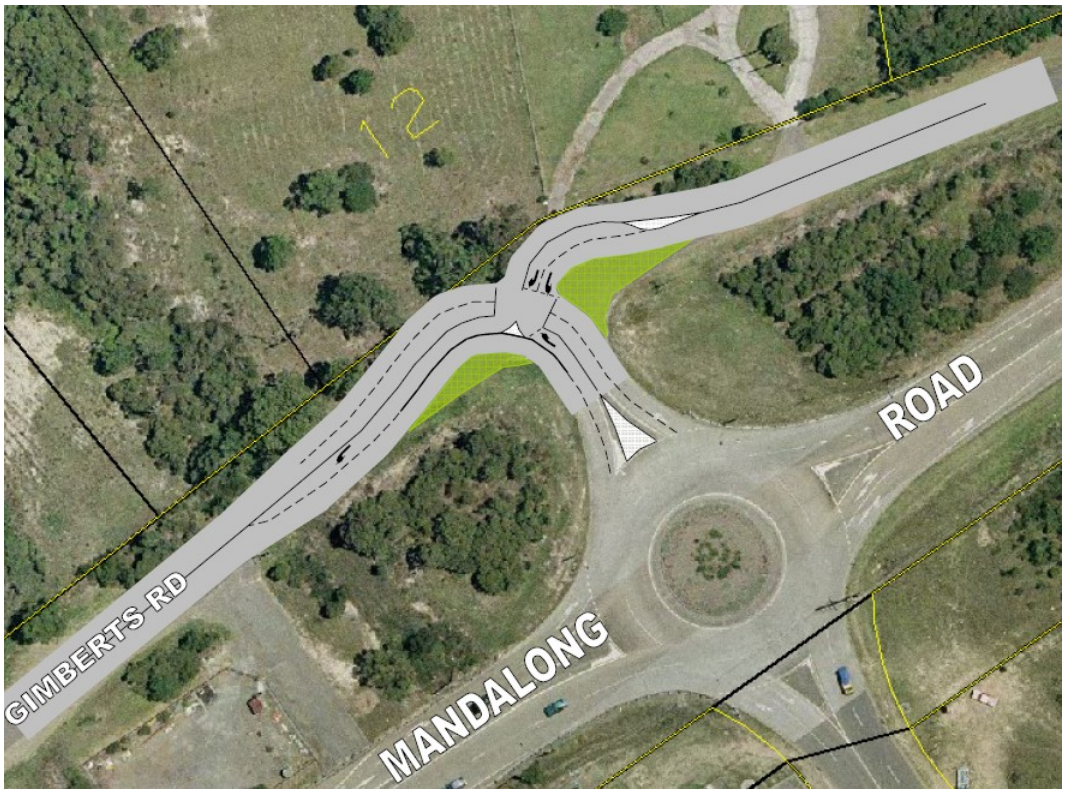

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Figure 7 - Access Arrangements from Mandalong Road (Option 2)

1.5 ECOLOGICAL VALUES

Objectives

a. To enhance, rehabilitate and manage wildlife and riparian corridors.
b. To ensure appropriate design measures are considered to facilitate fauna crossings.

Controls

1. Land zoned Conservation (as shown on Figure 3) must be rehabilitated and developers of lots containing land E2 Environmental Conservation must enter into a legally binding agreement (such as a planning agreement prepared under the *Environmental Planning and Assessment Act 1979*) to:
   i. Establish a mechanism (in perpetuity) to maintain the conservation values of that land and to provide ongoing funding to ensure this occurs; or
   ii. Dedicate the land to Council at no cost, and provide developer funding and management arrangements (including a plan of management) for an appropriate period post development eg 2 – 5 years, to be determined at DA stage.
2. Development of land adjoining the Conservation zoned land shown on Figure 3 may be set back less than 15 metres (but no less than five metres) if it can be shown that the development will have a minimal impact on the adjoining land (e.g. zero runoff).

1.6 VISUAL IMPACT AND LANDSCAPING

Objectives

a. To ensure that the site is appropriately landscaped to enhance the amenity of the area, and minimise potential visual impacts.

Controls

1. Landscaping and street tree selection must be in accordance with Figure 8 – Landscape Plan and Table 1 – Street Tree Planting Schedule.
2. Street trees must be planted along both sides of new roads.
3. Additional trees should be planted on the western side of Gimberts Road to augment existing trees and as many native trees as possible and adjacent to the Gimberts Road reserve are maintained.
4. Landscaping should limit views from the F3 Freeway and Mandalong Road into the site.
5. A visual impact assessment must be prepared for developments that are visible from the F3 Freeway and Mandalong Road.

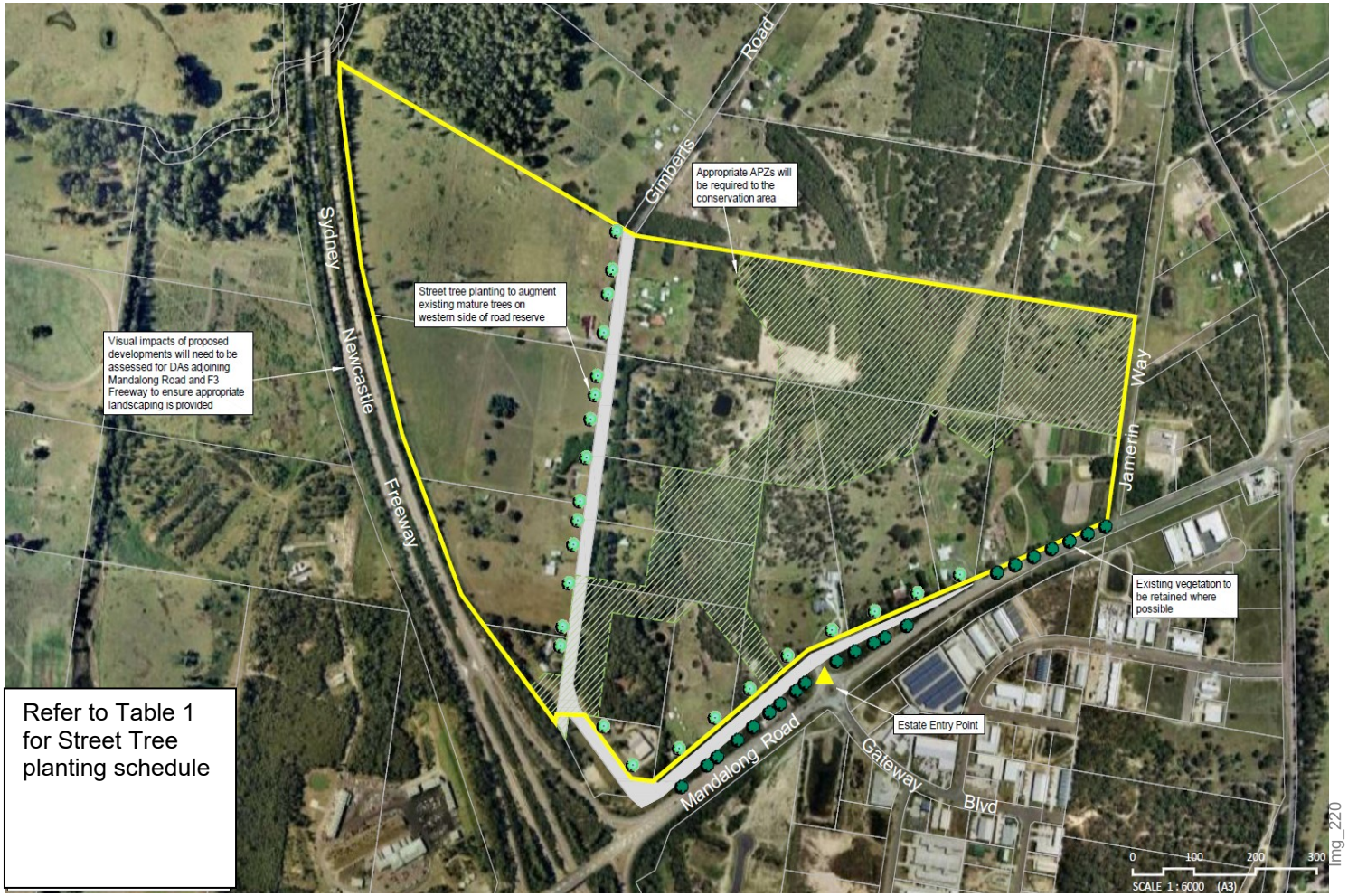

Figure 8 - Landscape Plan

Table 1 - Street Tree Planting Schedule

Species Name	Common Name	Height	Description
Mandalong Road Street Tree Planting			
Eucalyptus punctata	Grey Gum	35m	Tall upright tree with grey mottled bark that sheds to reveal orange- pink smooth bark
Gimberts Road Street Tree Planting			
Eucalyptus robusta	Swamp mahogany	25m	Medium tree with thick brown bark that turns pinkish towards the ends of the branches.
Corymbia gummifera	Red Bloodwood	15-30m	Tall open tree with rough brown-pink bark that excretes red sap.
Local Road Street Tree Planting			
Callistemon salignus	Willow Bottle Brush	6m	Cream coloured bottlebrush. Flowers in summer. New leaf growth is pink.
Elaeocarpus reticulatus	Blueberry Ash	8m	Small to medium tree with glossy green leaves. White or pink flowers in spring followed by blue berries.
Glochidion ferdinandi	Cheese Tree	8m	Open tree with spreading nature. Interesting fruit displayed for many months.
Hymenosporum flavum	Native Frangipani	8m	Small to medium tree with glossy green leaves and light brown bark. Masses of small yellow 'frangipani' type flowers during spring.
Melaleuca linariifolia	Narrow Leaf Paperbark	8m	Erect small tree with compact growth. New growth tipped with pink. Covered in white flowers during spring and summer.
Tristaniopsis laurina	Water Gum	8m	Glossy erect tree with a pale grey trunk.

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FIGURES:

1 INTRODUCTION

The purpose of the Highland Avenue Cooranbong Area Plan is to provide a strategic and coordinated approach to the development of lands off Highland Avenue and Freemans Drive Cooranbong for residential purposes. The Area Plan will ensure that the land is developed in an efficient manner taking into consideration environmental, social and economic issues affecting the site. Land within this precinct is currently in multiple ownership, necessitating an integrated approach to allow development to occur in an orderly and equitable manner.

This area plan is to be read in conjunction with the relevant part(s) of Lake Macquarie Development Control Plan (LM DCP 2014). Where the provisions of this area plan are inconsistent with the controls in the relevant part of LM DCP 2014, the provisions of this area plan will prevail.

1.1 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to land zoned 2(1), 7(3) and 7(5) as outlined in heavy black edging within Figure 1 – Highland Avenue Cooranbong.

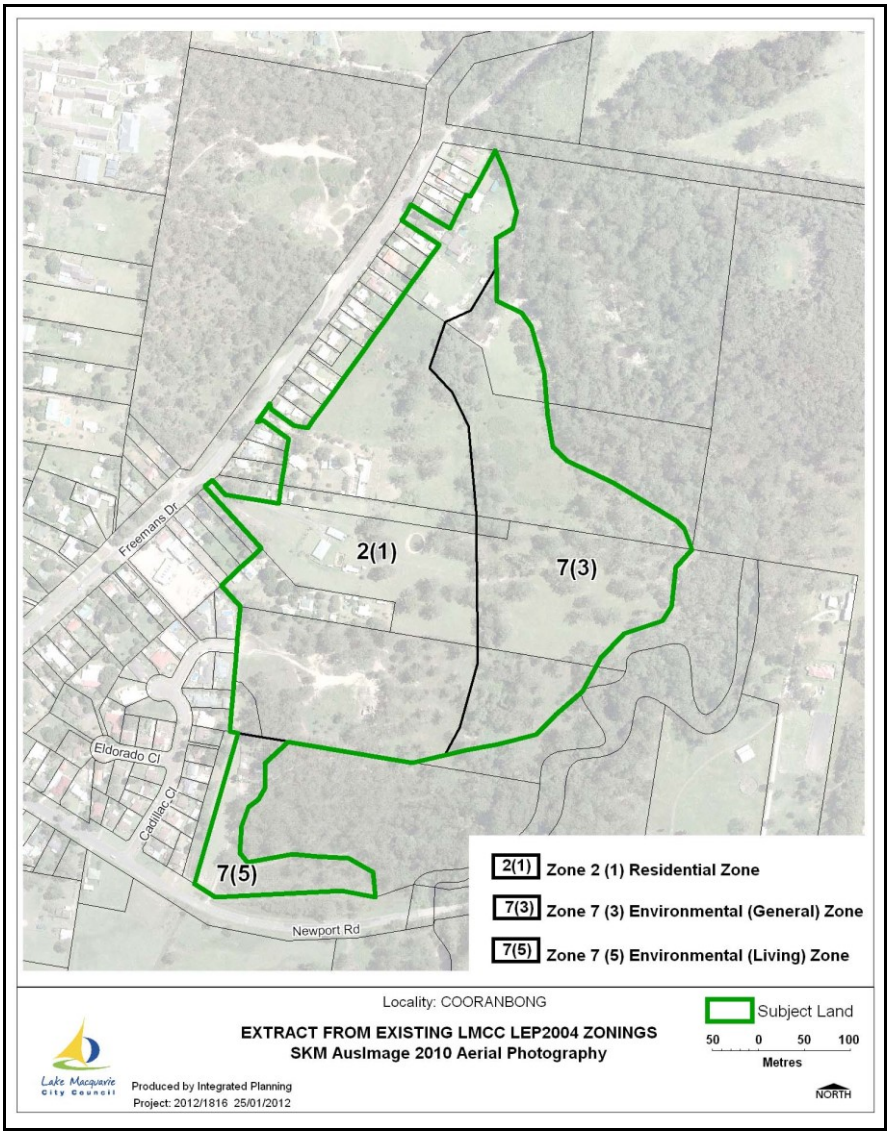

Figure 1 - Highland Avenue Cooranbong Area Plan Boundary

1.2 DESIRED FUTURE CHARACTER

The site is located along the northern fringes of the existing Cooranbong residential area and currently comprises relatively large lots being utilised predominantly for rural residential purposes with lands to the east comprising a corridor of remnant native vegetation including a riparian corridor. Jigadee Creek is located to the east of the subject site. Lands to the north west of the subject site have been rezoned for further residential development.

It is intended that this Highland Avenue Cooranbong Area Plan will facilitate residential development including a range of housing types and lot sizes with a focus on the provision of safe pedestrian and cycleway linkages to Freemans Drive allowing access to proposed pedestrian and cycleway facilities as well as public transport facilities, local shops, community facilities, schools, etc.

The Area Plan has also identified necessary road linkages to the existing road network allowing for staged development of the site to occur including the provision of one new vehicular access point off Freemans Drive and the other off Highland Avenue via Newport Road.

The precinct has been used for a range of agricultural purposes in the past and is predominately cleared of native vegetation except for three main clusters of remnant vegetation being the central riparian corridor that traverses the precinct, an area adjacent to the eastern boundary and the southern section of the site. The enhancement of this riparian corridor and the eastern vegetated parts of the site will contribute to the visual amenity and bushland setting of the site providing a natural backdrop to a residential area. These areas are designated as flood prone and will need to be rehabilitated to maintain this natural setting with planting of suitable indigenous species to create a self-sustaining ecosystem that requires little human interference. Consolidation of any residual lots of land zoned environmental to allow for the creation of one potential development lot to ensure long term tenure and maintenance of this part of the site is strongly encouraged. Any dwelling associated with this consolidation will need to be positioned within the residential zoned section of the site.

Stormwater and water quality facilities are to be an integral part of any subdivision and utilisation of best practice water sensitive design is necessary to enhance the existing riparian corridor.

A Structure Plan indicating these desired future characteristics for the study area is presented in Figure 2 – Structure Plan.

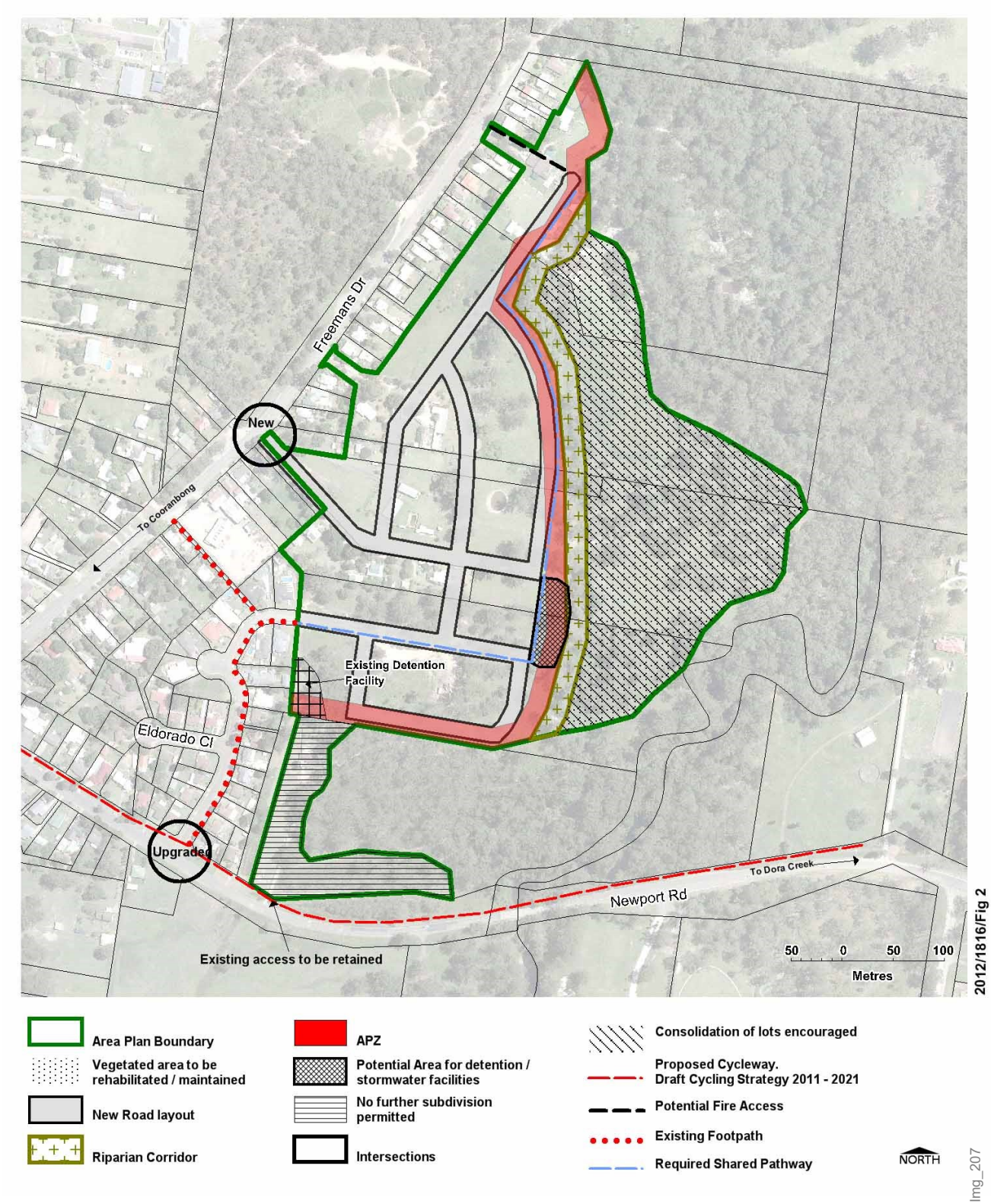

Figure 2 - Envisaged Highland Avenue Cooranbong Structure Plan

1.3 DEVELOPER CONTRIBUTIONS

Several items need to be provided to achieve the environmental and development objectives for the site. These include:

- Road and traffic infrastructure including shared pathways;
- Stormwater management infrastructure;
- Management of vegetation and riparian buffers in the 7(3) Environmental (General) zoned land.

There are several options available to deliver these items, including:

- Conditions of consent;
- Dedication of land;
- Voluntary planning agreements,
- Section 7.11 contribution plans, and
- Works in kind.

In relation to road and traffic infrastructure, it has been determined that the intersection of Cadillac Close and Newport Road needs to be upgraded and a new intersection and road constructed off Freemans Drive. These works are to be included within the Morisset Catchment Section 7.11 Contributions Plan. Contributions will then be sought from the applicants when development applications for subdivision are lodged with Council. If the Section 7.11 Contributions Plan has not been adopted by Council, at the time of lodgement of a development application, any road works considered to be required by the development will be dealt with by conditions of consent.

For stormwater management infrastructure and management of vegetation and riparian buffers outlined within Sections 1.4 and 1.5 of this Plan, the method of delivery of these items will be determined as part of the assessment of development applications for subdivision.

1.4 SUBDIVISION DESIGN AND LAYOUT

Objectives

a. To ensure the subdivision off Highland Avenue Cooranbong is designed in an efficient and coordinated manner.
b. To provide an appropriate road network that connects with the existing road network including a single road access off Freemans Drive.
c. To ensure that adequate pedestrian and cycle facilities are available to link the subdivision with existing and proposed facilities surrounding the area.

Controls

1. The subdivision layout should generally be consistent with Figure 2 - Highland Avenue Cooranbong Structure Plan.
2. The road layout should generally be consistent with Figure 3 - Highland Avenue Cooranbong Vehicle Connection Map.
3. Creation of larger residential lots with a perimeter fire trail upon part of Lot 12 DP 1019060 may be considered when a development application for subdivision is lodged with Council, however it will need to be demonstrated that this perimeter fire trail can be adequately maintained over individual lots to be created over the long term and supported by the NSW Rural Fire Services.
4. Safe shared pathways should be provided generally in accordance with Figure 2 to allow linkages to nearby public transport facilities along Freemans Drive.
5. No further subdivision of Lot 3 DP 622775 is permitted and vehicular access to this lot may be retained off Newport Road.

Note: The location of roads identified in Figures 2 & 3 are approximate and will be subject to final survey and design.

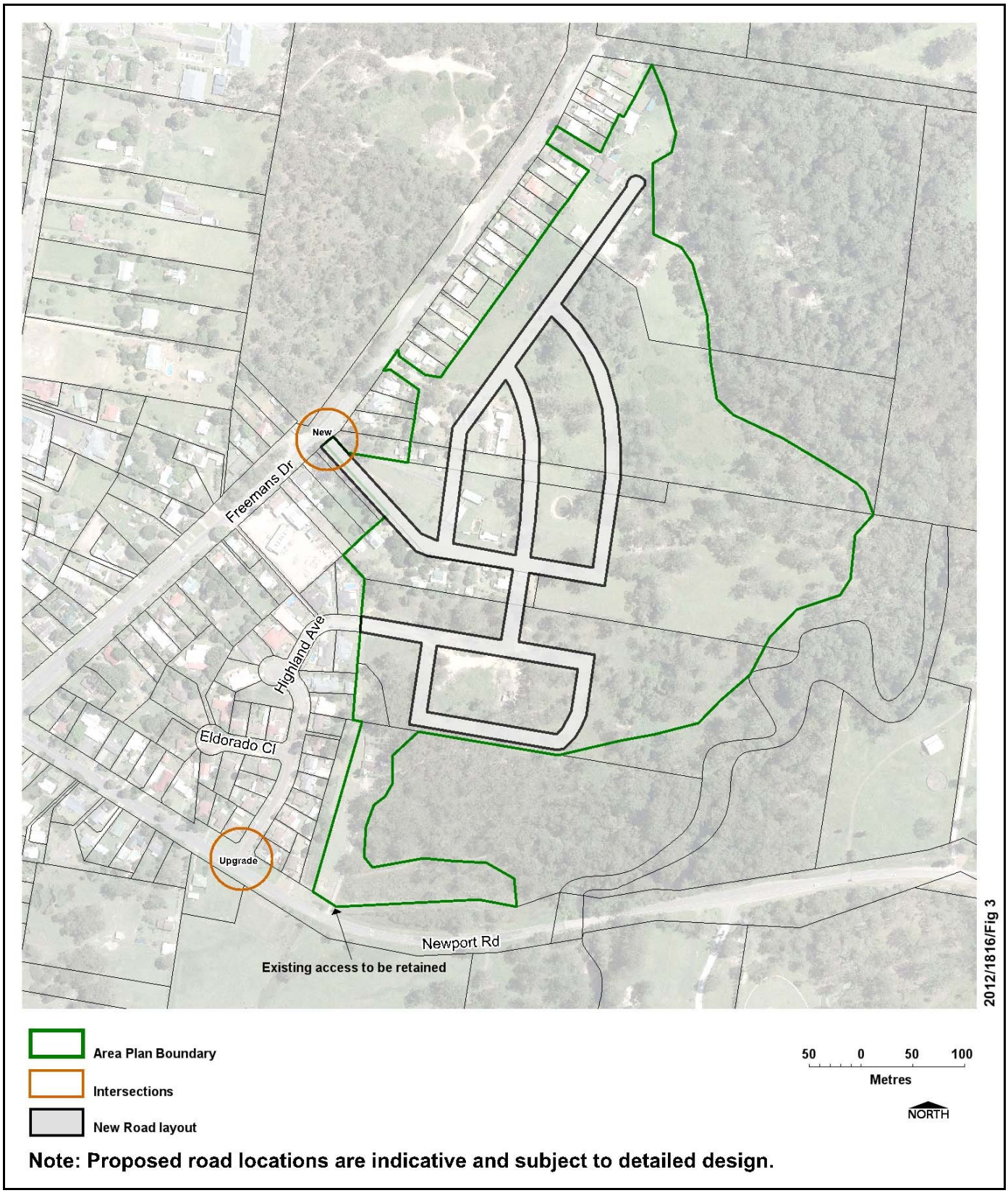

Figure 3 - Highland Avenue Cooranbong Vehicle Connection Map

1.5 VEGETATION MANAGEMENT

Objectives

a. To protect and revegetate the riparian corridor and low-lying areas within the site.
b. To ensure that land with biodiversity values is enhanced through the conservation and rehabilitation of vegetation habitat.

Controls

1. Long-term protection and management of areas zoned 7(3) Environmental (General) through secure tenure with appropriate conservation management must be achieved. This may be achieved by:
   i. consolidation of residue lots zoned 7(3) Environmental (General) is encouraged;
   ii. residual lots are dedicated to Council following satisfactory revegetation to allow consolidation;
   iii. entering into a legally binding agreement (i.e. planning agreement prepared under the *Environmental Planning and Assessment Act 1979*) to establish a mechanism (in perpetuity) to maintain the conservation values of that land and to provide ongoing funding; or
   iv. Council will consider creation of large lots that are partially zoned residential and occupied by a dwelling with the balance being zoned 7(3) Environmental (General) that is maintained by owners in perpetuity.
2. A Vegetation Management Plan must be prepared in accordance with Council's Vegetation Management Plan Guidelines and must accompany any development application for subdivision affecting 7(3) Environmental (General) zoned land incorporating but not limited to:
   i. Re-establishment including removal of rubbish, weeds, replanting and fencing of the riparian corridor within the centre of the site with suitable native species;
   ii. Rehabilitation including removal of rubbish, weeds, some planting where necessary and fencing of the section of the site zoned 7(3) Environmental (General) adjacent to the eastern boundary of the site;
   iii. Outline of any other appropriate revegetation works to be undertaken of cleared areas of lands zoned 7(3) Environmental (General);
   iv. Future management arrangements for both the riparian corridor and the Environmental 7(3) (General) zoned lands including any funding, monitoring and timeframes;
   v. The rehabilitation should be of a nature to ensure minimal maintenance is required over the long term; and
   vi. Inclusion of the treatment of the interface between the riparian corridor and asset protection zone.
3. Shared pathways must be constructed close to a road and away from the edge of a core riparian zone.

1.6 WATER QUALITY MANAGEMENT

Objectives

a. To ensure ecologically valuable land and associated watercourses are protected.
b. To ensure the stormwater drainage system is designed to maintain the natural watercourse and to minimise environmental impacts.

Controls

1. Stormwater and water quality facilities should be located within the residential zoned part of the site. If any stormwater and water quality structures are positioned within the Environmental zoned areas of the site, these facilities must be of a water sensitive design, integrated with any revegetation works and have minimal impact on water flows of the stream. These facilities must be located outside the core riparian area.

2. The design of drainage systems must provide both retention and water quality controls on stormwater flows prior to discharge into the riparian corridor and provided in accordance with Figure 2 – Structure Plan.
3. A suitable riparian corridor must be maintained along each side of the existing watercourse in accordance within State Government Guidelines.
4. Each lot must provide stormwater retention and water quality facilities to comply with maximum site discharge requirements and to minimise environmental impacts.

1.7 BUSHFIRE

Objectives

a. To minimise any risks to life and property from bushfire hazards.
b. To ensure that any risks associated with bushfire are appropriately managed.

Controls

1. Asset Protection Zones must be established within the residential zoned part of the site and generally in accordance with Figure 2 – Structure Plan.
2. The subdivision plan must provide for a perimeter road between the bushfire prone land and development lots.
3. Asset Protection Zones must be provided along the eastern boundary and along the southern boundary within the residential part of the site and generally in accordance with Figure 2 – Structure Plan.
4. An emergency fire access route must be provided to Freemans Drive and generally in the location shown in Figure 2 – Structure Plan.

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1 INTRODUCTION

The purpose of this Area Plan is to ensure the implementation of the Lake Macquarie Coastline Management Plan, which was adopted by Council in June 1999. This Area Plan will ensure that development in the Coastal area addresses the matters identified in the Lake Macquarie Coastline Management Plan.

Lake Macquarie Coastline runs from Moonee Beach in the south to Glenrock Lagoon in the north. The inland extent is variable up to 600m from the mean high-water mark. This area is defined by the Coastal Risk Map in the Lake Macquarie Local Environmental Plan 2014.

This area plan provides guidance for development in the Coastal Risk Area of the Lake Macquarie Coastline.

Development within the Coastal Risk Area is also subject to relevant State policies.

1.1 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all the land within the Coastal Risk Area identified on the Coastal Risk Map in Lake Macquarie Local Environmental Plan 2014.

1.2 CHARACTER STATEMENT

The coastline is comprised of a little more than 19 kilometres of beaches and 14 kilometres of sea cliffs and bluffs. Only around 4 kilometres of the Lake Macquarie Coastline is backed by urban development that is within 200 meters of high-water mark. The remainder of the coastline is largely in a natural or undeveloped state and contains areas of significant ecological, physical, and visual variety.

In recognition of the significance of the Lake Macquarie Coastline and the desire of the community to have it remain in a largely natural condition, Lake Macquarie Council adopted a Coastline Management Plan in June 1999 that deals with the issues of:

- coastal hazards,
- ecology,
- heritage and archaeological,
- recreational amenity,
- visual amenity, and
- commercial and tourism activities.

The purpose of the Area Plan is to ensure that the Coastal Risk Area (land seaward of the immediate coastal hazard planning line) remain undeveloped, with only minimal intrusion into an otherwise natural area.

The Coastline Management Plan will be reviewed and updated as required.

1.3 COASTAL DEVELOPMENT

Objectives

a. To ensure consideration and implementation of the Management Plan for the coastline adopted by Council.

b. To ensure consideration of coastal hazards.

c. To ensure that development in the Coastal Risk Area does not compromise the values of this area.

d. To protect and enhance the special physical, ecological, heritage and archaeological, recreational amenity, visual amenity aspects of the Lake Macquarie Coastline.

Controls

1. Development should comply with a Management Plan for the coastline adopted by Council and/or any Plan of Management relating to the coastline or a coastal reserve.
2. Development must be consistent with the Coastal Impact Zone as identified in a Management Plan for the coastline adopted by Council.
3. Structures and buildings must be located outside the 100-year coastal hazard planning lines unless the development is for a purpose that cannot be effectively conducted outside the coastal hazard planning lines.
4. Development must not result in the expenditure of public funds for coastal protection works within the 100-year planning period.
5. Development must not preclude public access to the coastline.
6. Development should facilitate the coastal walk corridor and provide educational opportunities.
7. Development must minimise disturbance and should not result in a net loss of native vegetation.
8. Development should result in conservation and enhancement of the coastal corridor.
9. Development on land adjoining or adjacent to the Coastal Risk Area must be consistent with the effective conservation of the coastal corridor and cultural heritage within the zone and the provision of the coastal walk and public assess to and from the area.
10. Development on land adjoining or adjacent to the Coastal Risk Area and associated coastal hazard lines identified on the Coastal Risk Map must ensure the protection of the Coastal Risk Area from adverse impacts on scenic amenity, visual values or adverse impacts arising from any stormwater, runoff, erosion and sedimentation, pollution, weed infestation, feral or domestic animals, chemicals and the like.

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1 INTRODUCTION

The purpose of this Area Plan is to provide development objectives and controls promoting flood and sea level rise resilient, low-density residential housing on part of the former Swansea Bowling Club site. These objectives and controls are in addition to the general provisions contained in Lake Macquarie Development Control Plan (LMDCP):

- Part 3 - Development in Residential Zones
- Part 8 - Subdivision Development

Where conflict arises between this section and others parts of the LMDCP, the controls in this Area Plan take precedence.

Note: The development objectives and controls contained in this Area Plan are considered interim planning provisions until a flood and sea level rise adaptation plan and flood evacuation plan has been prepared for the locality of Swansea. The outcomes of these plans will inform future land use zoning and Area Plan provisions applying to the site. If appropriate, further consideration will be given to facilitating more intensive development of the site by amending land use zoning and Area Plan provisions accordingly.

1.1 EXTENT OF AREA PLAN

This Area Plan applies to the land shown in **Error! Reference source not found.**.

Figure 1 - Extent of Area Plan

1.2 EXISTING CHARACTER

The site contains part of the former Swansea Bowling Club, which operated between the 1950s and 2013, and several surrounding properties. The land is located between 1m and 1.7m AHD and is flood prone and vulnerable to projected sea level rise.

Note: For details of the flood and sea level rise impacts affecting the land, refer to Planning Proposal RZ/1/2014.

2 DESIRED FUTURE CHARACTER

The desired future character for the site is flood and sea level rise resilient, low-density residential housing generally consistent with the character and density of existing residential housing surrounding the site. Due to the site being flood prone and vulnerable to projected sea level rise, more intensive development including subdivision of the land for dual occupancy development and small lot housing is not supported by Council.

3 DEVELOPMENT CONTROLS

3.1 SUBDIVISION AND DEVELOPMENT

Objectives

a. To promote a subdivision layout that enables flood and sea level rise resilient, low-density residential housing.

b. To promote a subdivision layout that is generally consistent with the existing subdivision pattern in the area.

c. To ensure that development is undertaken in a coordinated manner.

Controls

1. An application submitted for subdivision must include a site master plan outlining:

   i. the proposed subdivision design (including any proposed earthworks) for all of the land shown in figure 1 that is within the area plan boundary, and a

   ii. building envelope plan identifying the proposed location of future residential dwelling houses including street, front and side setbacks.

2. Subdivision of land below 3m AHD is permitted if the subdivision does not create lots for residential dwelling houses less than 550m^2 in area (including for strata subdivision).

Note: This control does not apply to any other parts of Swansea.

3. Subdivision of land below 3m AHD is not permitted for dual occupancy development or for development identified in clause 4.1A of Lake Macquarie Local Environmental Plan 2014.

3.2 HOUSING DESIGN

Objectives

a. To ensure compliance with Lake Flooding and Tidal Inundation (incorporating sea level rise) development controls in LMDCP 2014.

b. To promote passive surveillance of the public recreation reserve located at 32 Albert Street, Swansea.

Controls

1. Development must be in accordance with Section 2.9 Lake Flooding and Tidal Inundation (incorporating sea level rise) in Part 3 of LMDCP 2014.

Note: This includes compliance with minimum floor height provisions. Where non-compliance with minimum floor height provisions are proposed, preparation of a Flood Safety Audit and Management Plan is required, which includes meeting performance requirements in the *Development Guidelines for Resilient Housing for Lake Macquarie.*

2. Residential dwelling houses located adjacent to the public recreation reserve at 32 Albert Street, Swansea, must be designed with windows of habitable rooms overlooking the reserve.

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1 INTRODUCTION

1.1 INTENT OF THE AREA PLAN

The intention of this Area Plan is to guide development to help implement the *Marks Point and Belmont South Local Adaptation Plan*.

1.2 BACKGROUND

Council adopted the *Lake Macquarie Waterway Flood Study and Risk Management Plan* in 2012. The *Study* found that sea and lake levels in Lake Macquarie will rise because of climate change. Over time, this will lead to increased flooding and permanent inundation of the lake foreshore for low-lying suburbs.

Council adopted the *Marks Point and Belmont South Local Adaptation Plan* in March 2016. Council and representatives of the local community prepared the Plan to address the risk of permanent inundation by raising land above projected permanent inundation levels and infrastructure above flood hazard levels over time.

1.3 RELATIONSHIP WITH OTHER PARTS OF THE LMDCP 2014

Where the provisions of this Area Plan are inconsistent with the controls in other relevant parts of LMDCP 2014, the provisions of this Area Plan prevail.

1.4 EXTENT OF AREA PLAN

The Area Plan applies to land shown in Figure 1 below that is also shown on 'Lots Affected by Lake Flooding controls' on Council's 'Flood Control Lots' map. The 'Flood Control Lots' map is indicative only and property information should be checked to confirm if a lot is a Lake flood control lot.

Figure 1 - Extent of Area Plan

1.5 EXISTING CHARACTER

The communities of Marks Point and Belmont South are located on the low-lying eastern sand barrier between Lake Macquarie and the Pacific Ocean. The communities have frontage to the Lake.

Modern planning and construction is gradually replacing the original timber and fibro fishing shacks with a mixture of large freestanding homes, unit blocks and townhouses. This gives the area a variety of housing options. Development is generally limited to two storeys.

1.6 ENVIRONMENTAL ATTRIBUTES AND CONSTRAINTS

Lake flooding

The level of the lake rises when heavy rains fall on the lake and in the surrounding catchments. The *Flood Study and Risk Management Plan* shows that 1% AEP floods in Lake Macquarie could reach 1.5 metres AHD. This serious but rare flood has a 1% chance of occurring in any year.

Nuisance flooding

Many low-lying foreshore areas around the lake drain poorly and heavy rain can cause localised nuisance flooding as stormwater pipes and gutters back up and overflow. This is a frequent hazard but rarely causes major damage.

Sea level rise and permanent inundation

In 2008, Council adopted a policy that required the consideration of future sea level rise when planning for lake flooding and coastal erosion. The Swansea Channel connects Lake Macquarie to the ocean, so lake levels will rise by as much as ocean levels. As lake levels rise, the level of future floods will also rise. Higher lake levels will permanently inundate some low-lying areas around the foreshore, including parts of Marks Point and Belmont South.

1.7 DESIRED FUTURE CHARACTER

The *Local Adaptation Plan* seeks to protect Marks Point and Belmont South from up to 90cm of sea level rise. Filling land, building revetments on the foreshore and raising infrastructure are some of the key actions that will help achieve this outcome.

Detailed information is needed about how and when to raise land and infrastructure. When this detail is available, the content of this Area Plan is likely to change.

Until we known more, this Area Plan provides interim guidance on how to develop and build in Marks Point and Belmont South.

2 GARAGES

Objectives

a. To provide greater flexibility in applying minimum floor levels for garages on small, narrow and constrained blocks.

b. To encourage flood resilient and adaptable building design.

c. To ensure garages have practical driveway access.

Controls

1. Blocks less than 40 metres deep with frontage to both the Lake and a road can vary the minimum garage floor level heights if the applicants can demonstrate to the satisfaction of Council that not doing so would result in impractical driveway access.
2. Blocks less than 35 metres deep with frontage to a road can vary the minimum garage floor level heights if they can demonstrate to the satisfaction of Council that not doing so would result in impractical driveway access.

3. For Council to approve a variation to the garage floor level height, the applicant must provide evidence that:
   i. The garage is constructed of flood compatible materials,
   ii. A suitably qualified engineer has certified that the building can withstand floodwater and buoyancy up to the minimum flood planning level for a garage (as set by the minimum floor level for a garage), and that
   iii. The garage is designed to adapt to rising lake levels over time in accordance with the principles and performance criteria set out in the *Flood Resilient Housing Guidelines*.

Note: The Minimum floor level heights for a garage associated with a dwelling can be found in Section 2.9 Lake Flooding and Tidal Inundation (Incorporating Sea Level Rise) of Part 3 – Development within Residential Zones or other relevant Part of the LMDCP 2014.

3 CUT AND FILL

Objectives

a. To implement the Marks Point and Belmont South Local Adaptation Plan and minimise the impacts of future inundation due to sea level rise.

b. To ensure connections between new buildings and the surrounding area are functional.

c. To ensure that development does not concentrate surface water flows onto adjoining properties.

Controls

1. The development site can be filled to mitigate the adverse effects of projected sea level rise on development.
2. Fill is permitted up to:
   i. One metre above ground level (existing), or
   ii. The depth that results in a finished surface level of 1.5 metres AHD.

   Note: The Local Adaptation Plan aims for all land in Marks Point and Belmont South to be at least 1.5m AHD in the future to avoid permanent inundation up to 90cm of sea level rise. Until detailed information is available about how to coordinate raising land and infrastructure, this control permits up to 1m of fill on all 'flood control lots' to mimic the existing topography. This requirement may change in the future when more work is done on how to raise land and infrastructure.
3. Stormwater must be captured within the site, drained to the street or other approved stormwater drainage network.
4. The site must be filled to maintain cross fall for drainage.
5. An engineer must design all drainage infrastructure and all retaining structures that:
   i. are greater than 1m in height, or
   ii. of any height if located on a boundary.

Certificate details for the retaining structure, as well as the associated drainage infrastructure, shall be lodged with the development application.

6. Where earthworks batters are used, they must not exceed a gradient of 1V:2H, and need to be integrated with drainage to the street or other approved stormwater drainage network.
7. Fill must not adversely affect stormwater management, drainage, or the flow of water from roads, natural or constructed watercourses, or foreshore areas.
8. Fill must not impede or block the overland flow of stormwater from adjoining properties. Any impediment of overland stormwater flows must be managed on the subject development site.

9. Filled areas must maintain functional connections to and minimise impacts on adjoining:
    i. footpaths,
    ii. roads,
    iii. essential services (water, electricity, sewer, and stormwater),
    iv. neighbouring blocks, and
    v. other local features.
10. Any fill used must be certified Virgin Excavated Natural Materials, certified Excavated Natural Material or uncontaminated engineered fill.
11. Any fill material used must ensure easy drainage of water, such as top filled sand.
12. In addition to site filling, development should comply with the floor height provisions set out in Section 2.9 Lake Flooding and Tidal Inundation (Incorporating Sea Level Rise) of Part 3 – Development within Residential Zones or other relevant Part of the LMDCP 2014. Any development that does not comply with the floor height provisions needs to meet the principles and performance criteria set out in the Development Guidelines for Resilient Housing for Lake Macquarie.
13. Non-adaptable slab on ground development is not permitted.

Note: Filling is optional. This Area Plan provides guidance for those who wish to fill.

Note: When planning a new development, bear in mind that the Local Adaptation Plan aims to fill to at least 1.5m AHD up to 90cm of sea level rise. Filling during construction or major renovations may be easier and cheaper than filling retrospectively, particularly under dwellings and other major structures.

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1 INTRODUCTION

Martinsville is a rural, forested area and village set in a valley of Dora Creek, a tributary of Lake Macquarie, and is an important gateway to the Watagan National Park. Martinsville has been identified as a unique rural area requiring specific development solutions to suit its existing and desired future character

This area plan provides guidance for the development of Martinsville.

1.1 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all the land outlined in heavy black edging as shown within Figure 1 – Martinsville Area Plan Boundary.

1.2 CHARACTER STATEMENT

A majority of the area is zoned for environmental and conservation purposes reflecting the areas ecological, economic and scenic values. Portions of the valley floor have been cleared for agricultural uses while the steeper foothills remain forested, although they have been selectively logged. Vegetation on the valley floor mainly occurs in riparian areas adjacent to the current creeklines and around some historical creek channels. These support Alluvial Tall Moist Forest, which in places contains rainforest elements and is an Endangered Ecological Community. Olney State Forest is located to the south of Martinsville and the Watagan National Park to the west. The Martinsville Valley and surrounding slopes supports some of the most rich and diverse flora and fauna assemblages in the City. It is important to improve and maintain native vegetation corridors that cross the cleared valley floor to provide linkages with the vegetation communities on the sideslopes.

The main access to the village is from Martinsville Road via Cooranbong. Access is also available to the Watagan Mountains through Martinsville.

Martinsville is unique in Lake Macquarie, being a long-established rural community set in a picturesque valley with traditional rural architecture. Martinsville is a place highly valued by its residents, who are attracted by the peaceful atmosphere that co-exists with a variety or pursuits, including agriculture and tourism.

Public areas and infrastructure are an important part of the existing character, including Martinsville Reserve with its associated timber buildings and structures, sealed roads with grassed open drains and vegetated areas along roadsides that allow for horse and bicycle riding.

Martinsville should continue to be characterised by single storey, low-density dwellings and related structures demonstrating traditional rural building form. The picturesque character of the area will be maintained by vegetated road edges interspersed with farmlands and the Watagan Mountains backdrop.

Future development should maintain the visual pattern and predominant scale of existing development in Martinsville. The development of low impact rural and eco-tourism accommodation and associated uses, and the production and sale of local arts and crafts and sustainable agricultural activities, is encouraged.

Tourism development and new public buildings will maintain the existing rural and forested character of Martinsville. The use of materials that blend with the colours and textures of the natural landscape will be strongly encouraged. Landscaping should be restricted to appropriate native species.

Consideration will also be given to the provision of a separate equestrian/bicycle trail adjacent to the road edge whilst ensuring rider safety, retention of existing vegetation and erosion control.

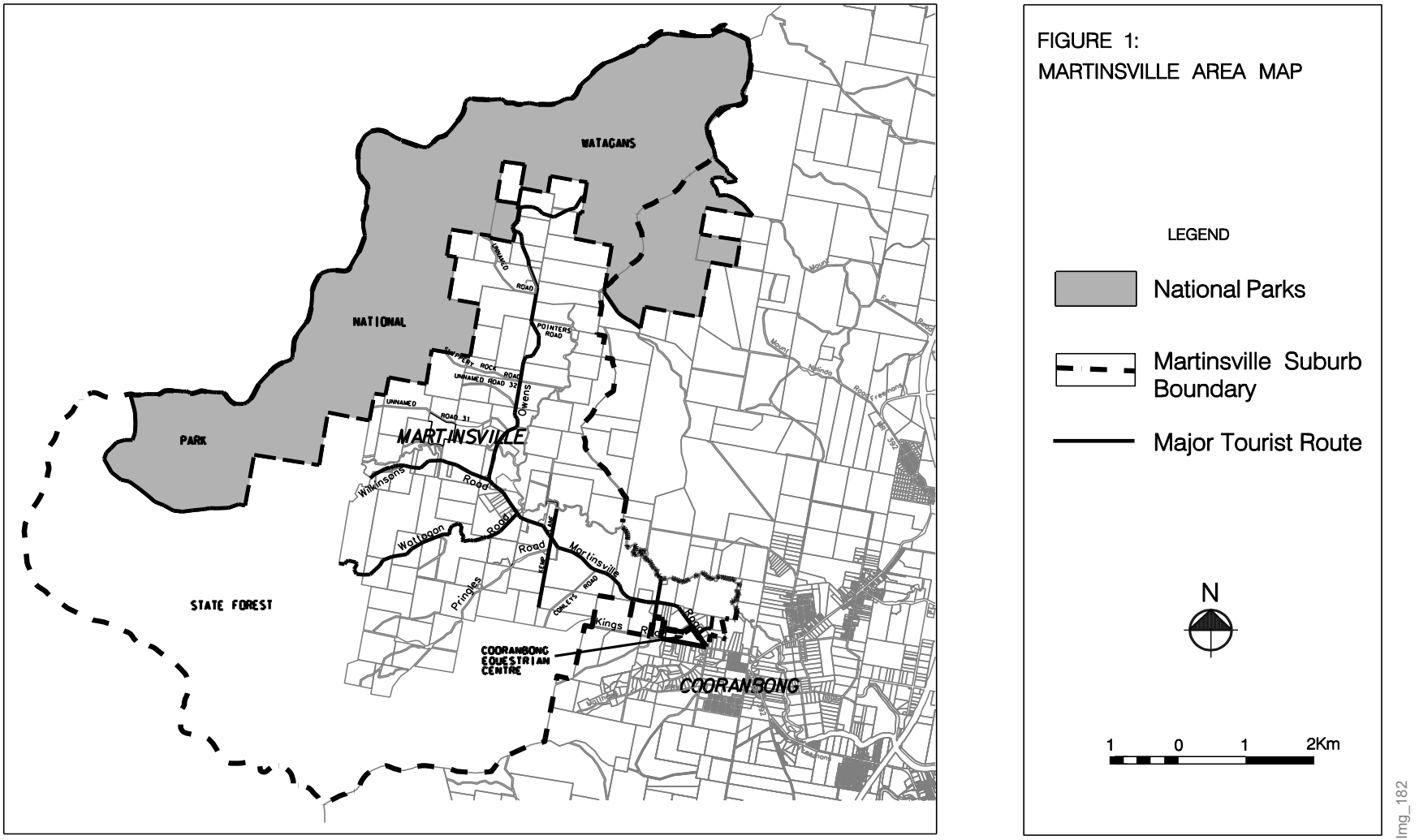

Figure 1 - Martinsville Area Plan Boundary

1.3 STREET SETBACK

Objectives

a. To ensure the rural character of the Martinsville area is maintained.

Controls

1. Where there are existing neighbouring residential buildings within 50m, front setbacks should be the average of the front setbacks of the nearest four (4) neighbouring residential buildings, or
2. Where the adjoining setbacks vary by more than five (5) metres, the proposed development should be set back the same distance as one of the adjoining buildings.
3. Where there are no existing (or approved) dwellings within 50m of the lot, front setbacks should be a minimum of 30 metres from the front boundary.

1.4 BUILDING DESIGN

Objectives

a. To ensure buildings are designed to maintain the environmental, scenic, and rural values of Martinsville.

Controls

1. Lightweight structures, including timber and corrugated steel, are encouraged utilising natural colours, tones, and finishes, which blend and complement the natural landscape.
2. Driveways should be located at least 20 metres from another driveway.
3. Car parking structures, and other site facilities should be located behind the main building structure.
4. Development should not protrude above the ridgeline or other prominent landscape feature.

1.5 RIPARIAN CORRIDORS

Objectives

a. Native vegetation and riparian corridors in the Martinsville Valley are conserved and rehabilitated.

Controls

1. Development should be designed and constructed to protect, rehabilitate, and widen native vegetation corridors and riparian areas.
2. Degraded areas and gaps in the riparian corridor should be rehabilitated with locally indigenous native species.
3. Development must maintain existing rainforest and riparian vegetation in the Martinsville valley with the exception of temporary uses and access.
4. Development must be designed and constructed to protect, rehabilitate and widen riparian and rainforest areas in the Martinsville Valley with degraded areas and gaps being rehabilitated with native vegetation.

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1 INTRODUCTION

The Mount Hutton Precinct Area Plan provides controls specific to the Mount Hutton area to ensure the effective delivery and design of infrastructure and the built environment, while also guiding the management and enhancement of key landscape and conservation features of the area. The plan applies to land immediately surrounding the Mount Hutton town centre, and extends to the area identified within Figure 1 - Mount Hutton Precinct Area Plan below. There is a separate Area Plan which applies to the Mount Hutton Town Centre (refer to Mount Hutton Centre Area Plan).

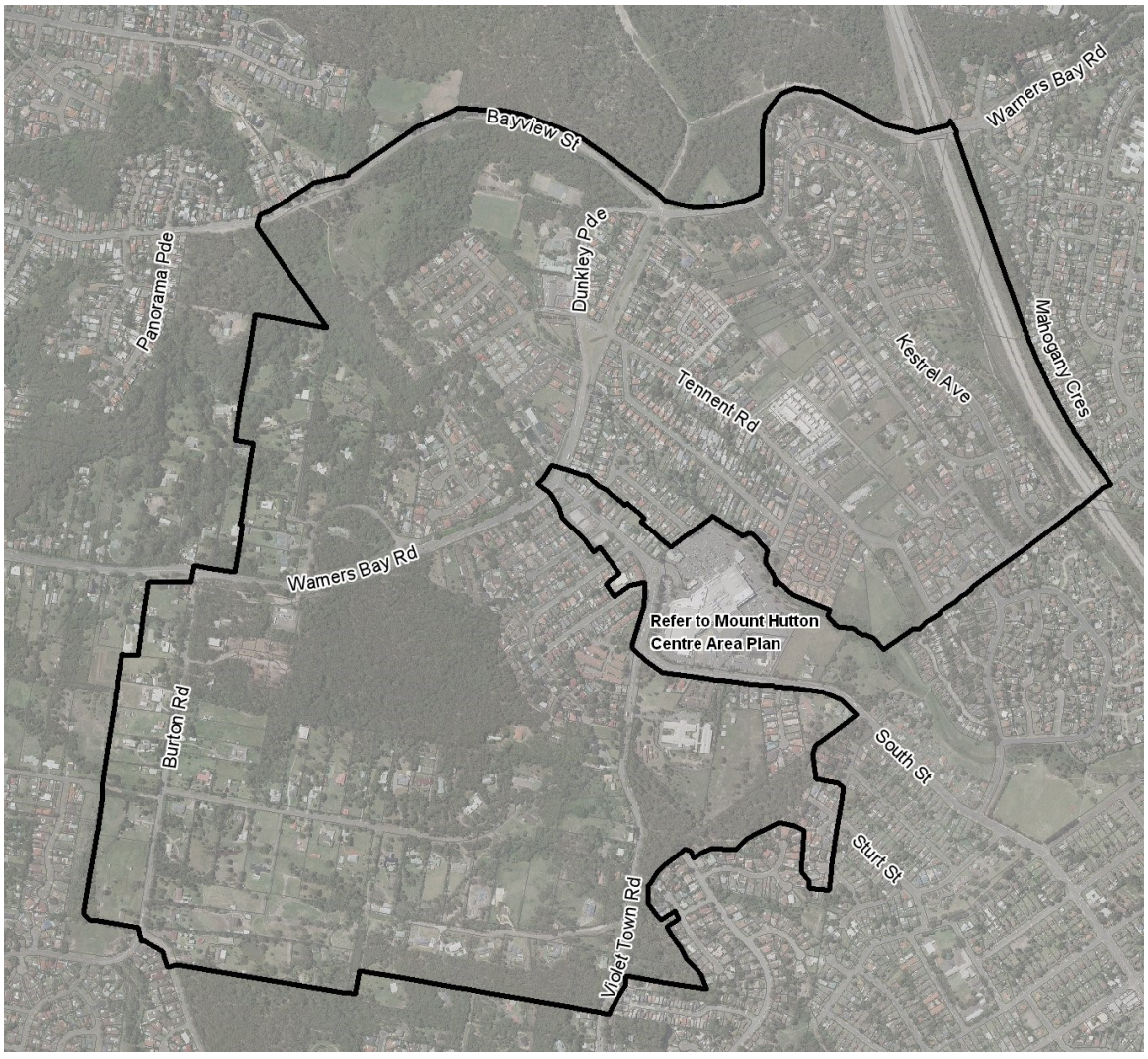

Figure 1 - Mount Hutton Precinct Area Plan

1.1 MOUNT HUTTON HISTORY

The traditional inhabitants of the Lake Macquarie area are the Awabakal people. The precinct of Mount Hutton was seasonally inhabited by the Awabakal clan of the Pambalong people (swamps district) who utilised the area for resources found within the native bushland amongst the ridgelines and Scrubby Creek (Dyall, 1972). The Pambalong clan and greater Awabakal people have a strong spiritual connection with the land and lake that provided them with the needs to thrive, and this is reflected in the ongoing Aboriginal culture of caring for Country (Awabakal Local Aboriginal Land Council, 2015). The Awabakal Local Aboriginal Land Council has statutory functions relevant to the protection of Aboriginal culture and heritage under the NSW *Aboriginal Land Rights Act 1983*. However, in NSW, Aboriginal objects and places are protected under the *National Parks and Wildlife Act 1974* (NPW Act) and under this act, the Secretary of the Department of

Planning Industry and Environment (DPI& E) is responsible for the protection of Aboriginal objects and Aboriginal places. The Special Minister of State (the Minister for the Public Service and Employee Relations, Aboriginal Affairs, and the Arts) jointly share responsibility with the Minister for Energy and Environment for administering the regulatory functions under Part 6A of the National Parks and Wildlife (NPW) Act.

Registered Aboriginal places or sites can be identified using the Office of Environment and Heritage (OEH) Aboriginal Heritage Information Management System (AHIMS) Web Services. While Council's sensitive Aboriginal landscape map does not include the Mount Hutton Area, it is likely that unregistered Aboriginal sites might be found along the Scrubby Creek, South Creek and Fossil Win Creek catchment creek lines and in areas of undisturbed vegetation. Aboriginal sites are protected under the National Parks and Wildlife Act (1974) and cannot be disturbed or destroyed without the approval of the former OEH now Department of Planning Industry and Environment (DPI &E). Relevant development controls can be found in the LMLEP (2014) under 5.10 Heritage conservation and the DCP (2014) under Section 1.0 Heritage Guidelines.

There are no local heritage listed sites in the LMLEP 2014, relating to non-indigenous heritage items within the Mount Hutton Area.

The first European to settle amongst the area of Mount Hutton was Thomas Williams in 1862, who later bought land from the crown in 1875. The area up until 1916 was referred to as Warners Bay Road, Charlestown. This was later changed to Mount Hutton after Dr Hutton who lived in the area, near the distinctive Hill behind the Main Road.

1.2 EXISTING CHARACTER

The Mount Hutton area can be best described as being an area in transition. Mount Hutton consists of single and two 2-storey weatherboard and brick homes which date from the 50's and 60's to the present day small lot and multi unit housing, which are prevalent on the slopes of Tennant and Auklet Roads and Kestrel Avenue. Mount Hutton has a Public school, recreation areas and various community services, child care services and Aged Care Facilities. Vegetated ridges and hillsides provide a strong visual backdrop for most viewpoints in the Mount Hutton area.

There are three distinct Shopping areas in Mount Hutton. To the south the Lake Macquarie Fair (a large floor plate shopping complex) and to the north the Dunkley Road shops, a traditional strip shopping complex with a variety of small shop fronts facing onto Dunkley Parade. This area contains an ALDI Supermarket as an anchor tenant. There are also a small group of shops on Wilsons Road, between Ford Avenue and Tango Street (Wilson's Road shopping village) which provides for the needs of local residents.

Land to the north of Tennant Road and off Judd Street is zoned as R2 Low Density Residential, is steep and provides for single and dual occupancy dwellings. The area comprises of dwellings from the 1990's through to 2000's and therefore the stock is quite new and unlikely to be renewed in the short term. Areas to the south of Cowmeadow Road to Warners Bay road are zoned as R3 Medium density where examples of multi dwelling housing has been established

1.3 MOUNT HUTTON STREETSCAPE MASTERPLAN

Mount Hutton Streetscape Master Plan generally aligns with the Mount Hutton Precinct Area Plan, covering the public areas owned and/or managed by Council. The Streetscape Master Plan will complement the Precinct Area Plan in providing high quality public domains and identity. It ensures a unified approach to undertaking public domain works by Council, developers and the community. The Streetscape Master Plan can be located on council's web page under Planning for economic and neighbourhood centres at:

https://www.lakemac.com.au/Development/Planning-controls/Local-Planning-Controls#section-3

1.4 DEVELOPER CONTRIBUTIONS

The Development Contributions Plan Charlestown Contributions Catchment - 2015 identifies several items that need to be provided to achieve the environmental and developmental objectives of the Mount Hutton area. These include:

- Pedestrian/cycle links;
- Road and traffic infrastructure;

- Stormwater management infrastructure; and
- Vegetation rehabilitation in conservation zoned land.

There are several options available to deliver these items, including:

- Conditions of consent attached to relevant development applications;
- Dedication of land;
- Voluntary planning agreements;
- Section 7.11 Contribution Plans; and
- Works in kind.

1.5 DESIRED FUTURE CHARACTER

Mount Hutton is envisaged as an active, pedestrian, and family friendly place for shopping, business and social activities. The Mount Hutton centre would offer access to banking, medical, personal services, and professional services, community and recreation facilities, cafes and restaurants. Mount Hutton is an important location for affordable housing and provides accessibility to services and facilities. A primary focus of the area plan is to facilitate effective and logical implementation of infrastructure, while improving the amenity of the area for its residents.

Future development in Mount Hutton should have regard to protecting key landscape elements including pockets of native vegetation, native vegetation corridors and vegetation on ridgelines, and in and around residential areas and commercial centres. A balance between built form and the natural landscape should be achieved. Any views of development from main roads, or hillside areas should be softened by screening vegetation and appropriate design measures such as setbacks. Existing view corridors should be preserved and enhanced, as well as opportunities for new view corridors identified.

Renewal of housing will take place over time, with new construction of multi dwelling units occurring in the areas zoned for R3 Medium Density being areas adjoining Wilsons Road to Tennent Road, the southern parts of Crawford Lane, parts of Kariboo Lane and south of Dunkley Parade and Cowmeadow Road. However, a primary component for any future potential development would be the amalgamation of lots to create suitable building footprints. Currently the lots off Kariboo Lane and Auklet Road are long and narrow and do not accommodate development other than a battle-axe or gun-barrel type of outcome.

Implementation of the Precinct Area Plan for Mount Hutton will facilitate additional housing development, be affordable and accessible whilst also making provision for stormwater infrastructure to manage and minimise flooding impacts. It will also provide additional pedestrian, cycling and road connections, guide future conservation management and planning, and maintain important landscape characteristics such as the areas' environmental and rural parcels, vegetated ridgelines, threatened species habitat, wildlife corridors and riparian areas.

Additionally, given issues associated with climate adaptation and readiness, and the launch of Greener places: An urban green infrastructure draft policy for NSW, it is appropriate for future development to consider minimising urban heat stress through the use of urban forest principles and the use of lighter coloured roofs and surface treatments which can be considered at the time of development of sites.

1.6 STRUCTURE PLAN

The Precinct Structure Plan at Figure 2 depicts the location of the main structural elements of Mount Hutton. The Structure Plan shows key transport corridors, road and cycleway/paths, existing native vegetation, open space, community and recreation facilities, local shops, the extent of the R3 Medium Density Zoned land and an Archaeological feature of International significance - Insect Fossils in the Mount Hutton and adjoining Windale area. Details of proposed transportation infrastructure works are located at Figure 6 Transportation Structure Map.

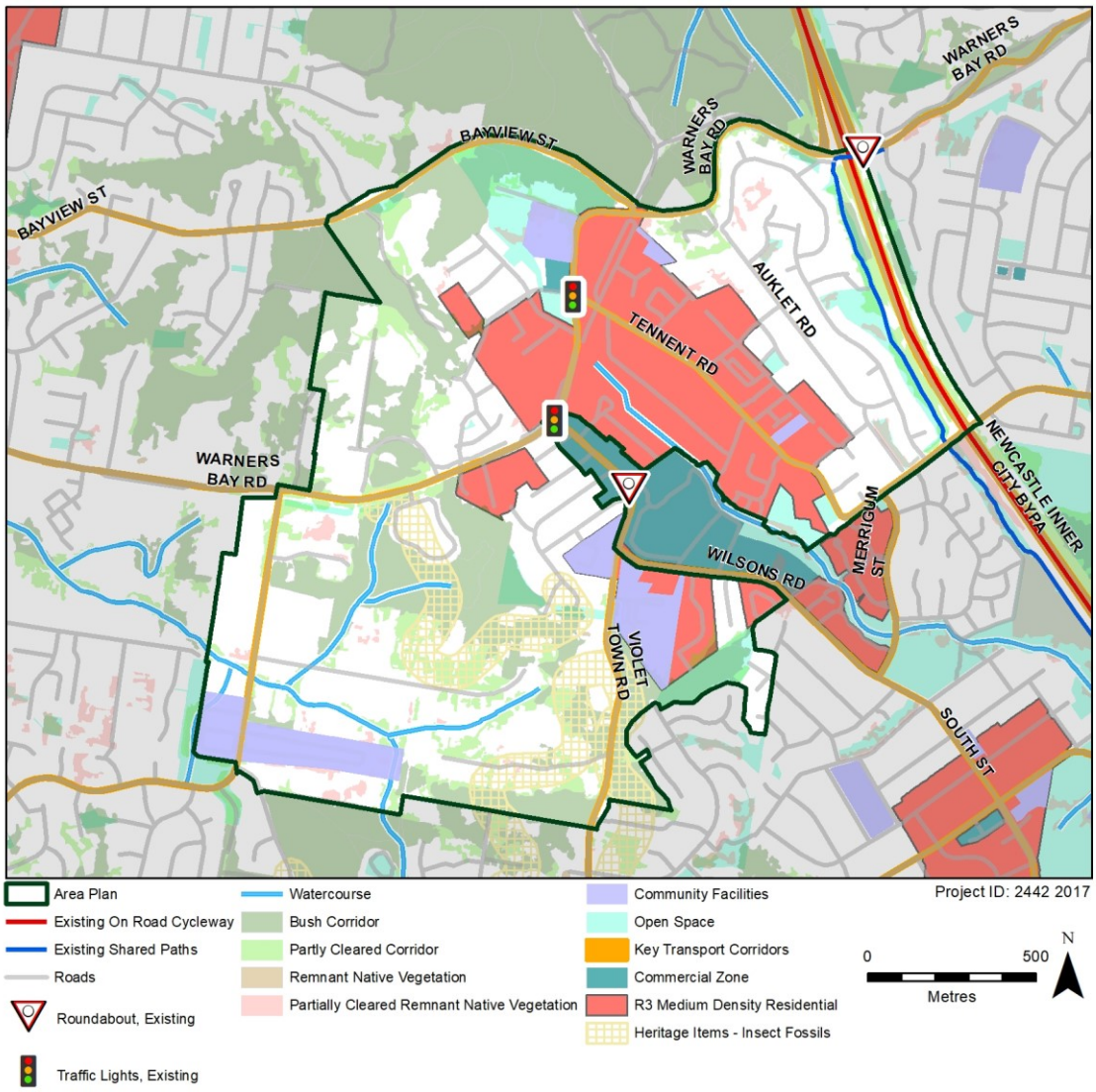

Figure 2 - Mount Hutton Precinct Structure Plan

2 ENVIRONMENTAL ATTRIBUTES AND CONSTRAINTS

2.1 FLOODPLAIN MANAGEMENT AND STORMWATER

The Mount Hutton area forms part of both the Lake Macquarie and Jewells Wetland Catchments. Soil limitations of the area include high water erosion hazard with the possibility of landslip on steep slopes. Parts of the area are subject to seasonal water logging, high run-off with moderate to high shrinkage and strongly acid soils of low fertility.

Sustainable and efficient stormwater and floodplain management is essential to future development in Mount Hutton. Scrubby Creek flows through Mount Hutton from the northwest to the south-east before entering the Jewells Wetlands. The majority of the suburb is contained in the Scrubby Creek catchment. The priority stormwater issues include flooding, sediment and erosion control while ensuring the downstream wetlands receive a viable and continuous supply of water.

The Scrubby Creek sub-catchment detention basins should act primarily as water quality devices. Stormwater run-off from all roof surfaces should be managed through storage/landscaping systems within the development footprint being harvested and reused on site.

A small portion at the south western section of the precinct plan is affected by the *South Creek Flood Study*, *April 2011* report and the area of Scrubby Creek Mount Hutton is affected by the *Jewells Wetland Floodplain Risk Management Study and Plan, 2019*. These studies show areas affected by probability floods for the full range of flood events (One (1) % Annual Exceedance Probability (AEP) as well as indicating flood hazard areas and recommending floodplain management options.

The *Jewells Wetland Floodplain Risk Management Study and Plan, 2019* has reinforced the findings and recommendations of the s.*7.11 Charlestown Contributions Plan 2015*. The *Study and Plan* 2019 has identified properties in the Ada Street locality susceptible to relatively frequent overland flooding because of the limited capacity of this part of the Scrubby Creek main drainage channel.

The Study and Plan highlight that the proposed works in the Council's *S7.11 Contributions Plan 2015* were identified as having some direct benefit (figure 3) to the Ada Street locality. The works would reduce risk to properties through reduced peak flood discharges and potentially reducing instances of overbank flooding to property lots. However, the Study and Plan also highlights that because of the high capital costs, the proposed works did not provide a major increase to overall flood immunity. Accordingly, *The Study and Plan 2019* have recommended that Ada Street, Alexander Street and Helen Street localities be further investigated.

Further investigations may require provision of additional information in respect of offsite effects during future development proposals for the above-mentioned localities.

Retention and rehabilitation of riparian creek lines and vegetation buffers will also be a primary objective of work to be completed for the area.

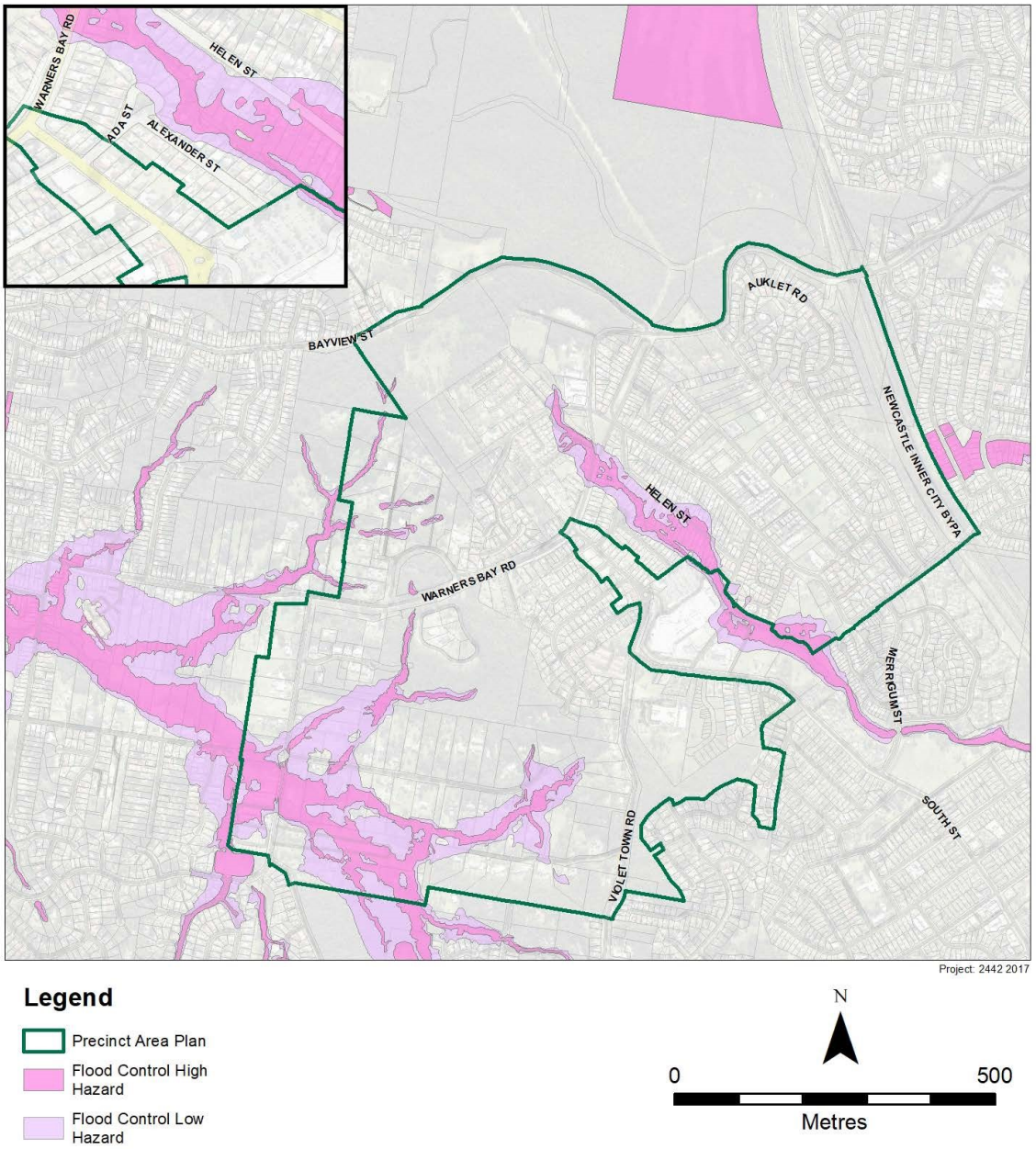

Figure 3 - Mount Hutton Flood Hazard Map – Insert shows detail of Ada, Alexander & Helen Street localities

2.2 NATIVE VEGETATION, FLORA & FAUNA CORRIDORS

The Mount Hutton area is very important for the long-term survival of threatened species and other native fauna that inhabit the area. Threatened species, habitat and corridors are particularly relevant issues for the disused quarry south of Bayview Street and the Cowmeadow Road and Casson Avenue Precincts.

