

# Planning Proposal

BlueScope Woods Residential Estate  
and BlueScope Employment Hub,  
Kembla Grange

8201811101



Prepared for  
BlueScope Steel (AIS) Pty Ltd

30 June 2020

## Contact Information

### Cardno (NSW/ACT) Pty Ltd

ABN 95 001 145 035

Ground Floor,  
16 Burelli Street  
Wollongong NSW 2500  
Australia

www.cardno.com

Phone +61 2 4228 4133

Fax +61 2 4228 6811

Author(s):



Kiera Plumridge  
Environmental Planner

Approved By:



Sophie Perry  
Manager - Planning

## Document Information

Prepared for BlueScope Steel (AIS) Pty Ltd

Project Name BlueScope Woods Residential  
Estate and BlueScope  
Employment Hub, Kembla  
Grange

File Reference 8201911101-REPT-008-00-  
03\_Planning Proposal.docx

Job Reference 8201811101

Date 30 June 2020

Version Number 00-03

Effective Date 30/06/2020

Date Approved 30/06/2020

## Document History

Version	Effective Date	Description of Revision	Prepared by	Reviewed by
00-01	15 June 2020	Draft	KP	KP
00-02	19 June 2020	Draft for Client Review	KP	KP
00-03	30 June 2020	Final	KP, SP	SP

© Cardno. Copyright in the whole and every part of this document belongs to Cardno and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person other than by agreement with Cardno.

This document is produced by Cardno solely for the benefit and use by the client in accordance with the terms of the engagement. Cardno does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by any third party on the content of this document.

Our report is based on information made available by the client. The validity and comprehensiveness of supplied information has not been independently verified and, for the purposes of this report, it is assumed that the information provided to Cardno is both complete and accurate. Whilst, to the best of our knowledge, the information contained in this report is accurate at the date of issue, changes may occur to the site conditions, the site context or the applicable planning framework. This report should not be used after any such changes without consulting the provider of the report or a suitably qualified person.

## Table of Contents

1	Introduction	1
1.1	The Site	1
1.2	Site Context	3
1.3	Statutory Overview	6
1.4	Environmental and Infrastructure Considerations	17
1.5	Consultation	29
2	Purpose of the Planning Proposal and Amendments	41
2.1	Objectives and Intended Outcomes	41
2.2	Explanation of Provisions	41
3	Justification	52
3.1	Section A – Need for Planning Proposal	52
3.2	Section B – Relationship to Strategic Planning Framework	53
3.3	Section C - Environmental, Social and Economic Impacts	66
3.4	Section D - State and Commonwealth Interests	67
4	Mapping	68
5	Community Consultation	69
6	Project Timeline	70

## Appendices

<b>Appendix A</b>	Water Cycle Management Study
<b>Appendix B</b>	Ecological Constraints Assessment
<b>Appendix C</b>	Traffic Impact Assessment
<b>Appendix D</b>	Bushfire Assessment
<b>Appendix E</b>	Aboriginal Cultural Heritage Assessment and Archaeological Report
<b>Appendix F</b>	Arboricultural Development Assessment Report
<b>Appendix G</b>	Preliminary Site Investigations
<b>Appendix H</b>	Statement of Heritage Impact

## Tables

Table 1-1	Current Development Standards in the LEP by Zone	1
Table 1-2	Wollongong Development Control Plan 2009 Review	3
Table 1-3	West Dapto Draft Contributions Plan Infrastructure Relevant to the Site	11
Table 1-4	Key land-forming features for the post-development scenario	21
Table 1-5	Proposed WSUD measures	22
Table 1-6	Total Traffic Generation	24
Table 1-7	Pre-Lodgement Meeting Comments	29

Table 2-1	R2 and R3 zone characteristics	44
Table 3-1	Wollongong Council Draft Housing and Affordable Housing Options Paper Assessment	54

## Figures

---

Figure 1-1	Site Plan	2
Figure 1-2	Location Plan	4
Figure 1-3	Location of the Neighbourhood Precinct (Source: Chapter D16, Wollongong DCP 2009)	5
Figure 1-4	Existing Zoning Plan	2
Figure 1-5	Environmental Constraints Plan	15
Figure 2-1	Neighbourhood Plan	42
Figure 2-2	Proposed Rezoning Plan	43
Figure 2-3	Transitional Land Use in the West Dapto Vision and Structure Plan 2018	47
Figure 2-4	Proposed Minimum Lot Size Plan	50
Figure 2-5	Proposed Floor Space Ratio Plan	51



# 1 Introduction

This Planning Proposal (PP) report is submitted to Wollongong City Council (Council) as part of a Neighbourhood Plan and Planning Proposal submission for the future urban development of five lots owned by BlueScope Steel (AIS) Pty Ltd (BSL) at Kembla Grange. The land is within the West Dapto Urban Release Area (WDURA). The four lots (collectively known as 'the site') consist of:

North of West Dapto Road, known as 84 Sheaffes Road, Kembla Grange:

- > Lot 1 DP 588139
- > Lot 2 DP 230137

South of West Dapto Road, known as 261 West Dapto Road, Kembla Grange:

- > Lot 1 DP 588140
- > Lot 1002 DP 1192327.

This PP seeks amendments to the *Wollongong Local Environmental Plan 2009* (LEP) in relation to the land described above. Proposed amendments include the following:

- > An increase in the area of land zoned for both light and heavy industrial land use based on updated flood modelling
- > Change the minimum lot size development standard to accurately reflect site-specific capabilities for BioBanking and potential stewardship that reflect future management practices
- > Increase environmental protections for a portion of the site by rezoning to E2 from E3 to reflect the biodiversity values of the location
- > Make adjustments to land in Zone SP2 Infrastructure accounting for the disused rail line
- > Add land in Zone R3 Medium Density Residential based on best practice planning for efficient use of land and housing diversity and case examples.

This PP has been prepared in accordance with Section 3.33 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and in accordance with the document '*Planning Proposals: A Guide to Preparing Planning Proposals*', (NSW Department of Planning, Industry and Environment).

## 1.1 The Site

The site is located at West Dapto, within the suburb of Kembla Grange and to the north of the established suburb of Horsley (refer Figure 1-1). It is located approximately 2.5 km from the Dapto Town Centre and 10 km from the Wollongong City Centre.

### 1.1.1 North-western Precinct

The north-western precinct is bounded by Paynes Road to the west, Sheaffes Road to the south, West Dapto Road to the southeast; neighbouring rural lands to the north, and existing industrial and rural lands to north east.

The site is primarily undeveloped and has been used for livestock grazing with grassed areas in the central, north eastern and south eastern portions of the site. The south, middle and north west portions of the site are vegetated with a stand of remnant trees. A creek line (Sheaffes Creek) with areas of existing riparian vegetation runs along the northern boundary of the site and another in the south west corner.

The site broadly slopes towards West Dapto Road to the east. Surface water at the site is inferred to infiltrate or flow via surface runoff to the tributaries and creeks that generally flow from the north to the south and south east.

Derelict sheds and a horse training track are situated in the south western portion of the site, within the R2 zone. A residential dwelling with ancillary structures is located along the eastern site boundary in the E3 zone, with a farm dam situated approximately 30 m north west of the residential dwelling.





**BLUESCOPE WOODS  
RESIDENTIAL ESTATE AND  
BLUESCOPE EMPLOYMENT HUB,  
KEMBLA GRANGE**

### Legend





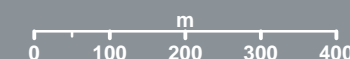
-  Planning Proposal Boundary
-  5m Contours (LPI LiDAR, 2013)
-  Watercourse (LPI)
-  Cadastre (NSW SS, 2019)

FIGURE 1 - 1

**1:10,000 Scale at A3**



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)  
Date: 2020-06-30 | Project: 8201911101  
Coordinate System: GDA 1994 MGA Zone 56  
Map: 82019111-01-GS-050-PP-SitePlan.mxd 01  
Aerial imagery supplied by Nearmap (March, 2020)



### 1.1.2 South-eastern Precinct

The south-eastern precinct is bounded to the north and northwest by West Dapto Road; to the southwest by Darkes Road; to the southeast by the South Coast Railway Line and Princes Highway. The Kembla Grange Golf Club is situated to the south-east.

The site is primarily undeveloped and has been used for livestock grazing and horse agistment within grassed areas in the north eastern portions of the site, and as informal recreation in the south-western portion utilised by Kembla Joggers. Three creek lines with riparian vegetation run across the site: Dapto Creek from the north-west to the south-east, Sheaffes Creek from the west to the east, and Robins Creek briefly within the site boundary at the south-east.

The south-eastern precinct broadly slopes towards the south-east. Surface water at the site is inferred to infiltrate or flow via surface runoff to the tributaries and creeks that generally flow from the north to the south and south east.

## 1.2 Site Context

### 1.2.1 Location and Surrounds

The subject site is located within the West Dapto Urban Release Area (WDURA) within the Wollongong Local Government Area (LGA). The WDURA has been identified as providing long term housing supply for the LGA and Illawarra region, with an estimated 17,000 dwellings to be provided over a 40-year period. Stages 1 and 2 of the urban release area have been rezoned, which includes the subject site.

The character of the area surrounding the subject site is defined by existing low density residential subdivisions, subdivisions under construction and undeveloped lands used for farming and grazing to the south and west. Land to the north and east is occupied by industrial uses.

Specifically, the site is surrounded by:

- > **North** - large industrial parcels of land including land recently utilised by Patrick Autocare and Prixcar as a car processing facility and depot. Further north are rural landholdings in the suburb of Kembla Grange. To the northeast is the Whytes Gully Waste and Resource Recovery Centre
- > **South** - large parcels of rural land, some of which are currently owned by Kembla Grange Golf Club and Wollongong City Council with some lands identified for future residential subdivision and a town centre development. Along Darkes Road is Integral Energy Recreation Park which includes the Australian Motorlife Museum, a playground and picnic area.
- > **East** – industrial uses, landscape suppliers, South Coast Rail Line and further east is the Princes Highway and Kembla Grange Racecourse
- > **West** – large parcels of rural land, which are currently being developed as residential land by Urban Land and Housing (Kembla Grange Estate) and land subject to development applications for residential subdivision not yet determined.

The site and surrounding land use zones are illustrated on the Location Plan at Figure 1-2.





## Location Plan

BLUESCOPE WOODS  
RESIDENTIAL ESTATE AND  
BLUESCOPE EMPLOYMENT HUB,  
KEMBLA GRANGE

### Legend

- Planning Proposal Boundary
- Local Road (LPI)
- Major Watercourse (LPI)
- Railway (NSW SS)
- Distance Buffer
- Land Use (ABS, 2016)**
- Other
- Commercial
- Education
- Hospital/Medical
- Industrial
- Parkland
- Primary Production
- Residential
- Water

FIGURE 1 - 2

1:40,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)  
Date: 2020-06-30 | Project: 82019111-01  
Coordinate System: GDA 1994 MGA Zone 56  
Map: 82019111-01-GS-082-PP-LocationPlan.mxd 01



### 1.2.2 Kembla Grange Employment Lands

The BSL owned lands are significant to the Illawarra Region representing the largest contiguous portion of remaining vacant industrial lands under one ownership in the region. The site has been identified within the Illawarra-Shoalhaven Regional Plan as being a key greenfield employment land opportunity to support future development in West Dapto. Employment land is broadly defined within the NSW Department of Planning, Infrastructure and Environment (DPIE) *Employment lands guidelines for the Illawarra* (2008) as land that could be used for employment generating activities including land zoned for industrial and commercial uses.

These BSL owned lands hold the potential for unique development opportunities which may require multiple linked premises and/or large format facilities. These lands therefore have strategic importance to the wider Illawarra region and have existing road (and potential rail) access to Port Kembla and the F3 southern freeway which links Wollongong to Sydney, as well as providing a link to the Hume Highway for road transport to South Western Sydney, Canberra, Melbourne and beyond.

### 1.2.3 Surrounding Existing Neighbourhood Plans

The subject site includes land from one adopted 'Neighbourhood Precinct' known as *Reddalls Road Industrial* in Chapter D16 of the Wollongong Development Control Plan (DCP) (see Figure 1-33 below). The subject site does not include all of the land within the Reddalls Road Industrial Precinct.

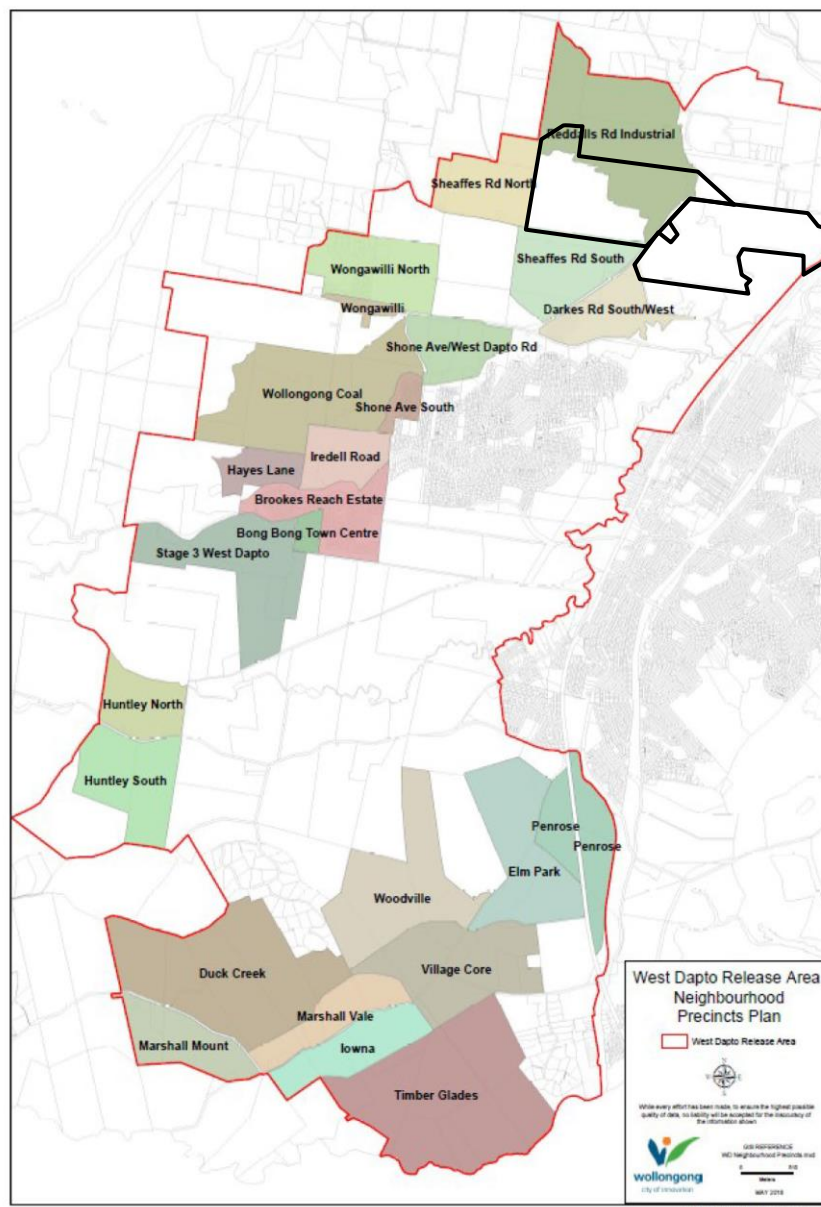


Figure 1-3 Location of the Neighbourhood Precinct (Source: Chapter D16, Wollongong DCP 2009)

As detailed in the West Dapto Urban Release Area (WDURA) Neighbourhood Precincts Plan within the DCP, the BSL site is surrounded by adopted neighbourhood plans. The surrounding adopted neighbourhood plans are shown in Figure 1-3 and include:

- > Reddalls Road Industrial – adopted December 2013
- > Sheaffes Road North – adopted April 2013
- > Sheaffes Road South – adopted October 2015
- > Darkes Road South/West – adopted March 2014.

#### 1.2.4 Reddalls Road Industrial Neighbourhood Plan

Chapter D16 West Dapto Release Area of the DCP identifies a portion of Lot 1 DP 588139 (the subject site) as part of the Reddalls Road Industrial Neighbourhood Precinct (NP). With PrixCar already established to the north, and the development not extending down into the BSL landholdings, it is recommended that the NP lodged with this PP supersede the Reddalls Road Industrial NP with regard to Lot 1 DP 588139. This will require Chapter D16 to be amended to adjust the boundaries of the NPs accordingly. This will allow for a more strategic and coordinated approach to the neighbourhood planning process for the Kembla Grange Employment Lands.

#### 1.2.5 Surrounding Current Development Applications

##### 1.2.5.1 DA-2018/1433

An Integrated Development Application for land at 79-83 Sheaffes Road Kembla Grange seeks development consent for 36 medium density residential lots and associated infrastructure.

##### 1.2.5.2 DA-2018/104/A

An Integrated Development Application was lodged on 1 October 2019 for 109 Darkes Road Kembla Grange for “Subdivision - Torrens title - 191 lots comprising 187 residential lots and four (4) residue lots including tree removals, road and civil works Modification A - amend conditions relating to number of lots, adjusting boundaries and staging.”

##### 1.2.5.3 DA-2017/486/D

An Integrated Development Application was lodged on 9 August 2019 for 160 Sheaffes Road Kembla Grange for “Subdivision - Torrens title - 277 residential lots, two (2) open space lots, one (1) drainage lot, (1) lot to be consolidated with Lot 99 approved via DA-2016/410 and associated works Modification D - consolidation and subdivision of land and associated changes - conditions 1, 16, 39 and 79 and attachment 2.”

##### 1.2.5.4 DA-2017/1342/A

A Designated Development Application was lodged on 26 August 2019 for 132 West Dapto Road Kembla Grange for “Designated Development - Upgrade to Waste Resource Recovery facility including construction of aerated storage tunnels, bio filtration system, water management area, drilling mud separation plant, new weighbridge and associated operational activities Modification A - relocation of composting tunnels, new covered storage bays, relocation of bio filter, relocation of heavy vehicle parking, fire suppression infrastructure and phasing of development - four (4) phases.”

### 1.3 Statutory Overview

#### 1.3.1 Wollongong Local Environmental Plan 2009

The *Wollongong Local Environmental Plan 2009* (LEP) is the principal land use planning document guiding the future development on the site and the surrounding area. The LEP contains the zoning, principal development standards and relevant provisions that require consideration for development and use of land.

##### 1.3.1.1 Zoning

The site is covered by a number of zones (refer Figure 1-4) including:

- > Zone R2 Low Density Residential
- > Zone E2 Environmental Conservation
- > Zone E3 Environmental Management
- > Zone IN2 Light Industrial
- > Zone IN3 Heavy Industrial and
- > Zone SP2 Infrastructure.

Specifically, the R2, IN2 and IN3 zones provide for future urban and industrial uses while the E2 and E3 zoning is intended to be associated with high quality native vegetation, watercourses and riparian lands.

The PP and NP propose urban, industrial and environmental zones for the site in a more accurate, ground-truthed layout. The intention remains to achieve the objectives of each zone, primarily by:

- > Supporting the future development of the Kembla Grange Employment Lands by optimising the yield for light and heavy industrial zoned land, as detailed within the West Dapto Structure Plan and West Dapto Vision 2018
  - o The land holds the potential for unique development opportunities for companies that may require multiple or large facilities, providing key strategic importance to the West Dapto area and broader Illawarra region
  - o A conceptual rail loop has been incorporated into the Neighbourhood Plan within the eastern heavy industry land which would create an important direct rail freight link with Port Kembla and the broader NSW rail network, improving opportunities for rail-based operators seeking an off-road freight alternative or intermodal distribution
- > Ensuring the protection of the native vegetation across the site, and the enhancement of future residential recreation and wellness opportunities, through the Biobanking agreement in place on Lot 1 DP 588139 and the identification of other potential stewardship areas
- > Providing for a range of housing and associated development within a low and medium density environment, close to the Illawarra escarpment, employment lands and new West Dapto infrastructure and community facilities.

#### 1.3.1.2 Minimum Lot Size, Height of Buildings and Floor Space Ratio

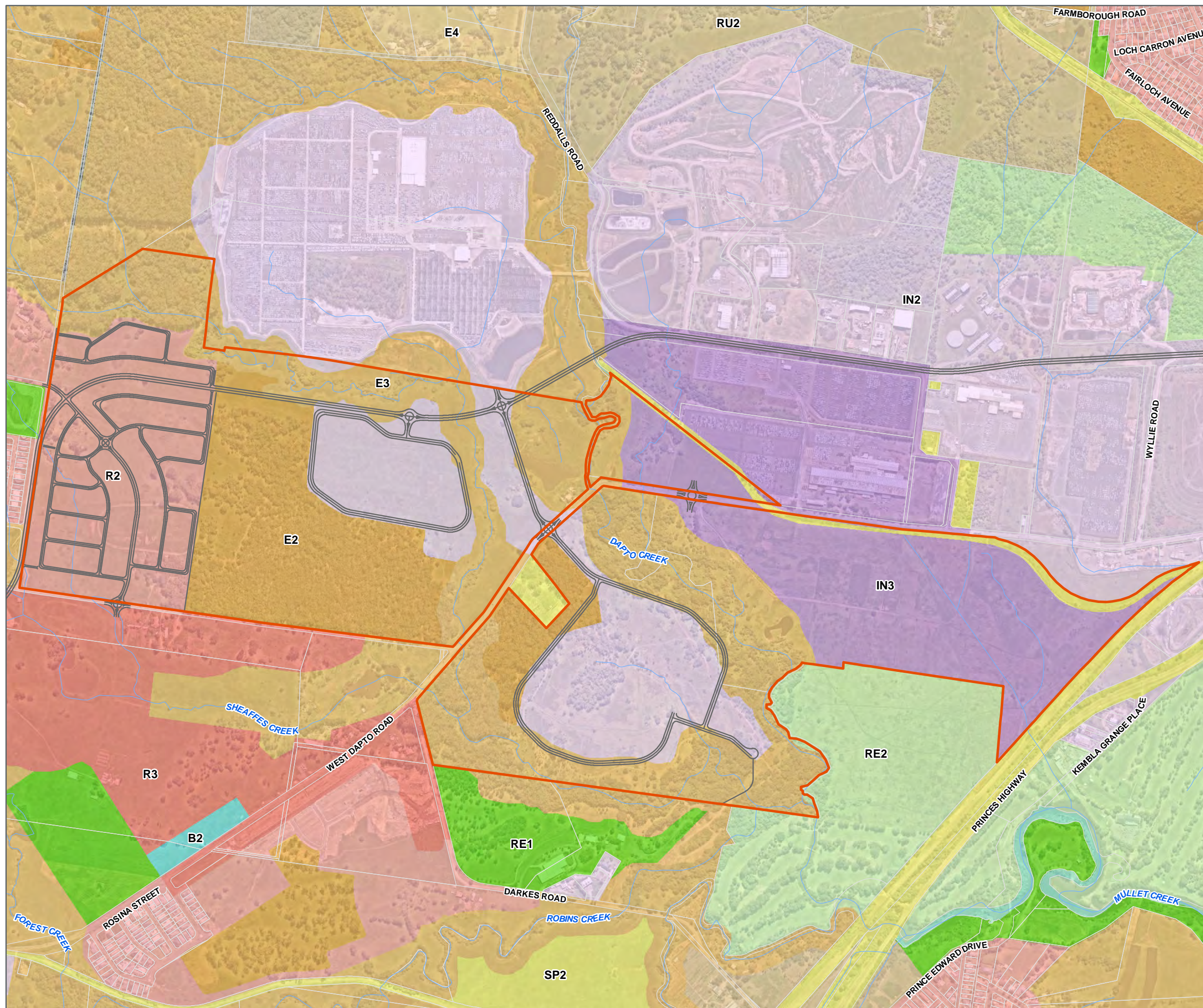
The current LEP provisions applicable to the site are provided in Table 1-1.

Table 1-1 Current Development Standards in the LEP by Zone

Development Standard	R2 Low Density Residential	IN2 Light Industrial	IN3 Heavy Industrial	E2 Environmental Conservation	E3 Environmental Management
<b>Lot Size</b>	449 m <sup>2</sup>	999 m <sup>2</sup>	2999 m <sup>2</sup>	39.99 ha	39.99 ha
<b>Height of Buildings</b>	9 m	9 m	N/A	9 m	9 m
<b>Floor Space Ratio</b>	0.5:1	0.5:1	N/A	N/A	N/A

Proposed amendments to development standards are detailed in Section 2.2.





## Existing Zoning Plan

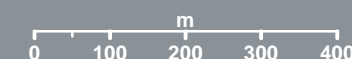
BLUESCOPE WOODS  
RESIDENTIAL ESTATE AND  
BLUESCOPE EMPLOYMENT HUB,  
KEMBLA GRANGE

### Legend

- Neighbourhood Plan Boundary
  - Proposed Road Layout
  - Watercourse (LPI)
  - Cadastre (NSW SS, 2019)
- Zoning - Wollongong LEP 2009 (DPE, Feb 2019)**
- B2 - Local Centre
  - E2 - Environmental Conservation
  - E3 - Environmental Management
  - E4 - Environmental Living
  - IN2 - Light Industrial
  - IN3 - Heavy Industrial
  - R2 - Low Density Residential
  - R3 - Medium Density Residential
  - RE1 - Public Recreation
  - RE2 - Private Recreation
  - RU2 - Rural Landscape
  - SP2 - Infrastructure
  - W2 - Recreational Waterways

FIGURE 1 - 4

1:10,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)  
Date: 2020-06-30 | Project: 8201911101  
Coordinate System: GDA 1994 MGA Zone 56  
Map: 82019111-01-GS-029-NP-ExistingZoning.mxd 02  
Aerial imagery supplied by nearmap (March, 2020)



### 1.3.1.3 Flooding and Riparian Land

#### Flood Planning Area

The objective of Clause 7.3 of the LEP is to ensure flood planning is addressed by proposed development, ensuring safety and maintenance of the floodplain. This PP contains updated information on site flooding which:

- > Improves site conditions compatible with the WDURA and intentions for future development
- > Optimises the efficient use of the site
- > Improves site conditions for new infrastructure
- > Improves flood management and flood data resources for adjoining lands.