Remnant vegetation and riparian areas of the Mount Hutton area support a variety of flora and fauna species that provide an important role in the area's amenity and associated liveability (refer to figure 4).

Key ecological features of the Mount Hutton area include:

- Habitat for an estimated 400 fauna and flora species including habitat for threatened species such as *Tetratheca juncea*, the masked owl, powerful owls, squirrel glider, grey headed flying fox, threatened micro bats and endangered ecological communities, Swamp Sclerophyll Forest on Coastal Floodplains and River Flat Eucalypt Forest on Coastal Floodplains;
- A significant north-south wildlife corridor that connects large tracts of forest and woodlands of the Green Point/Floraville area to that in Hillsborough. This north-south corridor enables a greater diversity of fauna to move through and inhabit the area and aids in the dispersal of genetic plant material. This corridor is weak in places and needs protection and rehabilitation. The corridor is also particularly significant to the viability of a local population of threatened squirrel gliders that are known to move through this area; and
- A number of creek lines and associated vegetation buffers that are important for maintaining the health of waterways including those that occur downstream such as the SEPP 14 Wetlands at Jewells.

Retention and enhancement of native vegetation and corridors in conservation priority areas of the Mount Hutton area, is a main objective of the area plan particularly within:

- land zoned for environmental protection;
- corridor linkages identified on the map.

2.3 RIDGELINE MANAGEMENT

An important aspect of Mount Hutton's character is the natural bushland, native vegetation corridors and vegetated ridgelines, which surround and cross the suburb. These need to be maintained and enhanced. The vegetated ridgelines are the most dominant physical and scenic feature of the suburb. They frame the western and southern areas and define the valley that spreads out to the east. Protecting and maintaining these ridgelines is a key priority of this Area Plan.

To enhance this scenic character, residential development along the ridgeline and split zoning of the R2 Low Density Residential and R3 Medium Density Residential Zones of Glasshouse Ridge Road toward Sylvia Place/Bottlebrush Road shall include provision for the planting of native trees and shrubs as development occurs. This will enable the ridgeline to be gradually re-vegetated over time, particularly along existing and future road alignments and road reserves. Retention of the existing treed areas within the precinct is also a priority.

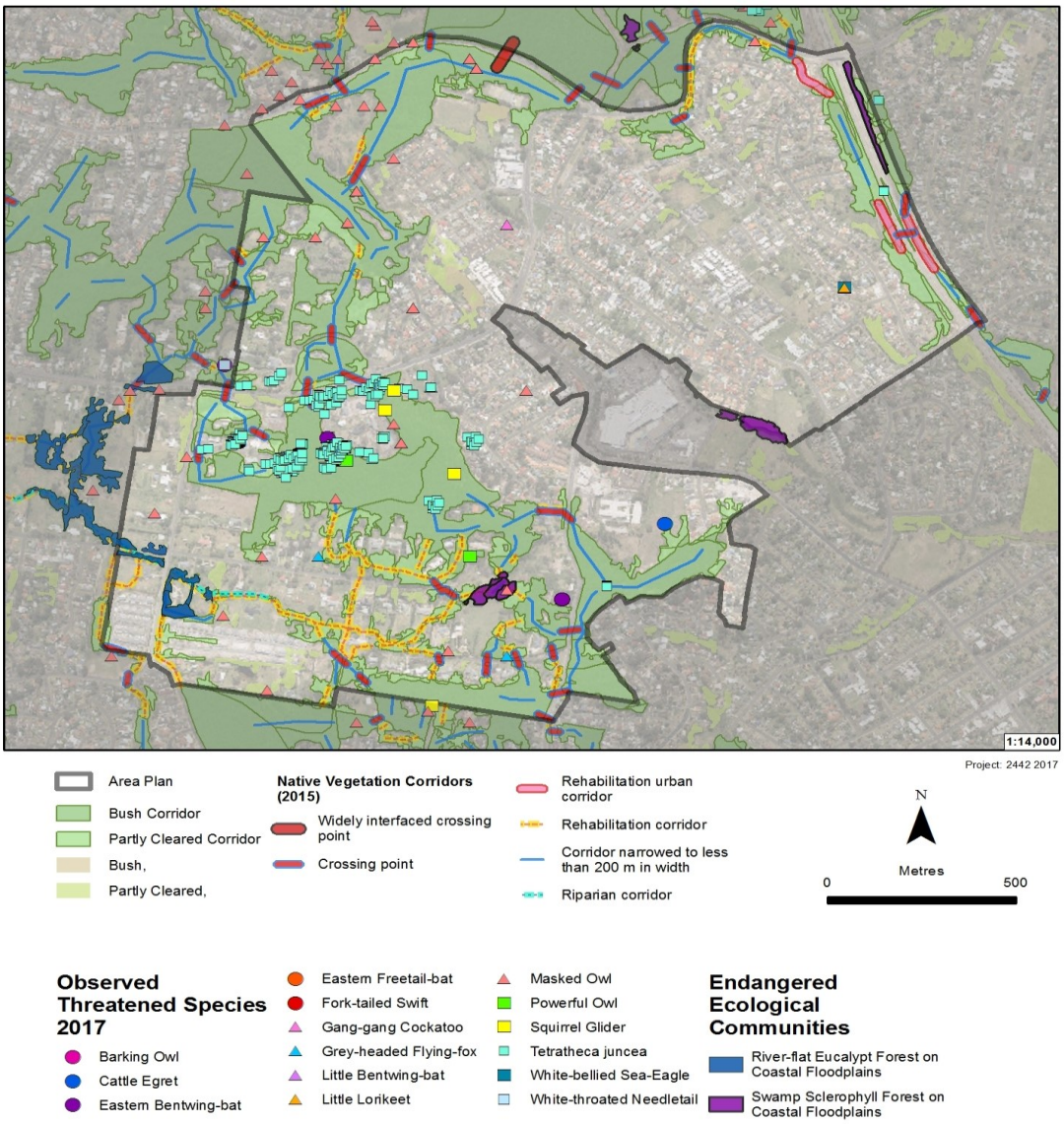

Figure 4 - Native Vegetation and Corridors, Observed Threatened Species and Endangered Ecological Communities

2.4 INSECT FOSSILS

The Insect Fossils form part of the Belmont insect beds. These fossil beds are of International significance and very high conservation value as they represent the only significant occurrence of fossil insects from the Palaeozoic Era found in Australia and are unusual when compared to equivalent occurrences overseas (refer to figure 5).

The Belmont insect beds have yielded in excess of 140 species and over 800 specimens of fossil insects including approximately 15 new species of fossil insect.

Any proposed development and/ or disturbance of an area identified over a fossil seam must be in accordance with Councils Natural Heritage Guidelines.

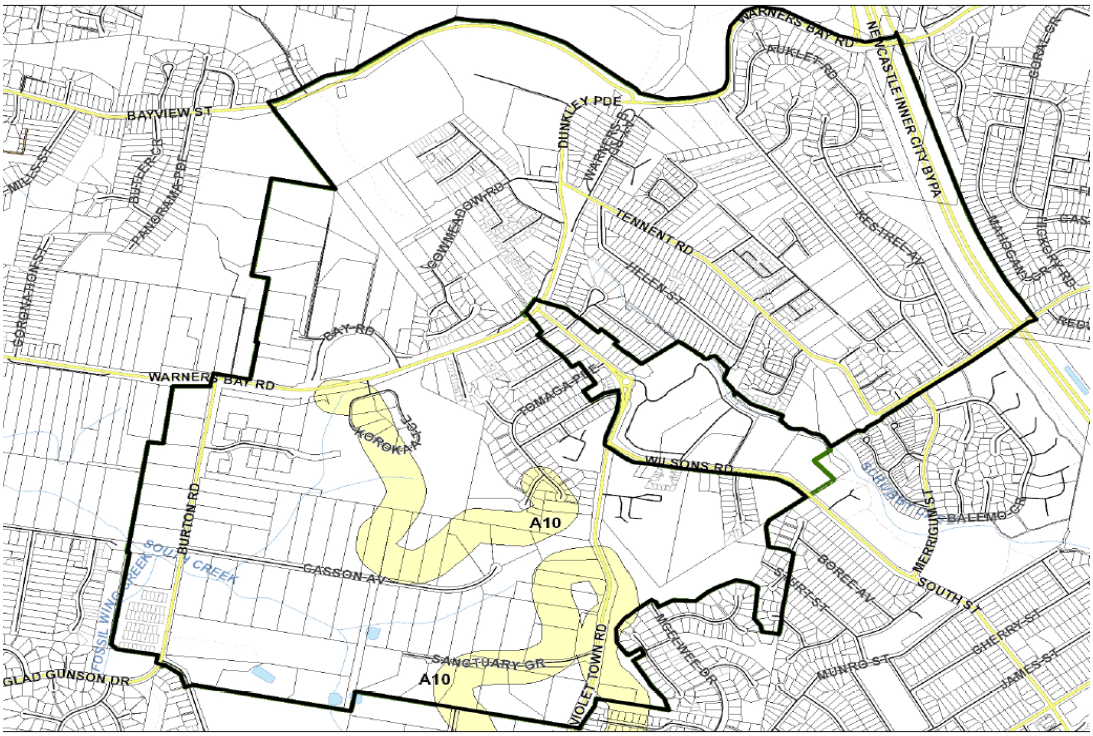

Figure 5 - Insect fossils of International significance in the Mount Hutton area

2.5 CONTAMINATED LAND

There are a number of contaminated or potentially contaminated sites in Mount Hutton that are identified on Council's Database of Contaminated or Potentially Contaminated Land within the City of Lake Macquarie.

Proposed development on contaminated or potentially contaminated sites need to take into consideration the requirements of Council's Policy for Managing Contaminated or Potentially Contaminated Land within the City of Lake Macquarie and the requirements of SEPP55 and the SEPP55 Planning guidelines. Information about sites within the Council Database is available from enquiries to the Council Administration Office in Main Road, Speers Point or from applying for a section10.7 Planning Certificate for the land in question.

Note: Up-to-date details will be found on Council's Contaminated or Potentially Contaminated Land Database.

This database should be referred to obtain the most recent accurate listing of contaminated or potentially sites in the Mount Hutton area.

Further information in relation to contaminated land management or remediation, and Fact Sheets about contamination generally, can be found on Council's webpage.

3 PEDESTRIAN, CYCLE PATH AND VEHICLE MOVEMENT

3.1 PEDESTRIAN AND CYCLE PATHS

Shared pedestrian and cycle paths are lacking in the Mount Hutton area, despite the area being suitable for walking and bicycle transport.

Pedestrian access from the western side of Warners Bay Road, incorporating the northern section of the suburb linking the shopping precinct and the primary school, has been significantly improved since the installation of traffic signals at the intersection of Dunkley Parade and Tennent Road.

While Council has developed both its Footpath and Cycling Strategy, Mount Hutton is not listed as a high priority area for footpaths or cycleways. Greater emphasis will need to be placed on future development in the area to improve footpath and/or cycling facilities (refer to figure 6).

3.2 TRAFFIC AND TRANSPORT

The Mount Hutton Precinct Area Plan aims to deliver improved accessibility to services and facilities, providing additional intersection upgrades and pedestrian connections. New residential development in Mount Hutton will place additional pressure on the existing road infrastructure. Refer to (figure 6) for location of key priority areas summarised below:

1) Intersection upgrade - Dunkley Parade, Warners Bay Road and Bayview Street.

   The intersection of Dunkley Parade, Warners Bay Road and Bayview Street will initially be constructed as a 3-legged roundabout only. The intersection upgrade will be listed on Council's Intersection Capital Works Programme for funding and construction (refer to Council's Delivery Programme for additional information). A 4th leg" extension of the round-about of Warners Bay Road would be based on future traffic modelling and is not considered necessary until the 2030's. Concept design will require investigations into land acquisitions, driveway access to properties, retaining walls and service relocations. Community consultation will be undertaken as part of the development of the intersection at that time (refer to Item No. 1, figure 6).

2) Potential future road access from Auklet Road to Warners Bay Road

   Subject to further investigations and consultation there is potential for a road access from the northern end of Auklet Road near the junction of Government Road and traversing westward toward Warners Bay Road. This potential road connection could initially be a future road access that ends in a Cul de Sac at the eastern boundary of Number 300 Warners Bay Road. There is further potential of exiting onto Warners Bay Road subject to detailed engineering design work and discussions with affected landowners as a component of the future Roundabout proposed at Bayview Street, Dunkley Parade and Warners Bay Road intersection (refer to Item No. 2, figure 6).

3) Glasshouse Ridge Road connection to Kariboo Lane

   The 2014 Mount Hutton Precinct Area Plan illustrated an elbow road connection from an existing "Restriction as to user" (Easement) i.e. extension of Glasshouse Ridge Road north from Langdon Way over numbers 21, 41, 43, 45, 47 and 47A Auklet Road and connecting to Kariboo Lane. Initially the elbow connection from the Easement would provide greater traffic circulation. However, due to high financial cost, difficult topography, loss of residential land and adequate circulation through Langdon Way, the elbow connection has been removed. Additionally, the Easement has been retained for a future road when required which would terminate in a T-head or Cul-de-sac (refer to Item No. 3, figure 6 and figure 7 for detail).

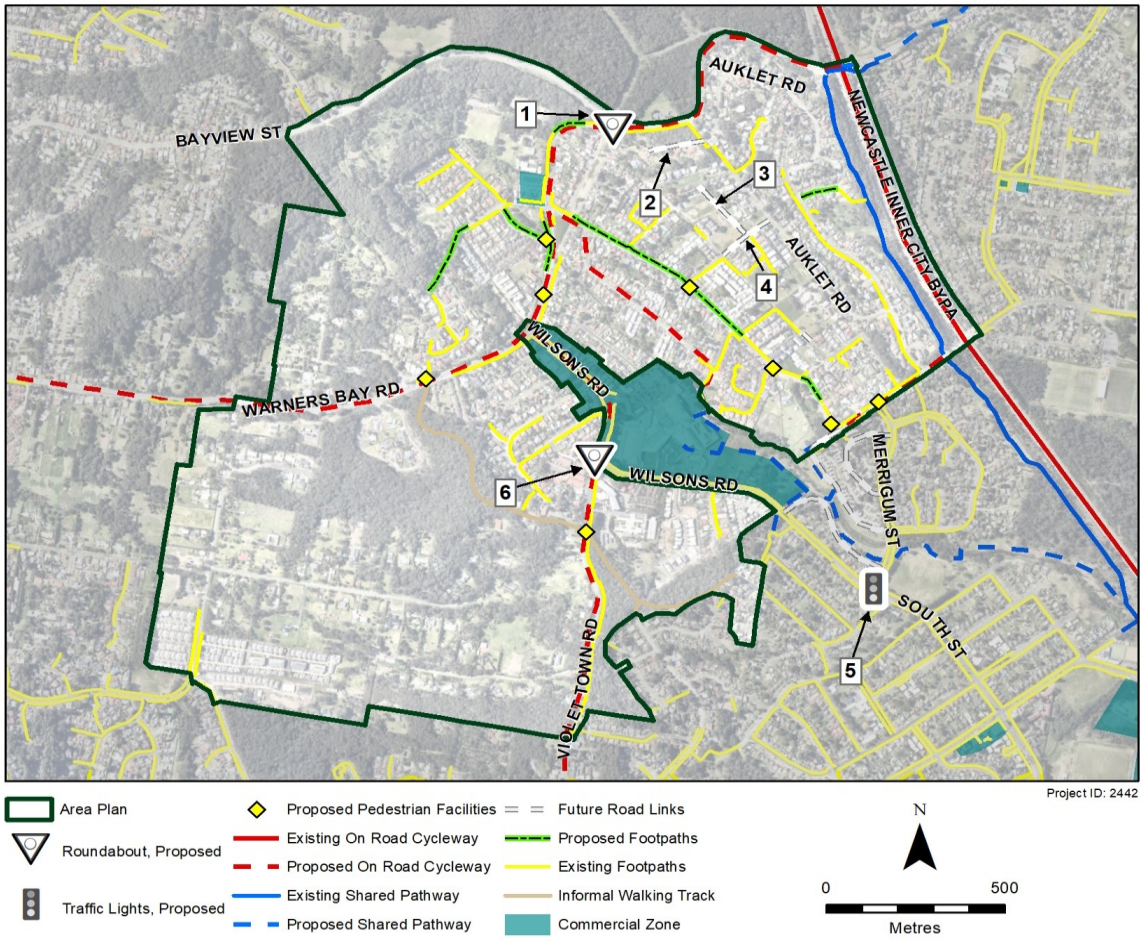

Figure 6 - Transportation Structure Map, showing existing and proposed footpaths and cycleways identified in the Footpath Strategy 2013-2023 and Cycling Strategy 2021, including identified pedestrian facilities/refuges, and priority intersection upgrades.

4) Road upgrade – Langdon Way

The s.7.11 Contributions Plan 2015 indicates that Langdon Way will be extended to Auklet Road to create a single lane two-way road (subject to Capital works programming) refer to Item No.4, figure 6.

5) Intersection upgrade – Merrigum Street and South Street, Windale

The alternate and existing connection between Wilsons Road and Willow Road/South Street Windale is via Merrigum Street. The intersection of Merrigum Street and South Street has been identified as requiring an upgrade to a signalised intersection and is listed in the Charlestown s.7.11 Contributions Plan for the Windale area (subject to Capital works programming). It is not a component of the Mount Hutton Precinct Area Plan but has been included to ensure consistency in connectivity with the adjoining Windale Precinct Area Plan also currently under review (refer to Item No.5, figure 6).

6) Intersection upgrade – Violet Town Road and Wilsons Road

Modelling undertaken to 2025 as part of the Charlestown s.7.11 Traffic Studies shows that the intersection of Violet Town Road and Wilsons Road will require upgrade to a roundabout. This intersection is listed on Council's Intersection Upgrade Capital Works Programme and listed in the Charlestown s.7.11 Contributions Plan (refer to Item No. 6, figure 6).

There are also several proposed pedestrian refuges/facilities shown at figure 6 along Warners Bay Road, Violet Town Road, Tennant Road and Willow Road. These pedestrian refuges/facilities will be progressively upgraded when a detailed investigation has occurred as to actual need and placement.

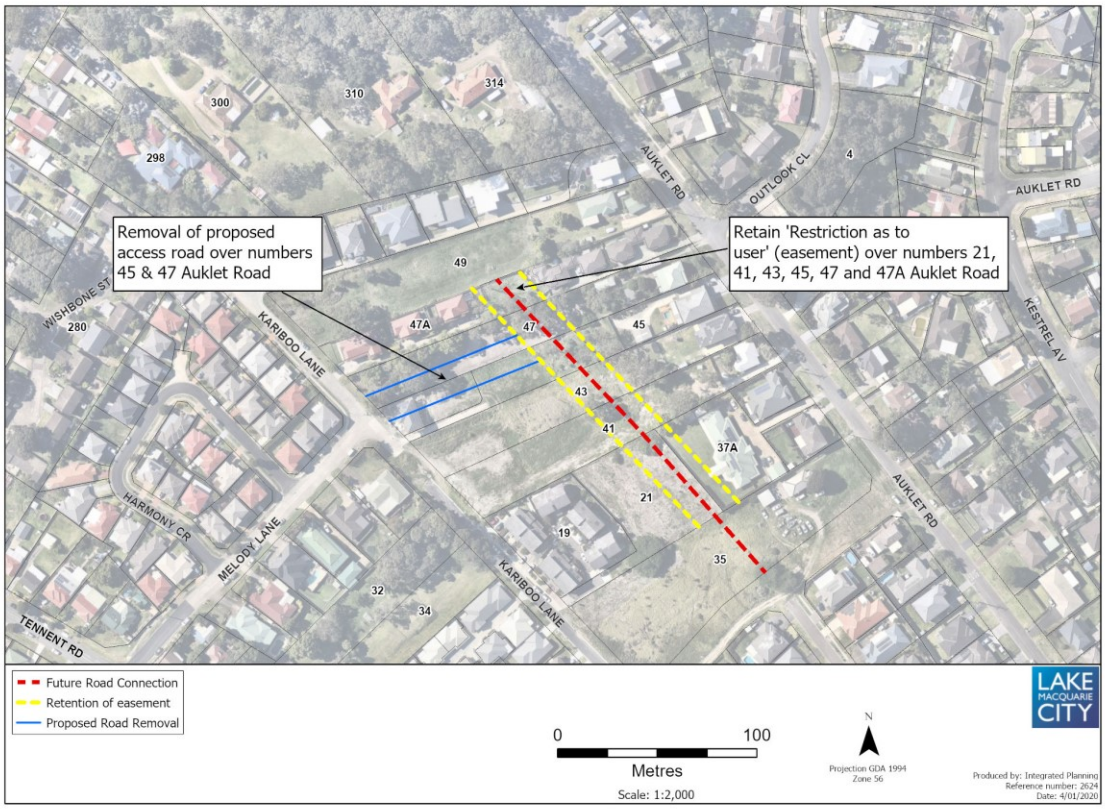

Figure 7 - "Restriction as to user" over lots 21 to 47A Auklet Road, and indicative road from Langdon Way northward

4 OBJECTIVES AND CONTROLS OF THE AREA PLAN

4.1 FUTURE CHARACTER

Objectives:

a. To ensure that urban areas develop to support future housing needs in a low and medium density environment;

b. To enable affordable, adaptable and accessible housing to be established;

c. To protect key landscape elements including pockets of native vegetation and vegetation on ridgelines including around residential areas and commercial centres;

d. To ensure that green infrastructure development is generally consistent with Greener Places: A draft urban green infrastructure policy for NSW.

e. To maintain and enhance the bushland character of the area including bushland within scenic management areas, threatened species habitat, wildlife corridors, riparian areas and vegetated ridgelines;

f. To maintain and enhance the rural character of the non-urban area;

g. To ensure that future development enables pedestrian and bicycle connectivity so that pedestrians are not isolated from existing or proposed pedestrian facilities, public transport and services.

Controls:

1. Developments must be generally consistent with the desired future character of the Mount Hutton Precinct, and Transportation Structure Map (refer to figure 6).
2. Development in the R2 Low Density Zone enables the amalgamation of lots particularly in the block between Kariboo Lane, Auklet and Langdon Way, and establishment of a road along “the Restriction as to User” to ensure legal access is available for future development (refer to figure 7).
3. Development in the R3 Medium Density Zone enables medium density housing to establish that is complimentary to the scale, bulk and amenity of existing buildings in the immediate location inclusive of pedestrian and bicycle connections and infrastructure.
4. Green Infrastructure development must generally be consistent with the principles of Greener Places: A draft urban green infrastructure policy for NSW.
5. Development ensures that pedestrian and cycleway connectivity is maintained and enhanced and does not prejudice existing or proposed pedestrians or cycleway connections (refer to figure 6).
6. In residential areas and commercial centres, development avoids the removal of native vegetation, threatened species habitat, wildlife corridors, riparian areas and vegetated ridgelines.
7. Development outside of environmental and scenic management areas, avoids the removal of native vegetation, threatened species habitat, wildlife corridors, riparian areas and vegetated ridgelines.
8. Development in or adjacent to degraded vegetation must include a replanting and vegetation management plan for the continued rehabilitation of the suburb with native flora species.
9. Development is not to occur on the tops of ridges and slopes where loss of vegetation and visual amenity would be compromised.

4.2 URBAN STRUCTURE

Objectives

a. To ensure that built outcomes provide an efficient use of land, and proposals consider broader opportunities and constraints in the vicinity.

b. To ensure that proposed developments do not compromise future development potential of adjoining or near-by land.

c. To ensure that planned infrastructure for Mount Hutton is delivered, and not compromised by development on a single site.

d. To incorporate Water Sensitive Urban Design (WSUD) techniques in all new developments.

e. To provide an appropriate road network that connects with the existing road network.

f. To ensure subdivision of land and road networks are consistent with a grid subdivision pattern of existing residential lots.

g. To ensure that adequate pedestrian and cycle facilities are available to link developments with existing and proposed facilities surrounding the area.

h. To ensure that future development adjoining Scrubby Creek has street frontage and overlooks the creek reserve to facilitate appropriate urban design outcomes including natural surveillance.

i. To ensure that land adjoining Scrubby Creek is rehabilitated with locally indigenous native vegetation.

Controls:

1. Developments must be generally consistent with the desired future character of the Mount Hutton Precinct.
2. Developments must not preclude the establishment of infrastructure identified on the Transportation Structure Map (refer to figure 6)
3. Development of land for subdivision and road networks are consistent with a grid subdivision pattern of existing residential lots.
4. Development must ensure that adequate pedestrian and cycle facilities are available to link developments with existing and proposed facilities surrounding the area.
5. Development must include Water Sensitive Urban Design (WSUD) measures to manage stormwater, erosion, and water quality of stormwater leaving the site.
6. Where development adjoins Scrubby Creek, the creek is to be rehabilitated and re-vegetated with locally indigenous native species in accordance with Council's Estuarine and Creekbank Stabilisation & Rehabilitation Guideline.
7. Development of new dwellings adjoining Scrubby Creek provides for frontage to the creek to enable natural surveillance and pedestrian access.
8. Development must not adversely impact fauna crossings where development encroaches or intersects with crossing points shown in figure 4 in accordance with Council's Flora and Fauna Survey Guidelines.
9. Where roads must cross identified wildlife corridors, appropriate design measures are provided to facilitate fauna crossings in accordance with Council's Flora and Fauna Survey Guidelines.

4.3 PEDESTRIAN, VEHICLE AND BICYCLE LINKS

Objectives:

a. To ensure that development provides a pedestrian and cycle network with access to key destinations within the site and surrounding area, including existing and proposed recreation areas, transport routes, shops, and the Mount Hutton Public School.

b. To ensure that development does not prejudice pedestrian, cycle and road infrastructure.

Controls:

1 Pedestrian and cycleway routes must be conveniently linked to recreation and community facilities, and the external road network, as shown in the Transportation Structure Map (refer to figure 6).

2 Where practical and safe to do so, shared pedestrian/cycle pathways should be incorporated into the road reserve on the undeveloped side of perimeter roads, thereby contributing to Asset Protection Zones and providing a 'hard edge' to conservation land.

4.4 NATIVE VEGETATION, FLORA & FAUNA CORRIDORS, SCENIC MANAGEMENT AND INSECT FOSSILS

Objectives:

a. To maintain and enhance areas of natural, ecological and scenic significance including native vegetation, rehabilitation corridors, bush corridors, threatened species habitat, wildlife corridors, riparian areas and vegetated ridgelines.

b. To ensure that the highly valued bushland settings and vegetated ridgelines that surround Mount Hutton are protected and enhanced.

c. To re-establish native trees or shrubs along the road corridor of Glasshouse Ridge Road to Langdon Way.

d. To establish native trees and shrubs along the ridgeline and split zoning of the R2 Low Density Residential and R3 Medium Density Residential Zones of Glasshouse Ridge Road toward Sylvia Place/Bottlebrush Road as development occurs.

Controls:

1 Existing vegetation should be maintained and enhanced throughout the Mount Hutton Precinct (refer to figure 4) and be in accordance with Council's Flora and Fauna Survey Guidelines particularly:

   i. Visually sensitive landscapes and scenic areas;

   ii. In areas of threatened species habitat and wildlife corridors;

   iii. On prominent landscape features, such as hillsides and ridgelines;

   iv. In riparian areas and associated buffers particularly along Scrubby Creek and South Creek

2 Existing vegetation should be maintained along major road corridors including:

   i. Development in or adjacent to areas of natural vegetation;

   ii. Where green breaks provide visual relief to the urban area;

   iii. Where a Visual Impact Assessment and Development Site Plans determine the location of buildings, structures, driveways and other development within bushland areas of the suburb;

3 Rehabilitation of riparian areas with native vegetation shall be in accordance with Council's Estuarine Creekbank Stabilisation & Rehabilitation Guideline.

4 Development in or adjacent to degraded vegetation should assist in the rehabilitation of the suburb with local native species.

5 Development along the ridgeline and split zoning of the R2 Low Density Residential and R3 Medium Density Residential Zones of Glasshouse Ridge Road toward Sylvia Place/Bottlebrush Road, must include provisions for landscaping using native trees and shrub species so that the ridgeline will be gradually re-vegetated over time.

6 Any proposed development and/or disturbance of an area identified over a fossil seam must be in accordance with Councils Natural Heritage Guidelines.

7 Riparian creek lines and associated vegetated buffers will be retained and rehabilitated

4.5 SCRUBBY CREEK RESERVE

Objectives

a. To ensure that development addresses and overlooks Scrubby Creek and open space areas.

b. To ensure that development is sited and designed to minimise the impacts of flooding of Scrubby Creek.

c. To ensure that development does not adversely affect water quality or quantity in Scrubby Creek.

d. To ensure that Scrubby Creek and associated riparian vegetation is maintained and rehabilitated, in order to contribute to water quality, and to mitigate sedimentation of Jewells Wetland.

e. To incorporate Water Sensitive Urban Design (WSUD) techniques in all new developments.

f. To minimise the volume and rate of stormwater leaving a development site.

g. To develop a reserve with an informal native landscape, and pedestrian and cycle paths.

h. To provide pedestrian and cycle paths along Scrubby Creek.

Controls

For development adjoining Scrubby Creek:

Development to address and overlook Scrubby Creek, and not result in any net increase in peak stormwater volume and flows into the Creek (refer to 5.4.1- LMDCP Water Cycle Management Guidelines).

1 Development must not result in any net increase of pollutant loads to Scrubby Creek (refer to 5.4.1 -LMDCP Water Cycle Management Guidelines).

2 Development proposals must include a Stormwater Management Plan that is consistent with the recommendations of the Jewells Wetland Flood Risk Management Study and Plan 2019.

3 Development must include Water Sensitive Urban Design (WSUD) measures to manage stormwater, erosion, and water quality of stormwater leaving the site (refer to Council's Water Cycle Management Guidelines and Stormwater Treatment Framework, and Stormwater Quality Improvement Device Guidelines).

4 The elements of the drainage system and stormwater treatment devices must be visually unobtrusive and integrated within individual sites, landscaped areas, roads and open space areas. They must be designed in accordance with Council's Water Cycle Management Guidelines and Engineering Guidelines.

5 Development must include revegetation along Scrubby Creek using local native species.

6 Development must include pedestrian and cycle paths along Scrubby Creek that are readily visible, as shown in figure 6 Transportation Structure Map of this Precinct Plan, and figure 1 of the Mount Hutton Centre Structure Plan within the Mount Hutton Centre Area Plan.

7 Pedestrian and cycleway routes must be conveniently linked to recreation and community facilities, and the external road network, as shown in the Transportation Structure Map (refer to figure 6).

8 Where practical and safe to do so, shared pedestrian/cycle pathways should be incorporated into the road reserve on the undeveloped side of perimeter roads, thereby contributing to Asset Protection Zones and providing a 'hard edge' to conservation land.

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1 INTRODUCTION

The purpose of the Area Plan for 1A Raymond Street is to provide a strategic and coordinated approach to the development of land located at the former Speers Point quarry. The Area Plan will ensure the land is developed in an efficient manner, taking into account environmental, social and economic issues affecting the site.

This Area Plan is to be read in conjunction with the relevant part of Lake Macquarie Development Control Plan (LM DCP) 2014. Where the provisions of this Area Plan are inconsistent with the controls in the relevant part of LM DCP 2014, the provisions of this Area Plan will prevail.

1.1 BACKGROUND

This Area Plan relates to the former Speers Point Quarry site, which has been rezoned for the purpose of future residential development within an E4 Environmental Living Zone, and satisfies the additional local provisions that apply to the site pursuant to Part 7 Clause 7.17 of the Lake Macquarie Local Environmental Plan 2014 (LM LEP 2014).

1.2 EXTENT OF AREA PLAN

This Area Plan applies to the land outlined in green in Figure 1.

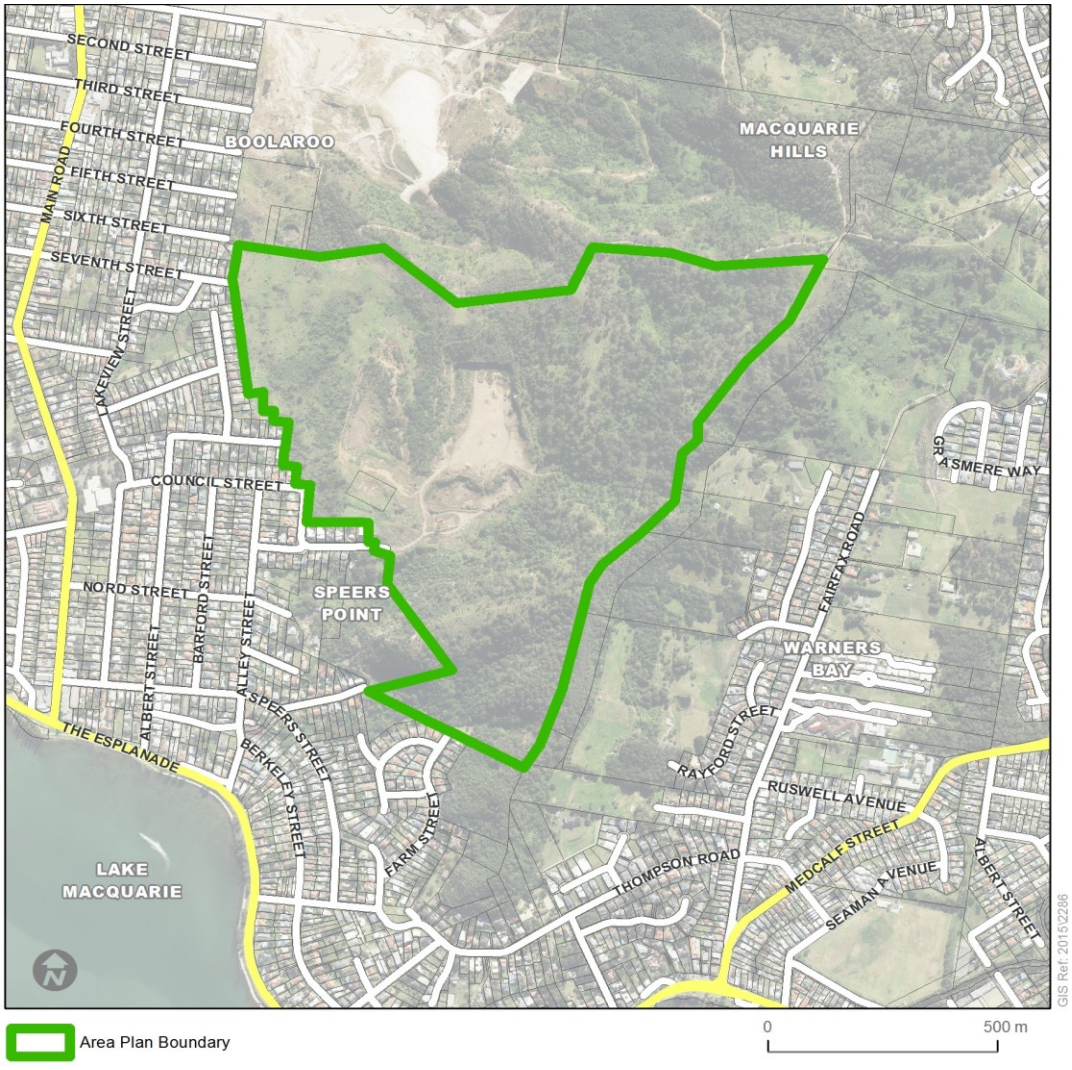

Figure 1 - Extent of the Area Plan

1.3 HISTORY OF THE SITE

The history and character of the site was presented in the Local Environmental Study prepared by RPS (2011) and is summarised below.

The study area is located within the boundaries of the Awabakal people, the Aboriginal people of the Lake Macquarie area. The range of high hills we now know as Munibung Hill was important in the spiritual and ceremonial life of the Awabakal people (Threlkeld in Gunson 1974:64).

Formal European occupation of the area commenced in 1828 with the selection by William Brooks of 1,280 acres encompassing present day Speers Point and the area now known as Munibung Hill. In 1843, Brooks announced the opening of a coal mine, which is thought to have been located around the top end of present-day Hopkins Street. The coal mine operated until around 1856 (Hartley 1998:55).

Around 1870 William Speer, a Sydney businessman and timber merchant, acquired the property. In 1902, the first subdivisions were made around Munibung Hill extending from Main Road Boolaroo, to present day Thompson Road and east to Fairfax Road. The remaining land was acquired by Mrs Mersie Hardy who subdivided some portions although the hilly area remained undeveloped. A quarry operation commenced from about that period, with access from Hopkins Street. It is thought that a Mr Hopkins was the quarry manager (Read, 2003).

The hilly area was sold to A G Hawkins (Speers Point article nd:1) who established gravel quarries to support road building activities (Boolaroo – Lake Macquarie Council Local History Website). From 1986 onward, Boral Resources Pty Ltd operated a gravel quarry under an operating licence from Dekagra Pty Ltd (Resource Planning: 1989:29). The quarry licence was formally surrendered in 2014.

1.4 EXISTING CHARACTER

The site is located in the northern part of the Lake Macquarie local government area (LGA), some 17 kilometres from the central business district of Newcastle and 8.5 kilometres from Charlestown, and is currently vacant. Topographically, Munibung Hill comprises of three spurs running in a north-south and east-west direction. A significant ridgeline exists on the southwestern slopes of Munibung Hill where the subject site is located, and being approximately 800 metres northeast of the lake.

The East Munibung Hill Precinct Area Plan covers the residential areas of Fairfax Road. To the south and through to the west are the residential and commercial areas of Speers Point and Boolaroo.

The landform resulting from previous quarry activities is characterised by two adjacent pits (Figure 2). Pit A is the larger of the two pits, located on the eastern side of Pit B and is approximately 5.75 hectares in area, with wall heights varying from approximately 0 to 25m. Pit B is approximately 2.14 hectares in area with wall heights varying from approximately 0 and 15m. The base of Pit A is relatively flat whilst the base of Pit B slopes down from the north to the south at an average slope of 3 degrees.

The site has historically been accessed from Hopkins Street via a local neighbourhood road network to the west. This road network also includes numerous streets, which terminate at the western boundary. A network of bushwalking tracks is located along ridge crests on the site. A Council car park off Quarry Road provides an entry point to the site whilst pedestrian access is also available via the streets on the western edge of the site.

1.5 ENVIRONMENTAL ATTRIBUTES AND CONSTRAINTS

Former Quarry

Development opportunities are generally restricted to that area of the site that previously accommodated the quarry operation and to an area that has been largely disturbed and does not hold any tangible environmental qualities.

It is noted that Pit B, which is to the west of Pit A, has been excavated to create a non-draining void and now contains a small artificial wetland. Options will be developed to offset the wetland removal.

Biodiversity

Four vegetation communities are present across the site:

- Coastal Foothills Spotted Gum – Ironbark Forest (the dominant forest type on site)
- Coastal Narrabeen Moist Forest
- Coastal Wet Gully Forest (an Endangered Ecological Community (EEC) covering approximately 3.97 hectares
- Disturbed Lands.

As shown in Figure 2, potential opportunities for conservation across the site include retention of Coastal Wet Gully Forest (EEC) and Coastal Narrabeen Moist Forest areas along drainage lines, and areas of Coastal Foothills Spotted Gum Ironbark Forest along the steeper slopes. The conservation of such areas will provide habitat areas for local species (including the threatened Squirrel Glider), stop-over habitat for highly mobile species, and habitat areas for less mobile species within the landscape.

The high ecological value land is within the E2 Environmental Conservation zone and encompasses land mapped as native vegetation on Council's Native Vegetation and Corridors Map. The high ecological land is generally located to the north east, east and south east of Pit A. The retention, conservation and rehabilitation of the environmental corridors are an important priority. Minimal development (e.g. walking paths and potential future low impact eco-tourism) will occur in areas zoned E2 to ensure ongoing ecological function of the conservation areas. Roads and other infrastructure will be required in parts of the E2 zoned land to service the proposed development. They need to be designed to minimise visual and environmental impacts on land zoned E2.

Other Attributes

The elevated nature of the site means that careful consideration needs to be given to the visual impact of future development. Scenic management therefore needs to be in accordance with the Council's Scenic Management Guidelines. Of particular importance, the guidelines recommend rehabilitation of degraded areas while ensuring that future development sits appropriately into the site's existing landscape context, and utilising mitigation measures to minimise visual and other amenity impacts.

The site is partially mapped as bushfire prone land, and is subject to areas of slope instability and potential contamination.

Given the site's visual prominence within the landscape of Munibung Hill, the early planting of a vegetation buffer/earth mounding with vegetation to assist in screening the southern and western portions of the site during earthworks and construction stages would be appropriate.

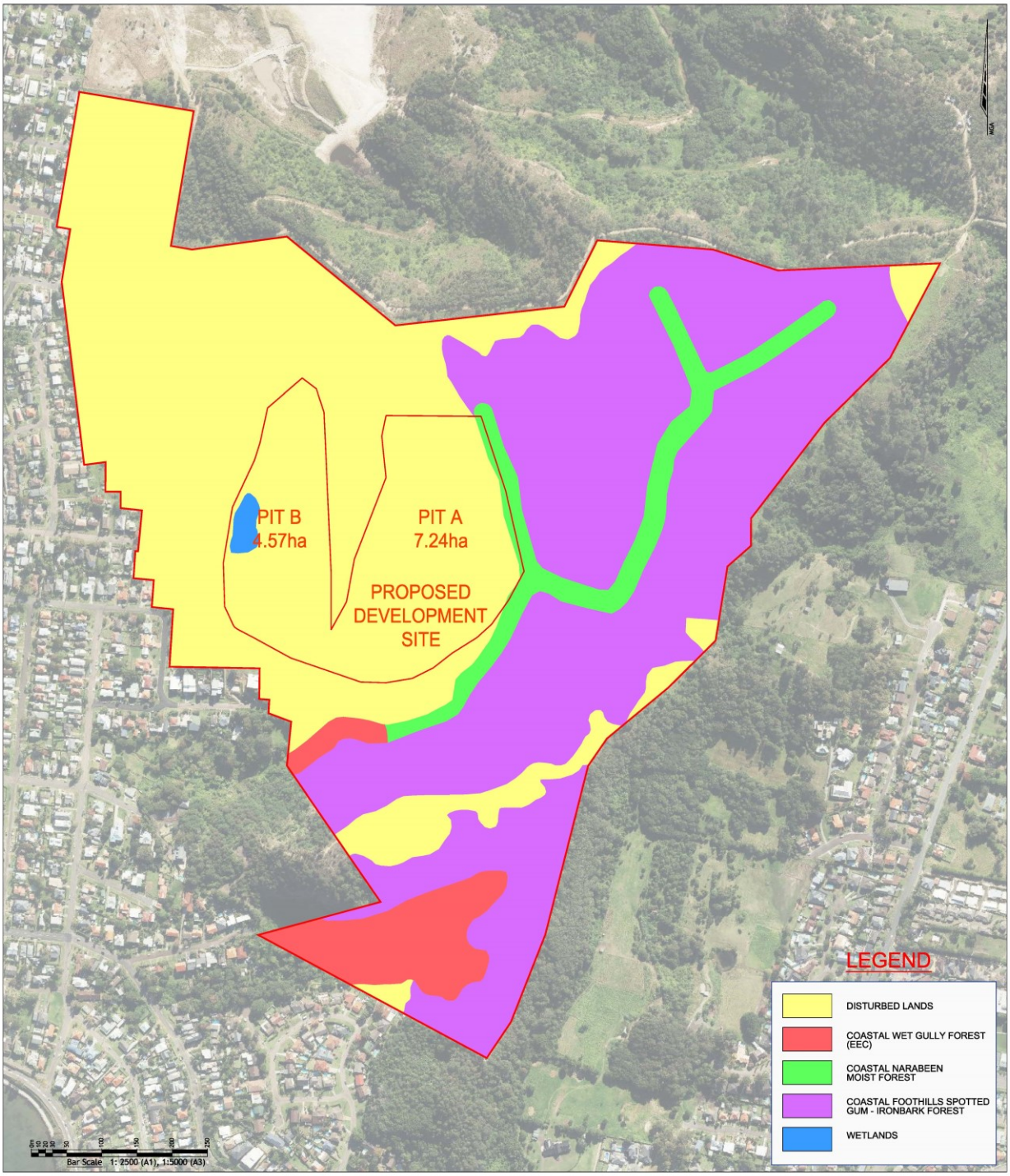

Figure 2 - Vegetation Communities (RPS 2011)

1.6 DESIRED FUTURE CHARACTER

Future development will be characterised by low-density residential development (450m^2 lot size) within an E4 Environmental Living Zone, surrounded by areas of existing native vegetation and introduced buffer vegetation for visual integration within the broader landscape of Munibung Hill. A colour palette of muted natural tones will be provided for all new dwellings inclusive of proposed roof and wall colours. Combined with the use of non-reflective building materials, future development will not be a visually dominant feature within the hillscape of Munibung Hill. Residents will enjoy the high level of amenity afforded by the elevated nature of the site and its natural setting.

It is envisaged that the site will be remediated and redeveloped to provide a residential area which:

- respects the cultural value of Munibung Hill to the Awabakal people, and reflects these values in the planning and design of open space lands contained in the area plan
- integrates future development in a way that ensures the visual predominance of the natural environment, and that development visually links to the settlement patterns of Boolaroo and Speers Point suburbs
- enhances the natural environment, and ensures continuous viable links for watercourses and drainage lines including provision of an alternate location/solution for the wetland currently located in Pit B, and biodiversity values including native flora species
- retains the scenic amenity and visual prominence of Munibung Hill, and that urban development responds to and enhances the significance of this landform to the Lake Macquarie viewshed.
- provides shared pathway infrastructure that physically links the site to surrounding town centres (Glendale, Boolaroo, Warners Bay), schools and existing/planned pathway networks to meet active transport principles, which encourages walking and cycling
- has a relationship with the Pasminco Area Plan bounding the site to the north, and the East Munibung Hill Area Plan in terms of pathway and street connections

A Site Structure Plan outlining the desired future character is presented in Figure 3.

Future development of the site including lot layout, built form and landscaping will occur according to relevant provisions of Part 3 - Development within Residential Zones, and Part 7 - Development in Environment Protection Zones of the Lake Macquarie Development Control Plan 2014. Where controls are not provided for in the relevant parts of the E4 Environmental Living zone and the Residential zones of the DCP described, then the Aims and Controls of this Area Plan prevail.

2 DEVELOPMENT CONTROLS

2.1 SITE ACCESS AND CONNECTIVITY WITH ADJOINING AREAS

Objectives

a. to create a transport network that provides access, mobility and connectivity within the site and to adjoining areas with regards to vehicles, pedestrians and bicycles.
b. to promote development that integrates with the existing subdivision pattern of Boolaroo, Fairfax Road, and Macquarie Hills.
c. to encourage safe and effective pedestrian and cycle networks

Controls

1. Footpath links, roads and cycleways should be provided in accordance with Figures 3 & 6.
2. Primary road linkages must be designed to include footpaths, and collector roads must cater for buses and have footpaths.
3. The local road network in residential areas should be designed to achieve:
   i. a subdivision pattern consistent with the existing grid subdivision pattern of residential lots in Boolaroo and Speers Point, and provision of good solar access;
   ii. connections with existing local roads to Council's satisfaction;
   iii. a low speed environment (50 km/h speed zoning); and
   iv. a walkable and permeable street network avoiding long street blocks.
4. Pedestrian links and cycleways must connect with the Lake Macquarie bicycle network.
5. There are two options for access to the future residential subdivision on the site, from Council Street or Hopkins Street, Speers Point. A Traffic Impact Assessment, geotechnical and other engineering investigations are to be undertaken by the proponent, to recommend the most appropriate option for access to the site.
6. The Traffic Impact Assessment must also consider the impacts of additional vehicle movements on the local street network and identify any intersection and road upgrades or improvements required to accommodate the additional traffic movements.

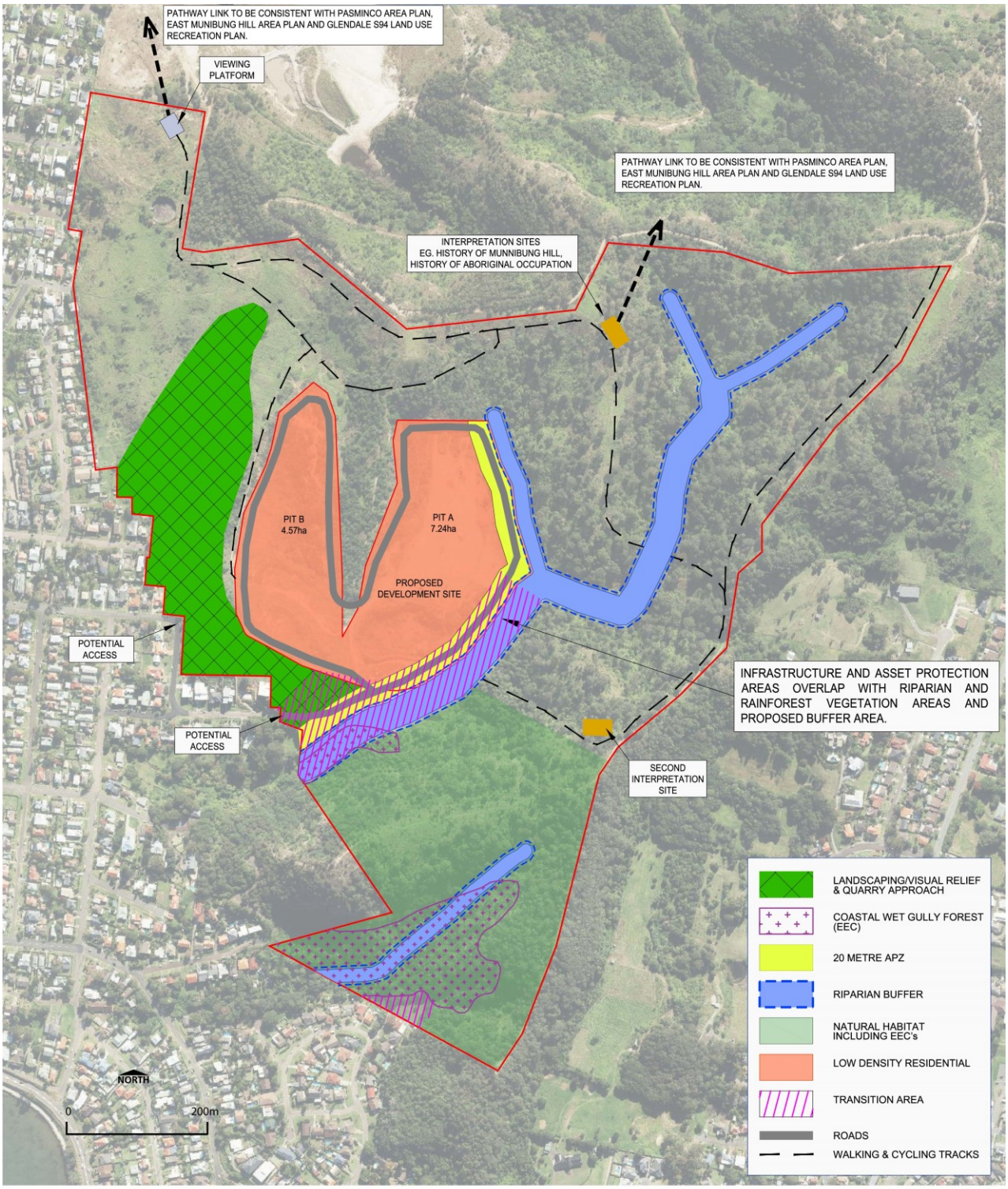

Figure 3 - Site Structure Plan

2.2 VEGETATION MANAGEMENT

Objectives

a. To protect and enhance biodiversity values within identified native vegetation areas on land zoned E2 Environmental Conservation.
b. To ensure the riparian areas, wildlife corridors and fauna habitat associated with Munibung Hill are rehabilitated and appropriately managed.
c. To ensure that the loss of biodiversity arising from development of the land is offset to mitigate the impact of that development.
d. To provide for the long-term rehabilitation and management of land zoned for conservation.
e. To ensure biodiversity values, bushfire risk and land contamination issues associated with the conservation lands are appropriately managed.

Controls

1. Areas of high biodiversity value are to be rehabilitated and managed in perpetuity for conservation.
2. A Vegetation Management Plan must be prepared for the area depicted in Figure 4, in accordance with Council's Vegetation Management Plan Guidelines prior to submission of a development application for subdivision or other residential development. Management plans for the conservation lands must address the following matters:
   i. the proposed land tenure and managing body for the land;
   ii. the rehabilitation and ongoing management of native vegetation areas including the revegetation of the spur between Pits A and B;
   iii. bushfire control, fire trails, weed and feral animal management measures;
   iv. measures to offset the loss of habitat including provision/solution of an offset for the artificial wetland characteristics within Pit B.
3. Secure tenure of the E2 Environmental Conservation Land is necessary to ensure the long-term protection, rehabilitation and management of the E2 land. This may be achieved by:
   i. Dedication of E2 land to Council or an acceptable management agency subject to risk and liability being acceptable, control of all noxious weeds and assessment following implementation of the Vegetation Management Plan for a period of 10 years;
   ii. Entering into a legally binding agreement (e.g. Planning Agreement) to establish a mechanism to provide ongoing security and management of E2 land.

Note: The Vegetation Management Plan (VMP) must be in accordance with the Council's Vegetation Management Guidelines and provide for, but not be limited to:

1. Re-establishment of native vegetation along riparian corridors, in endangered ecological communities and in fauna habitat and movement corridors (including removal of rubbish, weeds and planting with suitable native species);
2. Future management arrangements for the E2 land including funding, monitoring and timeframes;
3. The standard of rehabilitation to be achieved should result in a weed free, self-maintaining ecosystem to ensure minimal maintenance is required over the long term; and
4. If any land is to be managed by or dedicated to any other organisation or trust other than Lake Macquarie City Council, suitable documentation is to be provided to Council to provide certainty that:
   i. The criteria and arrangements in this section are satisfied, and
   ii. Adequate financial resources have been secured in perpetuity for the subject land.

   Council will not accept ownership or management responsibility for any land that is contaminated, including roads or stormwater infrastructure. Council will not consider accepting ownership or management responsibility of conservation land unless management plans have been prepared and implemented to the satisfaction of Council.
5. The location of fire trails should utilise the alignment of walking trails where possible, and connect to the local road network;
6. The management and stabilisation of any contaminated soil to prevent public contact and contaminated soil leaving the development site including in the event of fire or in stormwater runoff;

7. Stormwater treatment to ensure contaminated material does not leave the development site and contaminate off-site stormwater infrastructure and residential areas;
8. The identification of areas suitable for public access and recreation;
9. Proposed buffers, edge treatments and management measures to reduce ongoing impacts and management costs at the interfaces between the conservation area, and urban areas;

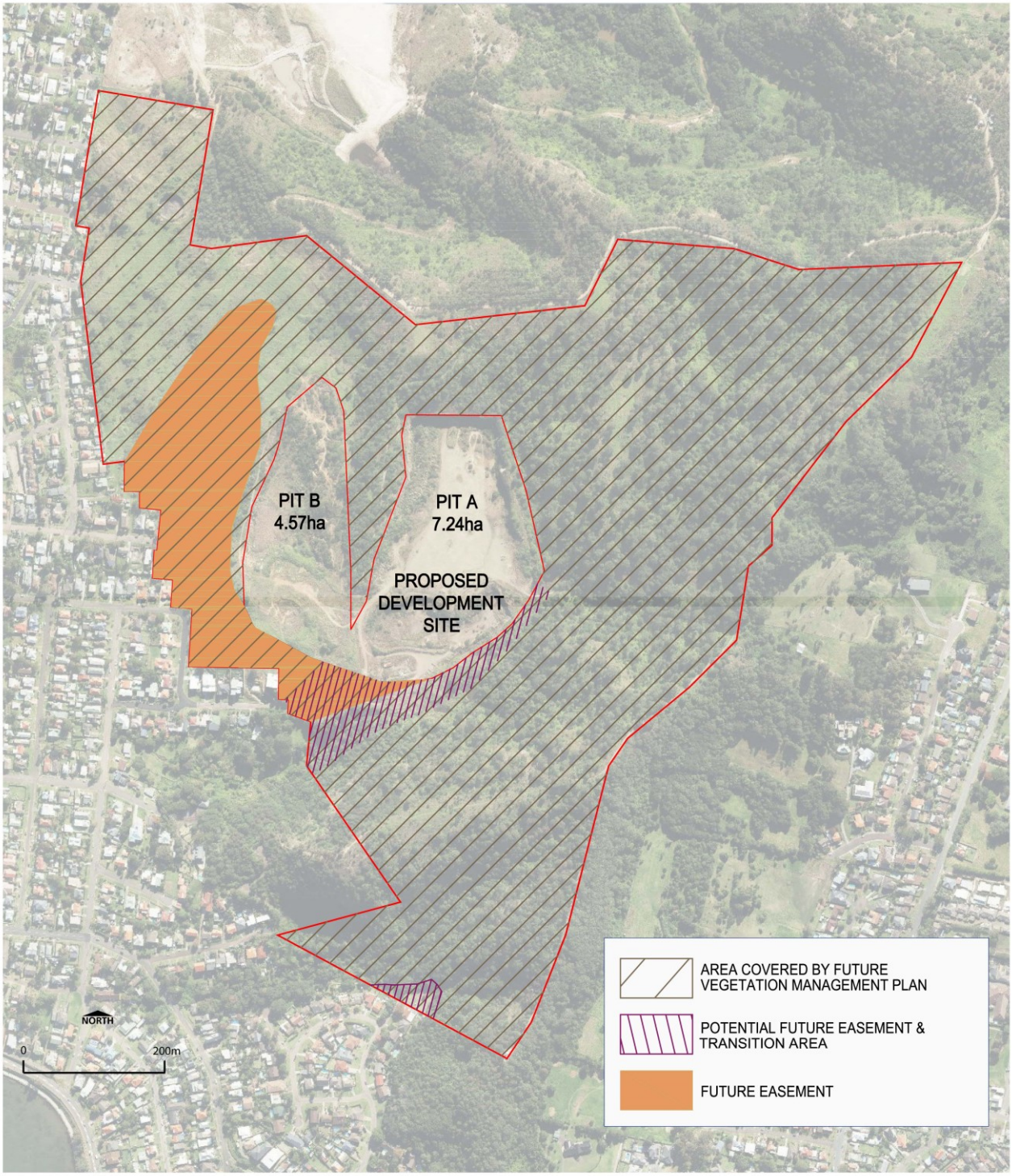

Figure 4 - Extent of Vegetation Management Plan

2.3 CULTURAL HERITAGE

Objectives

a. To acknowledge the value of Munibung Hill to the Awabakal people.
b. To conserve and interpret Aboriginal and European heritage as part of future development.
c. To provide guidelines for the protection of Aboriginal and European cultural heritage and culturally significant areas.
d. To integrate interpretative material with the emerging urban form

Controls

1. Prior to lodgement of a development application for residential subdivision and in accordance with relevant Office of Environment and Heritage (OEH) guidelines, provide documentation to Council's satisfaction that consultation has occurred with Aboriginal traditional owners and Biraban LALC, and any other relevant Aboriginal groups in relation to:
   i. known Aboriginal sites and the significance of ridges and valleys in the E2 Environmental Conservation zone, as to whether the ridges and valleys should be proclaimed as an Aboriginal Place under the National Parks and Wildlife Act 1974,
   ii. designation of the valleys as archaeologically sensitive in terms of Aboriginal cultural heritage.

   The specific guidelines are:

   OEH Guidelines for assessment and gazettal of Aboriginal Places (2008); and

   OEH Aboriginal Cultural Heritage consultation requirements for proponents (2010)
2. Ensure the protection of known Aboriginal objects by directing walking and cycling paths away from those areas, as required by Development on sensitive Aboriginal landscape areas of LEP 2014 (refer to Figure 5).
3. Any interpretive signage / artwork in areas that are designated for pathways, to raise awareness within the community and educate people about the Cultural Heritage of the Awabakal people, must be in accordance with the wishes of Aboriginal traditional owners, Biraban LALC and as negotiated with the landowners.
4. During construction, if suspected Aboriginal cultural heritage material is encountered, work must cease in that vicinity immediately and the NSW Office of Environment and Heritage and traditional owners immediately notified. Works must only recommence when relevant stakeholders have agreed to an appropriate and approved management strategy.
5. Vegetation in the area of the historic head stones must be removed using hand tools to minimise potential for accidental impact to European heritage (see Figure 4).
6. If, during the course of clearing work, significant European cultural heritage material is uncovered, work must cease and the NSW Heritage Branch must be notified. Works must only recommence when an appropriate and approved management strategy is instigated.
7. Consultation is to occur with Council's heritage officer to determine the historical significance of a potential World War II site, and if the site is found to be of historical significance it should be protected.

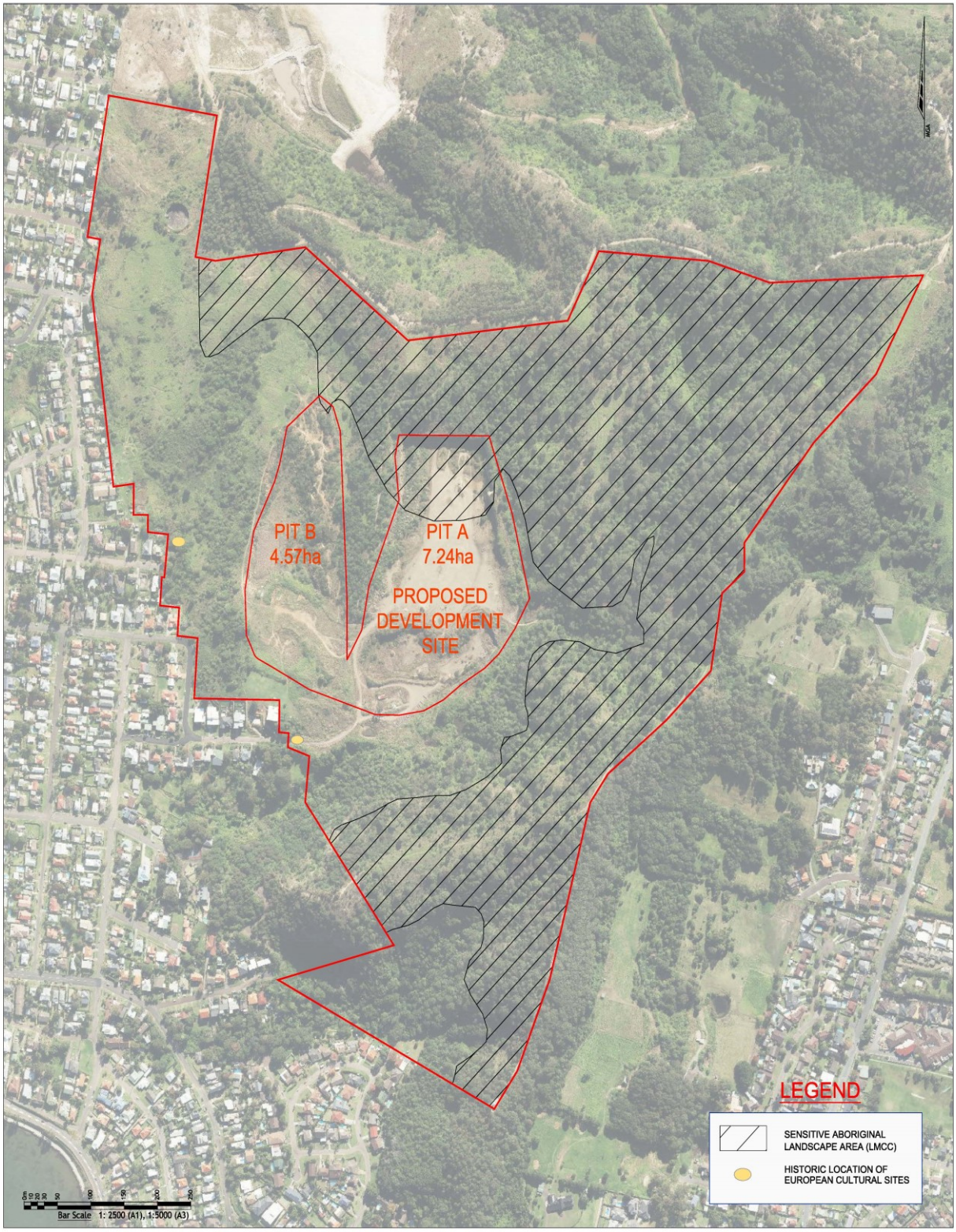

Figure 5 - Cultural Heritage Plan

2.4 GEOTECHNICAL

Objectives

a. To identify and mitigate risk of land instability and provide a stable platform for future development.
b. To provide for Environmental protection works associated with rehabilitation of land towards its natural state or to protect land from environmental degradation.

Controls

1. Further geotechnical studies are required to investigate areas identified as being subject to instability and proposed suitable measures to stabilise affected areas.
2. Environmental protection works associated with rehabilitation of land towards its natural state or to protect land from environmental degradation may occur with development consent.
3. Earthworks including stabilisation and reshaping require development consent and are to be supported by geotechnical studies, detailed cross sections and a landscape master plan prepared by a suitably qualified and experienced landscape architect.
4. Final landform must ensure future development can comply with the Maximum Building Height Ridge Line RLs referred to in Section 2.12 of this Area Plan.

2.5 REMEDIATION

Objectives

a. To remediate contaminated land prior to subdivision within the E4 Environmental Living zone in accordance with the requirements of SEPP 55 Contaminated land and associated guidelines,
b. To maximise the use of safe useable land and ensure that future works including rehabilitation, infrastructure and proposed walking paths in the E2 Environmental Conservation zone are in accordance with the requirements of SEPP 55 Contaminated land and associated guidelines, and NEPM 2013 guidelines for human health exposure in recreation areas.
c. To ensure that paths are useable for walking and cycling

Controls

1. A Stage 2 Detailed Site Investigation must be provided for areas set aside for future subdivision in the E4 Environmental Living zone including a Stage 3 Remedial Action Plan (RAP). The RAP must be prepared and lodged in accordance with the guidelines approved by the Office of Environment & Heritage and the *Contaminated Land Management Act, 1997*. The RAP must be submitted prior to the issue of a Subdivision Construction Certificate. It is anticipated that site remedial works will be carried out in conjunction with the subdivision earth works.
2. Following remediation, the site of future subdivision in the E4 Environmental Living zone must be validated by an accredited site auditor in accordance with the NSW *Contaminated Land Management Act, 1997* prior to the issue of a Building Construction Certificate (CC).
3. Existing paths used for proposed walking / cycle tracks in the E2 Environmental Conservation zone must:
    i. be covered with suitable material, such as uncontaminated crushed rock to minimise incidental contact with exposed soil where required to comply with the Environmental Management Plan (EMP);
    ii. The EMP is to be prepared by a qualified and experienced contaminated site consultant and approved by the Contaminated Site Auditor; and
    iii. the completion and certification of the pathway construction shall occur prior to the issue of a Building Construction Certificate (CC)
4. Proposed excavation of soil for services and infrastructure in the E2 Environmental Conservation zone must occur in accordance with an Environmental Management Plan (EMP), prepared by a qualified and experienced contaminated Site Consultant. In this regard, consideration must include the National Environment Protection (Assessment of Site Contamination) Measure 2013 guidelines.

2.6 BUSHFIRE HAZARD MANAGEMENT

Objectives

a. To minimise any risks to life and property from bushfire hazards and minimise impacts on existing native vegetation.

Controls

1. The location of fire trails must utilise the alignment of existing trails where possible, and connect to the local road network to enable emergency vehicle access
2. Asset Protection Zones must be fully provided within the E4 Environmental Living and Transition Area parts of the site and require minimal maintenance (i.e. incorporate perimeter road).
3. Asset Protection Zones (APZs) must be established on the property title(s) in accordance with RFS requirements at the subdivision registration stage. Management will occur in accordance with the requirements of Planning for Bushfire Protection 2006.
4. The subdivision plan must provide a perimeter road between the bushfire prone land and the development lots.
5. Bushfire control, fire trails, weed and feral animal management measures to be provided to Council's satisfaction.

2.7 CREATION OF THE VISUAL RELIEF/BUFFER AREA

Objectives

a. To provide for the establishment and ongoing management of the proposed visual relief/buffer area within the E2 Environmental Conservation zone.

Controls

1. At the subdivision development application stage, create the visual relief/buffer area, and provide a maintenance schedule of works associated with its creation and longer term maintenance in accordance with the Structure Plans at (Figures 3 and 6).

2.8 TRANSITION AREA

Objectives

a. To provide for management of multiple uses on the site for the purposes of conservation, asset protection, infrastructure and visual buffer integration

   Note: The transition area occurs where infrastructure and asset protection zones overlap with riparian and rainforest vegetation zones, and proposed visual buffer area as shown on Figures 3 and 6.

Controls

1. Development must ensure that it visually integrates into the site by creation of an effective buffer vegetation (refer to Figures 3 and 6, Site and Residential Structure plans)
2. Fire asset protection zones or infrastructure for the development of the site must not compromise existing (or the potential to rehabilitate) rainforest and/or riparian vegetation bordering creeks,
3. Fire asset protection zones or infrastructure for the development of the site must not interfere with the creation and maintenance of buffer vegetation or other methods necessary to achieve effective visual screening
4. Details of how all of the above competing uses will be incorporated and managed in this area will need to be addressed to Councils satisfaction.

Note: Infrastructure includes stormwater quality control structures access roads or services for development

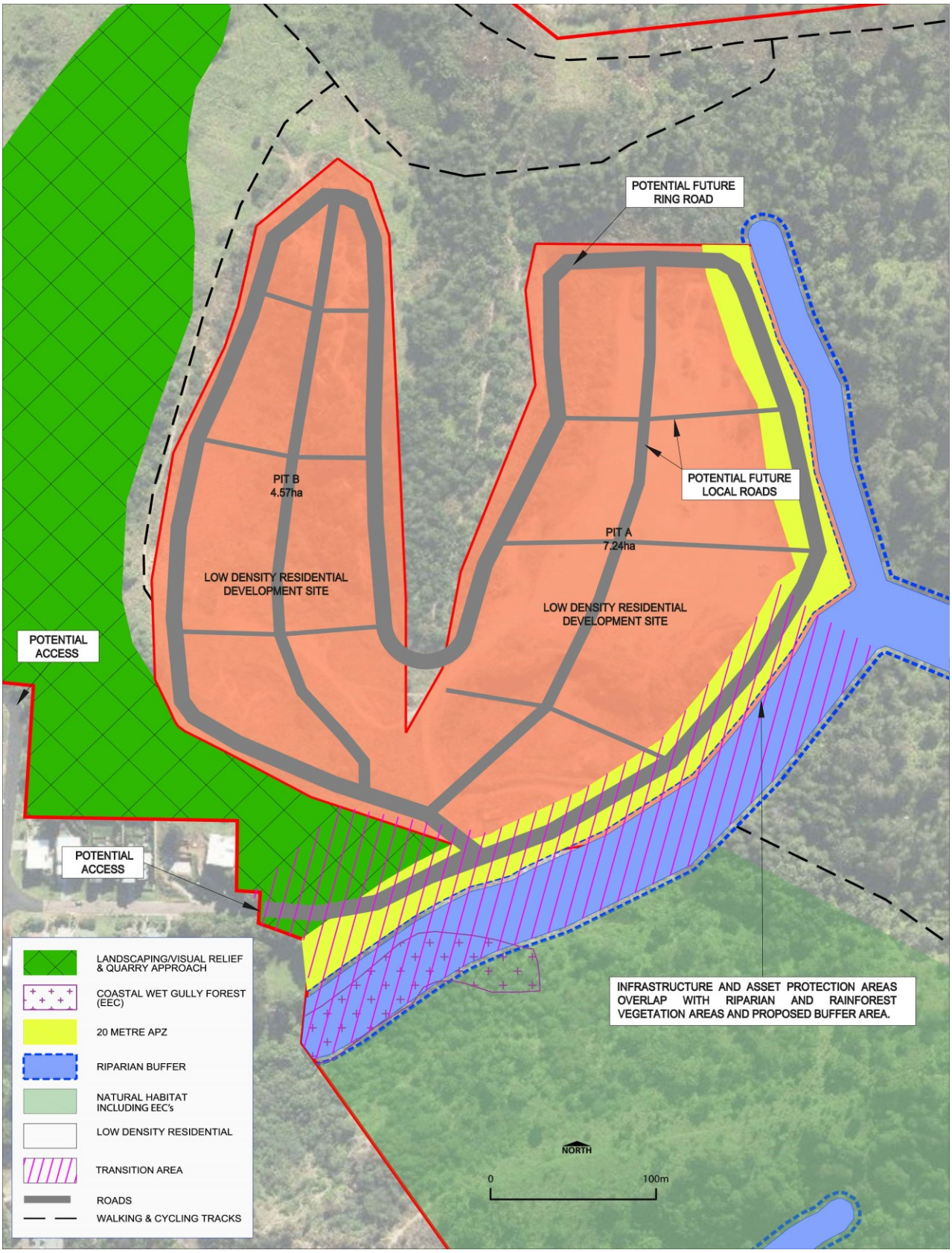

Figure 6 - Residential Structure Plan

2.9 SUBDIVISION LAYOUT

Objectives

a. To ensure that subdivision design and layout responds to the site's topography, and visually integrates with the prominence of Munibung Hill and the surrounding visual catchment.
b. To provide a suitable road layout that incorporates pedestrian and bicycle access which connects with adjoining lands.

Controls

1. Subdivision controls within Part 8 of DCP 2014 apply to the E4 Environmental Living Zone.

   Note: The following Controls within DCP 2014 do not apply:

   i. Control 3.17 - Lot Sizes and Dimensions
   ii. Control 3.19 - Requirements Under Clause 4.1A of LM LEP 2014.
2. Application for subdivision must be accompanied by a staging plan - if the subdivision is to be staged.
3. A Section 88B and Section 88E Instrument under the *Conveyancing Act 1919* must be created at the subdivision registration stage for the proposed visual relief/buffer landscaping and bushfire management with Council a party to the easement.

2.10 PROVISION OF PUBLIC AREAS

Objectives

a. To provide for safe, attractive and accessible public open spaces with good casual surveillance
b. To link the public space to other open space areas via walking trails and cycle and pedestrian linkages

Controls

1. Development must refer to the Glendale Contributions Catchment plan for any facilities identified in the plan that relate to the subject site.

2.11 LANDSCAPE MASTER PLAN

Objectives

a. To enhance the existing landscape and protect the scenic qualities of Munibung Hill
b. To ensure residential development within the E4 Environmental Living Zone is separated from land with bushfire risk, land contamination and biodiversity values.

Controls

1. A landscape masterplan in accordance with Council's requirements must accompany a development application for residential subdivision and include:
   i. road canopy street trees and management
   ii. weed and feral animal management measures
   iii. provide bushfire control,
   iv. fire trails.

Note: The location of fire trails should utilise the alignment of existing trails where possible, and connect to the local road network to enable emergency vehicle access.

2.12 DESIGN CONTROLS FOR SCENIC MANAGEMENT

Objectives

a. Development must be sited and designed to respond to the topography and landscape of Munibung Hill.
b. To ensure future development is not visually dominant within the broader landscape of Munibung Hill.
c. To minimise cut and fill platforms on the sloping margins of the site that create visually prominent scaring to the landscape of Munibung Hill.

Controls

1. The Design Controls within Part 3 of DCP 2014 – Development within Residential Zones apply as follows:
   i. Control 3.2 - Street Setback
   ii. Control 3.3 - Side Setback
   iii. Control 3.4 - Rear Setback
   iv. Control 4.5 - Front Fences; and
   v. Control 4.6 - Side and Rear Fences

   Note: For all other development design requirements, refer to Part 7 Development in Environmental Protection Zones.
2. Maximum Building Height Roof Ridge Lines must not exceed Australian Height Datum (AHD) RL 81 (Pit A) or RL 72.5 (Pit B and eastern valley) shown in Figures 7-11.
3. Development design to consider construction techniques that minimise cut/fill, particularly in those areas where scarring of the area could remain visible.
4. Building design including roof forms, must be simple and designed to respond to the slope of the surrounding topography and landscape, and provide appropriate solar orientation.
5. Building elements must be restricted to:
   i. muted tone colorbond roof/roof tiles and/or wall colours, and finishes that blend with and complement the natural landscape and add to the architectural design of the building, e.g. grey colours assist in receding building forms into the landscape;
   ii. non-reflective materials and not include highly polished reflective finishes;
   iii. tinted glass or glass with an anti-reflective coating or equivalent to Council's requirements. Note: clear glass windows, doors and balustrades are not acceptable;
   iv. avoid single bulky building forms – i.e. walls in excess of 15 metres in length or 4 metres in height, must be articulated; and
   v. external lighting for buildings is to face downwards to avoid light spill in accordance with the Australian Standards Control of Obtrusive Effects of Outdoor Lighting.
6. Pier and beam construction should be used on sloping sites greater than 10% crossfall (refer to Control 3.14 in Part 7 of the DCP for cut and fill requirements).

2.13 WATER QUALITY MANAGEMENT

Objectives

a. To ensure ecologically valuable land and associated watercourses are protected.
b. To ensure the stormwater drainage system is designed to maintain the natural watercourse and to minimise future environmental impacts.

Controls

1. Stormwater from developed areas shall be treated prior to discharging into a natural watercourse to ensure that no net decrease in water quality, or net increase in water quantity is discharged into receiving waters.
2. Stormwater and water quality facilities should be primarily located within the E4 Environmental Living zoned part of the site or "Transition Area". Any stormwater and water quality structures

must be designed to integrate with landscaping and revegetation works and ensure adequate flow paths are maintained.

3. Stormwater drainage system is designed to maintain the natural watercourse and to minimise future environmental impacts

2.14 MOSQUITO MANAGEMENT

Objectives

a. To manage risk of mosquito borne diseases.

Controls

1. An application for residential subdivision must be accompanied by a mosquito management plan.

2.15 POTENTIAL ECOTOURISM RESORT

Objectives

a. To provide opportunity for potential future low impact ecotourism resort.
b. To ensure any Eco-tourism facility is located within a buffer of smaller scale buildings and landscape vegetation in order to visually blend into the Munibung Hill landscape

Controls

1. Any future development application for an ecotourism resort must comply with the provisions of LMDCP 2014 – Part 7 Development in Environmental Protection Zones, and Council's Scenic Management Guidelines.

Figure 7 - Cross Section Site Plan

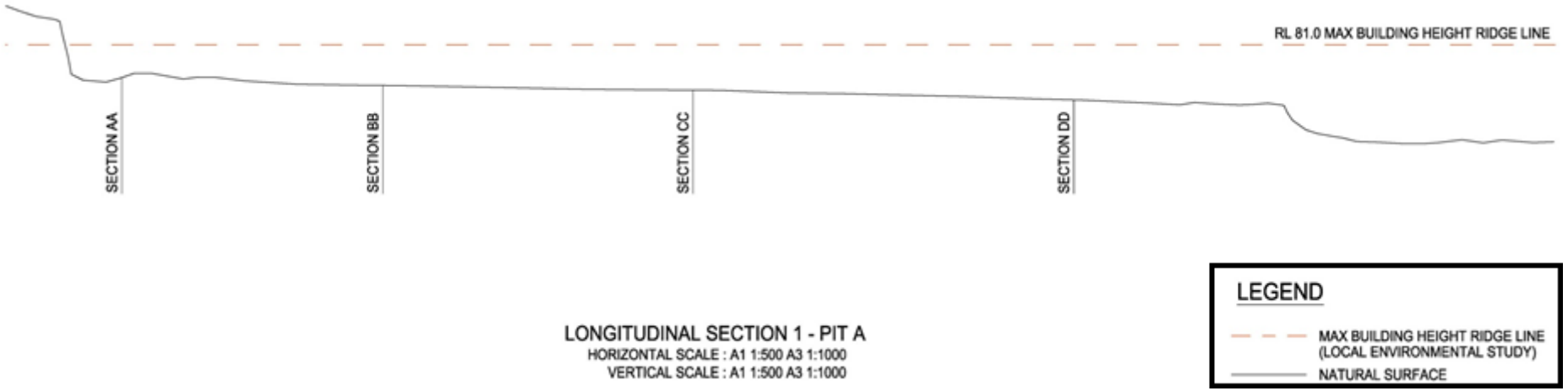

Figure 8 - Pit A Longitudinal (North South) Cross Section

SECTION A-A

SECTION B-B

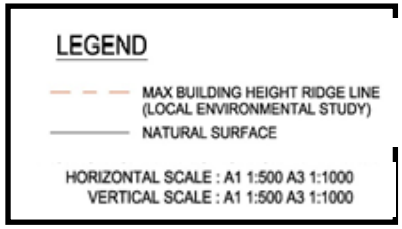

Figure 9 - Pit A Cross Sections (East West)

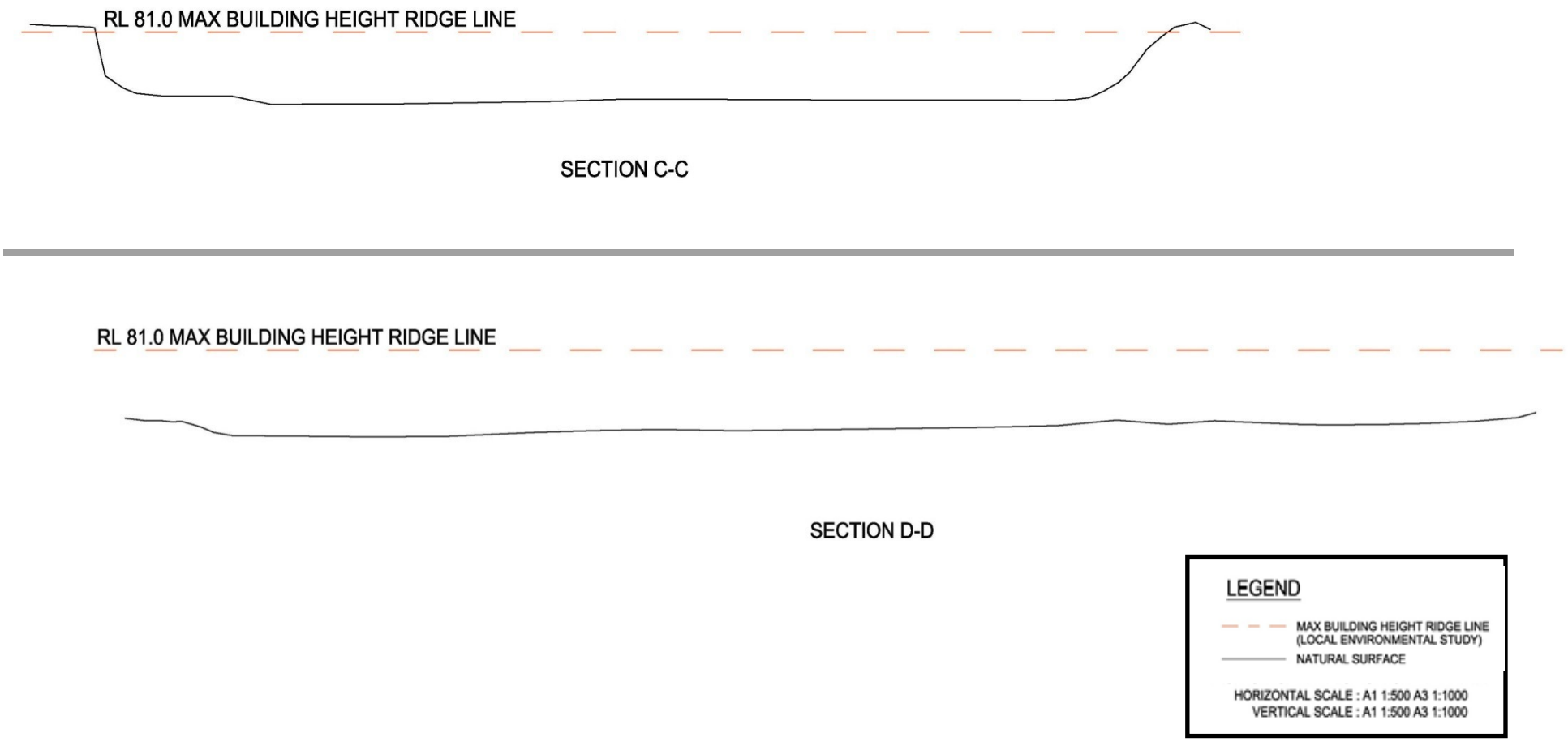

Figure 10 - Pit A Cross Sections (East West)

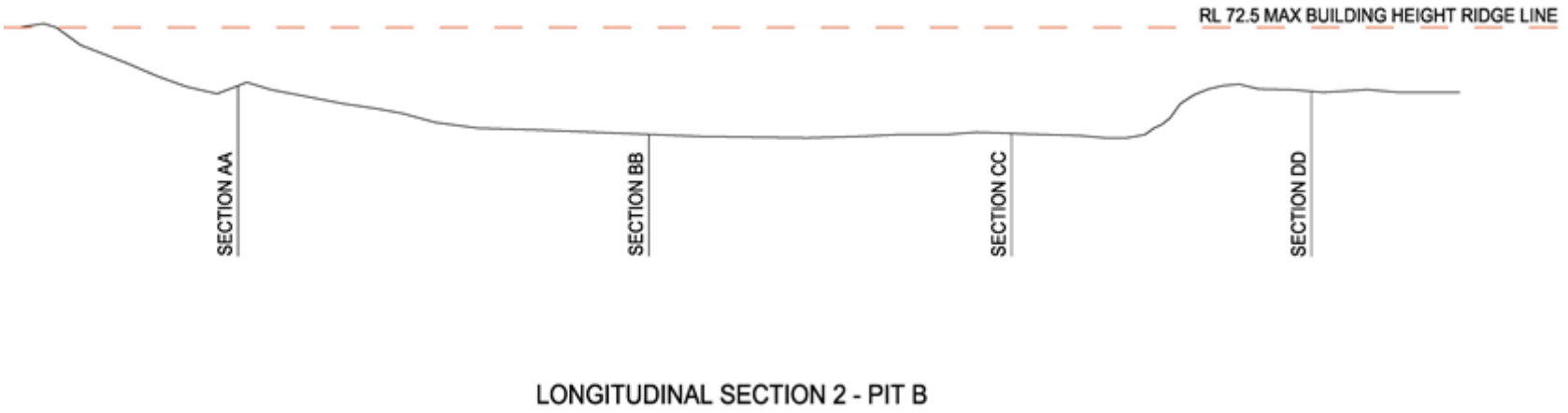

Figure 11 - Pit B - Longitudinal (North South) Cross Section

Figure 12 - Pit B Cross Sections (East West)

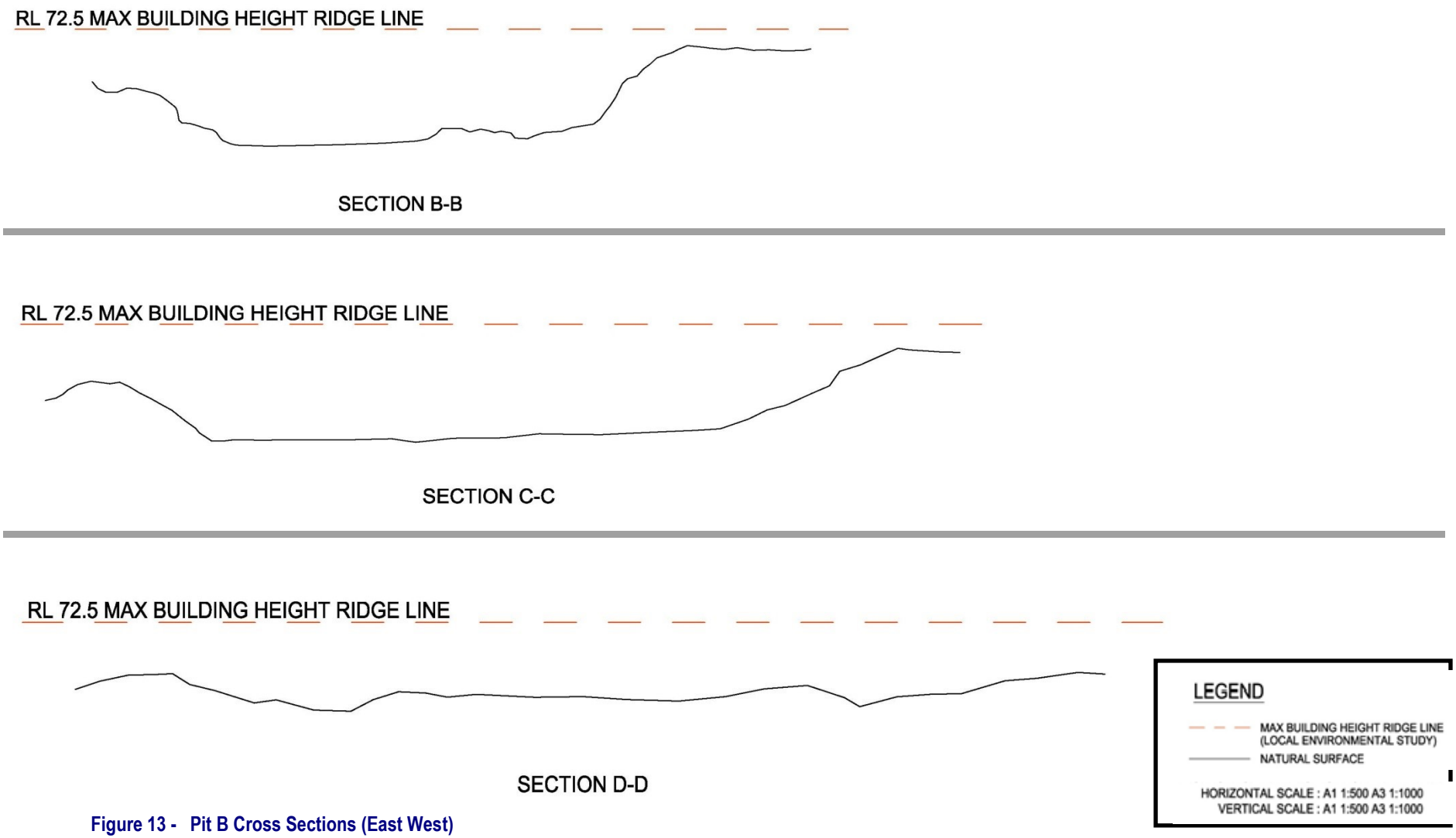

Figure 13 - Pit B Cross Sections (East West)

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The North Cooranbong Area Plan supplements Lake Macquarie Development Control Plan 2014 for future development requiring consent in the North Cooranbong Residential Estate. The North Cooranbong area will be developed to allow approximately 2,500 residential dwellings, commercial development, public land as well as the conservation of environmentally significant land.

In 2008, the Department of Planning approved the North Cooranbong Concept Plan and as part of the consent conditions required the preparation of Design Guidelines for this development. Council approved the Design Guidelines on 9 February 2009 and these Guidelines have been utilised to form an Area Plan for North Cooranbong.

1.1 EXTENT OF AREA PLAN

This Area Plan applies to all the land outlined in heavy black edging as shown within Figure 1 – North Cooranbong Residential Estate Area Plan Boundary.

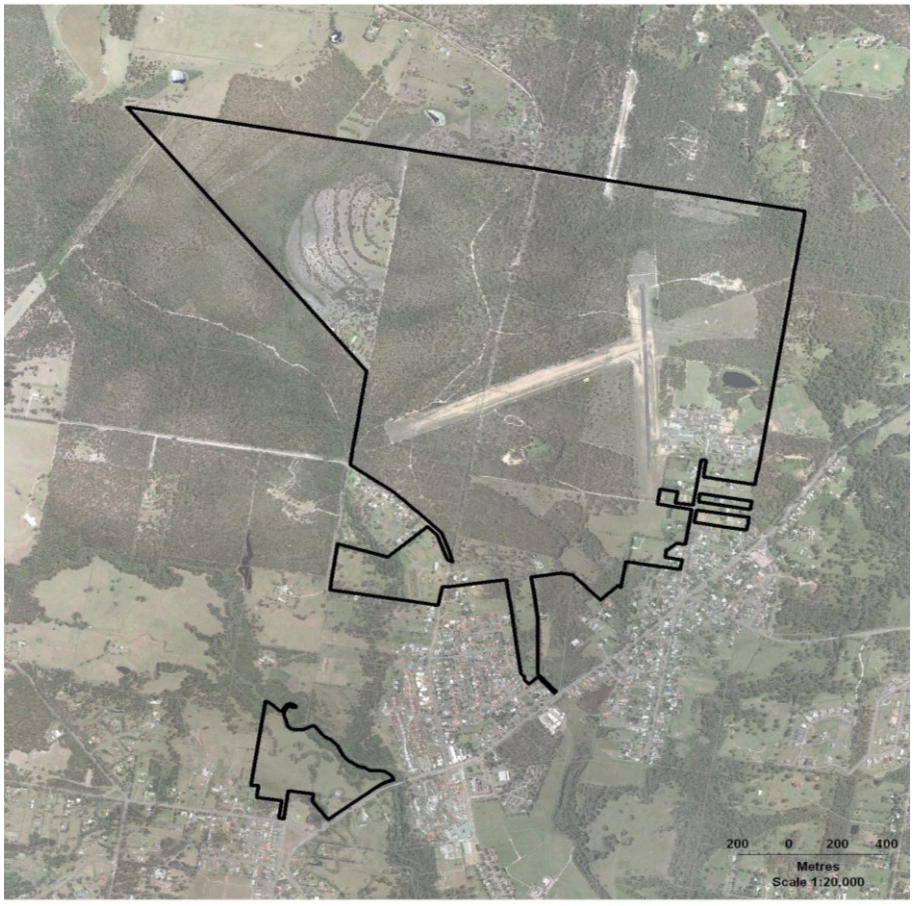


Figure 1 - North Cooranbong Residential Estate Area Plan Boundary

1.2 CHARACTER STATEMENT

It is envisaged that the North Cooranbong Estate will facilitate mixed use development, medium density and low-density residential development. The design will link the urban centre and residential lands to the neighbouring sports fields, neighbourhood park, community centre and Avondale school. Environmentally significant lands will be conserved including those adjoining Olney State Forest. The Town Common located in the south will provide leisure and recreational opportunities.

Figure 2 – North Cooranbong Structure Plan, provides a concise schematic plan showing the appropriate design outcomes for the site and how the development is likely to occur in the future.

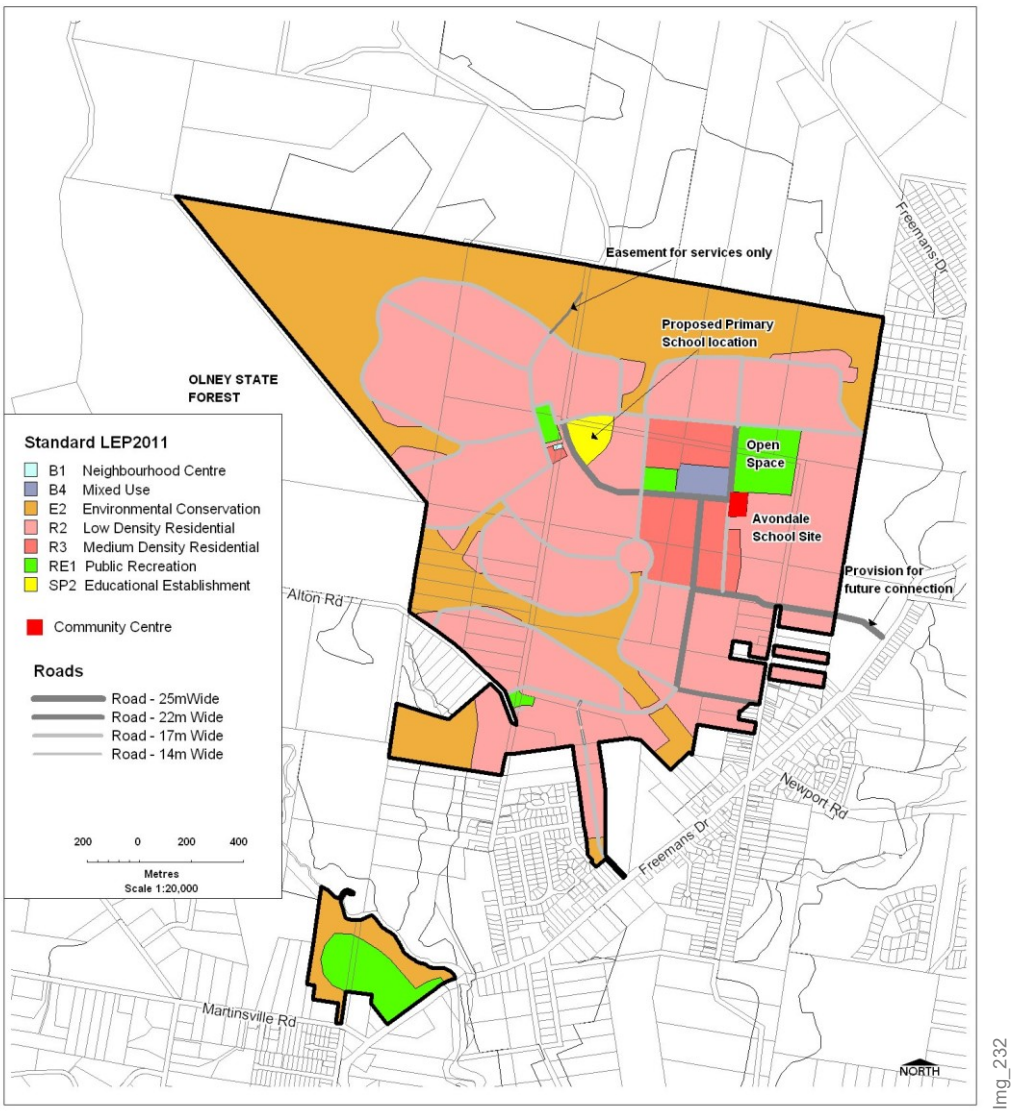


Figure 2 - North Cooranbong Structure Plan

1.3 SUBDIVISION DESIGN AND LAYOUT

Objectives

a. To ensure the subdivision and development of North Cooranbong Residential Estate is undertaken in a coordinated manner.

b. To ensure the North Cooranbong Residential Estate will be developed to reflect the availability of services.

c. To ensure that the subdivision of the Estate occurs as envisaged in the Part 3A Concept Plan.

Controls

1. The subdivision layout should generally be consistent with Figure 2 - North Cooranbong Structure Plan.
2. Staging of the development should be generally consistent with Figure 3 - Indicative Development Staging and Subdivision Plan, however stages may be constructed simultaneously.
3. Stage XII is not limited and may be constructed at anytime.
4. The provision of community infrastructure must be staged in accordance with the Voluntary Planning Agreement for the site.
5. The subdivision pattern should generally comply with the approved Part 3A Concept Plan and Council's DCP subdivision requirements. An indicative subdivision pattern is shown in Figure 3 - Indicative Development Staging and Subdivision Plan.

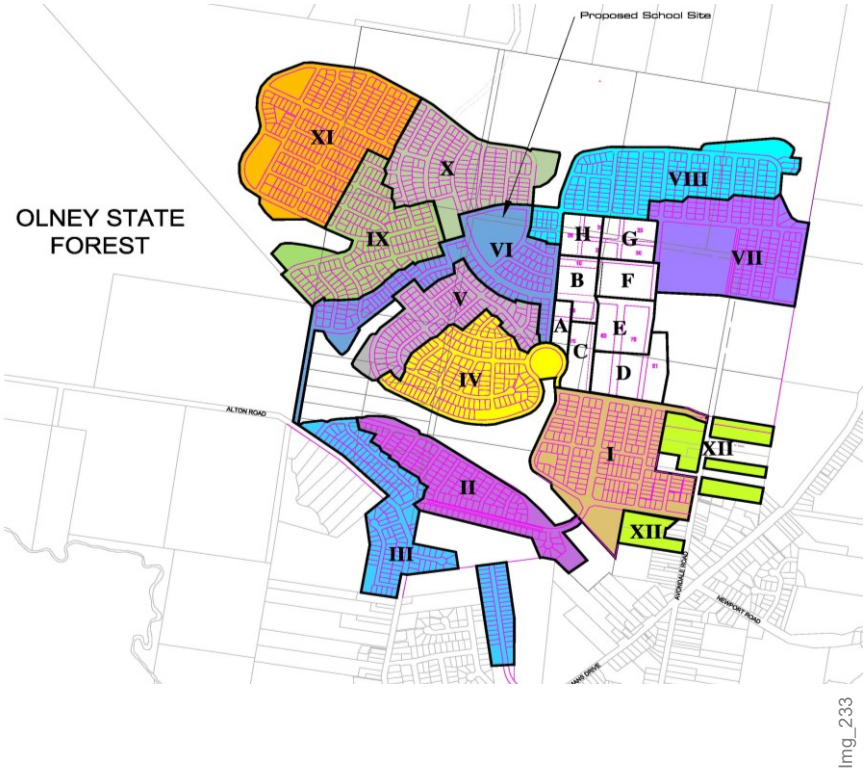


Figure 3 - Indicative Development Staging and Subdivision Plan

1.4 WATER SENSITIVE URBAN DESIGN

Objectives

a. The North Cooranbong Residential Estate will utilise best practice water sensitive urban design.

Controls

1. The North Cooranbong Residential Estate should comply with Australian Runoff Quality – A Guide to Water Sensitive Design.

2. Flood modelling assessment must be submitted to Council with subdivision development applications to identify areas affected by the 100 ARI flood levels.
3. Dual reticulation should be used for toilet flushing and for gardening uses.

1.5 CONTAMINATION

Objectives

a. To ensure the appropriate remediation of contaminated land for the purpose of reducing the risk of harm to human health and the environment.

Controls

1 Development applications for the first application for subdivision creating residential lots on areas identified as potential contamination sites must be accompanied by a Phase 2 Detailed Contamination Site Assessment as outlined within State Environmental Planning Policy 55. Known contaminated sites and sites requiring further investigation are outlined in Figure 4 – Contamination Assessment.

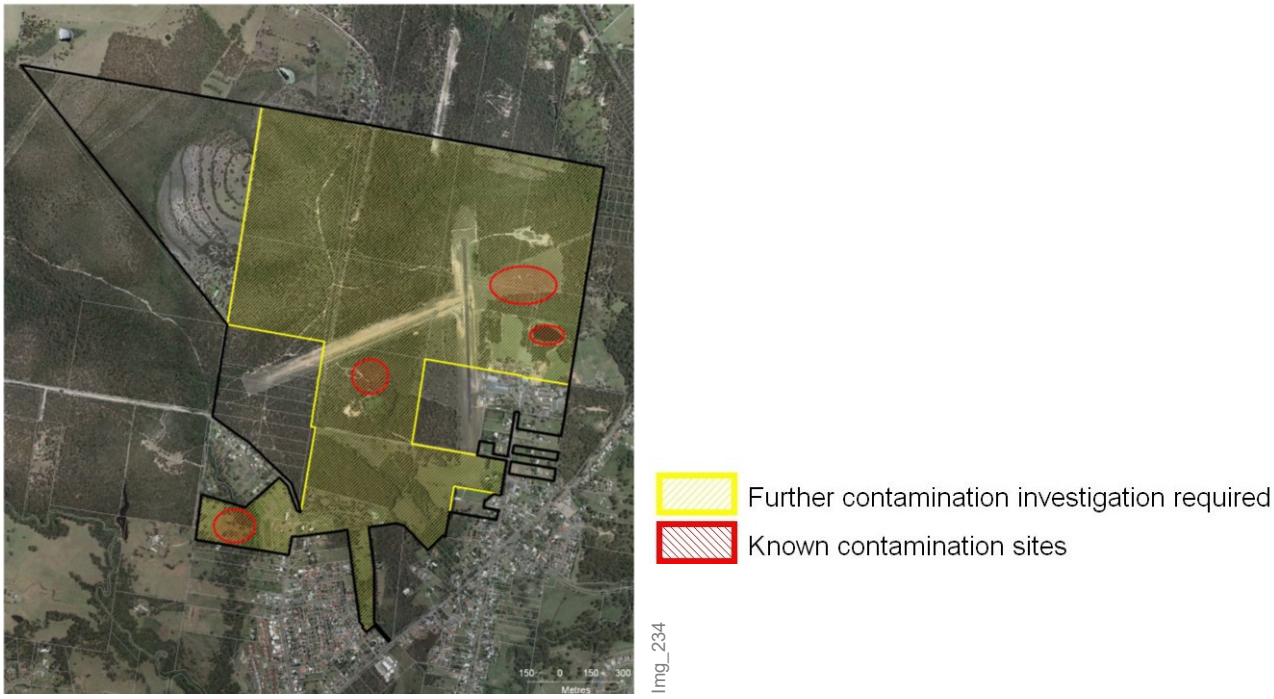


Figure 4 - Contamination Assessment

1.6 SETBACKS TO OLNEY STATE FOREST

Objectives

a. To ensure that there is appropriate setback to Olney State Forest.

Controls

1 Where residential development is to adjoin the Olney State Forest, a perimeter road and setback is required and houses shall be designed in accordance with Planning for Bushfire Protection.

2 A minimum 17m wide road reservation, containing a minimum 8m wide bitumen sealed perimeter road is to be provided in accordance with the approved Part 3A Concept Plan.

3 A rural post and rail fence (see Figure 5) should be constructed along the boundary of the perimeter road, where this perimeter road directly adjoins the Olney State Forest.

Img_235

Figure 5 - Indicative Post and Rail Fence

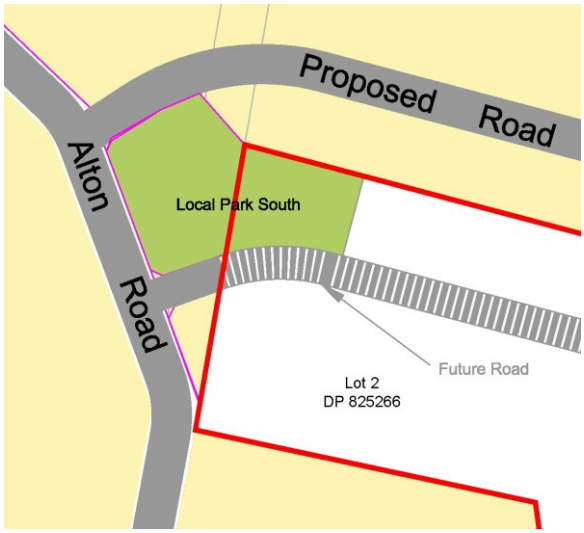
1.7 LOCAL PARK SOUTH

Objectives

a. To ensure that the Local Park south is accessible.

Controls

1 The minimum 5000sqm Local Park is to be constructed in accordance with the design requirements agreed and approved as part of the Part 3A Concept Plan and have frontage to three roads (one of which is Alton Road) as shown in Figure 6 – Road Treatment to Local Park South.



Img_236

Figure 6 - Road Treatment to Local Park South

1.8 TREATMENT OF URBAN CENTRE

Objectives

a. To promote mixed use development and quality urban design, which safeguards the amenity of the Centre and residential uses within and surrounding the Centre.

Controls

1 The design of the urban centre should link to the neighbouring sports fields, neighbourhood park, community centre and Avondale School as indicatively shown in Figure 7 – Indicative Design of Urban Centre.

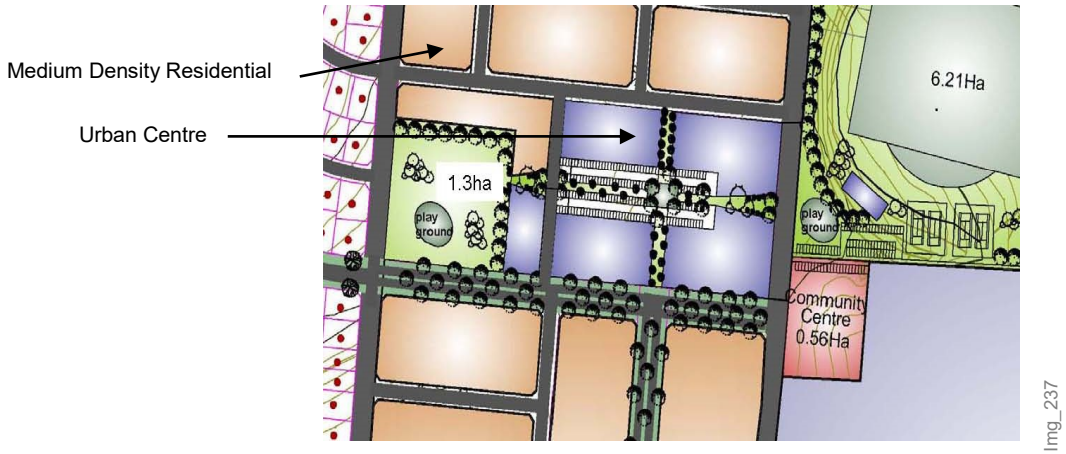


Figure 7 - Indicative Design of Urban Centre

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The North Morisset Area Plan supplements LM DCP 2014 for future development in the Stockton Street, Freeman's Drive and Terrigal Street precincts of North Morisset. The Area Plan envisages low and medium density residential uses for the area, expansion of the caravan park, neighbourhood shops, some rural living and conservation of environmentally significant land.

1.1 EXTENT OF AREA PLAN

This Area Plan applies to all the land outlined in heavy black edging as shown within Figure 1 – North Morisset Area Plan Boundary.

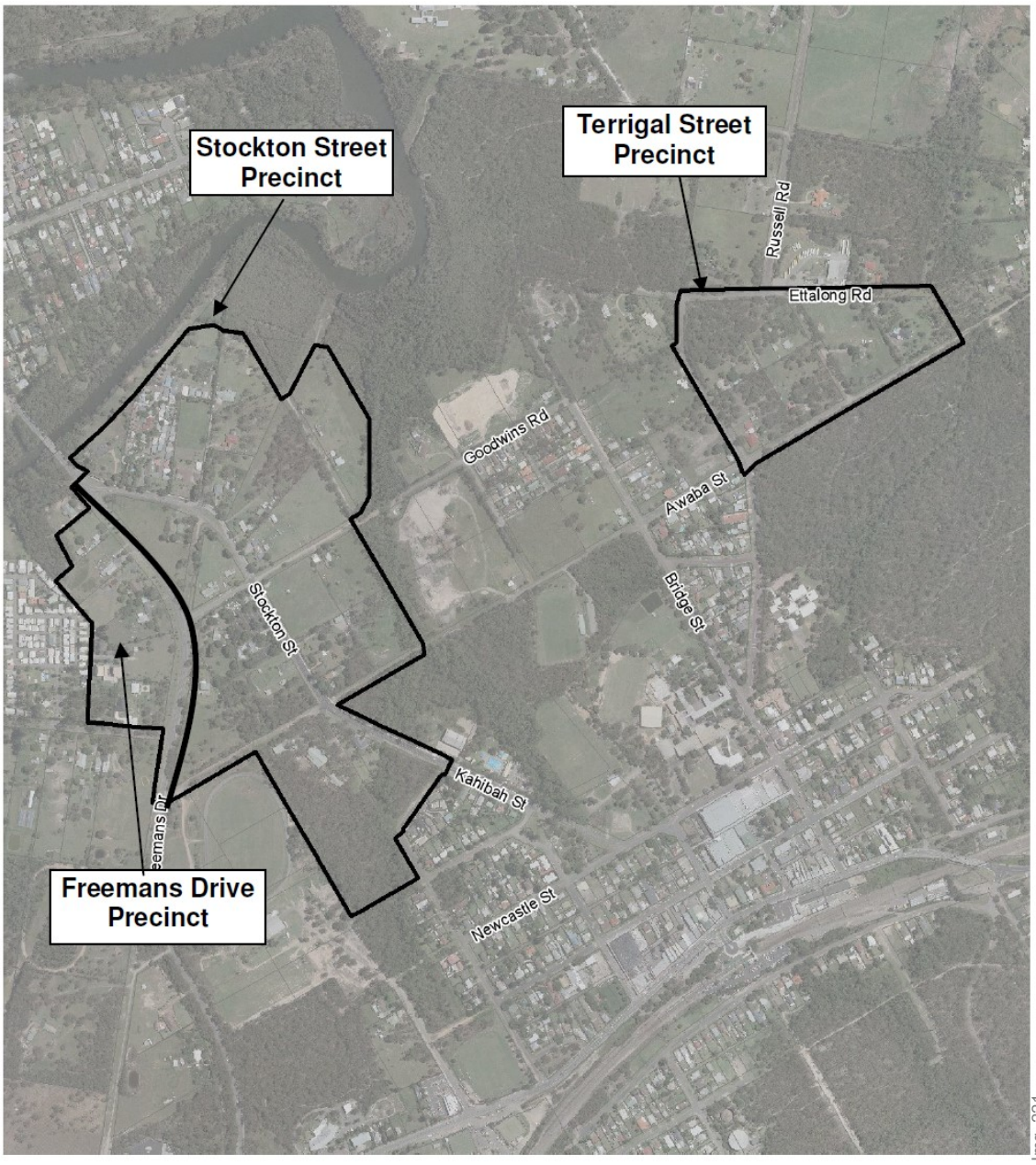


Figure 1 - North Morisset Area Plan Boundary

1.2 CHARACTER STATEMENT

Stockton Street Precinct

Land fronting Stockton Street will accommodate medium density housing, such as town houses, villas and residential flat buildings to a maximum of three storeys in height. Stockton Street will be widened to collector road specification with bus facilities and include a shared pedestrian and cycle path extending north to Cooranbong and south to Morisset town centre. The Lake Macquarie Village caravan park is expected to expand onto the adjoining parcel to the east. The caravan park caters chiefly for longer-term residents and is therefore compatible with the proposed residential development.

Land in the Stockton Street Precinct zoned for low density residential will have a more traditional suburban character and include detached housing and dual occupancies. Neighbourhood shops (e.g. Newsagent, Bakery, Hairdresser) are envisaged near the intersection of Goodwins Road and Freemans Drive once the surrounding residential area is well established.

Rural small holdings will provide a transition zone between more urban land uses and the riparian areas of Clacks Creek and Stockton Creek. Conservation land will retain and enhance native vegetation to facilitate ongoing movement of local native fauna and protect the water quality of local waterways. Conservation zoned land south of Awaba Street will help distinguish the Stockton Street precinct as a separate neighbourhood to Morisset town centre.

Freemans Drive Precinct

Freemans Drive will remain the primary traffic route between Cooranbong and the F3 Freeway interchange at Morisset. The Freemans Drive residential precinct will take on a suburban character and contain an internal road as well as lots fronting Freemans Drive.

Terrigal Street Precinct

Land immediately west of Terrigal Street was rezoned for residential development in 2008, and subdivision of this land has commenced. The Terrigal Street Precinct in this Area Plan will be a continuation of traditional residential development comprising detached housing and dual occupancies. It will also complement housing envisaged on the neighbouring Landcom site on the southern side of Awaba Street.

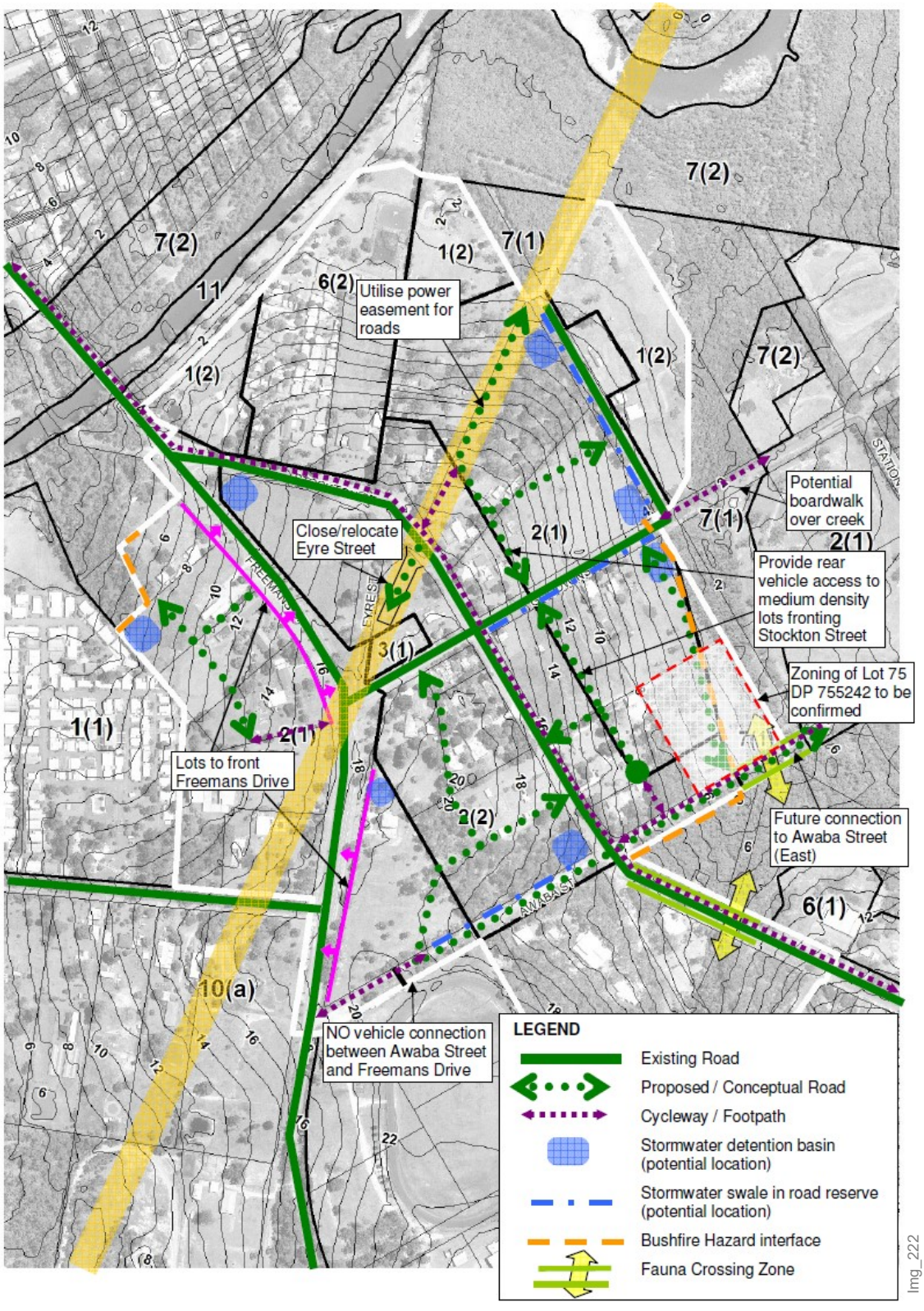


Figure 2 - Stockton Street and Freemans Drive Precincts Structure Plan

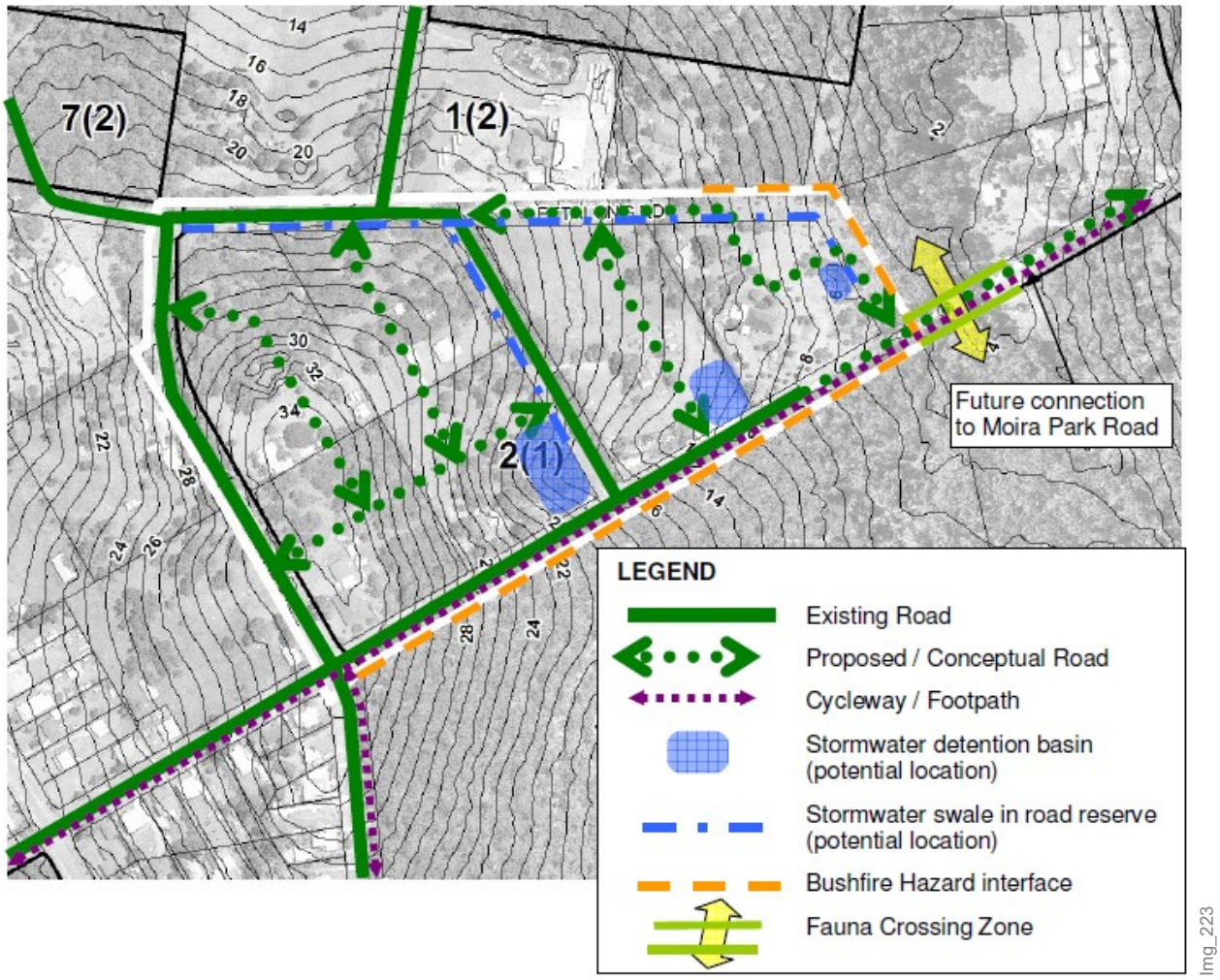


Figure 3 - Terrigal Street Precinct Structure Plan

1.3 SUBDIVISION DESIGN, LAYOUT AND STAGING

Objectives

a. To ensure the subdivision and development of North Morisset is undertaken in a coordinated manner and is well designed.

Controls

1 The subdivision layout must generally be consistent and address the issues identified in Figures 2 and 3.

2 Development may be approved in stages, provided that development does not prejudice the ability of future development in the precincts to comply with the provisions of this Area Plan.

3 Where practical, subdivision must be approved for complete sub-catchments to allow efficient provision of services and utilities.

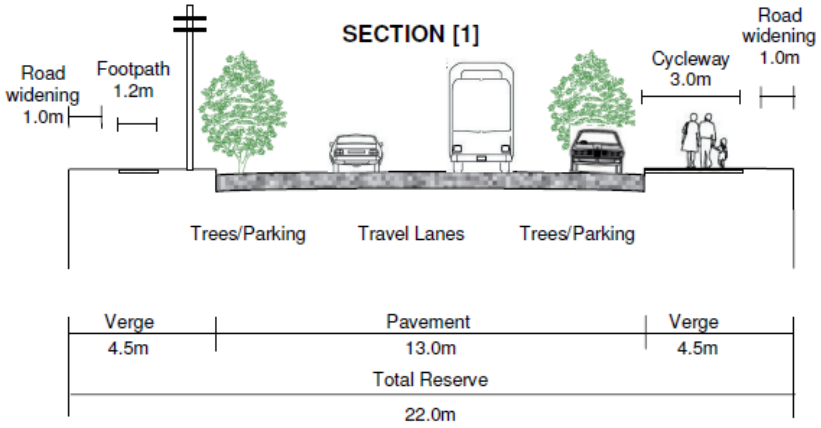
1.4 STREET LAYOUT

Objectives

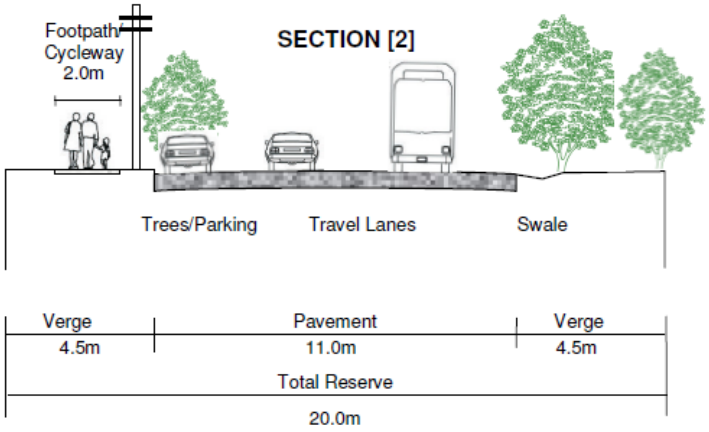
a. To ensure the subdivision and development of North Morisset is undertaken in a coordinated manner and is well designed.

Controls

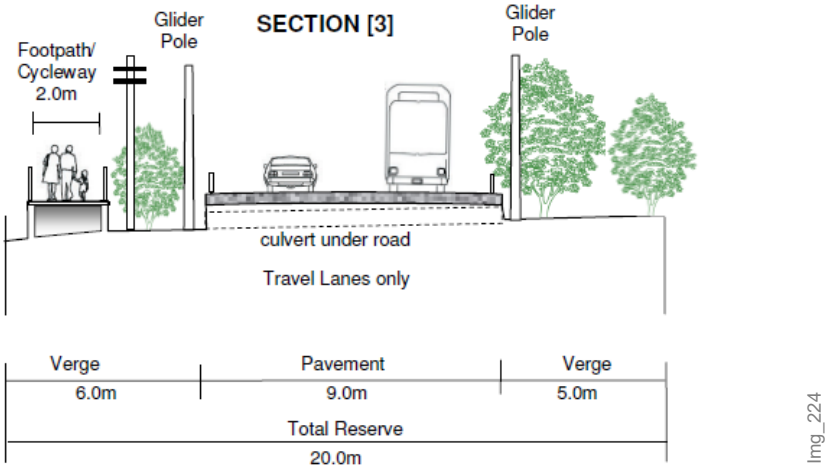
1. Street layout must reflect the principles illustrated in Figure 2 - Stockton Street and Freemans Drive Precincts Structure Plan and Figure 3 – Terrigal Street Precinct Structure Plan.
2. Where necessary, lot boundaries must be set back 1m on both sides of Stockton Street to achieve a minimum 22m wide road reserve in accordance with Collector Road specifications.
3. Road design for Stockton Street must be consistent with Figure 4 - Street Cross Sections.
4. Terrigal Street and Ettalong Road (between Terrigal Street and Russell Road) must be upgraded to Primary Local Road - Bus Route (i.e. minimum pavement width of 9m).
5. In the Terrigal Street Precinct, lot boundaries must be set back 1m from Awaba Street to achieve an adequate width road reserve for a collector road with bus route.
6. Road Design for Awaba Street must be consistent with Figure 4 - Street Cross Sections.
7. Public road access must be provided at rear (or side) of lots fronting Stockton Street.
8. Rear fences should not be located along new or existing roads, including Freemans Drive.



Stockton Street (as viewed facing North West between Awaba Street and Goodwins Road)



Awaba Street (as viewed facing North East between Stockton Street and Clacks Creek)



Awaba Street (as viewed facing North East at Clacks Creek crossing)

Figure 4 - Street Cross Sections

1.5 NATIVE VEGETATION REHABILITATION AND MANAGEMENT

Objectives

a. To rehabilitate and enhance the ecological functions of the Environmental Conservation land adjoining Clacks Creek.

Controls

1. Land zoned E2 Environmental Conservation along Clacks Creek must be rehabilitated with locally indigenous native vegetation and dedicated to council once re-planting is established to the satisfaction of Council.

1.6 FAUNA CROSSINGS

Objectives

a. Where roads must cross identified wildlife corridors, appropriate design measures are taken to facilitate fauna crossings.

Controls

1. Fauna crossings must be established in the locations indicated in Figures 2 and 3.
2. Road pavement width must be narrowed to no more than nine metres in crossing locations.
3. Glider poles must be erected on opposite sides of the road to facilitate Squirrel Glider movement.

1.7 LANDSCAPE MASTER PLAN

Objectives

a. Subdivision within the study area adheres to an overall landscape plan for each precinct.

Controls

1. Street trees along Stockton Street must be planted within the parking lane of the road pavement.
2. Street tree species must be consistent with Table 1 – Street Tree Planting Schedule.

1.8 BUSHFIRE MANAGEMENT

Objectives

a. Subdivision design in bushfire prone areas must include measures to manage the threat of bushfires without impact on land zoned for conservation.

Controls

1. APZs must be incorporated in perimeter roads and where necessary the front property setbacks.
2. APZs must not be located in any land zoned for conservation.
3. Stormwater Detention basins may form part of an APZ.

Table 1 - Street Tree Planting Schedule

Morisset Street Tree Selection			
Species Name	**Common Name**	**Height**	**Description**
Freemans Drive			
Eucalyptus punctata	Grey Gum	35m	Tall upright tree with grey mottled bark that sheds to reveal orange- pink smooth bark
Stockton Street			
Callistemon salignus	Willow Bottle Brush	6m	Cream coloured bottlebrush. Flowers in summer. New leaf growth is pink.
Awaba Street			
Corymbia gummifera	Red Bloodwood	15-30m	Tall open tree with rough brown-pink bark that excretes red sap.
Trees Suitable for Local Roads and Streets - Native			
Callistemon salignus	Willow Bottle Brush	6m	Cream coloured bottlebrush. Flowers in summer. New leaf growth is pink.
Elaeocarpus reticulatus	Blueberry Ash	8m	Small to medium tree with glossy green leaves. White or pink flowers in spring followed by blue berries.
Glochidion ferdinandi	Cheese Tree	8m	Open tree with spreading nature. Interesting fruit displayed for many months.
Melaleuca linariifolia	Narrow Leaf Paperbark	8m	Erect small tree with compact growth. New growth tipped with pink. Covered in white flowers during spring and summer.
Tristaniopsis laurina	Water Gum	8m	Glossy erect tree with a pale grey trunk.
Trees Suitable for Local Roads and Streets – Exotic			
Lagerstromia Hybrids *('Natchez', 'Yuma', 'Tuscarora')*	Crepe Myrtle	7m	Small deciduous tree with open canopy. Scaly light brown bark is a key feature. Pink or white flowers in late summer.
Pyrus calleryana cvs.	Ornamental Pear	12m	Erect deciduous tree with light grown bark. Green glossy leaves that turn to vibrant red in autumn.

Note- Trees within parking lane to be provided with tree guards.

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PART 1 – NORTH WALLARAH PENINSULA AREA PLAN

1 INTRODUCTION

This Area Plan contains local objectives and controls for development in North Wallarah Peninsula and aims to ensure the vision and principles of the North Wallarah Peninsula Masterplan and Conservation Land Use Management Plan (CLUMP) are achieved.

North Wallarah Peninsula has three distinct sectors comprising the Lake Sector (Murrays Beach), the Coastal Sector (Pinny Beach) and Northern Sector. The Area Plan contains a number of parts. The first part contains general development controls that apply to North Wallarah Peninsula to be used for subdivision applications and the remaining parts contain development controls for housing design within each Sector – Lake Sector (Murrays Beach), Coastal Sector (Pinny Beach) and the Northern Sector. The parts of this Area Plan are outlined below:

Part 1 – North Wallarah Peninsula Area Plan

This section contains information on the background, extent of the Area Plan and character of North Wallarah Peninsula.

Part 2 – Subdivision

This section contains general development controls that apply to subdivision applications in North Wallarah Peninsula.

Part 3 – Lake Sector – Murrays Beach

This section contains development controls that apply to the Lake Sector in the area known as Murrays Beach and includes all land within North Wallarah Peninsula west of the Pacific Highway. This part should be used for development applications for dwellings in Murrays Beach. The Murrays Beach area comprises a number of precincts including the Point Morisset, Lake Shore and Slopes and Lakeside Ridge Precinct and the Swansea Valley Precinct.

Part 4 – Coastal Sector – Pinny's Beach

This section contains development controls for dwelling applications in the Coastal Sector in the area known as Pinny Beach. This includes the coastal land south of the existing Caves Beach Village. The Pinny Beach area comprises the Coastal Village, Spoon Rocks Valley and Radar Hill Precincts. This part includes development controls for the Coastal Village Precinct. This Part will be updated with further development controls for Spoons Rocks Valley and the Radar Hill Precinct following subdivision applications for these areas.

Part 5 – Northern Sector

This section contains development controls that apply to the Northern Sector. This part should be used for development applications for dwellings in the Northern Sector. This Part will be updated with further development controls for the Northern Precinct following subdivision applications for these areas.

1.1 BACKGROUND

The North Wallarah Peninsula is a unique development in an environmentally sensitive area. The North Wallarah Peninsula site covers approximately 600ha and it is bounded by the Pacific Ocean to the east, Lake Macquarie to the west, with Swansea and Caves Beach urban developments to the north. The lakeside and coastal settlements of Cams Wharf on the western side and Catherine Hill Bay on the eastern side borders the site in the south. The villages of Nords Wharf and Catherine Hill Bay will be further developed in line with recent rezoning approvals. The Pacific Highway runs along the central ridge of the Peninsula bisecting the site.

The North Wallarah Peninsula Conservation Land Use Management Plan (CLUMP) and Masterplan were adopted by Council in 2000 and 2003 respectively. The North Wallarah Peninsula Masterplan is an extensive document that includes a number of management plans including Ecological Site Management, Bushfire Management Plan, Construction Management Strategy, Open Space and

Public Access Management, Social Equity Management Plan, Built Form Management Plan, Visual Integration Management Plan and Physical Infrastructure Management Plan.

The North Wallarah area comprises three distinct sectors referred to as the Lake Sector, the Coastal Sector and the Northern Sector and each sector has individual precincts. This Area Plan seeks to ensure that the planning controls of the North Wallarah Peninsula Masterplan and CLUMP continue to guide the future development of this area.

The North Wallarah Peninsula Masterplan envisaged:

- The development of 2000 lots with a population of approximately 5,500 people. The Masterplan outlined four different development types for the area based on land use suitability. The Masterplan included a series of small villages (300-500 dwelling units) within defined sectors or neighbourhoods (800-1,000 dwelling units).
- The creation of 250 hectares of land to be preserved for conservation including the 180ha Wallarah National Park. The National Park retains and protects representative samples of all vegetation associations occurring on the site together with their wildlife habitat values including the protection of sub-populations of *Tetratheca juncea*.
- Creation of a Forest Red Gum Reserve along the eastern foreshore of Lake Macquarie and a habitat corridor 100 meters wide between Wallarah National Park and the Forest Red Gum Reserve.
- Conservation of all identified Aboriginal heritage items of local and regional significance.
- A number of open spaces, pedestrian and cycle links connecting the development.

This Area Plan seeks to ensure that the objectives, planning principles, considerations and strategies of the North Wallarah Peninsula Masterplan and CLUMP are achieved in the development of this Area.

The North Wallarah Peninsula is classed as an environmentally sensitive area within the *Lake Macquarie LEP 2014* for the purposes of excluding it from the operation of the SEPP (Exempt and Complying Development) Codes 2008.

1.2 EXTENT OF AREA PLAN

This Area Plan applies to all the land outlined in green edging as shown within Figure 1 – North Wallarah Peninsula Area Plan Boundary.

Figure 1 - North Wallarah Peninsula Area Plan Boundary

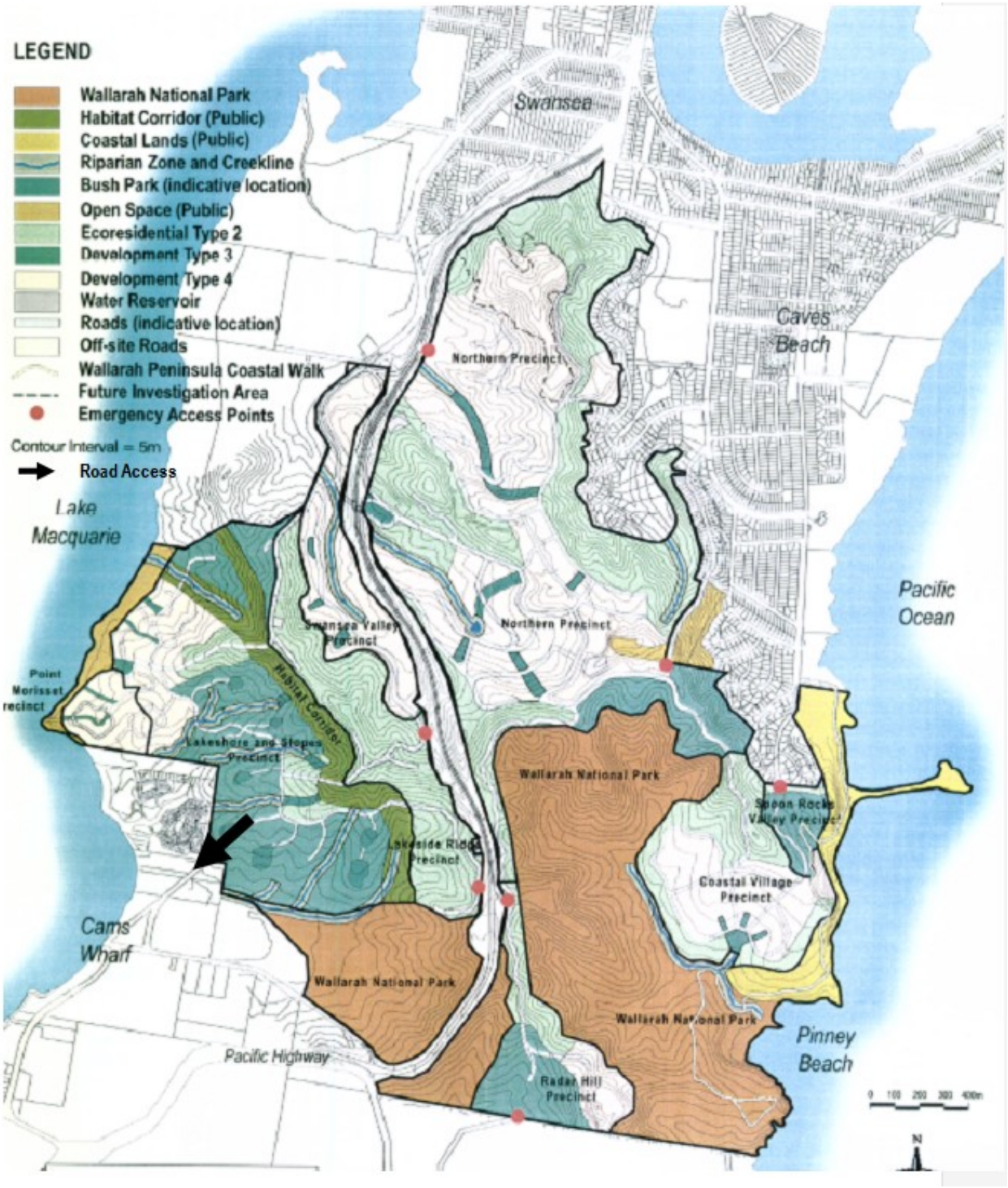


Figure 2 - Precinct Map

The Precinct Character Statements included in Sections 1.4, 1.5 and 1.6 are from the Masterplan and may evolve as a result of detailed precinct planning and consideration of opportunities and constraints.

1.3 LAKE SECTOR – MURRAYS BEACH PRECINCT CHARACTER

The Masterplan envisaged that the built character of the lakeside village was to contain a variety of housing types with a mix of lakeside cottages, rear lane housing, detached and semi-detached houses, town houses and terraces that would create a village character reflecting the traditional villages on Lake Macquarie and other lake environments of the region. However, the variety of housing types has not been achieved to date and typically consists of detached housing. Diversity of housing types is still encouraged.

The buildings within this lakeside village will be designed to create an identifiable architectural image, which relates to the lakeside and bush setting and its sense of intimacy, stillness and timeless tranquillity. Buildings are required to be sensitively integrated into the natural landscape and clustered to minimise the settlement footprint.