A Water Cycle Management Study (Cardno, 2020) has been prepared to inform the NP and PP (see Appendix A) which demonstrates the additional land that is capable of supporting industrial development and appropriate mitigation and management strategies within the flood planning area.

#### Riparian Land

The objective of Clause 7.4 of the LEP is to ensure that Council has '*considered the impact of the proposed development on the land and any opportunities for rehabilitation of aquatic and riparian vegetation and habitat on that land.*' An Ecological Constraints Assessment (ECA) has been prepared for the site (Ecoplanning, 2020) that assesses the impacts of the NP and supporting PP on riparian lands across the site. The full report is on Appendix B and is discussed further in Section 1.4.1.

### 1.3.1.4 Natural Resource Sensitivity – Biodiversity

Clause 7.2 of the LEP states that development consent must not be granted for development of land containing native flora and fauna and threatened species, communities and habitats unless the impact of the development has been considered.

A portion of the site is mapped in the LEP as land to which Clause 7.2 applies. This land is primarily the large stands of native vegetation from the middle to the western extent of the site.

BlueScope has executed a Biobanking agreement on Lot 1 DP 588139 under the *Threatened Species Conservation Act 1995* (TSC Act) (ID number: BA421) to ensure this remnant vegetation is protected.

An Ecological Constraints Assessment (ECA) has been prepared for the site (Ecoplanning, 2020) that assesses the potential impacts to listed species under the BC Act and the EPBC Act as a result of the PP and NP (refer Appendix B). The PP and NP propose methods to effectively manage impact to these areas, and riparian vegetation is mostly being retained and enhanced on E2 and E3 zoned land and through the potential for future stewardship. All areas of vegetation are to be incorporated into passive open space areas where possible.

### 1.3.1.5 Urban Release Area

The site is located within the WDURA with Part 6 of the LEP applicable. Among other things, Part 6 of the LEP requires the preparation of a site specific DCP to guide the future development of the site. Council has adopted the Neighbourhood Planning process as a way to satisfy this requirement. The NP lodged with this PP contains specific matters as listed in Clause 6.2 of the LEP.

## 1.3.2 Wollongong Development Control Plan 2009

The Wollongong Development Control Plan 2009 (DCP) is the document that provides detailed planning guidelines for development within the Wollongong LGA. Table 1-2 outlays the chapters relevant to this proposal and demonstrates how this PP and NP are in alignment with the primary DCP objectives.

Table 1-2 Wollongong Development Control Plan 2009 Review

Relevant DCP Chapter	Assessment
<b>Chapter B2 – Residential Subdivision</b> <i>Objectives Include:</i> > <i>To facilitate a range of lot sizes to permit a range of housing styles</i>	The residential subdivision at the western extent of the site will comprise of low and medium density residential housing. This will be inclusive of a range of varying lot sizes to permit housing diversity and match housing types to streetscape settings.

<ul style="list-style-type: none"> <li>&gt; <i>To ensure subdivisions achieve a high-quality urban design outcome</i></li> <li>&gt; <i>To establish a clear hierarchy of different road types</i></li> <li>&gt; <i>To ensure the majority of residential allotments are within 400 metres walking distance from an existing or proposed bus stop</i></li> </ul>	<p>The road hierarchy has been clearly identified in the PP and NP, and public transport arrangements are addressed in the Traffic Impact Assessment (Cardno, 2020) that has been prepared to support the NP and PP (see Appendix C). The concept road layout has capacity for bus stops and bus routes.</p>
<p><b>Chapter D16 – West Dapto Urban Release Area</b> <i>Objectives Include:</i></p> <ul style="list-style-type: none"> <li>&gt; <i>Enable the development of the West Dapto Urban Release Area for residential, employment, industrial and environmental conservation areas</i></li> <li>&gt; <i>Support the provision of safe and efficient road networks</i></li> <li>&gt; <i>Implement Water Sensitive Urban Design</i></li> <li>&gt; <i>Protect, conserve and enhance riparian and environmentally sensitive areas</i></li> <li>&gt; <i>Improve employment opportunities and economic growth in the Illawarra region</i></li> </ul>	<p>The PP increases the diversity of land uses and subsequent development consistent with efficient use of greenfield land.</p> <p>The PP and NP are informed by specialist investigations including traffic, flooding and stormwater management, bushfire, biodiversity, and optimising infrastructure and land availability for employment uses.</p> <p>The mix of heavy and light industry will enhance economic viability and employment in the Illawarra Region.</p>
<p><b>Chapter E3 – Car Parking, Access, Servicing/Loading Facilities</b> <i>Objectives Include:</i></p> <ul style="list-style-type: none"> <li>&gt; <i>Ensure transport networks are able to support the proposed development</i></li> <li>&gt; <i>Provide adequate and safe vehicular access</i></li> <li>&gt; <i>Ensure that developments are designed to be accessible for pedestrians, cyclists and motorists</i></li> <li>&gt; <i>Provide adequate access, loading facilities and on-site maneuvering for service and waste collection vehicles</i></li> <li>&gt; <i>Ensure safe access for pedestrians and people with a disability</i></li> </ul>	<p>The concept road and land use layout has been shown in the Traffic Impact Assessment to be potentially compatible with the existing and future road network including:</p> <ul style="list-style-type: none"> <li>&gt; West Dapto Road</li> <li>&gt; Reddalls Road</li> <li>&gt; Sheaffes Road</li> <li>&gt; Paynes Road.</li> </ul> <p>The proposed road layout of the NP has been designed to reflect the varying and uses of the site including light and heavy industry and residential. In addition, road widths have been designed to accommodate new standards adopted by Council.</p>
<p><b>Chapter E13 – Floodplain Management</b> <i>Objectives Include:</i></p> <ul style="list-style-type: none"> <li>&gt; <i>Reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone land</i></li> <li>&gt; <i>Minimise the potential impact of development and other activity upon the aesthetic, recreational and environmental value of the waterway corridors</i></li> <li>&gt; <i>Ensure new development must, as far as practical, reduce the existing flood risk</i></li> </ul>	<p>A Water Cycle Management Study (Cardno, 2020) has been prepared to inform the NP and PP (see Appendix A).</p>
<p><b>Chapter E14 – Stormwater Management</b> <i>Objectives Include:</i></p> <ul style="list-style-type: none"> <li>&gt; <i>Reduce peak flows from sites into Council's stormwater drainage system</i></li> <li>&gt; <i>Reduce the probability of downstream flooding</i></li> <li>&gt; <i>Minimise stormwater runoff volumes</i></li> <li>&gt; <i>Minimise the drainage infrastructure cost on development</i></li> </ul>	

<p>&gt; Increase public convenience and public safety as well as protection of property</p>	
<p><b>Chapter E15 – Water Sensitive Urban Design</b></p> <p><i>Objectives Include:</i></p> <p>&gt; To ensure water sensitive urban design treatment measures are incorporated in new developments</p> <p>&gt; To improve the potential for urban runoff reuse</p> <p>&gt; To preserve, restore and enhance riparian corridors</p>	
<p><b>Chapter E16 – Bushfire Management</b></p> <p><i>Applies to Bushfire Prone Land in the Wollongong LGA</i></p>	<p>A Bushfire Assessment (Peterson Bushfire, 2020) has been prepared to inform the NP and PP (see Appendix D).</p>
<p><b>Chapter E17 – Preservation and Management of Tress and Vegetation</b></p> <p><i>Objectives include:</i></p> <p>&gt; Protect and enhance native vegetation, habitat for native fauna and biodiversity</p> <p>&gt; Conserve trees of ecological, heritage, aesthetic and cultural significance</p>	<p>An Ecological Constraints Assessment (ECA) has been prepared for the site (Ecoplanning, 2020) that assesses the presence of listed species under the <i>Biodiversity Conservation Act 2016 (BC Act)</i> and the <i>Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)</i> (see Appendix B).</p> <p>Trees of heritage significance have also been considered in an Aboriginal Cultural Heritage Assessment (ACHA) and Archaeological Report (AR) prepared by Biosis (2020) (see Appendix E) and the Arboricultural Development Assessment Report (ADAR) prepared by Moore Trees (2020) (see Appendix F).</p>
<p><b>Chapter E19 – Earthworks</b></p> <p><i>Objectives Include:</i></p> <p>&gt; Ensure the future use of the land is not adversely affected by land reshaping</p> <p>&gt; Ensure that appropriate environmental management measures are applied</p> <p>&gt; Facilitate the regulated disposal / use of excavated material</p>	<p>A concept indication of proposed earthworks has been included in both the Water Cycle Management Study (Cardno, 2020) (refer Appendix A) and the draft NP lodged with this PP.</p> <p>Earthworks are the minimum proposed to best manage flooding and stormwater to optimize costs of infrastructure installation and maintenance, safe operation of infrastructure and safe and efficient use of the urban footprint.</p>
<p><b>Chapter E20 – Contaminated Land Management</b></p> <p><i>Objectives Include:</i></p> <p>&gt; Consider the likelihood of contamination upfront in the planning and development process</p>	<p>Two Preliminary Site Investigations (PSIs) have been undertaken for the site to inform contamination matters on site (refer Appendix G).</p> <p>A Detailed Site Investigation (DSI) and Remedial Action Plan (RAP) are currently being prepared for Lot 1 DP 588139 to inform a future residential subdivision DA.</p>
<p><b>Chapter E23 – Riparian Land Management</b></p> <p><i>Objectives Include:</i></p> <p>&gt; Conserve, enhance and protect existing native riparian vegetation and associated habitat</p> <p>&gt; Ensure riparian management is compatible with, and does not adversely affect, floodplain risk management objectives in urban areas</p>	<p>An Ecological Constraints Assessment (ECA) has been prepared for the site (Ecoplanning, 2020) that assesses the impacts of the NP and supporting PP on riparian lands across the site (see Appendix B).</p>

### 1.3.3 West Dapto Vision and Structure Plan 2018

The vision for the WDURA is Council policy and is considered in all statutory planning decisions. The vision for the WDURA is as follows:

*“West Dapto will grow and develop as a series of integrated and connect communities. Set against the spectacular Illawarra Escarpment and a landscape of riparian valleys, these communities will integrate the natural and cultural heritage of the area with the new urban form.*

*The communities will be healthy, sustainable and resilient with active and passive open space accessible by walkways, cycleways and public transport. To support these new communities, local centres will provide shopping services, community services and jobs while employment lands will facilitate further opportunities for the region.*

*West Dapto will be supported by a long-term strategy to oversee the timely implementation of infrastructure to deliver sustainable and high-quality suburbs with diverse housing choices.”*

The vision is supported by a range of Planning Principles intended to guide land use planning decisions associated with the URA. The relevant principles and an assessment against each is provided below.

Planning Principles for WDURA	Consistency of this PP with Planning Principles
<b>Transport Principles</b>	
Supportive land use patterns	<p>Informed by a Traffic Impact Assessment (Cardno, 2020) (refer Appendix C) and urban design analysis, the site layout has been designed to:</p> <ul style="list-style-type: none"> <li>&gt; Maximise walking and cycling opportunities and catchments</li> <li>&gt; Link with surrounding existing and planned communities to the west and south of the residential precinct through shared paths, as well as roads to reduce the overall daily reliance on private car use for many families</li> <li>&gt; Provide roads and intersections designed for the type of traffic generated by residential and industrial lands.</li> </ul>
A safe, connected and legible road network for all users	<p>The concept road network has a clear hierarchy and safe layout based on a modified grid to maximise accessibility and efficiency through the residential precinct.</p> <p>The network caters for private vehicles and public transport (buses) whilst also providing safe pedestrian and cyclist access throughout the residential and industrial districts.</p> <p>The layout has been designed to ensure the Northern Access Road is access-denied and will not allow direct driveway access from the residential precinct.</p> <p>Intersection design for all roads are as per the notes within Chapter B2 of the DCP for each road type, and all roads and intersections have been designed to relevant standards and best practice guidelines.</p> <p>Lots adjoining the Northern Access Road have been designed as rear-access to maintain passive surveillance, with internal lots designed as front-facing.</p> <p>All roads and intersections have been designed to meet relevant standards and best practice guidelines including <i>Planning for Bush Fire Protection 2019</i>.</p>
Design roads to compliment the environment	Road and infrastructure layout is compatible with stormwater and flood management to minimize cut and fill and protect riparian areas with ecologically significant habitats.

Quality infrastructure	Future development applications are encouraged to incorporate high quality design principles during detailed design for road and public transport infrastructure
Road network to support sustainable transport outcomes	Roads have been designed with a general layout that considers a high level of safety and amenity for pedestrians, cyclists and bus services.
Good design is context sensitive design	Road hierarchy and intersection design is compatible with anticipated scale and frequency of vehicles from different land uses.  Front and rear access controls for new residential lots is compatible with intended road traffic volumes, streetscape design, proximity to open space and optimizing walkability.
Effective bus network, service provision and integration	The road network has been designed to accommodate interconnected bus services across surrounding neighbourhoods.
Working with State Government to provide and improve public transport services	The Traffic Impact Assessment (Cardno, 2020) (refer Appendix C) notes that there will be future coordination with public transport providers at DA stage.
Promotion and incentives	The proximity of residential areas to industrial based employment-generating development includes potential for well-connected and safe pedestrian and cyclist links.
Connected, functional pedestrian and cycle network	The road network and associated footpath and shared path networks for pedestrians and cyclists has been designed to ensure excellent connectivity between residences, employment centres and nearby local centres.
Attractive and safe environment	Roads have been designed with a general layout that considers the principles of CPTED and a high level of safety and amenity for pedestrians, cyclists and bus services. All roads and intersections have been designed to meet relevant standards and best practice guidelines including <i>Planning for Bush Fire Protection 2019</i> .  All roads have been designed to relevant standards and best practice guidelines to ensure safe pedestrian and cyclist accessibility across the site and to nearby existing and planned neighbourhoods.  All major intersections across the site have appropriate controls to ensure a safer pedestrian and cyclist environment.  Lots adjoining the Northern Access Road have been designed as rear-access to maintain passive surveillance across paths, with internal lots designed as front-facing.
Promotion of active transport	The concept layout is intended to encourage significant active workplace, residential and social travel due to proximity of residential areas to industrial based employment-generating development, and well-connected and safe pedestrian and cyclist access between industrial precincts, nearby community centres and open spaces.  Everyday active transport would also be encouraged through the design of safe and efficient pedestrian paths and cycle ways, which opens opportunities for future active transports initiatives such as community events and bike sharing services.
<b>Water Management Principles</b>	
Integration of floodplain and stormwater management	A Water Cycle Management Study (Cardno, 2020) has been prepared to inform the NP and PP (refer Appendix A) which demonstrates the additional land that is capable of supporting



	industrial development and appropriate mitigation and management strategies.
Manage water quantity	Results within the TIA show that floodplain storage will not be decreased as a result of the proposed development. The comparison between pre-development and post-development floodplain storage volumes confirms that additional floodplain storage is provided within the site.
Sustainable floodplain development	The combined outcomes of the Water Cycle Management Study (Cardno, 2020) (refer Appendix A) and the Ecological Constraints Assessment (Ecoplanning, 2020) (refer Appendix B) demonstrate the proposed NP and PP amendments are feasible within the floodplain to provide residential and industrial developable land sustainably in the context of the surrounding area.
Preservation of floodplain function and natural corridors	<p>The Water Cycle Management Study (Cardno, 2020) addresses natural corridors and floodplain function.</p> <p>The proposal is consistent with the NSW Floodplain Management Guidelines and compatible with the natural function of the local catchment to flood without causing detrimental impacts to surrounding land and infrastructure.</p>
Protection from flooding	See above.
Protect water quality	Modelling for Water Sensitive Urban Design (WSUD) treatment options would be prepared during future DA stages of the project and will consider primary, secondary, and tertiary treatment. Treatment measures considered include demand management, rainwater tanks, grass lined swales, gross pollutant traps (GPTs), detention basins and bio-retention basins/wetlands.
Integrate stormwater with the environment	See above. WSUD details are to be implemented with future specific works proposed with developments applications.
Efficient and sustainable infrastructure	Infrastructure layout has been conceptually considered for efficient layout. Further refinement is expected with future Das.
Preserve/enhance the environment	The proposal facilitates BioBanking, stewardship and implementation of Vegetation Management Plans (VMPs) in perpetuity.
<b>Conservation Principles</b>	
Prioritise areas that offer high environmental value for conservation	<p>The Ecological Constraints Analysis (ECA) (Ecoplanning, 2020) (refer Appendix B) informing the PP identifies areas of 'High', 'Medium' and 'Low' ecological sensitivity.</p> <p>Areas of 'High' sensitivity are to be protected from future development and managed with a Vegetation Management Plan (VMP), Biobanking and offsetting arrangements.</p>
Connectivity of habitat areas	Habitat connectivity will be maintained via the riparian corridors between and surrounding the residential precinct and industrial precincts, with the site retaining large areas of vegetation.
Protect environmental values	Environmental values have been identified in the ECA and Biobanking commitment. A future VMP will also protect habitats in accordance with statutory requirements and best practice.
Prioritise the conservation of heritage items and sites of Aboriginal heritage significance	Two locally listed heritage items occur on the site, including Item no. 6326 Group of Bunya Pines, Moreton Bay Figs and Item no. 6329 Hills Figs and Moreton Bay Fig. The NP has been designed to conserve Item no. 6326 in a 'pocket park' within the residential precinct, creating a unique open space for the community and for the

	<p>broader West Dapto area. Item no. 6329 occurs within E2 zoned land, and is not proposed for any future development.</p> <p>Item no. 5974 is St John's Catholic Cemetery located on Lot 1 DP 1037747 and is located centrally within the site, adjacent to West Dapto Road. This item will not be impacted by the NP and PP.</p>
Respect the cultural landscape	Methods for respecting and protecting the cultural landscape are identified in the Aboriginal Cultural Heritage Assessment (ACHA), Archaeological Report (AR) (refer Appendix E) and Statement of Heritage Impact (SoHI) prepared by Biosis (2020) (refer Appendix H), prepared to inform the existing heritage environment and likely impacts due to the NP, PP, and future development applications.
Embed local history and character in new communities	Landscaping is proposed on the western side of West Dapto Road to protect the setting and outlook from St. John's Catholic Cemetery.
<b>Open Space and Recreation Principles</b>	
Functionality	<p>Local Heritage Item No. 6326 is situated in far west of the site and consists of a number of Bunya Pines, Moreton Bay Figs and Hills Figs. The item is considered locally significant due to its historical and aesthetic value. These trees have been incorporated into a 'pocket park' or broad footpath area within the residential precinct to enhance the passive open space with cultural value. The pocket park is subject to pending testing results undertaken by an engaged Arborist and future safety assessment due to the presence of Bunya pinecones.</p> <p>Additionally, the extensive Biobank area directly to the east of the residential precinct acts as publically accessible natural area via a network of management trails.</p>
Accessibility	Accessibility throughout the Biobank will be via clearly signposted management trails with gated access and will be off-limits to dogs.
Connectivity, movement and flow	<p>The road network has been designed to allow for the primary access to the residential precinct via the minor collector, to run generally through the centre of residential land. This central location improves accessibility to all areas of the residential precinct via a connected network of shared pathways to ensure safety and accessibility for pedestrians and cyclists both throughout the site and with nearby neighbourhoods.</p> <p>Gated management trails throughout the Biobank will allow public access (excluding dogs, both on or off-leash) and be connected to the paths and shared paths across the site.</p>
Value and amenity	<p>The substantial Biobank between the residential and industrial precincts offers high quality integrated natural vistas and acts as an additional open space for residents and visitors to enjoy the native vegetation of the West Dapto area.</p> <p>This Biobank area also offers increased visual amenity for adjacent households overlooking the natural vistas, and will likely be a popular daytime destination for walkers.</p>
<b>Housing Principles</b>	
Encourage housing diversity	R2 and R3 zoning optimises housing diversity consistent with lot layouts throughout WDURA, and the siting of proposed R3 areas has been considered suitable due to transport and open space considerations, as discussed in Section 2.2.1.
Promote housing affordability	<p>Housing affordability will be delivered by:</p> <ul style="list-style-type: none"> <li>&gt; A wide range of housing forms</li> </ul>

	<ul style="list-style-type: none"> <li>&gt; Optimising housing yield</li> <li>&gt; Efficient layout of infrastructure per lot</li> <li>&gt; A range of transport options to reduce overall costs of living.</li> </ul>
Establish sustainable, energy efficient, appealing and functional residential living	<p>Residential lots have been designed to accommodate roof orientations suitable for rooftop solar panels.</p> <p>The concept layout is intended to optimize walkability.</p>
Creating local amenity and a sense of place	<p>The NP would encourage significant active transport via well connected and safe pedestrian and cyclist access between the residential precinct, industrial precincts and open spaces.</p> <p>The Neighbourhood Plan maximises residential lot yield to contribute to the overall planned WDURA residential dwelling yield; maximises industrial land yield to contributes to the planned Kembla Grange Employment Lands; and is complemented by the natural areas across the site including the Biobank and riparian corridor as well as the scattered local heritage items, to create a unique sense of place and local amenity and protect and promote the conservation values of the Illawarra.</p>
Housing transition to the Illawarra Escarpment	<p>Illawarra Escarpment Lands as mapped in the LEP overlap the north west corner of the site (refer Section 2.2.1.1.2). The NP concept layout protects the edge of the escarpment lands with asset protection, new roads and the residential development footprint not encroaching on existing vegetation. The layout maintains the integrity and continuity of vegetated escarpment lands.</p>
<b>Employment Principles</b>	
Support local sustainable employment	<p>The site encompasses the largest industrial-zoned greenfield land area within the Wollongong region that will provide new and unique local employment opportunities within the WDURA. These employment lands will offer a variety of future local employment opportunities to the community and reduce the necessity to travel out of the release area and region.</p>
Attract, facilitate and support industries, enterprises and business to locate in West Dapto	<p>The site retains flexibility within the employment lands with future local road and lot layouts to be determined based on the requirements of future operators and specific land uses.</p>
Protect existing employment land	<p>The PP optimises yield for employment land (IN2 and IN3) by managing flooding compatible with land development and infrastructure to ensure the sufficient supply of employment generating land opportunities for the region.</p> <p>The sizes of these industrial areas will allow opportunities to industrial operators of various size and type to establish themselves in the area close to infrastructure and transport.</p>
Improve employment opportunities whilst ensuring development is of a high standard	<p>The employment lands will be buffered by environmental lands that enhance overall conservation outcomes for the WDURA. The land contains an extensive Biobank which will conserve the stands of native vegetation across the site, and riparian corridors are included in the environmental lands throughout the site.</p>
Ensure a high level of accessibility to employment Hubs	<p>New residential lots are within a walkable catchment to industrial lands and the future Darkes Town Centre. Safe pedestrian and cyclist access can be achieved via the new road network and future NDE.</p>

#### 1.3.3.1 West Dapto Contributions Plan

Developer Contributions Plans under Section 7.11 of the EP& A Act allow Council to levy contributions for public facilities and services needed as a consequence of development. The land to be developed under this



PP will deliver infrastructure required to service new urban land in the WDURA including water, sewer, electricity and telecommunications infrastructure, roads, public transport, water cycle management facilities, community facilities, recreational facilities, open space and environmental protection.

The Draft West Dapto Development Contributions Plan 2020 has been considered in conjunction with the Assessment of West Dapto Contributions Plan 2020 (IPART, 2020). The development of the site can deliver the following specific infrastructure for which an offset can be claimed (see also details in Table 1-3 below):

- > Part of the extension to the NDE
- > Bridges and culverts
- > Pathways within the Bio banked area, riparian lands and the new public road network
- > Upgrades to Sheaffes Road
- > Fire management trails and pathway connections to adjoining land to the west (to Sheaffes Road North NP subdivision) and south (Integral Energy Park).

The current West Dapto Contributions Plan does not include acquisition of riparian corridors within the site. Discussions with Council's Property Division are ongoing with regard to potential future ownership and management of some riparian areas. This PP report will be revised and updated as these discussions progress if there is an in principle agreement to dedicate the riparian land to Council care, control and ownership.

The proposed stormwater detention basin adjacent to Sheaffes Road is intended to be a temporary basin. At a future point in time, Council will construct a district scale basin as part of the Darkes Town Centre and Darkes Road South West NP. Once the district scale basin has been constructed, the temporary detention basin will be replaced with medium density housing and drainage directed to the district scale basin.

BlueScope intend to submit a letter of offer to Council for entering into a Planning Agreement or Works in Kind Agreement with Council for the delivery of infrastructure and the payment of contributions. The details on the Planning Agreement/Works in Kind Agreement will be negotiated during the assessment of the PP and will form part of future Development Application processes.

Table 1-3 lists the infrastructure within the Contributions Plan relevant to the NP and PP.

Table 1-3 West Dapto Draft Contributions Plan Infrastructure Relevant to the Site

Reference	Description
R2	Road upgrade of 4 lanes for approximately 4 km
NR9	
NR10	
NR11	
NR12	
WD5	Road upgrade of 2 to 4 lanes for approximately 5 km
WD6	
WD7	
WD8	
IN5	Large roundabout for access to industrial lands off Northcliffe Drive Extension
IN6	Large signals for the intersection of Paynes Road and Northcliffe Drive Extension
IN14	Small roundabout for access to industrial lands off West Dapto Road

The exact nature of the road upgrade and intersection provisions is subject to further detailed design, however as an indication these works have been included in this preliminary phase of the future development of the land to support the potential future land uses and activities.

### 1.3.4 Commonwealth Legislation

#### 1.3.4.1 *Environment Protection and Biodiversity Conservation Act 1999*

Under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) a referral is required to the Australian Government for proposed 'actions' that have the potential to significantly impact on Matters of National Environmental Significance (MNES) or the environment of Commonwealth land.

Any future development application that proposes an action that may impact on an MNES will require consideration of the EPBC Act.

An Ecological Constraints Assessment (ECA) has been prepared for the site (Ecoplanning, 2020) that assesses the presence of listed species under the Biodiversity Conservation Act 2016 (BC Act) or and the EPBC Act. The full report is on Appendix B and is discussed further in Section 1.4.1.

### 1.3.5 NSW Legislation

The following Acts are relevant to the future development of the subject site:

- > *Heritage Act 1977*
- > *National Parks and Wildlife Act 1974*
- > *Rural Fires Act 1997*
- > *Roads Act 1993*
- > *Biodiversity Conservation Act 2016*
- > *Water Management Act 2000*
- > *Coastal Management Act 2016*.

#### 1.3.5.1 *Heritage Act 1977*

The Heritage Act 1977 lists and protects items and areas of heritage significance in New South Wales. The NSW Heritage Council administers the Act and listings. A search of the following heritage registers has been undertaken:

- > State Heritage Register
- > Commonwealth Heritage List
- > National Heritage List.

The subject site is not affected by above listed heritage items or lists.

#### 1.3.5.2 *National Parks and Wildlife Act 1974*

The *National Parks and Wildlife Act 1974* (NP&W Act) is administered by the Department of Planning, Industry and Environment (DPIE) and provides for:

- > Protection of flora and fauna, including threatened species listed under the BC Act and protected flora and fauna listed under the NP&W Act
- > Protection of Aboriginal sites or remains
- > Reservation of land for protection under the Act, including reservation of National Parks.

When determining applications under this Act, the consent authority must consider the objectives listed above, the public interest and appropriate management of the subject land. This Act stringently controls activities in designated Parks, Reserves, and Aboriginal areas.

The ecological aspects of the NP&W Act are not applicable to the proposed works as the land is not within a Park, Reserve, or Area designated under Part 4 of the Act.

The *National Parks and Wildlife Act 1974* (NP&W Act) is the primary legislation dealing with Aboriginal cultural heritage in NSW. Items of Aboriginal cultural heritage (Aboriginal objects) or Aboriginal places (declared under Section 84) are protected and regulated under the NP&W Act.

An Aboriginal Cultural Heritage Assessment (ACHA) and Archaeological Report (AR) have been prepared for the site (Biosis, 2020) (refer Appendix E and Section 1.4.3), which considers the potential for Aboriginal objects and places to be located on site. Areas of high archaeological potential for Aboriginal heritage significance have been identified within the site and will require further assessment as part of future development applications if disturbance is proposed.

Although the PP does not propose any actions or works that would disturb places or items of Aboriginal heritage significance, it is anticipated that the PP will be referred to NPWS during the assessment and consultation processes.

#### 1.3.5.3 Rural Fires Act 1997

Section 4.47 of the EP&A Act identifies Integrated Development as development that requires authorisation under Section 100B of the *Rural Fires Act 1997* (RF Act) for the subdivision of land for residential or rural residential purposed or the development of land for special fire protection purposes. Any future development application proposing the subdivision of land for residential purposes will be Integrated Development under the EP&A Act.

As the site includes land that is bushfire prone, the conceptual subdivision layout has incorporated appropriate asset protection zones (APZs) and subdivision design to meet the requirements of *Planning for Bushfire Protection 2019*.

Although the PP does not propose any actions or works that require concurrence from the NSW RFS it is anticipated that the PP will be referred to RFS during the assessment and consultation processes.

#### 1.3.5.4 Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* (BC Act) protects threatened species, communities and critical habitat in New South Wales. This Act provides protection for species, populations, and ecological communities considered endangered, vulnerable, or extinct. Any activity, which may have an impact on threatened species must consider a range of factors in the assessment and determination of the development application. Section 5AA of the EP&A Act links with the BC Act and requires the consent authority to consider a range of factors during the determination of a development application.

An Ecological Constraints Assessment (ECA) has been prepared for the site (Ecoplanning, 2020) that assesses the presence of listed species under the Biodiversity Conservation Act 2016 (BC Act) or and the EPBC Act. The full report is on Appendix B and is discussed further in Section 1.4.1.

It is intended for future works to achieve neutral or positive outcomes for endangered ecological community (EECs) present at the site. It is anticipated that the PP will be referred to NPWS during the assessment and consultation processes. Any future development application that proposes the removal of native vegetation on site will require consideration of the BC Act.

#### 1.3.5.5 Water Management Act 2000

The *Water Management Act 2000* (WM Act) aims for sustainable and integrated management and use of State water sources. The WM Act regulates controlled activities that occur within 40 metres of a water course, river bank, and lake shore or estuary mean high water mark. An approval is required to undertake controlled activities on waterfront land, unless that activity is otherwise exempt (Section 91E).

Controlled Activity means:

- (a) the erection of a building or the carrying out of a work (within the meaning of the *Environmental Planning and Assessment Act 1979*), or
- (b) the removal of material (whether or not extractive material) or vegetation from land, whether by way of excavation or otherwise, or
- (c) the deposition of material (whether or not extractive material) on land, whether by way of landfill operations or otherwise, or
- (d) the carrying out of any other activity that affects the quantity or flow of water in a water source.

The PP applies to land already zoned for urban purposes and identified for infrastructure that will require controlled activities subject to future development applications. Any future development application that proposes works within a riparian corridor will require an application to the National Resource Access Regulator (NRAR) for a Controlled Activity Approval (CAA), supported by a Vegetation Management Plan (VMP) for works within a riparian corridor. It is anticipated that the PP will be referred to the NRAR and Water NSW during the assessment and consultation process.

#### 1.3.5.6 Coastal Management Act 2016

The objects of the *Coastal Management Act 2016* (CM Act) relevant to the PP are to protect natural coastal processes and coastal environmental values, acknowledge the connections Aboriginal people have with the coastal zone, to recognize the economic significance of the coastal zone and seek sustainable development and strategies compatible with coastal processes.

As shown in Figure 1-5, part of the site is located within the Coastal Environment Area which is described in the CM Act as:

*“the land identified by a State environmental planning policy to be the coastal environment area for the purposes of this Act, being land containing coastal features such as the coastal waters of the State, estuaries, coastal lakes, coastal lagoons and land adjoining those features, including headlands and rock platforms.”*

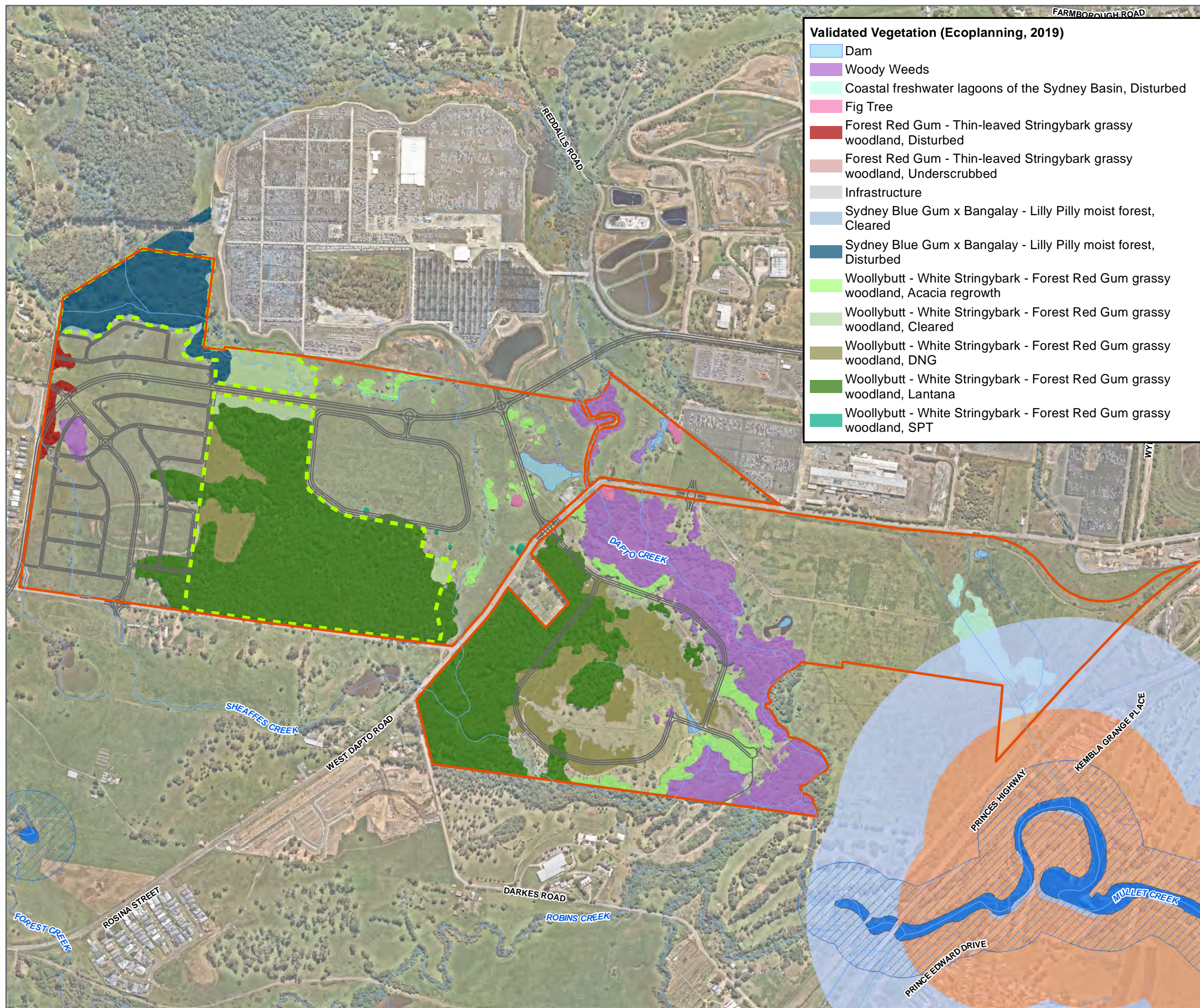
The management objectives for the Coastal Environment Area are listed in Clause 8 to the CM Act and are as follows:

- “(a) to protect and enhance the coastal environmental values and natural processes of coastal waters, estuaries, coastal lakes and coastal lagoons, and enhance natural character, scenic value, biological diversity and ecosystem integrity,*
- (b) to reduce threats to and improve the resilience of coastal waters, estuaries, coastal lakes and coastal lagoons, including in response to climate change,*
- (c) to maintain and improve water quality and estuary health,*
- (d) to support the social and cultural values of coastal waters, estuaries, coastal lakes and coastal lagoons,*
- (e) to maintain the presence of beaches, dunes and the natural features of foreshores, taking into account the beach system operating at the relevant place,*
- (f) to maintain and, where practicable, improve public access, amenity and use of beaches, foreshores, headlands and rock platforms.”*

The PP does not propose to facilitate any works that would be contrary to the abovementioned management objectives.

In accordance with the CM Act, Council has adopted a Coastal Zone Management Plan (CZMP) which identifies coastal values and features and management processes to protect and enhance the coastal zone. This PP has the potential to facilitate stormwater and flooding management practices and restoration of vegetation and habitats consistent with the commitments of the CZMP.







### 1.3.6 State Environmental Planning Policies

There are three State Environmental Planning Policies (SEPPs) applicable to the future development of the land, being:

- > *State Environmental Planning Policy (Infrastructure) 2007*
- > *State Environmental Planning Policy No 55 – Remediation of Land*
- > *State Environmental Planning Policy (Coastal Management) 2018.*

#### 1.3.6.1 *State Environmental Planning Policy (Infrastructure) 2007*

*State Environmental Planning Policy (Infrastructure) 2007* (ISEPP) Schedule 3 – Traffic Generating Developments identifies development that requires a referral to Transport for NSW (TfNSW). Development applications proposing traffic generating developments (as listed in Schedule 3 to the ISEPP) or triggering consideration under Clauses 101, 102 or 103 to the ISEPP will require referral to TfNSW. Such developments may be proposed on the site in the future.

The consideration of future acoustic impacts for development adjacent to a road corridor (future Northcliffe Extension Drive (NDE)) will need to be considered with future DAs. Clause 102 of the ISEPP listed specific noise criteria that must be met by residential development adjacent to road corridors.

A Traffic Impact Assessment (TIA) (Cardno, 2020) (Appendix C) has been prepared as part of the NP and PP process for the site. Relevant DCP chapters are addresses in Section 1.4.8. It is anticipated the PP will be referred to RMS as part of the assessment and consultation processes.

#### 1.3.6.2 *State Environmental Planning Policy No 55 – Remediation of Land*

*State Environmental Planning Policy No 55 – Remediation of Land* (SEPP 55) provides a state-wide approach to the remediation of contaminated land, with the aim of promoting remediation to reduce the risk of harm to human health or any other aspect of the environment. Clause 7 of SEPP 55 provides guidelines to be considered by the consent authority when determining development applications:

(1) *A consent authority must not consent to the carrying out of any development on land unless:*

- (a) *it has considered whether the land is contaminated, and*
- (b) *if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
- (c) *if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

Two Preliminary Site Investigations (PSIs) have been undertaken for the site to inform contamination matters on site (refer Appendix G for full reports and Section 1.4.7 for discussion). The PSIs provided recommendations for future development applications including the preparation of Remedial Action Plans (RAPs). It is anticipated the PP will be referred to the NSW EPA as part of the assessment and consultation processes.

#### 1.3.6.3 *State Environmental Planning Policy (Coastal Management) 2018*

*State Environmental Planning Policy (Coastal Management) 2018* (Coastal Management SEPP) gives power to, and defines the land use planning objectives of, the *Coastal Management Act 2016* to protect and enhance NSW's coastal environments. The Coastal Management SEPP updates and consolidates the old SEPP 14 (Coastal Wetlands), SEPP 26 (Littoral Rainforests) and SEPP 71 (Coastal Protection) and details four coastal management areas: coastal wetlands and littoral rainforests, coastal vulnerability, coastal environment and coastal use.

The Coastal Management SEPP covers a portion of land within the IN3 zoned eastern portion of the site (refer Figure 1-5), with both coastal environment area and coastal use area occurring. The Neighbourhood Plan provides a high level design for the industrial zones within the site. Any future development application for land covered by this SEPP must satisfy the consent authority as to the impacts caused by the proposed development in relation to coastal processes.

#### 1.3.6.4 Illawarra Shoalhaven Regional Plan

The Illawarra Shoalhaven Regional Plan (ISRP) was released in 2015 and provides the strategic framework for future growth in the Region over the next 20 years. The subject site is located within the West Lake Illawarra “Regionally Significant Release Area” which will contribute up to 37,600 new lots when fully zoned and developed. This PP and the NP will facilitate the optimum development of the site consistent with detailed land capability analysis. Concept layouts have determined there is potential for approximately 368 residential lots on approximately 20ha of residential-zoned land. The number of industrial lots will be subject to future development applications selecting lot sizes best suited to the intentions of future land owners. The total area of industrial land is approximately 40.86ha of heavy industrial land and 38.55 of light industrial land.

The concept layout is based on sustainable urban design principles that ensure:

- > Flooding and stormwater management are integrated with the natural catchment and improve water quality
- > Natural vegetation and watercourses are retained and enhanced
- > Walkways and cycleways are provided and provide links between housing, employment, open space and commercial space (future)
- > Diversity of housing products are possible
- > New housing is in close proximity to the future town centre, public transport routes and public open space.

Overall, the PP is consistent with the strategic objectives of the ISRP.

## 1.4 Environmental and Infrastructure Considerations

### 1.4.1 Biodiversity and Ecological Constraints

Ecoplanning Pty Ltd (Ecoplanning) was commissioned by BlueScope Steel to undertake an Ecological Constraints Assessment (ECA) for the site (refer Appendix B).

An initial field survey was undertaken on 6 March 2019 by experienced ecologists, with additional inspections conducted on 23 October 2019 and 26 February 2020 for Lot 1 DP 588140, Lot 2 DP 230137 and Lot 1002 DP 1192327.

The condition of the vegetation within the study area was sampled within eight vegetation integrity plots in accordance with the Biodiversity Assessment Method (BAM) (OEH 2017). Using the plot data, a Vegetation Integrity Score (VIS) for several vegetation zones within the study area was calculated and utilised to inform estimates of biodiversity credit requirements. Additionally, fauna habitat features (i.e. hollows, stags decorticating bark, mature/old growth trees, winter flowering eucalypts) and indirect signs of fauna use (i.e. scats, owl pellets, fur, bones, tracks, bark scratches, foliage chew marks and chewed capsules) were recorded.

#### 1.4.1.1 Flora

The developable area within the proposed NP was determined to impact on 124.21 ha of land, of which 22.98 ha comprise native vegetation. An additional 48.51 ha has been identified as potential to be a future stewardship site. Field survey determined that study area contained four native vegetation communities, three of which are listed as threatened ecological communities (TECs).

Woollybutt - White Stringybark - Forest Red Gum grassy woodland (PCT 1326) and Forest Red Gum - Thin-leaved Stringybark grassy woodland (PCT 838) are listed as Illawarra Lowlands Grassy woodland (ILGW), an endangered ecological community (EEC) under the BC Act. Further survey is required to determine if these PCTs also form part of Illawarra and South Coast lowland forest and woodland (ISCLFW) under the EPBC Act. Coastal freshwater lagoons of the Sydney Basin Bioregion and South East Corner Bioregion (PCT 781) is listed as the Freshwater Wetlands on Coastal Floodplains EEC under the BC Act. A total of seven hollow bearing trees (HBTs) were identified within the subject site. The remainder of the study area comprised pasture, woody weeds, farm dams and existing infrastructure.

#### 1.4.1.2 Fauna

No threatened species were recorded during field survey. Forty-two threatened species have previously been recorded within 5 km of the study area and based on the field surveys, 12 threatened fauna species

were identified as having 'moderate' or 'high' likelihood of occurrence. Targeted survey in accordance with the BAM will likely be required for threatened fauna species with a 'moderate' or 'high' likelihood of occurrence within the study area.

#### 1.4.1.3 Ecological Constraints Assessment

Desktop analysis and field survey found that the site predominantly consists of land of low ecological value. High constraint areas comprise vegetation which forms part of an EEC, hollow bearing trees, the Grey-headed Flying-fox camp situated along Dapto Creek, and land identified on the Biodiversity Values Map within the LEP (BVM). 'Moderate' constraint areas comprise native vegetation that is not an EEC, areas identified as Terrestrial Biodiversity and Riparian Lands and Watercourses within the LEP, and vegetated riparian zones (VRZs) that are 3rd order and above. 'Low' constraints comprise 1<sup>st</sup> and 2<sup>nd</sup> order VRZs and farm dams.

The existing biobank site is excluded from this constraints assessment as it is to be managed for biodiversity in perpetuity.

Given the development will exceed the threshold for the clearance of native vegetation, development of the subject site is likely to trigger the Biodiversity offset Scheme under the BC Act. Consequently, a BDAR will need to be prepared to assess impacts to biodiversity associated with the proposed development and offset requirements through retiring purchased or generated biodiversity credits.

##### 1.4.1.3.1 Serious and Irreversible Impacts (SAIL)

The *Guidance to Assist a decision-maker to Determine a Significant and Irreversible Impact (SAII)* (DPIE, 2019) and the Threatened Biodiversity Data Collection were used to identify potential SAIL entities. PCT 838 and PCT 1326 are a potential SAIL entity as ILGW is currently in a rapid rate of decline and has a very small extent. As such, an assessment in accordance with Section 10.2.2 of the BAM must be conducted and included in a BDAR for any future DA in the study area. Impacts to a potential SAIL entity are required to be taken into consideration by the decision maker, and if significant impacts are considered likely, it is the role of the decision maker to refuse to grant development consent. Therefore, it may be necessary for substantial avoidance and minimisation measures to be implemented to reduce impacts to ILGW in the study area. Sufficient avoidance and minimisation measures would reduce the potential for a SAIL to occur to ILGW.

#### 1.4.1.4 Riparian Corridors

Several watercourses are mapped across the site. Sheaffes Creek (4<sup>th</sup> order) and Dapto Creek (5<sup>th</sup> order) both flow through the centre of the site in a south-easterly direction, towards Lake Illawarra. Sheaffes Creek flows into Robins Creek (5<sup>th</sup> order) before merging into Dapto Creek along the southern boundary of the site. An unnamed 3<sup>rd</sup> order watercourse flows along the northern boundary of the study area before merging with Sheaffes Creek. Several additional 1<sup>st</sup> and 2<sup>nd</sup> order watercourses join these major watercourses, all which flow in a south-easterly direction.

The *Guidelines for Riparian Corridors on Waterfront Land* (NRAR, 2018) outlines the requirements for maintaining, establishing or rehabilitating a riparian corridor, or vegetated riparian zone (VRZ), as part of an application for a controlled activity approval (CAA). The area of the VRZ is related to the stream order and is measured from the top of the bank, with 1<sup>st</sup> order watercourses requiring a 10 m VRZ either side, 20 m for 2<sup>nd</sup> order, 30 m for 3<sup>rd</sup> order and 40 m for 4<sup>th</sup> order and above. Several VRZs intersect with the developable areas of the NP, and future development must consider the requirements of the WM Act as per Section 1.3.5.5.

#### 1.4.1.5 Arborist

Moore Trees Arboricultural Services (Moore Trees) was commissioned by Cardno on behalf of BlueScope Steel to undertake an Arboricultural Development Assessment Report (ADAR) for the site (Appendix F).

An initial Visual Tree Assessment (VTA) was undertaken by a qualified Arborist on 26 November 2018 for Lot 1 DP 588139, and an additional inspection was completed on 14 January 2019 as a supplementary measure. A more recent targeted site inspection was undertaken on 4 June 2020 due to the extended time period between the initial inspections and the preparation of this report. The ADAR assessed only the 174 individual and groups of 'prescribed trees' as per the tree management permit policy of Chapter E17 of the DCP and have been included within a Tree Protection Plan (TPP) in the ADAR.

Assessed trees were mostly determined to be in good health. Safe Useful Life Expectancy (SULE) results show that 36% of the trees within Lot 1 DP 588139 have a life expectancy of greater than forty (40) years and 30% had a medium life expectancy and trees that were less significant totalled 33%.



Local Heritage Item 6326 (Group of Bunya Pines, Moreton Bay Figs and Hills Figs) is identified as Tree group 1 – 20 within the TPP. The group is noted as consisting of seven Bunya pines (*Araucaria bidwillii*), four Maiden's wattle (*Acacia maidenii*), one Moreton bay fig (*Ficus macrophylla*), six Cheese trees (*Glochidion ferdinandi*), a Red Ash (*Alphitona excelsa*) and a Stone pine (*Pinus pinea*).

Tree 152 is identified as a large mature specimen of Moreton bay fig (*Ficus macrophylla*) with a SULE of over 40 years and retention or relocation of this specimen is recommended.

Due to the sudden death of Tree 11, and deteriorating state of Tree 6 during the most recent inspection, further scientific testing was recommended. While the local heritage item would normally be required to be retained, if there is a detrimental soil pathogen such as Australian honey fungus (*Armillaria luteobubalina*) or *Phytophthora cinnamomic* it will impact on the long term suitability of these trees. Soil and tissue samples have been taken and sent to the Royal Botanic Gardens Pathology unit to determine the diagnosis and the ADAR will be updated following receipt of the results.

It is recommended that a Project Arborist be appointed to oversee the arboricultural related works for future development within the site.

#### 1.4.2 Bushfire

Peterson Bushfire (2020) was commissioned by Cardno on behalf of BlueScope Steel to undertake a Bushfire Assessment for the site (refer Appendix D).

The vegetation within 140 m of the site was assessed in accordance with the methodology specified by *Planning for Bush Fire Protection 2019 (PBP)* (NSW Rural Fire Service, 2019) and forest hazard and woodland hazard types were identified.

The hazards adjacent the residential zone are situated on an effective slope class of 'downslope 5-10 degrees' to the north and 'downslope 0-5 degrees' to the north-east. Similarly, the forest hazard adjacent the proposed R3 zone in Lot 1 DP 588140 is situated on a slope class of 'downslope 0-5 degrees'. The IN2 zoning is predominantly adjacent a slope class of 'downslope 0-5 degrees' representative of the surrounding riparian corridors.

The proposed NP demonstrates that the residential zones will benefit from multiple access/egress points in alternate directions. The proposed subdivision road layout provides perimeter access between future lots and the associated bushfire hazard. The perimeter access road to the eastern interface of the residential zone on the western side of West Dapto Road is also complemented by the fire management trail that runs the full length of the interface within the adjacent BioBanking site.

The industrial zones also demonstrate adequate access, with all hazard interface areas within the industrial zones featuring an access road acting as defensible space. The defensible space will vary between a public road and a minimum 6 m wide fire access road to be provided within lots. The fire access road will be a requirement for future subdivision and development applications.

The public roads will be designed in accordance with the PBP Acceptable Solutions for the design and construction of roads for residential subdivision as required by PBP, and future development will require fire hydrants to be installed to comply with AS 2419.1 – 2005 Fire Hydrant Installations - System Design, Installation and Commissioning (AS 2419).

A Bushfire Assessment Report will be required during the future subdivision application stage to demonstrate compliance of the detailed subdivision design with PBP.

##### 1.4.2.1 Recommendations

Bushfire protection measures for the proposed rezoning and Neighbourhood Plan recommended within the Bushfire Assessment to achieve the requirements are as follows:

- > Provision of APZs to the residential zones ranging from 16 m to 36 m
- > Provision of defensible space to the light industrial zones consisting of public roads and minimum 6 m wide fire access roads
- > Vegetation management across all developable zones to achieve IPA standard
- > Adequate access for emergency response and evacuation consisting of alternate access to the existing road network for the residential zones
- > Compliant road widths and design for all zones.