Community facilities and public open spaces create important destinations in the lakeside village and pedestrian walkways and pathways promote a pedestrian access to the lakeside village. Tree preservation and appropriate native landscaping and bush gardens will seek to integrate housing into the bushland setting.

The Lake Sector contains the following precincts: Point Morisset, Lakeshore and Slopes, Lakeside Ridge and Swansea Valley Precincts.

Point Morisset Precinct:

> *Objective: To allow site sensitive development that takes account of the archaeological and scenic resource values on this visually prominent lake foreshore site*

The foreshore topography will remain intact protected by the foreshore public reserve and conservation area. The Masterplan envisaged at the northern boundary of the Point Morisset Precinct and extending into the adjacent Murrays Beach area, there was the opportunity for a low intensity village centre, including limited retail adjacent to the reserve and destination tourist amenities. The village centre will serve the local community as well as local and holidaying visitors. Co-ordinated improvements along the street frontages and foreshore reserve will maximise recreational opportunities and pedestrian safety. The Village centre is now located in the Lakeshore and Slopes Precinct.

Future development will enhance the scenic quality of the area as well as protecting the amenity of the surrounding Angophora, Grey gums and Ironbark forest. Vehicle and pedestrian traffic will have high accessibility to the foreshore reserve.

The village centre has a defined footprint to allow for sustainable economic outcomes and reasonable flexibility over time to accommodate changing community needs and uses. Activities, height, silhouette and orientation of any future development is required to preserve privacy, sunlight and visual amenity to respect the lifestyle of neighbouring dwellings and their private open space. Building facades visible from public frontages should reflect patterns that are typical of traditional coastal villages, including the appearance of small scale individually architecturally designed retail buildings situated on narrow fronted allotments, continuous shopfronts located below awnings or upper storeys that are enclosed by balconies.

Colour schemes of residential and commercial buildings should identify and promote an integrated character for the location and reinforces a distinct modest scale village. Existing bushland and public open space will be reinforced by new indigenous planting and restoration to create a fully integrated canopy. Park structures, furniture and equipment will reflect a co-ordinated village theme that reflects the recreation and water-based lifestyle of living adjacent to Lake Macquarie.

Lake Shore and Slopes Precinct:

Objective: To allow site sensitive residential development that responds to the ecological values of the site by maintaining wildlife habitat corridor connections between the proposed Conservation Reserve, the Red Gum Forest Reserve and the wildlife habitat on adjoining properties located to the north of the site.

The northern end of this precinct interfaces with the habitat corridor, a classified river and riparian zone and the keystone winter feeding habitat area of Swamp mahogany, which have been conserved.

The Lakeshore and Slopes area will be designed as a mixed density wooded residential precinct. It will reflect a sense of affinity between the bush and the lake that occurs as the natural landscape condition. The scale and design of future buildings will protect the scenic qualities of the wooded foreshore visible from Nine Acres, Pulbah Island and other existing residential areas at the southern end of Lake Macquarie. Houses will be surrounded by retained foreshore forests and Angophora, Grey Gums, Spotted Gums and Ironbark that provide a natural backdrop to the shoreline and foreshore public reserve.

Future siting of buildings and development infrastructure will minimise disturbance to natural slopes and existing bushland, in particular, the visually prominent habitat corridor. Areas of undisturbed understorey will form sustainable corridors of bushland linking riparian areas. New buildings are to be nestled below the woodland canopy, following the natural hillside profile. There will be an irregular siting of a mix of housing forms facing the Lake. Homes in this area are required to be designed to conserve surveyed and mapped trees, providing filtered water views from neighbouring residential areas and the Lake.

A range of articulated houses and setbacks will provide variety in height to homes with roofs that are designed to minimise the apparent scale of new buildings and respect views from neighbouring lots. There will be no slab on grade housing on natural slopes greater than 10%. Visible facades should exhibit a light weight appearance with raised floors screened by shaded balconies and verandahs. Street frontages are not to be dominated by wide garages and will encourage integration between pedestrian and public areas. Gardens should contain a selection of native species. Wide driveways are not supported and should be screened by new native planting. Fences should be low or transparent in order to maintain filtered views and connectivity. Local streets will be informal and of a pedestrian character with unformed edges flanked by wide verges with retained vegetation. The scenic qualities established by existing trees are to be preserved, particularly tall canopies along the wider verges.

As the development moves up the moderate foot slopes, the overall density of development should decrease. The scale, design, and construction of development is intended to protect the scenic quality of houses surrounded by a continuous canopy of woodland to maintain a sensitive environmental relationship between the habitat corridor and defined riparian areas. Future development shall avoid disturbance to natural slopes and the riparian creek lines particularly corridors of trees and understorey along the creek buffer areas. There will be no slab on grade development on slopes greater than 10%. Light weight construction with suspended floors and decks is most appropriate in these wooded areas.

New buildings should be nestled below the canopy, surrounded by an Asset Protection Zone, that conserves, where possible, existing vegetation. Forest roads should retain an informal quality with unformed edges and wide verges. The parkland areas established by retaining existing trees, internal to the precinct, will be a prime characteristic of this area. Safe and secure pedestrian access has been designed through the bushland and open space system to provide minimal impact to the environment.

Lakeside Ridge Precinct

Objective: To allow site sensitive residential development that responds to the ecological values and visual aspects of the site providing for road access across the Precinct connecting the Swansea Valley and Lakeshore and Slopes Precincts.

This precinct will be established as a low density wooded residential area. A variety of residential neighbourhoods will be created on gentle to moderate foot slopes surrounded by steep wooded residential hillsides and private open space. A continuous canopy will be retained to contribute to this scenically distinctive setting that provides a backdrop to the Pacific Highway and overlooks enclosed valley areas and the lake.

Subdivision of Development Type 2 lots with irregular frontages will face the village drive and contour trails with narrow pavements and wide verges of retained trees. The scale and design of buildings should protect the scenic qualities of the hillside, in particular areas that are visible from the Pacific Highway.

There will be no cut and fill, other than for access, on slopes greater than 10%. New buildings will be established below the tree canopy and reflect an irregular siting of dwellings incorporating a stepped form that follows the natural hillside profile. Retained bushland and landscaping will restore disturbed hillside clearings and avoid the appearance of continuous development. Buildings should appear similar in height to their neighbours and contain rooflines that are designed to minimise their scale within the landscape. Street frontages should not be dominated by wide garages, driveways or fences. Bush gardens should retain a natural profile. Retaining walls for driveways will be restricted. Contour trails will retain an informal quality with unformed edges and wide verges.

Swansea Valley Precinct

Objective: To allow residential development that is directly accessible from Swansea within a visually confined area while maintaining the integrity of the wildlife habitat values of the tree canopy on the steep side slopes along the western edge of the Precinct.

The topography of this precinct establishes a self-contained valley of gentle slopes and original vegetation drawing to a single catchment of a long narrow creek that contribute to a scenically distinctive wooded setting. This precinct is suitable for a mixture of regular subdivisions of single allotments and attached housing facing contour trails flanked by wide verges and front gardens of retained indigenous plants. The street patterns should retain an informal quality. A distinctive parkland atmosphere may be created within a landscape of scattered wetland ponds along the creek line.

Dwellings will vary from traditional suburban bungalows that are of a modest scale, single storey timber framed buildings, to contemporary medium to large houses of one or two storeys. There may also be clusters of attached low-scale development. Garages should be incorporated into each dwelling or located as free-standing structures at the side or rear of the dwelling.

Front gardens will be predominantly open areas of native vegetation with planted native species that spill across the street verges. Along the creek line, wetland ponds will frame partly screened buildings on either side of the creek. Private lots may extend to newly created ponds and retention areas. Public and private open space will be used to create a series of interconnecting paths and bikeways linking this precinct to the lake and to Swansea. The scale, design and construction of buildings should enhance the scenic potential of the wetlands, ponds and creek line. This will promote houses dominated by natural gardens and retained understorey to frame or screen each building as well as protecting the water quality of the creek and ponds. Buildings should avoid disturbance to the natural slopes and creek interface areas. Light weight construction with suspended floors and decks is most appropriate. Bush gardens should retain a natural profile. Retaining walls or terraces will be restricted for access only and will be screened by native planting.

1.4 COASTAL SECTOR – PINNY BEACH PRECINCT CHARACTER

The Coastal Sector contains the following precincts: Coastal Village, Spoon Rocks Valley and Radar Hill.

Coastal Village Precinct

Objective: To allow site sensitive development on a degraded portion of the site that takes advantage of the special site features while minimising potential environmental impacts within the coastal zone.

The Coastal Village will capture the essence of the seaside landscape of Pinny Beach. A mix of high and low density residential areas will infill the disturbed areas of the naturally occurring topographic bowl. The gentle slopes extending from the bowl to the crest of the exposed east ridge will form a prominent backdrop to Pinny Beach and the surrounding Wallarah National Park. The village will be planned and designed to reflect a distinct coastal settlement character.

The southeast facing orientation will align an irregular pattern of mixed frontage lots. Seaside cottages will be mixed with a scattering of multi-unit and attached housing with a mixed-use village centre. Less dense larger lots will be created at the fringe of the development area. Lots will address streets of narrow paved surfaces with wide vegetated verges covered with coastal grasses and heath. The principle outlook will be across the coastal heath reserve that slopes up from Pinny Beach and its exposed rugged shoreline. The revegetated reserve and public foreshore will create a natural link of ground covers and low growing native coastal vegetation from the foreshore areas into the Coastal Village.

Living in the Coastal Village will be an experience of shared environmental outcomes. Homes will be oriented towards the ocean and panoramic bushland views. Buildings will have a variety of setbacks to create the appearance of an undulated frontage in response to the organic coastal landscape. Within the village core, generally small open areas of retained landscape will reinforce a theme of retained heath and scrubland that will become natural boundaries to development and residential lots. There will be no slab on grade housing and no boundary fencing. Along the street frontage, building setbacks and a stepped built form will provide a variety of natural garden and retained vegetation areas maintaining a typical informal atmosphere of coastal cottages in the landscape. Garages and carports will be integrated discreetly within the building facades or rear lanes. A village centre at the heart of the development will provide the opportunity for higher density forms including local retail, destination and tourist amenities. The village footprint will be intimately integrated with the landscape of the coastal setting and become a key component of the sustainable development outcome that incorporates the Wallarah National Park, Spoon Rocks and Radar Hill precincts.

Spoon Rocks Valley Precinct

Objective: To allow site sensitive development that results in rehabilitation of the areas that have been grossly disturbed, particularly by quarrying, while minimising potential visual impacts on the coastal environment.

This precinct will be a low density residential special use area. The new development will establish a clear distinction from the existing development on Caves Beach headland. The scale and design of new buildings will enhance the remediation of the previously disturbed quarry and open cut areas and complement the scenic potential of the valley that is only visible from the Coastal Walk. The built form outcome will complement the need for public access through this area to the adjacent quarries head and public open space public reserve as well as Spoon Rocks Beach and rock break wall.

Buildings will be nestled within remnant vegetation framed by a backdrop of indigenous trees running along the drainage gully and eastern slopes. Clusters of small footprint cottages will avoid disturbance to the natural hillside, enhance the prominent rock and geological features and protect any existing canopy trees within the valley or on the south facing headland.

New buildings on the western edge of the precinct will be set against a backdrop of ridgetop canopy trees and will follow the natural hillside profile. Buildings should be placed in an organic form to avoid a continuous line of buildings across the topography. The height of buildings will complement the consistent height of remnant vegetation that has evolved because of the prevailing east and southeast salt winds. Cottages will include roof designs to minimise the scale of the buildings. Buildings visible from the Coastal Walk and public lands will be constructed as light-weight aboveground structures. Exposed walls or reflective surfaces will be screened by balconies, verandas and pergolas. There will be no slab on grade construction. There will be no fences or double garages to street frontages.

Hillside revegetation will retain the natural profile incorporating native species. Adjacent to the east ridge, canopy replanting of existing species and understorey ecotones will encourage a revitalisation of the coastal forest habitat to encourage a link across the ridge to the Wallarah National Park.

Radar Hill Precinct

Objective: To allow site sensitive development that results in rehabilitation of this grossly disturbed site while avoiding environmental impacts on the surrounding proposed Conservation Reserve.

This area of unremediated open cut quarry overlooks the Wallarah National Park and Pacific Ocean. It is an elevated detached portion of land surrounded by retained coastal bushland habitat. Steep slopes lead down to the foreshore of Pinny Beach, Pinny Headland, and the tidal rock platforms. A ridgetop canopy of trees creates the backdrop for an enclosed area of future development. This precinct will have a single access road leading from the Northern Sector. Emergency access will also be provided to the Pacific Highway and Old Mine Camp Road or alternative road due to the Catherine Hill Bay development.

The development form and its location will create its own unique urban character driven by its elevated northeast orientation and the opportunity to capture panoramic views across to the Wallarah National Park and along the northern coastline. Higher density forms of attached apartments built within the quarry floor and reaching the remnant canopy will create the critical mass for the heart of the precinct. Opportunities exist for lower density forms of townhouses, terraces, and single family lots at the edge of the precinct.

The scale, design and construction of buildings will protect the scenic qualities of the ridgetop and slopes which can be seen from the Coastal Village and Coastal Walk. Future development will avoid any disturbance to the buffer areas of the Wallarah National Park. On those portions of the precinct that are steep, there will be no slab on grade development on natural slopes greater than 10%. The final built form should present a varied and articulated facade to enhance the visual amenity and avoid the appearance of a single wall of construction. The facade should incorporate shaded balconies, decks and pergolas. Hillside gardens may be necessary to enhance remaining outcrops and will be planted with species native to the area. Retaining walls, terraces and areas of hardscape will be restricted to assist the water sensitive urban design outcome.

It is intended that the Radar Hill Precinct become an additional component to the sustainable outcome of the Coastal Sector by complementing the village scale development in the Coastal Village and Spoon Rocks Valley. Shared use facilities, destination uses, strata title development, and tourist uses will encourage an outcome where the residents of Radar Hill participate in the community activities and social infrastructure of the overall development.

1.5 NORTHERN SECTOR PRECINCT CHARACTER

Objective: To allow development on the portion of the site that has been extensively disturbed by open cut mining and quarrying operations while protecting scenic resource values and avoiding environmental impacts on adjoining areas.

The Northern Sector is dominated by a single spine ridge that dissects the land. To the east the foot slopes retain significant intact vegetation that forms a natural backdrop to the Caves Beach suburban development on the coastal plain. The scenic distinctiveness of the ridgeline and hillside will be

preserved and remain intact other than where previous disturbance has occurred. The east slopes will create a continuous scenic frontage running along the face of the peninsula and establish a natural separation between the hilltop and beach front character of settlement. The retained vegetation will protect view lines upslope of the existing development and downslope from a new urban village to be established on the plateau.

The future development will be concentrated in the disturbed quarry floor and mid-slopes. The scale of development will ensure the top of the quarry face is not broken. There is the opportunity to create higher density forms in areas of previous disturbance. The unique nature of the elevated site with panoramic views provides the opportunity for a more urbanized village with diverse amenities in a natural vegetated setting.

Residential development which will be established on a remediated plateau along the spine of the ridge, should capitalise on the panorama of filtered views through retained vegetation to either side of the ridge. On steeper slopes with remnant bushland, framed construction with suspended floors will preserve the scenic quality. Bushfire management will be a key component of the design outcome in these areas.

Mid-slope development areas of the western edge of the ridge should range from typical residential lots to larger lots of Development Type 2 development on the higher slopes. Scenic buffers can be achieved by capitalising on the dissected topography and undisturbed hilltops. Open space corridors can be created along the riparian creek lines leading into the Galgabba Creek catchment.

PART 2 – SUBDIVISION

2 DEVELOPMENT CONTROLS

2.1 SUBDIVISION

The subdivision standards apply to community and Torrens title subdivision, but do not apply to strata subdivision. The controls within Part 8 – General Subdivision of Council's DCP 2014 do not apply to this Area Plan.

Objectives

a. To ensure the objectives and guidelines established in the North Wallarah Peninsula Masterplan are achieved.

b. To promote the efficient use of land.

c. To ensure that subdivision provides a variety of lot sizes that meet community and economic needs, while ensuring that ecological, social and cultural values are safeguarded.

d. To facilitate subdivision which results in predominately rectangular shaped lots.

e. To ensure that subdivision does not preclude the orderly development of land.

f. To require adequate street frontages and dimensions for standard, battle-axe and irregular shaped lots.

Controls

1. Subdivision should comply with the lot size map in *Lake Macquarie LEP 2014* and generally be consistent with Figure 3 – Indicative Development Landuse Plan to allow the various development types of:
    i. Development Type 2 – Larger lots of up to 1 ha with substantial unbuilt areas with minimal lot size of 1,250m^2.
    ii. Development Type 3 – Lot size ranging from 750m^2 to 1,250m^2.
    iii. Development Type 4 – Urban village settlement. No minimum lot size defined.
2. Subdivision applications should take into consideration and be generally consistent with the North Wallarah Peninsula Masterplan.
3. Subdivision applications for precincts must include precinct plans. The precinct plans should address:
    i. Existing Physical Constraints and Opportunities
    ii. Existing Trees and Vegetation
    iii. Hydrology
    iv. Bushfire Management
    v. Open Space
    vi. Access and Mobility
    vii. Building Heights
    viii. Overview Plans

    Note: Precinct plans provide an overview of the precinct design guidelines based on an analysis of the land and its context.
4. Subdivision applications for precincts must include building design guidelines that address:
    i. Building materials, textures and colours,
    ii. Roof form,

iii. Facade articulation and design.

5. The building design guidelines address, where relevant the Built Form Management Plan site wide considerations of:
   i. Ecological sustainability and energy efficiency
   ii. Village character and pedestrian orientated development
   iii. Retention of native vegetation and lot landscaping
   iv. Water sensitive urban design
   v. Building on sloping land
   vi. Building in bushfire prone land
   vii. Building to retain views
   viii. Privacy and Security
   ix. Home Based Businesses
   x. Other site wide considerations
6. Subdivision applications must include a:
   i. Survey of existing vegetation including identifying all trees greater than 75mm trunk diameter,
   ii. Geotechnical survey and report detailing constraints on development,
   iii. Landscape requirements and plant species list with planting prescriptions for public and private land.
   iv. Statement of Environmental Effects that demonstrates compliance with the North Wallarah Peninsula Masterplan.
7. Subdivision applications must include Site Analysis and Development Envelope Plans (or alternatives) for lots that address:
   i. building type and use,
   ii. building siting and orientation,
   iii. building setbacks,
   iv. building height,
   v. location of ancillary buildings on private lots,
   vi. on-site parking location and access, as required to ensure the retention of trees,

   Where required, the Site Analysis and Development Envelope Plans identify lot boundaries and the development envelope. The development envelope is the envelope in which all building and related structures are to be included. The Site Analysis and Development Envelope Plans also address contour, bushfire requirements, stormwater detention, trees and tree management zones, access (if required) and service connections.

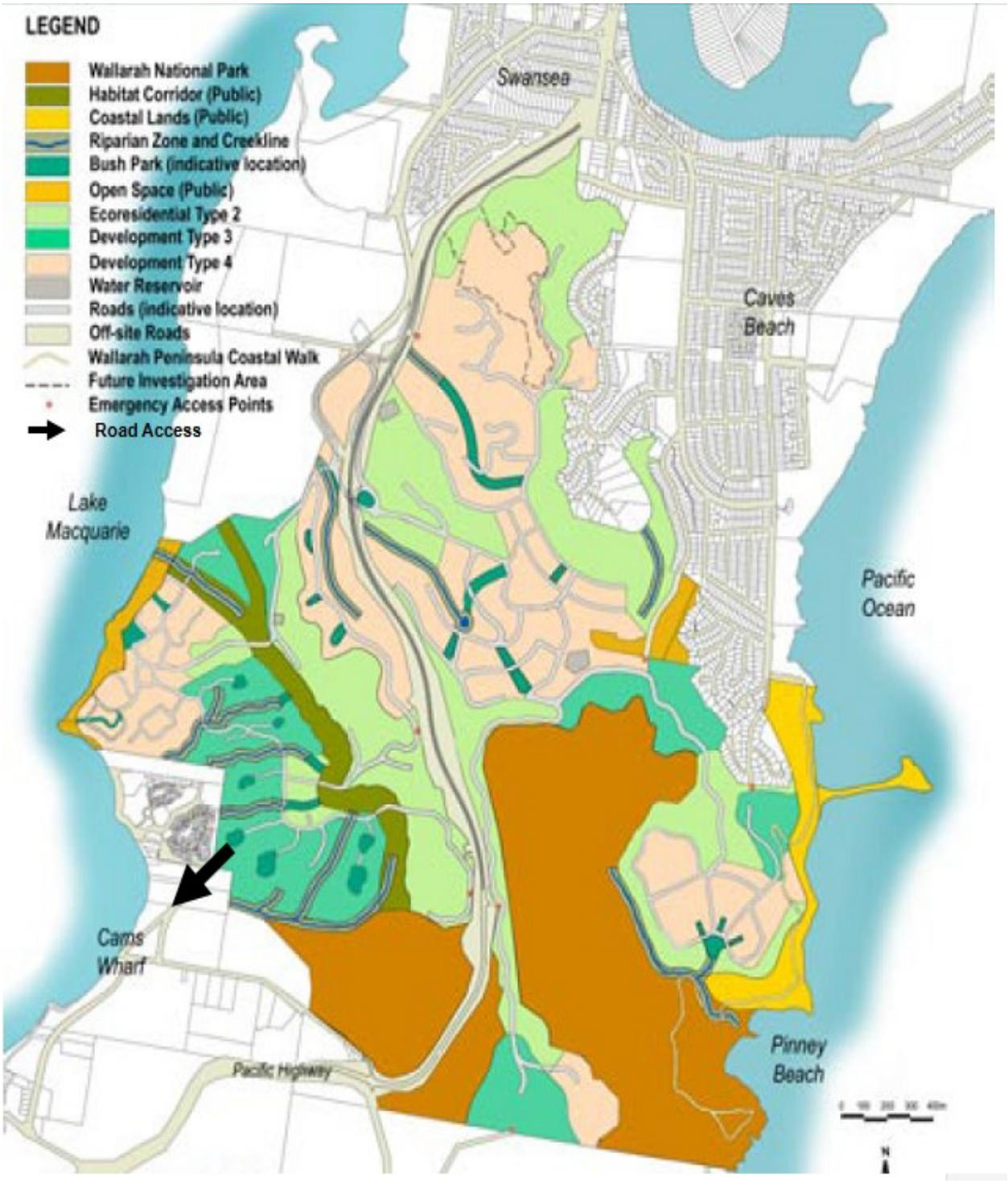


Figure 3 - North Wallarah Indicative Development Land Use Plan

2.2 DEVELOPMENT TYPES

Objectives

a. To ensure development responds to the environmental attributes of North Wallarah Peninsula.

b. To ensure the objectives and guidelines established in the North Wallarah Peninsula Masterplan are achieved.

Controls

1. Development lots, types and locations should generally comply with the North Wallarah Peninsula Masterplan.
2. Development types should generally be located in accordance with Figure 3 – Indicative Development Landuse Plan.
3. Development Type 2 areas should generally be consistent with Figure 4 – Development Type 2 and consist of:
    i. Clusters of development lots planned as a transition between Development Types 3 and 4.
    ii. A building development envelope identified for each lot, to take account of bushfire protection requirements and vegetation on the site.
    iii. Generally larger lots with a minimum lot size of 1250m^2, with potential to be up to 1ha with substantial unbuilt areas.
    iv. Selective canopy removal within the identified building envelope with partial retention of the understorey within the lot.
    v. No excavation or filling to be undertaken on natural slopes greater than 10% (6^o) other than as required for access.
    vi. Individual development envelope plans less than 750m^2.
4. Development Type 3 areas should generally be consistent with Figure 5 and 6 – Development Type 3 and consist of:
    i. Clusters of residential dwellings planned as individual precincts of 20 – 40 lots.
    ii. A building development envelope identified for each lot, to take account of bushfire protection requirements and vegetation on the site.
    iii. Minimum lot size from 750m^2.
    iv. No excavation or filling to be undertaken on natural slopes greater than 10% (6^o) other than as required for access.
5. Development Type 4 areas should generally be consistent with Figure 7 – Development Type 4 and consist of:
    i. An urban village settlement, with diverse urban forms including terraces, small cottages, large homes, traditional suburban residential development, attached housing, apartments, a neighbourhood centre and retail/tourist uses/small commercial and home-based businesses.
    ii. Landscaping using indigenous species to enhance the natural vegetation retained in road reservations and public open space particularly along drainage lines.

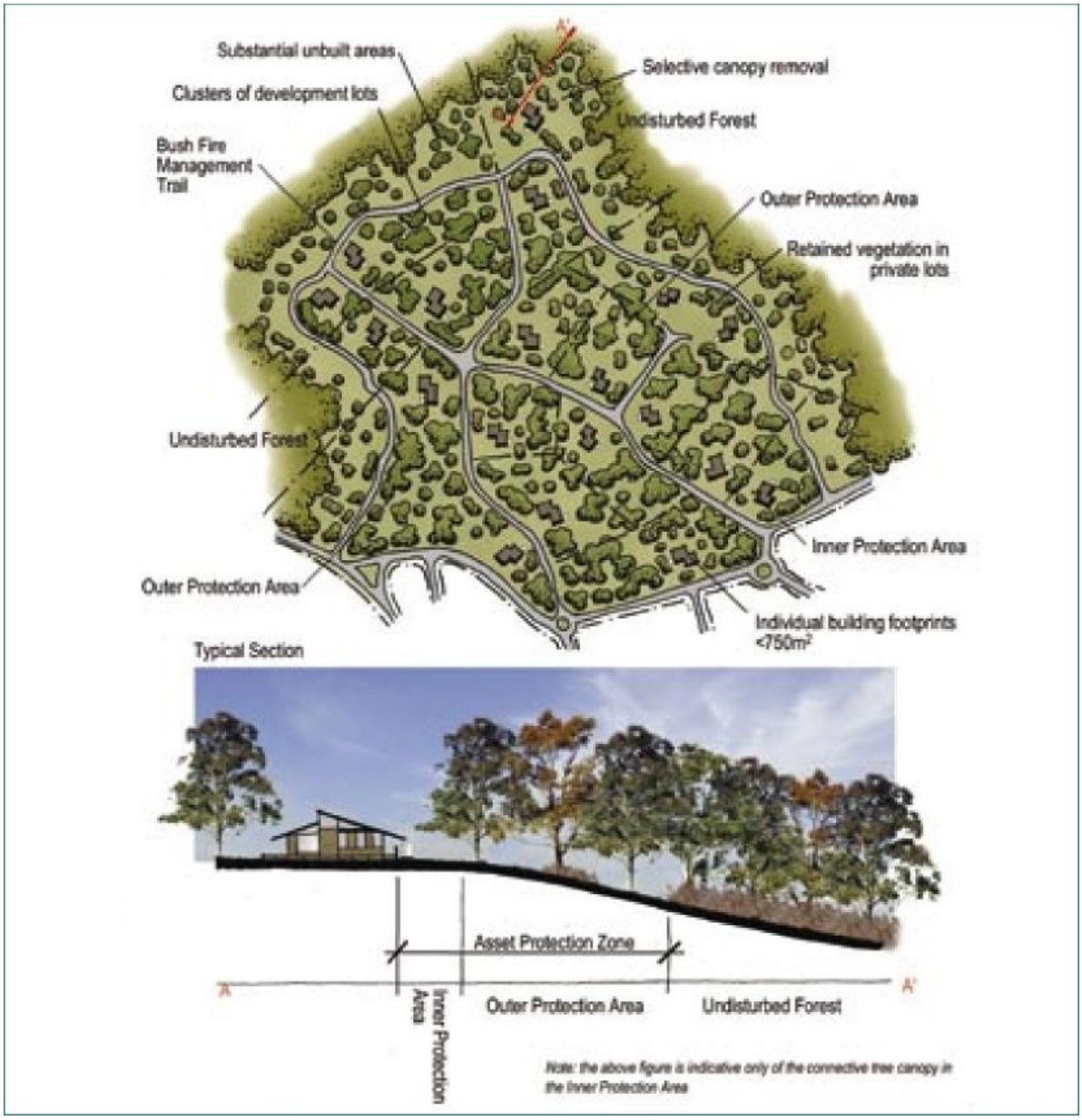


Figure 4 - Development Type 2

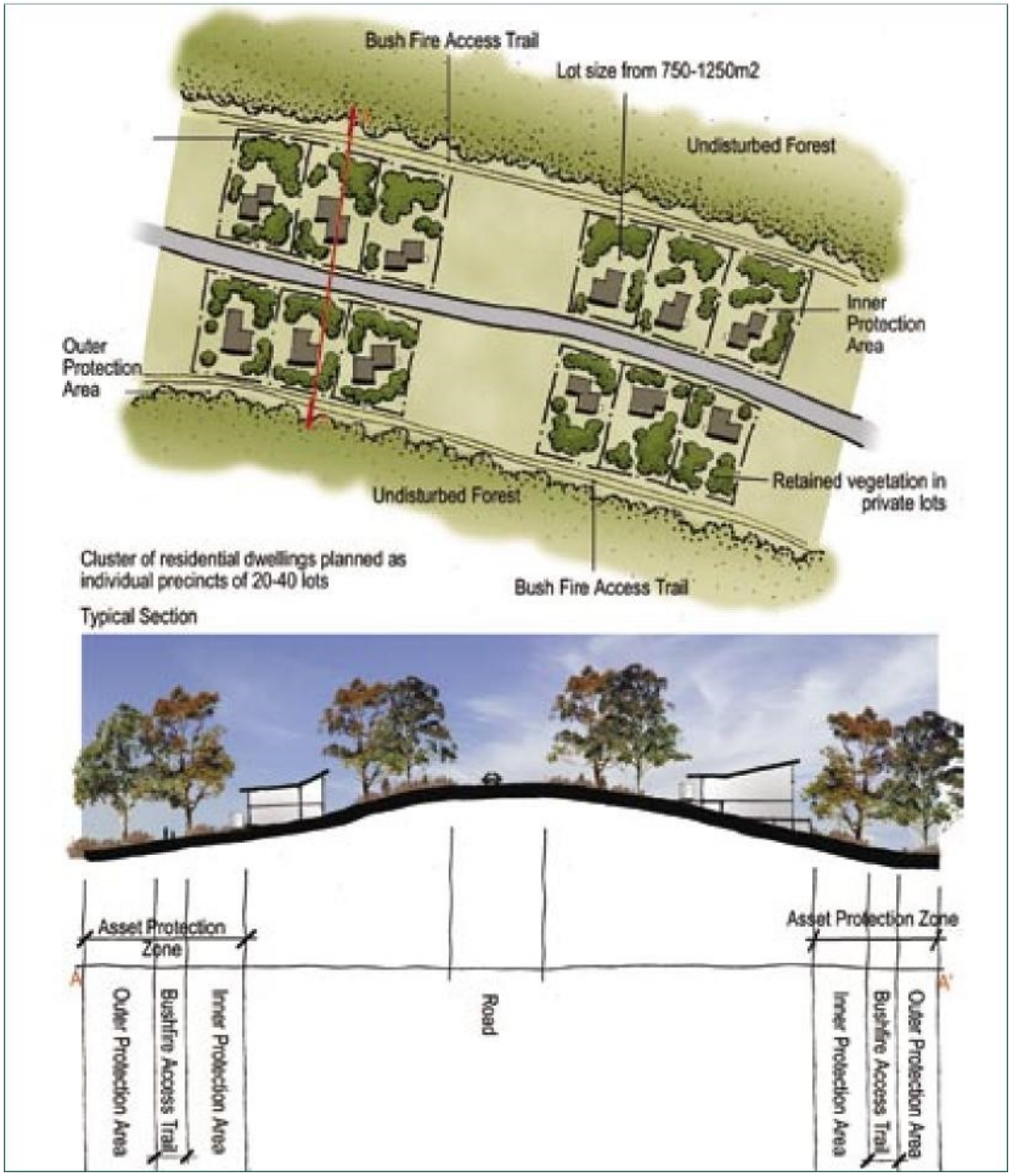


Figure 5 - Development Type 3 – Ridgetop Access

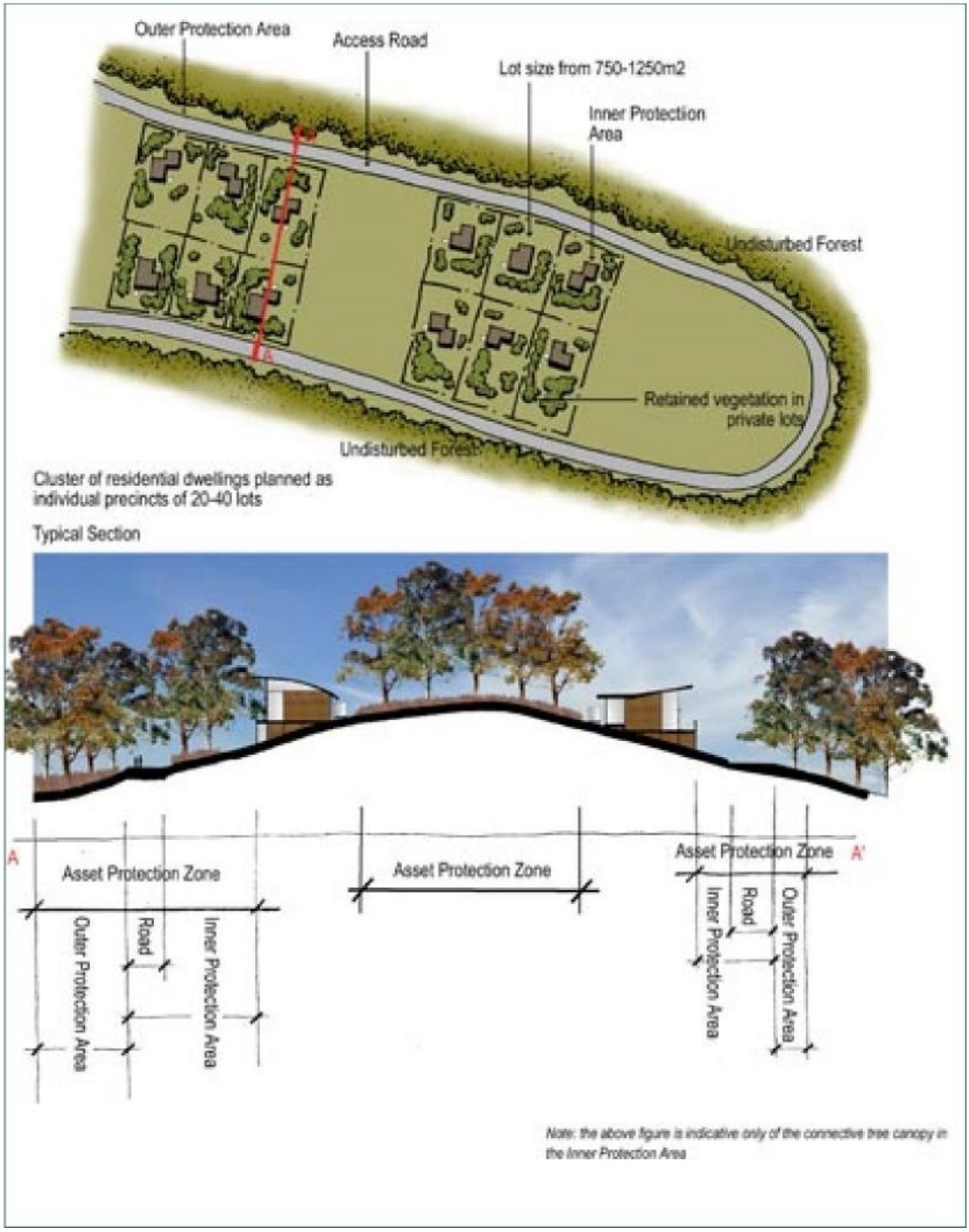


Figure 6 - Development Type 3 – Midslope Access

Figure 7 - Development Type 4

2.3 VILLAGE CENTRES

Objectives

a. To promote village centres which meet the needs of the North Wallarah Peninsula residents as well as providing tourist and recreational amenity to the wider population.

b. To promote sustainable and walkable village centres.

Controls

1. Each sector should contain a village centre generally in accordance with Figure 8 - Village Centres.
2. Village centres should contain a mix of uses with diverse urban forms including terraces, small cottages, large homes, traditional suburban residential development, attached housing, apartments, neighbourhood centres and retail/tourist uses/small commercial and home-based businesses and open space.
3. Higher development density extends from the Village Centre outwards to the periphery of the lower scale Type 2 development.

Figure 8 - Village Centres

2.4 ROAD DESIGN

Objectives

a. To promote roads as part of the public access network with shared use of roads for pedestrian and cycle activity.

b. To facilitate connections between sectors and to offsite areas.

c. To ensure that connectivity by walking and cycling within North Wallarah Peninsula and to nearby destinations, is an attractive and practical alternative to private car use.

d. To minimise environmental impacts and increase amenity.

Controls

1. Roads should generally be located in accordance with Figures 9 – Indicative Road Locations.
2. A variety of road types should be used consistent with Figure 9 – Indicative Road Locations and Figure 10 – Typical Road Design. These road types consist of:
    i. Bush tracks - Pedestrian only routes through bushland, open space, or road reserves. Bush tracks are part of the public access network and may also be used in bushfire management. Bicycles will be allowed on specially designated bush tracks. Bush tracks are generally constructed of compacted soil or rough formed gravel.
    ii. Village mews - Pedestrian and bicycle only bounded by residential and/or commercial facilities within the village settings.
    iii. Village Lanes - These lanes provide pedestrian and vehicle access to the front or rear of residential and/or commercial facilities within the village settings. Bicycle access is also to be considered and provided where appropriate. Lanes are of variable width, formation and edge treatments.
    iv. Contour trails - Shared roads for pedestrians, cyclists and vehicles. Contour trails are to be sealed or paved. Drainage is provided via a combination of grass swales, where appropriate, rolled kerb and gutter and concentre edge strips. They provide access to individual village lots and forest clusters, and generally have a 5.5m maximum pavement and road reserve of 15m minimum for services, integration of soft drainage and vegetation retention. On-road parking allowed within parking bays. Tree canopies are linked to assist in habitat connections. Trails generally follow contours to minimise steep grades to make walking and cycling easier.
    v. Forest roads - Forest roads accommodate the needs of pedestrians, vehicles and cyclists where appropriate in a shared environment. The road reservation will be of variable width but generally 20 metres. A high level of vegetation retention and ‘soft’ grass swales, where appropriate, will characterise the forest roads. Road pavements will provide for the adequate movement of vehicles. Pavement width will match these requirements with a maximum width of generally 7.0 metres. Roads will include a combination of grass swales, where appropriate, and rolled kerb and gutter. Direct lot access permitted from forest roads with some on–road parking.
    vi. Village drives - Village drives provide access between sectors and the Swansea Bowl Interchange and terminate at each of the three villages. They are improved roads with 20m maximum road reservations to accommodate service corridors, drainage, pedestrian and cyclist facilities (off road); pull-over bays, vegetation retention, and habitat linkages. On-road parking and direct lot access is discouraged and generally with a maximum pavement width of 7.0 to 8 metres. Grass swales replace typical kerb and gutter, where appropriate.
    vii. Appropriate signage should provide guidance to the users of roads and road reserve areas.
3. Roads should be designed to incorporate safe pedestrian and bicycle access within the road reserve or immediately adjacent, where required as part of the overall network.
4. Existing natural vegetation should provide the framework for road location and landscape treatment.

5. Open space areas should be connected by contour trails, forest roads, or bush tracks, where possible, so that they are accessible by multiple means as well as reinforcing the use of roads as part of the open space network.
6. Traffic calming techniques should be used including staggered intersections, narrow roads and retained vegetation and verges with calming techniques most concentrated in the village centres.
7. Rear lanes should service denser residential areas.
8. Road design should incorporate sensitive stormwater design solutions, where appropriate.
9. Road crossing of habitat corridors must be limited.
10. Emergency access locations must be opened to pedestrian and cyclists.
11. Road access to Caves Beach will be restricted as emergency access only with no permanent vehicle access to Pinny Beach.
12. In addition to the controls envisaged under the North Wallarah Masterplan, road access is provided with the connection of Lake Forest Drive to Rafferty's Road, Cams Wharf.
13. The road connection from Murrays Beach to Cams Wharf should only go ahead after the intersection of Cams Wharf Road and the Pacific Highway is changed to a left in and left out intersection.

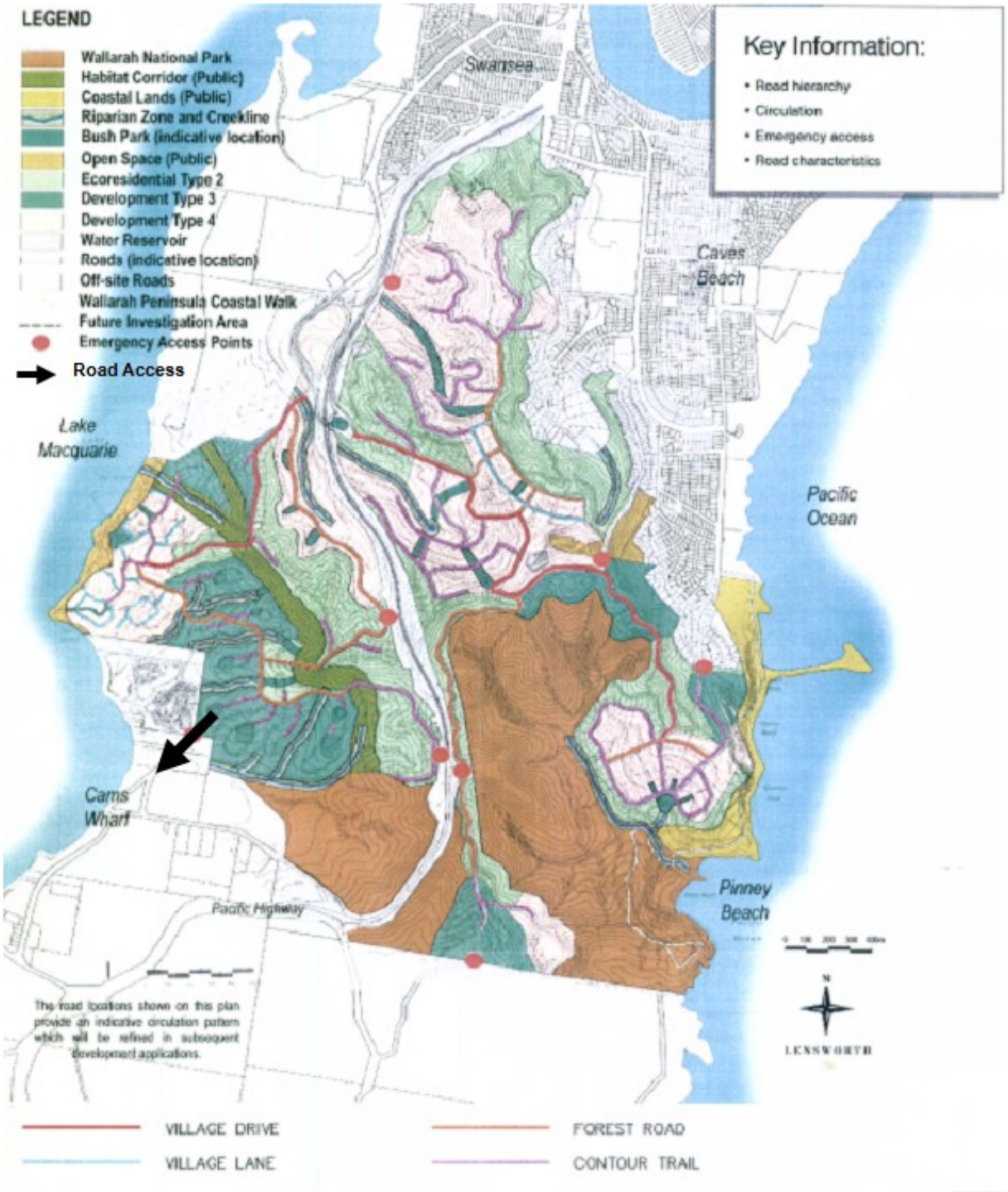


Figure 9 - Indicative Road Locations

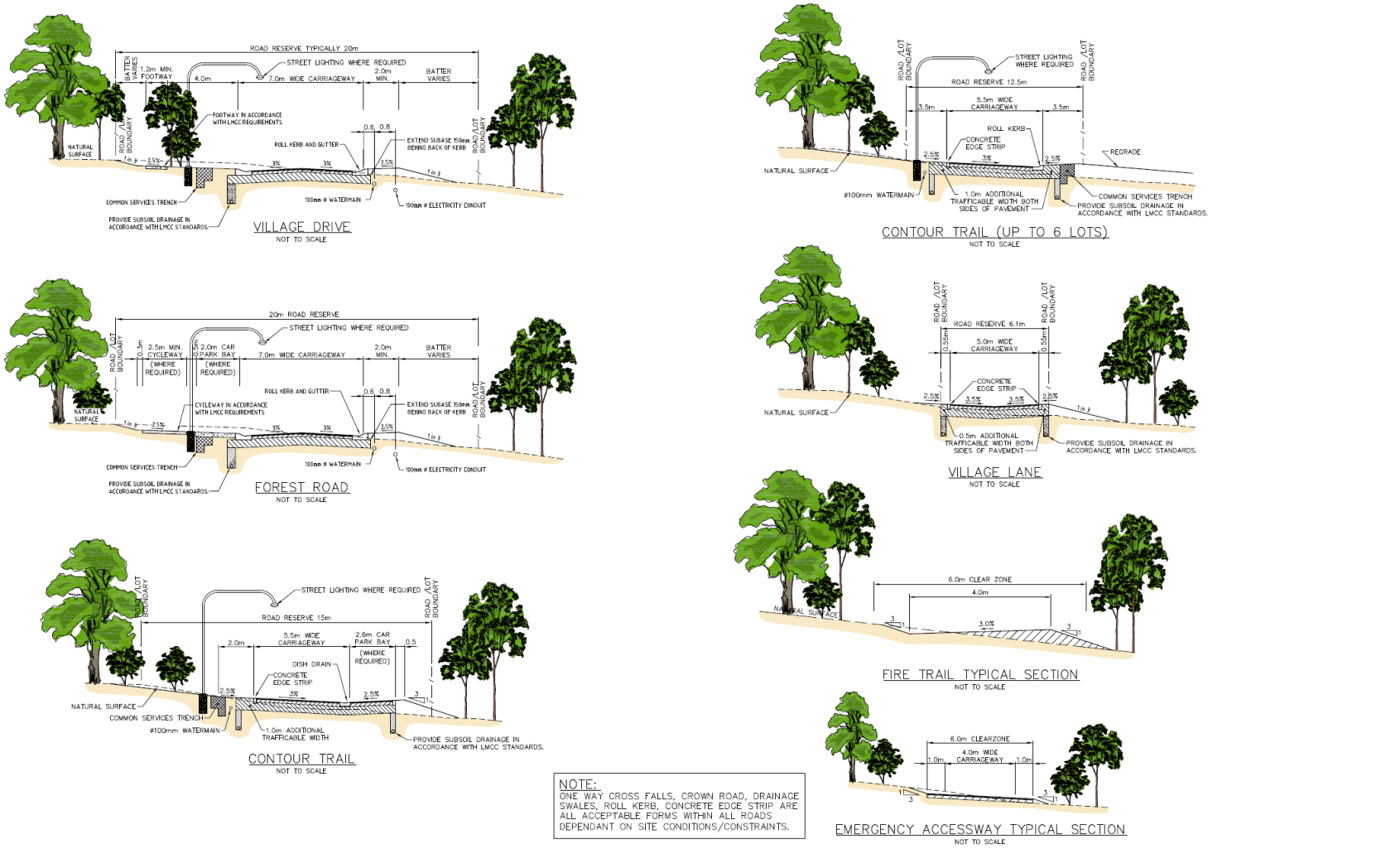


Figure 10 - Typical Road Design

2.5 SCENIC QUALITY

Objectives

a. To ensure the considerations and strategies of the North Wallarah Peninsula Masterplan Visual Integration Plan are achieved.

b. To maintain and enhance viewing opportunities of the lakeside and coastal setting and local and regional views.

c. To ensure that the scenic values of North Wallarah Peninsula are protected and enhanced.

d. To ensure that developments visible or adjoining the coastline, Lake Macquarie or ridgelines maintain and enhance the scenic value of these features.

Controls

1. The consideration and strategies of the North Wallarah Peninsula Masterplan Visual Integration Plan should be followed.
2. Significant view corridors should be maintained in accordance with Figure 11 – View Corridors.
3. Viewing opportunities should be incorporated into the development design with notable viewing points being the Lake Macquarie Jetty, the Scenic Lake Ridge Lookout and Bush Track, the Pacific Highway Footbridge Lookouts, the Coastal Village Entry, Coastal Walk Views, Pinny Beach, Radar Hill Lookout, Northern Lookout, Northern Precinct Village, Mawson's Lookout and the Palm Gullies.
4. Development must be designed to minimise the impact of the built environment on the natural bushland, lakeside and coastal setting.
5. Development types should generally be consistent with Figure 3 – Indicative Development Landuse Plan and Figures 4-7 Development Types 2-4.
6. Subdivision and road design must respond to the topography of the site and be designed to minimise visual impacts.
7. Developments must be designed and sited to complement their location through:
    i. responding to the topography and landscape,
    ii. the retention of existing vegetation,
    iii. incorporating appropriate native landscaping and revegetation of disturbed areas,
    iv. minimising cut and fill,
8. The natural character of ridgelines, hillsides and the foreshore must be protected.
9. Lake Sector:
    i. The lakeside village should be the densest precinct of the lake sector with the massing within the other lake precincts to be responsive of views and canopy heights.
10. Coastal Sector:
    i. The massing and densities of the Coastal Village will be compact with an intimate village scale.
    ii. The development at Radar Hill will be limited to disturbed land, as much as possible.
    iii. Development at Spoon Rocks should consist of small dwellings nestled in the landscape.
    iv. Native vegetation must be reintroduced within the Radar Hill precinct.

v. Clay Graminoid heath must be reintroduced in the Coastal Village.

vi. Existing canopy and understorey must be preserved at Spoon Rocks to assist in screening to/from adjacent off-site development.

11. Northern Sector:

i. The hilltop village should be of a high-density urban form.

ii. Along the northern ridgeline, massing must avoid a continuous 'built' skyline when viewed from adjoining areas.

iii. In the quarry, massing will focus upon containing the highest densities to the most visually contained zone with lower densities to the northern slopes.

iv. In the central ridgeline, massing is aimed at providing medium to higher densities along the central ridge and lower densities to the northwest.

v. Residential layouts should be structured and patterned to give the best fit to the remediated "natural" topography while allowing maximum opportunities for views.

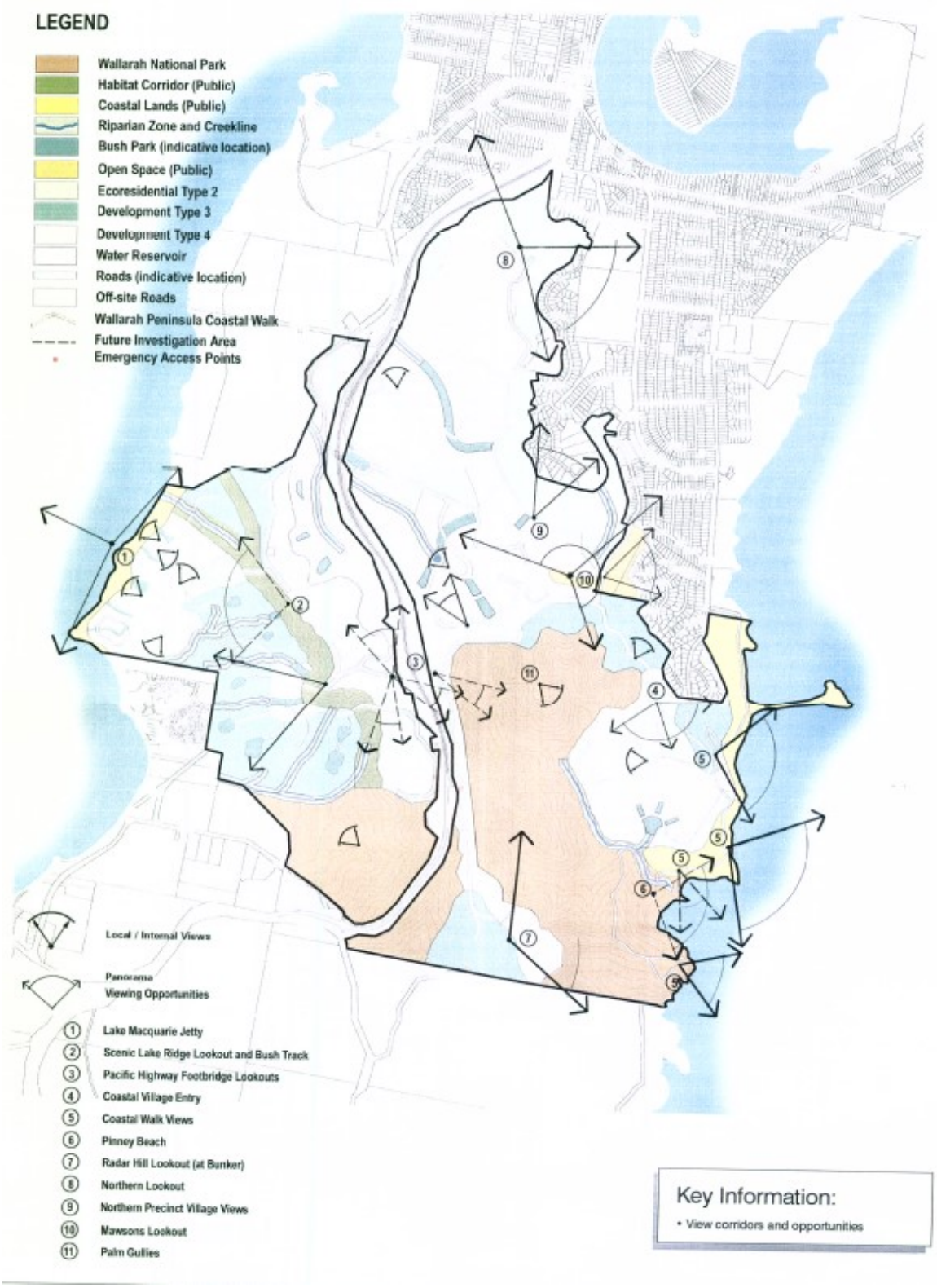


Figure 11 - View Corridors

2.6 ENVIRONMENTAL MANAGEMENT

Objectives

a. To ensure the objectives and principles established in the North Wallarah Peninsula Masterplan Ecological Management Strategy are achieved.

b. To ensure the ongoing ecological viability of the land by protecting the ecological biodiversity and habitat values of the land, the flora and fauna (including invertebrates, fungi and microorganisms) of the land and other ecological values of the land.

c. To protect the aesthetic, heritage, recreational, educational and scientific values of the land.

d. To promote the management of the land in a manner that protects and enhances the environmental values and quality of the land and facilitates public enjoyment of the land, and to implement measures directed to restore degraded bushland.

e. To protect existing landforms such as natural drainage lines, watercourses and foreshores.

f. To retain bushland in parcels of a size and configuration that will enable the exiting plan and animal communities to survive in the long-term.

g. To ensure the ecological function of conservation reserves and habitat linkages are preserved.

h. To promote the retention of natural vegetation within development lots.

Controls

1. Development applications must comply with the considerations and strategies of the North Wallarah Masterplan Ecological Management Strategy.
2. The conservation reserves of Wallarah National Park, the Forest Red Gum Reserve and habitat corridor between these reserves as well as appropriate buffers are conserved in accordance with Figure 12 - North Wallarah Conservation Strategy.
3. An ecological/bushfire buffer zone of 20m must be provided between development areas and Wallarah National Park.
4. Development should generally be consistent with Figure 3 - Indicative Development Landuse Plan and Figures 4-7 - Development Types 2-4.
5. Site Analysis Plans are prepared which outline trees over 75mm trunk diameter and identifies building development envelopes and asset protection areas. The Plans should identify trees to be retained.
6. The habitat corridor must be appropriately managed and secured in perpetuity. This may include dedication to Council as land adjoining the corridor occurs, or through other secure mechanisms.
7. Development must retain natural vegetation on those parts of lots adjoining open spaces, to provide habitat transition zones between proposed development areas and open spaces.
8. Buffer zones should function to reduce human impacts in the conserved area and complement bushfire management objectives.
9. Access into conserved areas from development areas must be restricted to designated pathways and boardwalks.
10. Urban form and building design should seek to maximise the amount of intact vegetation, incorporating canopy, understorey and groundcover that is retained beyond the building envelope, within fire safety guidelines.

11. The detailed design and configuration of developed lots should aim to maximise the amount of natural vegetation that is retained, in accordance with the relevant development type of the specific area.
12. In eco-residential/Development Type 2 areas, the canopy, understorey and groundcover should be retained outside of the development envelope and the asset protection zone as outlined in Figure 4 – Development Type 2.
13. In Development Type 3 areas, the canopy, understorey and groundcover should be retained between clusters of development, outside of the development envelope and asset protection zone as outlined in Figure 5 and 6 – Development Type 3.
14. In Development Type 4 areas, natural vegetation retained as part of the open space system should focus on large mature trees that either contain hollows or are feeding resources for any of the fauna species as outlined in Figure 7 – Development Type 4.
15. Natural vegetation areas to be maintained should focus on clumps of bushland that include large mature trees with hollows.
16. The design of lots and the location of building envelopes on lots should aim to retain pockets of natural vegetation within the developed parts of the site and to connect these pockets of natural vegetation to other areas of natural vegetation via linkages in order to facilitate the movement of wide-ranging species.
17. An inter-connected system of natural vegetation must be established, linking small habitat with other larger habitat, Wallarah National Park and the habitat corridor.
18. Vegetation regeneration should occur where there is no natural vegetation to provide linkages.
19. Habitat linkages should follow natural contours and drainage lines. The riparian areas throughout the site should be protected and managed in accordance with the Masterplan, as functional habitat linkages that facilitate the movement of terrestrial and arboreal fauna across Wallarah Peninsula.
20. A system of natural habitat linkages should be established in conjunction with infrastructure such as roads and pathways, constructed within the developed parts of Wallarah Peninsula. Roads and pathways should be within wide easements that allow the retention of natural vegetation alongside.
21. Local streets must be designed to maximise the number of retained native trees and to maximise the connection of the tree canopy across roads.
22. Any crossings required through the habitat corridor or reserves should be guided by the following strategies:
    i. The number of roads, emergency accesses and pedestrian pathways crossing the habitat corridor should be minimised.
    ii. The width of roads, emergency accesses and pedestrian pathways crossing the habitat corridor should be minimised in order to maintain a consistent canopy layer overhead.
    iii. Roads, emergency accesses and pedestrian pathways should be designed to have low levels of stormwater run-off to reduce the risk of erosion and sedimentation within the habitat corridor.
    iv. The surface materials used in the construction of emergency accesses and pedestrian pathways should, where possible, be a soft surface, such as crushed local rock, to simulate a more natural surface than hard bitumen.

v. The movement of terrestrial fauna across roads, emergency accesses and pedestrian pathways should be enhanced through the careful design of culverts and other crossings, particularly along riparian areas

23. Cats are prohibited in all development types. Dogs are prohibited in Development Types 1 and 2. Dogs are permitted in Development Types 3 and 4.

24. To effectively conserve the areas of vegetation, covenants that ensure the protection of habitat and habitat linkages within individual properties should be established over eco-residential Development Type 2 lots.

25. The design and development of the pedestrian pathways, emergency accesses and road system should be integrated with the open space system to maximise the amount of natural vegetation that may be retained on lots and in the open space system.

26. Riparian zones classified by the NSW Office of Water must be retained and protected. Minimal clearing and development is to occur 0 – 20 metres from the waterway (eg road crossings and some services). Limited development is to occur 20 – 40 metres from the waterway (eg asset protection zones, fire trails, pathways, some limited dwellings).

27. Where there is limited existing vegetation or remediated lands, a Landscape Concept Plan must be prepared with subdivision applications. The landscape concept plan should include a survey of remaining vegetation and the relationship of remnant vegetation to the vegetation retention concept plan, outline suitable plant species to reinforce site specific connectivity and ecology, an assessment of the opportunity to enhance vegetative connections to local and regional open spaces, parks and pedestrian networks, the incorporation of a planting schedule to support the vegetation retention concept plan for private lots and public open space within the proposed subdivision plan, identification of an ongoing regeneration and/or revegetation management plan with the intent of ensuring that a sustainable landscape is achieved.

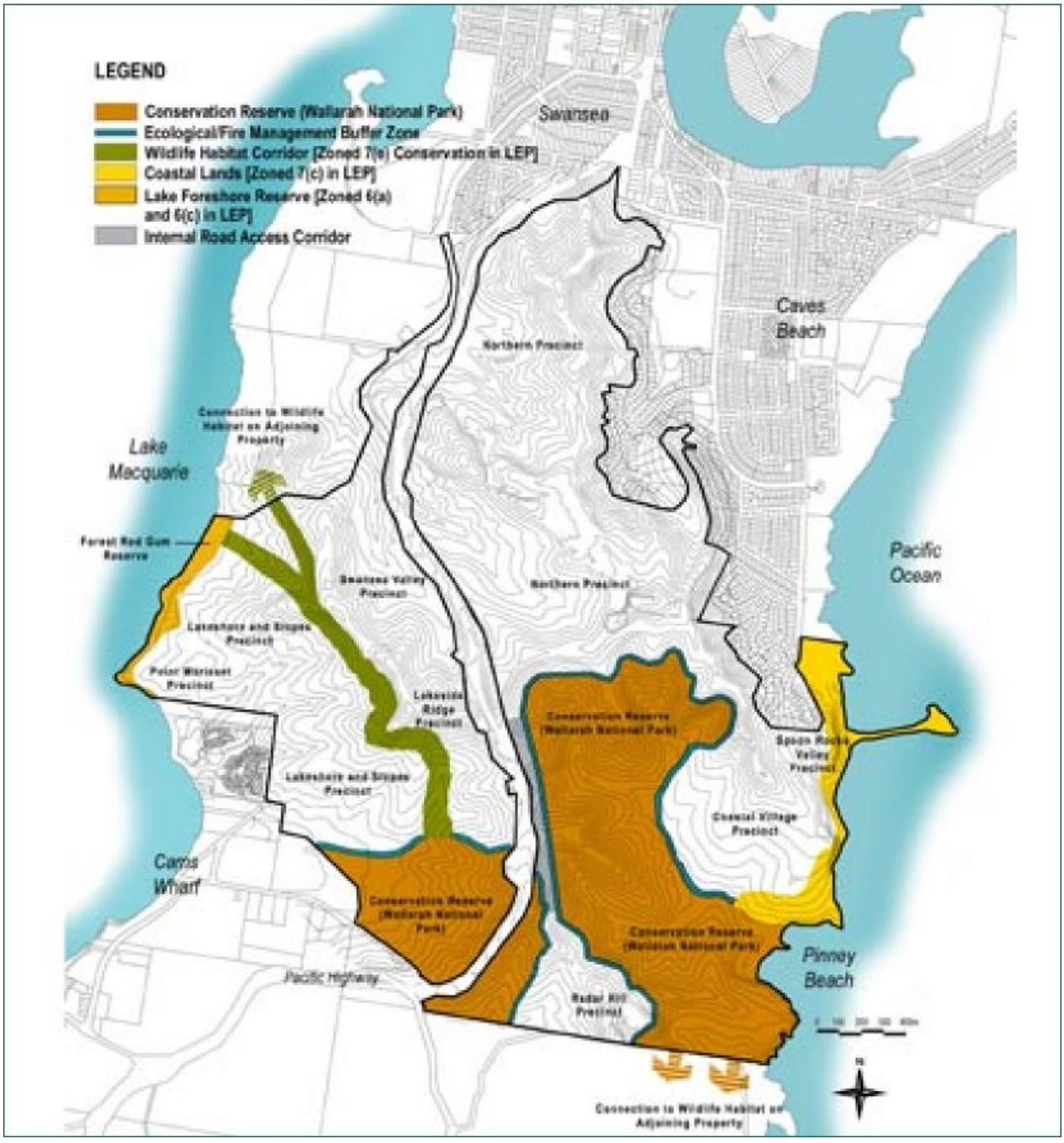


Figure 12 - Conservation Land Use Strategy

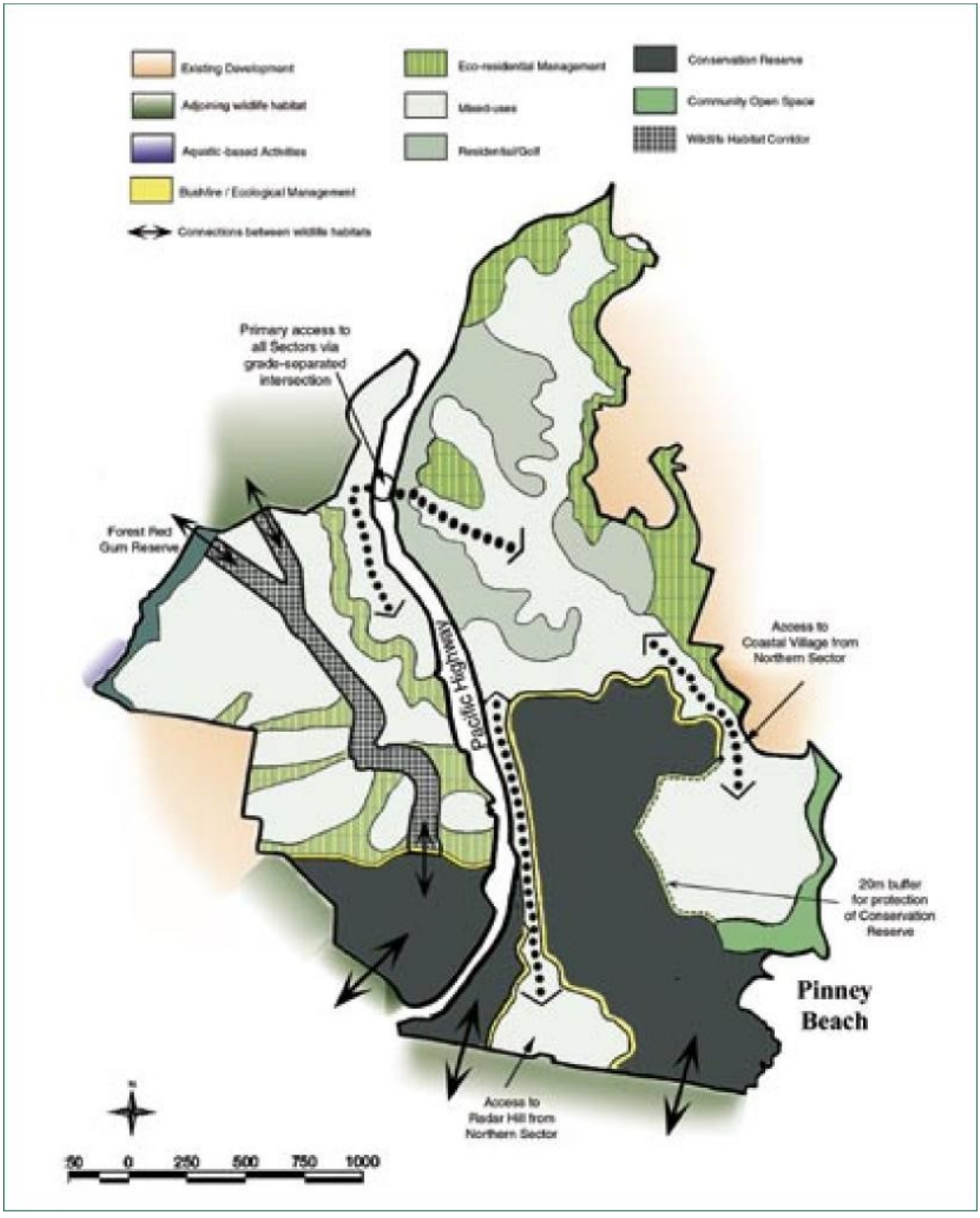


Figure 13 - Conservation Land Use Plan

2.7 ABORIGINAL AND EUROPEAN HERITAGE

Objectives

a. To protect and conserve European and Aboriginal cultural, spiritual, and sacred sites within North Wallarah Peninsula.

Controls

1. Aboriginal heritage items must be protected. These include:
    i. estuarine midden and a coastal midden and burial site at Pinny Beach
    ii. A rock overhang with a potential archaeological deposit on the steep escarpment near the existing suburb of Caves Beach,
    iii. Scar tree at Murrays Beach,
    iv. a midden at Point Morisset,
    v. artefact scatters on Quarries Head Ridgeline.
2. Development adjoining Aboriginal heritage sites must include an assessment of any impacts on the heritage site and appropriate impact mitigation measures.
3. The concrete bunker structure located in Radar Hill should be conserved as part of a heritage protection plan and incorporated into the layout.

2.8 BUSHFIRE MANAGEMENT

Objectives

a. To ensure that risks associated with bushfire are appropriately and effectively managed on the development site.

b. To ensure that bushfire risk is managed in connection with the preservation of the ecological values and biodiversity of North Wallarah Peninsula and adjoining lands.

Controls

1. The considerations and strategies of the North Wallarah Peninsula Masterplan Bushfire Management Plan must be followed.
2. Subdivision applications must include a Bushfire Assessment Report.
3. The North Wallarah Bushfire Management Plan and Contingency Plan will be updated as part of the conditions of consent for subdivision applications.
4. Emergency access points, bush tracks and fire trails must be located as outlined in Figure 14 - Wallarah National Park Proposed Fire Trail Strategy.
5. In addition to the controls envisaged under the North Wallarah Masterplan, road accesses should be provided with the connection of Lake Forest Drive to Rafferty's Road, Cams Wharf and the connection of the Spoon Rocks Precinct to Spoon Rocks Road, Caves Beach.
6. Development Type 2 must contain:
    i. A building development envelope identified for each lot, to take account of bushfire protection requirements.
    ii. Selective canopy removal within the identified building envelope with partial retention of the understorey within the lot.

7. Development Type 3 must include a building envelope identified for each lot, to take account of bushfire protection requirements.
8. Development types should generally be located in accordance with Figure 3 – Indicative Development Landuse Plan and appropriate asset protection zones are developed in accordance with Figures 4-7 Development Type Plans.
9. Development must comply with the *NSW Planning for Bushfire Protection 2006.*
10. Bushfire prone areas and Asset Protection Zones must be identified on the Site Analysis Plan.
11. Access by a network of roads and fire trails must be provided which enables safe access/egress for the public, and facilitate firefighting operations.
12. Adequate water supplies for bushfire suppression operations must be provided.
13. Asset Protection Zones must be provided to emergency access routes, roads, the development and reserve areas and National Parks.