Adequate water supply for all developable zones to allow fire-fighting operations by fire authorities.

### 1.4.3 Aboriginal Heritage

Biosis Pty Ltd (Biosis) was commissioned by Cardno on behalf of BlueScope Steel to undertake an Aboriginal Cultural Heritage Assessment (ACHA) and Archaeological Report (AR) for the site (refer Appendix E).

A field investigation consisting of an archaeological survey was conducted for Lot 1 DP 588139 on 5 December 2018 and for Lot 1002 DP 1192327, Lot 1 DP 650528, Lot 1 DP588140, and Lot 2 DP 230137 on 14 February 2019, with a low effectiveness due to poor ground surface visibility.

Seven existing Aboriginal cultural heritage sites were found to be Aboriginal Heritage Information Management System (AHIMS) registered sites within the site, with two new sites identified during field investigations. Of the existing AHIMS sites, 3 were found to have low significance and 2 were found to have moderate significance. The two newly identified sites, Kembla Grange ISO and Kembla Grange Fig Tree, were determined to have low and moderate significance respectively. An attempt was made to locate and verify the existing AHIMS sites across the site, however this proved unsuccessful due to visibility issues.

During the investigation, 11 areas of archaeological sensitivity were also identified.

#### 1.4.3.1 Recommendations

It is recommended that any future development applications for the site comply with the recommendations made within Section 7 of the ACHA and AR (Biosis, 2019); including, but not limited to, the avoidance of areas of high archaeological potential where possible, obtaining a s139 exemption for excavation near the crest landform in the western portion of the site, and the incorporation of unexpected find protocols into any future Construction Environmental Management Plan (CEMP).

### 1.4.4 European Heritage

Biosis Pty Ltd (Biosis) was commissioned by Cardno on behalf of BlueScope Steel to undertake an historical heritage assessment and Statement of Heritage Impact (SoHI) for the site (refer Appendix H).

A physical inspection of the site was conducted on 3 September 2019.

The historical heritage assessment identified a number of historical sites across the site, however the following were identified as the primary significant heritage value items:

- > Two heritage items, including Group of Bunya Pines, Moreton Bay Figs and Hills Figs (Item no. 6326) and Moreton Bay Fig (Item no. 6329)
- > Five areas of archaeological potential related to Clarke's huts and stockyard, McGhee's hut, the Travellers Inn on the West Dapto Road, Barrett's house including an outbuilding and circular driveway, and a cottage and outbuilding in close proximity to the locally listed Moreton Bay Fig.

#### Bunya Pines, Moreton Bay Figs and Hills Figs and Moreton Bay Fig

Local Heritage Item No. 6326 is located within Lot 1 DP 588139 and consists of a number of Bunya Pines, Moreton Bay Figs and Hills Figs. The item is considered locally significant due to its historical and aesthetic value. The trees are likely to be associated with a historical homestead and were likely planted to form a wind break and/or for aesthetic purposes. Plantings such as these were common within homesteads in the West Dapto area and the item is considered to be representative of ornamental plantings accompanying 19th and early 20th century homesteads.

Local Heritage Item No. 6329 is located within Lot 1 DP 588140 and consists of two Moreton Bay Figs. The trees are considered significant for their landmark, landscape, natural and aesthetic value and have the same importance in West Dapto as described above.

#### Houses and Cottages

The archaeological resources identified across the site will either not be impacted by future development due to their location outside the developable area, or will have remnants wholly disturbed by future earthworks and construction.

#### Dapto Radio Telescope

The site contains the concrete pad remnants of the rhombic aerial radio telescopes established by Paul Wild, a Commonwealth Scientific and Industrial Research Organisation (CSIRO) scientist. The telescopes were on site for approximately 13 years before being removed to another site after March 1965.

#### 1.4.4.1 Recommendations

The Neighbourhood Plan has been designed to create potential to conserve Item no. 6326 in a 'pocket park' within the residential precinct, creating a unique open space for the community and for the broader West Dapto area. The pocket park is subject to pending testing results undertaken by an engaged Arborist and future safety assessment due to the presence of Bunya pinecones. Item no. 6329 occurs within E3 zoned land, and is not proposed for any future development.

It is recommended that any future development applications for the site comply with the recommendations made within Section 7.2 of the SoHI (Biosis, 2019); including, but not limited to:

- > Additional archaeological investigation for areas of high potential (s140 approval),
- > Obtaining a s139 exemption for excavation near the location of Clarke's hut in Lot 1 DP 588139
- > The inclusion of heritage interpretation records to archive the historical relevance of the site and heritage values.

Council's Heritage Advisor requested mitigation measures be considered to address the future change in the landscape and scenic outlook from St John's Catholic Cemetery (Local Heritage Item 5974). The change could be anticipated from the construction of industrial development on land on the opposite side of West Dapto Road to the cemetery. Site-specific DCP provisions are recommended for a landscaped strip within the setback to West Dapto Road for any future industrial development of the site. The landscape strip is intended to screen new industrial development from the general line of sight of the cemetery.

#### 1.4.5 Flooding and Drainage

To support the development of a Neighbourhood Plan and future residential and industrial development applications, a Water Cycle Management Study (WCMS) was undertaken for the site (Cardno, 2020) (refer Appendix A). The WCMS has revised pre-development flood modelling based on a locally refined model for Lot 1 DP 588139, Lot 2 DP 230137, Lot 1 DP 588140 and Lot 1002 DP 1192327.

The WCMS was prepared to develop a post-development site layout that balanced the objectives of maximising developable land for the establishment of residential areas and industrial areas, while managing flood risk both within and beyond the site boundary.

The following post-development scenario resulted from the WCMS (refer Table 1-4), and with Area IDs located on the NP Master Plan (refer Figure 2-1).

Table 1-4 Key land-forming features for the post-development scenario

Area ID	Proposed Land Use Type	Description of Key Features
A	Residential	Create a fill pad to elevate the south western corner of the site by approximately 1.2 m on average
B	Industrial	<ul style="list-style-type: none"> <li>&gt; Fill the existing man-made dam on the eastern half of Area B (approximately 1.5 m depths to be filled)</li> <li>&gt; Create a fill pad, approximately 1.4 m above existing ground level on average</li> <li>&gt; Note that the western part of Area B is largely above the 1% AEP level, however some fill is required in the southwestern portion (to a level 1.2 m - 1.9 m above existing ground level)</li> <li>&gt; An open channel is proposed along the northern boundary of Area B, approximately 30 m wide, and with depth ranging from 1 m below ground at the western (upstream) end, to 2 m at the eastern (downstream) end</li> <li>&gt; Between area B and C, east of Dapto Creek, it is proposed to excavate an area of 0.9 ha to a depth of approximately 1.4 m, to create approximately 14,700 m<sup>3</sup> of flood storage. This additional floodplain storage is designed to offset the filling of the man-made</li> </ul>

		dam in Area B, as well as the fill pad required for Area C (described below);
C	Industrial	<ul style="list-style-type: none"> <li>&gt; The existing flow path through Area C will be formalised into a 30 m wide swale, grading from 1 m deep at the north to 2.5 m deep at the south</li> <li>&gt; Two fill pads are proposed to elevate Area C: <ul style="list-style-type: none"> <li>o The western pad is to be filled by up to 1.2 m on average</li> <li>o The eastern pad is to be filled by up to 0.5 m.</li> </ul> </li> </ul>
D	Industrial	<ul style="list-style-type: none"> <li>&gt; No land forming is proposed. Area D is outside the floodplain (except for an incised channel at the south eastern corner. This is not proposed to be modified.</li> </ul>
E	Residential	<ul style="list-style-type: none"> <li>&gt; Two fill pads are proposed to raise ground levels by 0.5 m.</li> </ul>
F	Industrial	<ul style="list-style-type: none"> <li>&gt; Two 30 m swales are proposed to run along the northern and southwestern/southern boundaries of Area F</li> <li>&gt; The northern swale ranges from 1.9 m to 2.4 m below existing ground level</li> <li>&gt; The southern swale ranges from 1.5 m to 2.0 m below existing ground level</li> <li>&gt; Area F is proposed to be raised by up to 1 m on average above existing ground levels</li> <li>&gt; A basin is proposed at the eastern end of the site to both offset the fill over Area F and provide storage for flows entering from the two swales prior to discharging from the site. The basin will involve excavation to depths ranging from 0.7 m - 2 m to create a volume of approximately 107,365 m<sup>3</sup>.</li> </ul>

A floodplain storage assessment shows that floodplain storage will not be decreased as a result of the proposed NP, and a comparison between pre-development and post-development floodplain storage volumes confirms that additional floodplain storage will be provided within the site.

On-site detention (OSD) will be incorporated into future development. Preliminary sizing of basins and a tank has been undertaken to ensure that there is adequate provision for basins within the proposed NP layout. It was noted that the trends in site storage requirement (SSR) and permissible site discharge (PSD) with increasing catchment size suggest that the preliminary sizing is conservative and that refinement of the OSD assessment during future DA stages may reduce the required size of a number of the basins.

Modelling for Water Sensitive Urban Design (WSUD) treatment options would be prepared during future DA stages of the project and will consider primary, secondary, and tertiary treatment. The following WSUD measures are being considered across the site (refer Table 1-5).

Table 1-5 Proposed WSUD measures

Treatment Measure	Primary and Secondary Purposes	Comment
Demand Management		Promote the use of water efficient showerheads and dishwashers and tap aerators. Provide native landscaping with a lower water demand than traditional urban planting regimes. These mechanisms will contribute to achieving BASIX targets.
Rainwater Tanks (RWT)	Reduction in potable water use through capture and re-use of	Typically included as one of a number of measures to ensure that new development meets or exceeds the BASIX requirements for reduction in potable water

	roof runoff and associated pollutants	usage. Rainwater tanks can also form part of the treatment train in reducing runoff and pollutant exports due to the capture and re-use of roof runoff. It is noted that the quality of roof runoff is higher than the quality of surface runoff so additional measures are required to treat surface runoff.
Grass Lined Swales	Conveyance and capture of sediment and particulate-bound pollutants	Vegetated swales convey stormwater whilst also capturing of coarse and medium sediments. Swales are a secondary treatment and are often used as a pre-treatment for bio-retention systems.
Gross Pollutant Traps (GPTs)	Capture of coarse sediments and litter	Decrease loadings of coarse sediment and improve the amenity of downstream measures and/or the receiving environment.
Detention Basins	Control of runoff which can also lead to the removal of finer sediments	The primary purpose is to limit the adverse impacts of development on peak runoff and can be combined with other treatment measures to deliver dual benefits e.g. with a wetland or a bio filter located in the base of the basin.
Bio-retention Basin/ Wetlands	Sedimentation and removal of stormwater pollutants	End of line component of the WSUD treatment train to reduce TSS, TN & TP loads.  Some of the proposed tertiary treatment systems will be constructed within the proposed OSD basins to achieve both water quantity and quality management outcomes.

## 1.4.6 Topography and Geotechnical

### 1.4.6.1 Geology and Topography

The Wollongong-Port Hacking 1:100,000 Geological Sheet SI 56-9 (Geological Survey of NSW Second Edition, 1966) indicates that the site is situated on Budgong Sandstone, characterised by red, brown and grey lithic sandstone.

The western portion of the site (84 Sheaffes Road) broadly slopes towards West Dapto Road to the east. Surface waters generally flow from the north to the south and south east.

Soil may have historically been imported to site as a surface material for the racehorse training track in Lot 1 DP 588139. However, the historic aerial photographs do not indicate that widespread filling occurred at the site.

### 1.4.6.2 Acid Sulfate Soils

Acid sulfate soil (ASS) mapping indicates that the broader site contains Class 3, 4 and 5 soils, focused towards the east within 261 West Dapto Road with the majority of 84 Sheaffes Road free of ASS.

Any future proposed ground disturbance at the site should consider the risks of encountering ASS, even outside of the mapped area, and an Acid Sulfate Soils Management Plan will be required to mitigate environmental risks associated with ASS in areas mapped as Class 3, 4 and 5.

## 1.4.7 Contamination

To support the development of a Neighbourhood Plan and future residential and industrial development applications, two Preliminary Site Investigations (PSIs) were undertaken for the site. Cardno undertook a PSI of Lot 1 DP 588139 on 12 November 2018 and an additional PSI for Lot 1002 DP 1192327, Lot 1 DP 588140 and Lot 2 DP 230137 on 27 June and 28 August 2019 (refer Appendix G).

Based on information gathered during desktop searches and observations made during the site inspections, the following Potential Areas of Environmental Concern (PAECs) were identified within the site:

- > Earthworks and Filling Areas
- > Stockpiles and general tipping



- > Equipment, Waste and Chemical Storage
- > Historical and current building footprints
- > Offsite Sources of Contamination.

It is noted that a Detailed Site Investigation (DSI) and Remedial Action Plan (RAP) are currently being prepared for Lot 1 DP 588139 to inform a future residential subdivision DA.

#### 1.4.7.1 Recommendations

It is recommended that any future development applications for the site comply with the recommendations within the PSI reports (Cardno, 2019) (refer Appendix G), with specific measures detailed for each side of West Dapto Road as determined by DSIs and RAPs (if necessary).

Overall recommendations include, but are not limited to, the preparation of a RAP if remediation is required, the preparation of an Asbestos Management Plan (AMP) to ensure asbestos is appropriately managed, and the incorporation of an unexpected finds protocol into any future Construction Environment Management Plan (CEMP).

#### 1.4.8 Road Network and Pedestrian Access

To support the development of a Neighbourhood Plan and future residential and industrial development applications, a Traffic Impact Assessment (TIA) was undertaken for the site (Cardno, 2020) (refer Appendix C). The TIA assessed potential road network impacts of the NP for Lot 1 DP 588139, Lot 2 DP 230137, Lot 1 DP 588140 and Lot 1002 DP 1192327.

Key roads in the vicinity of the site include West Dapto Road, Darkes Road, Sheaffes Road, and Paynes Road. Generally, Kembla Grange currently has a very limited public transport network while neighbouring areas have a more established network in line with the increased residential density. The nearest bus stops to the subject site is located on Princes Highway opposite Kembla Grange Station and Princes Edward Drive before Kanahooka Road.

The proposed internal road work will be split between the residential zoned land and industrial zone land within the NP. Residential streets will predominantly be local road access streets with parking permitted. The residential street types consist of the cross sections as per DCP Chapter B2, and industrial zoned land street profiles will consist of the cross sections as per DCP Chapter B5.

To facilitate the future development and connection to the broader road network, a number of intersections are proposed as part of the NP, including three main intersections along Northcliffe Drive Extension (NDE), consisting of two roundabouts and one signalised intersection, as well as a minor left in/left out intersection. Two roundabouts are proposed on West Dapto Road to provide access to the industrial parcels. The West Dapto Road intersection is likely to be a roundabout which is generally consistent with the West Dapto Contributions Plan. However, it is noted that the current road geometry to the north west has an acute horizontal alignment which may impact sight lines and the gap acceptance for heavy vehicles. Further detailed analysis is to be prepared at the development application stage and will determine if further intersection treatments, or possible signalisation, is required to address any prevailing road safety concerns.

The NP is forecast to generate 695 peak hour vehicles. The total traffic generated during the AM and PM peak hour is summarised in Table 1-6 below.

Table 1-6 Total Traffic Generation

Land Use	AM	PM
Residential	419	305
Industrial	275	224
<b>Total</b>	<b>694</b>	<b>529</b>

The SIDRA results indicate that all of the intersections assessed are forecast to operate at a satisfactory level of service of LoS 'B' or better, with minimal delays and queueing in both of the AM and PM peak periods. This indicates that these intersections have considerable spare capacity in each of the AM and PM peak periods. Traffic modelling results show that the morning and evening peak hour traffic volumes results in LoS 'B' or better at midblock locations along the Northcliffe Drive extension and West Dapto Road. This

result demonstrates that traffic conditions will be, in most cases, free flow with minimal friction along the two corridors allowing speed choice similar to the expect posted limit.

Under the ultimate NP, the bus corridor is most likely going to favour the NDE with additional routes as a potential consideration (subject to the road cross section supporting bus movements through the residential precinct as proposed). Improvements to the active transport network will be facilitated via shared paths along the NDE and West Dapto Road.

#### 1.4.9 Utility Servicing Strategy

##### 1.4.9.1 Existing Water

- > A 750 mm Ductile Iron Cement Lined (DICL) **potable water** main exits the pump station on West Dapto Road approximately 200 m east of Reddalls Road and travels west along the southern side of West Dapto Road (adjacent to Lot 1002 DP 1192327), and then south along the eastern side of West Dapto Road (adjacent to Lot 1 DP 588140). This 750 mm DICL main reduces to 600 mm DICL at the intersection of West Dapto Road and Darkes Road and follows the eastern side of Darkes Road.
- > Local **potable water** mains (300 mm oPVC, 200 mm CICL and 150 mm CICL) are situated within the northern reserve of West Dapto Road to the west of the Reddalls Road intersection. A 150 mm uPVC connected to the aforementioned local mains heads north along Reddalls Road to service commercial/industrial lots.
- > A 200mm oPVC **potable water** main runs within the northern reserve of West Dapto Road entering the proposed development area from the south. The 200mm oPVC main tapers to a 300mm oPVC at the intersection of Sheaffes Road and West Dapto Road and a tee splits flows going north along West Dapto Road and west along Sheaffes Road. The 300mm oPVC heading north from the tee along West Dapto Road only continues a few meters north before terminating with a stop valve. The 300mm oPVC main that services Sheaffes Road runs within the southern reserve of Sheaffes Road and crosses at Paynes Road to service the new subdivision on the western side of Paynes Road.
- > A 1200 mm Steel Cement Lined Internal Bitumen Lined (SCL IBL) **raw water** main follows the southern side of Sheaffes Road within Lot 47 DP 751278 and Lot 1 DP 195705. This main then becomes privatised and is a Wyuna Water asset, transitioning to a 1124mm Steel Cement Lined (SCL) main as it crosses over to the eastern side of West Dapto Road (within Lot 1 DP 588140) and follows the south-eastern side of West Dapto Road heading north.
- > A 750 mm SCL IBL **raw water** main is located on the northern side of Sheaffes Road (within Lot 1 DP 588139) and feeds the potable water pump station on Lot 1 DP 227382. This main then crosses West Dapto Road and travels along the eastern road reserve (adjacent to Lot 1 DP 588140), prior to crossing West Dapto Road again to the north of West Dapto Road adjacent to Lot 2 DP 230137. The 750 mm main then runs on the northern side of West Dapto Road toward Reddalls Road.
- > A tee is located on the above 750 mm SCL IBL raw water main at the northern corner of Sheaffes and West Dapto Roads incorporating a 450mm SCL IBL **raw water** main. This heads south crossing Sheaffes Road into a Sydney Water Potable Water chamber structure located in the southern corner of Sheaffes and West Dapto Roads (Lot 1 DP 227382) before exiting as a 450 mm SCL IBL **potable water** main. This main immediately heads south and crosses West Dapto Road into Lot 1 DP 588140 running alongside the aforementioned 750 mm DICL potable water main, before heading down Darkes Road alongside the 600 mm DICL potable water main.
- > Sydney Water have released the WDURA services proposed scheme report which indicates 45 kilometres of new and upgraded drinking water pipelines in West Dapto including Kembla Grange and Sheaffes/Wongawilli areas. Sydney Water has reviewed the proposed development concept and provided preliminary comments stating the proposed development will be ultimately serviced by the existing reservoir at Berkeley/Avondale via a new 375 mm main, however no construction timing is confirmed.
- > On 12 September 2019, Sydney Water released their Growth Servicing Plan which includes the focus area of this site investigation in Kembla Grange. Sydney Water state that drinking water in the vicinity bounded by West Dapto, Sheaffes and Paynes Roads have adequate existing trunk capacity.
- > It is recommended a Sydney Water Feasibility Application is lodged as soon as possible.

#### 1.4.9.2 Water Usage and Proposed Supply Requirements

In the Cardno report titled "Review of Draft West Dapto Masterplan and Supporting Documents November 2006 (107014-01 Report 001)" it is indicated potable water to BSL employment lands is to be provided from the existing Wongawilli Reservoir, as the existing mains infrastructure has sufficient capacity for this service.

The Civil Engineering & Infrastructure Report (Mott MacDonald, 2011) supports the claims that the existing mains are sufficient to service the employment lands, on the assumption of 630 L/Metric Unit/Day or 1,660 kL water usage. The report further outlines no modifications/relocation of existing mains are required, however any further road works will need to concrete encase the mains as a protective measure.

As an interim measure to service the proposed development, Sydney Water suggests a 150 m long 375 mm connection, to the existing 450 mm main located at the intersection with West Dapto Road and Sheaffes Road.

In WCC assessment of the Sheaffes Road North neighbourhood plan, Council advises Sydney Water has developed a Growth Servicing Plan to provide services as development occurs.

#### 1.4.9.3 Existing Sewer

- > A 225 mm PVC sewer line services the new subdivision on the western side of Paynes Road. The sewer reduces up to 300 mm PVC and runs south along the western side of Paynes Road, crosses Sheaffes Road and heads further south east crossing Lot 47 DP 751278, Lot 1 DP 657171 and Lot 1 DP 195705. The sewer crosses both West Dapto Road and Darkes Road and continues east, 100 m south of the southern boundary of Lot 1 DP 588140.
- > A 375 mm DICL sewer rising main is located within the West Dapto Road reserve, passing the Sheaffes Road intersection and joins the Princes Highway near the Kembla Grange railway station. The main extends from Sewer Pump Station (SPS) 1007 located on West Dapto Road (1500 m south of Sheaffes Road). At the Sheaffes Road intersection the main switches to the western side of West Dapto Road (adjacent to Lot 1 DP 588139) until the northern end of the cemetery, where it crosses back to the eastern side of West Dapto Road (adjacent to Lot 1 DP 588140) and continues along the southern side of West Dapto Road (adjacent to Lot 1002 DP 1192327) to the Princes Highway.
- > Additional sewer services are provided to the commercial/industrial lots on Reddalls Road via a 63 mm PE main within the road reserve.
- > On 12 September 2019, Sydney Water released their Growth Servicing Plan which includes the focus area of this site investigation in Kembla Grange. Sydney Water state that additional wastewater distribution in the vicinity bounded by West Dapto, Sheaffes and Paynes Roads are under concept design. The timing of this delivery is subject to development demand.
- > It is recommended a Sydney Water Feasibility Application is lodged as soon as possible.

#### 1.4.9.4 Sewer Usage and Proposed Supply

The existing rising main and pump station (SPS 1007) is unlikely to have any surplus capacity to provide a suitable sewerage service for the Kembla Grange Employment Lands.

Sydney Water has recently released a plan for the sewerage servicing of West Dapto. The preferred option is to use a conventional gravity and pump system (upgrade to SPS 1007) to discharge sewage to the Wollongong Treatment Plant. Under this scheme, recycling facilities remain centralised at the treatment plant. The Sydney Water servicing strategy proposes a future expansion of their sewer pipeline network to include construction of a sewer line along Darkes Road, however given that there has been no formal time frame provided as yet for the augmentation to the existing system, it is expected that a large sewer collection pit will be required onsite with a contractor engaged to empty the pit as required. Once the upgrade to the pipeline system has been undertaken then it is expected there would be capacity to discharge into the system. This would require the construction of a sewer main.

The *Civil Engineering & Infrastructure Report* (Mott MacDonald 2011) supports the claims that the existing infrastructure requires increased capacity to service the areas, based on their review of the Sydney Water WDURA strategy plan. This report identifies the development area being serviced either by a new carrier main (4.5 km long) constructed as per the Sheaffes/Wongawilli area, or a Kembla Grange carrier. Flows are expected to be carried into the Dapto carrier main via gravity and be treated at Port Kembla STS.

The total sewer discharge estimate is 1,800 kL/day, from the BSL site including the residential development based on 368 lots. The estimate is based on the Sydney Water WSA 02 Sewerage Code which nominates future industrial areas as 150 EP per gross hectare (Equivalent Population) and a minimum 225 mm



diameter sewer pipe to be used. The capacity of a 225 mm diameter pipe is 1600 EP (approximately 10 hectares). The developable industrial area utilised in the discharge estimate is 80 ha. Further to the Sewerage Code, for single occupancy lots, an Equivalent Population of 3.5 EP per lot has been used assuming the residential lots are 300 square metres minimum in size.

In a letter dated 14 January 2020, Sydney Water has emphasized that planning of the delivery of wastewater services is being based on demonstrated growth demands. Sydney Water states that there is currently insufficient demand to deliver the Kembla Grange infrastructure however they are in a proactive position to initiate design and delivery of wastewater services once demand increases.

#### 1.4.9.5 Existing Electricity Supply

The existing electrical supply network in the vicinity of the BSL employment lands consists of a combination of Overhead (OH) and Underground (UG) feeders, both within the road network and private land. Services located in the vicinity of the site include:

- > 132 kV OH line within a 30-metre-wide easement located in the northern end of Lot 2 DP 560973 travelling east west
- > 33 kV OH line within a 50-metre-wide easement travelling north east and south west diagonally through the sites Lot 1 DP 588140 and Lot 1002 DP 1192327.
- > 33 kV OH/UG service from the Springhill Transmission Substation to Wongawilli Mine. This service is trenched along the Princes Highway, follows West Dapto Road on the southern side up till Reddalls Rd, where this service transitions to OH lines on the southern side of West Dapto Road (adjacent to Lot 1002 DP 1192327). This service then crosses to the western side of West Dapto Road (adjacent to Lot 1 DP 588139) up to the intersection with Darkes Road, where it crosses back to the eastern side, and services the mine.
- > 33 kV OH line within the Princes Highway road reserve (eastern side)
- > 11 kV OH line within the Princes Highway road reserve (western side)
- > 11 kV OH line along Sheaffes Road and Paynes Road (not on plans)
- > 11 kV OH line along West Dapto Road (not on plans)
- > 415 V OH lines on Sheaffes Road and West Dapto Road to provide local connections
- > Kembla Grange Substation located on Reddalls Rd, approximately 250 m from West Dapto Road.

#### 1.4.9.6 Power Usage and Proposed Supply

Previous discussions with Endeavour Energy have indicated that the limited surplus capacity at the zone substation in Reddalls Road is reserved for industrial development at Kembla Grange. Given the proposed scale of the industrial development, the BSL development would not be able to solely rely on the existing lines due to the increase in demand this would generate. BSL land will require a combination of zone substations, 11kV feeders, pad-mount stations, and LV reticulation. Previous discussions with Integral Energy (now Endeavour Energy) indicated Endeavour Energy will fund necessary upgrading works to provide sufficient capacity to meet the proposed usage.

The *Civil Engineering & Infrastructure Report* (Mott MacDonald 2011) states that a preliminary review by Endeavour Energy confirms sufficient capacity of the existing 11 kV OH (Sheaffes Road) infrastructure for 80 residential lots in Lot 1 DP 588139. Additionally, confirmation is provided for the 11 kV OH (West Dapto Rd) supplied from Kembla Grange substation to deliver 1 MVA of load for industrial zoned (heavy and light) land adjacent to West Dapto Rd (Lot 1 DP588141 and/or Lot 2 DP230137). No further capacity in excess of 80 residential lots and 1 MVA is available from the existing infrastructure. It is proposed that to facilitate services, the following is required:

- > To the development east of Dapto Creek within the land zoned heavy industrial and light industrial, new 11 kV feeders are required to be established from the development to Endeavour Energy's Kembla Grange Zone Substation; and
- > To the development west of Dapto Creek within the land zoned low density residential and light industrial, new 11 kV feeders are required to be established from the development to the site of Endeavour Energy's proposed West Dapto Zone Substation at Lot 1 DP 818199 which is located in West Dapto Road, approximately 230 m south west of Darkes Road. If at the time the 11 kV feeders are being established and the new West Dapto Zone Substation is operational, the 11 kV feeders are to be

connected directly to the zone substation to make capacity available to the development. Conversely, if at the time the 11 kV feeders are being established and the new West Dapto Zone Substation is not operational, the 11 kV feeders are to be connected to either the 11 kV network adjacent the site of the zone substation or an 11 kV switching station installed by Endeavour Energy within the zone substation site to make capacity available for the development. The connection will be determined at the time of application to Endeavour Energy for the provision of supply for the development.

The above is based on preliminary calculations by Cardno which estimate a total demand of 22.71 MVA is required for the BSL industrial development and includes provision for the residential development based on 368 lots.

In Council's assessment of the Sheaffes Road North neighbourhood plan, Council advises that Endeavour Energy has secured a location for a new substation along West Dapto Road, confirming a connection point for new developments. With recent closures of high usage businesses along West Dapto Road, we expect that additional capacity is now available within the existing zone substation that may be allocated to the future industrial development proposed. Confirmation from Endeavour Energy regarding current network capacity will need to be sought during the detailed design phase.

#### 1.4.9.7 Existing Gas Supply

The existing gas infrastructure near the BSL owned Kembla Grange lands comprises of:

- > Eastern Gas Pipeline (EGP) is a high-pressure main servicing Wollongong and the northern suburbs. The main is positioned within 20 m wide easement located on the eastern portions of Lot 1 DP 588140, Lot 1001 DP1192327 and Lot 1002 DP1192327 and follows the railway corridor north.
- > A 160mm PE 210 kPa distribution mains runs underneath the south eastern side of West Dapto Road up past Darkes Road and then east adjacent to Lot 1002 DP1192327. The main tees off just south of the intersection of West Dapto Road and Sheaffes Road in a 110mm PE 210 kPa transmission line. The line crosses both West Dapto Road and Sheaffes Road and heads west along the northern reserve of Sheaffes Road to service the new development on the western side of Paynes Road.
- > A secondary main exists on the eastern side of the Princes Highway.

#### 1.4.9.8 Gas Usage and Proposed Supply

Jemena has advised gas supply to the proposed BSL development will provide the service at no cost to the developer. A connection to the existing 150 mm main in the Princes Hwy will be required, resulting in crossing the railway corridor. Jemena advised approval from railway crossings takes approximately 2 years.

#### 1.4.9.9 Existing Telecommunications Supply

- > On the western side of Darkes Road where the road intersects with West Dapto Road is a size 8 pit with 4 100mm PVC conduits feeding it.
- > Three 100mm PVC Conduits leave the above pit following the western side of Darkes Road before crossing to the eastern side where Lot 1 DP 588140 and Lot 1 DP 858690 bound each other.
- > A single 100mm PVC conduit exits the above size 8 pit and crosses Darkes road before heading north crossing West Dapto Road and following the northern side of West Dapto Road until where Sheaffes Road intersects West Dapto Road. The conduit then continues along the southern side of Sheaffes Road crossing at the western side of Paynes Road to service the new subdivision.

#### 1.4.9.10 Telecommunications Usage and Proposed Supply

Future servicing for Broadband, cable TV and optical fibre cabling will need to be coordinated with individual service providers.

### 1.4.10 Community and Recreation Facilities

#### 1.4.10.1 Local Park

The Neighbourhood Plan has been designed to create potential to conserve Item no. 6326 in a 'pocket park' within the residential precinct, creating a unique open space for the community and for the broader West Dapto area. The pocket park is subject to pending testing results undertaken by an engaged Arborist and future safety assessment due to the presence of Bunya pinecones. Item no. 6329 occurs within E3 zoned land, and is not proposed for any future development.

#### 1.4.10.2 Natural Area

Lot 1 DP 588139 contains a substantial Biobank site between the residential and industrial precincts offers high quality integrated natural vistas and acts as an additional open space for residents and visitors to enjoy the native vegetation of the West Dapto area. Gated management trails throughout the Biobank will allow public access (excluding dogs, both on or off-leash) and be connected to the paths and shared paths across the site to open the natural area to local residents and visitors.

#### 1.4.11 Light, Noise and Air Quality Impacts

##### 1.4.11.1 Light

Due to the proximity of the industrial precincts to extensive native vegetation communities, sensitivities regarding lighting in and around IN2 and IN3 zoned land must be considered during development applications as part of detailed design to minimise potential impacts to surrounding fauna. Additionally, due to the natural topography of the site, impacts to the closest residential properties and motorists travelling on adjacent roads must be considered.

Lighting design, including street lighting and lighting associated with the development of industrial lots, must be designed and constructed as per the appropriate standards to ensure light spill is kept to a minimum.

##### 1.4.11.2 Noise

Future development applications for the industrial precincts and roads within the site must be accompanied by Noise Impact Assessments to ensure the impacts of road infrastructure of light to heavy industry are appropriately considered due to the proximity of surrounding sensitive receivers.

Noise guidelines that should be considered during the development application stage include, but is not limited to, the NSW Environmental Protection Agency's (EPA) Noise Policy for Industry (2017) and the roads and Maritime Services Noise Criteria Guideline (2015).

It is anticipated that the vegetated buffers formed as a result of environmental management and conservation zoning and retained vegetation will assist in reducing conflicts with existing and future surrounding urban areas.

##### 1.4.11.3 Air

The project area is surrounded by a range of industrial and rural residential, with increasing development of general residential and commercial precincts within the broader West Dapto. Emissions from industrial premises are primarily concerning dust and odour, with nearby industrial operations operating with Environmental Protection Licences (EPLs) under the *Protection of the Environment Operations Act 1997* (POEO Act). Vehicles also influence the ambient air quality of the study area. Vehicle generated emissions generally include oxides of nitrogen, oxides of sulphur, carbon monoxide and particulate matter.

As development activity both locally and within the wider West Dapto Area, the cumulative impacts of industrial development should be considered in future development applications.

## 1.5 Consultation

### 1.5.1 Consultation with Council

A prelodgement meeting was held with Wollongong City Council on 2 June 2020 with key members of the project team and Wollongong Council.

Table 1-7 provides an overview of the key items discussed during the meetings and how the Planning Proposal responds.

Table 1-7 Pre-Lodgement Meeting Comments

Item Discussed	How the PP Has Addressed the Item
<b>Land Zoning Compatibility with Flooding Constraints</b>	
The proposed increases to IN2 and IN3 zoned land are said to be the result of capability assessment. The supporting information to be submitted with the planning proposal shall	A Water Cycle Management Study (Cardno, 2020) has been prepared to inform the NP and PP (refer Appendix A) which demonstrates the additional land

<p>clearly outline the basis for the proposed increases. Council staff will consider the proposal on merit.</p>	<p>that is capable of supporting industrial development and appropriate mitigation and management strategies.</p>
<p>During the pre-lodgement meeting Council staff also informed the proponent that the proposal shall also outline how constraints and capability analysis has been considered elsewhere on the site including all IN3 land where there may be considerable flooding constraint. In addition, consideration of E3 to E2 land may be warranted in the area of land between the proponent proposed R3 site on corner of Darkes Road and the Cemetery site north on West Dapto Road.</p>	<p>An Ecological Constraints Assessment (ECA) has been prepared for the site (Ecoplanning, 2020) that assesses the presence of listed species under the <i>Biodiversity Conservation Act 2016 (BC Act)</i> and the <i>Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)</i> (refer Appendix B).</p> <p>The rezoning of a portion of land in Lot 1 DP 588140 that is mapped as Terrestrial Biodiversity under the LEP is proposed in this location. This would rezone the area from E3 to E2 to offer additional protection, and has also been identified as a potential future stewardship site.</p>
<p><b>Correction to Zone SP2 (Lot 2 DP 2320137)</b></p>	
<p>Council staff initial response to this part of the proposal is concern with the potential opportunity that would be lost by rezoning of the SP2 land to IN3. Supporting information should provide clear justification for this proposed land use change. Supporting information should outline the outcome of adjoining landowner consultation.</p>	<p>The accompanying NP has accommodated the potential for a new internal rail loop on Lot 1002 DP 1192327 which would service operators on the IN3 zoned land within this lot if so desired.</p> <p>The existing rail corridor within Lot 1002 DP 1192327 and to the north of West Dapto Road on Lot 2 DP 2320137 is no longer in operation as public infrastructure. As such, removing the SP2 zoning associated with this corridor would not impact on future opportunity of the site to accommodate rail.</p>
<p><b>Increased Residential Density</b></p>	
<p>Supporting information with the planning proposal shall clearly outline what is attempting to be achieved by introduction of the R3 Medium Density Residential zone, MLS and FSR changes. This should include demonstration that those desired outcomes cannot be achieved in the existing R2 zone supported by DCP (Neighbourhood Planning) controls. Council staff indicated at the 2 June pre-lodgement meeting that some of the areas where R3 zoning is proposed were unlikely to be supported while others would be considered further through merit assessment.</p>	<p>Land proposed for Zone R3 in the south west corner of Lot 1 DP 588140 has been excluded from the PP. The land is identified to have high ecological value in accordance with the ECA (Appendix B) and works to make the land flood free could potentially have impacts on the movement of stormwater and floodwater on adjoining land to the south. Whilst this area is shown in the original lodgement documents – these supporting documents will be reviewed imminently and new versions issued to Council as soon as lodgement has been confirmed.</p> <p>Land in Zone R3 has been included in the north west portion of the site. The reasons supporting this proposed change are detailed in Section 2 Explanation.</p>
<p>Around the proposed pocket park (in the north-west): Council staff unlikely to support as inconsistent with housing principles in the West Dapto Vision document, 2018 and Chapter D16 of Wollongong DCP, 2009, Principle 5 Housing transition to the Illawarra Escarpment. The proposed residential areas would also be separated from the pocket park by the future Northcliffe Drive extension (Northern Access Road).</p>	<p>Refer to Section 2.2.1 for justification of proposed rezoning.</p>
<p>Along Sheaffes Road (to the south): staff would consider further through merit assessment.</p>	
<p>Along the northern access road through the site: Council staff unlikely to support particularly as the areas proposed span north toward the escarpment transition area.</p>	

<p>Fronting BioBanking site (to the east). Council staff unlikely to support as incompatible with the conservation interface. In additional APZ requirements are likely to be problematic.</p>	
<p>Within the temporary OSD location (to the south east). Council staff would consider further through merit assessment. However, the Planning Proposal should be supported with clear water management solution information (refer to detailed comments below).</p>	
<p>Introduce a parcel of R3 land in the south-west of Lot 1 DP588140 along Darkes Road. Council staff unlikely to support. The pocket of isolated residential is inconsistent with the surrounding E3, E2 buffer context between Darkes Road and the IN zonings to the north east. The current setting of Darkes Road provides a clear boundary between the existing residential land uses and the industrial land uses. In addition staff consider that the biodiversity values within and immediately adjacent the proposed R3 area would not be compatible.</p>	<p>Land proposed for Zone R3 in the south west corner of the site on the eastern side of Darkes Road has been excluded from the PP. The land is identified to have high ecological value in accordance with the ECA (Appendix B) and works to make the land flood free could potentially have impacts on the movement of stormwater and floodwater on adjoining land to the south.</p>
<p><b>Rezoning of IN2 to E3</b></p>	
<p>Council staff would support the rezoning of the approximately 80 m<sup>2</sup> at the north east corner of Lot 1 DP 588139 in principal subject to merit assessment.</p>	<p>Noted. Refer to Section 2.2.1 for justification of proposed rezoning.</p>
<p><b>Minimum Lot Size</b></p>	
<p>Council staff would require more information to form an opinion. Would be considered as part of merit assessment. Clear justification for any proposed change in MLS and FSR should be provided.</p>	<p>Refer to Sections 2.2.2 and 2.2.3 for justification of proposed changes to MLS and FSR.</p>
<p><b>General Considerations</b></p>	
<p>The PP is required to be consistent with the West Dapto Vision 2018, Planning Principles and Structure Plan, which are also outlined in Chapter D16 West Dapto Release Area of Wollongong Development Control Plan 2009 (DCP).</p>	<p>This report considers the PP against the planning principles of the West Dapto Vision 2018 and Structure Plan in Section 1.3.3.</p>
<p>The Planning Proposal supporting information should consider the surrounding strategic context, including all existing adopted Neighbourhood Plans and current proposals including development applications. Council will consider the strategic context as part of our assessment, including, but not limited to transport network connections, open space provision, water management, future Darkes town centre connection etc.</p>	<p>The context of the site is discussed broadly in Section 1.2, with surrounding adopted Neighbourhood Plans within Chapter D16 of the DCP detailed in Section 1.2.3, and nearby development applications detailed in Section 1.2.5.</p>
<p>The developer shall ensure local infrastructure requirements identified in the West Dapto Section 7.11 Development Contributions Plan 2017 are considered and where required spatially identified in the PP and ensure any proposed LEP amendment would not preclude delivery of the relevant Section 7.11 infrastructure.</p>	<p>Infrastructure capacity and requirements are examined in Section 1.3.3.1.</p>
<p>The applicant should refer to all relevant chapters of the DCP when preparing both the PP and Neighbourhood Plan (NP).</p>	<p>Checklists referencing the relevant provisions of the DCP are included in Section 1.3.2 of this report, and in Section 4.1.2 of the NP.</p>
<p><b>Current Policy Reviews</b></p>	
<p>On 15 May 2020, IPART issued a final report on their Assessment of West Dapto Contributions Plan 2020. The</p>	<p>This report considers the requirements of the draft West Dapto Development Contributions Plan 2020</p>



<p>IPART report along with Council's draft West Dapto Development Contributions Plan, 2020 should be considered during preparation of the Planning Proposal as this plan will ultimately supersede the 2017 Plan as the 2020 Plan is expected to be adopted in the coming months.</p>	<p>and the IPART Assessment of West Dapto Contributions Plan 2020 in Section 1.3.3.1.</p>
<p><b>Landowner Consultation</b></p>	
<p>The proponent should undertake consultation with all landowners affected by the proposed Planning Proposal. This includes all landowners adjoining and within the Planning Proposal boundary, particularly where LEP amendments are proposed for that affected landowner. Wollongong City Council (WCC) is an adjoining landowner. Consultation with WCC shall be made with our Property Team.</p>	<p>BlueScope is the sole landowner of parcels within the PP site boundary. Details of the consultation undertaken to date are included in Section 1.5.</p>
<p><b>Traffic and Transport</b></p>	
<p>The applicant should refer to all relevant chapters of Wollongong Development Control Plan, 2009 (DCP), in particular Chapter E3 – Car Parking, Access, Servicing/Loading Facilities and Traffic Management, Chapter B2 – Residential Subdivision and Chapter D16 – West Dapto Land Release.</p>	<p>Noted. A Traffic Impact Assessment (TIA) (Cardno, 2020) (refer Appendix A) has been prepared as part of the NP and PP process for the site. Relevant DCP chapters are addresses in Section 1.4.9.</p>
<p>A Traffic Study is required, which needs to be prepared by a suitably qualified consultant which looks at the number of likely lots and potential traffic generation. In addition, the study is to look at the road connections, hierarchy and any required intersection treatments against major road volumes (existing and proposed roads), based on AUSTROADS warrants.</p>	<p>This table includes all pre-lodgement notes as received from Council on 11 June 2020 with responses to comments and references to relevant information throughout this report and specialist investigations attached in appendices.</p>
<p>The study must also address the requirements set out in these pre-lodgement notes.</p>	
<p>Observed changes since the 2019 conceptual Neighbourhood Plan (NP). The submitted information doesn't appear to show the full proposed road layout as per the previously submitted NP (particularly for the industrial land south-east of West Dapto Rd). However, it is noted that there have been some changes in what is shown. Traffic and transport comments related to these changes:</p> <ul style="list-style-type: none"> <li>&gt; A new connection from the residential pocket north of the NDE to the NDE. This should be left-in/left-out only.</li> <li>&gt; Elimination of the eastern internal access road connection to Sheaffes Rd. This was shown as open space/basin on previous NP – if this is still the case then it should comply with Council's Open Space Design manual (NB the Manual states 4 residential road frontages required which was previously provided but not anymore). See also comments below re roundabout on Sheaffes.</li> <li>&gt; No internal connection between the western industrial site and the road connecting West Dapto Rd to Northcliffe Drive Extension (NDE). An internal connection is preferred here such that two intersections on the NDE are avoided (as raised in previous Council comments).</li> <li>&gt; Relocation of the access point for the industrial pocket north of West Dapto Rd further east. This is supported. It also appears that it would be a 4-way intersection to allow access to the industrial lands south of West Dapto</li> </ul>	<p>See Traffic Impact Assessment in Appendix C and Section 1.4.8.</p>



<p>Rd. The applicant will need to provide an appropriate form of intersection treatment at this location.</p> <p>&gt; Removal of the road between the eastern industrial land and West Dapto Rd/Sheaffes Rd at the southern extent. This is supported to minimise impacts on E2 land.</p>	
<p>There is no additional information shown that addresses the issue raised in Council's July 2019 letter about pedestrian access to/from the NDE west of the residential area (where swale was previously shown). Council prefers not to see another swale and an alternate drainage solution should be considered (e.g. through internal subdivision roads), such that more direct access to the NDE, its shared path and the future signals at Sheaffes/NDE is available. The previous proposal appeared to turn its back on these key assets for active transport.</p>	<p>See Traffic Impact Assessment in Appendix C and Section 1.4.8 and the concept NP layout. The north-south swale has been removed with drainage able to be accommodated in the road and pipe design. There are several points of connection to the Sheaffes Road North NP to the west now proposed.</p>
<p><b>Public Transport</b></p>	
<p>Demonstrate how the Neighbourhood could be serviced by buses and how the proposed layout will maximise (as far as practicable) accessibility to bus services (ie proportion of lots within 400 m walking distance of any bus stop). Indicative bus stops should be shown on the Neighbourhood Plan.</p>	<p>The Traffic Impact Assessment (TIA) (Cardno, 2020) (refer Appendix A) prepared as part of the NP and PP process for the site addresses public transport and the suitability of the proposed NP layout.</p>
<p>Chapter B2 of the DCP requires that large residential subdivisions should be designed to make provision for a bus service to link existing urban areas with the new residential subdivisions.</p>	<p>Noted. This matter will be addressed in future subdivision DAs. A collector road has been accommodated in the concept layout of the residential subdivision.</p>
<p>The bus route should be primarily designed along collector roads and linked up to sub-arterial or arterial roads, due to the requirement for wider road carriageways.</p>	
<p>Indented bus parking bays should be provided at nominated bus stops.</p>	<p>Noted. These matters will be addressed in a future residential subdivision DA.</p>
<p>Bus stops should be generally located within 400 m walking distance for 90% of the lots in the immediate locality.</p>	
<p>Any proposed roundabout on a bus route must be designed to satisfactorily accommodate bus manoeuvring through and around the roundabout.</p>	
<p>If the development proposes staged construction of a neighbourhood which would require an interim bus stop solution, this should be provided by the applicant for consideration by the Development Engineering Section of Council.</p>	
<p>Seek Transport for NSW and local bus company input at the Neighbourhood Plan stage to assist in planning the road layout to best accommodate existing and future bus servicing requirements.</p>	<p>Noted. Consultation will be undertaken during the NP assessment and outcomes provided to Council within the earliest timeframe possible.</p>
<p><b>Road Design</b></p>	
<p>The designs of intersections onto major roads need to be considered in the context of Austroads guidelines (turn warrants, sight distances etc) to ensure no issues arise at the DA stage.</p>	<p>A Traffic Impact Assessment (TIA) (Cardno, 2020) (refer Appendix A) has been prepared as part of the NP and PP process for the site and addresses this matter, and the NP report discusses this further.</p>
<p>The applicant must refer to Chapter B2: Residential Subdivision which provides details of the required road cross sections.</p>	

<p>The applicant will need to indicate the width of the proposed road reserve for local streets and the type of cross sections and road hierarchy showing local and collector roads.</p>	
<p>A preliminary assessment of acceptable road grades must be carried out to ensure that the proposed layout will accord with the Wollongong City Council Subdivision Code and Austroads.</p>	
<p>WCC project delivery section has advised that the provision of a roundabout on Sheaffes Rd and the north-south internal subdivision road is likely not possible, due to Sydney Water concerns with building over large underground water mains. It is noted that the new PP road layout includes only one access point to Sheaffes Rd at a roundabout. This will mean higher traffic volume at this intersection to/from the proposed residential area, and the applicant needs to consider whether a future 4-way priority intersection will perform safely and effectively under this arrangement, in lieu of a roundabout. Further details regarding the design of Sheaffes Rd should be available from WCC design section as this project progresses (detailed design process is expected to commence 2020/21).</p>	<p>Noted. Future design details will need to align with future information from Council's Design Section.</p>
<p>It is not clear why a 4th leg (to the north) is shown at the proposed eastern roundabout on the NDE. Please clarify what land the 4th leg would be servicing. If the 4th leg is needed staff are likely to require a left-in/left-out arrangement as WCC is supporting only the western roundabout on NDE. It is noted there are roundabouts to the east and west so vehicles can fairly easily turn around.</p>	<p>The 4th leg of the roundabout is to accommodate vehicle access to the small area of developable IN2 land to the north and to maintain a potential connection to the Reddalls Road Industrial NP to the north if desired. The alignment has been modified to allow for a suitably sized intersection and appropriate approach angles to Council's proposed NDE.</p>
<p>The proposed connection between NDE and West Dapto Rd would need to intersect West Dapto Rd at a roundabout (as per the West Dapto contributions plans draft 2020 and current adopted 2017). This should be shown on any NP/PP.</p>	<p>Noted.</p>
<p>A perimeter road is preferred along the eastern edge of the residential area adjacent to the Biobank site. If the two portions of vegetation are proposed to be removed for housing on the west side of the biobank border, then the perimeter road is required.</p>	<p>Perimeter roads are present along the majority of the residential zone adjacent to the Biobank site, with the exception of the finger of vegetation proposed to remain.</p> <p>The provision of APZs to the residential zone ranging from 16 m to 36 m as recommended within the Bushfire Assessment (Peterson Bushfire, 2020) (refer Appendix D) are able to be accommodated within the proposed NP.</p>
<p>More detail on the eastern part of the BlueScope Lands (i.e. south of Wyllie Rd) needs to be provided (if it is proposed to be included in the NP/PP) such that WCC advice can be given.</p>	<p>The land between Wyllie Road and West Dapto Road is not included in the NP or PP.</p>
<p><b>Active Frontages, Pedestrian and Cyclist Connection</b></p>	
<p>The Neighbourhood Plan is to identify all pedestrian paths and shared paths/cycleways, including riparian cycleways. Supporting material should demonstrate how the cycle way network provides convenient and safe options for cyclists within, into and out of the development area and in particular to and from the proposed Darkes Town Centre.</p>	<p>The layout proposed in this PP and NP is concept only and subject to future DAs.</p> <p>Shared pathways are to be constructed on Road Types 1, 2, 3, 5 and 6, and additional pathway-only connections are shown as Type 7 connections and link to Sheaffes Road North NP site.</p>
<p>A pedestrian/cycle connection to Northcliffe Drive Extension (NDE) should be incorporated into the NP at the northeast corner of the residential area, to allow direct and convenient access to/from the NDE shared paths.</p>	<p>Fire management trails within the Biobank site (labelled '8' on the NP) provide pedestrian options for recreational walking.</p>