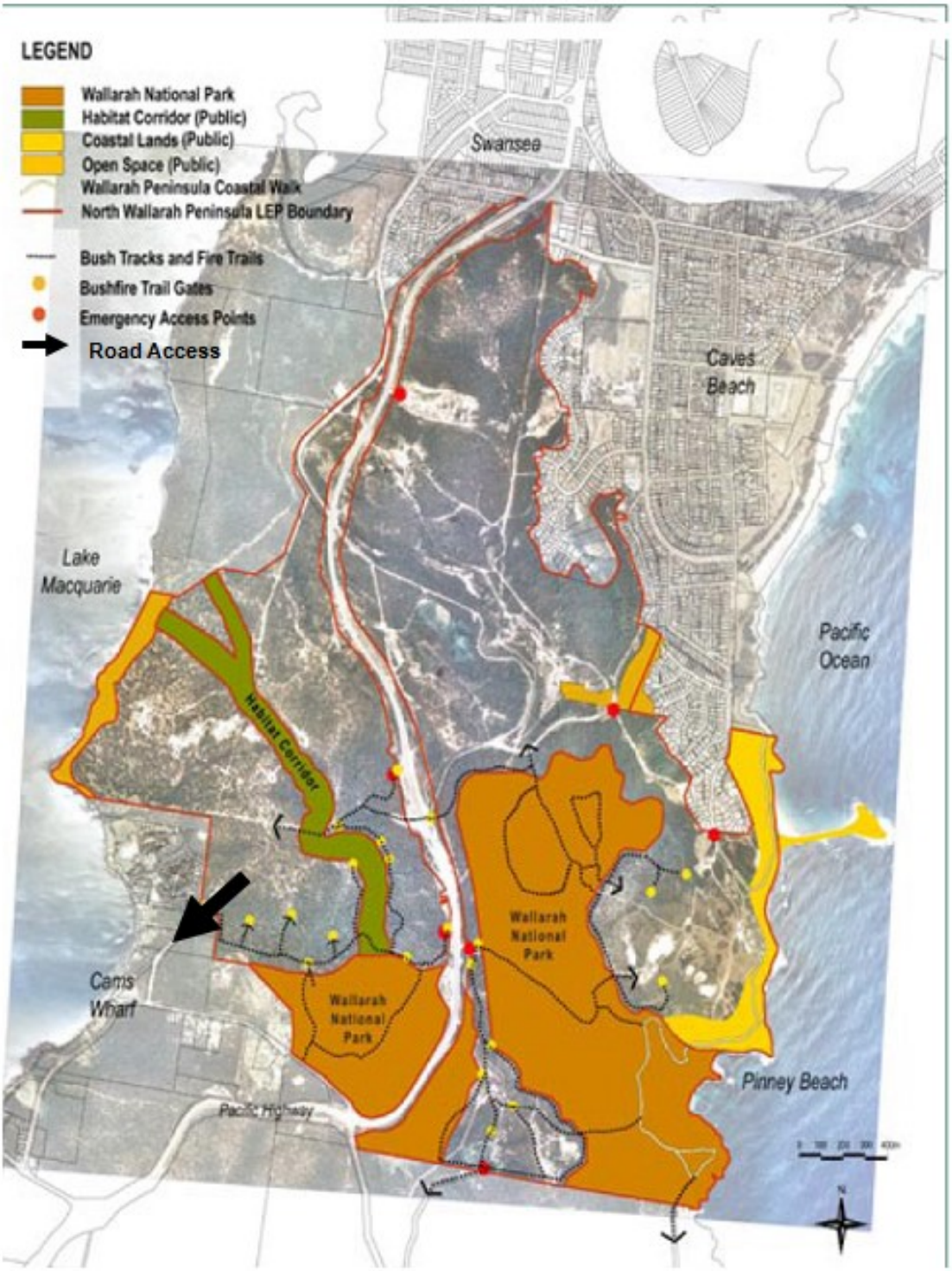


Figure 14 - Wallarah National Park Proposed Fire Trail Strategy

2.9 OPEN SPACE AND RECREATION

Objectives

a. To ensure the consideration and strategies of the North Wallarah Peninsula Masterplan Open Space and Public Access Management Plan are followed.

b. To provide a highly accessible mix of local and district public recreation open space areas and community facilities.

c. To ensure that public open space of appropriate quantity and quality is provided to meet the recreational and social needs of the community.

d. To provide for well distributed and highly accessible open spaces and recreation facilities.

e. To promote a public access network with connections within North Wallarah and offsite.

f. To provide opportunities to appreciate local and regional views.

Controls

1. The number, size and location of recreation and open space areas, local parks and cycleways must be consistent with the North Wallarah Contributions Plan or any Planning Agreement over the land.
2. Recreation and open spaces areas should generally be consistent with Figure 15 - Pedestrian, Cycle and Open Space Plan.
3. Recreation and open space areas must also be consistent with LMCC's specification templates for recreation and community facilities.
4. Cycleways should be consistent with Council's adopted Cycling Strategy.
5. The open space network of the Wallarah Peninsula must complement and enhance the existing open space network of the region.
6. Open spaces must be integrated within the natural landscape and vegetation of the site while minimising man-made visible boundaries between open space and private property.
7. Each recreation and open space areas must be accessible either by roads, fire trails and/or bush tracks and should be made available to residents and visitors including provision for disabled access in appropriate locations.
8. All built form within the open spaces must be representative of the natural setting of the space and should be constructed of reusable materials from onsite activities.
9. Interpretive signage and information to educate and inform the community must be provided within bushland areas.
10. Emergency access locations must be opened to pedestrian and cyclists.
11. Roads should be designed to incorporate pedestrian and bicycle access within the road reserve or immediately adjacent, where required as part of the overall network
12. Public access and open space should connect the Wallarah Peninsula south to adjoining private property and provide the potential for future pedestrian/cycle connection along the ocean and lake edges to the neighbouring communities of Catherine Hill Bay and Cams Wharf and Nords Wharf.
13. Bush tracks must run via existing fire trails from the national park and Radar Hill, within the Coastal Sector to future paths to Catherine Hill Bay.

14. A bush track must connect the southern precincts of the Lake Sector and national park with Cams Wharf via Raffertys, and through Council parklands via Cams Wharf Road.
15. A heritage trail for recreational walking and bicycle riding should be developed leading from Radar Hill (Mine Camp) to Catherine Hill Bay following the alignment of the historic mining trolley route. The development of this Heritage Trail will likely be coordinated with the development of the proposed Coastal Walk, south to Catherine Hill Bay.

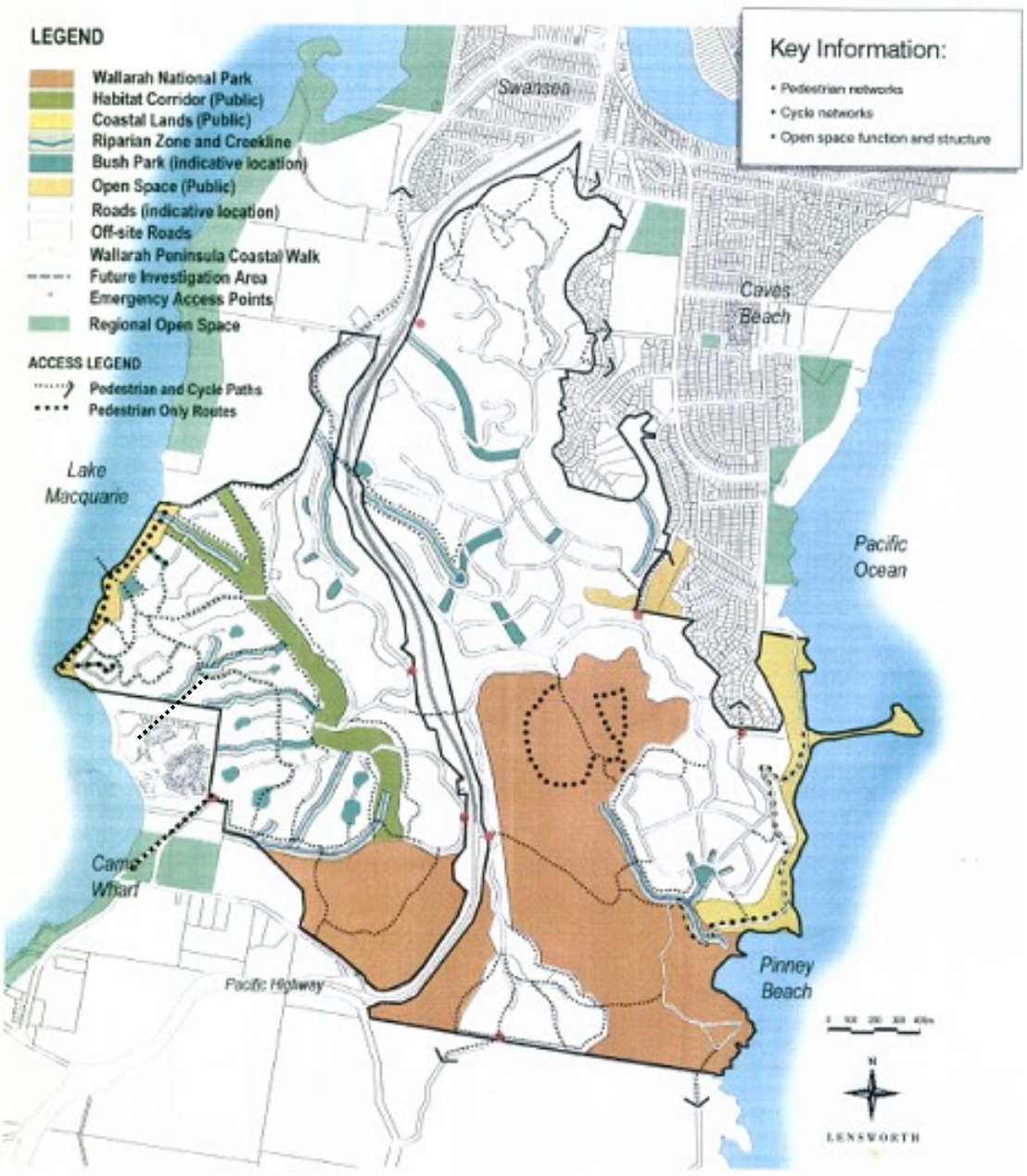


Figure 15 - Pedestrian, Cycle and Open Space Plan

2.10 REMEDIATION OF DISTURBED SITES

Objectives

a. To remediate and provide functional use of disturbed sites within North Wallarah Peninsula.

Controls

1. A Contamination Report must be submitted with subdivision applications, which encompass land, which has previously used for landfill, quarrying or mining purposes, demonstrating whether or not the land is subject to contamination, and if so, the manner in which it is to be remediated so that it can be used for its intended use. The Contamination Report is to be prepared in accordance with the Contaminated Land Management Act 1997, SEPP 55 – Remediation of Land, and the relevant EPA guidelines.
2. Residential development should be focused on remediated previously disturbed areas.
3. Within the northern sector, geotechnical and engineering assessment of the former tip site must occur, and if possible, it should be remediated for open space and recreation.
4. The remediation of disturbed areas should include revegetation with native endemic species.
5. Development must not occur within the northern section of the Northern Sector that is subject to coal seam burning, until this issue is resolved.
6. Appropriate buffers to areas subject to coal seam burning must be put in place until the coal seam burning is resolved.

2.11 PHYSICAL INFRASTRUCTURE

Objectives

a. To ensure that the North Wallarah Peninsula is adequately serviced with infrastructure.

Controls

1. All lots must have access to reticulated water and sewer, electricity, telecommunications and where available gas. Where an equal or superior service can be provided using alternative technology and this service meets all the requirements of the relevant service provider, this alternative may be considered.
2. The controls within the North Wallarah Peninsula Masterplan Physical Infrastructure Management Plan must be addressed.

2.12 ECOLOGICAL SUSTAINABILITY AND ENERGY EFFICIENCY

Objectives

a. To achieve a water sensitive development at North Wallarah Peninsula.

b. The street and lot orientation and lot dimensions facilitate the siting and design of energy efficient buildings with good solar access.

c. To ensure that development occurs in an ecologically sustainable manner, and is energy efficient in terms of design and layout, consumption and materials.

Controls

1. Subdivision patterns should seek to achieve lot layouts and development envelopes that are orientated for solar access, and where possible considering the design requirements.
2. Wallarah Peninsula must be a water sensitive development through adaptation of a combination of water sensitive urban design, water efficient buildings (rainwater tanks, AAA-rating water fittings and fixtures) and water sensitive landscape design. Development incorporates detention and retention basins, grassed swales and retention of natural vegetation to facilitate water infiltration and pollutant filtration.
3. A detailed Stormwater Management Plan must be submitted with development applications. This must address water sensitive urban design principles.
4. On site detention on private lots should be utilised.
5. Settlement form should be compact to reduce impervious surfaces.

PART 3 – LAKE SECTOR - MURRAYS BEACH

3 INTRODUCTION

This section contains local objectives and controls for development in North Wallarah in the Lake Sector commonly known as Murrays Beach and aims to ensure the vision and principles of the North Wallarah Peninsula Masterplan and Conservation Land Use Management Plan (CLUMP) are achieved. This section applies to the Lake Sector as outlined in Figure 16.

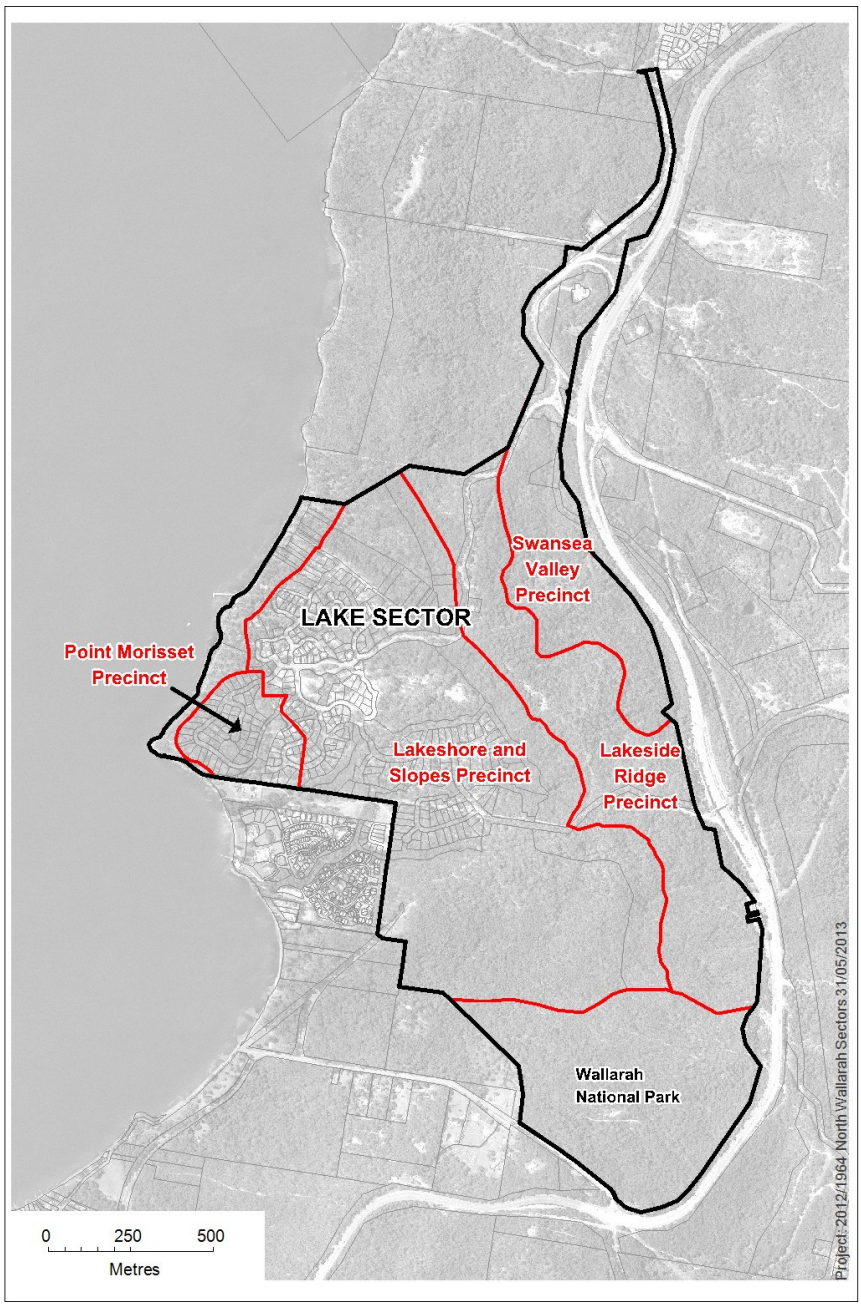


Figure 16 - Lake Sector and Precinct Map - Murrays Beach

3.1 DESIRED FUTURE CHARACTER

The desired future character for this area is outlined in section 1.4 – Lake Sector – Murrays Beach Precinct Character.

3.2 SITE ANALYSIS

Objectives

a. To ensure that the impacts of development are minimised.

b. To ensure that building design and location responds to the topography, landscape and environmental attributes of the individual lot.

c. To maintain and enhance the natural bushland or treed character of the area.

Controls

1. Development must be consistent with the Site Analysis Plan and Development Envelope defined on the Deposited Plan of Subdivision of the lot.
2. The footprint of any building and related structures (including out buildings, storage sheds, retaining walls and courtyards) must be sited wholly within the Development Envelope designated in the Site Analysis Plan and Development Envelope as defined on the Deposited Plan of Subdivision of the lot.
3. The maximum building height must not exceed the height designated on the Deposited Plan of Subdivision for the lot. The Site Analysis and Development Envelope Plan provides a guide to the height above natural ground level.
4. All building/infrastructure services must be located underground. Trenching is not permitted within the dripline of existing trees to minimize impact. Site plans are to show service trench location in relation to existing trees.
5. In the area outside of the Development Envelope, no native trees or native understorey vegetation are to be ring barked, cut down, topped, lopped, removed, injured, wilfully destroyed or cleared unless:
   i. native understorey vegetation is required to be removed or lopped as part of an ongoing program of vegetation/ fuel management (if required) contained in an Approved Bushfire Fuel Management Plan for the neighbourhood, or
   ii. individual native trees can be demonstrated to be a clear risk to personnel safety and or property and supported by an arborist report.
6. Prior to any such removal of native trees, endorsement by the Community Association and approval by Lake Macquarie City Council must be granted in accordance with Clause 5.9 of the LMLEP 2014 and Council's Tree Preservation and Native Vegetation Management Guidelines.
7. An arborist report must include a plan to scale that clearly shows:

   i. The location of the proposed development;

   ii. The location, diameter, canopy spread, condition and species of each tree on the site;

   iii. All trees to be removed;

   iv. All trees to be retained;

   v. All trees with habitat hollows;

   vi. Tree protection zones for all trees to be retained; and

   vii. Any asset protection zones.

8. Habitat trees must be assessed by a suitably qualified flora and fauna specialist.

***Note*:** Evidence to support tree removal or lopping must be forwarded to Council in accordance with requirements outlined in Council's *Tree Preservation and Native Vegetation Management Guidelines*. Council's Tree Assessment Officer may undertake a site inspection to verify that these conditions are satisfied.

3.3 BUILDING DESIGN

Objectives

a. To promote unique sustainable lakeside and coastal housing that responds to the sensitive landscape and environment of Murrays Beach.

b. To promote sustainable building design that responds to the topography and vegetation of the site and limits the use of cut and fill construction techniques.

Controls

1. Building design must respond to the natural landscape and topography of the site. This includes the use of elevated building forms using bearer and joist construction and split level housing design following the contours of the site.

2. Buildings should be sited with their long axis parallel to the contours if the building envelope allows, to reduce the need for earthworks.

3. Built form on sloping sites should be of frame construction with minor use of masonry. Where masonry is proposed, it must not exceed 50% of each façade.

   Note – For each façade of the building, 50% rendered masonry at or below window sills, with 50% weatherboard cladding above, is not a desired outcome to achieve compliance with this part.

4. Lightweight construction techniques must be utilised predominately, including a light weight insulated floor, timber or metal framed floorings, strip footings and/or piers, pole frame construction, sheet metal roofing, timber or metal frame roof framing.

5. On sites where the slope exceeds 1:10 (10%), slab on ground construction is not considered an appropriate design solution and may be considered only where Council is satisfied that site constraints prohibit elevated construction.

6. Where proposed on slopes less than 1:10 (10%), slab on ground construction should incorporate split level design conforming to the slope of the land and be undertaken as outlined below in control 7. Where required to accommodate natural ground levels, dropped edge beam slab construction must be employed to contain fill.

7. Cut or fill is to be limited to earthworks within the proposed building footprint(s) only, with a maximum cut of 1m and fill of 1m. On sites with slopes greater than 1:10 (10%), earthworks external to the building footprint will be permitted for vehicular access only, with maximum cut of 1m and fill of 1m. Earthworks for vehicular access includes garage/ carport slabs, and associated driveway only. Cut or fill for pedestrian access around the perimeter of the dwelling, and for alfresco/courtyard/clothes drying areas, must not extend beyond the footprint of the building.

8. Excavations with long axis running perpendicular to natural contours will not be supported.

   Note: The ***building footprint*** is the area designated for the building design including the house, garage and attached decks. The building footprint is not the same as the development envelope. The ***development envelope*** is the area outlined in the Site Analysis and Development Envelope Plans. The building footprint must be located within

the development envelope. The development envelope incorporates the building footprint plus other unbuilt areas. No cut and fill can occur outside the building footprint.

9. Existing ground profiles and tree cover must be demonstrated by registered survey dated within 60 days prior to lodgement of development application.
10. Where undercroft rooms and garages are proposed under the main dwelling on high side lots, excavation must be limited to a maximum length of 8m.
11. Where site conditions restrict the use of bearers and joists and slab on ground construction is proposed, drop edge beams are the preferred method of taking up level changes with natural grades (in lieu of fill batters). In all cases, front or rear facades with drop edge beams must incorporate a lightweight articulation treatment comprising a min 1.5m deep x 4m wide verandah or deck forward of the building line and contained within the development envelope. On side elevations where deep edge beams exceed 600mm above natural ground level, reinforced concrete elements are to be concealed or lined or finished with product complementary to the proposal.
12. Where excavation is proposed within the building footprint, the natural ground levels must be reinstated around the dwelling following completion of building works prior to occupation and/or landscaping.
13. The underside of an elevated home must be either concealed or lined and presentable from public view and integrated with the overall dwelling design.
14. Construction Management Site plans must demonstrate compliance with the Construction Management Requirements and be consistent with controls 15 and 16.
15. Top soil removed and stockpiled during construction should be stored and respread within the Development Envelope or removed from the site.
16. Undercroft spaces must be finished with even grades, compacted and all debris and building rubble removed prior to occupation.

3.4 BUILDING FACADES, VERANDAHS, PORCHES AND DECKS

Objectives

a. Building facades are articulated, unique and respond to the individual setting of Murrays Beach.

b. To ensure that building design includes verandahs, porches and decks for outdoor living spaces and to emphasise the village living of Murrays Beach.

c. To enhance street amenity for pedestrians and make a positive contribution to the streetscape.

d. To ensure that development responds to the existing, or desired future character of the street.

Controls

1. A clear defined entry way must be visible from the street.
2. Eaves must be at least 450mm (excluding gutter).
3. The maximum unarticulated façade length must be 10m with minimum step of 450mm.
4. The façade should be articulated and should incorporate sun shades, windows, doors, openings and stepping in of the building façade.
5. Floor to Ceiling Height for single storey slab on ground dwellings should be a minimum of 2.7m. All other dwellings types are to have minimum ceiling heights in accordance with the Building Code of Australia.

6. Verandahs, porches or decks must be integrated into the building design.
7. Where the front façade of the dwelling is visible from the street, front verandahs must take up at least 30% of the width of the front façade (excluding 1m width in front of the front door) or 4m whichever is the greater.
8. Where the main roof form of the dwelling is hipped or gabled then the verandah must contain a separate roof structure. Porticos are not sufficient in satisfying this control.
9. The minimum depth of a front porch/deck/verandah must be 1.5m. Where formal outdoor living areas are proposed to the rear of the dwelling, minimum depth may be reduced to 1.2m where associated roof or pergola structure is proposed, separate from the main roof structure.
10. Balustrades must be open style, constructed of materials to complement the home design. Post and wire, clear glass and powder coated aluminium are a satisfactory solution to this control.

3.5 ROOF FORM

Objectives

a. To promote architectural roof forms that integrate with the site and building design.

Controls

1. Roofs should be simple and designed to respond to solar orientation needs, the slope of the site, the building design and the immediate surroundings.
2. Where traditional pitched roofs are proposed, roof designs must be limited to a maximum of 3 ridges. The massing of smaller elements and/or pavilions linked with breezeways are supported and encouraged.

3.6 BUILDING MATERIALS

Objectives

a. Building materials and colours reflect the lakeside and bushland setting of the landscape.
b. Building materials and finishes should add to the architectural character and environmentally sustainable design.
c. Building materials should limit the visual impact of buildings viewed from the lake and promote blending with the natural bushland setting.

Controls

1. Building materials must be a mix of materials/colours/finishes of lightweight cladding and rendered/applied finish masonry to reflect traditional lakeside and bushland character and add individuality to the building design.
2. External materials may include rendered or bagged masonry, stone or architectural veneers, glass, weatherboarding or fibre cement architectural products, plywood and metal cladding such as galvanised and pre-coloured metal cladding, copper and steel.
3. Rendered, bagged and painted masonry or fibre cement sheeting and stone is only permitted for a maximum of 50% of the area of each building façade and is to complement the total design. Where masonry is proposed for two storey dwellings the upper storey must incorporate lightweight materials, however colour finished fibre cement sheeting is not permitted.
4. Galvanised and pre-coloured metal cladding must not constitute more than 50% of the extent of each building façade.

5. Face brickwork must not be used.
6. Tile roofs must not be used.
7. External colours should be selected in accordance with Appendix A. Other colours that blend with the natural environment and add to the architectural design will be assessed on a case by case basis.
8. A maximum of 10% of the façade may be bright or contrasting colours selected from colours in the natural landscape. Bright or contrasting colours may only be used for highlights, feature panels and trims. Refer to Appendix A for a range of suitable contrasting colours.
9. Highly polished reflective finishes are not permitted.
10. The roof colour is to complement the colour of the home and should reflect the colour chart in accordance with Appendix A. Other colours that blend with the natural environment will be assessed on a case by case basis.
11. External colour selections must be submitted with building design plans for endorsement.

3.7 BUSHFIRE PROTECTION

Objectives

a. To ensure that risks associated with bushfire are appropriately and effectively managed on the development site.

b. To ensure that bushfire risk is managed in connection with the preservation of the ecological values and biodiversity of North Wallarah Peninsula and adjoining lands.

Controls

1. All proposed dwellings should have roof gutters and valleys, leaf proofed by the installation of an external gutter protection shroud system that denies all leaves from entering the gutter and building up on that gutter. Any material used in such a system should have a flammability index of no greater than 5 (as measured against AS 1530.2).
2. All outward opening doors and windows including bifold, stacker and solid or glazed louvers are to be screened to mitigate against ember attack.

3.8 FENCING

Objectives

a. To encourage and enhance the existing natural bushland character and a village streetscape with the use of open landscape treatments and limiting boundary fencing.

Controls

1. Where required for privacy and/or security, boundary fencing is permitted to the side and rear boundaries in accordance with the following fencing types: post and wire fence, slat fencing, (50% transparency) to 1.5m high, pool fencing to 1.5m high.
2. Where swimming pools are proposed an isolated pool fence in accordance with AS1926.1-2007, will completely surround the pool and be contained within the development envelope. Boundary fencing must not be used as part of a pool enclosure.
3. All fencing should be adequately screened with vegetation and located at least 1m behind the building line.
4. Where required for privacy or containment of a pet, courtyard fencing is permitted to a maximum 1.8m within the development envelope to the side and rear of your dwelling only

and located at least 1m behind the building line. Courtyard fencing shall be a minimum of 25% transparency and compliment the architectural design of the home.

3.9 LANDSCAPING

Objectives

a. To enhance the bushland setting and protect the sensitive environment through the retention of native vegetation.

b. To provide a bush garden and landscaping which contributes to the ecological function of the area.

Controls

1. In the private bushland outside the defined Development Envelope native vegetation is to be maintained and managed. No native trees or native understorey vegetation is to be ring barked, cut down, topped, lopped, removed, injured, wilfully destroyed or cleared outside the development envelope unless:

   i. native understorey vegetation is required to be removed or lopped as part of an ongoing program of vegetation/ fuel management (if required) contained in an Approved Bushfire Fuel Management Plan for your neighbourhood, or

   ii. where Council is satisfied beforehand that individual native trees care a clear risk to personal safety and or property, or

   iii. prior to any such removal of native trees, endorsement by the Community Association and approval by Lake Macquarie City Council in accordance with Clause 5.9 of the LMLEP 2014 and Council's Tree Preservation and Native Vegetation Management Guidelines is obtained.

2. If removal of trees is required for the siting of the dwelling, the same or similar plant species must be planted elsewhere on the lot.

3. Landscaped areas must have a "bushland" character displaying a range of local flora.

4. Landscaped areas must incorporate native grasses, understorey and ground cover vegetation and be consistent with any bushfire fuel management requirements.

5. Suitable plant species endemic or suitable native plant species selected from the approved plant species list (refer Appendix B) must be used for revegetation of disturbed areas both outside of the Development Envelope and within the Development Envelope.

6. Non-invasive exotic species are only permitted within the Development Envelope and must be contained within defined edges (eg timber, steel or masonry edging)

7. Lawns are restricted to a maximum area of 100sqm or within the development envelope (whichever is the greater). Turf variety is limited to Buffalo species. Turf is only permitted within 1m of the lot boundary and must be contained within defined edges (eg timber, steel, spade or masonry edging).

8. Hard surface landscaping pathways and paved areas must be designed and constructed of materials that facilitate water infiltration into the subsoil. Unit paving, sandstone flagging, compacted and loose gravels are acceptable materials. Insitu coloured concrete slab pavement is only permitted where it can be demonstrated that adequate infiltration of surface water within the lot is achievable.

9. Retaining walls for gardens and landscaping are permissible only within the Development Envelope and are to be no more than 600mm in height and constructed to complement the house design. These walls are permitted for landscaping purposes only and are not to be used to facilitate benching of the site. Material selection for retaining and garden

structures are to be complementary to the house design. Treated pine may be used at the rear of the dwelling.

10. Altering the ground surface around existing trees is not permitted without an arborist's report.
11. Placement of fill materials around trees or against trees is not permitted.
12. Landscaping works must be completed within 3 months of occupation.

Note: Evidence to support tree removal or lopping must be forwarded to Council in accordance with requirements outlined in Council's Tree Preservation and Native Vegetation Management Guidelines. Council's Tree Assessment Officer may undertake a site inspection to verify that these conditions are satisfied.

3.10 CAR PARKING

Objectives

a. To ensure that onsite car parking, garages, and driveways do not dominate the streetscape.

b. To enhance street amenity for pedestrians and make a positive contribution to the streetscape.

c. Driveway design incorporates water sensitive urban design.

Controls

1. To mitigate garage dominance, car accommodation must be located behind the front building line of the house and within the development envelope of the lot.
2. Single and double garages and/or carports are permitted on all dwellings (attached or detached).
3. Garages must be setback a minimum of 1m from the front building line and must not occupy more than 50% of the front façade width. The maximum width of a garage door opening is 6m.
4. The maximum area of a garage/carport must not exceed 60m^2.
5. Triple garages or carports are not permitted.
6. Where detached garages or carports are proposed they are to be designed to integrate with the home design in terms of roof pitch, materials and colours.
7. Garage doors are to complement the design and be of a similar tone to the dominant surrounding roof colour and be either tilt up, panel lift or traditional swing type without feature patterns or windows.
8. Only one vehicle entry/exit point is permitted with a maximum of 3metres width at the front boundary. The location should avoid the biofiltration basin and any trees.
9. Driveway surfaces are to be designed and constructed of materials that facilitate infiltration into the subsoil or onsite detention basins. Asphalt, macadamised gravel, compacted gravel, unit paving, coloured insitu concrete and permeable concrete in approved colours and finishes are acceptable materials.
10. Where the driveway surface does not permit the infiltration of stormwater (ie concrete), the driveway must incorporate appropriate elements of infiltration (such as horizontal aggregate strips) at 3m intervals.
11. Driveway crossovers to Council owned footpaths/verges are to be constructed of insitu coloured concrete (CCS Lemon Cream) where adjacent to footpaths or macadamised

asphalt elsewhere to Council requirements where timber bridges or asphalt crossovers have not been provided.

12. Generally, driveway grades will not exceed 1:5. Steeper grades will be considered on their merits. Appropriate grades and transition slopes are to be provided to avoid vehicle scraping. On steeper driveways where the gradient is over 5%, instead of permeable driveway pavements, the driveway should be drained to an onsite infiltration system.
13. Boats, caravans and trailers boats, caravans and trailers may be stored on lots (in addition to car accommodation) provided they are located within the Development Envelope and are located behind the front building line and adequately screened to a height of 1.8 metres across the street frontage.
14. Any form of temporary accommodation (including motor homes, caravans, tents and portable sheds are not permitted to be occupied on a permanent basis.

3.11 WATER EFFICIENCY

Objectives

a. To achieve a water sensitive development at North Wallarah Peninsula.

Controls

1. Rainwater tanks should be installed to a minimum capacity as shown on the Site Analysis Plan and Development Envelope Plan or greater if required by BASIX (including 2,000L stormwater detention when required) to enable the storage and reuse of roof water in the garden, for car washing and other uses to supplement mains water supply.

3.12 ANCILLARY STRUCTURES/ SWIMMING POOLS AND TENNIS COURTS

Objectives

a. To maintain and enhance the streetscape of Murrays Beach.

Controls

1. Ancillary structures including outdoor clothes drying areas, garbage waste and recycling, rainwater tanks, air conditioning units and hot water heater tanks should be located at the side or rear of the property within the Development Envelope and adequately screened from public view.
2. Ancillary services required to be located on the roof including satellite dishes should be located to the rear of the property.
3. Solar panels without stand up brackets can be located on all roof planes.
4. Security Screens which are visible from the street or public pathways shall be Amplimesh 'clearguard' or equivalent (without patterns or grills). The screen frame and any insect screens frames shall be of a similar colour to that of the door or window into which they are installed.
5. Where outbuildings are required for additional storage or work space one outbuilding no greater than 9sqm is permitted within the development envelope to the rear of the house.
6. If a swimming pool or tennis court is proposed it must be located within the Development Envelope and to the rear the property. On larger lots > 1000m^2 swimming pools and tennis courts to the side of the dwelling will be considered on a case by case basis.
7. Maximum 1.5m cut and/or 1.5m fill is permissible for swimming pools surrounds and tennis courts.

8. Any swimming pool edges elevated above the ground should be integrated with landscaping or decking to a maximum height of 1.5m above natural ground level.
9. Filtration and pumping equipment is to be enclosed and located adjacent to your pool within the Development Envelope.

3.13 CONSTRUCTION MANAGEMENT

Objectives

a. To protect the sensitive environment of North Wallarah Peninsula.

Controls

1. Development applications for a proposed building must be supported by a Construction Management Plan and address the requirements of Appendix C – Construction Management Plan Requirements.

Appendix A – Colour Palette – Lake Sector – Murrays Beach

APPENDIX A: Colour Palette

This colour palette draws its character from a variety of natural landscape experiences of the Wallarah Peninsula namely the serenity of the lake highlighted by the sunset, sculptural quality of red gum forest and the natural vegetation of the bushland.

Material, textures and colours should respond to these natural landscape palette and blend with the surroundings minimising contrast and use of non-reflective finishes.

Textures should likewise respond to site elements like tree trunks, rock, wave, etc.

For lots visible from the lake and foreshore reserve, external colours should enable the building to blend with local vegetation. In forest areas, external colours should be vibrant and their hues selected from immediate locality.

Roof Palette

Note: Other selections that are within the same tonal range of one of the above palettes will be considered for approval. Black or near black selections will not be considered.

While every effort is made to provide accurate colour information, the colour palettes on this page are subject to variation due to printing techniques. It is recommended that actual manufacturer's samples are examined when selecting finishes for your home.

Driveway Palette

Crossover Palette

Accent Palette

Dominant Element of Facade, a gable feature or projecting element

Community Palette

Main Body of the Building

Note: The lighter shades of Alabaster, Winter sky and Far Horizon should be limited to only part of the dwelling and be limited to dwellings not visible from the Lake and foreshore areas.

Appendix B – Plant Species List – Lake Sector – Murrays Beach

APPENDIX B – Plant Species List

SPECIES	COMMON NAME
TREES	
Acacia irrorata	Green Wattle
Allocasuarina littoralis	Black She-oak
Allocasuarina torulosa	Forest Oak
Angophora costata	Smooth-barked Apple
Backhousia myrtifolia	Grey Myrtle
Casuarina glauca	Swamp Oak
Corymbia gummifera	Red Bloodwood
Corymbia maculata	Spotted Gum
Cupaniopsis anacardioides	Tuckeroo
Eucalyptus capitellata	Brown Stringybark
Eucalyptus haemastoma	Scribbly Gum
Eucalyptus longifolia	Woolybutt
Eucalyptus paniculata	Grey Ironbark
Eucalyptus punctata	Grey Gum
Eucalyptus resinifera	Red Mahogany
Eucalyptus siderophloia	Northern Grey Ironbark
Eucalyptus tereticornis	Forest Red Gum
Eucalyptus umbra	Broad-leaved White Mahogany
Exocarpus cupressiformis	Native Cherry
Glochidion ferdinandi	Cheese Tree
Livistona australis	Cabbage Tree Palm
Pittosporum undulatum	Sweet Pittosporum
SHRUBS	
Acacia buxifolia	Box-leaved Wattle
Acacia falcata	Sickle Wattle
Acacia implexa	Hickory Wattle
Acacia longifolia	Sydney Golden Watlle
Acacia myrtifolia	Red-stem Wattle
Acacia suaveolens	Sweet Scented Wattle
Acacia terminalis	Sunshine Wattle
Acacia ulicfolia	Prickly Moses
Acrotriche divaricata	Ground Berry
Astrotricha longifolia	Broad Leaf Star Hair

SPECIES	COMMON NAME
SHRUBS (CONT)	
Banksia oblongifolia	
Banksia spinulosa	Hairpin Banksia
Boronia polygalifolia	Milkwort Boronia
Breynia oblongifolia	Breynia
Bursaria spinosa	Blackthorn
Cassinia cunninghamii	
Clerodendrum tomentosum	Hairy Clerodendrum
Comesperma defoliatum	
Comesperma ericinum	Matchheads
Daviesia ulicifolia	Gorse Bitter-pea
Dillwynia retorta	Eggs and Bacon
Dodonaea triquetra	Common Hop Brush
Epacris pulchella	
Goodenia ovata	Hop Goodenia
Hibbertia empetrifolia	
Hovea linearis	Narrow-leaf Hovea
Kunzea ambigua	Tick Bush
Lambertia formosa	Mountain Devil
Leptospermum polygalifolium	Yellow Tea Tree
Leptospermum trinervium	Flaky-barked Tea Tree
Leucopogon ericoides	
Leucopogon juniperinus	Prickly Bearded Heath
Lomatia silaifolia	Crinkle Bush
Maytenus silvestris	
Melaleuca stypheloides	Prickly-leaved Paperbark
Melaleuca styphelioides	Prickly-Leaved Tea Tree
Mirbelia rubiifolia	
Notelea longifolia	Mock Olive
Ozothamnus diosmifolius	Ball Everlasting
Persoonia lanceolata	Lance-leaved Geebung
Persoonia levis	Broad-leaved Geebung
Persoonia linearis	Narrow-leaved Geebung
Pimelea linifolia	Slender Rice Flower

SPECIES	COMMON NAME
SHRUBS (CONT)	
Pittosporum revolutum	Yellow Pittosporum
Podolobium ilicifolium	Native Holly
Polyscias sambucifolia	Elderberry Panax
Pomaderris lanigera	
Pultenaea daphnoides	Large-leaf Bush Pea
Pultenaea euchila	
Pultenaea paleacea	
Pultenaea retusa	
Pultenea villosa	Bacon and Eggs
Rapanea variabilis	Muttonwood
Rubus parvifolius	Native Raspberry
Rulingia dasyphylla	Kerawang
GROUNDCOVERS AND VINES	
Acianthus fornicatus	Pixie Caps
Adiantum aethiopicum	Common Maidenhair
Adiantum hispidulum	Rough Maidenhair
Arthropodium milleflorum	Pale Vanilla Lily
Billardiera scandens	Apple Dumplings
Blechnum cartilagineum	Gristle Fern
Brachyscome angustifolia	
Caesia parviflora	Pale Grass Lily
Cassytha glabella	Devil's Twine
Cassytha pubescens	Devil's Twine
Cayratia clematidea	Slender Grape
Centella asiatica	Indian Pennywort
Cheilanthes sieberi	Mulga Fern
Clematis aristata	Clematis
Clematis aristata	Old Man's Beard
Commelina Cyanea	Scurvy Weed
Corybas pruinosus	Helmet Orchid
Cryptostylis erecta	Bonnet Orchid
Cryptostylis subulata	Large Tongue Orchid
Dampiera stricta	Blue Dampiera
Desmodium rhytidophyllum	Rusty Tick-trefoil (furry)

SPECIES	COMMON NAME
GROUNDCOVERS AND VINES (CONT)	
Desmodium varians	Slender Tick-trefoil
Dianella caerulea	Flax Lily
Dianella longifolia	Flax Lily
Dichelachne michrantha	Short Hair Plume Grass
Dichondra repens	Kidney Weed
Doodia aspera	Rasp Fern
Einadia hastata	Berry Saltbush
Euchiton involucratus	Star Cudweed
Eustrephus latifolius	Wombat Berry
Fimbristylis dichotoma	Common Fringe-rush
Geitenoplesium cymosum	Scrambling Lily
Geranium homeanum	
Glossodia minor	Small Waxlip Orchid
Glycine clandestina	Twining Glycine
Glycine tabacina	Twining Glycine
Gonocarpus teucroides	Raspwort
Goodenia hederacea	Ivy Goodenia
Goodenia heterophylla	
Hardenbergia violacea	False Sarsparilla
Hibbertia aspera	
Hibbertia dentata	Twining Guinea Flower
Hibbertia scandens	Climbing Guinea Flower
Histiopteris incisa	Bat's-wing Fern
Hydrocotyle peduncularis	Pennywort
Hypericum gramineum	Little St Johns Wort
Hypolepis muelleri	Harsh Ground Fern
Lagenifera stipitata	Common Lagenifera
Macrozamia spiralis	
Oxalis perennans	
Pandorea pandorana	Wonga Vine
Parsonsia straminea	Common Silkpod
Phyllanthus hirtellus	Thyme Spurge
Plantago debilis	Slender Plantain
Plectranthus parviflorus	Cockspur Flower

SPECIES	COMMON NAME
GROUNDCOVERS AND VINES (CONT)	
Polymeria calycina	Bindweed
Poranthera microphylla	Small Poranthera
Portulaca oleracea	Purslane
Pratia purpurescens	Whiteroot
Pteridium esculentum	Bracken Fern
Pterostylis obtusa	Blunt-tongued Greenhood
Ranunculus plebeius	Buttercup
Sarcopetalum harveyanum	Pearl Vine
Sigesbeckia orientalis	Indian Weed
Smilax glyciphylla	Sarsparilla
Stephania japonica	Snake Vine
Tetratheca juncea	Black-eyed Susan
Tricoryne elatior	Yellow Rush-lily
Vernonia cinerea	
Veronica plebeia	Creeping Speedwell
Viola hederacea	Ivy-leaved Violet
Wahlenbergia communis	Tufted Bluebell
Wahlenbergia gracilis	Australian Bluebell
Xanthorrhoea latifolia	Grass Tree
GRASSES	
Aristida vagans	Wire Grass
Austrodanthonia tenuior	Wallaby Grass
Bothriochloa marca	Redleg Grass
Carex appressa	
Cymbopogon refractus	Barbwire Grass
Cyperus gracilis	
Cyperus sphaeroideus	

SPECIES	COMMON NAME
GRASSES (CONT)	
Dichelachne micrantha	Short Hair Plume Grass
Echinopogon caespitosa	Tufted Hedgehog Grass
Echinopogon ovatus	Forest Hedgehog Grass
Entolasia marginata	Bordered Panic
Entolasia stricta	Wiry Panic
Eragrostis brownii	Brown's Lovegrass
Eragrostis leptostachya	Paddock Lovegrass
Gahnia aspera	Saw Sedge
Gahnia clarkei	Saw Sedge
Imperata cylindrica	Blady Grass
Joycea pallida	Silvertop Wallaby Grass
Juncus continuus	Broad-leaf Rush
Juncus continuus	
Lepidosperma filiforme	
Lepidosperma laterale	
Lepidosperma laterale	Variable Sword-sedge
Lomandra longifolia	Spiky-headed Mat-Rush
Lomandra obliqua	Twisted Mat-Rush
Microlaena stipoides	Weeping Grass
Oplsimenus aemulus	
Panicum simile	Two Colour Panic
Paspalidium distans	
Pteridium esculentum	Bracken Fern
Ptilothrix deusta	
Schoenus melanostachys	Black Bog-rush
Themeda australis	Kangaroo Grass

Appendix C – Construction Management Plan Requirements

The Construction Management Plan must include the following information:

a) Construction zone
b) Location of:
    i. site access points
    ii. surface water drainage
    iii. native vegetation/trees – including their tree numbers as depicted on each lot specific Site Analysis Plan (SAP)
        - on site,
        - to be retained and protected,
        - to be removed or lopped.
c) Proximity to areas such as:
    i. rare or threatened species habitat,
    ii. soil and geotechnical hazards,
    iii. any other significant sensitive natural features.
d) Easements
e) Existing service locations and protection measures
f) Storage areas for:
    i. construction vehicles
    ii. construction materials
    iii. waste
    iv. stockpiles – including excavated soil stockpiles.
g) Location of any temporary site offices/lunchrooms (if applicable)
h) Topography/slope of the land
i) Sediment control measures
j) Stormwater drainage measures
k) Staging of works (if applicable)
l) A waste management plan detailing proposed methods of construction waste disposal including type and volume of material, and proposed facility of which to dispose of the waste, is to be submitted.

Construction Management Plan minimum standards:

Site Induction

Prior to the commencement of any building works, an induction must be undertaken by the site supervisor alerting all construction personnel to the requirements of the approved Construction Management Plan of the site.

Construction Zone and Vehicle Access

- Prior to the commencement of any building or works, the extent of the construction zone, including pedestrian, vehicle and machinery access must be clearly defined physically on site, in accordance with the approved applicable construction management plan.
- All buildings and works must be confined to the defined construction zone.

- Access should be confined to designated access tracks and pathways, and as far as practical utilise existing disturbed areas. Access must not be gained over adjoining properties. Access areas, both vehicular and pedestrian, must be stabilised to prevent sediment loss (eg. with crushed rock).
- If using porous materials (e.g. crushed rock), it should be contained by edging or boxing. Where suitable, porous material should be free of fines to allow for free drainage and to minimise the risk of sediment transport.
- Vehicular and machinery maintenance is not to occur on site.

Threatened Species / Disturbance of Habitat Trees

- The presence of rare/vulnerable/threatened species and habitat trees as shown on each lots Site Analysis Plan (SAP) (if applicable), should be recognised on site and the necessary protection measures put in place.
- If any threatened species or species of habitat trees are identified on the site, all works shall cease, and Council's Flora and Fauna Officer contacted to advise appropriate protection measures to be installed.

Easements and existing service locations

- Refer to the applicable Site Analysis Plan (SAP) for the site, as well as contact the 'Dial Before You Dig' service to identify where all existing services and infrastructure are located on site.
- Contact the relevant service utility to determine what measures need to be implemented to best protect the asset (i.e. – Electricity, Water and Telephone or the like).

Storage Areas for Building Materials, Soil Stockpiling, and Waste Storage (on and off site)

- The storage of all equipment, waste and building materials must be contained within the areas defined on the Construction Management Plan.
- Construction areas must be kept free of litter at all times.
- Adequate and appropriate waste receptacles must be provided on site, and placed in position as per the approved Construction Management Plan.
- Waste must be transported to an approved off-site, recycling centre or land fill, in accordance with the approved waste management plan for the site.
- Waste is to be collected when waste receptacles are full.
- Waste is to be reduced by selecting, in order of preference, avoidance, reduction, reuse and recycling methods. Construction should involve the reuse of materials and the recycling of waste wherever possible.
- No waste may be disposed of on site.
- Chemicals and fuels stored on site must be kept to a minimum. If stored on site, bunds must be installed to reduce the potential damage caused by spills.
- All equipment, construction materials and waste must be removed from the site as part of site clean up works.
- No fire is to be lit on site.

Sediment Control Measures

- Sediment run-off controls and drainage around all construction areas must be established prior to commencement of any building or works.
- Sediment traps must be designed, installed and maintained to maximise the volume of sediment trapped from the site during construction.

- A mulch of fibre matting, shredded plant material from the site or certified weed free sterile straw, preferably from a pasture fescue crop, must be maintained on exposed areas until adequate plant cover is produced.
- Grading, excavation and construction must not proceed during periods of heavy rainfall.
- Sediment control measures must have a size and capacity to withstand the flow of a one in five-year storm event.
- All sediment control measures must be maintained during construction and inspected prior to (and after) rain events to ensure they are functioning properly.
- Topsoil must be kept separate from sub-soil when stockpiling soil, and covered with an appropriate fabric to minimise loss and sedimentation.
- All loads of soil being taken off site for disposal must be covered.
- Drainage is to be returned to previously existing flow paths, except where specified by a separate drainage report.
- All stockpiles of soil, sand, fertiliser, cement or other fine, loose material must be placed in locations away from drainage lines, roadside channels and culverts unless adequately protected from erosion by diversion drains, bunds or similar works. All stockpiles must be covered.

Stormwater Drainage Measures

- Any water to be pumped from the site should be filtered before release to ensure that no sediment or weed seeds enter the stormwater system. Energy dissipation measures also need to be in place to guard against potential scouring.
- Natural drainage patterns must not be altered post construction, except through an approved drainage plan.
- Cut-off or intercept drains must be established during construction to redirect stormwater away from cleared areas and slopes to stable (vegetated) areas.
- Stormwater collected by impervious surfaces during construction must be drained via sediment traps to the road drainage system where possible.
- Drip line drainage, including energy dissipation measures, must be installed under eaves to minimise erosion caused by raindrop action and snow shedding.

Management of Pests and Animals

- All construction vehicles and equipment must be cleared of soil and organic matter to remove seeds prior to arriving on site to prevent the introduction and/or spread of weeds and pathogens.
- Site inspections must be conducted by the site supervisor during and after construction to identify weed species requiring control.
- Building work that uses transported gravel and soil must be monitored to prevent the introduction of exotic species.
- No animals (including dogs) are permitted on site without the prior written approval of Council.

PART 4 – COASTAL SECTOR - PINNY BEACH

4 INTRODUCTION

This section contains local objectives and controls for development in North Wallarah in the Coastal Sector commonly referred to as Pinny Beach and aims to ensure the vision and principles of the North Wallarah Peninsula Masterplan are achieved. This section applies to the Coastal Sector as outlined in Figure 17. This section has been divided into controls for the Coastal Village Precinct (West and East Village) and separate controls for the Spoon Rocks Valley and Radar Hill Precincts.

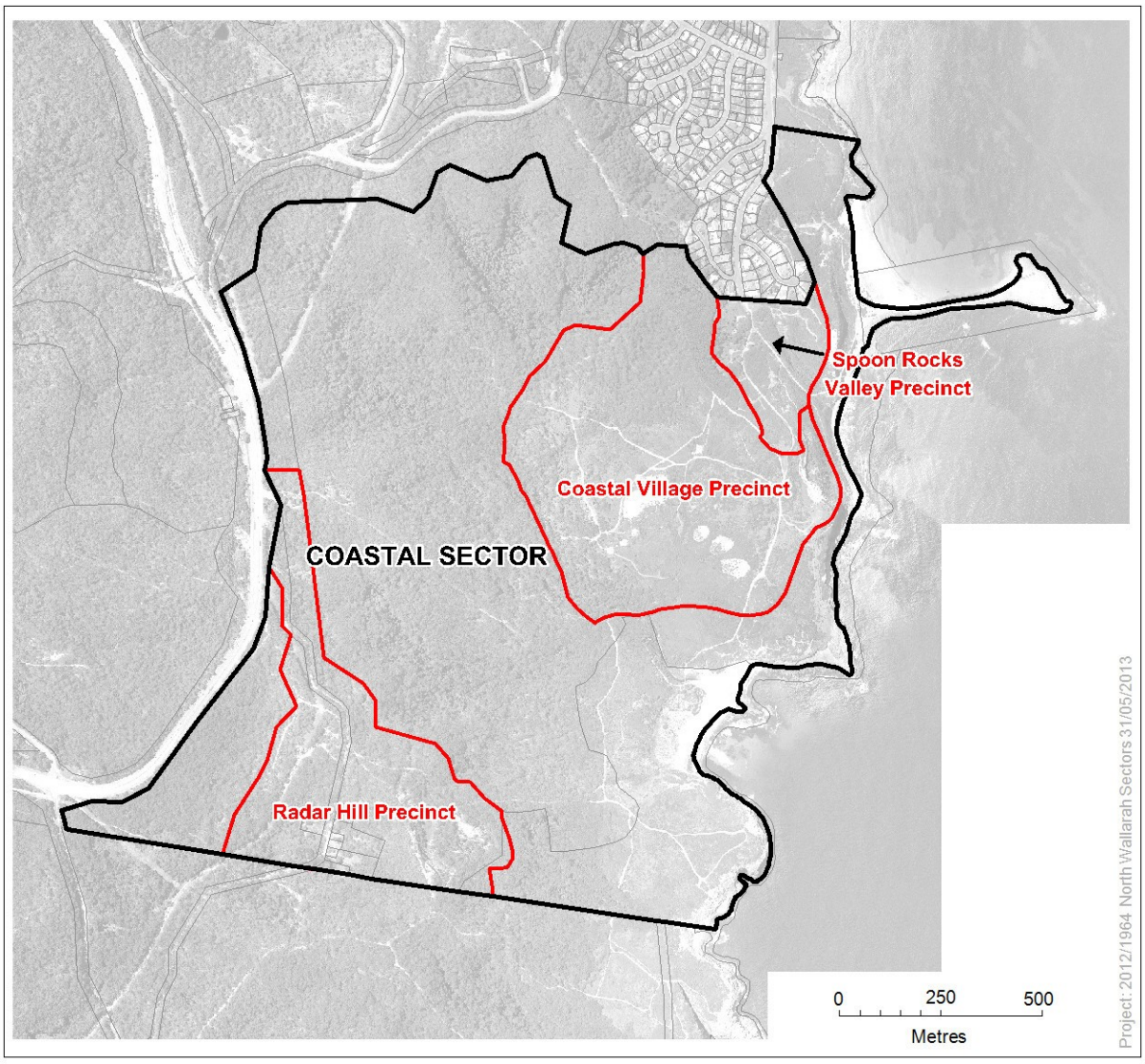


Figure 17 - Coastal Sector and Precinct Map – Pinny Beach

4.1 DESIRED FUTURE CHARACTER

The desired future character for this area is outlined in section 1.5 Coastal Sector – Pinny Beach Precinct Character.

4.2 COASTAL VILLAGE - EAST AND WEST VILLAGE - DESIGN CONTROLS

This section applies to the Coastal Village including the East and West Village as outlined in Figure 18.

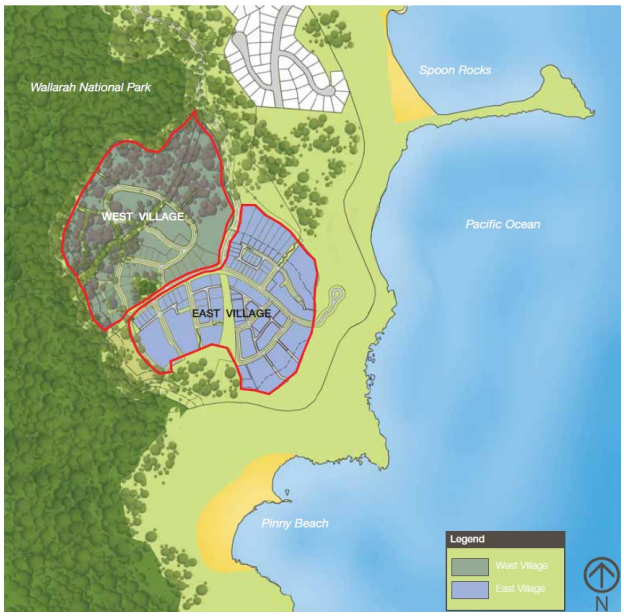


Figure 18 - Coastal Sector – Coastal Village: East and West Village

4.2.1 BUILT FORM

Objectives

a. To promote modern Australian architectural style which is sensitive to the surrounding environment of Pinny Beach.

b. To minimise the perceived visual bulk of buildings and ensure that they contribute visually to the street.

c. To encourage building materials that establishes a relaxed coastal character.

d. To minimise ground disturbance through reducing excavation and having homes which lightly touch the earth.

e. To promote the colours of the natural landscape through the selection of the external colour palette.

Controls

1. Facades must be articulated to minimise the bulk and scale of built form. The use of sun shades (where appropriate), windows, door openings verandahs, balconies and the like must be used with no more than 12m of any wall in one plane is to be provided without a minimum 0.5m step in the wall.

2. The underside of an elevated home must be either concealed or lined and presentable from public view.

3. External structural components and cladding material are to be predominantly lightweight to reinforce the seaside and bushland character. External materials may include glass, weatherboard, timber, fibre cement, lightweight cladding, stone, rendered, bagged or

texture finished masonry and metal cladding such as zinc, galvanised iron, copper and steel and any other suitable materials.

4. Textured, painted render, bagged masonry and local stone is only permitted for a maximum of 30% of the area of each external building façade, and is to complement the overall design.
5. Highly polished reflective finishes must not be used.
6. External colours must complement the landscape in accordance with the colour palette guide included in Appendix C. Bright or contrasting colours may only be used for highlights, feature panels and trims, to a maximum of 10% of the area of each building façade.
7. Facades and colour schemes must not be repeated unless there is a gap of 3 buildings in between.
8. The front facade is to contain the primary entrance and must face the street. The entrance must be visible from the street, simple and integrated into the design.
9. Buildings must incorporate verandas, porches or decks and be integrated into the house design. The minimum depth of any porch, deck or veranda is to be 1.5m. Front porches and verandas are to take up at least 30% of the width of the front facade at the ground floor level or 3m whichever is the greater.
10. The house design must have an outdoor living areas which relates to the main living room level. This may be in the form of decking or large balconies or courtyard area.
11. Balustrades are to be constructed of materials to complement the house design.

4.2.2 ROOF FORM

Objectives

a. To promote architectural roof forms that integrate with the site and building design.

Controls

1. Roofs should be simple and designed to respond to the slope of the site, solar orientation needs, the building design and the immediate surroundings.
2. Overhangs and eaves of at least 600mm are required to shade openings and glazing.
3. Mansard roofs are not permitted. Curved roofs are not encouraged and will be assessed on architectural merit during the design review process.
4. The material of roofs must be metal.
5. The roof colour should be selected from the colour range in Appendix C and must complement the house design.

4.2.3 BUILDING HEIGHTS

Objectives

a. To maintain and enhance viewing opportunities of the coastal setting.

b. To ensure that the scenic values of North Wallarah Peninsula are protected and enhanced.

c. To ensure that developments visible or adjoining the coastline enhance the scenic value of these features.

Controls

1. The maximum building height is not to exceed the height designated on the Development Envelope Plan in the West Village or as designated in the Built Form Code for the East Village.

2. Third Storey Pop-ups are encouraged within the East Village in accordance with Figure 19 – Attached Dwellings with Third Storey Pop-Ups and Figures 21 and 22 – Neighbourhood Code.
3. Third storey pop-up can be no more than 50% of the area of the floor below.

Figure 19 - Attached dwellings with third storey pop ups

4.2.4 CONSTRUCTION TECHNIQUES AND GROUND PREPARATION

Objectives

a. To promote unique coastal housing that responds to the sensitive coastal landscape and environment of Pinny Beach.
b. To promote building design that responds to the topography of the site and minimises the use of cut and fill construction techniques.
c. To ensure that cut and fill does not significantly alter the flow of water, or exacerbate flooding.

Controls

1. No cut and fill is to be undertaken on slopes (retaining their original ground profile) with gradients greater than 10% (6 degrees) other than as required for access, garaging (max 60m^2) and footings. Habitable rooms adjacent to and only for the full depth of garaging in cut on high-side lots are also permissible.
2. Minor cut and fill of up to 1.2m will be considered to achieve slab on ground construction but must include a minimum 1.5m verandah or deck to the front facade.
3. Minor excavation may only be undertaken outside of the building footprint for the following purposes:
    i. to enhance the streetscape (maximum 0.9m),
    ii. to create usable private open space areas (maximum 0.9m),
    iii. to gain access to and from the site via stairs, driving ways, paths etc.

4. Underground services and drainage is to be located to avoid major root systems of existing trees.
5. East Village - Excavation is permitted within the building footprint to achieve the design requirements within the Neighbourhood and Built Form Codes up to a maximum height of 1.5m.

4.2.5 GARAGE AND CAR PARKING

Objectives

a. Garages and carports must not dominate the streetscape.

Controls

1. Garages must be located behind the front building line and within the development envelope.
2. Single and double garages and/or carports are permitted on all dwellings (attached or detached).
3. Garages must be setback a minimum of 1m from the front building line and must not occupy more than 50% of the front façade width. The maximum width of a garage door opening is 6m.
4. The maximum area of a garage/carport must not exceed 60m^2
5. Triple garages or carports are not permitted.
6. Where detached garages or carports are proposed they are to be designed to integrate into the design in terms of roof pitch, materials and colours.
7. Garage doors are to complement the design and be of a similar tone to the dominant surrounding roof colour and be either tilt up, panel lift or traditional swing type without feature patterns or windows.
8. Garage doors should be recessed to minimise the visual impact of large flat door surfaces.
9. In the West Village, double detached garages are encouraged to have a second storey above.
10. In the East Village:
    i. Garaging in rear lanes should allow for landscaping
    ii. No more than two garages in a row are allowed with the same setback to a rear lane (minimum 1m difference). Carports are not required to vary their setback.
    iii. A second storey over garages and car ports is encouraged in the form of studio, decks, living rooms, bedrooms, lofts.
    iv. Zero lot line walls are permissible within the setback of a side boundary as nominated in the Neighbourhood Codes in Figures 21 and 22. Zero lot line walls are to be no longer than 9 metres, no higher than 3.5 metres from the natural ground and a maximum of one per lot.

4.2.6 DRIVEWAYS

Objectives

a. Driveways are to not dominate the building design

Controls

1. Only one vehicle entry/exit point is permitted with a maximum of 3metres width at the front boundary other than for manoeuvring areas. The driveway should be located as shown on

the Development Envelope Plan or Neighbourhood Built Form Code. The location should avoid the biofiltration basin and any trees.

West Village

2. Steep gun barrel driveways perpendicular to the street are not permitted.
3. Driveway surfaces are to be designed and constructed of materials that facilitate infiltration into the subsoil or onsite detention basins. Asphalt, macadamised gravel, compacted gravel, unit paving, coloured insitu concrete and permeable concrete in approved colours and finishes are acceptable materials.
4. Driveway grades should not exceed 1:5. Steeper grades will be considered on their merits. Appropriate grades and transition slopes are to be provided to avoid vehicle scraping.
5. Where the driveway surface does not permit the infiltration of stormwater, the driveway must incorporate appropriate elements of infiltration such as adjoining permeable drainage swales.
6. Where driveways cross Council owned footpath/verges, they are to be surfaced with non-eroding materials to prevent a safety hazard for pedestrians.

4.2.7 NATIVE VEGETATION

Objectives

a. To ensure that the impacts of development are minimised.

b. To ensure that building design and location responds to the topography, landscape and environmental attributes of the individual lot.

Controls

West Village:

1. In the area outside of the Development Envelope, no native trees or native understorey vegetation is to be ring barked, cut down, topped, lopped, removed, injured, wilfully destroyed or cleared unless:
   i. Removal or lopping of native vegetation is required to be undertaken as part of an ongoing program of vegetation/ fuel management (if required) contained in an Approved Bushfire Fuel Management Plan for the neighbourhood, or
   ii. Where Council is satisfied beforehand that individual native trees or branches are a clear risk to personal safety and or property, or
   iii. Removal of native trees and understorey is essential to the provision of access to the lot.
   iv. Prior to any such removal of native trees, endorsement by the Community Association and approval by Lake Macquarie City Council in accordance with Clause 5.9 of the LMLEP 2014 and Council's Tree Preservation and Native Vegetation Management Guidelines is required.
2. Within the Development Envelope native trees may be removed with approval by Council that are within 3 metres of the ground floor footprint of the approved home and any ancillary buildings or where Council is satisfied beforehand that individual native trees or branches are a clear risk to personal safety and or property.

East Village:

3. Trees and understorey vegetation may be removed or lopped within the lot subject to approval of Lake Macquarie City Council unless shown otherwise on the Deposited Plan of subdivision.

Note: Evidence to support tree removal or lopping must be forwarded to Council in accordance with requirements outlined in Council's Tree Preservation and Native Vegetation Management Guidelines. Council's Tree Assessment Officer may undertake a site inspection to verify that these conditions are satisfied.

4.2.8 ENERGY AND WATER EFFICIENCY

Objectives

a. To encourage sustainable water and energy use.

b. To encourage the placement of buildings to maximise solar access and natural cross ventilation.

c. To promote passive solar design and energy efficient buildings.

d. To ensure that development does not adversely affect water quality or availability,

e. To incorporate Water Sensitive Urban Design techniques into all new developments.

f. To minimise the volume and rate of stormwater leaving a development site

Controls

1. Buildings must be oriented to provide efficient use of solar energy and natural ventilation wherever possible.
2. Openings on the western elevation must be minimised and effectively shaded by awnings, louvers, screens, eaves or landscaping.
3. Roofs should be designed to accommodate at least 2.5sq.m for solar hot water energy collectors.
4. Rainwater tanks must be installed within the Development Envelope and integrated into the house design.
5. In the West Village, rainwater tanks must be installed as nominated on the Site Analysis and Development Envelope Plan to fulfil site detention requirements.
6. In the East Village, rainwater tanks must be installed with a minimum capacity of 2,000 litres.

4.2.9 OUTSIDE YOUR HOME

Objectives

a. To maintain and enhance the streetscape of Pinny Beach.

Controls

1. Ancillary structures including outdoor clothes drying areas, garbage waste and recycling, rainwater tanks, air conditioning units and hot water heater tanks should be located at the side or rear of the property within the Development Envelope and adequately screened from public view.
2. Ancillary services required to be located on the roof including satellite dishes should be located to the rear of the property.
3. Solar panels without stand up brackets can be located on all roof planes.
4. Where outbuildings are required for additional storage or work space one outbuilding no greater than 9sqm is permitted within your development envelope to the rear of your dwelling.

4.2.10 SWIMMING POOLS

Objectives

a. To maintain the streetscape.

Controls

1. Swimming pools must not be located in lots with a slope greater than 10%.
2. Swimming pool edges elevated above the ground should be integrated with landscaping or decking.
3. Maximum 600mm cut and/or 600mm fill is permissible for swimming pools surrounds and tennis courts.
4. Swimming pools must be integrated with the garden.
5. Filtration and pumping equipment is to be screened, enclosed and located adjacent to the pool within the Development Envelope.

4.2.11 LANDSCAPING

Objectives

a. To enhance the bushland setting and protect the sensitive environment through the retention of native vegetation

b. To promote high quality private open space for all at Pinny Beach.

c. To conserve and contribute to the natural assets by ensuring the planting of endemic species.

d. To ensure a high quality of public open space is achieved through screening and reduced fencing requirements.

e. To reduce water consumption by using endemic species.

Controls

1. Landscaping drawings must be submitted with the development application.
2. Landscaping must incorporate native grasses, understorey and ground cover vegetation and be consistent with any bushfire fuel management requirements.
3. Suitable plant species endemic or suitable native plant species selected from the approved plant species list (refer Appendix D) are to be used for revegetation of disturbed areas and for landscaping both outside of your Development Envelope and within your Development Envelope.
4. Non-invasive exotic species are only permitted in courtyards/private open space and must be contained within defined edges (eg timber, steel or masonry edging).
5. Any trees or branches that are removed should be mulched and used on site.
6. Lawns musts be contained within defined edge as part of the courtyard / private open space and located within the Development Envelope.
7. Impermeable surfaces in the garden should be minimised.
8. Retaining walls for gardens and landscaping should be minimised. When required, they should be low and no more 0.9metres and constructed of timber or stone and compliment the house design. These walls are permitted for landscaping purposes only and are not to be used to facilitate benching of the site. Material selection for retaining and garden

structures are to be complementary and subject to approval. Treated pine is not an acceptable material for this purpose.

9. Altering the ground surface around existing trees is not permitted without an arborist's report.
10. Placement of fill materials around trees or against trees is not permitted.
11. Landscaping works shall be completed within 12 months of occupation.
12. In the private bushland outside the defined Development Envelope native vegetation is to be maintained and managed in accordance with the section 'Tree Retention and Removal'

4.2.12 FENCING

Objectives

a. To encourage and enhance the existing natural bushland character and a village streetscape with the use of open landscape treatments and limiting boundary fencing.

b. To contribute positively to the visual quality of the street.

c. To create a seamless integration between private bushland, the streetscape and the public domain.

d. To provide a safer street environment by creating increased opportunities for passive surveillance.

Controls

West Village

1. Fencing should be restricted except for courtyard area, boundary fencing adjoining public open space and of swimming pools.
2. Fencing of the Development Envelope is not permitted.
3. Boundary fencing should be restricted except of private lots adjoining areas of public open space where the natural attributes of the land and topography do not create a physical barrier.
4. Where required due to private open space adjoining public land, boundary fencing is to be a maximum of 1.2m high and 50% transparency. Where the distance between development envelopes is less than 5 metres, approved courtyard style fencing may be installed along the boundary behind the front building line.

East Village

5. Fencing should be restricted with privacy achieved through the combination of landscaping and transparent fencing.
6. The only permissible fencing is:
    i. front fencing (fencing to roads) is allowed forward of the home if private open space is in front of the home. This fencing must be a maximum of 1m high and 50% transparency.
    ii. Side and rear fencing behind the front building line, including lanes and can be 1.5m high solid fencing or 1.8m high with 50% transparency.
    iii. Pool fencing

West and East Village

7. Fence colours should blend with the natural environment and be of natural or stained timber, black or dark green metal work or colours sympathetic to the home design.
8. Fencing materials of masonry or sheet metal fencing (Colorbond) are not permitted.
9. Where required for privacy or containment of a pet, courtyard fencing is permitted to a maximum 1.8m within the development envelope to the side and rear of the dwelling only and located at least 1m behind the building line. Courtyard fencing shall be a minimum of 30% transparency and compliment the architectural design of the home.
10. Swimming pool fencing must be in accordance with AS1926.1-2007 and completely surround the pool and be contained within the development envelope. Boundary fencing must not be used as part of a pool enclosure.
11. All fencing should be adequately screened with vegetation and located at least 1m behind the building line.