	Links to the Darkes Road Town Centre will be via the connections across West Dapto Road and through the land subject to subdivision south of Sheaffes Road as well as via the shared pathways anticipated to be included in the design and construction of the NDE.
The Neighbourhood Plan design should maximise continuity of proposed riparian paths as well as logical & efficient connectivity to/from adjacent neighbourhoods/subdivisions.	Pathway connections to Sheaffes Road North NP are labelled '7' in the concept NP. Riparian pathways are subject to future discussions with Council's Property Division.
Active frontage NDE – the plans appear to show housing fronting internal road as well as the NDE. How will the applicant guarantee an active frontage outcome along NDE? An internal parallel side road configuration is preferred in order to achieve this outcome.	Refer to Section 2.2 for explanation of provisions and Section 3 for justification.
Consideration should be given to a continuation of the riparian shared path from the north side of NDE south along the border between the E2 biobank site and residential area, tying back into the Darkes Town Centre. This would be a good environmental route around West Dapto, showcasing its natural beauty and features (creeks, bushland etc).	Refer to fire trail labelled '9' on the concept NP. Further pathways through other environmental land will be subject to future DAs.
Consideration should also be given to interim bus servicing arrangements for the neighbourhood.	Consultation with local bus service providers is ongoing and will be resolved during the assessment of the PP and NP.
<b>Stormwater/Flooding</b>	
The proposed rezoned land to be residential should not be creating additional flood affected lots (i.e. those being partly or wholly below the flood planning level of 1% AEP + 0.5 m).	All residential land can be made compliant (refer to WCMS in Appendix A).
The design of the road layout that supports the rezoning within the site needs to make provision for access to designated flood access routes in the 1 in 100 year flood event as mapped within Chapter D16 - West Dapto Release Area of Wollongong Development Control Plan 2009.	All roads can be made compliant (refer to WCMS in Appendix A).
Locations identified as on-site detention storage to be rezoned to a higher density are required to detail how the basin is intended to be temporary and the adjacent sites identified to address no increase in peak flows from the catchment.	The temporary OSD and final design are being confirmed with ongoing consultation with the developer of the adjoining land on the south side of Sheaffes Road (see Section 1.5.2.2 and WCMS in Appendix A).
It appears the previous proposed swale adjoining Paynes Road to the east is now proposed to be moved. Pedestrian access crossing the future NDE as previously raised should be outlined in the NP detail.	Noted, and the swale has been revised.  Pedestrian pathways are proposed on both sides of the NDE and additional pathway connections to Sheaffes Road North NP are labeled '7' in the concept NP layout.
A flood study shall be provided for the subject development. The flood study shall be prepared by a suitably qualified civil engineer, strictly in accordance with Chapters E13 and E14 of the Wollongong DCP2009. The purpose of the flood study is to determine flood levels, Flood Planning Area (FPA) and flood risk precincts applicable to the development/site.	A Water Cycle Management Study (Cardno, 2020) has been prepared to inform the NP and PP (refer Appendix A).
The Flood Study must be amended to include all watercourses/floodways within the full extent of the planning proposal site that were modelled in Council's adopted Mullet Creek Review Flood Study dated 2018 and the flood extents	

<p>from Councils adopted Mullet Creek Flood Model Update Flood Mapping Compendium (April 2018) shall be used to establish the flooding constraints for the subject lands.</p>	
<p>Details are to be provided for any filling within the floodplain are to achieve compliance with the requirements of Clause 7.3 of the Wollongong LEP2009, and Chapters E13 and Chapter D16 of the Wollongong DCP2009, in a way that provides acceptable outcomes to Council and the community (in relation to landform modifications, sustainability/usability/maintainability of the finished landform, creation of public assets, and riparian outcomes).</p>	<p>Concept bulk earthworks details are included in the Flooding and Stormwater Report and are the minimum recommended to achieve safe land use and infrastructure, minimal infrastructure installation and maintenance costs and to best maintain the natural flooding functions of the catchment compatible with adjoining ad surrounding land.</p>
<p>Provision for on-site detention basins need to be provided for each sub-catchment. Consideration should be given to consolidating basins and also creating basins that cater for runoff from the defined neighbourhood Precinct areas as indicated in Chapter D16 of the WDCP2009.</p>	<p>A Water Cycle Management Study (Cardno, 2020) has been prepared to inform the NP and PP (refer Appendix A) and addresses these matters.</p>
<p>On Site Detention basins should be off-line to watercourses to better cater for the proposed development and minimise the future asset and maintenance cost to Council and the community.</p>	
<p>1 in 100-year overland flow paths will need to be incorporated within the proposed subdivision layout, and where required, direct all contributing overland flows into the respective detention basins. This should be considered now at the PP and NP stage.</p>	
<p>The proposal needs to demonstrate no increase in peak flows for all storm events from each sub catchment. This will need to be demonstrated with detailed pre and post development runoff/routing modelling showing pre and post development flow rates draining to each stormwater disposal point for the 1, 2, 5, 10, 20, 50, and 100 year ARI storm events.</p>	
<p>A review of the flooding on Lot 2 in DP 230137 indicates that approximately 50% of this lot is affected by a 1% AEP floodway, which is an incompatible land use for urban/commercial/industrial development. The proposed layout would need to be modified to reflect this constraint.</p>	
<p>It is noted that the 'high hazard' and 'floodway' areas identified within Council's 2018 Mullet Creek Flood Model Update Report mapping is now outdated due to the recent release of updated conduit blockage criteria found within Chapter E13 of the Wollongong DCP 2009. In this respect, any proposal to rezone or plan for a new neighbourhood within West Dapto would need to undertake detailed flood modelling based on the new conduit blockage criteria to determine the true flood constraints and development potential across the sites.</p>	<p>New blockage criteria have been included in modelling (refer to WCMS in Appendix A).</p>
<p>The land in the southwest corner of Lot 1 in DP 588140 is potentially constrained by high hazard and/or a floodway. This should be confirmed by detailed flood modelling as stated above.</p>	<p>A Water Cycle Management Study (Cardno., 2020) has been prepared to inform the NP and PP (refer Appendix A) and addresses the impacts of development within this location.</p>
<p>Stormwater management should be considered in the early phase of potential rezoning and neighbourhood planning of the sites to ensure that catchment wide solutions rather than individual development solutions are implemented, and that sufficient space is allocated to the stormwater facilities upfront.</p>	<p>Noted. The Water Cycle Management Study (Cardno, 2020) has been prepared to inform the NP and PP (refer Appendix A) and addresses the impacts of development across the site and in the surrounding locality.</p>

The water management principles and controls found within Chapter D16 of the Wollongong DCP 2009 should be considered for all new planning proposals and neighbourhood plans.	Noted. The Water Cycle Management Study (Cardno, 2020) has been prepared to inform the NP and PP (refer Appendix A) and addresses the impacts of development across the site and in the surrounding locality.
Riparian corridor widths as per Chapter E23 of the Wollongong DCP 2009 should be applied to all watercourses identified within sites considered for new planning proposals and neighbourhood plans – not the NRAR guidelines.	An Ecological Constraints Assessment (ECA) has been prepared for the site (Ecoplanning, 2020) that assesses the impacts of the NP and supporting PP on riparian lands across the site, and the NP utilises riparian corridors as per the DCP.
The environmental assessment on stormwater and floodplain management should be a comprehensive investigation and analysis to validate the rezoning and conceptual layout of roads, lots, bridges and stormwater infrastructure including appropriate sizing of water quality/quantity basins and any other mitigation measures.	A Water Cycle Management Study (Cardno., 2020) has been prepared to inform the NP and PP (refer Appendix A) and addresses this matter.
<p>The following documents should be used in the environmental assessment for stormwater and floodplain management to inform the proposed rezoning and conceptual layout:</p> <ul style="list-style-type: none"> <li>&gt; The water management principles from the draft West Dapto Vision Document (2018) and Clause 5 of DCP Chapter D16</li> <li>&gt; The revised structure plan from the draft West Dapto Vision Document (2018) and Clause 4 of DCP Chapter D16</li> <li>&gt; Wollongong DCP Chapter E23 (Riparian Land management)</li> <li>&gt; Wollongong DCP Chapter E15 (Water Sensitive Urban Design)</li> <li>&gt; Wollongong DCP Chapter E14 (Stormwater Management)</li> <li>&gt; Wollongong DCP Chapter E13 (Floodplain Management)</li> <li>&gt; Riparian Corridor Management Study (DIPNR - 2004).</li> </ul>	<p>A Water Cycle Management Study (Cardno., 2020) has been prepared to inform the NP and PP (refer Appendix A) and addresses relevant chapters of the DCP.</p> <p>This report also addresses relevant chapters of the DCP (refer to Section 1.3.2), and the NP report addresses relevant chapters of the DCP in Section 4.1.2.</p>
Water management basins proposed should be located integrated with the lot/road layout and consistent with the current flood extents layer and West Dapto Structure plan 2018.	A Water Cycle Management Study (Cardno., 2020) has been prepared to inform the NP and PP (refer Appendix A) and addresses this matter.

#### Environment, Biodiversity and Riparian, and Bushfire Matters

<p>The Neighbourhood Plan should be supported by material addressing the following matters:</p> <ul style="list-style-type: none"> <li>&gt; The Coastal SEPP and SEPP Coastal Wetlands and Coastal Wetlands buffers mapping</li> <li>&gt; All the relevant Directions and Actions from 'Goal 5 A region that protects and enhances the natural environment' of the ISRP 2015 e.g. but not limited to DIRECTION 5.1, ACTION 5.1.1 Avoid, minimise and mitigate the impact of development on significant environmental assets as mapped in the ISRP</li> <li>&gt; Ministerial Directions for environment</li> <li>&gt; The Water Management and Conservation Principles of the West Dapto Vision 2018 and corresponding</li> </ul>	<p>Noted.</p> <p>This matter has been addressed within the NP report, and Sections 1.3 and 3.3 of this report.</p>
--	--



outcomes sought in the West Dapto Structure Plan 2018 (Clause 4 and 5 of DCP Chapter D16).	
Identify the known presence of NSW Biodiversity Conservation Act and/or Commonwealth Environment Protection and Biodiversity Conservation Act listed threatened ecological communities, threatened species and potential threatened species habitat and correctly categorise riparian land. Relationship of the Biobank Agreement site (Lot 1 DP 588139) to adjoining proposed land uses.	An Ecological Constraints Assessment (ECA) has been prepared for the site (Ecoplanning, 2020) that assesses the presence of listed species under the <i>Biodiversity Conservation Act 2016 (BC Act)</i> and the <i>Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)</i> (refer Appendix B).  Refer Sections 1.3.4, 1.3.5 and 1.4 for details.
Identify land where dedication to Council is likely to be proposed.	This matter is subject to ongoing consultation with Council's Property Division and will be resolved during the assessment of the PP.
Council staff recommend Biocertification of the site is considered by the proponent.	The Ecological Constraints Assessment (ECA) has been prepared for the site (Ecoplanning, 2020) (refer Appendix B) identifies the potential for future stewardship areas across the site.
Ensure any APZ requirements do not conflict with conservation land values outcomes. APZs will not be accepted on any land proposed for dedication to Council.	The provision of APZs to the residential zone ranging from 16 m to 36 m as recommended within the Bushfire Assessment (Peterson Bushfire, 2020) are able to be accommodated within the proposed NP and do not add maintenance burdens to Council above standard road and verge maintenance.
<b>Geotechnical and Contamination</b>	
A Stage 1 – Preliminary Site Investigation must be prepared. The Report is to be prepared as per the Guidelines for Consultants Reporting on Contaminated Sites (OEH, 2011). The Report must be prepared by a suitably qualified and experienced consultant who is certified under the Environment Institute of Australia and New Zealand's (EIANZ) Certified Environmental Practitioner (Site Contamination) scheme (CEnvP (SC)) or the Soil Science Australia (SSA) Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) certification.	Two Preliminary Site Investigations (PSIs) have been undertaken for the site to inform contamination matters on site (refer Appendix G for full reports and Section 1.4.8 for discussion).  A Detailed Site Investigation (DSI) and Remedial Action Plan (RAP) are currently being prepared for Lot 1 DP 588139 to inform a future residential subdivision DA. The DSI and any potential RAP are intended to be completed prior to the completion of the assessment of the PP.
Depending on the results of the Stage 1 – PSI a Stage 2 – Detailed Site Investigation may be required to be prepared.	
<b>Heritage</b>	
The BlueScope land in question includes a heritage listed Fig Tree and is in close vicinity to a number of other listed heritage items. The potential heritage impacts of PP & NP proposed land use would need to be considered with regard to these items also.	Biosis completed an Aboriginal Cultural Heritage Assessment (ACHA), an Archaeological Report (AR) and a Statement of Heritage Impact (SoHI) to inform the existing heritage environment and likely impacts due to the Neighbourhood Plan and future development applications (refer to Appendices E and H for full reports and Sections 1.4.3 and 1.4.4 for summaries of the findings).
Council has received community interest in the historic value of the site. Whilst little physical evidence of the site is likely to be in place, and whilst the archaeological value of the remains may be limited (due to the recent age), the archaeological provisions of the NSW Heritage Act 1977 would need to be addressed in relation to this site in any future development proposal for the area. Council would like to see potential interpretation opportunities and outcomes related to this historical site considered as part of the planning for this site. The neighbourhood planning stage presents an opportunity to ensure the outcome is achieved.	



<p>It is recommended that the archaeological consultant engaged, should also be asked to provide a preliminary assessment of the archaeological significance of the site and the potential for requirements under the NSW Heritage Act 1977 to be triggered to ensure any Neighbourhood Plan identified land use layout is supportive or a future interpretive outcome and reduced impact on any identified archaeological significance.</p>	
<p>More recently staff have become aware of an old Hotel site on West Dapto Road. This should also form a consideration of the archaeological consultant's preliminary assessment work.</p>	
<p><b>Subdivision</b></p>	
<p>Rezoning locations for higher density is to take into account the revised Chapter B2 and D16 controls of Council's DCP for future intended subdivision layouts (in particular the road widths).</p>	<p>Refer to Section 2.2 for explanation of provisions and Section 3 for justification.</p>
<p>The layout of the development will be required to be designed in accordance with current emergency services policy and design.</p>	<p>The Bushfire Assessment (Peterson Bushfire, 2020) (refer Appendix D) concludes that the proposed road layout has adequate access (refer Section 1.4.2 for additional discussion).</p>
<p><b>Bushfire Assessment</b></p>	
<p>It is noted from the briefing note a bushfire assessment report is being prepared which should be submitted with the PP &amp; NP application.</p>	<p>A Bushfire Assessment (Peterson Bushfire, 2020) has been prepared to inform the NP and PP (refer Appendix D).</p>

### 1.5.2 Other Consultation

The following is a summary of the communications with other stakeholders during the investigative studies and preparation of the PP and NP.

#### 1.5.2.1 Dapto Leagues Club

Dapto Leagues Club own land east of the site and north of the Kembla Grange golf club. Draft plans were presented to the CEO of Dapto Leagues Club in September 2019. No negative comments were tabled and the Club have indicated they are happy to continue discussions during the assessment of the PP and NP.

#### 1.5.2.2 The Esplanade Group

The Esplanade Group are the applicants for a current DA2018/1433 on the southern side of Sheaffes Road.

Communications have been ongoing with more formal discussions particularly regarding integration of stormwater management in January 2020. The landowners are open to discussions regarding future connection of stormwater flows from the residential subdivision via this neighbouring downstream site to a future district scale detention facility near the new Darkes Town Centre. Discussions are ongoing as volumes and rates of flow data are clarified.

#### 1.5.2.3 Council Property Division

BSL initiated communication with Council's Property Division in June 2020 specifically to discuss:

- > Integral Energy Park – potential fire trail access and potential conservation area amalgamation
- > Drainage of water from the future residential subdivision (eastern corner of Sheaffes Rd and Paynes Rd), through the proposed residential subdivision to the south and into a precinct detention basin to be built on WCC's land as part of Darkes Town Centre
- > Land acquisition for Northcliffe Drive Extension (NDE).
- > Council potential interest in dedication of land in Zones E2 and E3.

At the date of lodgement of 30 June 2020 no response had been received. Communications will continue through the assessment of the PP and NP.

## 2 Purpose of the Planning Proposal and Amendments

### 2.1 Objectives and Intended Outcomes

The objective of this PP is to amend Wollongong Local Environmental Plan 2009 to enable the best and highest use of the site (Lot 1 DP 588139, Lot 2 DP 230137, Lot 1 DP 588140, Lot 1001 DP 1192327 and Lot 1002 DP 1192327) for residential, environmental conservation, and industrial purposes as per the accompanying Neighbourhood Plan (refer Figure 2-1).

The PP aims to achieve the following outcomes:

- > The provision of a broader range of housing types and densities that are compatible with the surrounding area and contribute to housing targets within the WDURA
- > The protection and appropriate management of areas of ecological significance
- > The optimisation of land available for employment and industrial uses
- > The provision of new infrastructure that best integrates with surrounding land and matches the constraints of the site for sustainable long term operation and maintenance.

### 2.2 Explanation of Provisions

The objectives and intended purpose of this PP are to be achieved by undertaking the following amendments to the LEP:

- > Land Zoning Map – Sheet LZN\_010
- > Floor Space Ratio Map – Sheet LSZ\_010
- > Lot Size Map – Sheet LSZ\_010

Amendments to the planning controls are explained below.

#### 2.2.1 Land Zoning

All proposed land zoning amendments are demonstrated in Figure 2-2.

##### 2.2.1.1 Rezoning of R2 land to R3

It is proposed to rezone some areas currently in Zone R2 within Lot 1 DP 588139 to Zone R3, to take advantage of strategic locations and settings that offer medium density housing potential consistent with Council's adopted planning provisions and consistent with other medium density housing areas in WDURA.

The land suitable for Zone R3 are described as follows:

- > Around the proposed public space to be set aside for protection of Local Heritage Item no. 6326. This will optimise the setting for the protected trees in the streetscape and allow medium density residential layouts that are more compatible with setbacks from the trees than conventional single lot low density development
- > Adjacent to Sheaffes Road to accommodate for access denied frontages and rear-loaded dwelling designs that prioritise walkability along Sheaffes Road
- > Along the future Northern Access Road to accommodate for acoustic treatment, access denied frontages and rear-loaded dwelling designs that prioritise multiple movement options along the NDE
- > Fronting the Biobank site to optimise the number of dwellings with outlook to the bio banked land and to best accommodate for APZ separation and pedestrian and cyclist activity at the interface between bio banked land and residential land
- > Within the temporary OSD location to be consistent with other residential development to the east along Sheaffes Road (see (ii) above).





LEGEND

- SITE BOUNDARY
- EXISTING CONTOURS AT 1m INTERVALS
- INDICATIVE RAIL SPUR
- EXISTING WATERCOURSE
- INDICATIVE OSD/WATER QUALITY BASIN LOCATION
- INDICATIVE SWALE/OPEN CHANEL
- PROPOSED LOW DENSITY RESIDENTIAL
- PROPOSED MEDIUM RESIDENTIAL
- PROPOSED LIGHT INDUSTRIAL ZONED LAND
- PROPOSED HEAVY INDUSTRIAL ZONED LAND
- ACTIVE OPEN SPACE
- PASSIVE OPEN SPACE
- EXISTING VEGETATION TO BE RETAINED WHERE POSSIBLE
- 1 COUNCIL'S NORTHERN ACCESS ROAD TYPE 2 SUB-ARTERIAL ROAD 22.9m ROAD RESERVE
- 2 TYPE 4 MINOR COLLECTOR ROAD 20.95m ROAD RESERVE
- 3 TYPE 6 ACCESS STREET 17.1m ROAD RESERVE
- 4 TYPE 7 ACCESS PLACE 15.0m ROAD RESERVE
- 5 INDUSTRIAL PERIMETER /CIRCULATION ROAD
- 6 INDUSTRIAL MAIN ACCESS ROAD
- 7 PEDESTRIAN CONNECTION
- 8 FIRETRAIL
- 9 FIRE ACCESS PATH WITHIN BIOBANK SITE
- 10 POTENTIAL SIGNALISED INTERSECTIONS PENDING DETAILED DESIGN INVESTIGATION. FINAL INTERSECTION DESIGN TO BE CONSIDERATE TO POTENTIAL HEAVY VEHICLE SIZE, VEHICLE MOVEMENT AND SIGHT DISTANCE RISK FROM WDR ALIGNMENT.
- 11 INTERSECTION TYPE TO BE FINALISED AT DETAILED DESIGN. POTENTIAL FOR A SIGNALISED INTERSECTION DUE TO KNOWN WATER INFRASTRUCTURE IN THE AREA.
- 12 TEMPORARY OSD TO BE MADE REDUNDANT AT COMPLETION OF PRECINCT OSD WITHIN SHEAFFES RD SOUTH NP. AREA TO BE RESIDENTIAL DEVELOPMENT FOLLOWING REMOVAL OF TEMPORARY OSD.
- A INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 1.0m FLL
- B INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 1.0m CUT
- C INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 0.5m FILL
- D INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 1.0m FILL
- E INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 1.4m CUT
- F INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 1.0m FILL
- G INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 1.0m FILL
- H INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 1.5m CUT

NEIGHBOURHOOD PLAN (VERSION 1)



landscape architecture  
urban design  
environmental management



0 100 200 300 600m  
SCALE 1:6000 @ A1, 1:12000 (A3)



BLUESCOPE STEEL BSL KEMBLA GRANGE DA & NP  
DATE 30.06.2020 PROJECT NO. 82019111-01 DRAWING NO. L1000 ISSUE 1





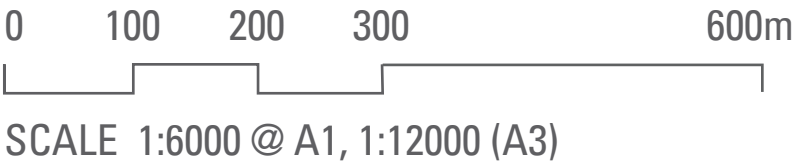
**LEGEND**

- SITE BOUNDARY
- EXISTING CONTOURS AT 1m INTERVALS
- INDICATIVE RAIL SPUR
- EXISTING WATERCOURSE
- INDICATIVE OSD/WATER QUALITY BASIN LOCATION
- INDICATIVE SWALE/OPEN CHANEL
- PROPOSED LOW DENSITY RESIDENTIAL
- PROPOSED MEDIUM RESIDENTIAL
- PROPOSED LIGHT INDUSTRIAL ZONED LAND
- PROPOSED HEAVY INDUSTRIAL ZONED LAND
- ACTIVE OPEN SPACE
- PASSIVE OPEN SPACE
- EXISTING VEGETATION TO BE RETAINED WHERE POSSIBLE
- 1 COUNCIL'S NORTHERN ACCESS ROAD TYPE 2 SUB-ARTERIAL ROAD 22.9m ROAD RESERVE
- 2 TYPE 4 MINOR COLLECTOR ROAD 20.95m ROAD RESERVE
- 3 TYPE 6 ACCESS STREET 17.1m ROAD RESERVE
- 4 TYPE 7 ACCESS PLACE 15.0m ROAD RESERVE
- 5 INDUSTRIAL PERIMETER /CIRCULATION ROAD
- 6 INDUSTRIAL MAIN ACCESS ROAD
- 7 PEDESTRIAN CONNECTION
- 8 FIRETRAIL
- 9 FIRE ACCESS PATH WITHIN BIOBANK SITE
- 10 POTENTIAL SIGNALISED INTERSECTIONS PENDING DETAILED DESIGN INVESTIGATION. FINAL INTERSECTION DESIGN TO BE CONSIDERATE TO POTENTIAL HEAVY VEHICLE SIZE, VEHICLE MOVEMENT AND SIGHT DISTANCE RISK FROM WDR ALIGNMENT.
- 11 INTERSECTION TYPE TO BE FINALISED AT DETAILED DESIGN. POTENTIAL FOR A SIGNALISED INTERSECTION DUE TO KNOWN WATER INFRASTRUCTURE IN THE AREA.
- 12 TEMPORARY OSD TO BE MADE REDUNDANT AT COMPLETION OF PRECINCT OSD WITHIN SHEAFFES RD SOUTH NP. AREA TO BE RESIDENTIAL DEVELOPMENT FOLLOWING REMOVAL OF TEMPORARY OSD.
- A INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 1.0m FLL
- B INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 1.0m CUT
- C INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 0.5m FILL
- D INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 1.0m FILL
- E INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 1.4m CUT
- F INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 1.0m FILL
- G INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 1.0m FILL
- H INDICATIVE EARTHWORKS PAD. APPROX. AVERAGE 1.5m CUT