4.2.13 BUSHFIRE PROTECTION

Objectives

a. To ensure that risks associated with bushfire are appropriately and effectively managed on the development site.

b. To ensure that bushfire risk is managed in connection with the preservation of the ecological values and biodiversity of North Wallarah Peninsula and adjoining lands

Controls

1. Building projections outside of the Development Envelope are not permitted in lots requiring Level 1, 2 or 3 building construction for bush fire protection in accordance with AS 3959.
2. All proposed dwellings should have roof gutters and valleys, leaf proofed by the installation of an external gutter protection shroud system that denies all leaves from entering the gutter and building up on that gutter. Any material used in such a system should have a flammability index of no greater than five (as measured against AS 1530.2).
3. All outward opening doors and windows including bifold, stacker and solid or glazed louvers are to be screened to mitigate against ember attack.

4.3 WEST VILLAGE – SITE ANALYSIS AND DEVELOPMENT ENVELOPE PLANS

Objectives

a. To promote unique coastal housing that responds to the sensitive landscape and environment of Pinny Beach within the West Village.

Controls

1. Development controls including setbacks, height, stormwater detention, development envelopes and driveways locations are consistent with the Site Analysis Plan and Development Envelope defined on the Deposited Plan of Subdivision of the lot.
2. The footprint of any building and related structures (including out buildings, storage sheds, retaining walls and courtyards) must be sited wholly within the Development Envelope designated in the Site Analysis Plan and Development Envelope as defined on the Deposited Plan of Subdivision of the lot.
3. Existing flora should be maintained and vegetation planted.

4.4 EAST VILLAGE – NEIGHBOURHOOD CODE AND BUILT FORM CODE

Objectives

a. To promote building design that responds to the street, topography and promotes sustainable design.

b. To promote a compact village in the coastal setting of Pinny Beach

Controls

1. Buildings should be located as indicatively within the East Village as outlined in the Neighbourhood Codes in Figures 21 and 22.
2. Setbacks should be varied within the built form and in the village lanes to create areas of additional landscaping.
3. Zero lot wall boundaries must only be located within the East Village in accordance with Figures 21 and 22.
4. Third storey pop-ups are allowed within the East Village in accordance with Figures 21 and 22.
5. Building types within the East Village should be in accordance with the Built Form Codes as represented in Figures 23-32.
6. Private open space and living areas must be coordinated to allow a minimum of one north / east facing living area and courtyard. Indicative locations are illustrated in Figures 21 and 22 – Built Form Code.
7. Residential flat buildings must be designed in accordance with 4.5 – East Village – Residential Flat Code.

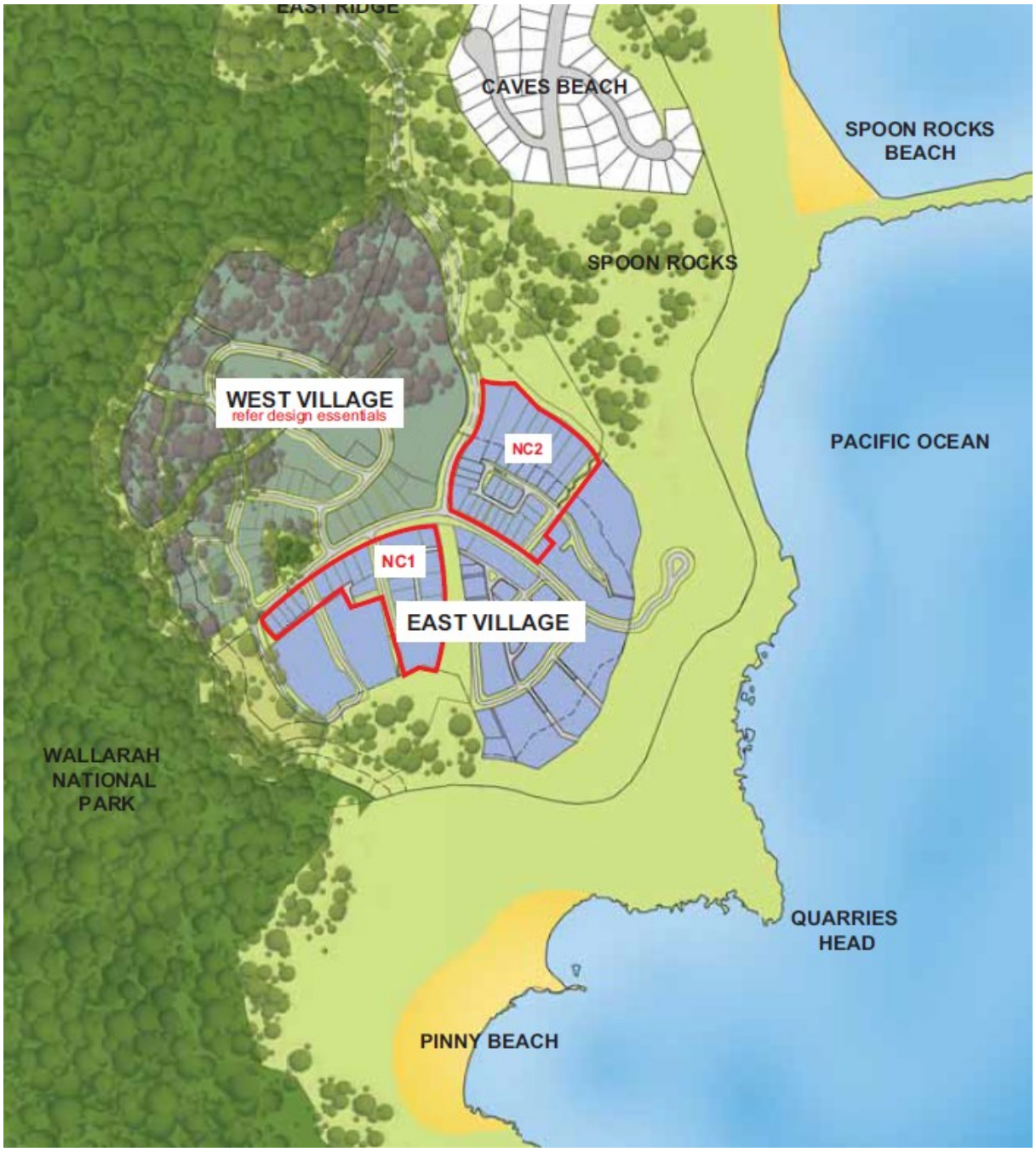


Figure 20 - Neighbourhood Code Plan - East Village

Figure 21 - East Village - Neighbourhood Code 1

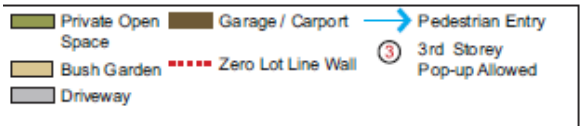


Figure 22 - East Village - Neighbourhood Code 2

BUILT FORM CODE

TYPE	PLANNING DATA	
B	SITE AREA	from 800m²
	SITE COVER	Max 60% Note: Overhangs, Hoods & Pergolas are excluded from site cover calculations
	HEIGHT	12m (Max height 3 storey)
	PRIVATE OPEN SPACE	Min. 25m² for each dwelling with a minimum width of 3m accessible from a living area

THE DESCRIPTION
The Purpose of this code is to ensure that townhouses provide for an attached multi dwelling home whilst contributing to the character of Pinny Beach

DWELLINGS PER LOT
2 - 5 townhouses per lot

MINIMUM BUILDING SETBACKS
All setbacks are to face of wall of primary structure with overhangs, hoods, screens and other architectural extensions are as per the Architectural Extension setbacks (AE*). All setbacks at the discretion of the Design Review Panel and still subject to BCA requirements

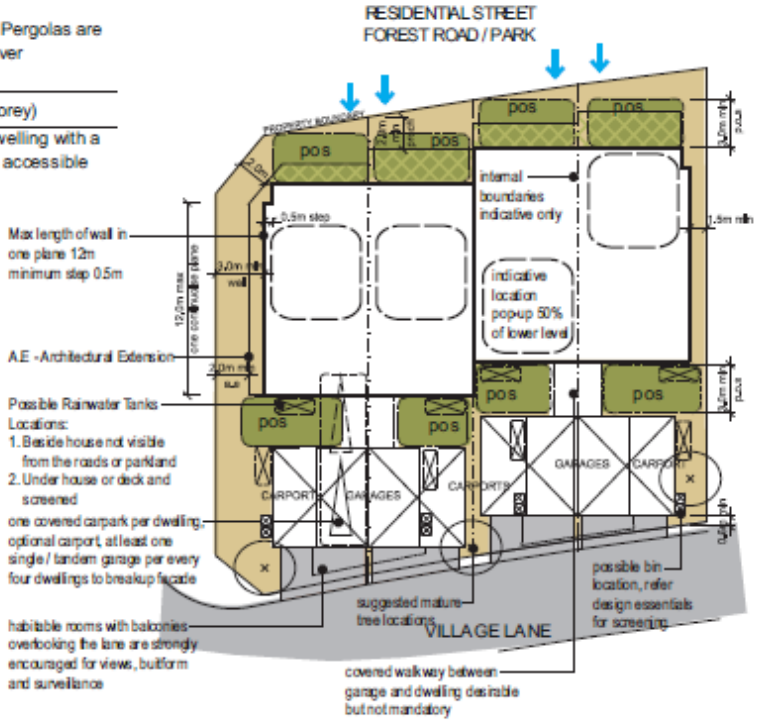
THREE STOREY POP-UP
Maximum 50% of storey area below, only on dwellings nominated on the neighbourhood code.

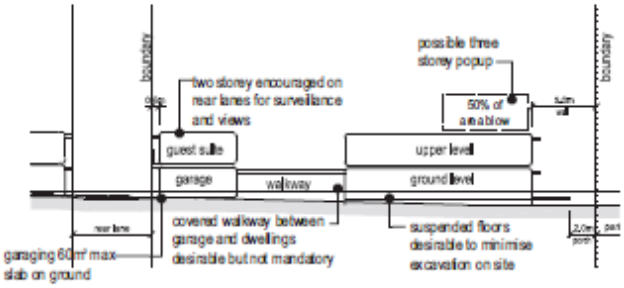
PRIVATE OPEN SPACE (POS)
Orientated to the North/East, all living areas to interface with P.O.S
Note: Other P.O.S positions can be approved based on good solar principle and site orientation

SETBACK TABLE

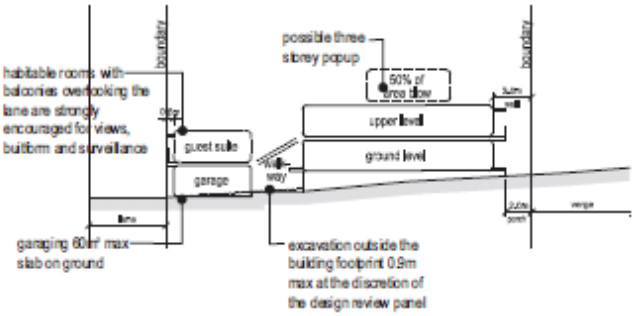
Boundary	Type	Storeys		
		Ground	Upper	3 storey
Main Access Drive / Contour Road	Garage	No Acces Allowed		
	Wall	3.0	3.0	3.0
	A.E*	2.0	2.0	2.0
Corner Lot Setback	Garage	No Acces Allowed		
	Wall	3.0	3.0	3.0
	A.E*	2.0	2.0	2.0
Park Front Boundary	Wall	5.0	5.0	5.0
	A.E*	2.0	2.0	2.0
Side Boundary	Wall	1.5	1.5	2.0
	A.E*	0..95	0.95	1.40
Village Lane	Wall	0.6	0.6	0.6
	A.E*	0.0	0.0	0.0
Side Boundary Village Lane	Wall	1.0	1.0	1.5
	A.E*	0.45	0.45	0.45
Zero Lot Line	Wall	0.2	0.2	N/A
	A.E*	0.2	0.2	N/A

note: the building footprint shown is a guide to good home placement and is indicative only refer Designs Essentials ans Setbacks



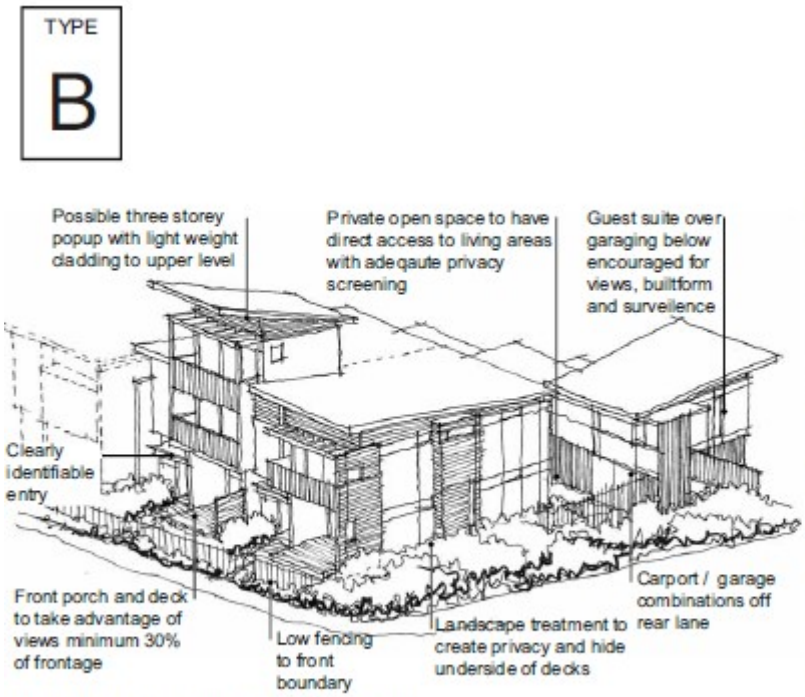


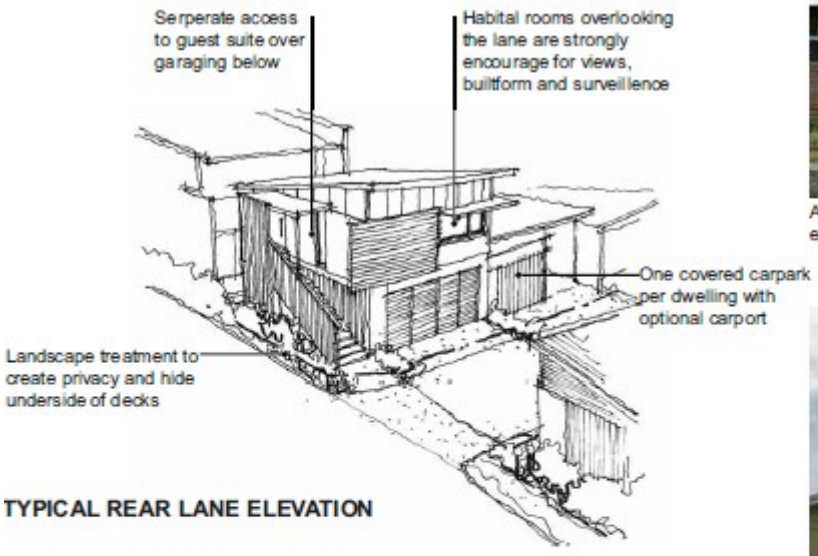
CROSS SLOPE SECTION - B1 (refer neighbourhood code)



UPHILL SECTION - B2 (refer neighbourhood code)

Figure 23 - Built Form Code – Building Type B - Townhouses





The street elevation of each dwelling must be articulated to provide interest by incorporating:

- recessed or projecting balconies, porches or verandahs
- eaves overhangs
- designed screens, shutters and sunshades
- landscape treatment
- fenestration including louvres and trims

Balconies over looking the village lane to encourage surveillance and take advantage of views

Articulated front elevation with clearly identified entry and transparent fencing

Possible three storey popup to take advantage of views and to help articulate the builtform

Figure 24 - Built Form Code – Building Type B - Townhouses – Graphical Representation

BUILT FORM CODE

TYPE	PLANNING DATA	
C	SITE AREA	from 600m²
	SITE COVER	Max 60% Note: Overhangs, Hoods & Pergolas are excluded from site cover calculations
	HEIGHT	10m (Max height 3 storey)
	PRIVATE OPEN SPACE	Min. 25m² for each dwelling with a minimum width of 3m accessible from a living area

THE DESCRIPTION
The Purpose of this code is to ensure that duplexes provide for an attached dwelling home whilst contributing to the character of Pinny Beach

DWELLINGS PER LOT
2-3 Dwellings per lot

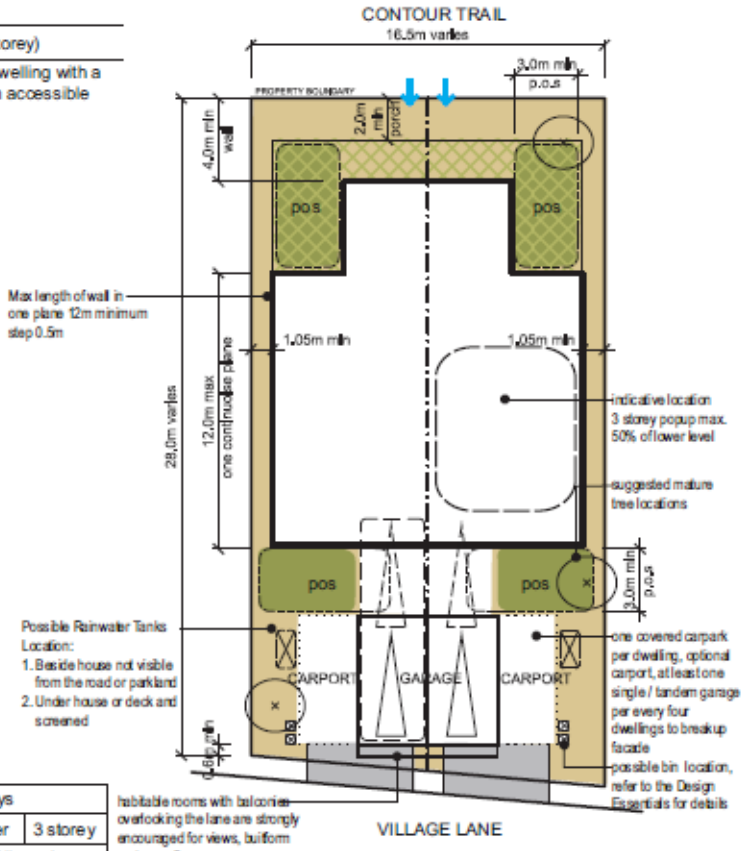
MINIMUM BUILDING SETBACKS
All setbacks are to face of wall of primary structure with overhangs, hoods, screens and other architectural extensions are as per the Architectural Extension setbacks (A.E*). All setbacks at the discretion of the Design Review Panel and still subject to BCA requirements

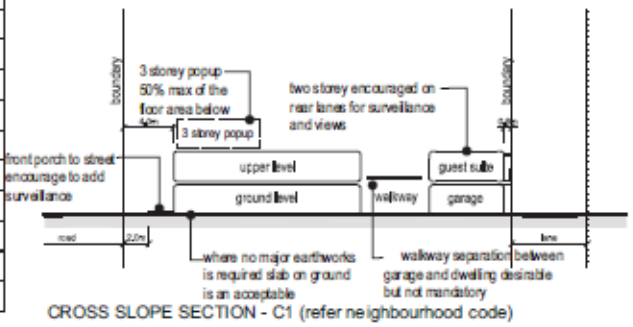
THREE STOREY POP-UP
Maximum 50% of storey area below, only dwellings nominated on the neighbourhood code.

PRIVATE OPEN SPACE (POS)
Orientated to the North/East, all living areas to interface with P.O.S
Note: Other P.O.S positions can be approved based on good solar principle and site orientation.

SETBACK TABLE

Boundary	Type	Storeys		
		Ground	Upper	3 storey
Contour Road	Garage	No Acces Allowed		
	Wall	4.0	4.0	4.0
	A.E*	2.0	2.0	2.0
Corner Lot Boundary	Garage	No Acces Allowed		
	Wall	3.0	3.0	3.0
	A.E*	2.0	2.0	2.0
Side Boundary	Wall	1.05	1.05	2.0
	A.E*	0.45	0.45	1.4
Village Lane	Wall	0.6	0.6	0.6
	A.E*	0.0	0.0	0.0
Side Boundary Village Lane	Wall	1.0	1.0	1.0
	A.E*	0.45	0.45	0.45





CROSS SLOPE SECTION - C1 (refer neighbourhood code)

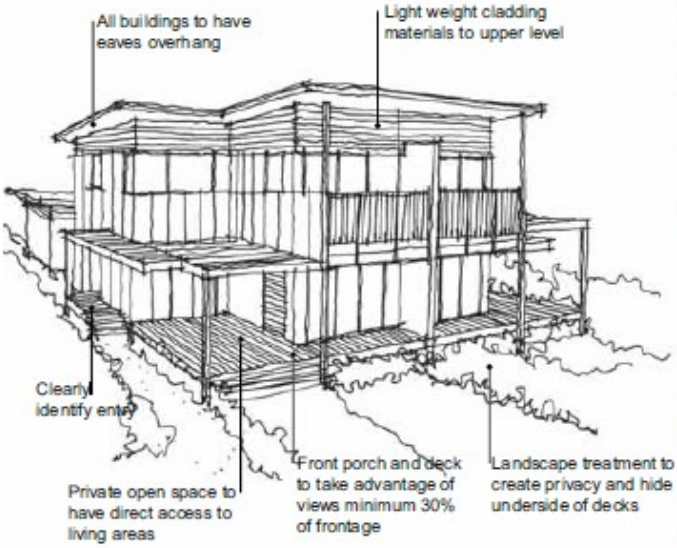
note: the building footprint shown is a guide to good home placement and is indicative only refer Designs Essentials ans Setbacks for detailed infromation

Figure 25 - Built Form Code – Building Type C - Attached Dwellings

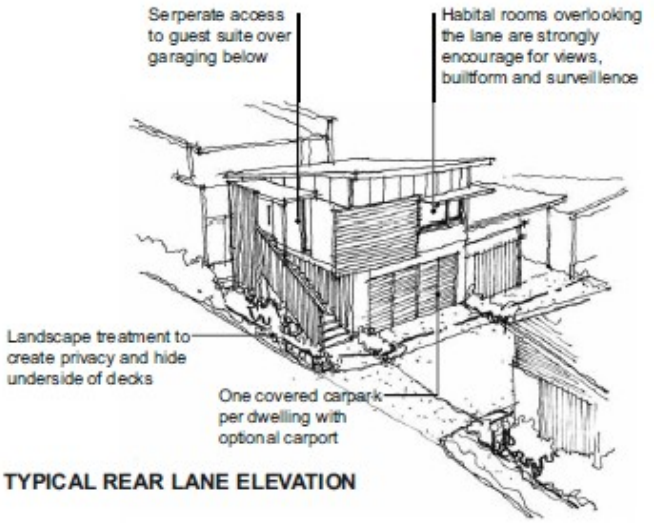
BUILT FORM CODE

TYPE

C



TYPICAL STREET FRONT ELEVATION



TYPICAL REAR LANE ELEVATION

Screens, eaves extention and balconies encourage with a good mix of material to help breakup the built form

Balconies over looking the road are encouraged for surveillance and take advantage of views

Articulated front elevation with light weight material to upper level and good eaves extention, sun shades / screens used to breakup facade

Figure 26 - Built Form Code – Building Type C - Attached Dwellings – Graphical Representation

BUILT FORM CODE

TYPE **D**

PLANNING DATA	
SITE AREA	from 250m²
SITE COVER	Max 50%
Note:	Overhangs, Hoods & Pergolas are excluded from site cover calculations
HEIGHT	10m (max height 3 storey)
PRIVATE OPEN SPACE	Min. 25m² for each dwelling with a minimum width of 3m accessible from a living area

THE DESCRIPTION
The Purpose of this code is to ensure that narrow lots detached homes contribute to the character of Pinny Beach

DWELLINGS PER LOT
Single Dwelling 10-12m frontage lots.

MINIMUM BUILDING SETBACKS
All setbacks are to face of wall of primary structure with overhangs, hoods, screens and other architectural extensions are as per the Architectural Extension setbacks (AE*). All setbacks at the discretion of the Design Review Panel and still subject to BCA requirements

THREE STOREY POP-UP
Maximum 50% of storey area below, only dwellings nominated on the neighbourhood code.

PRIVATE OPEN SPACE (POS)
Orientated to the North/East, all living areas to interface with P.O.S
Note: Other P.O.S positions can be approved based on good solar principle and site orientation

ZERO LOT LINE WALL
Maximum height of built to boundary walls 6.0m and can only be at the rear of the lot as shown above. Zero Lot Line walls are not mandatory. Refer Design Essentials

SETBACK TABLE Boundary	Type	Storeys		
		Ground	Upper	3 storey
Main Access Drive / Contour Road	Garage	No Acces Allowed		
	Wall	3.0	3.0	3.0
	AE*	2.0	2.0	2.0
Forest Road	Garage	No Acces Allowed		
	Wall	4.0	4.0	4.0
	AE*	2.0	2.0	2.0
Corner Lot Boundary	Garage	No Acces Allowed		
	Wall	3.0	3.0	3.0
	AE*	2.0	2.0	2.0
Side Boundary	Wall	1.05	1.05	2.0
	AE*	0.45	0.45	1.4
Village Lane	Wall	0.6	0.6	0.6
	AE*	0.0	0.0	0.0
Side Boundary Village Lane	Wall	1.0	1.0	1.0
	AE*	1.0	1.0	1.0
Zero Lot Line	Wall	0.2	0.2	N/A
	AE*	0.2	0.2	N/A

note: the building footprint shown is a guide to good home placement and is indicative only refer Designs Essentials ans Setbacks

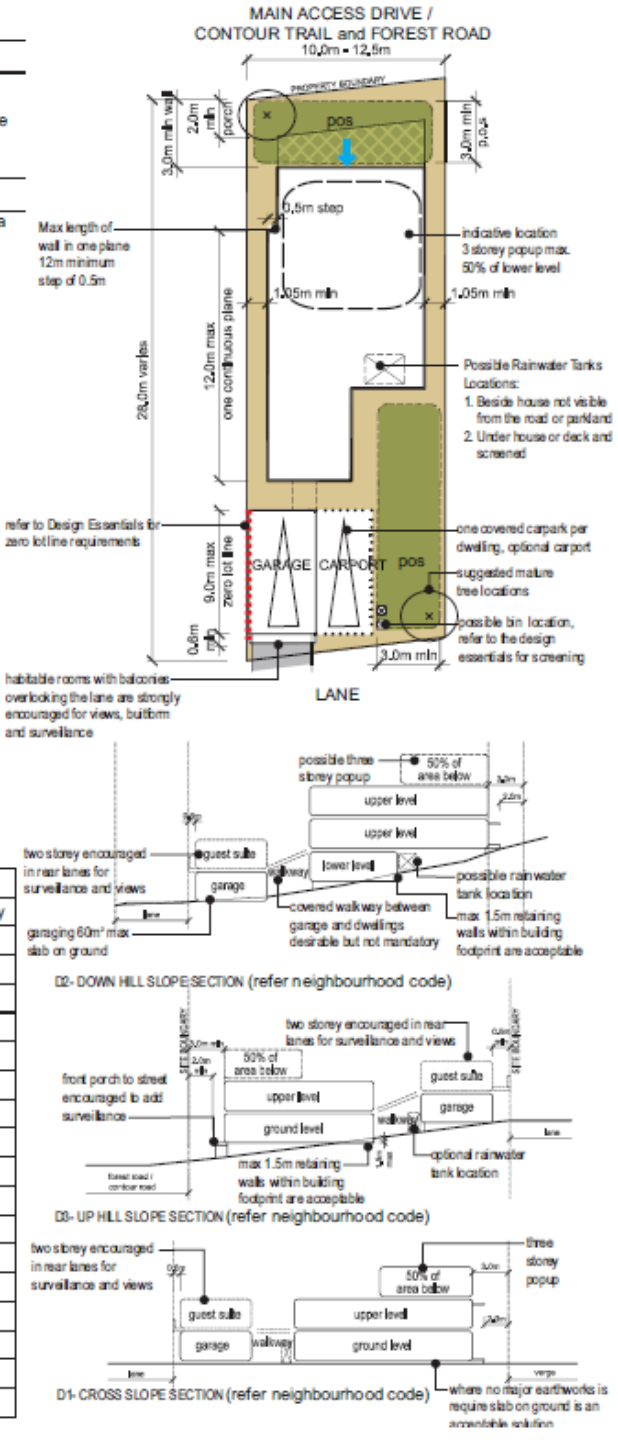


Figure 27 - Built Form Code – Building Type D - Single Dwellings

BUILT FORM CODE

TYPE **E**

PLANNING DATA	
SITE AREA	from 350m²
SITE COVER	Max 50% Note: Overhangs, Hoods & Pergolas are excluded from site cover calculations
HEIGHT	10m (max height 3 storey)
PRIVATE OPEN SPACE	Min. 25m² for each dwelling with a minimum width of 3m accessible from a living area

THE DESCRIPTION
The Purpose of this code is to ensure that narrow lot detached homes contribute to the character of Pinny Beach

DWELLINGS PER LOT
Single Dwelling 12.5m minimum lot frontages

MINIMUM BUILDING SETBACKS
All setbacks are to face of wall of primary structure with overhangs, hoods, screens and other architectural extensions are as per the Architectural Extension setbacks (A.E*). All setbacks at the discretion of the Design Review Panel and still subject to BCA requirements

THREE STOREY POP-UP
maximum 50% of storey area below, only dwellings nominated on the neighbourhood code.

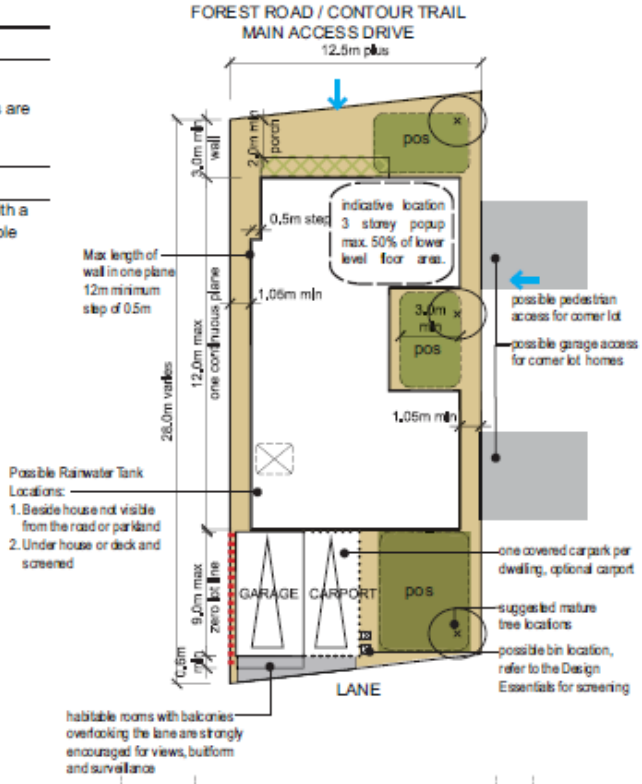
PRIVATE OPEN SPACE (POS)
Orientated to the North/East, all living areas to interface with P.O.S
Note: Other P.O.S positions can be approved based on good solar principle and site orientation

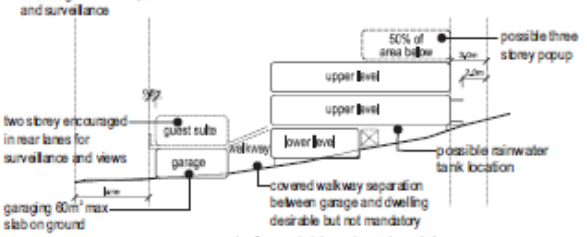
ZERO LOT LINE WALLS
Maximum height of built to boundary walls 6.0m and can only be at the rear of the lot as shown above. Zero Lot Line walls are not mandatory. Refer Design Essentials

SETBACK TABLE

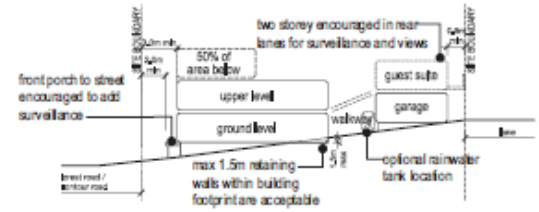
Boundary	Type	Storeys		
		Ground	Upper	3 storey
Main Access Drive / Contour Road	Garage	No Acces Allowed		
	Wall	3.0	3.0	3.0
	A.E*	2.0	2.0	2.0
Forest Road	Garage	No Acces Allowed		
	Wall	4.0	4.0	4.0
	A.E*	2.0	2.0	2.0
Corner Lot Boundary	Garage	No Acces Allowed		
	Wall	3.0	3.0	3.0
	A.E*	2.0	2.0	2.0
Side Boundary	Wall	1.05	1.05	2.0
	A.E*	0.45	0.45	1.4
Rear Village Lane	Wall	0.6	0.6	0.6
	A.E*	0.0	0.0	0.0
Side Boundary Rear Village Lane	Wall	1.0	1.0	1.0
	A.E*	0.45	0.45	0.45
Zero Lot Line	Wall	0.2	0.2	N/A
	A.E*	0.2	0.2	N/A

note: the building footprint shown is a guide to good home placement and is indicative only refer Designs Essentials ans Setbacks for detailed infromation





E2- UP HILL SLOPE SECTION (refer neighbourhood code)



E3- DOWN HILL SLOPE SECTION (refer neighbourhood code)

Figure 28 - Built Form Code – Building Type E - Single Dwellings

Figure 29 - Built Form Code – Building Type D and E - Single Dwellings – Graphical Representation

BUILT FORM CODE

TYPE	PLANNING DATA	
F	SITE AREA	from 1000m²
	SITE COVER	Max 60% of the effective site Note: Overhangs, Hoods & Pergolas are excluded from site cover calculations
	HEIGHT	10 metres to front of site and 7metres at the rear of the within effective site area (Max height 2 storeys)
	PRIVATE OPEN SPACE	Min. 25m² for each dwelling with a minimum width of 3m accessible from a living area

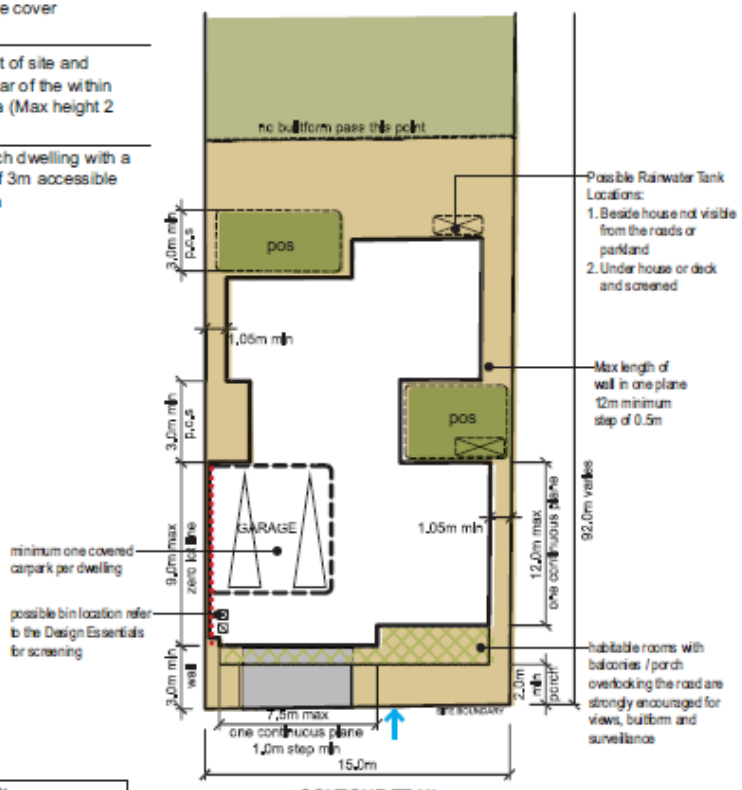
THE DESCRIPTION
The Purpose of this code is to ensure that narrow lot detached homes contribute to the character of Pinny Beach

DWELLINGS PER LOT
Single Dwelling Lots 15.0 metres plus

MINIMUM BUILDING SETBACKS
All setbacks are to face of wall of primary structure with overhangs, hoods, screens and other architectural extensions are as per the Architectural Extension setbacks (AE*). All setbacks at the discretion of the Design Review Panel and still subject to BCA requirements

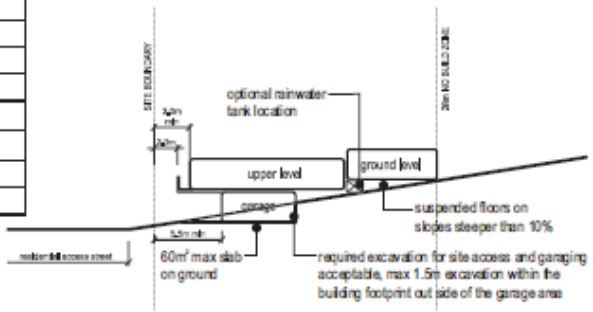
ZERO LOT LINE WALLS
Maximum height of built to boundary walls 6.0m. Zero Lot Line walls are not mandatory.

PRIVATE OPEN SPACE (POS)
Orientated to the North/East, all living areas to interface with P.O.S
Note: Other P.O.S positions can be approved based on good solar principle and site orientation



SETBACK TABLE

Boundary	Type	Storeys	
		Ground	Upper
Main Access Drive	Garage	No Access Allowed	
	Wall	4.0	4.0
	A.E*	3.0	3.0
Forest Road	Garage	5.5	N/A
	Wall	3.0	3.0
	A.E*	2.0	2.0
Side Boundary	Wall	1.05	1.05
	A.E*	0.45	0.45
Zero Lot Line	Wall	0.2	0.2
	A.E*	0.2	0.2



D3- UP HILL SLOPE SECTION (refer Neighbourhood Code)

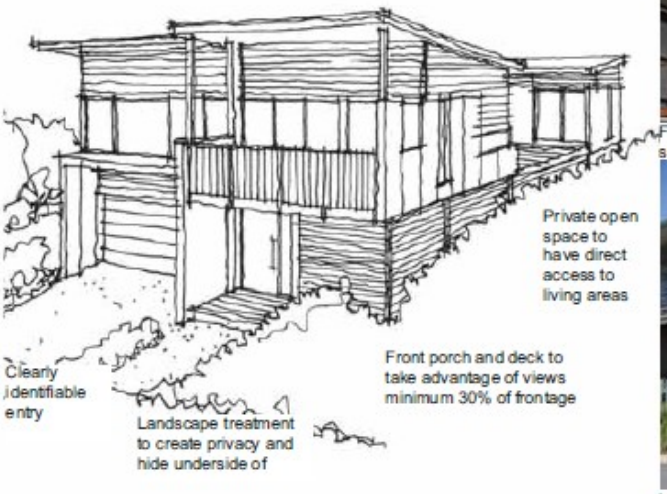
note: the building footprint shown is a guide to good home placement and is indicative only refer Designs Essentials ans Setbacks for detailed infromation

Figure 30 - Built Form Code – Building Type F - Single Dwellings

BUILT FORM CODE

TYPE

F



Articulated front elevation with clearly identified from entry balconies encouraged for views builtform and surveilence to the street

Front balcony encourage to take advantage of view and add surveilence to the street front.

Low fencing does not dominate the street front with good use of light weight, transparent materials

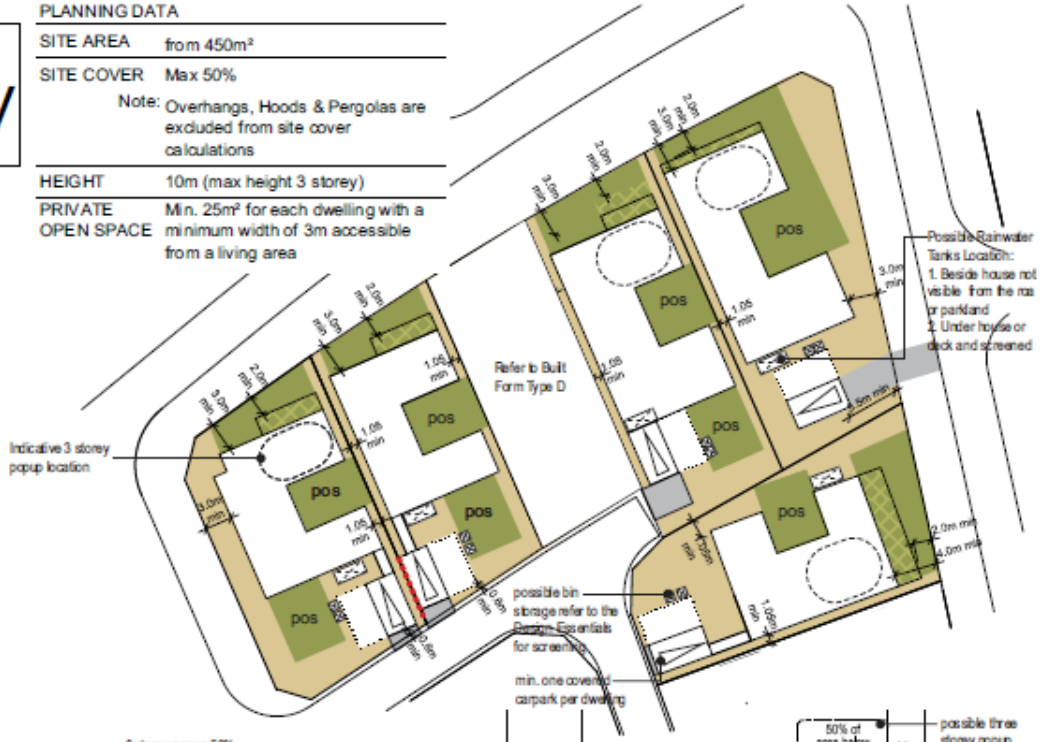
Landscape treatment to create privacy and hide underside of deck, also light weight material used within the building to breakup the buildform

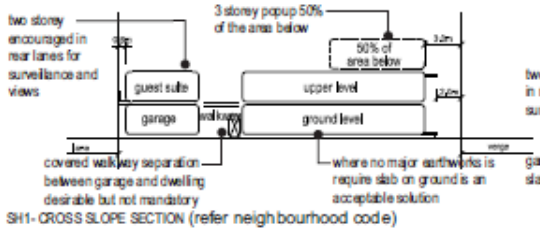
Figure 31 - Built Form Code – Building Type F - Single Dwellings – Graphical Representation

BUILT FORM CODE

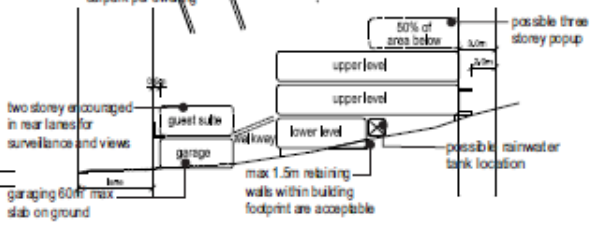
TYPE **DV**

PLANNING DATA	
SITE AREA	from 450m²
SITE COVER	Max 50% Note: Overhangs, Hoods & Pergolas are excluded from site cover calculations
HEIGHT	10m (max height 3 storey)
PRIVATE OPEN SPACE	Min. 25m² for each dwelling with a minimum width of 3m accessible from a living area





SH1- CROSS SLOPE SECTION (refer neighbourhood code)



SH3- UP HILL SLOPE SECTION (refer neighbourhood code)

THE DESCRIPTION
The Purpose of this code is to insure that detached lot homes contribute to character of Pinny Beach

DWELLINGS PER LOT
Single Dwelling Lots 15.0 metres plus

MINIMUM BUILDING SETBACKS
All setbacks are to face of wall of primary structure with overhangs, hoods, screens and other architectural extensions are as per the Architectural Extension setbacks. All setbacks at the discretion of the Design Review Panel and still subject to BCA requirements

THREE STOREY POP-UP
maximum 50% of storey area below, only dwellings nominated on the neighbourhood code.

PRIVATE OPEN SPACE
Orientated to the North/East, all living areas to interface with P.O.S
Note: Other P.O.S positions can be approved based on good solar principle and site orientation

ZERO LOT LINE WALLS
Maximum height of built to boundary walls 6.0m and can only be at the rear of the lot as shown above. Zero Lot Line walls are not mandatory.

SETBACK TABLE

Boundary	Type	Storeys		
		Ground	Upper	3 storey
Main Access Drive / Contour Trail	Garage	No Access Allowed		
	Wall	3.0	3.0	3.0
	A.E*	2.0	2.0	2.0
Forest Road	Garage	No Access Allowed		
	Wall	4.0	4.0	4.0
	A.E*	2.0	2.0	2.0
Corner Lot Boundary (Forest Road)	Garage	5.5	N/A	N/A
	Wall	3.0	3.0	3.0
	A.E*	2.0	2.0	2.0
Side Boundary	Wall	1.05	1.05	2.0
	A.E*	0.45	0.45	1.4
Rear Village Lane	Wall	0.6	0.6	0.6
	A.E*	0.0	0.0	0.0
Zero Lot Line	Wall	0.2	0.2	N/A
	A.E*	0.2	0.2	N/A

Figure 32 - Built Form Code – Building Type DV - Single Dwellings

4.5 EAST VILLAGE – RESIDENTIAL FLAT CODE

4.5.1 SITE COVERAGE

Objectives

a. To promote a compact village in the coastal setting of Pinny Beach.

b. Site coverage is consistent with the low to medium density residential character of the surrounding Pinny Beach Coastal Village.

Controls

1. The maximum site coverage must not exceed 55% excluding eaves, pergolas, awnings, gatehouses or basement parking.

4.5.2 HEIGHT

Objectives

a. To protect the visual amenity of the Coastal Village.

Controls

1. Heights must not exceed 14 metres above the existing ground level.
2. Building heights must be in keeping with the residential character of the surrounding area.

4.5.3 SETBACKS

Objectives

a. To ensure buildings provide for setbacks from the street frontage which are appropriate to the efficient use of the site and the streetscape character.

b. To ensure there is no significant loss of amenity to residents on adjoining sites.

c. To ensure that there is adequate solar access to adjoining dwellings and open space areas.

Controls

1. Street frontage must be setback a minimum of 4 metres for building walls and 1.5 metres for balconies, eaves, awning, and garden structure or likewise.
2. Parks and Public walkways / access ways must have a minimum setback of 1 metre for building walls and no setback for balconies, eaves, awning, and garden structures or likewise.
3. Basement parking structures, between street frontage and the main front elevation must be no more than 1 metre average above the ground level and setback 1.5 metres minimum from any street frontage.
4. Internal site setbacks between building walls must be a minimum of 3.0 metres with balconies, eaves, awning, and garden structure or likewise to have a minimum setback of 2.0 metres between.

4.5.4 CAR PARKING

Objectives

a. Development achieves adequate provisions of on-site vehicle parking that is clearly defined, safe and easily accessible.

b. To ensure the provision of vehicle parking spaces takes into account the type and size of the development, the capacity of existing road network to cater for street parking and universal design to provide non-discriminatory access and use.

Controls

1. Each dwelling unit must have the following car parking rates:
   i. Small (<75m²) or 1 bed = .075 per dwelling
   ii. Medium (75-100m²) or 2 beds = 1.0 per dwelling
   iii. Large (>100m²) or 3 beds = 1.5 per dwelling
2. Single file parking should be provided where two spaces are provided for one dwelling.
3. Visitor car parking rates must be 0.25 car parks per dwelling unit which can be provided on site or adjacent to the building in public streets.

4.5.5 BUILDING DESIGN

Objectives

a. To ensure buildings are designed and orientated to the street to add visual interest to the streetscape.

b. To ensure building articulation and design elements that reduces bulk and provides interest.

c. To ensure pedestrian and open spaces are more prominent than vehicle movement areas and utility spaces.

d. To promote buildings that have a human-scale built form.

Controls

1. Building should be parallel or nearly parallel to the road frontage and have living area windows or balconies that face the street.
2. Buildings must incorporate a combination of verandas, recesses and variation in materials and building form.
3. Buildings must have no unbroken elevation greater than two storeys on any vertical plan and elevations use a variety of materials colour / textures between levels.
4. Facades must maintain an appropriate scale, rhythm and proportions that respond to the desired contextual character and include:
   i. Defining a base, middle and top related to the portion of the building, expressing the internal layout of the building through vertical bays
   ii. Expressing the variation in floor to floor height, particularly at lower levels
   iii. Articulating building entries with awnings, porticos and projecting bays and incorporating architectural features which give human scale to the building design at street level
5. Visual relief must be provided by pavement treatments and landscape elements
6. Fencing must be designed and constructed to complement the building, streetscape and to allow for outlook to the street.

4.5.6 SOLAR ORIENTATION

Objectives

a. To ensure that dwellings and open spaces receive sufficient solar access and privacy.

b. To minimise adverse impacts on the private outdoor space of adjoining dwellings.

Controls

1. Windows to north facing living areas and principle open space areas must receive at least 3 hours of sun between 9am and 5pm on 21st of June over a portion of the surface.
2. North facing windows to living areas and principle open spaces areas of neighbouring dwellings must not have sunlight reduced to less than the above three hours.

4.5.7 PRIVACY

Objectives

a. To ensure building are designed and sited to achieve an acceptable level of privacy for the occupants of the dwelling and neighbouring dwellings.

Controls

1. All habitable room windows should not directly face within 10 metres of a habitable room window of another dwelling unit.
2. All habitable room windows should not have a sill height not less than 1.7 metres that are directly facing and within three metres of an access way, footway or communal open space area.

OR

3. Fixed obscured glazing should be fitted to all habitable room windows to a height of less than 1.7 metres above floor level.
4. The view from the habitable room window should be screened by a structure not greater than 1.8 metres in height which has openings that make it greater than 25% transparent.
5. A direct view exists into the private open space of adjoining dwelling/s and the outlook from windows, landing stairs, terraces, decks and other private communal or public areas is obscured or screened by privacy screens which have openings that make not great than 25%.

4.5.8 ROOF DESIGN

Objectives

a. Roof design enhances the streetscape.

Controls

1. Roofs must be a simple combination of pitched and skillion roofs with parapet roofs being a secondary roof element.
2. All roof top features and equipment must be located out of view from the street front and must be colour coordinated with the roof colour.
3. Roof eaves must be a minimum of 600mm with no less than 70% of the fascia length having overhangs, unless openings are sufficiently shaded by awnings.

4.5.9 COMMUNAL OPEN SPACE

Objectives

a. To provide outdoor areas that improve visual amenity, views and recreational opportunities for residents and occupants within a development.

Controls

1. Where more than 25 percent of dwellings do not have direct access to the ground floor private outdoor areas, communal outdoor areas with non-discriminatory access must be provided with at least one continuous area being a minimum of 50m² with a minimum dimension of five metres. These facilities may include a communal pool, tennis court or similar recreational facilities.

4.5.10 PRIVATE OPEN SPACE

Objectives

a. To ensure that dwellings are provided with functional, well located areas of private open space.

b. To ensure that private open space is integrated with, and is directly accessible from the living areas of a dwelling.

Controls

1. The private open space for dwellings with ground level access must be at least 25m² with a minimum dimension of three metres, and is accessible from the living area.
2. A dwelling entirely located above the ground floor level must include a private open space that consists of a balcony or roof area open to the sky and has a minimum are of 8m² and minimum dimension of two metres.

4.5.11 SERVICE AND UTILITY AREAS

Objectives

a. To ensure service structures and communal utilities are unobtrusively located on the site and are environmental sustainable.

Controls

1. Service structures and mechanical plant should be designed as an architectural feature of the building or are effectively screened from view.
2. A permeable (gravel, grasscrete etc) car wash bay should be provided.
3. Individual clothes drying areas or internal clothes dryers should be provided.

4.5.12 PEDESTRIAN ENTRY

Objectives

a. To provide well lit pedestrian paths and entry points that are clearly visible form the street.

Controls

1. The development must have at least one prominent pedestrian path that connects the street with the building entry.
2. Movement sensitive lighting should be directed towards pedestrian and vehicle entry and exit points and communal facilities.
3. Community building/facilities should be well lit and clearly identified.

4.5.13 VEHICLE MOVEMENT

Objectives

a. To encourage vehicle access and parking that is safe and convenient for residents, visitors and service providers.

b. To ensure vehicle parking design and location minimises impact on neighbouring dwellings.

Controls

1. A centrally located driveway must not dominate the main street frontage and provides:
   i. For two way traffic and entry/exit point.
   ii. A driveway of at least 5.5metres in width
2. Vehicle movement areas should be located a minimum of 3m from any bedroom window.
3. Where the site is bounded by more than one street frontage, the secondary street should provide for the main vehicle entry/exit point.

4.5.14 NOISE

Objectives

a. To ensure noise does not unreasonably affect existing and likely future developments on adjacent land.

Controls

1. Active recreation areas should not be close to bedroom windows or other openings.
2. Air conditioning plant should be located toward the centre of the site and acoustically insulated.

4.6 RADAR HILL PRECINCT

Objectives

a. To design Radar Hill Precinct as a compact higher density pedestrian orientated village.

Controls

1. A development control plan incorporating design guidelines for built form must be prepared for the Radar Hill Precinct at subdivision stage. These built form controls will be incorporated into this Area Plan and will be consistent with the North Wallarah Masterplan – Built Form Management Plan.
2. Development at Radar Hill will form a compact pedestrian orientated residential village of higher density confined to the quarry footprint, the radar installation and the former village.
3. Landscaping must be used within Radar Hill Precinct to remediate past mining areas.
4. External building materials within Radar Hill must utilise brickwork or stone as the predominant external materials. The upper levels of multi-level buildings should use lightweight construction (timber and metal) and be non-reflective.
5. Colours within Radar Hill must be consistent with the North Wallarah Peninsula Masterplan Visual Integration Management Plan.
6. Built form in Radar Hill must be articulated into smaller elements utilising stepping facades and roofs to provide a horizontal emphasis.
7. Roof pitch must be kept to a minimum to reduce the height of building envelopes and allow views from beyond.
8. Roof terraces and balconies should provide viewing opportunities and articulate the façades of large buildings.

9. The tree lined ridgetop must remain as the visual backdrop to the development. Buildings adjoining the quarry face must be below the top of the tree canopy above the quarry. Buildings should respond to the topography.
10. Car parking must be limited to common parking bays or in basement car parking.
11. The radar hill bunker must be retained and integrated into the development with heritage interpretation.

4.7 SPOON ROCKS VALLEY PRECINCT

Objectives

a. To design Spoons Rocks Valley Precinct as a compact coastal village.

Controls

1. A development control plan incorporating design guidelines for built form must be prepared for the Spoons Rocks Valley Precinct at subdivision stage. These built form controls will be incorporated into this Area Plan and will be consistent with the North Wallarah Masterplan – Built Form Management Plan.
2. Development at Spoon Rocks Valley must be a compact pedestrian orientated coastal village below the ridgeline.
3. Building footprints within Spoon Rocks Valley Precinct are compact and should have a maximum floor area of 120 square metres (excluding terraces and decks).
4. Spoon Rocks Precinct comprises a mix of single and two storey detached buildings.
5. Views to Pinny Beach must be retained through the sensitive sitting of buildings.
6. All external materials within Spoons Rocks Valley must comprise timber, metal, lightweight cladding and glass and colours derived from the natural landscape. Roof materials must not be reflective.
7. Spoons Rocks should contain pedestrian and walking trails linking the precinct to other parts of the Coastal Sector.
8. Native vegetation landscaping screens the development from Caves Beach.

Appendix D – Colour Palette – Coastal Sector – Pinny Beach

Colour Palette

This colour palette is provided as a guide for you to select appropriate exterior colours for your home. They are colours which will compliment the surrounding national park and foreshore vegetation.

External building colours should enable the building to blend with local vegetation.

External building colours should be vibrant, and their hue should be selected from colours found in the immediate locality to assist in achieving an interesting house design, and variety in the streetscape.

The colour palette consists of three colour 'families'.

Some homes may be required by the DRP to be specific colours to reduce visual impact from key public views outside of the Pinny Beach Village. (Refer Neighbourhood Plan).

It is important to note that the colours shown below are shown as a guide only and do not represent the only colour choices available for your home. As noted in each 'family' other colours may be approved at the discretion of the DRP.

Encouraged for East and West Village	Encouraged for West Village	Encouraged for East Village
1	5	9
2	6	10
3	7	11
4	8	12

Family A (selected from the Dulux Master Palette)

The predominant external colour of your home should be selected from this family or similar. Colours used which are not shown here may be approved at the discretion of the DRP.

1. Army IssueP15B.5
2. SandbarkP17C.1H
3. Paris CreekP18.B5
4. LivingstoneP17A.1H
5. Reed BedP17.B3
6. Celery Satin P19.D1
7. Willow LeafP20.B3
8. Spring ShootP19.F1H
9. AerobusPG2.G3
10. Soft Fresco HalfP25.B1H
11. Vivid WhitePCW.B4
12. Aqua Mist QP30.B1Q

Family B (selected from the Dulux Master Palette)

The stronger colour for feature walling, accents and external cladding which 'connect' your home to the landscape should be selected from this family or similar. Colours used which are not shown here may be approved at the discretion of the DRP. The colour must be compatible with the predominant colour selected from Family A.

1. Ticking	PG1.A7
2. Klute	PG1.F5
3. Bronze Fig	P16.B7
4. Oyster Linen	P16.B3
5. Bogle	PG2.D7
6. Purple prince	P46.B7
7. Bronze	Fig P16.B7
8. Pawn Broker	P04.B9
9. Brood	P12.B7
10. Oriental Spice	P09.F9
11. Billet	P12.F9
12. Namadji	PG1.F8
13. Anchor Point	P40.E7
14. Quantum Blue	P41.E5
15. Stream	P38.E7
16. Passionate Blue	P41.H9

Window Frame Colours

Timber window frames may be stained in a colour to compliment your family A and B selections, or painted in a colour selected from Family C.

Family C (selected from the Dulux Master Palette)

If required, the strongest colour for trim, details, main entrance door, pergolas and the like should be selected from this family or similar. Colours used which are not shown here may be approved at the discretion of the DRP. These colours must be compatible with colours selected from Families A and B, and be used in moderation.

1. Le Roy	P09.B7
2. Army Issue	P15.B5
3. Congo Brown	P15.B9
4. Western Myall	PG1.F7
5. Raku	PG2.C7
5. Jarrah	P14.D7
6. Mali	PG2.C9
7. Ovoid Fruit	P17.D8
8. Painted Bark	P06.D9
9. Desert Soil	P10.F8
10. Deep Fuchsia	P01.B7
11. Reed Green	P19.F8
12. Areostatics	P37.E8

Roof Colours (selected from the Colorbond Palette)

One of the following three colours should be used for the roof sheeting.

1. Bushland
2. Jasper
3. Windspray

Appendix E – Suitable Plant Species List – Coastal Sector – Pinny Beach

Suitable Species List

	SECTOR WIDE LANDSCAPE CHARACTER UNIT (LCU)	
	Trees	
	Allocasuarina littoralis	Black She-oak
	Allocasuarina torulosa	Forest Oak
	Angophora costata	Smooth-barked Apple
	Backhousia myrtifolia	Grey Myrtle
	Casuarina glauca	Swamp Oak
	Corymbia gummifera	Red Bloodwood
	Corymbia maculata	Spotted Gum
	Cupaniopsis anacardioides	Tuckeroo
	Eucalyptus capitellata	Brown Stringybark
	Eucalyptus haemostoma	Scribbly Gum
	Eucalyptus punctata	Grey Gum
	Eucalyptus racemosa	Scribbly Gum
	Eucalyptus siderophloia	Grey Ironbark
	Eucalyptus umbra	Bastard White Mahogany
	Glochidion ferdinandi	Cheese Tree
	Livistona australis	Cabbage Tree Palm
*	Pandanus pedunculatus	Pandanus
	Pittosporum undulatum	Sweet Pittosporum
	Syncarpia glomulifera	Turpentine
	Shrubs	
	Acacia longifolia	Sydney Golden Wattle
	Acacia parvipinnula	Silver-stemmed Wattle
	Acacia sophorae	Coastal Wattle
	Allocasuarina distyla	Scrub She-oak
	Banksia integrifolia	Coast Banksia
	Banksia serrata	Old Man Banksia
	Banksia spinulosa	Hairpin Bankisa
	Boronia falcifolia	Wallum Boronia
	Boronia polygalifolia	Milkwort Boronia
	Breynia oblongifolia	Breynia
	Callistemon citrinus	Lemon Scented Bottlebrush
*	Callistemon cultivars	Bottlebrush
	Calytrix tetragona	-
	Casuarina distyla	Scrub Oak
	Cissus hypoglauca	Water Vine
	Clerodendrum tomentosum	Hairy Clerodendrum

	SECTOR WIDE LANDSCAPE CHARACTER UNIT (LCU)	
	Shrubs cont.	
*	Cordyline australis	Cordyline
	Dillwynia retorta	Eggs and Bacon
	Dodonaea triquetra	Hop Bush
*	Dracaena draco	Dragon Tree
	Gonocarpus teucroides	Raspwort
*	Grevillea cultivars	Grevillea
	Goodenia ovata	Hop Goodenia
	Hakea sericea	Needlebush
	Hakea teretifolia	Needlebush
	Hibbertia pedunculata	-
	Hibbertia vestita	
	Kunzea capitata	-
	Lambertia formosa	Mountain Devil
	Leptospermum laevigatum	Coastal Tea Tree
	Leptospermum polygalifolium	Yellow Tea Tree
	Leptospermum trinervium	Slender Tea-tree
	Leucopogon juniperinus	Bearded Heath
	Leucopogon virgatus	-
	Melaleuca nodosa	Paperbark
	Melaleuca stypheloides	Prickly-leaved Paperbark
*	Myoporum parvifolium	Creeping Boobialla
	Notelea longifolia	Mock Olive
	Persoonia levis	Broad-leaved Geebung
	Persoonia linearis	Narrow-leaved Geebung
	Pimelea linifolia	Slender Rice Flower
	Pittopsporum revolutum	Yellow Pittosporum
*	Phormium tenax	Flax Lily
*	Phormium purpureum	Flax Lily
	Phyllota phylicoides	-
	Podolobium ilicifolium	Prickly Shaggy Pea
	Ptilothrix deusta	-
	Pultenaea paleacea	Chaffy Bush Pea
	Pultenaea villosa	Bacon and Eggs
*	Syzygium cultivars	Lilly Pilly
	Westringia fruticosa	Coastal Rosemary
	Xanthorrhoea resinifera	Grass Tree

Non-endemic Plants can be used in fenced courtyard spaces.

Suitable Species List cont.

	SECTOR WIDE LANDSCAPE CHARACTER UNIT (LCU)	
	Groundcovers, Vines and Sedges	
	Adiantum aethiopicum	Common Maidenhair
	Aristida vagans	Wire Grass
	Arthropodium milleflorum	Pale Vanilla Lily
	Blechnum cartilagineum	Gristle Fern
	Brachyscome angustifolia	-
	Calochlaena dubia	Rainbow Fern
	Carex apressa	-
	Cymbopogon refractus	Barbwire Grass
	Dampiera stricta	Blue Dampiera
	Dianella caerulea	Flax Lily
★	Dianella cultivars	Flax Lily
	Dichelachne micrantha	Short-hair Plume Grass
	Eragrostis brownii	Brown's Lovegrass
	Gahnia clarkei	Tall Saw-sedge
	Goodenia hederacea	Ivy Goodenia
	Goodenia heterophylla	-
	Hardenbergia violacea	False Sarsparilla
	Hibbertia aspera	-
	Hibbertia dentata	Twining Guinea Flower
	Hibbertia scandens	Climbing Guinea Flower
	Isolepis cernua	Nodding Club-rush
	Juncus kraussii	Matting Rush
	Kennedia rubicunda	Dusky Coral Pea
	Lomandra longifolia	Spiky-headed Mat Rush
	Macrozamia communis	Burrawang Palm
	Pandorea pandorana	Wonga Vine
	Phyllanthus hirtellus	Thyme Spurge
	Pratia purpurescens	Winteroot
	Schoenus apogon	Common Bog-rush
	Sporobolus virginicus	Marsh Grass
	Tetratheca juncea	Black-eyed Susan
	Themeda australis	Kangaroo Grass
	Viola hederacea	Ivy-leafed Violet
	Wahlenbergia communis	Tufted Bluebell
	Xanthorrhoea latifolia	Grass Tree

★ **Non-endemic Plants** can be used in fenced courtyard spaces.

PART 5 – NORTHERN SECTOR

5 INTRODUCTION

This section contains local objectives and controls for development in North Wallarah in the Northern Sector and aims to ensure the vision and principles of the North Wallarah Peninsula Masterplan and Conservation Land Use Management Plan (CLUMP) are achieved. This section applies to the Northern Sector as outlined in Figure 33.

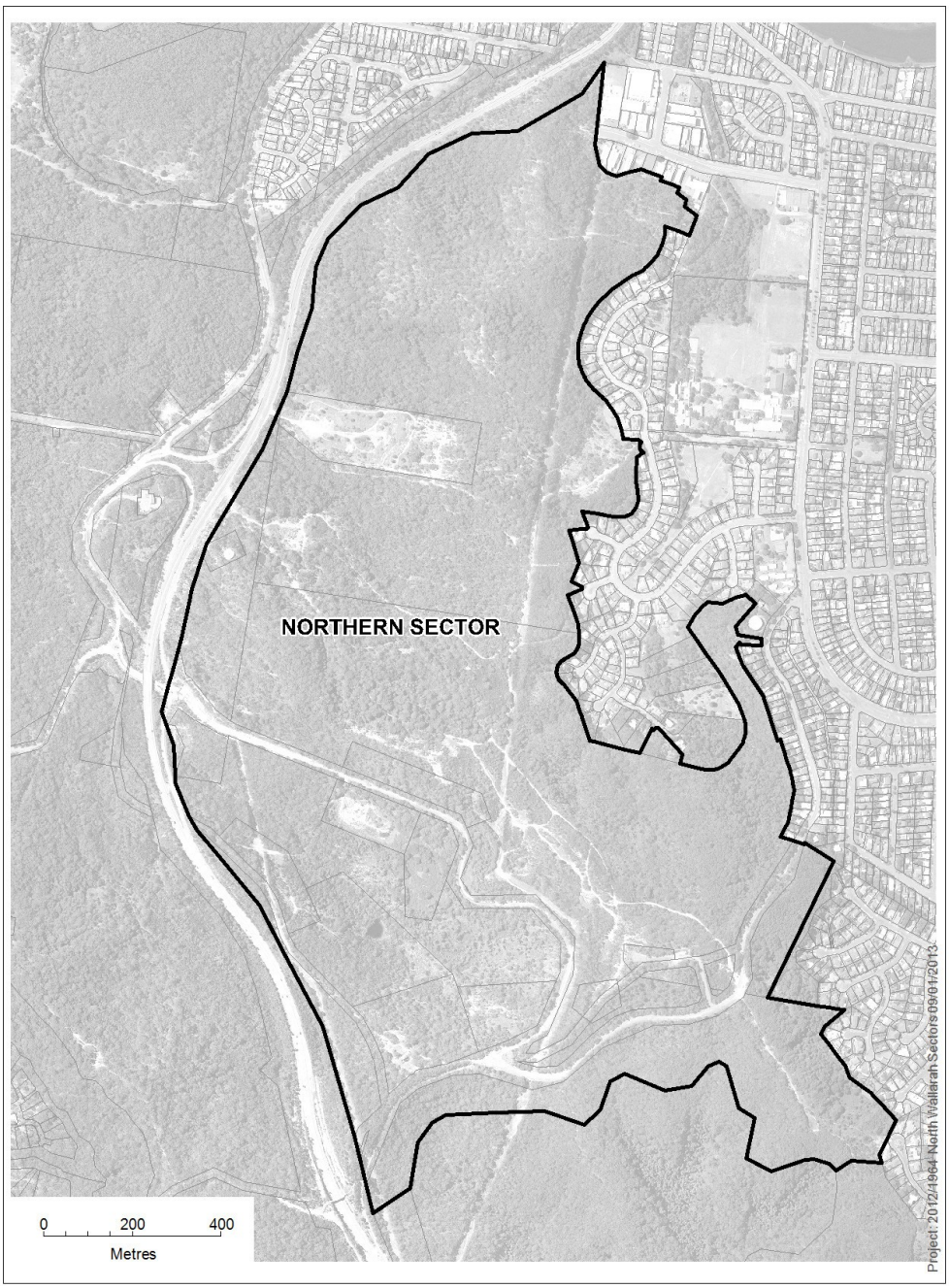


Figure 33 - Northern Sector

5.1 DESIRED FUTURE CHARACTER

The desired future character for this area is outlined in section 1.6 – Northern Sector – Precinct Character.

5.2 NORTHERN SECTOR

Objectives

a. To design the Northern Sector as a compact pedestrian-oriented hilltop village.

Controls

1. A development control plan incorporating design guidelines for built form must be prepared for the Northern Sector at subdivision stage. These built form controls will be incorporated into this Area Plan and will be consistent with the North Wallarah Masterplan – Built Form Management Plan.

Table of Contents:

1 INTRODUCTION

The purpose of this Area Plan is to guide the redevelopment of the former Pasminco Cockle Creek Smelter site and the former Incitec Pivot Fertilizer site. The Pasminco and Incitec sites are located north of the historic village of Boolaroo, between Cockle Creek and Munibung Hill.

1.1 EXTENT OF AREA PLAN

This Area Plan applies to land shown in Figure 1.

Figure 1 - Extent of Area Plan

1.2 HISTORY

The Pasminco Cockle Creek Smelter site and Incitec Pivot Fertilizer site are located within the traditional country of the Awabakal people. European settlement of the land began in the 1830-40s and consisted of small-scale agriculture and coal mining. Industrial activities commenced in the 1890s and included lead smelting and fertiliser production. Industrial activities ceased on the Pasminco site in 2003, and the Incitec site in 2009.

1.3 EXISTING CHARACTER

Topography

The topography varies between 1.5m to 160m above sea level and includes low-lying land adjacent to Cockle Creek and ridgelines associated with Munibung Hill. Cockle Creek and Munibung Hill are both culturally important landscapes to the Awabakal people. Munibung Hill also has high scenic values.

Activities and Uses

The Pasminco Cockle Creek Smelter site and Incitec Pivot Fertilizer site predominantly consist of cleared, former industrial land. Part of the Pasminco Cockle Creek Smelter site includes remnant native vegetation with significant biodiversity values.

Built form

The majority of the industrial buildings and equipment associated with the two sites has been demolished. The only exception is the former Pasminco laboratory building which is a listed heritage item.

Transport Network

Main Road, T.C. Frith Avenue and Munibung Road provide vehicle access to the Pasminco Cockle Creek Smelter site. First Street provides vehicle access to the Incitec Pivot Fertilizer site

The Cockle Creek railway station is located north of the Pasminco Cockle Creek Smelter site and provides train services to Newcastle and Sydney. Bus services to Warners Bay and Newcastle (via Glendale) are accessible from Boolaroo.

A pedestrian link is located along Main Road and T.C. Frith Avenue (north of Main Road), and provides access between Boolaroo and Argenton. However, the pedestrian link is not completely paved along T.C. Frith Avenue and pedestrian access from Main Road to T.C. Frith Avenue is constrained by high traffic volumes. A road refuge to facilitate road crossings is not provided.

1.4 ENVIRONMENTAL CONSTRAINTS

Land Contamination

The Pasminco Cockle Creek Smelter site and Incitec Pivot Fertilizer site are declared 'remediation sites' under the Contaminated Land Management Act 1997. Remediation will include excavation of contaminated material and placement into a containment cell (hazardous waste storage facility) on the Pasminco site. The containment cell will store the contaminated material indefinitely and will require long-term management and maintenance. Several bushland areas (*Angophora inopina* Reserve and Munibung Hill Reserve) will not be completely remediated and will also require long-term management and maintenance. Restrictions on the use of ground water may also apply across the site.

The containment cell will be retained in private ownership, and *Angophora inopina* Reserve and Munibung Hill Reserve are anticipated to be retained in private ownership. Implementation of long-term management plans for the containment cell, *Angophora inopina* Reserve and Munibung Hill Reserve are necessary to ensure that these areas do not re-contaminate the surrounding land, proposed to be used for residential housing and business development.

Note: Council will not accept ownership or management responsibility for the containment cell, or any land that is contaminated, including roads or stormwater infrastructure. Council will not consider accepting ownership or management responsibility of *Angophora inopina* Reserve and Munibung Hill Reserve unless management plans have been prepared and implemented to the satisfaction of Council.

2 DESIRED FUTURE CHARACTER

Desired Urban Structure

It is envisaged that the site will be remediated and redeveloped to provide residential and employment areas which:

- respect the cultural value of Munibung Hill to the Awabakal people;
- recognise the history of the industrial activity in the area;
- integrate future development into the existing urban and natural environment;
- reinforce the existing character of Main Road and the village of Boolaroo;
- enhance the natural environment such as watercourses and biodiversity values including native flora species *Angophora inopina*;
- retain and enhance the scenic amenity and significance of Munibung Hill;
- provide a range of choice in housing types; and
- encourage walking and cycling and facilitate the use of public transport.

An urban structure map and a cycleway, heritage and open space map outlining the desired future character is presented in Figure 2 and Figure 3. The key elements of the urban structure map include:

- integration industrial heritage values, the containment cell and remediated land into the existing urban fabric;
- a range of residential lands consisting of low to medium density residential development, and employment lands for mixed use and light industrial development;
- new environmental conservation and Aboriginal heritage areas including the establishment of *Angophora inopina* Reserve and Munibung Hill Reserve; and
- transport upgrades and linkages within the site and surrounding area.

Desired Urban Character (Key transport and landuse interface areas only)

The intersection of Main Road and First Street: Residential development located adjacent to the intersection of Main Road and First Street should complement the streetscape and built form of the Boolaroo Heritage Precinct. Residential development should be two storeys high to match the scale of adjoining commercial development. Residential development should be designed with building frontages and entries clearly addressing either Main Road or First Street. Windows of habitable rooms should overlook Main Road or First Street. Front fencing should not exceed 1.2m high.

Main Road: Residential development should be designed with building frontages and entries clearly addressing Main Road. Windows of habitable rooms should overlook Main Road. Front fencing should not exceed 1.2m high.

If site grades on the western-side of Main Road constrain development from addressing the street, a landscaped buffer area should separate residential development from Main Road. The indicative location of the landscape buffer is shown in Figure 2. An indicative cross section of Main Road with a landscape buffer is provided in Figure 4. Rear fencing of residential development adjoining Main Road must be consistent along the entire length of Main Road. Sheet steel fencing is not acceptable. The fencing design must be resolved at subdivision stage and be compatible with noise attenuation requirements.

T.C. Frith Avenue and Munibung Road: Residential development along T.C. Frith Avenue and Munibung Road should be separated by a landscaped buffer and local road as shown indicatively in Figure 2. Building frontages and entries should clearly address local road. Windows of habitable rooms should overlook the local road. Front fencing should not exceed 1.2m high. An indicative cross section of T.C. Frith Avenue and Munibung Road is provided in Figure 4.

Residential / Industrial Interfaces: Residential development south of Munibung Road should be separated from light industrial development by a landscape buffer and a local road as shown indicatively in Figure 2. Building frontages and entries should clearly address the local road. Windows of habitable rooms should

overlook the local road. An indicative cross section of the landscape buffer and local road is shown in Figure 4. Rear fencing of industrial properties must be consistent. Sheet steel fencing is not acceptable.

Residential / Riparian and Detention Basin Interfaces: Residential lots should be separated from riparian linkages and detention basins by a local road as shown in Figure 5. Residential buildings should be designed with windows of habitable rooms overlooking riparian linkages and detention basins. Residential lots must not be designed with rear boundaries and fences adjoining riparian linkages and detention basins. Riparian linkages and detention basins should be landscaped and provide opportunities for passive recreation and vehicle access for ease of maintenance.

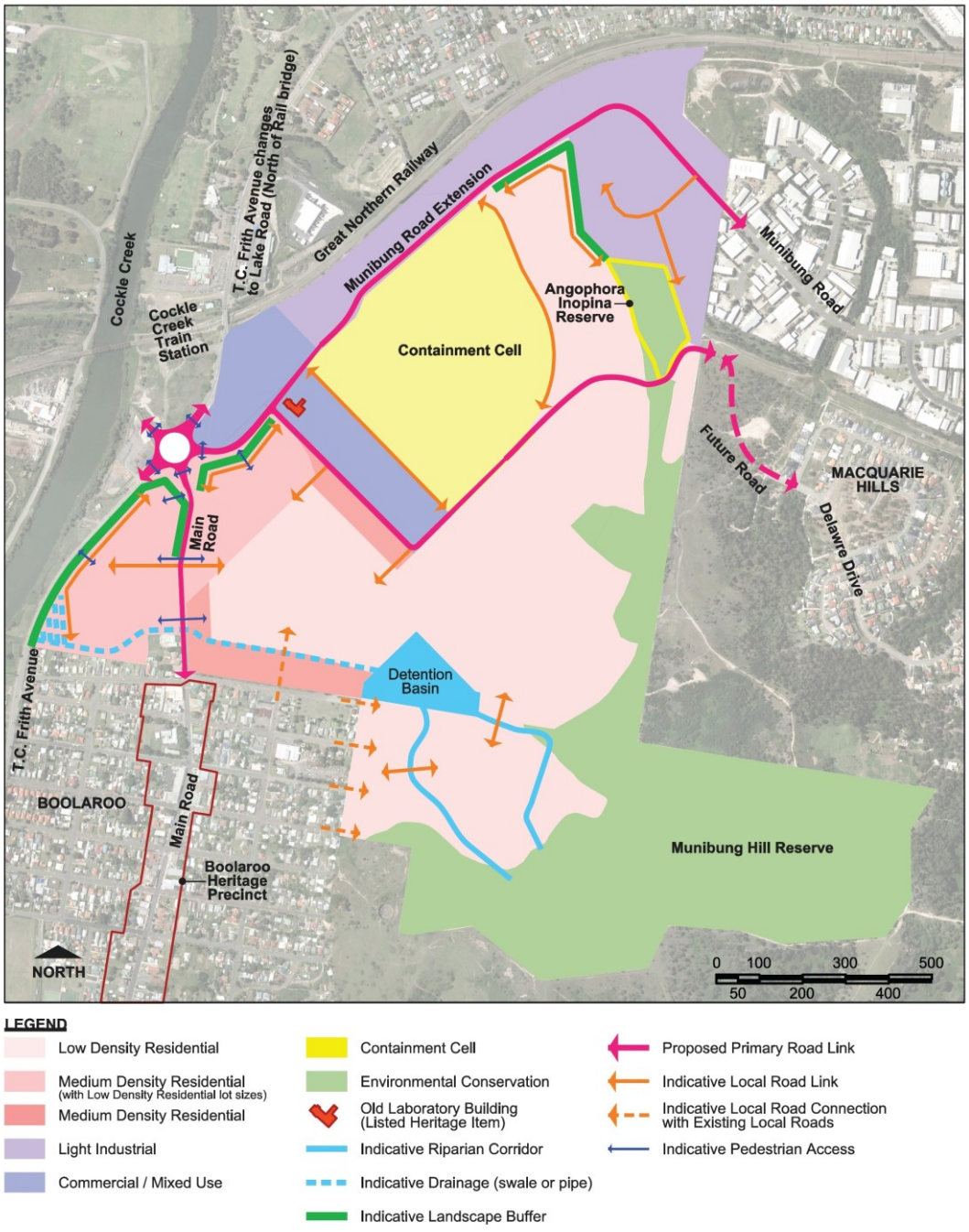


Figure 2 - Urban Structure Map

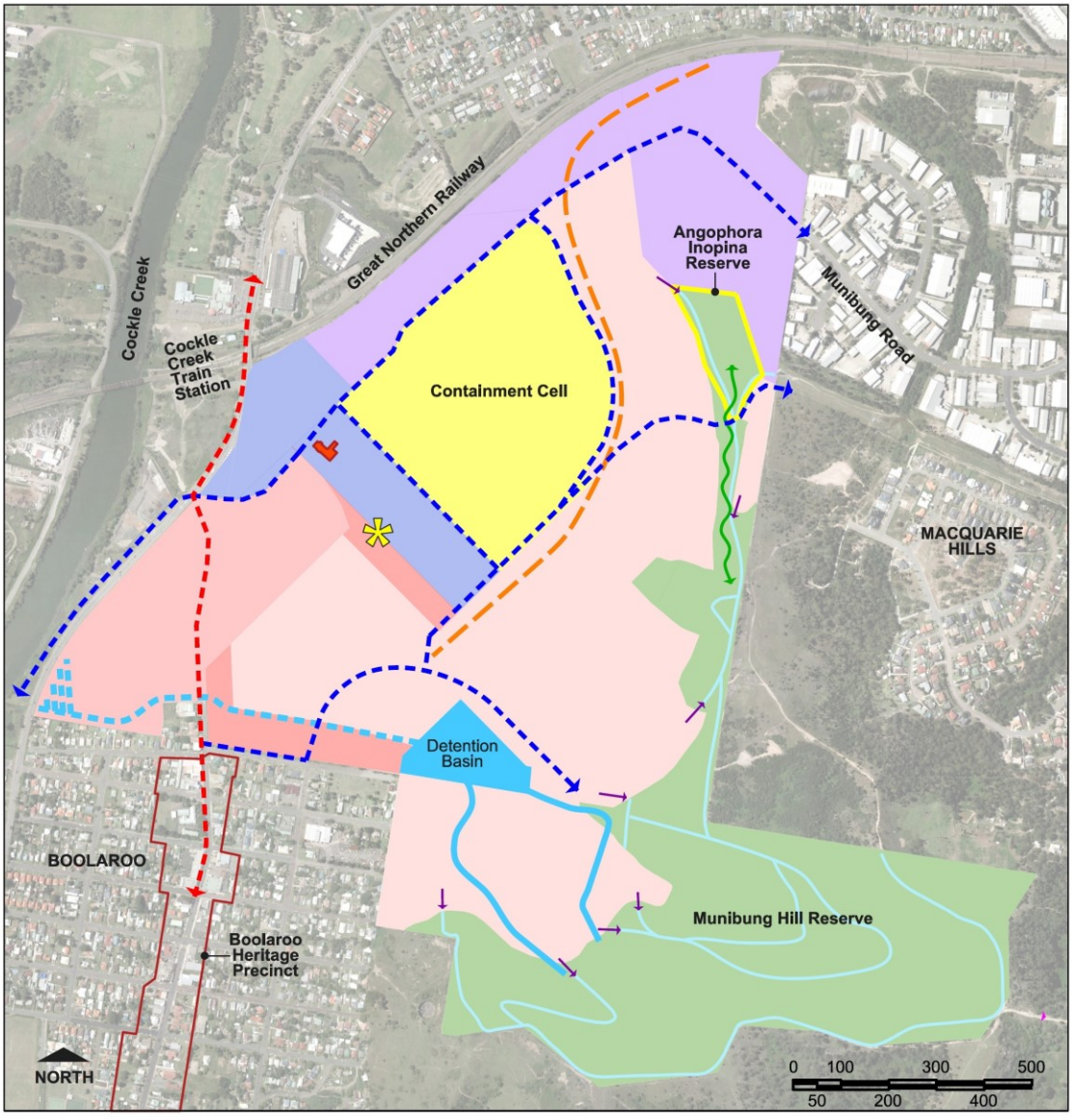


Figure 3 - Cycleway, Heritage and Open Space Map

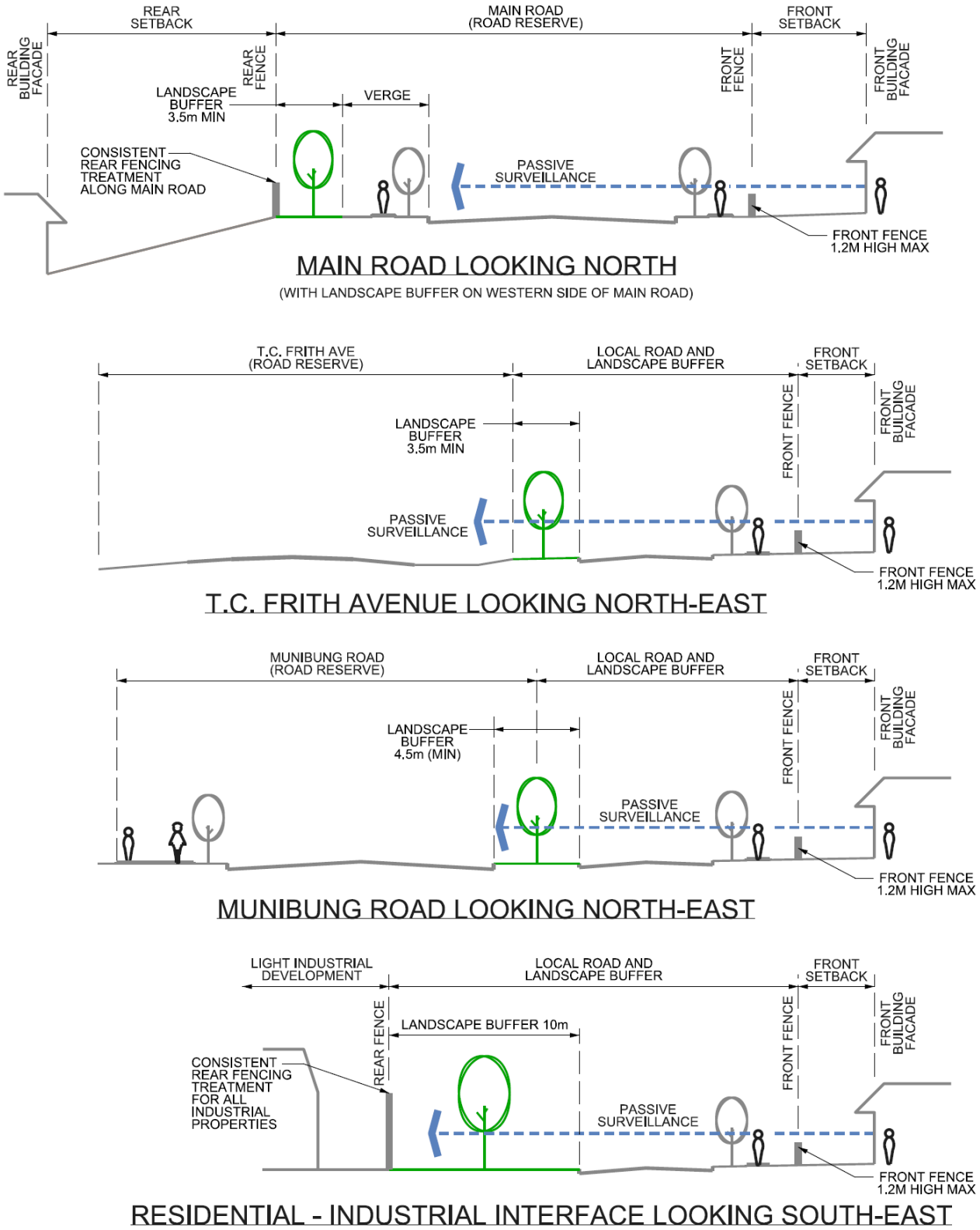


Figure 4 - Indicative Cross-sections of Selected Roads

Note: Landscape buffer plantings should consist of large trees, with a low maintenance understorey or grass, and must be determined in consultation with Council.

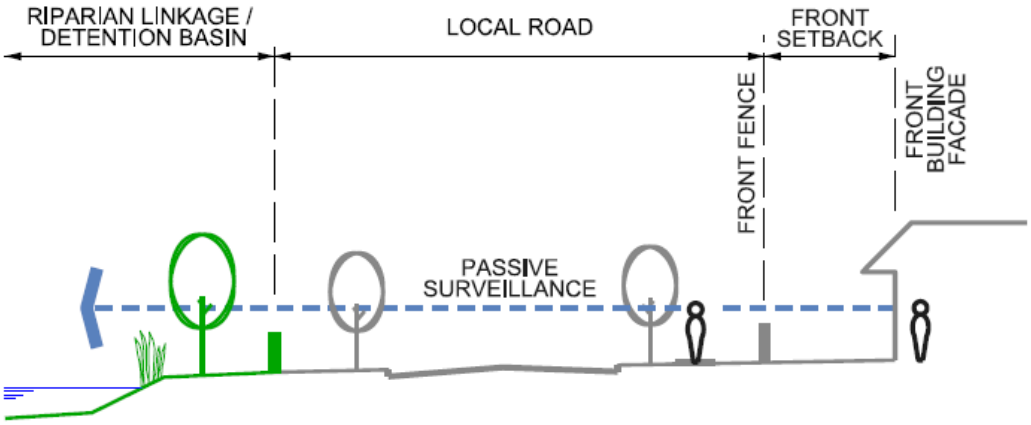


Figure 5 - Indicative residential development interface with riparian linkages and detention basins

3 CONTAMINATION

3.1 CONTAMINATED LAND

Objectives

a. To ensure land surrounding the containment cell, *Angophora inopina* Reserve and Munibung Hill Reserve is not subject to contamination risk and is suitable for development in accordance with s4.15 of the *EP&A Act 1979.*

Note: 'Contamination risk' includes contaminating substances moving from the containment cell, *Angophora inopina* Reserve and Munibung Hill Reserve onto surrounding land. Refer to Section 4.3 of the Managing Land Contamination: Planning Guidelines SEPP 55 – Remediation of Land for further details on 'contamination risk'.

Controls

1 Consent to subdivide land surrounding the containment cell into standard mixed use, commercial or residential lots must not be granted until a long-term management plan for the containment cell has been prepared and implemented to the satisfaction of Council.

2 Consent to subdivide residential land located adjacent to *Angophora inopina* Reserve and Munibung Hill Reserve into standard residential lots must not be granted until long-term management plans for these areas have been prepared and implemented to the satisfaction of Council.

Note: Controls 1 and 2 do not apply to the subdivision of land into super lots.

3.2 CONTAINMENT CELL

Objectives

a. To provide physical separation between the containment cell and adjacent land uses.

b. To provide an access road around the cell.

c. To provide passive surveillance of the containment cell.

d. To prevent erosion on the site and promote visual integration of the containment cell into the landscape character of Munibung Hill.

e. To ensure appropriate levels of public access and signage to the containment cell.

f. To ensure the public are not exposed to contaminated material.

Controls

1. A road must be provided around the perimeter of the containment cell.
2. The perimeter road must not be located within the containment cell lot.
3. The perimeter road must be located on a separate road reserve in public ownership.
4. Buildings adjacent to the containment cell must be oriented and designed to provide passive surveillance of the containment cell.
5. A landscape master plan must be prepared for the containment cell and should be consistent with the following requirements:
    i. the top of the containment cell should be grassed;
    ii. the slopes of the containment cell should be vegetated with dense shrubs;
    iii. a band of informally planted trees should be planted along the perimeter edge of the top of the containment cell;
    iv. any containment cell infrastructure such as detention basins or swales should be landscaped; and

v. details of proposed maintenance access points, public access points, public signage and fencing must also be included in the landscape master plan.

6. Any excavation within the containment cell site must be performed in consultation with an accredited land contamination site auditor under the NSW site auditor scheme.

3.3 ANGOPHORA INOPINA RESERVE AND MUNIBUNG HILL RESERVE

Objectives

a. To ensure biodiversity values, bushfire risk and land contamination issues associated with *Angophora inopina* Reserve and Munibung Hill Reserve are appropriately managed.
b. To enhance the existing landscape and scenic qualities of Munibung Hill.
c. To ensure residential development is separated from land with bushfire risk, land contamination and biodiversity values.

Controls

1 Management plans for the *Angophora inopina* Reserve and Munibung Hill Reserve must address the following matters:

i. the proposed land tenure and managing body for the reserves;

ii. the rehabilitation and ongoing management of native vegetation areas;

iii. bushfire control, fire trails, weed and feral animal management measures;

Note: The location of fire trails should utilise the alignment of existing trails where possible, and connect to the local road network to enable emergency vehicle access.

iv. the management and stabilisation of any contaminated soil to prevent public contact and contaminated soil leaving the site including in the event of fire or in stormwater runoff;

v. stormwater treatment to ensure contaminated material does not leave the site and contaminate off-site stormwater infrastructure and residential areas;

vi. the identification of areas suitable for public access and recreation;

vii. proposed buffers, edge treatments and management measures to reduce ongoing impacts and management costs at the interfaces between the reserves, and urban areas; and

viii. the establishment of a ridge line native vegetation regeneration link 50m wide as shown in Figure 3.

2 A road must separate residential development from the *Angophora inopina* Reserve and Munibung Hill Reserve.

3 The road must be located on a separate road reserve in public ownership.

4 SITE ACCESS, MOBILITY AND CONNECTIVITY WITH ADJOINING AREAS

Objectives

a. To create a transport network that provides access, mobility and connectivity within the site and to adjoining areas with regards to vehicles, pedestrians and bicycles.
b. To promote development that integrates with the existing subdivision pattern of Boolaroo, the Cardiff Industrial area and Munibung Hill.
c. To encourage safe and effective pedestrian and cycle networks.

Controls

1 Road links and cycleways should be provided in accordance with Figure 2 and Figure 3.
2 Primary road linkages must be designed in accordance with the following requirements:
   i. Munibung Road extension (road reservation and carriageway) must be an industrial road and must include footpaths;
   ii. All other primary roads are collector roads and must cater for buses; and
   iii. The proposed intersection between Munibung Road, Main Road and T.C. Frith Avenue must be designed to accommodate safe vehicular, pedestrian and cycle movements.
3 An underground water main located along the eastern side of Main Road (within lot 2 D.P. 1127713) should be:
   i. incorporated into the front setback area of residential development addressing Main Road (the front setback should not be greater than 11m); or
   ii. relocated into the existing Main Road, road reserve.
4 The local road network in residential areas should be designed to achieve:
   i. a subdivision pattern consistent with the existing grid subdivision pattern of Boolaroo residential lots and with good solar access;
   ii. connections with existing local roads to Council's satisfaction;
   iii. a low speed environment (50 km/h speed zoning); and
   iv. a walkable and permeable street network avoiding long street blocks.
5 Pedestrian links and cycleways must connect with Cockle Creek Station and the Lake Macquarie bicycle network. A safe pedestrian / cyclist crossing must be provided across T.C. Firth Avenue at a location and type to be determined by Roads and Maritime.
6 The implications of the proposed road network on the efficiency and safety of traffic movement in Boolaroo must be investigated and mitigation measures must be included in any development application that proposes changes to the existing road network.

Note: To limit adverse impacts on the existing local road network, traffic management measures may be required to limit traffic volumes entering existing local roads during peak periods.

5 EMPLOYMENT LANDS

Objectives

a. To ensure development on employment related land does not result in unacceptable amenity impacts on surrounding residential or conservations areas.

Controls

1. Light industrial development adjacent to residential areas must comply with the following requirements:

   i. development must not have an unacceptable adverse impact on the amenity of surrounding residential areas by virtue of noise, vibration, air / odour pollution, traffic generation and/or hours of operation;

   ii. development must be designed to promote the protection of the amenity of surrounding residential areas through a range of measures including appropriate land uses, location of access and parking, use of acoustic screens, and controls on hours of operation;

   iii. development applications must be accompanied by an acoustic and vibration study establishing that noise criteria for residential amenity and intrusive industrial noise specified in the NSW Industrial Noise Policy (INP) will be achieved at the boundary of the nearest residential property;

   iv. development proposals must ensure that lot size and dimensions are adequate to enable implementation of noise controls; and

2 development adjacent to the *Angophora inopina* Reserve must incorporate measures that prevent encroachment of industrial activities, weed invasion, and access into the reserve.

6 NOISE ATTENUATION

Objectives

a. To ensure development achieves acceptable levels of amenity in relation to road and rail traffic noise and vibration.

b. To ensure any noise walls do not compromise pedestrian / bicycle links and are not a maintenance liability to Council.

Controls

1. Subdivision applications for the creation of residential or commercial / mixed use lots adjoining T.C. Frith Avenue, Munibung Road, Main Road and the Great Northern Railway must be accompanied by a detailed acoustic and vibration study prepared to the satisfaction of Council. Acoustic modelling must be based on the proposed subdivision pattern and finished ground levels and include:
   i. the location and the elevation of noise sources such as vehicles; and
   ii. the location and elevation of noise receptors such as building windows of new development.
2. Noise acoustic treatments should consist of:
   i. a continuous building frontage comprising of building facades connected by solid fencing located at least 1m behind the front building line;
   ii. acoustic treatments to building facades and windows; and
   iii. the placement of noise sensitive rooms and private outdoor areas away from noise sources.
3. Noise walls should only be provided where the above acoustic treatments cannot achieve levels of acoustic amenity to the satisfaction of Council.
4. Any proposed noise walls must be designed to the satisfaction Council and accompanied by a funded maintenance plan where the noise wall is proposed to be maintained by Council.
5. Bicycle / pedestrian links must be provided through any proposed noise walls.

7 HERITAGE CONSERVATION AND INTERPRETATION

Objectives

a. To acknowledge the value of Munibung Hill to the Awabakal people.

b. To conserve, interpret and incorporate industrial heritage as part of future development.

c. To encourage development that respects the history of the site's development and former industrial use.

d. To retain and adaptively reuse the Old Laboratory Building as a landmark within the site.

e. To integrate interpretative material with the emerging urban form.

Controls

1. Development must be in accordance with the Heritage Interpretation Plan and the Conservation Management Plan - Former Sulphide Corporation Assay Building, prepared by Graham Brooks and Associates Pty Ltd, November 2009.

   Note: An electronic version of the Heritage Interpretation Plan and the Conservation Management Plan is available on request from Council.

2. A site wide Heritage Interpretation Masterplan must be prepared prior to superlot subdivision to ensure a meaningful and consistent approach to the interpretation of heritage matters is achieved across the Pasminco Cockle Creek Smelter site and Incitec Pivot Fertilizer sites. The Heritage Interpretation Strategy must include:

   i. a schedule of plaques, public artworks, and commemorative displays to be provided across the site;

   ii. a list of Aboriginal names prepared in consultation with local Aboriginal stakeholders to be used in the naming of parks and reserves;

   iii. a list of former long serving workers at the Pasminco Cockle Creek Smelter site and Incitec Pivot Fertilizer site to be used in the naming of local streets; and

   iv. a schedule of salvaged materials from the Pasminco Cockle Creek Smelter and Incitec Pivot Cockle Creek sites that must be incorporated into the design of the landscaping and the public domain in consultation with Council.

3. Development must be in accordance with the site wide Heritage Interpretation Masterplan.

4. Development should ensure that:

   i. the Old Laboratory building is retained in a prominent location in the site layout and with an appropriate curtilage;

   ii. the alignment of the former Cockle Creek spur railway line is maintained over most of its length as part of the movement system of the site; and

   iii. the public domain includes salvaged items from the Pasminco and Incitec sites in landscaping.

Note: Refer to Figure 3 for the location of the Old Laboratory building and former Cockle Creek spur railway line.

5. Development that includes plaques, public artworks, commemorative displays and salvaged items must be accompanied by a schedule outlining the ongoing maintenance activities for the items, and the funding arrangements for lifecycle management of the items to the satisfaction of Council.

6. Development of the land associated with the Old Laboratory building must be accompanied by a Heritage Assessment and Statement of Heritage Impact, and must outline:

i. appropriate curtilage for the Old Laboratory Building site; and

ii. appropriate setbacks and building heights for development adjacent to the Old Laboratory Building.

8 LANDSCAPING AND THE PUBLIC DOMAIN

Objectives

a. To ensure that landscaping recognises and enhances the local character of the area.

Controls

1. A landscape plan must be prepared for any landscape buffer between residential development and T.C. Frith Avenue.
2. A streetscape master plan must be prepared for Main Road upgrade and Munibung Road extension.
3. Landscaping adjacent to the *Angophora inopina* Reserve is to consist of native species grown from local seed.
4. Landscaping should include salvaged materials from the Pasminco Cockle Creek Smelter site and Incitec Pivot Fertilizer site.

Note: For containment cell landscaping requirements refer to Section 3.1.

9 LOCAL PARK

Objectives

a. To establish a local park in accordance with the desired urban structure for the area.

b. To provide for the local recreational needs of future residents and workers.

Controls

1. A local park must be established as part of the subdivision of 13A Main Road (Lot 2, D.P. 1127713) into standard mixed use, commercial or residential lots.

   Note: Control 1 does not apply to the subdivision of the land into superlots.

2. The local park must be established to the satisfaction of Council and should be:

   i. located in the vicinity of the location shown in Figure 3;

   ii. 5000m^2 area and be square or rectangular in configuration;

   iii. consist of flat land or land with a gentle slope;

   iv. have street frontage extending along at least two of the side boundaries; and

   v. be fit for purpose for development as a local park and not have any constraints.

Lake Macquarie Development Control Plan 2014 - Revision 25

Part 12 – Precinct Area Plans

Adopted by Council 28 September 2020

Contents of Part 12 – Precinct Area Plans:

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1 INTRODUCTION

This Area Plan is intended to provide guidance for development that is both appropriate and provides a positive contribution to the future of land at Thompson Road, Speers Point. It is intended to act as an integrated planning instrument managing and promoting quality development whilst ensuring the outcomes of Council processes are implemented in a clear, cohesive, and progressive manner.

This area plan provides guidance for the development of the Thompson Road Precinct of Speers Point.

1.1 LAND TO WHICH THIS PLAN APPLIES

This Area Plan applies to all the land outlined in heavy black edging as shown within Figure 1 – Thompson Road Area Plan Boundary.

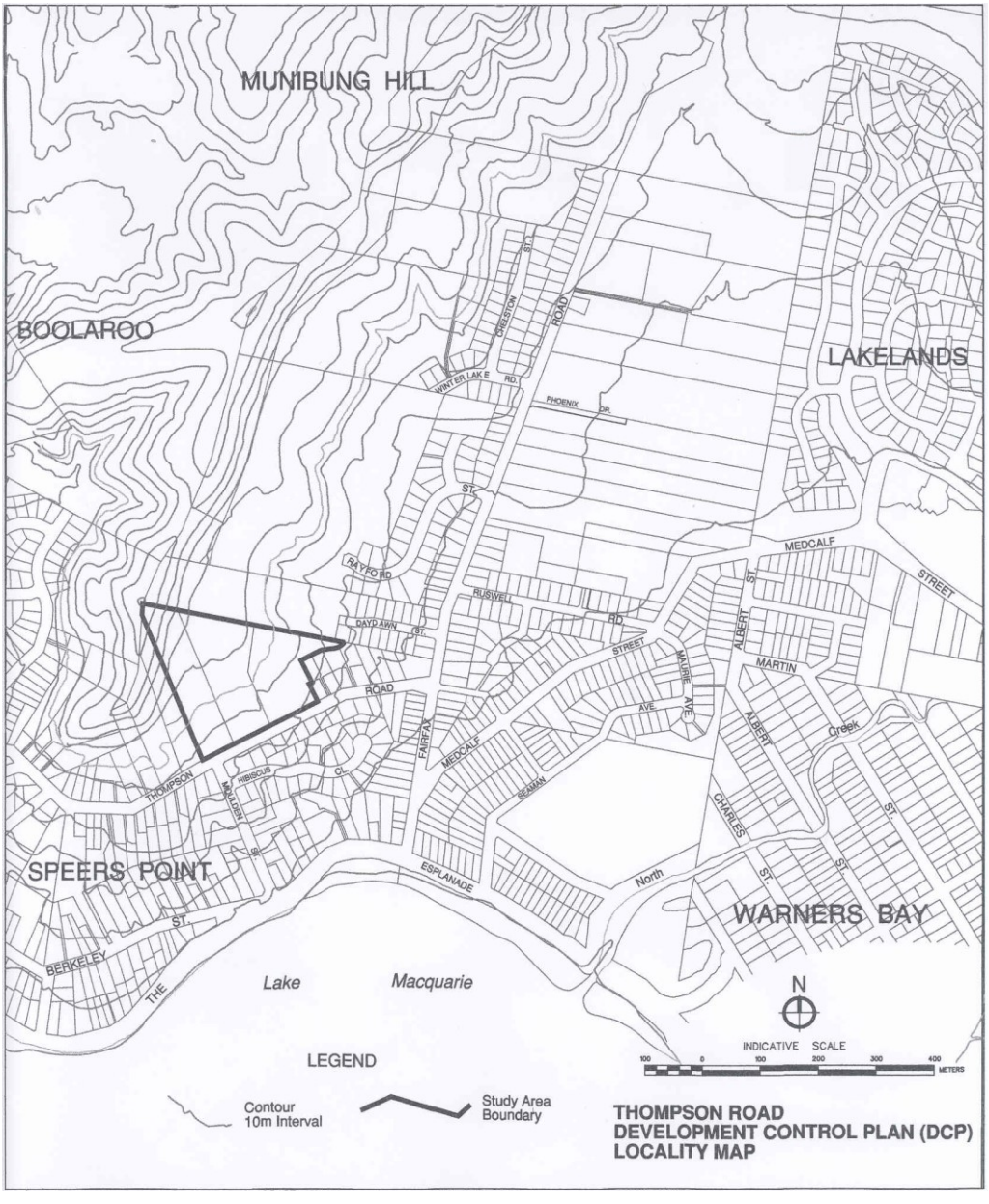

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Figure 1 - Thompson Road Area Plan Boundary

1.2 CHARACTER STATEMENT

The surrounding areas and foothills of Munibung Hill are characterised by detached residential development amongst vegetated areas. The significant ridgeline of Munibung Hill forms a green backdrop to the subject area and to Warners Bay, especially when viewed from the foreshore of Lake Macquarie.

It is envisaged that future housing and lot sizes will respect the natural setting and will not dominate views towards Munibung Hill from the surrounding areas, including from Lake Macquarie. It is envisaged that any residential development will be of a low density and should appear no greater than two storeys and will allow for the sharing of views. The form and bulk of dwellings should be broken up in order to minimise their dominance on the landscape.

Lots will be orientated towards or side on to Thompson Road. Privacy will be achieved through landscaping treatment rather than by solid/closed fencing.

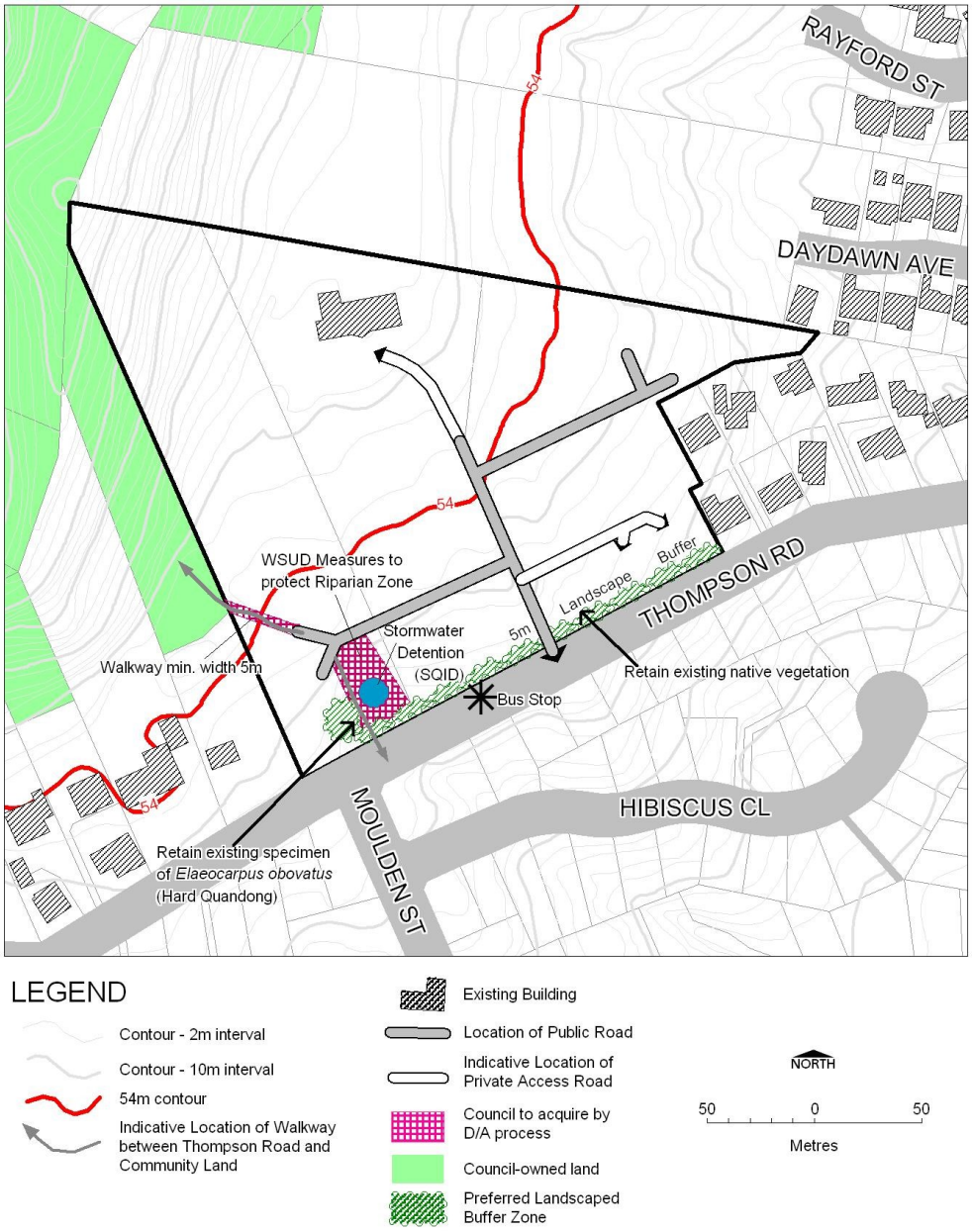

Figure 2 - Thompson Road Structure Plan

1.3 SUBDIVISION DESIGN AND LAYOUT

Objectives

a. To ensure the subdivision the Thompson Road precinct is undertaken in a coordinated manner.

Controls

1. The subdivision layout should generally be consistent with Figure 2 - Thompson Road Structure Plan.

1.4 BUILDING DESIGN

Objectives

a. To ensure that buildings within the Thompson Road Precinct do not interrupt the views to the Munibung Hill ridgelines.

Controls

2. The finished floor levels (FFL) of buildings must not exceed RL 54 AHD.

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FIGURES

TABLES

1 INTRODUCTION

This Area Plan contains local objectives and development controls for the suburb of Windale.

The general provisions of the Lake Macquarie Development Control Plan 2014 (LM DCP 2014) also apply to development in Windale. Where there is an inconsistency between the controls in this Area Plan and the controls in another Part of the LM DCP 2014, the controls in this Area Plan prevail.

2 CONTEXT

Location

Windale is centrally located in the east of Lake Macquarie. It is a short road trip from Charlestown to the north, Belmont to the south, and Lake Macquarie (the lake) and Warners Bay to the northwest.

Mount Hutton is within walking and cycling distance to the north of Windale. It contains a freestanding shopping centre with supermarkets and specialty retail.

Windale is also within walking and cycling distance to the light industrial and bulky goods retailing areas at Bennetts Green and Gateshead to the east, and the Gateshead medical precinct to the northeast.

Heritage and history

Lake Macquarie Local Government Area (LGA), which includes Windale, is part of the traditional country of the Awabakal people. Europeans settled the suburb of Windale as an agricultural area for growing fruit, vegetables, and poultry. In 1949, the Housing Commission of NSW acquired most of the land across the suburb of Windale and opened a public housing development.

Demographic and social context

At the time of writing, compared to the Lake Macquarie LGA average, Windale has:

- ↑ a larger proportion of public housing,
- ↑ a larger proportion of youth (aged 0-19 years),
- ↑ a greater proportion of one-person households,
- ↑ a greater proportion of renting households,
- ↑ more people needing assistance,
- ↑ a larger proportion of residents who identify as being of Aboriginal descent,
- ↑ higher unemployment and lower labour force participation,
- ↓ a lower proportion of seniors (aged 60 or more),
- ↓ fewer cars per household, and
- ↓ lower median household income.

3 EXISTING CHARACTER

Windale neighbourhood centre

South and Lake Streets are the two main roads through Windale, providing access to and from surrounding suburbs. Traffic on these roads is a mixture of local and through traffic.

The Windale neighbourhood shops are located in the centre of the suburb on the corner of South and Lake Streets. There is a wide pleasant footpath in front of the shops, along with a library and community centre next to the shops, which provide opportunities for social interaction.

Residential areas

Windale has 1950s style fibro cottages on single lots, 1970s Radburn style housing, and 1980s townhouses. In recent years, the suburb has continued to change with several new townhouse and villa developments. Each of these areas has their own local character, as described below.

1950s cottage areas

Windale contains many 1950s style fibro cottages on relatively deep single allotments. The cottages are mainly on grid pattern streets with wide, grassy verges. The cottages are small with open grassy front yards, scattered trees and lightweight low fences. Most of the cottages are on piers with simple corrugated iron hip or gable roofs. Driveways are narrow and the few carports or garages are setback behind houses.

1970-80s Radburn style and townhouses and villas

Several larger sites in Windale contain Radburn style townhouses and villas built in the 1970-80s, including:

- The Northern Townhouse Area – a large precinct between Merrigum Street and Scrubby Creek,
- The Mulga Street Townhouse Area – located between Mulga Street and Sturt Street and backing on to a drainage reserve, and
- The Southern Townhouse Area – located in the south of Windale between South Street and Frazer Creek.

Radburn designs characteristically have backyards facing the street and front yards facing each other over common green space. As a result, it is often unclear what is public and what is private space. Street patterns and road widths are irregular:

- Road are narrow and privately owned,
- Pedestrian footpaths are built between fences without passive surveillance,
- There is road access to the rear, instead of the front, of houses, and
- Cul-de-sacs are common.

Each of these Radburn style developments was originally on one allotment, but some have now been subdivided in to individual allotments. These subdivisions have a highly irregular subdivision pattern based on the existing development footprint that may limit future redevelopment opportunities if ownership becomes fragmented.

Post 2000 multi-dwelling housing

Townhouses and villas with face brick and tile roofs are located throughout the suburb. Many were built under the Nation Building program during the global financial crisis in 2008. They are generally heavier masonry, with limited front gardens and a dominance of hard surfaces over green space.

Cycling and walking

The area between the Windale shops and the Mount Hutton shops is zoned for medium density housing because it has good walking proximity to a range of everyday needs, including open space, shops, community facilities and schools. The topography in this area is also relatively flat and many of Windale's streets are in a grid pattern that makes walking easy.

There is a cycle path on the north-eastern boundary of Windale providing access from Willow Road to Lake Street and Gateshead Sports High.

Vegetation and landscape character

Windale is surrounded by large bushland reserves to the northwest, west, south, and east. There are vegetation corridors crossing Croudace Road near the disused quarry at the western entry to Windale and at Frazer Creek near the Pacific Highway in the south.

The suburb has a generally open, green character, with extensive areas of open space on Scrubby Creek and Tulootaba Reserve, wide road verges and a predominance of small cottages on large open lots, as well as the extensive surrounding bushland.

Large canopy trees, including *Angophora costata* or Smooth-barked Apple, are scattered through the northeast of Windale along the cycleway, which runs parallel to the Charlestown Bypass. An impressive stand of Angophora is located near Willow Road on the northern boundary of Windale.

Hydrology and flooding

Windale contains Scrubby Creek and Frazer Creek, which ultimately flow in to the Jewells Wetland. Jewells Wetland is a large wetland identified in the State Environmental Planning Policy (Coastal Management). This wetland and the endangered ecological communities within it are sensitive to decreases in water quality, and changes in hydrological regime. Part of the buffer or proximity area for this wetland occurs in the southeast of the Area Plan boundary.

The Jewells Wetland Flood Study shows the nature and extent of the flood risk in the catchment.

4 DESIRED FUTURE CHARACTER

Discussions with the Windale community helped to inform the desired future character outlined below. Locals told Council staff that they value the green character of Windale. Many people also saw that Windale offers reasonably priced housing in a great location.

4.1 DESIRED FUTURE PUBLIC REALM

Future changes to the public realm in Windale will build on the momentum of community programs, activities, support services and infrastructure currently underway.

The local community should have early, inclusive input into the design of works in the public realm to ensure that they reflect the local character, history, people and natural setting. Public works will make a positive contribution to the local character as described below.

Cycleways, open space reserves and community facilities

Future development will add to walking and cycling paths in Windale to connect people with open space reserves, shops, community facilities and public transport services.

Scrubby Creek reserve provides a continuous open space link between Windale and the Mount Hutton shopping centre. The rehabilitation of Scrubby Creek will improve the amenity and function of this natural asset. A shared path on Scrubby Creek will take advantage of the improved amenity and significantly increase the number of people in walking distance of the Mount Hutton shops.

Over time, the existing parks and reserves in Windale will be enhanced including Bahloo Reserve, Tulootaba Reserve, and the park on Wakool Street.

Older pedestrian paths associated with Radburn style developments are located in some open space reserves at the rear of residential dwellings and have poor surveillance. There is an opportunity for redevelopment and retrofitting of these areas to provide safer paths overlooked by housing.

Natural environment

Future development will protect and enhance the local topography, and contribute to the rehabilitation and revegetation of natural areas, native vegetation corridors, reserves and creeklines and enhance water quality. New housing will overlook reserves and creeklines to improve passive surveillance. The water quality and amenity of Scrubby Creek and other natural areas will improve and will be an asset

to future development. The discharge and quality of water leaving the area will not affect sensitive downstream receiving waters.

Any significant development in proximity to Scrubby Creek or Frazer Creek requires a Flood Assessment and Stormwater Management Plan. Key considerations include stormwater retention and detention facilities, effective erosion and sediment control and maintenance, water quality improvement and rehabilitation of the Scrubby Creek riparian corridor.

Streetscape Character

Future development will provide dwellings that face the street and are designed to support social interaction. Battle-axe style development is discouraged.

New dwellings will include landscape plantings in front yards and provide street trees to add to a pleasant street character. Development will protect and enhance landscape plantings at the Windale suburb entries.

Social and Community development

Future development in Windale will build on the strong sense of social identity, resulting from the area's history and recent initiatives in education, community development and youth services. Community facilities will be designed to be flexible and cater to multiple users and uses over time. Education, youth and recreation facilities will continue to be important to the Windale community given the higher proportion of youth. Lighting of public facilities such as laneways, footbridges, pathways, and parks will create a sense of safety and discourage crime.

Business and Retail

The Windale local centre located on Lake and South Streets will continue to play an important role for the Windale community. Over time, the centre will attract a broader range of premises and support services.

New employment generating industries and commercial development will occur in the east of Windale fronting the Pacific Highway. Development in this area must provide safe walking and cycling access to the Pacific Highway and be designed to minimise traffic, noise and other impacts on the residential areas of Windale.

4.2 DESIRED FUTURE HOUSING CHARACTER

Future development will make the most of Windale's location, which is close to the beaches, lake and significant employment areas. Development will respect the area's unique characteristics, including the remnant vegetation and green character, creek lines, topography, and open spaces.

Windale will continue to transition to a higher proportion of dwellings in private ownership, while continuing to meet the demand for social and affordable housing in the area. New development will provide a diversity of dwelling types and tenancy options. The demographics mean that Windale needs more one and two bedroom houses, reduced car parking rates, more housing that enables independent living for people with disabilities, and more housing for families with children compared to the Lake Macquarie average.

Suggestions to encourage dwelling diversity in the R3 Medium Density Residential Zone in Windale are provided in Table 1 below.

Table 1 - Suggestions for dwelling diversity in the R3 zone

Parent lot type	Access	Primary frontage	Secondary frontage	Parent Lot area	Suitable dwelling typology
Fan shaped corner	Side street	>20m	>20m	>500m2	Manor house + studio
Regular corner	Side street		>30m	>600m2	Manor house 3-4 apartments
Regular corner	Side street		>30m	>600m2	3+ detached, semi-detached or attached dwellings
Single frontage	Front	15-20m	na	>600??	Manor House 3-4 apartments

Focus medium density housing near the Windale and Mount Hutton centres

The residential area between the Windale and Mount Hutton shops is zoned for medium density housing because it is in walking proximity to a range of everyday services. The urban form in this area will become more compact over time. In the future, this area will see:

- More medium density development such as townhouses, villas and small residential flat buildings,
- More small scale businesses and services,
- Improvements to walking, cycling and public transport infrastructure,
- Improvement to the amenity of streets and open spaces.

A number of the existing townhouse precincts have a poor street network and housing stock, making them suitable for redevelopment. There are excellent medium to long-term opportunities to redevelop these sites to provide well-connected neighbourhoods with improved amenity and increased yield.

Some of these townhouse precincts have irregular subdivision patterns, but they are still in single ownership making redevelopment easier. If these lots were in multiple ownerships, it would make redevelopment much more difficult and lock in the existing poor street network. Therefore, any future subdivision applications seeking to create separate titles for existing dwellings must not reinforce existing irregular development footprints and create lots that will be difficult to redevelop in the future.

Sensitive infill development

Residential areas that are further from the Windale and Mount Hutton centres are zoned for low-density residential development. Over time, these areas will experience limited, sensitive infill development such as secondary dwellings (granny flats), dual occupancies and semi-detached dwellings scattered across the area.

5 DESIRED FUTURE STRUCTURE

Figure 1 – Windale Structure Plan includes:

- Shared paths, cycleways and footpaths that connect Windale residents with the Windale shops, Mount Hutton shops, local parks and public transport stops.
- Rehabilitation of Scrubby Creek to create a high amenity, continuous open space link between Windale suburb and the Mount Hutton shops.

- Increasing medium density development and housing diversity between the Windale and Mount Hutton shops.
- Expansion of the services and businesses at the Windale shops over time to support the increased population. The expansion will provide development on both sides of Lake Street, which will improve the streetscape.
- New development must provide road edges to creeks and open space. New dwellings must overlook creek lines and open space reserves to improve passive surveillance.
- Redevelopment of some townhouse precincts in the medium to long-term will improve amenity, passive surveillance, walking, cycling, streetscape and open space, and clearly define public and private space.
- Development of 1-7 Merrigum Street and 3-19 Kirami Close must include shared paths on Scrubby Creek as shown in Figure 1.

The location and connectivity of future development, infrastructure and facilities must align with the Windale Structure Plan as shown in Figure 1.

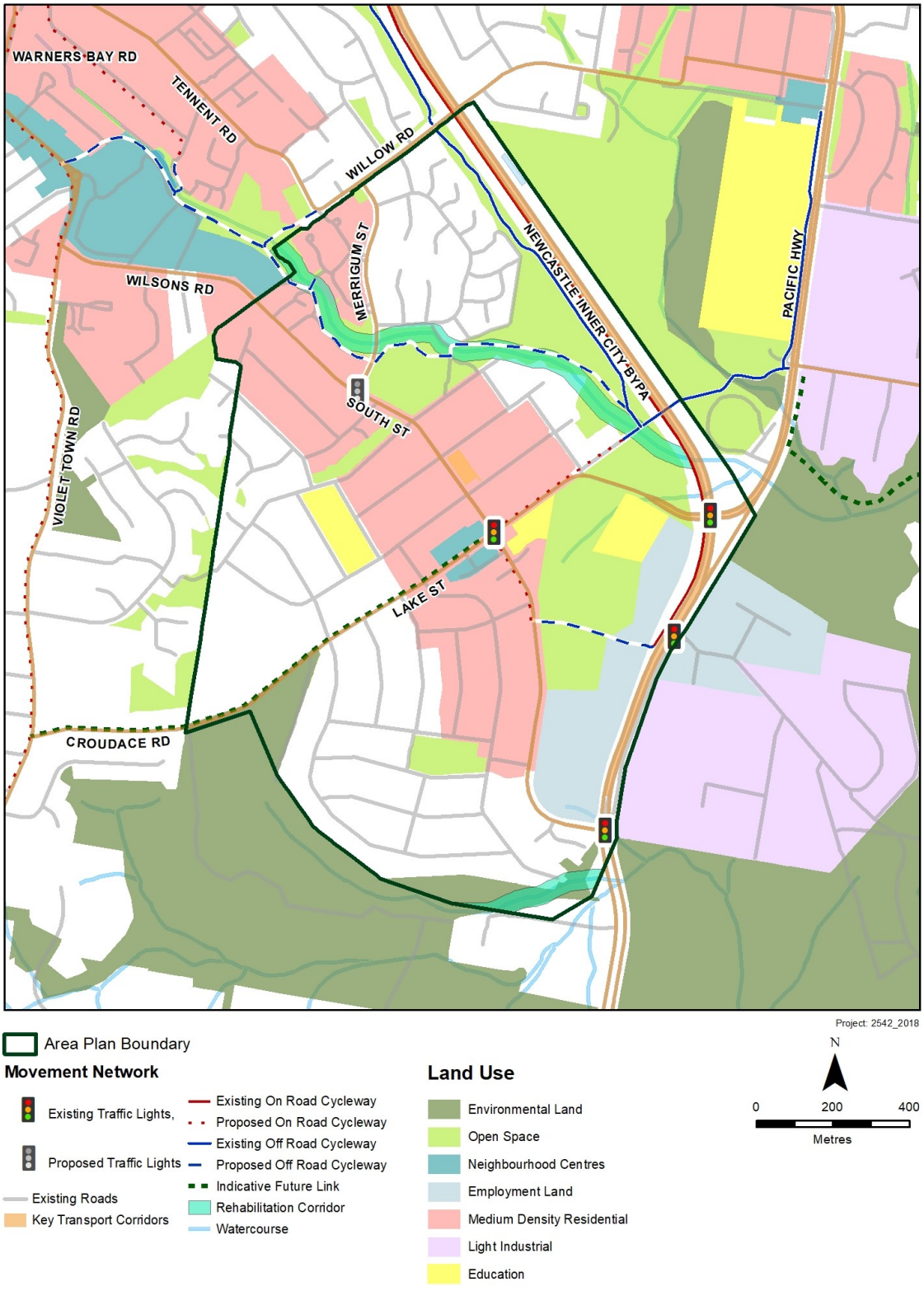

Figure 1 - Windale Structure Plan

6 SUBDIVISION CONTROLS FOR LAND ADJOINING SCRUBBY AND FRAZER CREEKS

The controls in this section of the Area Plan apply to any large subdivision applications on land adjoining Scrubby and Frazer Creeks, in the areas shown in Figures 2 and 4. See the Precinct controls in Section 9 for further advice on any redevelopment of these areas.

6.1 DEVELOPMENT ADJOINING SCRUBBY AND FRAZER CREEKS

Objectives

a. Ensure development addresses and overlooks Scrubby and Frazer Creeks.

b. Provide a shared path along Scrubby Creek.

Controls

1. Development adjoining Scrubby and Frazer Creeks must address and overlook the creeks to improve passive surveillance.
2. Development with frontage to Scrubby and Frazer Creeks must include a perimeter road parallel to the riparian zone, as shown in Figures 1, 2 and 3.
3. Development must maintain or provide the pedestrian and cycle network shown in Figure 1, in accordance with Council's requirements. Paths must be well lit and located to maximise passive surveillance.
4. Pedestrian, cycle and shared paths must be designed to be safe and legible by providing good sight lines, lighting, way finding signage, line marking, and passive surveillance from nearby properties (including that dwellings and roads must be designed to overlook pathways rather than having pathways at the rear of dwellings).

6.2 STORMWATER MANAGEMENT

Objectives

a. Rehabilitate and maintain Scrubby and Frazer Creeks and associated riparian vegetation.

b. Incorporate Water Sensitive Urban Design (WSUD) into new developments.

c. Ensure development minimises flooding impacts.

d. Ensure water leaving a development site does not change the quality or quantity of water entering the Jewells Wetland downstream.

Controls

1. Development proposals must include a Stormwater Management Plan that is consistent with *Jewells Wetland Catchment Management Strategy.*
2. Development must include Water Sensitive Urban Design (WSUD) measures to manage stormwater, erosion, and water quality that are integrated with revegetation works.
3. Development must not result in any net increase in peak stormwater flows to Scrubby or Frazer Creeks.
4. Development must not result in any net increase of pollutant loads to Scrubby Creek or Frazer Creeks.
5. Elements of the drainage system and stormwater treatment devices must be visually unobtrusive and integrated within individual sites, landscaped areas, roads and open space areas. They must be designed in accordance with Council's *Water Cycle Management Guidelines* and *Engineering Guidelines*.

6. Stormwater and water quality features are located within residential zoned land or positioned within the creek open space corridor and outside the core riparian zone.

6.3 VEGETATION MANAGEMENT

Objectives

a. Protect and revegetate riparian corridors on Scrubby and Frazer Creeks.
b. Reinforce the role of riparian vegetation for erosion control.
c. Integrate walking and cycle paths with riparian planting.
d. Protect and enhance corridors between reserves and conservation areas.

Controls

1. A Vegetation Management Plan must accompany any subdivision application for land abutting Scrubby or Frazer Creek corridors or that involves enhancement of natural areas. The Vegetation Management Plan should be prepared in accordance with Council's *Vegetation Management Plan Guidelines*.
2. Development of land containing or adjoining Scrubby and Frazer Creeks must contribute to the rehabilitation of the riparian area, including revegetation using endemic tree and ground cover species, in accordance with the requirements of Council.
3. Any works proposed in riparian corridors, including pedestrian and cycle paths must be in accordance with the requirements of the *Guidelines for riparian corridors on waterfront land, 2012* issued by the NSW Office of Water, or its equivalent.
4. The riparian area and associated open space on Frazer Creek may be dedicated to Council following satisfactory revegetation and rehabilitation and where arrangements have been made to fund ongoing management of the vegetation.

7 GENERAL SUBDIVISION CONTROLS

These controls apply to all subdivisions in the suburb of Windale.

7.1 SUBDIVISIONS IN WINDALE

Objectives

a. Ensure the logical, efficient and orderly development of land.
b. Increase dwelling density, variety and quality on lots within short walking distance of bus routes, open space and shops.
c. Maximise the number of dwellings facing the street.
d. Maximise the use of side street and rear lane access.
e. To help people feel safer using public and shared spaces in low light and at night by providing lighting.

Controls

1. Subdivision applications seeking to create separate titles for existing dwellings must not reinforce existing irregular development footprints, creating lots that will be difficult to redevelop in the future.
2. Subdivisions must be designed to maximise the number of dwellings facing the street. Battle-axe developments are not permitted.

3. Where possible, subdivisions should minimise driveway crossings on arterial roads (South, Lake and Merrigum Streets) by providing access from a secondary street or laneway.
4. Subdivisions should be designed to minimise vehicle crossing points on pedestrian footpaths, shared paths, and cycleways.
5. Subdivisions must light public spaces, such as roads, pathways, footbridges, parks, in accordance with Australian Standard 1158 or its current equivalent.

Note: In addition to the above, subdivisions should generally be in accordance with the provisions of Part 8 – Subdivision Development of the LM DCP 2014.

8 GENERAL DEVELOPMENT CONTROLS

These controls apply to all relevant development applications.

8.1 LIGHTING

Objectives

a. To help people feel safer using public and shared spaces in low light and at night, and encourage their use, by providing lighting.

Controls

1. Community facilities, as well as shared and communal spaces within developments, must include lighting. This can include the use of sensor lighting.
2. Lighting should be designed to minimise opportunities for concealment.

8.2 PEDESTRIAN AND CYCLE NETWORK

Objectives

a. Support safe and convenient walking and cycling transport to shops, public transport, open space and other local facilities and services.
b. Ensure dwellings overlook the pedestrian and cycle network for passive surveillance.
c. Ensure development contributes to the footpath and shared path network.
d. To create a high amenity, continuous open space link along Scrubby Creek between Windale and the Mount Hutton shops.

Controls

1. Development must maintain the pedestrian and cycle network shown in Figure 1 – Windale Structure Plan.
2. Development on 20 Pacific Highway (Lot 1 DP 1214343) must provide a shared path from the western boundary to the bus stop at Groves Road as shown in Figure 1 – Windale Structure Plan that is open for use at all hours and well lit, in accordance with Council's requirements.

8.3 STREET SETBACKS AND STREETSCAPE

Objectives

a. Ensure that buildings address the street and any adjacent public space.
b. Maximise natural surveillance by encouraging entries, windows, balconies and living areas that overlook the street.
c. Define the street edge by clearly distinguishing between public and private space.

d. Support social interaction between residents and people in the street and discourage unwanted behaviours by providing a comfortable front setback that reflects the intended future character of the R3 Medium Density Residential zone in Windale.

Controls

1. In the R3 Medium Density Residential zone in Windale, the front setback must be a minimum of 4 metres, and a maximum of 6.5 metres from the front boundary.
2. Dwellings will provide a clear and gradual transition between the private and public realms.
3. Dwelling entry and windows must overlook the street and entry path.
4. Front fences must be low enough for people to see each other easily.

Note: In accordance with Part 3 – Development within Residential Zones of the LM DCP 2014, 'entry features and porticos, porches, balconies, decks, verandahs, bay windows, eaves and awnings may encroach up to 1.5 metres into the front setback area. This encroachment must not cover more than 50 per cent of building width'.

Note: Refer to Part 3 – Development within Residential Zones of the LM DCP 2014 for front setback requirements in the R2 Low Density Residential Zone in Windale.

8.4 STREET TREE PLANTING

Objectives

a. Enhance the existing landscape setting of Windale by increasing tree cover in the suburb.
b. Improve streetscape character through consistent shade and amenity tree planting in residential streets.

Controls

1. Street trees must be supplied and installed in the road verge at a rate of one tree every 10 metres.
2. All trees must be a minimum 75 litre container size grown to AS2303 or its equivalent.
3. All trees must be established and maintained for a minimum period of 24 months. Any failed trees must be replaced immediately.

8.5 CAR PARKING

Objectives

a. Ensure that the number of car parking spaces encourages the use of public transport, cycling or walking.
b. Encourage medium density housing with a variety of car parking options to suit different household needs.
c. Stimulate the provision of affordable housing by allowing flexibility in car parking provision.
d. Locate driveways to maximise on-street car parking opportunities.

Controls

1. Where possible, driveways should be located to maximise on-street car parking opportunities. Development plans must show indicative on-street car parking spaces.
2. Table 2 shows the number of car parking spaces for development in Windale.

Table 2- Car parking rates for development in Windale

Development Type	Car Parking Rate
Attached dwellings	1 space per dwelling
Dual occupancies – attached or detached	1 space per dwelling
Dwelling house	1 space per dwelling
Residential flat buildings, multi dwelling housing and shop top housing, all other uses	Car parking rates are the same as for Part 3 and 4 – Development within Residential Zones, and Development within Business Zones of LMDCP 2014, except that there are no additional requirements for visitor parking.
Semi-detached dwellings	1 space per dwelling

Note: The rates in Table 2 are the desired rates for Windale. The rates in Part 3 – Development within Residential Zones, and Development within Business Zones of LM DCP 2014 provide an alternative if desired. Refer to Part 3 and Part 4 of the LM DCP 2014 for further controls relating to car parking.

8.6 DESIGN OF COMMON AND SHARED SPACES IN MEDIUM DENSITY HOUSING

Objectives

a. To provide clearly defined private, semi-private, and public spaces within medium density housing developments.

b. To provide common or shared spaces in medium density housing developments that foster healthy social interactions and recreation.

Controls

1. All medium density housing developments on the same Torrens Title allotment must provide high quality common and shared spaces with opportunities for both formal and informal interaction with neighbours. These spaces may be indoors or outdoors and may include entryways, gardens, kitchens, laundries, bicycle storage areas, or pet grooming facilities.
2. Public and semi-private spaces between buildings within a development must be well lit, minimise entrapment opportunities, and have passive surveillance from adjoining dwellings.
3. Large medium density residential developments should offer a variety of shared or common space to manage perceptions of density and encourage social interaction.
4. Pathways or corridors within a development are easy to navigate and have clear sightlines.

9 PRECINCT DEVELOPMENT CONTROLS

9.1 NORTHERN TOWNHOUSE AREA

Objectives

a. Support lot consolidation and a new subdivision that has an improved dwelling yield and provides a variety of housing types and tenures.

b. Provide a subdivision with clear and convenient vehicle, pedestrian and bicycle circulation.

c. Ensure development provides a clear transition between private dwellings and public space along Scrubby Creek.

d. Ensure development provides good surveillance and use of the creek and open space reserve and maximises the outlook and amenity for new dwellings.

a. Maximise the area suitable for building platforms and minimise the cost per lot of cut and fill and associated retaining works.

b. Retain significant trees.

Controls

1. Development with frontage to Scrubby Creek must include a perimeter road edge. Adjoining development must address and overlook the perimeter road and Creek to improve passive surveillance, as shown in Figures 2 and 3.
2. Development with frontage to Scrubby Creek must provide a shared path for pedestrians and cyclists along the creek to the satisfaction of Council, as shown in Figures 1, 2 and 3. The path must be well lit and located to maximise passive surveillance.
3. Development must provide a permeable road, pedestrian and cycle network and circulation through the site that connects with the surrounding network, as indicated on Figure 2. To encourage walking and cycling, the design must:
   i. provide direct paths and a choice of routes for pedestrians,
   ii. avoid cul-de-sacs and dead-end streets,
   iii. provide street trees, and
   iv. provide safe pedestrian and bicycle infrastructure like separated paths, shared pathways and crossings.
4. Development must retain the stand of native Angophora trees as shown on Figure 4 - Northern Townhouse Precinct Structure.
5. Where appropriate, development provides site benching across sloping residential land to suit delivery of medium density development such as small lot or multi-dwelling housing.

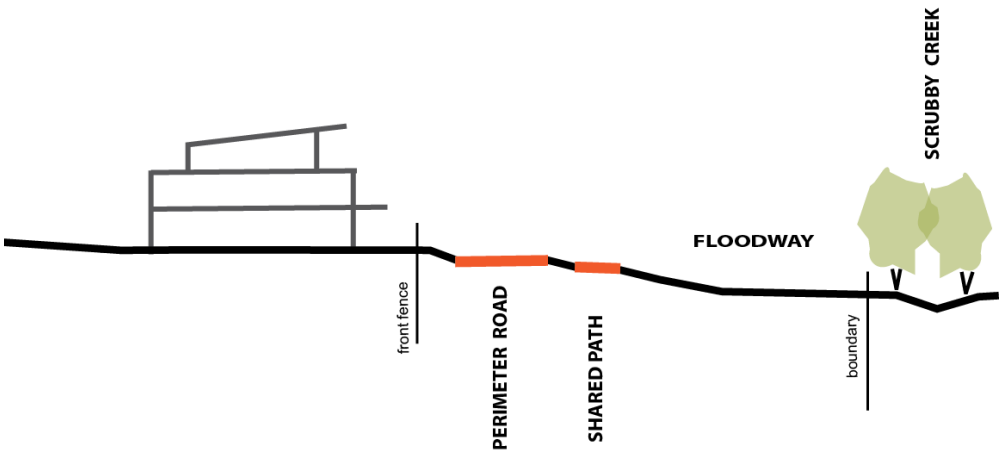

Figure 2 - Indicative section – applicable to developments overlooking Scrubby Creek

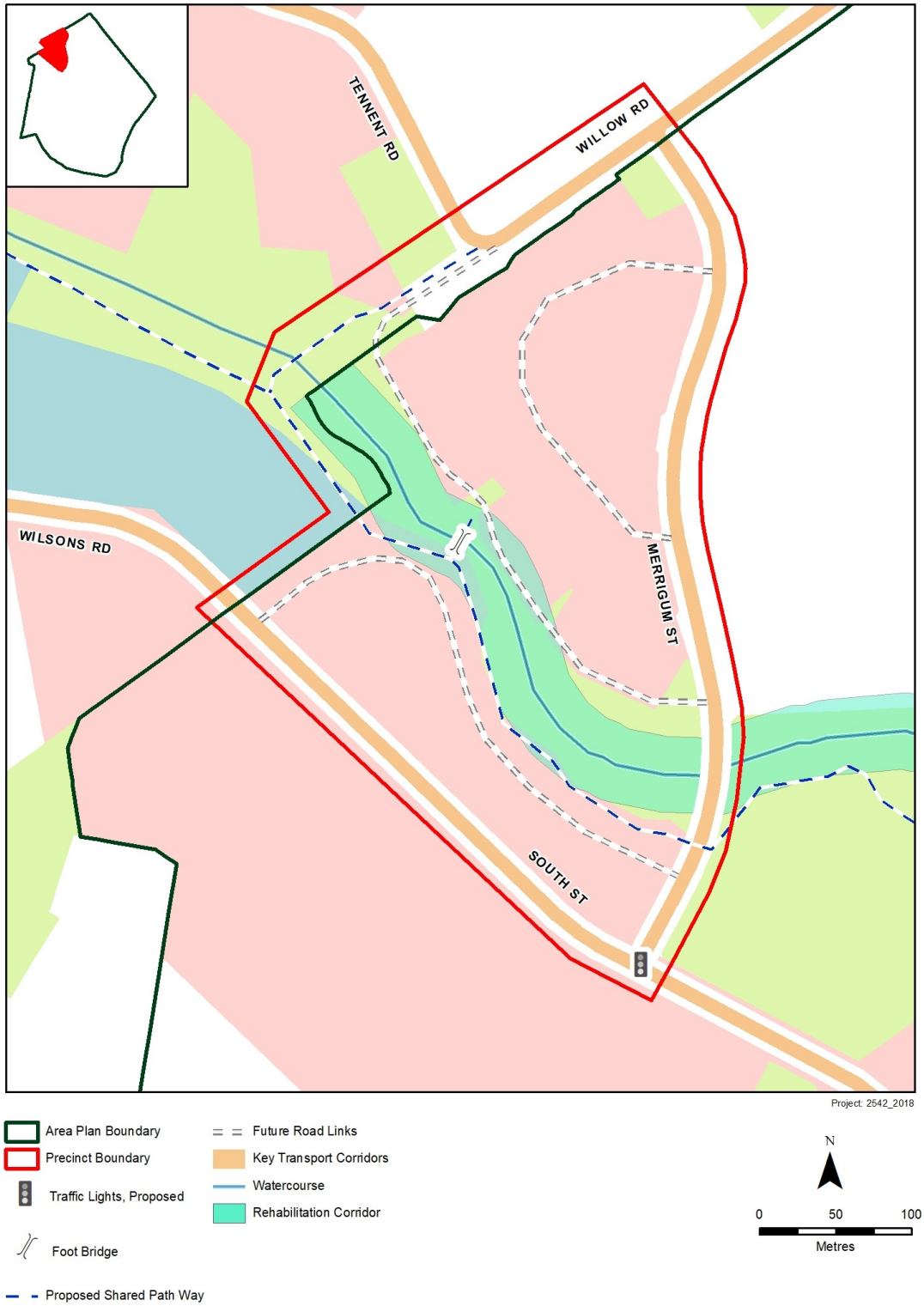

Figure 3 - Northern Townhouse Precinct Plan

9.2 SOUTHERN TOWNHOUSE AREA

Objectives

a. Support lot consolidation and a new subdivision that has an improved yield, improved amenity for residents, and provides a variety of housing types and tenures.

b. Provide a subdivision with clear and convenient vehicle and pedestrian circulation.

c. Ensure development provides good surveillance of the creek and maximises the outlook and amenity for new dwellings.

c. Maximise the area suitable for building platforms, and minimise the cost per lot of cut and fill and associated retaining works.

d. Retain significant trees and improve the suburb entry at the Pacific Highway.