NEIGHBOURHOOD PLAN (VERSION 2)



landscape architecture  
urban design  
environmental management

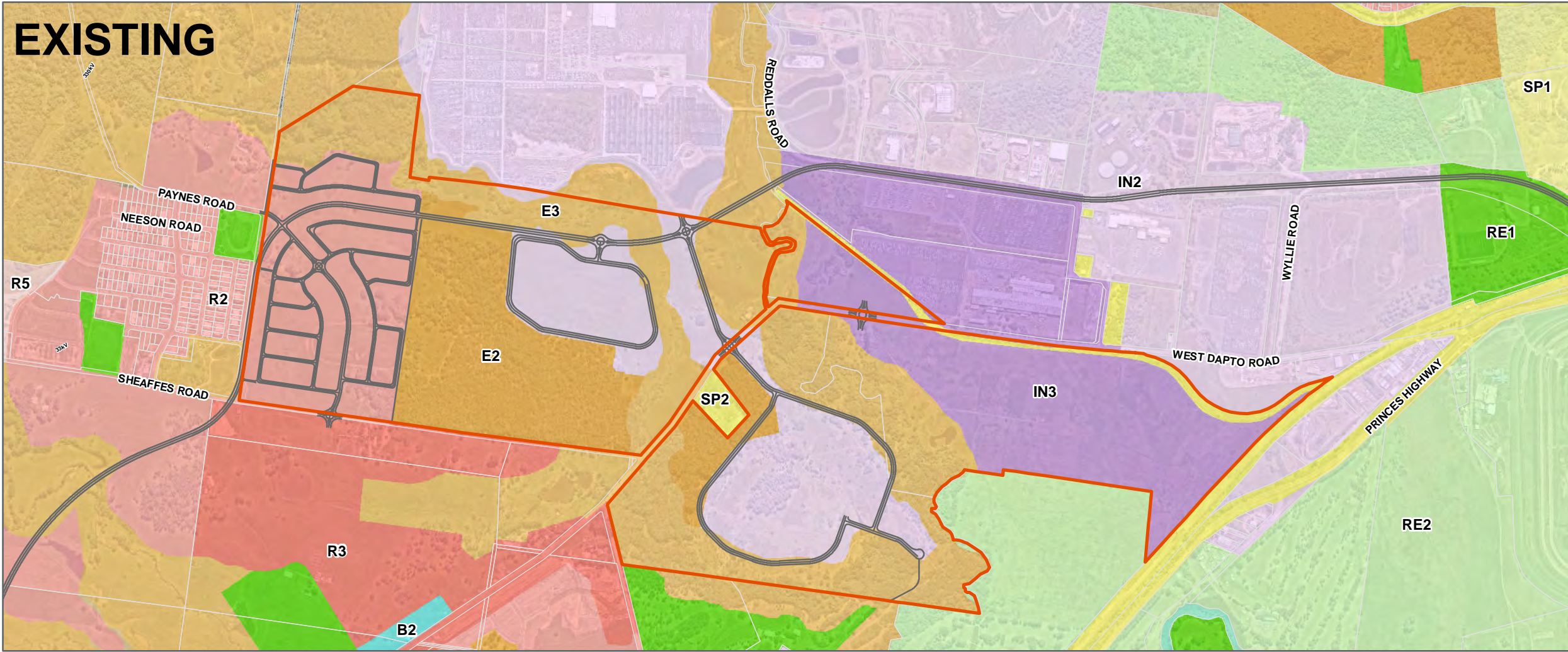


BLUESCOPE STEEL BSL KEMBLA GRANGE DA & NP

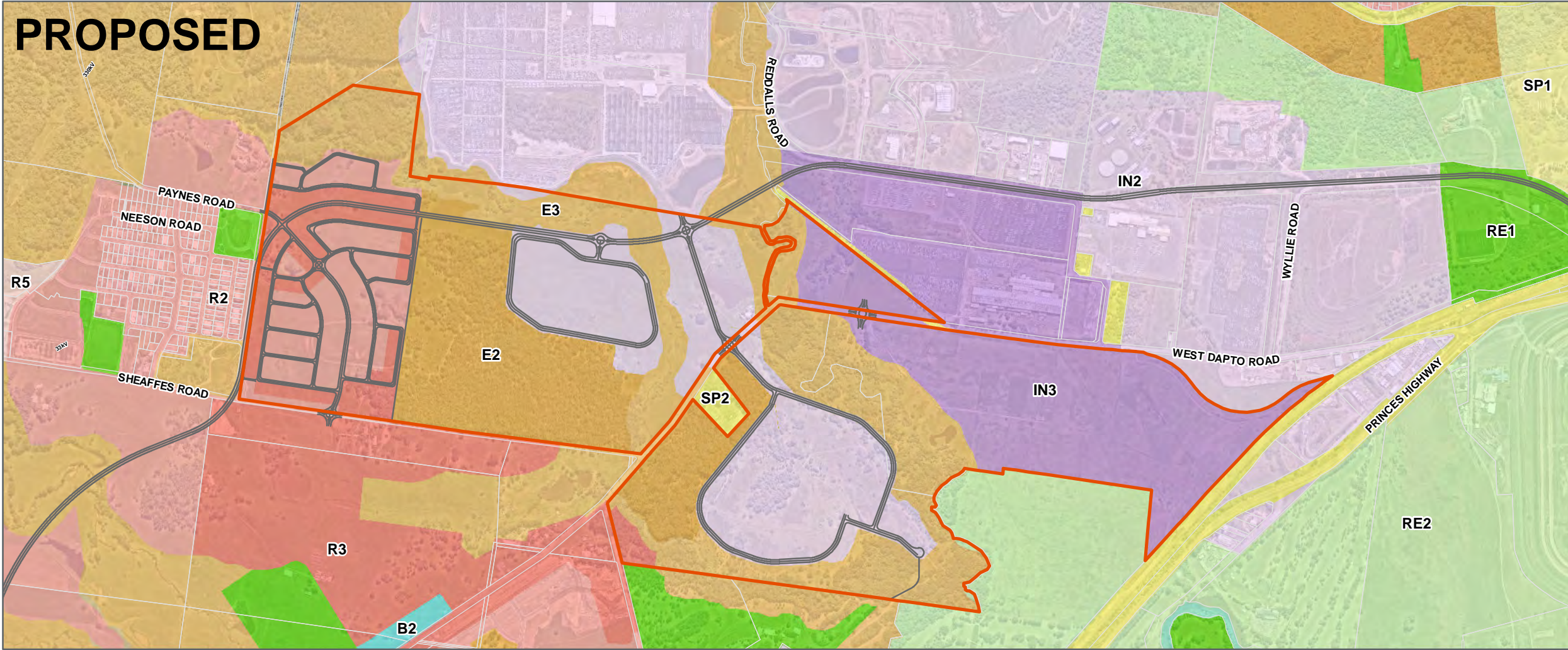
DATE	PROJECT NO.	DRAWING NO.	ISSUE
30.06.2020	82019111-01	L1001	1



EXISTING



PROPOSED



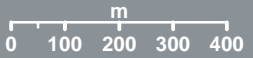
Existing and Proposed Zoning

BLUESCOPE WOODS  
RESIDENTIAL ESTATE AND  
BLUESCOPE EMPLOYMENT HUB,  
KEMBLA GRANGE

- Legend**
- Planning Proposal Boundary
  - Proposed Road Layout
  - Cadastre (NSW SS, 2019)
- Zoning - Wollongong LEP 2009 (DPE, Nov 2019)**
- B2 - Local Centre
  - E2 - Environmental Conservation
  - E3 - Environmental Management
  - IN2 - Light Industrial
  - IN3 - Heavy Industrial
  - R2 - Low Density Residential
  - R3 - Medium Density Residential
  - R5 - Large Lot Residential
  - RE1 - Public Recreation
  - RE2 - Private Recreation
  - RU2 - Rural Landscape
  - SP1 - Special Activities
  - SP2 - Infrastructure
  - W2 - Recreational Waterways

FIGURE 2 - 2

1:14,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)  
Date: 2020-06-30 | Project: 8201911101  
Coordinate System: GDA 1994 MGA Zone 56  
Map: 82019111-01-GS-044-PP-Zoning.mxd 01  
Aerial Imagery supplied by nearmap (March, 2020)



#### 2.2.1.1.2 Potential outcomes from applying Zone R2 and Zone R3:

Including both Zone R2 and Zone R3 land within the site is consistent with all statutory planning provisions and strategic plans for the site and WDURA.

Objects of the EP&A Act include:

- “(c) to promote the orderly and economic use and development of land,*
- (d) to promote the delivery and maintenance of affordable housing,”*

The ISRP goals include “a region with a variety of housing choices, with homes that meet needs and lifestyles”. Including both Zones R3 and R2 within the site optimises diversity of housing. In particular, the PP application is consistent with the Directions 2.1 and 2.2 of the ISRP which are “Provide sufficient housing supply to suit the changing demands of the region” and “Support housing opportunities close to existing services, jobs and infrastructure in the region’s centres”.

The aims of WLEP 2009 in Clause 1.2 include

- “(c) to encourage a range of housing choices consistent with the capacity of the land,”*

The Housing Principles in the DCP Chapter 16 include:

*Urban residential density distribution for:*

- > *Increased density around towns and village centres and community hubs to sustain centres*
- > *Medium densities to encourage population diversity for a vibrant community*
- > *Medium density to make public transport more viable*

Land use table provisions in the LEP are summarised below (refer Table 2-1) comparing anticipated character and density of development in Zone R2 and Zone R3. The table demonstrates it is reasonable to anticipate there will be no substantial difference in the housing forms in Zone R2 and Zone R3 potentially constructed on the site.

Table 2-1 R2 and R3 zone characteristics

Provision	Zone R2	Zone R3	Comment
Zone Objectives	<p>To provide for the housing needs of the community within a low density residential environment.</p> <p>To enable other land uses that provide facilities or services to meet the day to day needs of residents.</p>	<p>To provide for the housing needs of the community within a medium density residential environment.</p> <p>To provide a variety of housing types within a medium density residential environment.</p> <p>To enable other land uses that provide facilities or services to meet the day to day needs of residents.</p>	<p>The difference in objectives focusses on:</p> <ul style="list-style-type: none"> <li>(i) Density (see lot size below)</li> <li>(ii) Housing variety</li> </ul>
Housing forms permitted with consent in the LEP	<p>Attached dwellings</p> <p>Boarding houses</p> <p>Dual occupancies</p> <p>Dwelling houses</p> <p>Exhibition homes</p> <p>Exhibition villages</p> <p>Group homes</p> <p>Hostels</p> <p>Multi dwelling housing</p>	<p>Attached dwellings</p> <p>Backpackers' accommodation</p> <p>Boarding houses</p> <p>Dual occupancies</p> <p>Dwelling houses</p> <p>Exhibition homes</p> <p>Exhibition villages</p> <p>Group homes</p> <p>Hostels</p>	<p>The only differences in the potential diversity of permissible housing forms is the inclusion of backpacker accommodation and serviced apartments in Zone R3.</p> <p>It is extremely unlikely that backpacker accommodation and serviced apartments will</p>

	Residential flat buildings Respite day care centres Semi-detached dwellings Seniors housing Shop top housing	Multi dwelling housing Residential flat buildings Respite day care centres Semi-detached dwellings Seniors housing Serviced apartments Shop top housing	be constructed on the subject site.  Therefore the anticipated diversity of housing forms in Zone R2 and Zone R3 for the site are the same.
Minimum lot size (MLS)	449m <sup>2</sup> for the subject site compared to  449m <sup>2</sup> for Sheaffes Road North NP  And compared to  249 m <sup>2</sup> (as per Bong Bong Road / Cleveland Road residential precinct)	300m <sup>2</sup> for the subject site compared to  299 m <sup>2</sup> (as per Bong Bong Road / Cleveland Road residential precinct)	The PP seeks minimum lot sizes for residential development which are larger than those recently adopted by Council for the Bong Bong Road / Cleveland Road rezoning.  The proposed lot sizes are consistent with the lot sizes adopted for the Sheaffes Road North NP to the west of the subject site.  The subject site is between 900m and 1.2km from Darkes Town Centre. It is closer to the town centre than Sheaffes Road North NP.  Therefore the proposed density is appropriate in comparison to adopted lot sizes in WDURA and with consideration to proximity to town centres.
Floor space ratio (FSR)	0.5:1	0.75:1	Proposed FSR is consistent with the adopted FSR in WDURA Zones R2 and R3. Therefore, the scale and intensity of development will be the same as other residential areas in WDURA.
Dwellings per hectare (gross density)	Average 13 to 15	Average 20 to 25	The difference in dwellings per hectare with additional Zone R3 land will be within the anticipated range set by the Housing Principles for WDURA.  Dwelling density per hectare for the subject site must take into account land to be dedicated for the Northcliffe Drive extension and land for APZs which will reduce overall number of dwellings per hectare in



			the final development layout.
--	--	--	-------------------------------

The WDURA Housing principles recommend lot sizes and densities to reflect land capability constraints such as slope and protection of natural assets. The residential portion of the site is not constrained by slope and vegetation will be appropriately managed via vegetation management plans to achieve a net positive impact to biodiversity and ecological integrity.

The WDURA Housing principles encourage housing integrated with the street and open space areas.

Land in R2 and R3 zones has been selected based on the best means of achieving diverse and affordable housing options with efficient use of private and public space. Land immediately adjacent to future public open space areas has been nominated for Zone R3 to optimise the potential for future use of, and access to, that open space by future residents. Zone R3 land is also more appropriate than conventional low density housing lots where building footprints and vehicle access must be constrained to achieve outcomes like access-denied roads, continuity of walking and cycling paths, asset protection zones, and setbacks from busy roads. A mix of Zone R2 and Zone R3 land is also appropriate as a transition between the medium density zoned land south of Sheaffes Road and the low density residential land in Sheaffes Road North NP.

#### 2.2.1.1.3 Proposed Density Adjoining the Escarpment Lands

A Housing Principle in DCP Chapter 16 requires a transition to lower housing density towards escarpment lands to create a buffer and to protect visual impacts. Within the subject site, the residential land adjoining the escarpment is not elevated, rather the land slopes towards a creek line which is close to the edge of the escarpment land. Therefore, visual impacts are not applicable to future housing here. The spatial buffer to escarpment lands is proposed to be accommodated within the public road reserve. This allows for the outlook to escarpment lands to be shared from a public place rather than partly obscured behind private dwellings. In this case, the public road separation is a more effective buffer than a transition to lower density housing.

The site is also not indicated as a 'transitional' land use in the West Dapto Vision and Structure Plan 2018 (refer to Figure 2-3).

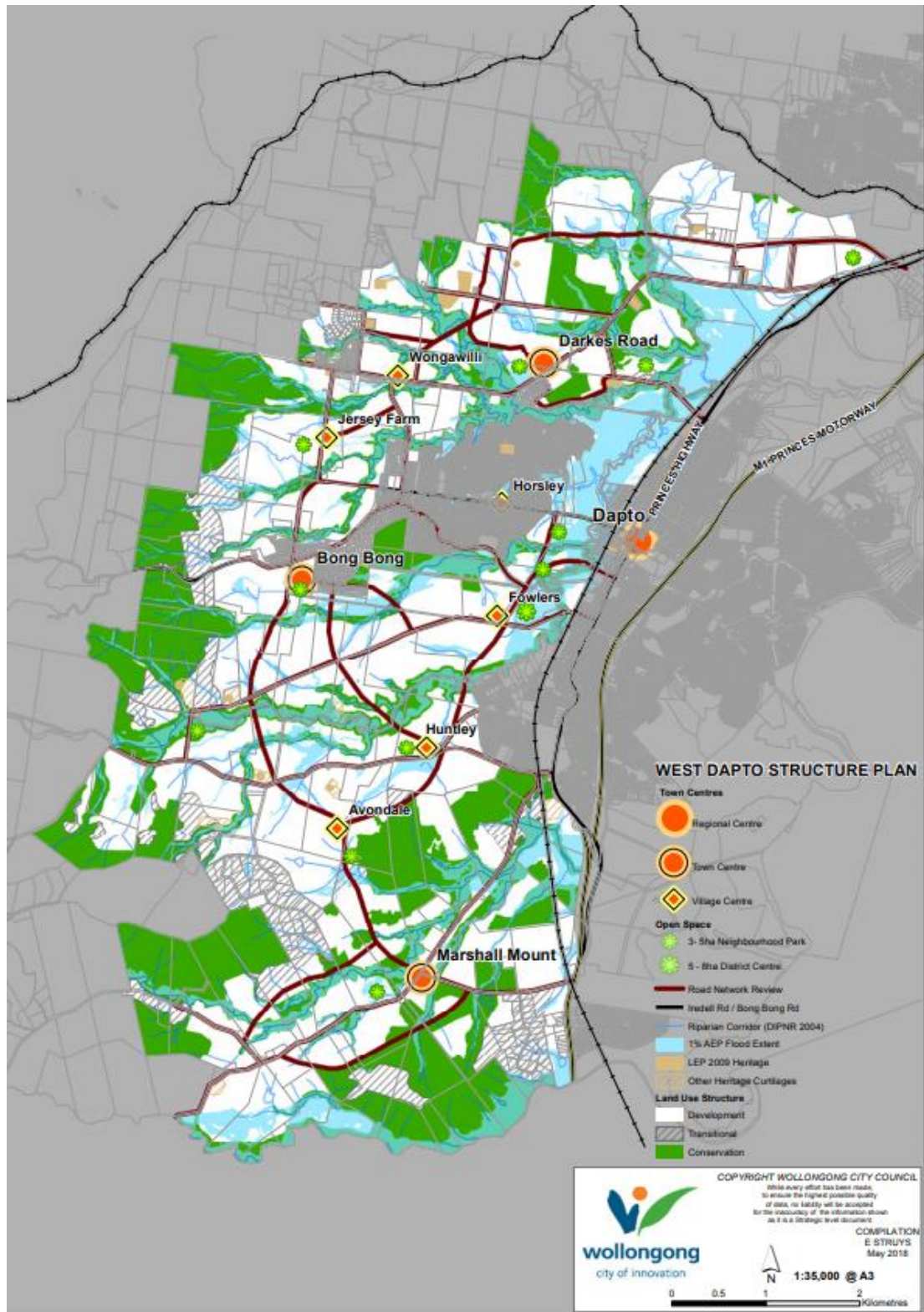


Figure 2-3 Transitional Land Use in the West Dapto Vision and Structure Plan 2018

#### 2.2.1.2 Rezoning of Zone SP2 Infrastructure corridor to Zone IN3 Heavy Industrial

The land currently zoned SP2 forms a rail corridor across Lot 2 DP 2320137 and Lot 1002 DP 1192327 that is no longer in operation as public infrastructure and is obsolete. Rezoning this corridor would enhance the future opportunity of the site to accommodate more appropriate rail, in a manner better suited to overall redevelopment for industrial purposes and future employment provision.

#### 2.2.1.3 Rezoning of Zone E3 land to Zone IN2 and Rezoning of Zone E3 land to Zone IN3

The combined outcomes of the Water Cycle Management Study (Cardno, 2020) (refer Appendix A) and the Ecological Constraints Assessment (Ecoplaning, 2020) (refer Appendix B) demonstrate an adjustment to the zone boundary is warranted to correctly delineate between land of environmental management qualities and land suitable for IN2 and IN3. This rezoning will maintain the biodiversity values of the site whilst also improving economic and employment opportunities within the region.

#### 2.2.1.4 Rezoning of Zone E3 land to Zone E2

The outcomes of the Ecological Constraints Assessment (Ecoplaning, 2020) (refer Appendix B) demonstrate adjustments to the land in Zones E3 and E2 are appropriate and improve environmental management outcomes of this area of the site.

#### 2.2.1.5 Rezoning of Zone IN2 to Zone E3

A small triangle of land currently zoned IN2 in the north-west corner of Lot 1 DP 588139 is proposed to be rezoned to Zone E3. The natural assets on the land warrant the application of Zone E3. The zoning change is also consistent with the intentions for the land to be managed in accordance with minimum lot size requirements anticipated with future subdivision.

### 2.2.2 Minimum Lot Size

All proposed land minimum lot size amendments are demonstrated in Figure 2-4.

The future subdivision of the land will create lots specific to the purposes of the land zoning. This PP seeks provisions similar to the example set by Clause 6.2A of the LEP, as the circumstances of this site and future subdivision are comparable.

The intention is to create lots where future land ownership and management responsibilities are singular in purpose, that is, residential-only, industrial-only and environmental-only lots.

Furthermore, all land in zones E2 and E3 are to be subject to either a BioBanking agreement (existing) or potential stewardship arrangement (future) which commits landowners to the implementation of a Vegetation Management Plan (VMP) registered on the title of any lots containing land in zones E2 or E3. Therefore, the future management of land in zones E2 and E3 will be an ongoing legal responsibility of landowners regardless of the lot size.

The proposed lot size for environmental zoned land is intended to match the zone boundaries of land in Zones E2 and E3 as well as the current cadastre and accounting for natural boundaries to access and maintenance due to watercourses.

The future ownership of some riparian lands and environmental protection lands is currently the subject of discussion with Council's Property Division. These discussions will be ongoing during the assessment of the PP and NP. Flexibility of minimum lot size for land in Zones E2 and E3 needs to be included for this site for these reasons. A minimum lot size map reflecting the current expected subdivision pattern has been included with this PP.

Council has supported a similar situation for the Darkes Road South West Precinct with Clause 6.2A. An additional subclause is proposed as follows (see underline):

*"6.2A Subdivision of land in West Dapto Release Area*

*(1) The size of any lot resulting from any subdivision of land in the Darkes Road South West Precinct may be less than the minimum lot size shown on the Lot Size Map in relation to that land if the lot complies with clauses 5.3.7 and 6.3.9 of Chapter D16 (West Dapto Release Area) of Wollongong Development Control Plan 2009.*

*(2) In this clause—*

***Darkes Road South West Precinct*** means the following land at Kembla Grange—

- (a) Lot 3, DP 1008723, Darkes Road,*
- (b) 105 Darkes Road, being Lot 202, DP 1192033,*
- (c) 109 Darkes Road, being Lot 1, DP 795839,*
- (d) 141 Darkes Road, being Lot 1, DP 770451,*
- (e) Lot 111, DP 718106, West Dapto Road,*
- (f) Lot 4, DP 1008723, West Dapto Road.*

(3) The size of any lot resulting from the subdivision of land in Zone E2 and Zone E3 in the BlueScope Woods Residential Precinct and the BlueScope Employment Hub Precinct may be less than the minimum lot size shown on the Lot Size Map in relation to that land if the lot has a Vegetation Management Plan registered on the title of the lot."

### **2.2.3 Floor Space Ratio**

All proposed land floor space ratio amendments are demonstrated in Figure 2-5.

The floor space ratio (FSR) map is to be amended to allow an FSR of 0.75:1 for land zoned R3.

### **2.2.4 Flood Planning Area**

Flood planning areas as mapped within the site will be altered on completion of all proposed works envisaged by the PP and NP. However, physical change to the flood planning areas will not be verified until after all site works are completed in accordance with future development applications.

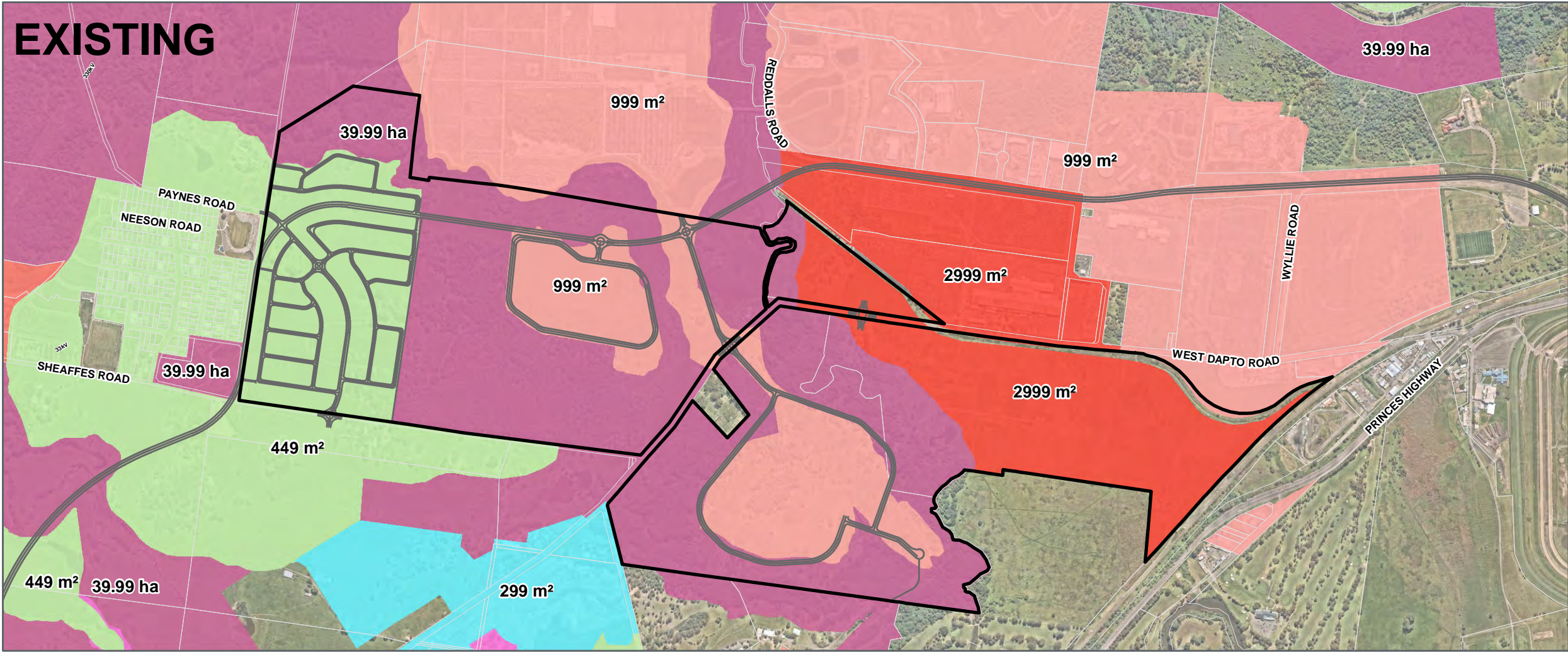
The LEP cannot be amended until works are completed. Council is to note that the mapped flood planning area will need to be adjusted if, and when, future development makes changes to flood affected land.