Controls

1. Development must provide a permeable road and pedestrian network and circulation through the site consistent with Figure 4. The design must avoid cul-de-sacs and provide safe pedestrian infrastructure like separated paths and crossings.
2. Development with frontage to Frazer Creek must include a perimeter road edge. Adjoining development must address and overlook the perimeter road and Creek, as per Figure 4.
3. Where appropriate, development provides site benching across sloping residential land to suit delivery of medium density development such as small lot or multi-dwelling housing.
4. Development maintains drainage easements to the creek.
5. Development must maintain significant stands of native vegetation, particularly on the corner of the Pacific Highway and South Street.

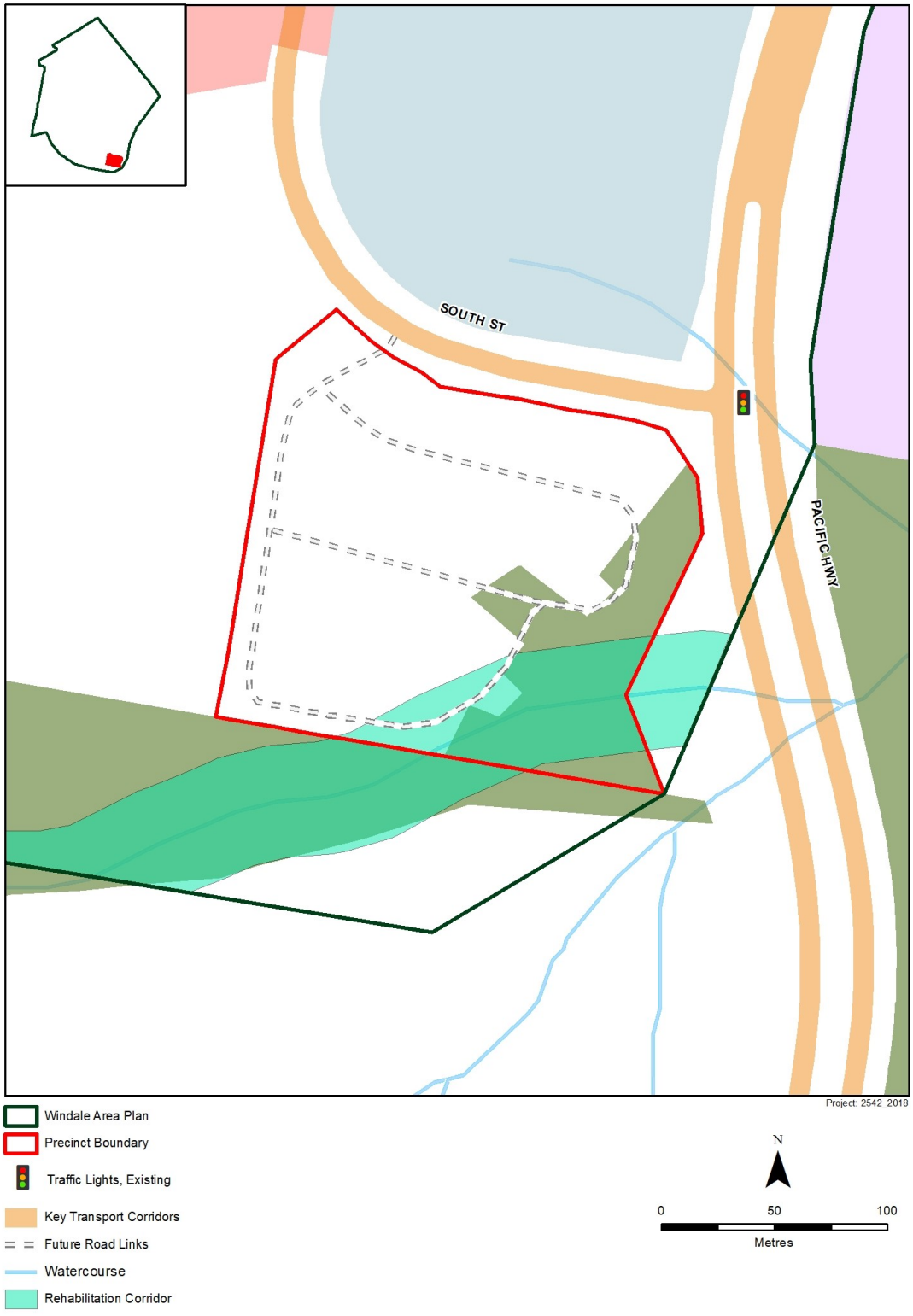

Figure 4 - Southern townhouse precinct plan

9.3 MULGA STREET TOWNHOUSE AREA

Objectives

a. Encourage housing overlooking the public drainage reserve for passive surveillance.

b. Distinguish between public and private space.

c. Ensure development enhances the amenity and safety, and avoids impacts on the functionality, of the drainage reserve.

Controls

1. Any subdivision of the existing lots must create a relatively regular lot layout that would not preclude eventual redevelopment of the resulting lots, as indicated in Figure 5 – Mulga Street Precinct Structure.
2. Development must maximise the number of dwellings overlooking the street and the public reserve.
3. Development must maintain drainage easements from Mulga Street to the drainage reserve.

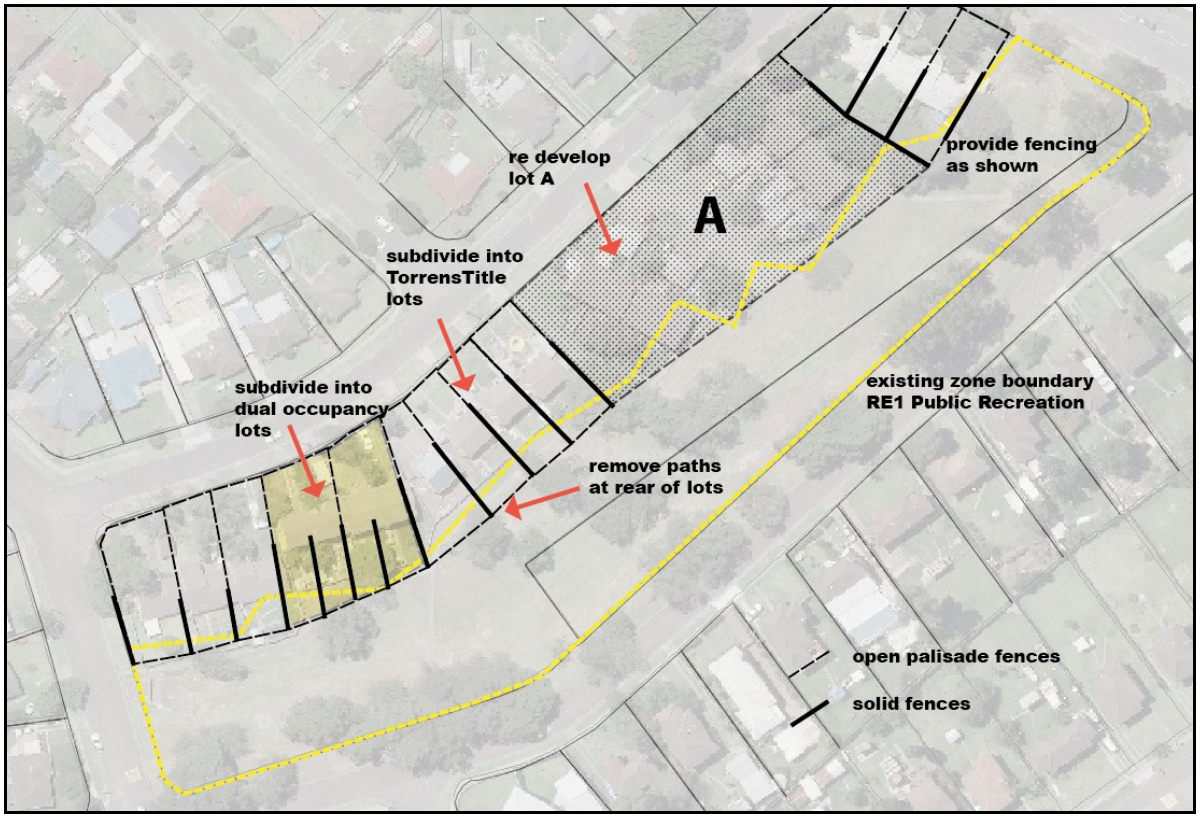

Figure 5 - Mulga Street Townhouse Precinct Plan

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1 INTRODUCTION

The purpose of the Wyee West Area Plan is to provide a strategic and coordinated approach to the development of land located to the west of the existing Wyee township. The Area Plan will ensure that the land is developed in an efficient manner, considering environmental, social and economic issues affecting the site.

This Area Plan is to be read in conjunction with the relevant part of Lake Macquarie Development Control Plan (LM DCP) 2014. Where the provisions of this Area Plan are inconsistent with the controls in the relevant part of LM DCP 2014, the provisions of this Area Plan will prevail.

1.1 BACKGROUND

The development of the land subject to this area plan for residential subdivision has been made possible by the construction of a wastewater treatment plant within the site. The treatment plant was partially funded by a grant from the Australian Government's Building Better Regional Cities program. That program was designed to fund infrastructure that supported the provision of affordable housing.

1.2 EXTENT OF AREA PLAN

This Area Plan applies to the land outlined in heavy edging as shown in Figure 1.

Figure 1 - Extent of the Area Plan

1.3 EXISTING CHARACTER

Wyee is located adjacent to the southern boundary of Lake Macquarie Local Government Area and is on the main northern railway line and main road that links Morisset to Doyalson. The Sydney-Newcastle M1 Motorway is located to the West of the township.

The Wyee township comprises predominantly low density residential allotments with detached housing, interspersed with rural properties and rural residential allotments. The town centre is situated on Wyee Road, and comprises a small commercial/retail centre.

Wyee is located within a rural landscape and it is physically and visually separated from the nearby urban settlements of Morisset, Wyee Point and Doyalson. Because of the small size of the settlement, and its shape and topography, glimpses of a rural landscape are frequently viewed from points within the town.

1.4 ENVIRONMENTAL ATTRIBUTES AND CONSTRAINTS

Flooding

Mannering Creek is a significant landscape feature that traverses the site in addition to a tributary entering from the south. Land adjacent to Mannering Creek and the tributary is flood prone and identified as a Flood Planning Area in *Lake Macquarie Local Environmental Plan (LM LEP) 2014*, as shown in Figure 2.

Biodiversity

The site provides a range of biodiversity values, including the general provision of habitat and connectivity, threatened species, and Ecological Endangered Communities. The key biodiversity features of the site include:

- Two riparian corridors containing Endangered Ecological Communities;
- Important Squirrel Glider corridor and habitat for denning and foraging; and
- Threatened flora species including *Tetratheca Juncea* and *Angophora Inopina*.

The high ecological value land has been mapped as E2 Environmental Conservation or identified as Environmentally Sensitive Land in *LM LEP 2014*, as shown in Figure 2. The retention, conservation and rehabilitation of the environmental corridors is an important priority. Vegetation within areas identified as Environmentally Sensitive Land must either be retained or, if removed, appropriately offset.

Figure 2 – Environmental Attributes and Constraints

1.5 DESIRED FUTURE CHARACTER

In 2010, Council adopted the Wyee Structure Plan following public exhibition. That plan provides strategic direction for the planning and future development of Wyee. Principle 1 – Desired Future Character and Urban Form of the Wyee Structure Plan states that 'Wyee will continue to exhibit the visual and aesthetic character of a rural village'.

The desired urban structure of the site is outlined in Figure 3 and aims to:

- Maintain and enhance environmental corridors,
- Establish a perimeter road to define the edge of open space and conservation areas,

- Locate roads and entries for efficient access and connectivity through the site and between the Precincts,
- Designate an area within the site for sport fields, netball courts, a local park and dog exercise area in a central location and free from environmental constraints,
- Provide safe pedestrian and cycle paths linking to the existing road network, recreation facilities and Wyee train station,
- Provide a range of lot sizes to accommodate a variety of dwelling types including affordable housing, and
- Minimise potential for risk from bushfire and flooding.

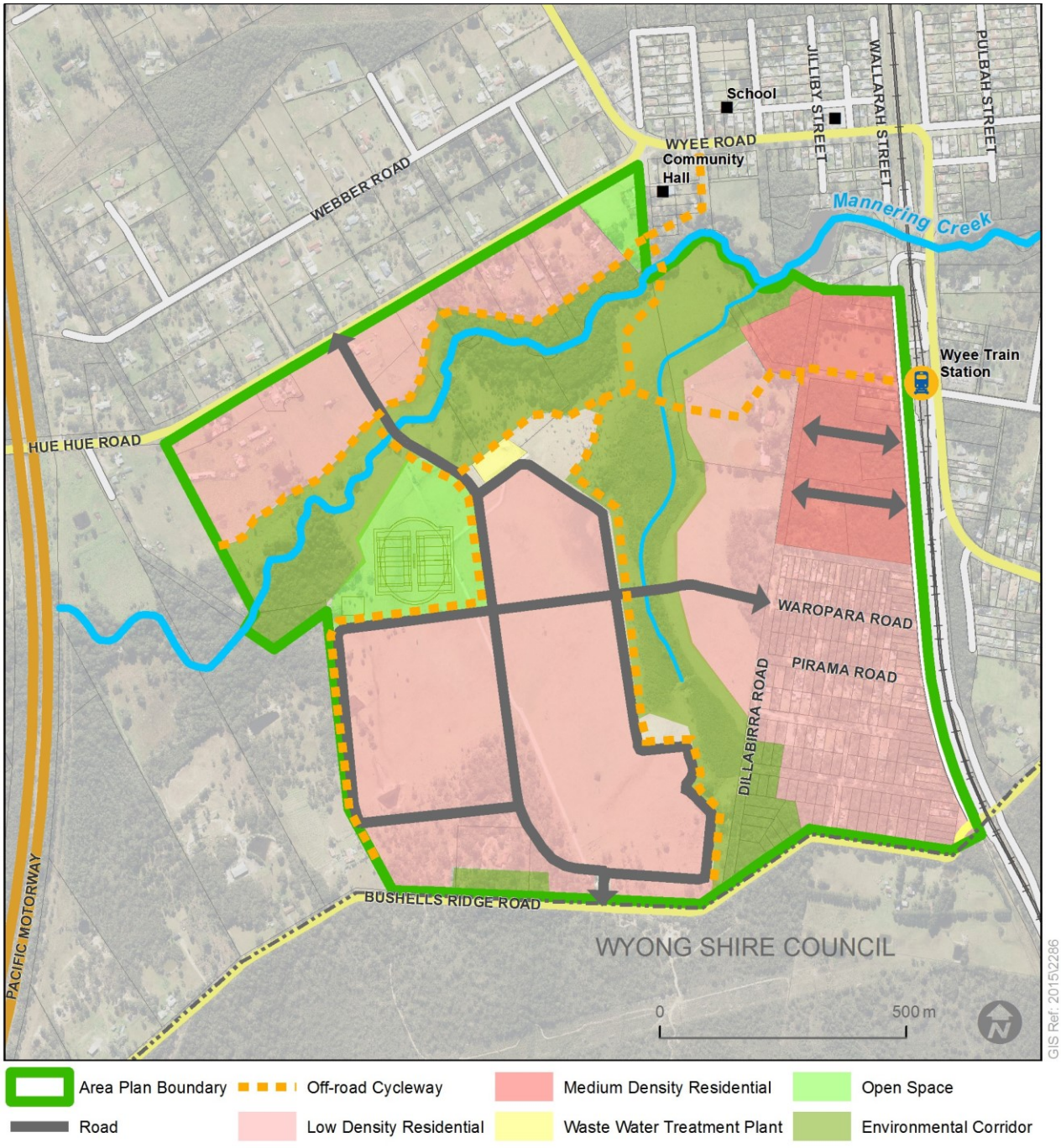


Figure 3 – Wyee West Structure Plan

1.6 PRECINCTS

Three distinctive precinct areas have been identified within the land to which this Area Plan applies, as outlined in Figure 4. Each precinct has its own specific development controls.

Figure 4 - Precinct Boundaries

Precinct A – Low Density Residential

This land comprises approximately 120 hectares of mostly cleared grazing land and also contains important ecological corridors and communities. Precinct A is the largest of the three precincts and will comprise predominantly low density housing on a range of lot sizes, including a component of affordable housing. Precinct A will contain new recreation facilities including sport fields and amenities, a local park, netball courts, dog exercise area and shared pathways. The enhancement of the riparian corridors will contribute to the visual amenity and bushland setting of the site by providing a natural backdrop to the residential area.

Precinct B – Medium Density Residential

Precinct B is located within 400 metres of the train station and is envisaged to contain predominantly medium density housing, such as town houses and villas. Medium density development is suitable in this location due to its accessibility to the Wyee train station and village centre. Single dwellings will only be permitted on small lots (between 200m^2 and 450m^2).

Precinct B contains habitat that forms part of an existing conceptual Squirrel Glider corridor through the site.

Precinct C – Paper Subdivision

Precinct C, located adjacent to the railway line, comprises 199 existing residential sized lots in Deposited Plan 7506. The land is known as the Wyee West Paper Subdivision and was created in 1914. The subdivision pre-dates the legislative requirements for anyone subdividing land to construct essential infrastructure. Until recently the land had limited development prospects due to its former rural zoning and lack of infrastructure. The land has generally remained undeveloped and unserviced. Precinct C also contains habitat that forms part of an existing conceptual Squirrel Glider corridor through the site.

In 2013, the majority of lots within the paper subdivision were rezoned from rural to residential. Despite the residential zoning, the paper subdivision still lacks the essential infrastructure to enable Council to grant consent to dwellings on these allotments. The paper subdivision will require sealed roads, drainage, reticulated water and sewerage, electricity and telecommunications. Landowners are responsible for the cost of the infrastructure.

Fifteen (15) lots are zoned E2 Environmental Conservation under the *LM LEP 2014* to conserve and enhance the high ecological value of this land which forms part of an important Squirrel Glider corridor. These lots are not suitable for residential development and accordingly will not require essential infrastructure.

2 DEVELOPER CONTRIBUTIONS

Several items need to be provided to achieve the environmental and development objectives of the site: These include:

- Pedestrian/cycleway links;
- Road and traffic infrastructure;
- Stormwater management infrastructure;
- Native vegetation and riparian corridor rehabilitation and ongoing management in environmental zoned land; and
- Provision of land for new sports fields, netball courts, local park and dog exercise area.

Public community facilities that will be required as a result of population growth in Wyee are specified in Lake Macquarie City Council Development Contributions Plan 2012 - Morisset Contributions Catchment.

There are several options available to deliver these items that may be used in combination, including:

- Conditions of consent for future development applications;
- Section 7.11 contributions;
- Dedication of land to Council;
- Works in kind; and
- Voluntary planning agreements.

3 PRECINCT A – LOW DENSITY RESIDENTIAL

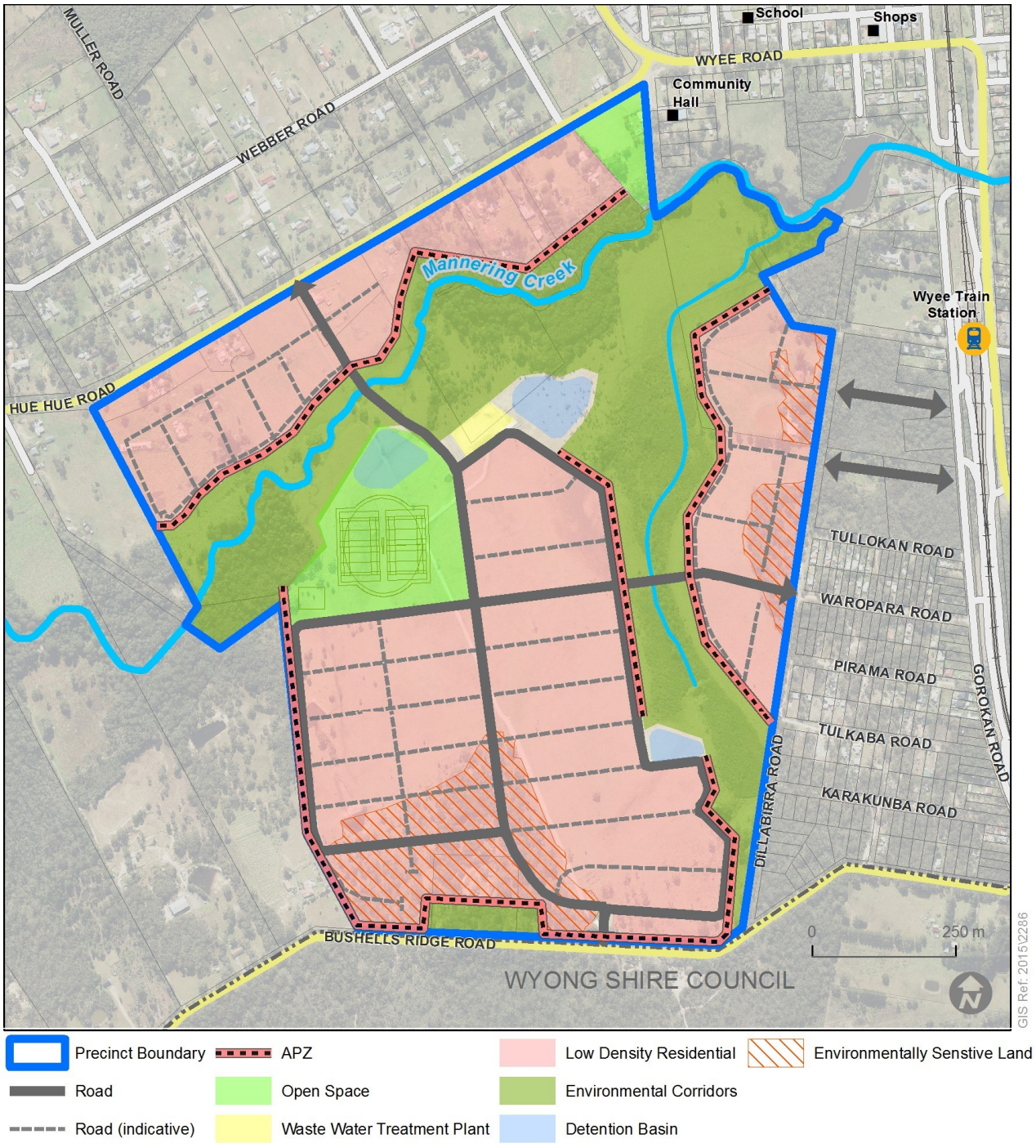


Figure 5 – Precinct A: Subdivision Design and Layout Plan

3.1 DEVELOPMENT STAGING

Objectives

a. To ensure the subdivision of the land is undertaken according to a logical sequence, having regard to the provision of infrastructure and identified community facilities.

b. To ensure the timely establishment of environmental rehabilitation works required in accordance with Section 3.10 of this Area Plan.

Controls

1. Any application for subdivision must be accompanied by a staging plan, indicating the number of residential lots and infrastructure included in each stage.

2. The staging plan must clearly indicate the extent of environmental rehabilitation work to occur as part of each stage of the subdivision and the proposed management regime for conservation areas.

3.2 SUBDIVISION DESIGN AND LAYOUT

Objectives

a. To ensure the subdivision layout is designed to integrate with the surrounding neighbourhood and the natural environment.

b. To ensure the ecological attributes of the site are protected and enhanced.

c. To provide a highly accessible network of pedestrian and shared pathways that encourage walking and cycling to local destinations, including, shops, sporting and community facilities and public transport.

d. To ensure the subdivision of the subject land provides adequate protection form hazards such as flooding and bushfire.

e. To mitigate adverse impacts of new intersections on the amenity of existing residents and to maintain safe access to existing residences.

Controls

1. The subdivision layout should generally be consistent with Figure 5.

2. The subdivision layout must be designed to ensure passive surveillance of open space and recreation facilities.

3. The developer of Precinct A shall determine the impact of the proposed intersection of the new collector road with Hue Hue Road on the ability of residents of 1432 and 1434 Hue Hue Road to safely access their properties from both directions. Where necessary, the developer shall, in consultation with the respective landowners, meet the reasonable expense of relocating the driveways of these properties to allow safe access to and from Hue Hue Road. Additionally, the developer shall construct a solid wall along the front boundary of 1432 Hue Hue Road to the extent necessary to mitigate the effect of headlights of vehicles exiting the proposed collector road on the existing dwelling.

3.3 SITE BENCHING

Objectives

a. To ensure that subdivision design and layout responds to the site's characteristics.

b. To maintain site stability.

c. To avoid unnecessary clearing and reshaping of land at subdivision stage.

d. To ensure that cut and fill does not significantly alter the flow of water or exacerbate flooding.

Controls

1. Benching of allotments created under Clause 4.1B of *LM LEP 2014* is permitted at subdivision stage if:
   i. The height of any retaining walls does not exceed 1.5 metres;
   ii. All retaining wall designs include a sub-soil drainage system;
   iii. Retaining walls are permitted near lot boundaries but must be located entirely on the lot being retained, including all necessary sub-soil drainage;
   iv. Retaining walls are designed to accommodate the surcharge loading of future dwellings, or a restriction will be placed on the lots to ensure that buildings are not built within the influence zone of the retaining wall;
   v. Retaining walls are constructed of decorative masonry or similar high-quality materials;
   vi. The side-to-side cross fall on the resulting benched lots does not exceed 5%.

Notes:

1. Benching is excavation and / or filling of the natural slope of land to create flat building sites. The earthworks are held in place by a retaining wall.
2. Section 3.27 of Part 3 – Development within the Residential Zones of LM DCP 2014 contains controls for cut and fill that apply in addition to those provided above. Where benching is undertaken at the subdivision stage, retaining walls may be near the allotment boundary as long as the structure and associated drainage is located entirely on one lot. Where retaining walls are proposed at the development application stage for an individual lot, only the provisions under Section 3.27 of Part 3 of the DCP apply and the retaining wall must be offset from the allotment boundary.

3.4 OPEN SPACE AND RECREATION

Objectives

a. To ensure that public open space provided is of the appropriate quantity and quality to meet the recreational and social needs of the community.

Controls

1. Open space shall be provided onsite in accordance with the requirements of Table 1.

Table 1 – Open Space Requirements

Open Space Type	Number	Minimum Area Required (m2)
Sportsground (2 playing fields)	1	32,500
Netball Courts	2	1,750 (combined area)
Local Park	1	5,000
Dog Exercise Area	1	5,000

Note: The location and configuration of open space as shown in Figure 5 is indicative and subject to final survey and design.

3.5 PEDESTRIAN AND BICYCLE LINKS

Objectives

a. To ensure the development provides a pedestrian and cycle network with access to key destinations within the site and surrounding area, including the existing and proposed recreation areas, shops, Wyee Public School and Wyee train station.

Controls

1. Pedestrian and cycle routes must be conveniently linked to recreation and community facilities, the Wyee train station, and the external road network, as shown in Figure 3.
2. Where practical, shared pedestrian/cycle pathways should be incorporated into the road reserve on the undeveloped side of perimeter roads, thereby contributing to Asset Protection Zones and providing a 'hard edge' to conservation land.

3.6 FRONTAGE TO EXISTING ROADS

Objectives

a. To ensure new dwellings are orientated towards existing roads in order to:

- integrate with the existing township,
- make efficient use of existing infrastructure, and
- provide better streetscape amenity along existing roads

Controls

1. Where practical, lots along Hue Hue Road and Bushells Ridge Road should be orientated towards the existing road.

Note:

1. If orientating lots towards Bushells Ridge Road cannot be practically achieved due to minimum Asset Protection Requirements and building setbacks, Council may consider a variation to the above control. The onus is on the applicant to demonstrate (supported by a Bushfire Report) why a variation to the control is required.

2. If, prior to residential subdivision of the relevant stage adjacent to Bushells Ridge Road, land adjacent to and south of Bushells Ridge Road, located within the Wyong Local Government Area, is developed for a use considered unsuitable to be faced by residential dwellings, Council will consider a variation to the above control. In this circumstance, a vegetated buffer area may be necessary between Bushells Ridge Road and residential allotments.

3. Where lots are not orientated towards Bushells Ridge Road, one consistent fence (using timber palings or similar) must be erected along the rear of all lots adjacent to Bushells Ridge Road and screened with landscaping to the satisfaction of Council. Fencing and landscaping details are to be submitted with the Development Application for the relevant stage of subdivision and the works shall be completed prior to release of the Subdivision Certificate.

3.7 WATER QUALITY MANAGEMENT

Objectives

a. To ensure ecologically valuable land and associated watercourses are protected.

b. To rehabilitate creek banks that have been subject to damage from erosion

c. To ensure the stormwater drainage system is designed to maintain the natural watercourse and to minimise future environmental impacts.

Controls

1. Stormwater from developed areas should be treated prior to discharging into a natural watercourse.
2. Eroded sections of the bank of Mannering Creek (including and upstream of Lot 1 DP 785709) are to be rehabilitated and stabilised by revegetation with suitable native species for the width of the E2 zone in conjunction with construction of the proposed road link crossing the creek.
3. Stormwater and water quality facilities should be primarily located within the R2 Low Density Residential zoned part of the site. If any stormwater and water quality structures are positioned within the E3 zoned land, these facilities must be designed to integrate with revegetation works and ensure adequate flow paths are maintained. No facilities are to be located in the E2 zone.

3.8 BUSHFIRE

Objectives

a. To minimise any risks to life and property from bushfire hazards.

b. To ensure that any risks associated with bushfire are appropriately managed.

Controls

1. The subdivision plan should provide for a perimeter road between the bushfire prone land and the development lots.
2. Asset Protection Zones must be established within the residential zoned part of the site and require minimal maintenance (i.e. incorporate perimeter road).

3.9 VEGETATION MANAGEMENT

Objectives

a. To protect and enhance biodiversity values within land zoned for conservation.

b. To ensure the riparian and wildlife corridors associated with Mannering Creek and its tributaries are rehabilitated and appropriately managed, including establishing habitat suitable for arboreal fauna.

c. To ensure that the loss of biodiversity arising from development of the land is offset to mitigate the impact of that development.

d. To provide for the long-term rehabilitation and management of land zoned for conservation.

Controls

1. A Vegetation Management Plan must be prepared for the Precinct in accordance with Council's Vegetation Management Plan Guidelines prior to subdivision.
2. Secure tenure of the E2 Environmental Conservation Land is necessary to ensure the long-term protection, rehabilitation and management of the E2 land. This may be achieved by:
    i. Dedication of E2 land to Council or an acceptable management agency following implementation of the Vegetation Management Plan for a period of 10 years;
    ii. Entering into a legally binding agreement (e.g. Planning Agreement) to establish a mechanism to provide ongoing management of E2 land (e.g. an endowment fund);
3. All required on-site biodiversity offsets must be planted and functioning to the satisfaction of Council, prior to removal of any vegetation identified as Environmentally Sensitive Land in *LM LEP 2014* (Clause 7.20).

4. Rehabilitated conservation lands should be protected by adequate drainage and weed controls, as well as fencing to deter unauthorised vehicular access.

Note:

i. Preparation of the Vegetation Management Plan (VMP) may be carried out in stages corresponding with stages in subdivision of the site. For example, subdivision of that part of Precinct A between Hue Hue Road and Mannering Creek must include a VMP for land zoned E2 adjacent to the proposed subdivision up to the northern bank of the creek [excluding land likely to be disturbed during construction of the proposed road crossing of the creek]. The final VMP must provide for, but not be limited to:

   a. Re-establishment of native vegetation along riparian corridors, in endangered ecological communities and in fauna movement corridors (including removal of rubbish, weeds and planting with suitable native species);

   b. Stabilisation of creek and drainage lines within the site using soft engineering (i.e. mimic natural systems such as properly constructed bed controls, pools and riffles);

   c. Rehabilitation of habitat suitable for squirrel gliders, including establishment of a continuous canopy of preferred habitat trees such as Swamp Mahogany (*Eucalyptus Robusta*) augmented with artificial structures where necessary to allow movement through the site and for habitat augmentation (e.g. installing nest boxes to compensate for loss of hollows).

   d. Details of the number and location of *Angophora Inopina* to be replanted in the E2 land to compensate for loss of individuals for development (replanting of *Angophora Inopina* must be provided at a ratio of 5:1);

   e. Future management arrangements for the E2 land including funding, monitoring and timeframes;

   f. The standard of rehabilitation to be achieved should result in a weed free, self-maintaining ecosystem to ensure minimal maintenance is required over the long term; and

   g. Inclusion of the treatment of the interface between the land to be conserved and areas to be developed as urban.

ii. If any offset land is to be managed by or dedicated to any other organisation or trust other than Lake Macquarie City Council, suitable documentation is to be provided to Council to provide certainty that:

   a. The criteria and arrangements in the section are satisfied, and

   b. Adequate financial resources have been secured in perpetuity of the subject land.

iii. In determining these controls, no seven-part test has been undertaken. Should Council's assessment of the seven-part test conclude that a significant impact will result from development of the land, then development and offset arrangements will require concurrence from the NSW Office of Environment and Heritage.

4 PRECINCT B – MEDIUM DENSITY RESIDENTIAL

Objectives

a. To ensure development within the precinct integrates (or provides for future integration) with the remainder of the precinct

b. To ensure that medium density development provides for a sympathetic transition to the low density housing.

c. To provide a mix of medium density housing such as town houses and residential flat buildings.

d. To recognise potential impacts of the rail corridor on new development.

Controls

1. A structure plan for the whole of Precinct B must be prepared to Council's satisfaction prior to consent being granted to any residential development within the precinct. The structure plan must have involved consultation with other landowners within the precinct, including with the relevant Aboriginal Land Council for any parcels subject to Aboriginal Land Claims.
2. Roads must be provided generally in accordance with Figure 6.
3. Development consent must not be granted for development unless Council is satisfied that the cumulative impact from residential development on the biodiversity values is minimal, or has been appropriately mitigated or offset.
4. Reticulated water and sewerage must be available, or adequate arrangements have been made to make them available, prior to Council granting consent for residential development.
5. Proposed development fronting Gorokan Road must have regard to "Development Near Rail Corridors and Busy Roads – Interim Guidelines" (released by the NSW Department of Planning).

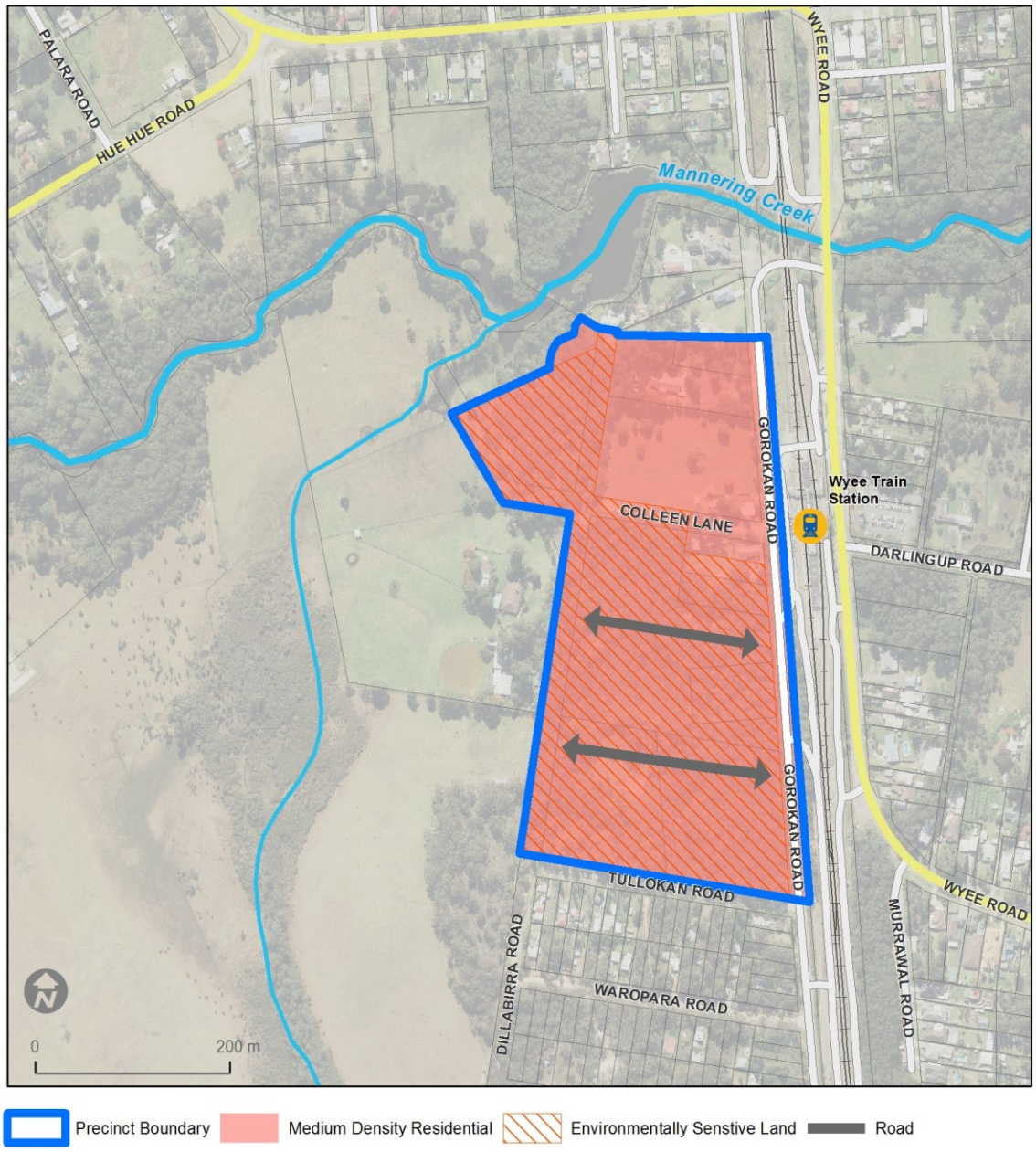


Figure 6 - Precinct B: Indicative Roads

5 PRECINCT C – PAPER SUBDIVISION

Objectives

a. To ensure that essential infrastructure is in place prior to dwellings being constructed.

b. To ensure that infrastructure is provided in a logical and coordinated manner.

c. To ensure that adverse impacts of development on environmentally sensitive land are minimised or offset in a coordinated manner.

Controls

1. Dwellings must not be approved until essential infrastructure is in place, or adequate arrangements have been made to make them available. Essential infrastructure includes:

    i. Reticulated water,

    ii. Reticulated sewerage,

    iii. Properly constructed roads,

    iv. Stormwater drainage,

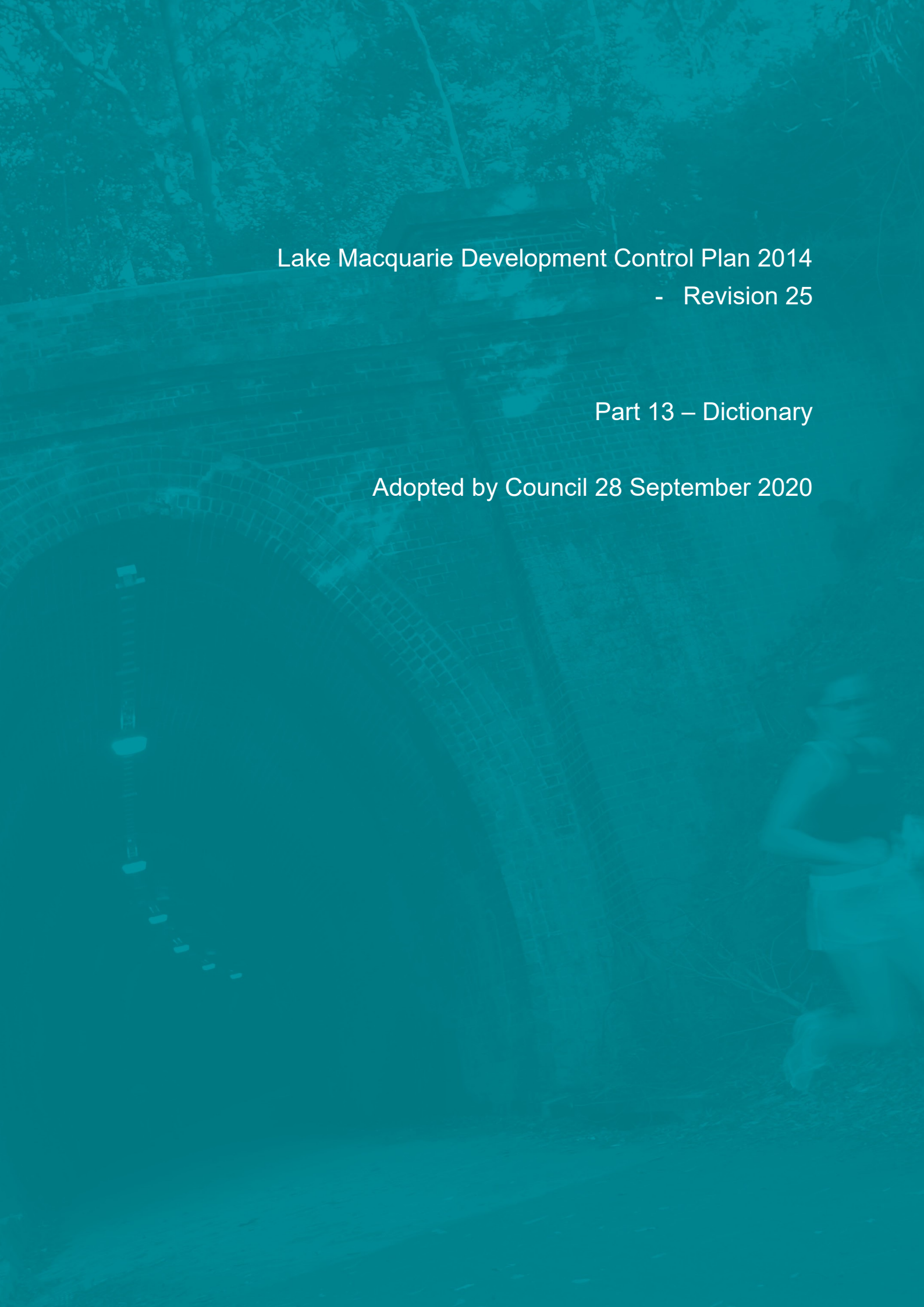
    v. Electricity, and

    vi. Telecommunications.

2. All landowners of land zoned residential will need to contribute to the cost of infrastructure through an agreed scheme.

3. Development consent for dwellings should not be granted unless Council is satisfied that the cumulative impact from residential development on biodiversity values is minimal, or has been appropriately offset.

Note: The investigation and resolution of biodiversity matters should be undertaken as part of preparing an agreed scheme to provide essential infrastructure to the land.



Lake Macquarie Development Control Plan 2014 - Revision 25

Part 13 – Dictionary

Adopted by Council 28 September 2020

1 DICTIONARY

The definitions used in this dictionary only reflect the usage of the word or term within the context of this DCP or their usage in a local government setting.

Aboriginal Object means any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of the area by persons of non-Aboriginal extraction, and includes aboriginal remains.

Aboriginal Place means any place declared to be an Aboriginal place under Section 84 of *National Parks and Wildlife Act 1974* as amended.

Access Driveways are the nature strip crossings that provide access to a site, and on which vehicles move between the external frontage road and the site boundary.

Acid Sulphate Soils means actual or potential acid sulphate soils, as defined in the *Acid Sulphate Soil Manual.*

Active Street Frontage means a street frontage that enables direct visual and physical contact between the street and the interior of the building. Clearly defined entrances, windows and shop fronts are elements of the building façade that contribute to an active street frontage.

Amenity is a term given to the attributes and appeal of a place.

Annual Exceedance Probability (AEP) is the probability of exceedance of a given storm event within a period of one year.

Arterial Roads carry through traffic from one region or district to another, forming principle avenues for traffic. Smooth and safe traffic flow is the priority of these roads. Arterial Roads are generally the responsibility of the Roads and Maritime Services.

Articulation means the change in the external alignment of walls, or other elements, that expresses the way that the parts of the building fit together.

Asset Protection Zone is an area surrounding a development which is intended to reduce bushfire risk to an acceptable level. The width of the Asset Protection Zone will vary with slope and aspect.

Australian Height Datum (AHD) is the original height for all levels as fixed by the Surveyor General.

Note: *It is a system of control points for height, based on a network of levelling measurements. It covered the whole of Australia and was fitted to mean sea level, as measured at tide gauges distributed around the Australian coast, over the period 1968-1970.*

Average Recurrence Interval (ARI) means the average period between the recurrence of a storm event of a given rainfall intensity. The ARI represents a statistical probability.

Note: *For example, a 100 year ARI indicates an average of 100 years between exceedance of a given storm magnitude. The AEP (probability of such an event being exceeded in any year) is therefore 1%.*

Balcony is an upper storey platform projecting from the wall of a building supported by posts or brackets, and enclosed by a balustrade. A balcony can also be recessed into the building.

Basement is a storey either below ground level, or no more than 1.2 metres above finished ground level.

Battle –Axe Lot means a lot located behind another, with vehicle access from the street via an access handle. The minimum area specified for battle-axe lots excludes the battle-axe access handle.

Biodiversity has the same meaning as in the *Standard Instrument (Local Government Plans) Order 2006.*

Boundary Realignment is the adjustment of an existing boundary or boundaries, which does not result in the creation of additional lots.

Building Area means the area of the site capable of supporting development. It does not include front, side and rear setbacks, or the access handle of a battle-axe lot.

Building Envelope means a three dimensional diagram drawn on a lot of a subdivision plan. It defines the limits for the siting and/or wall height of any dwellings and/or buildings/structures, private outdoor areas, driveways and/or garages/carports.

Building Frontage is the façade of the building that faces the street.

Building height is defined as the vertical distance between ground level (existing), at any point to the highest point of the building, including plant and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.

Burra Charter (The Australia ICOMOS Charter for Places of Cultural Significance) Provides guidance for the conservation and management of places of cultural significance. It is based on the knowledge and experience of Australian ICOMOS members (ICOMOS – International Council on Monuments and Sites).

Bushfire Risk is the chance of a bushfire igniting, spreading and causing damage to assets of value to the community. Risk is rated as being high, medium or low, and is related to the level of the potential threat of bushfire.

Circulation Aisles perform the dual function of providing access to car parking spaces and providing access to other aisles.

Circulation Roads are roadways contained within a development site that do not provide direct access to parking spaces. Instead they distribute traffic between entrance/exit driveways, circulation/parking aisles and service areas.

Coastal Impact Zone means the area of varying width along the coastline that is impacted by physical coastal processes (ie: storm cut erosion, long term coastal recession, climate change).

Conservation Management Plan means a document prepared in accordance with the requirements of the NSW Heritage Office, that establishes the heritage significance of an item, place or heritage conservation area. It also identifies the appropriate conservation policies and management mechanisms to enable that significance to be retained.

Collector Roads are non-arterial roads that mainly collect and distribute traffic within an area. They may carry some through traffic as they connect the Sub-Arterial road network with the Local Road network. Their use by heavy vehicles as a through route would not generally be appropriate.

Communal Outdoor Areas are useable community open spaces for recreation and relaxation of residents that are under the control of a body corporate or similar organisation.

Community Association has the same meaning as in the *Community Land Development Act 1989*

Community Development Lot has the same meaning as in the *Community Land Development Act 1989*

Community Parcel has the same meaning as in the *Community Land Development Act 1989*

Community Provider has the same meaning as in the *Community Land Development Act 1989*

Community Scheme has the same meaning as in the *Community Land Development Act 1989*

Community Jetty means a jetty structure fronting a foreshore public reserve where there is a public benefit and community need, and where it will serve at least six reserve frontage property owners.

Community Title Subdivision is the subdivision of land under the *Community Land Development Act, 1989 and the Community Land Management Act, 1989.*

Connectivity relates to the number and quality of connections in the movement network. It comprises streets, pedestrian/cycles paths/links and public buildings, or any type of open space that enables movement around or through an area

Consolidated Lot means the amalgamation of adjoining lots into one lot.

Corner Lot means a lot that has a frontage to two roads that intersect.

Cultural Significance (or Heritage Significance, or Significance of Places of Cultural Significance) means historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value.

Curtilage means the geographical area that provides the physical context for an identified heritage property, and which contributes to its heritage significance.

Note: *Land title boundaries and heritage curtilage do not necessarily coincide*.

Deed High Water Mark (DHWM) is the position of the mean high water mark as shown on the deposited plan. The current title for the land to which the development relates is based on the DHWM.

Deep Soil Area - an area of natural ground with relatively natural soil profiles within a development site. Deep soil areas should be free of conflicts with building footings, infrastructure and services.

Demolition (Heritage) means to demolish or destroy a heritage item or a building, work, archaeological site, tree or place within a Heritage Conservation Area. It means to wholly or partly destroy, dismantle or deface the heritage item, or the building work, archaeological site, tree, or place.

Design Vehicle means the vehicles for which a given development must make on-site provision.

Development has the same meaning as in the *Environmental Planning and Assessment Act 1979.*

Development Site Plans identify the location and extent of all development.

Discharge Controls are measures designed to manage stormwater at the point where it leaves a lot, development or water catchment. Examples include recharge, artificial wetlands, and retention and detention basins. Pervious pavements and oil/grit separators can also be discharge control elements.

Domestic Boat Shed means a building that is designed and used for the sole purpose of storing one or more boats and associated marine equipment, and has no residential use.

Driveway is the vehicle access between the property boundary and the development. The driveway is generally on private property, and is an extension of the Access Driveway.

Ecological corridors are lands that typically link habitats. They may consist of bushland, wetlands, creek lines or individual trees. The central role of corridors is to provide connectivity between bushland parcels for fauna and plant pollinator movement. They may be continuous, or disjunct and require rehabilitation.

Ecological Habitat is any element of the environment that provides protection, food or shelter for native flora and fauna including vegetation communities, microclimate, tree hollows, ponds, streams, fallen logs, rocks, etc.

Ecological Processes means those processes that play an essential role in maintaining the integrity, viability and continuity of an ecosystem.

Note: *Important ecological processes include water and nutrient cycling, the flow of energy, and evolution by natural selection.*

Ecosystem means a dynamic complex of plant, animal, fungal and microorganism communities and associated non-living environment, interacting as an ecological unit.

Energy and Water Efficiency is any action that minimises energy use through subdivision and building design, and water consumption. It is achieved through the management of run-off, and re-use and the sensitive conveyance of stormwater during the course of construction and ongoing operation.

Environment means components of the earth, including:

- Land, air and water;
- Any layer of the atmosphere;
- Any organic or inorganic matter and any living organism;
- Human-made or modified structures or areas; and
- Includes interacting natural ecosystems.

Erosion and Sediment Control Plan is a plan that demonstrates the proposed erosion prevention and sediment control measures/techniques. Such plans are used for a site as part

of its construction, including ongoing management and maintenance of these techniques for the length of the development.

Note: *See Managing Urban Stormwater Soils and Construction – Landcom, Fourth Edition (2004)..*

Flood is relatively high stream flow which:

- overtops the natural or artificial banks in any part of a stream, river, estuary, lake or dam, and/or
- local overland flooding associated with major drainage before entering a watercourse and/or
- coastal inundation resulting from super-elevated sea levels and/or waves overtopping coastline defences excluding tsunami

Flood Liable Land is synonymous with flood prone land, being land susceptible to flooding by the probable maximum flood (PMF) event. Note that the term flood liable land now covers the whole of the floodplain, not just that part below the flood planning level.

Flood Prone land means land susceptible to inundation by the probable maximum flood.

Floodplain means an area of land that is subject to inundation by floods up to, and including the probable maximum flood event, that is, flood prone land.

Flood Planning Area is the area below the flood planning level and is subject to flood-related development controls.

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

Foreshore Area Development means development within the foreshore building line but beyond six metres from the deed high water mark and includes boat sheds, in-ground swimming pools (within one metre of natural ground level), inclinators, barbeques, shade structures, children's play equipment, landscaping structures and the like.

Foreshore Reserve is a publicly accessible area, potentially public open space, between the deed high water mark and a property boundary.

Foreshore Building Line has the same definition as in Lake Macquarie LEP 2014.

Foreshore Stabilisation Treatment means the installation of a 'soft' structure (such as a beach or planting) or a 'hard' structure (such as a seawall, revetment or groyne) to reinforce the foreshore at the water/land interface and reduce recession and foreshore erosion.

Foreshore Stabilisation Treatment 'Limit Lines' indicate the lakeward limit for construction of foreshore stabilisation treatments, as determined by Council and Statutory Authorities.

Front Setback is the minimum distance from a lot's frontage to which the outermost projection of a structure may be built.

Frontage is a boundary of a lot that abuts a public or private road.

Green Travel Plan is a package of initiatives aimed at reducing car travel, particularly single occupant car trips. A Green Travel Plan encourages greater use of public transport, walking and cycling by residents, employees and visitors.

Gross Floor Area (GFA) means the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, and includes:

- the area of a mezzanine, and
- habitable rooms in a basement or an attic, and
- any shop, auditorium, cinema, and the like, in a basement or attic,

but excludes:

- any area for common vertical circulation, such as lifts and stairs, and
- any basement:
  - storage, and
  - vehicular access, loading areas, garbage and services, and
- plant rooms, lift towers and other areas used exclusively for mechanical services or ducting, and
- car parking to meet any requirements of the consent authority (including access to that car parking), and
- any space used for the loading or unloading of goods (including access to it), and
- terraces and balconies with outer walls less than 1.4 metres high, and
- voids above a floor at the level of a storey or storey above.

Ground level (existing) has the same meaning as in the *Standard Instrument (Local Government Plans) Order 2006.*

Ground level (finished) has the same meaning as in the *Standard Instrument (Local Government Plans) Order 2006.*

Ground level (mean) has the same meaning as in the *Standard Instrument (Local Government Plans) Order 2006.*

Habitable Room means, in a residential situation, a room used for normal domestic activities such as bedroom, living room, lounge room, kitchen, dining room, study, sun room or the like. In a commercial or industrial situation, means an area used for offices or to store valuable possessions susceptible to flood damage.

Heritage Conservation Area is an area that has a distinctive character of heritage significance, and which it is desirable to conserve. For the purposes of this document, it means an area of land of heritage significance:

- shown on the Heritage Map in LM LEP 2014 as a heritage conservation area, and
- the location and nature of which is described in Schedule 5 of LM LEP 2014.

It includes buildings, works, archaeological sites, trees and places and situated on, or within the land.

Heritage Impact Statement is a document demonstrating/ detailing the heritage significance of a heritage item or heritage conservation area, or of a building, work, archaeological site, tree or place within that area. It also contains an assessment of the impact that the proposed development will have on that item, and proposals for measures to minimise that impact.

Heritage Item means a building, work, place, relic, tree, object or archaeological site the location and nature of which is described in Schedule 5 of LM LEP 2014.

Note. Heritage items may be shown on the Heritage Map. An inventory of heritage items is also available at the office of the Council.

Identified Heritage Property means any place identified in a document held by Council which suggests that the place has heritage or cultural significance. It includes a heritage item, provisional heritage item, and any property identified in a plan or in a list within this document, or in the heritage guidelines.

Hierarchy of Centres describes the level of service and function performed by each Centre in the Hierarchy. The Lake Macquarie Hierarchy of Centres is described in *Lifestyle 2030 Strategic Plan Urban Structure – Intent Statements and Map*.

Impermeable Surface is a surface that does not allow rainwater to infiltrate to the soil. Examples of impermeable surfaces include roofs, roads and most paved surfaces.

Indian Spring Low Water (ISLW) is the datum used for measuring tides at Fort Denison. Zero on the tide gauge is the mean Indian Spring Low Water. Tides rarely fall below this level.

Infill Development is a general term used for new housing in an existing residential area. It usually involves the use of a vacant site or the removal of an existing dwelling to enable construction of a larger number of dwellings.

Infiltration is the process by which rainfall infiltrates the soil and enters the sub-surface drainage or ground water system.

Infiltration Devices are measures that are designed to provide temporary storage of run-off, which is subsequently infiltrated to the surrounding soil.

Irregular Lot means a lot that is not rectangular/square in shape.

Isolated Lot means an allotment that is bounded on all sides (excluding road frontage) by existing (or approved) medium to high density residential or commercial development that will preclude the development of the allotment beyond a dwelling house or dual occupancy dwelling or a two storey commercial building.

Lakefront Area Development means development within six metres of the deed high water mark of Lake Macquarie, its tributaries and estuaries. It includes a jetty, ramp, slipway, boat ramp pontoon, wharf, groyne or similar structure that may extend over or under the water, and includes foreshore stabilisation treatments.

Landscaped Area means a part of a site used for growing plants, grasses and trees, but does not include any building, structure or hard paved area. A minimum width of 2.5 metres is required to be included in the landscaped area calculation.

LALC means Local Aboriginal Land Council.

Legibility in design means that the movement system provides a sense of direction and connection, and gives clear signals regarding the spatial layout and topography of an area.

Light Industry has the same meaning as in the *Standard Instrument (Local Government Plans) Order 2006.*

Liquid Fuel Depot has the same meaning as in the *Standard Instrument (Local Government Plans) Order 2006.*.

Littoral Vegetation for the purposes of this plan is vegetation found on the foreshore of water bodies, such as Lake Macquarie and the coastal areas of the City.

Loading Dock is the area for loading and unloading of vehicles, generally incorporating a raised platform to facilitate operations. Loading and unloading can, however, take place from ground level.

Local Aboriginal Community means the body of persons in the local community who claim aboriginality.

Local Roads are generally the urban roads that are used solely to access individual lots.

Lot is a parcel of land or space described in a land title. Within this plan, lot also means "a development lot" as defined by the *Community Land Development Act (1989).*

Lot Width means the length of the perpendicular line between the side boundaries, as measured at the front boundary of the lot.

Major Drainage System is the part of the public drainage system in an urban area that carries relatively large flows. It consists of the system of waterways, floodplains, stormwater channels, retarding basins and road pavements.

Manoeuvring Area is the part of a service area, adjacent to service bays, required by service vehicles to manoeuvre into the bays or to a position beside a loading dock.

Mean High Water Mark (MHWM) is the mean height of all tides above a reference datum. Mean high water of Lake Macquarie is approximately equal to + 0.1 metres on the Australian Height Datum.

Minor Drainage System is the part of the public drainage system in an urban area that carries relatively minor flows. It consists of the system of kerbs, gutters, roadside channels, swales, sumps and underground pipes. It is generally designed to control 'nuisance flows' that occur on a day-to-day basis.

Minor System (or Nuisance) Flooding in urban areas comprises relatively minor localised flooding with an ARI of 2-5 years. It occurs due to surcharge of stormwater onto streets and roads. Stormwater infrastructure is usually designed to avoid minor system flooding. These floods can be conveyed to the receiving environment via a constructed system, or can be reduced or eliminated using stormwater source control measures.

Mixed Use Development has the same meaning as in the *Standard Instrument (Local Government Plans) Order 2006.*

Movement System is the traffic and transport networks described in *Lifestyle 2030 Strategy Plan Movement System - Intent Statements and Map*.

NatHERS is an abbreviation for the Nationwide House Energy Rating Scheme.

Native Vegetation has the same meaning as in the *Native Vegetation Act 2003*.

In deciding whether a species is native, Council will rely on *Flora of New South Wales* by Gwen Harden and *Flora of the Sydney Region* by Rodger Carolin and Mary Tindale.

Natural Heritage means:

1. Natural features consisting of physical and biological formations or groups of such formations, which are of identifiable value from the aesthetic or scientific point of view;
2. Geological and physiographical formations and delineated areas, which constitute the habitat of threatened species of animals and plants of identifiable value, from the point of view of science or conservation; and
3. Natural sites or delineated natural areas of identifiable value from the point of view of science, conservation or natural beauty, regardless of evidence of human intervention.

Neighbourhood is an urban area within a five-minute walk (400 metre) of a Centre. Neighbourhoods are generally residential areas with a central activity node in the form of a centre.

Neighbourhood Scheme has the same meaning as in the *Community Land Development Act 1989.*

Non-Habitable Room is a bathroom, laundry, walk-in wardrobe, corridor, hallway, garage or other similar types of spaces that are not occupied frequently or for extended periods.

Occupied area (100%) means that the floor space on that level completely fills the maximum possible area within the setbacks from each boundary.

Occupied area (50%) means that the floor space on that level occupies no more than 50% of the maximum possible area within the setbacks from each boundary.

On-Site Stormwater Detention is a stormwater management practice that limits the rate of discharge from a suite using outlet restriction devices. Stormwater flows in excess of the capacity of the outflow control device are temporarily stored either in tanks or surface depressions until the storm event recedes, and then released at a controlled rate. On-site detention systems should be designed so that the rate of site discharge is similar to that which would have existed under 'pre-development' conditions.

Outdoor lighting any form of permanently installed exterior lighting and interior lighting systems that emit light impacts on the outdoor environment.

Parking Aisles are the aisles used by cars to gain access to a parking space.

Permeable Surface is the treatment of a surface that allows rainwater to infiltrate to the soil, such as grass, gravel, landscaping or open paving.

Place means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.

Note: *The elements described may include memorials, trees, gardens, parks, places of historical events, urban areas, towns, industrial places, archaeological sites, and spiritual and religious places*.

Planting on Structures- means any planting that completely or partially covers a roof, wall or terrace area of a building with vegetation that is planted in a growing medium over a waterproofing membrane. It may also include planting in containers located on roof or deck areas, provided the containerised system is adequate to sustain shrub and small tree planting

Primary Road Frontage is the road fronting a development from which access is gained via a driveway. Some developments will have more than one frontage road.

Principal Private Open Space has the same definition as in SEPP Exempt and Complying 2008

Ecologically Sustainable Development has the same meaning it has in section 6 (2) of the *Protection of the Environment Administration Act 1991*

Probable Maximum Flood (PMF) means the largest flood that could conceivably occur at a particular location.

Provisional Heritage Items means any property or group of properties identified in the study titled *Lake Macquarie Heritage Study 1993* or Appendix 1 to the *Heritage Guidelines,* and not listed in any schedule or list attached to LM LEP 2014.

Public lighting means lighting provided for the purposes of all-night safety and security on public roads, cycle paths, footpaths and pedestrian movement areas within public parks and gardens, but not including car parks.

Public Realm is the shared urban areas and places, the structures that relate to those spaces, and the infrastructure that supports and serves them.

Public Road for the purposes of this plan is a road that is controlled by a public authority.

Queuing Area is an area of roadway between the entry or exit driveway, and the first conflict point or traffic control point within a car parking area, available for vehicles in a queue.

Rail line means infrastructure or area reserved for the purpose of rail transport, whether for goods or passengers.

Recreation is the act of passive (eg: walking, reading) or active (eg: power walking, jogging, cycling, cricket) relaxation. Recreation takes place in locations that are designed for either unstructured (random) recreation or structured (sports, such as cricket, soccer) activities. Sport fields are designed for structured recreation but also allow passive activity. Likewise, parkland may be designed for passive activity, but provides cycle paths for structured recreation.

Riparian Vegetation is vegetation that grows on water surfaces, below water surfaces, on waterway banks, and along the edges of waterways.

Run-off is rainwater that does not soak into the soil, but flows across surfaces, generally hard surfaces, to the nearest drain, water body or waterway.

Sensitive Receiving Environment means an area where significant flora and fauna species, vegetation communities, ecological and/or riparian corridors and other significant habitat are part of land in a residential zone. They may also be on the site of an education establishment, hospital, childcare facility, community facility and the like.

Service Aisles are the portions of roadway between the access driveway and the service area. Service aisles may form part of the internal circulating road system.

Service Bay is a parking bay for service vehicles engaged in loading or unloading, and where a loading dock may or may not be provided.

Service Vehicle is a vehicle used to supply or remove goods or services to or from a development.

Setback is the minimum distance from a stated boundary to which the outermost projection of a structure may be built.

Setting means the area around a 'place', which may include the visual catchment.

Sight Distance is the distance over which visibility occurs between a drive and an object, or between two drivers, at specific heights above the ground.

Sight Line is a straight line of clear view between two objects over which a sight distance is measured.

Significant Flora and Fauna Species and Vegetation Communities include species and communities listed in the Schedules to the *Threatened Species Conservation Act 1995*, in Council's *Flora and Fauna Guidelines*, or *Tree Preservation Guidelines*.

Significant Habitat is habitat or areas important for significant flora and fauna species, which may contain significant vegetation or ecological communities. These could be terrestrial, aquatic, estuarine or marine habitats. Refer to Council's *Flora and Fauna Guidelines* for more detail.

Significant Tree is a tree or vegetation of any species or height that is listed on Council's *Significant Tree Register.*

Site Analysis involves the identification and analysis of the existing urban character and adjacent properties. It is designed to assist in understanding the locality and the development of a range of appropriate design responses.

Site Analysis Plan means a plan that demonstrates an appreciation of a site and its context, to identify opportunities and constraints on site layout and design.

Site Coverage means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

- any basement,
- any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
- any eaves,
- any unenclosed balconies, decks, pergolas and the like.

Note: Balconies, decks, pergolas and the like located under the main roof of the building are not considered to be unenclosed and will be included in the site coverage calculation.

Note: Site coverage controls operate in tandem with the Stormwater Management, Principal Private Open Space, and Landscaped Area and Design controls in this DCP to ensure that adequate unbuilt area is available for outdoor recreation and for reducing stormwater discharge from the site. Stormwater permeability and integration with the landscape design will be considered when determining whether structures are included in the site coverage calculations.

Site Discharge Index is equal to the directly connected impermeable site area, expressed as a proportion of the total site area.

Social Equity means the state or process by which people in society are considered as equals, and receive fair access to public places and services.

Source and Water Management Plan means a plan that demonstrates proposed measures to control soil erosion and pollution of water courses, both during and after construction.

Note: *See Managing Urban Stormwater: Soils and Construction – DLWC (1998).*

Source Controls are measures designed to manage stormwater at or near the point of rainfall interception, without discharging from the site to an external drainage system (except for overflow during heavy rain). Examples of stormwater source controls include rainwater tanks, infiltration devices, porous paving, artificial wetlands and landscape measures.

Spill light means light emitted by a lighting installation which falls outside the boundaries of the property on which the installation is sited.

Standard Lot means a lot that is generally rectangular/or square in shape.

Statutory Authorities means any government department, body or agency responsible for the enforcement or implementation of legislation or government function.

Stormwater is the run-off from rainfall events.

Strata Title Subdivision is the subdivision under the *Strata Titles Act,* 1973.

Streetscape is what is within view of a person, including building and natural form, related to the street.

Structure Plan is a plan that provides a comprehensive planning approach to the subdivision of land. It identifies the road network, open space network, services, environmental issues, pedestrian/cyclist links, mix of land uses and approximate density yields, among other attributes.

Sub-Arterial Roads are roads that connect Arterial Roads to areas of development, carry traffic directly from one part of the City to another, and may also relieve traffic on Arterial Roads. Smooth and safe traffic flow is the main priority of these roads. In many instances, these roads travel through centres and should safely facilitate pedestrian and cycle movement.

Telecommunications Facility has the same meaning as in the *Standard Instrument (Local Government Plans) Order 2006.*

Threatened Species Populations and Ecological Communities are those likely to become extinct unless action is taken to remove the factors that threaten their survival, such as habitat clearance and predation by introduced animals. In NSW, these species are listed in the Schedules to the *Threatened Species Conservation Act* 1995 and the *Fisheries Management Act 1994*.

Total Catchment Management is the coordinated and sustainable use and management of land, water, vegetation and other natural resources on a water catchment basis, so as to balance resource utilisation and conservation.

Treatment Train is a term describing a stormwater treatment in which various devices and methods are used in sequence to treat polluted run-off water from sites.

Tree see definition of Native Vegetation.

Unbuilt Upon Area is the site area that has no buildings, structures or impervious surfaces or similar, as described by Site Coverage. It may include the identified private outdoor area, and landscaped areas, lawn areas, pools or similar activity areas.

Universal Design means design suitable for people of all ages and abilities, including people with a disability.

Urban Design is a process that concentrates on the appearance of the built environment, how it works, including its relationship to the natural environment and human behaviour, and its ability to provide, safe, equitable, stimulating and enterprising environments for all people.

Vegetation Corridor means a corridor identified on Council's *Native Vegetation and Corridors Map*.

Vehicle Threshold Surface means a paved and/or raised surface to facilitate safe pedestrian access across a public road.

Vicinity in this context means any development in close proximity to a heritage item, referring to more than just the immediate property on either side. Vicinity as a minimum should include the immediate property on either side, and the equivalent length of frontage opposite. It should also include a similar length on rear adjoining properties.

Walkable Catchment is the actual area served within a five-minute (400 metre) or 10-minute (800 metre) walking distance along a movement system.

Water Body means either an artificial or natural body of water.

Waterbody (artificial) has the same meaning as in the *Standard Instrument (Local Government Plans) Order 2006.*

Waterbody (natural) has the same meaning as in the *Standard Instrument (Local Government Plans) Order 2006.*

Water Catchment is an area that drains water to a common point.

Water Cycle Management means the handling of water and water resources in a manner that considers the whole of the hydrological process. This includes the quality and quantity of the resource from its various source/s, and its use and transport in the natural and built environment. Sustainable Water Cycle Management incorporates the principles and practice of Water Smart and Water Sensitive Urban Design philosophies.

Water Cycle Management Strategy is the plan containing details of the water cycle management strategy for a site.

Water Pollution or pollution of waters has the meaning ascribed to it in the *Protection of the Environment Operations Act 1977.*

Water Sensitive Urban Design (WSUD) is a design approach that is intended to:

- Enhance water quality in receiving waters;
- Reduce the risk of flood damage in developed areas;
- Reduce stormwater run-off volumes, peaks and velocity;
- Prevent erosion of waterways, slopes and banks;
- Protect riparian and littoral vegetation;
- Minimise water-borne pollutants;
- Improve efficiency in the use of water, and reduce reliance for imported mains water;
- Reduce sewer overflows in wet weather; and
- Promote scenic landscape and recreation values.

Watercourse has the same meaning as in the *Standard Instrument (Local Government Plans) Order 2006.*

Waterway has the same meaning as in the *Standard Instrument (Local Government Plans) Order 2006.*

Wetlands has the same meaning as in the *Standard Instrument (Local Government Plans) Order 2006.*

Wetland Vegetation Communities are those communities that depend on living in wet conditions for at least part of their life cycle.