### **2.2.5 Natural Resource Sensitivity – Biodiversity**

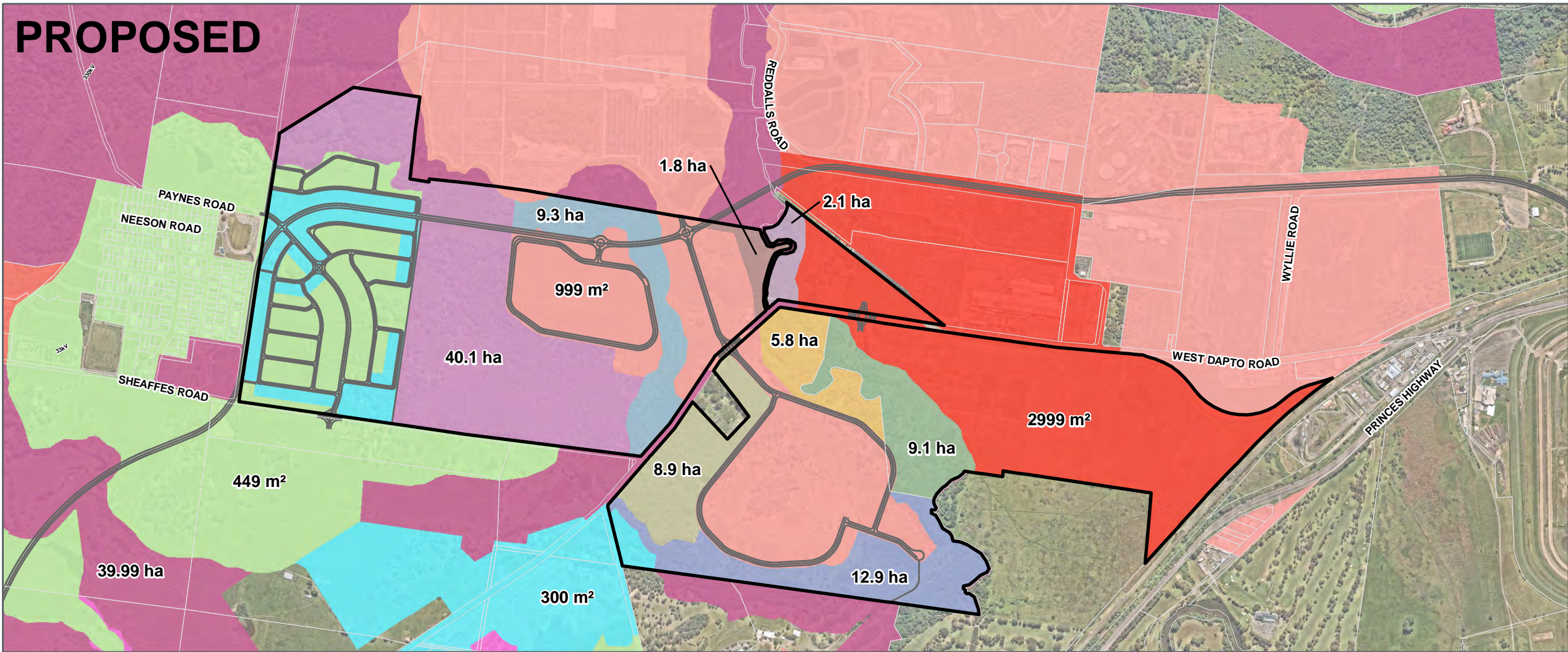
Natural Resource Sensitivity as mapped within the site may be altered during assessment of the NP and PP if desired to ensure the ecological values across the site are effectively retained and managed throughout future development applications .



EXISTING



PROPOSED



Existing and Proposed MLS

BLUESCOPE WOODS  
RESIDENTIAL ESTATE AND  
BLUESCOPE EMPLOYMENT HUB,  
KEMBLA GRANGE

Legend

- Planning Proposal Boundary
- Proposed Road Layout
- Cadastre (NSW SS, 2019)

Minimum Lot Size -  
Wollongong LEP 2009 (DPE,  
Nov 2019)

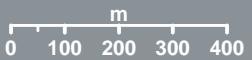
- C 300 m<sup>2</sup>
- F 449 m<sup>2</sup>
- T 999 m<sup>2</sup>
- U 1999 m<sup>2</sup>
- V 2999 m<sup>2</sup>
- AA/AA3 9.99 ha
- AB 39.99 ha

Proposed Minimum Lot Size -  
Wollongong LEP 2009 (DPE,  
Nov 2019)

- 1.8 ha
- 2.1 ha
- 5.8 ha
- 8.9 ha
- 9.1 ha
- 9.3 ha
- 12.9 ha
- 40.1 ha

FIGURE 2 - 4

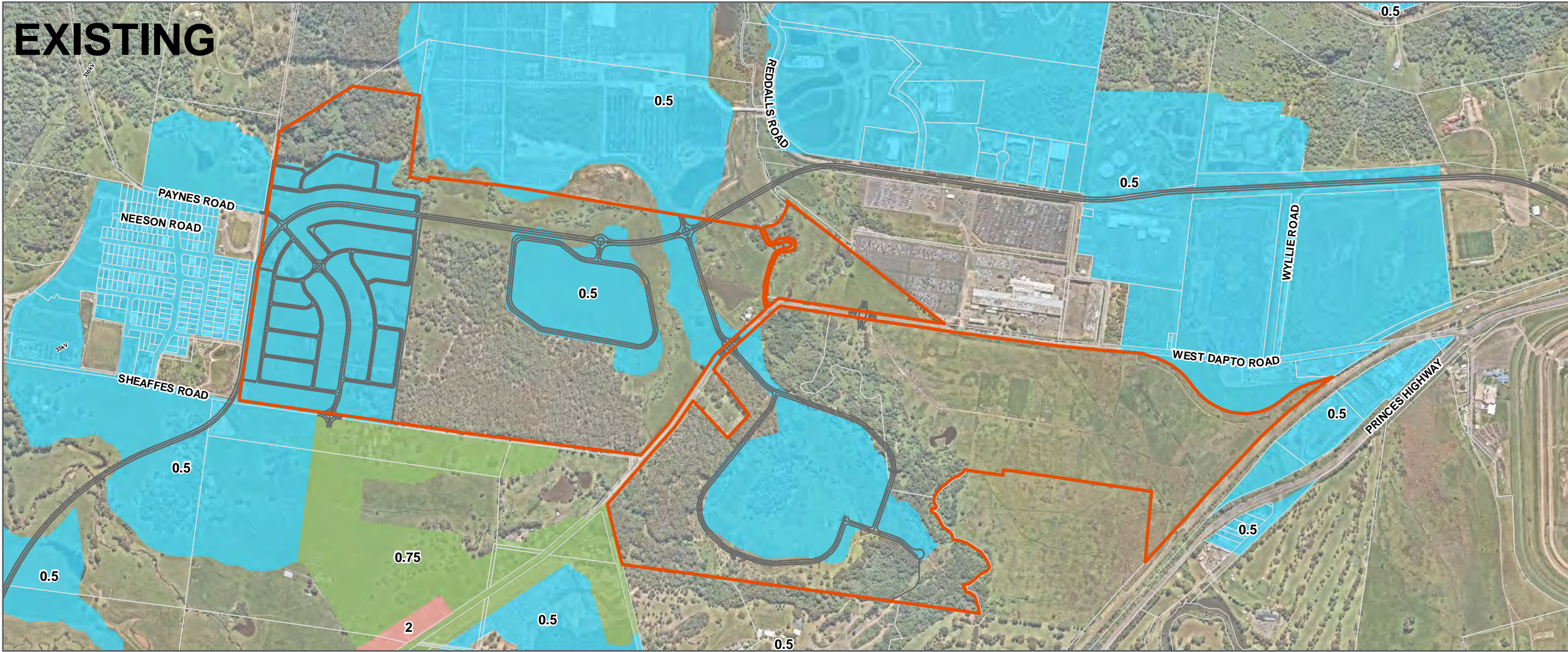
1:14,000 Scale at A3



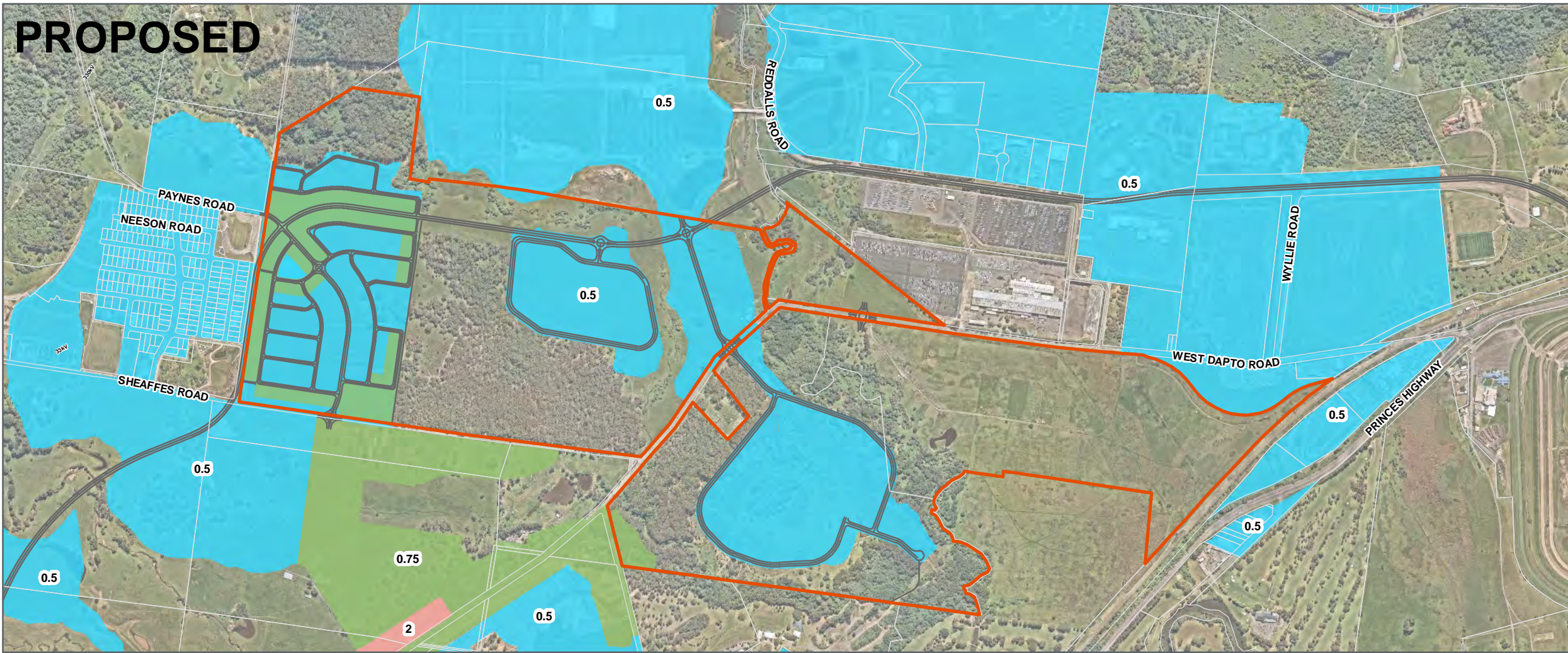
Map Produced by Cardno NSW/ACT Pty Ltd (WOL)  
Date: 2020-06-30 | Project: 8201911101  
Coordinate System: GDA 1994 MGA Zone 56  
Map: 82019111-01-GS-045-PP-MLS.mxd 01  
Aerial imagery supplied by nearmap (March, 2020)



EXISTING



PROPOSED



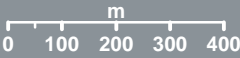
Existing and Proposed FSR

BLUESCOPE WOODS  
RESIDENTIAL ESTATE AND  
BLUESCOPE EMPLOYMENT HUB,  
KEMBLA GRANGE

- Legend**
- Planning Proposal Boundary
  - Proposed Road Layout
  - Cadastre (NSW SS, 2019)
- Floor Space Ratio (n:1) -  
Wollongong LEP 2009 (DPE,  
Nov 2019)**
- 0.5:1
  - 0.75:1
  - 2:1

FIGURE 2 - 5

1:14,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)  
Date: 2020-06-30 | Project: 8201911101  
Coordinate System: GDA 1994 MGA Zone 56  
Map: 82019111-01-GS-046-PP-FSR.mxd 01  
Aerial imagery supplied by nearmap (March, 2020)



### 3 Justification

Under Section 3.33(2) of the EP&A Act, justification for making the proposed LEP must be provided in accordance with Section 2.3 - Part 3 of 'A Guide to Preparing Planning Proposals'.

For the purposes of Gateway consideration, the overarching principles that guide the preparation of planning proposals are:

*"The level of justification should be proportionate to the impact the planning proposal will have*

*It is not necessary to address a question of this guide if it is not considered relevant to the planning proposal. In such cases the reason why it is not relevant should be briefly explained, and*

*The level of justification should be sufficient to allow a Gateway determination to be made with the confidence that the LEP can be finalised within the time-frame proposed."*

The questions to consider when demonstrating the justification in accordance with the Guide have been addressed under the relevant headings outlined below.

Overall the changes proposed to zone boundaries, lot size, introduction of land in Zone R3 and adjustments to biodiversity mapping cannot be achieved by any other mechanism than a PP.

#### 3.1 Section A – Need for Planning Proposal

**Is the planning proposal a result of an endorsed local strategic planning statement, strategic study or report?**

The PP as it applies to the extent of the site is not a direct result of a strategic study or report. It is, however, informed by the West Dapto Vision and Structure Plan 2018 as the vision for the WDURA supported by a range of Planning Principles intended to guide land use planning decisions within the area.

The vision for the West Dapto URA is Council policy and is required to be considered by all planning decisions in relation to the growing West Dapto URA. The vision for the West Dapto URA is as follows:

*"West Dapto will grow and develop as a series of integrated and connect communities. Set against the spectacular Illawarra Escarpment and a landscape of riparian valleys, these communities will integrate the natural and cultural heritage of the area with the new urban form.*

*The communities will be healthy, sustainable and resilient with active and passive open space accessible by walkways, cycleways and public transport. To support these new communities, local centres will provide shopping services, community services and jobs while employment lands will facilitate further opportunities for the region.*

*West Dapto will be supported by a long-term strategy to oversee the timely implementation of infrastructure to deliver sustainable and high-quality suburbs with diverse housing choices."*

The vision is supported by a range of Planning Principles intended to guide land use planning decisions associated with the URA.

Discussions throughout this report indicate compliance with the relevant provisions of various adopted strategies.

The Wollongong Local Strategic Planning Statement (LSPS) was adopted by Council at its Ordinary meeting of 29 June 2020. The LSPS has six themes being:

1. Jobs and Economic growth
2. Housing for All
3. Inclusive and connected communities
4. Climate Action and Resilience
5. Protect the Natural Environment
6. Enabling Infrastructure and Transport.



### **Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?**

The PP is the only way of achieving the objective and intended outcomes. The amendments to zoning, floor space ratio, and minimum lot size of the site can only be achieved by amending the LEP.

The LEP amendments are informed by specialist studies commissioned by the land owner. Therefore, the changes to the LEP would not be initiated by Council.

## **3.2 Section B – Relationship to Strategic Planning Framework**

### **Will the planning proposal give effect to the objectives and actions of the applicable regional, or district plan or strategy (including any exhibited draft plans or strategies)?**

The ISRP was released in 2015 and provides the strategic framework for future growth in the Region over the next 20 years. The subject site is located within the West Lake Illawarra “Regionally Significant Release Area” which will contribute an estimated 37,600 new lots when fully zoned and developed. The PP and NP are the first steps in facilitating the development of the site, with the estimated 368 residential lots and numerous industrial lots proposed directly supporting the strategic directions within the Regional Plan across housing, industry and employment.

The PP and NP are underpinned by sustainable urban design principles that ensure natural corridors and watercourses are retained and enhanced, walkways and cycleways are provided and a diversity of housing products will be provided, including higher densities in high amenity areas in close proximity to the neighbourhood centre, public transport routes and public open space.

Overall, the PP and accompanying NP are considered consistent with the strategic objectives of the Regional Plan.

### **Will the planning proposal give effect to a Council’s endorsed local strategic planning statement, or another endorsed local strategy or strategic plan?**

#### Community Strategic Plan

The Community Strategic Plan – *Wollongong 2022* outlines the priorities and aspirations of the community and identifies Council’s future directions for providing key projects and services. This PP is well aligned with Wollongong 2022 goals as follows:

*“W1. We value and protect our environment*

*1.1 The natural environment is protected and enhanced.*

*1.2 Our coastal areas and waterways are protected and enhanced.*

*1.3 Wollongong’s ecological footprint is reduced.*

*1.4 Community awareness and appreciation of heritage is increased.*

*1.5 Local food production and community food initiatives are supported.*

*1.6 The sustainability of our urban environment is improved.”*

This PP will facilitate:

- > Protection of vegetation and riparian areas of ecological significance including binding vegetation management to land ownership into the future
- > Reduce and manage the impacts of flooding to optimise the safe and productive use of land for employment, infrastructure and residential uses
- > Create interfaces with environmental lands using the public road layout to optimise views of, and in some cases access to, environmental lands that are equitable from public spaces
- > Commits to a layout and public infrastructure which includes walkability.

*“W5. We are a healthy community in a liveable space*

*5.1 There is an increase in the physical fitness, mental health and emotional wellbeing of all our residents.*

*5.2 Residents have improved access to a range of affordable housing options*

*5.3 The public domain is maintained to a high standard*

5.4 Community safety is improved

5.5 Participation in recreational and lifestyle activities is increased

5.6 Residents have a high level of life satisfaction and personal happiness.”

The PP promotes diversity in housing choice including medium density land for increased supply and more affordable housing forms on land in Zone R3.

“W6. We have sustainable affordable and accessible transport.

6.1 Walking, cycling and public transport is an accessible and well-resourced means of transport, and the use of private cars is reduced.

6.2 Wollongong is supported by an integrated transport system.

6.3 Transport disadvantaged communities have increased access to services.”

Shared pathways and bus routes can all be accommodated.

#### Wollongong Council Draft Housing and Affordable Housing Options Paper

This draft study is currently on public exhibition until 10 July 2020. The PP is consistent with the aims and principles of the strategy as summarised below.

Table 3-1 Wollongong Council Draft Housing and Affordable Housing Options Paper Assessment

Subject	Options Paper Extracts	Relevance to the PP
<b>Medium Density housing</b>	78% of the housing in medium density zones is single dwelling housing and not the desired medium density form. Overall the established medium density zoned lands are far from capacity	Planning for medium density housing to be delivered from Day 1 in greenfield sites requires LEP controls that readily facilitate medium density construction. The proposed inclusion of Zone R3 land encourages medium density development on suitable sites.
	As part of the draft West Dapto LEP (2008), Council proposed both minimum and maximum density standards through floor space ratios to discourage medium density land being subdivided into standard lots. This maximum density provision was not supported by the (then) Department of Planning as it did not comply with the standard LEP instrument.	The PP is consistent with the density ranges proposed in Ch.16 to the DCP.
	WLEP (2009) defines 13 precincts for medium density residential development. These areas are located in Helensburgh, Thirroul, Bulli, Woonona, Corimal, Fairy Meadow, Coniston, Unanderra, Kembla Grange, Dapto, Huntley, Avondale and Warrawong.	The PP is consistent with this intention to deliver medium density housing in Kembla Grange and in close proximity to the Darkes Town Centre
	Medium density zoned land is generally located closer to services, facilities and infrastructure, with access to transport and on less constrained land e.g. minimal or no flood hazard. Some are of the West Dapto Release Area are zoned for medium density but are yet to be developed.	Land proposed for Zone R3 is adjacent to the collector roads for access to shared pathways and future bus routes and are not constrained by flooding or steep slope.
	Preliminary review of land and environmental constraints throughout Wollongong LGA indicated there is opportunity to expand medium density zoned land. This may include expansion of existing medium zoned precincts or the	The PP is consistent with this aim

	creation of new medium density zoned land where there is currently low-density zoned land.	
	Wollongong Council have indicated one of their options in increasing housing diversity is to expand R3 Medium Density zones.	The PP is consistent with this aim
<b>West Dapto – Dwelling Targets, Housing Types</b>	Wollongong LGA has a number of new urban release areas under assessment or in progress. These include West Dapto, Tallawarra lands and a small portion of land in Calderwood. These areas are expected to provide large quantities of single dwelling houses and smaller amounts of dual occupancies, townhouses, villas and terrace housing.	These housing forms have been the focus of the concept layout considered in preparing the PP and NP.
	West Dapto Urban Release Area is expected to provide a high concentration of new single dwellings, and a smaller proportion of dual occupancies, townhouses, villas and apartments for residents.	The mix of dwelling types is anticipated for the subject site and has been considered in the concept layout to date
	As part of a recent Planning Proposal for part of Stage 3 in West Dapto, Council permitted a minimum lot size of 249m <sup>2</sup> which will enable the developer to provide a range of housing products from small to large lots.	This PP proposes minimum lot sizes of 449m <sup>2</sup> for Zone R2 and 300m <sup>2</sup> for Zone R3 which will also allow for housing diversity. In comparison to these lot sizes recently approved for the Bong Bong Road / Cleveland Road site – the subject site in part is a similar distance to a future town centre and also benefits from close proximity to protected environmental lands. The proposed density is not as high as that recently approved for Bong Bong Road / Cleveland Road NP.
	Introduce code based controls in R3 Medium Density zoned land, within walking distance of town and village centres and in within urban release areas - This approach enables urban release areas such as West Dapto, to have infrastructure planned to cater for housing supply. This approach will diversify approval pathways for low rise medium density housing in urban release areas, and contribute to the character of these newly established suburbs.	Code based controls would be appropriate for the subject site

### Illawarra Escarpment Strategic Management Plan

Illawarra Escarpment Strategic Management Plan (WCC, 2015) establishes a vision for the Escarpment as follows:

*“The Illawarra Escarpment is an outstanding feature of the Illawarra region providing a natural backdrop to the city as well as encompassing areas of high conservation value and rich cultural heritage. The long term vision for this area is for these values to be preserved and enhanced through public reserve or private stewardship.”*

The objectives of the Plan are as follows:

*“1. Identify the environmental, cultural and economic values of the escarpment and foothills requiring conservation*



2 Define the principles and strategic direction for protecting and enhancing escarpment values.

3 Outline an action plan for Council to improve escarpment management.”

The site contains escarpment land and the ecological integrity of this land will be permanently protected by defining the interface with residential land by a public road.

#### Illawarra Biodiversity Strategy

The Illawarra Biodiversity Strategy is a joint commitment by Kiama Municipal Council, Shellharbour City Council and Wollongong City Council to set biodiversity targets and objectives for biodiversity conservation. The PP is consistent with the Strategy objectives and targets. The site includes bio banked land and long-term protection for land proposed in Zones E2 and E3 subject to specific vegetation management commitments for future landowners.

The ECA has identified the presence of vegetation communities and habitats on the site and the future integrity and management of this vegetation has been taken into consideration in the proposed layout of land use zones, infrastructure and earthworks for flood management.

#### Urban Greening Strategy 2017 – 2037 (WCC 2017)

The Urban Greening Strategy 2017-2037 was adopted by Council on 11 December 2017. It aims to increase the quality and quantity of vegetation on urban land. The Strategy identifies the following principles

- > More strategic and targeted urban greening
- > Evidence-based decision making and programming
- > Enhanced amenity of public spaces
- > Maximisation of ecosystem services and biodiversity connections
- > Stronger leadership and partnerships with the community
- > Greater diversity of urban greening.

The PP is aligned with the Strategy. It represents the potential to:

- > enhance and maintain connectivity of the riparian corridors incorporating bio banked land
- > Retain vegetation of ecological and heritage significance
- > Prioritise street continuity along collector roads to optimise pedestrian and bicycle path and street tree planting.

#### **Is the planning proposal consistent with applicable State Environmental Planning Policies?**

There are three (3) relevant State Environmental Planning Policies (SEPPs) applicable to the future development of the land, as discussed in Section 1.3.6.

#### **Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?**

Section 9.1 Direction	Consistency	Comment
<b>Employment and Resources</b>		
1.1 Business and Industrial Zones		<p>The PP is consistent with the objectives of Direction 1.1.</p> <p>It is proposed to increase land in Zones IN2 and IN3 is informed by site specific flood modelling and review of ecological constraints as well as improvements in safe construction and maintenance opportunities for new roads.</p> <p>The rezoning of land in Zone SP2 is based on increasing the diversity of potential private use of the rail line. This would increase the total potential floor space for the purposes of light and heavy industry within the site,</p>

		increase diversity of use of the rail land, increase the opportunities for new development prospects from the site and directly contribute to employment targets for the designated employment lands consistent with the West Dapto Vision 2018.
1.2 Rural Zones	N/A	This direction does not apply as the planning proposal does not affect land within an existing or proposed rural zone.
1.3 Mining, Petroleum Production and Extractive Industries	N/A	This direction does not apply as the planning proposal does not affect land containing mining, petroleum production and extractive industries.
1.4 Oyster Aquaculture	N/A	This direction does not apply as the planning proposal does not affect land impacted by oyster aquaculture nor is it detrimental to the operation of oyster aquaculture.
1.5 Rural Lands	N/A	This direction does not apply to the Wollongong LGA.
<b>Environment and Heritage</b>		
2.1 Environment Protection Zones		<p>The PP seeks to rezone a portion of land in Zone E3 on Lot 1 DP 588139 and Lot 1 DP 588140 to Zone IN2. This change is based on the combined outcomes of the Water Cycle Management Study (Cardno, 2020) (refer Appendix A) and the Ecological Constraints Assessment (Ecoplaning, 2020) (refer Appendix B). The total developable area within the proposed NP was determined to impact on 124.21 ha of land, of which 22.98 ha comprise native vegetation.</p> <p>The existing Biobank agreement maintains 39.03 ha of native vegetation, with 31.55 ha of Woollybutt - White Stringybark - Forest Red Gum grassy woodland on coastal lowlands (listed threatened ecological communities (TEC) as Illawarra Lowlands Grassy Woodland in the Sydney Basin Bioregion under the BC Act and Illawarra and South Coast Lowland Forest and Woodland under the EPBC Act) and 7.48 ha of Sydney Blue Gum x Bangalay – Lilly Pilly Moist Forest in gullies and on sheltered slopes. An additional 48.51 ha has been identified as potential to be a future stewardship site and is contained within the remaining E3 and E2 zoning across the site. An 'up-zoning' of a portion of land from E2 to E2 is also proposed in Lot 1 DP 588140 to the south of the cemetery.</p> <p>The MLS of the across the site is proposed be amended to allow the future subdivision of the land for ecological purposes, and for the practical implementation of the Biobank</p>



	<p>agreement on Lot 1 DP 588139 (and for future potential stewardship arrangements) in a manner consistent with the objectives and expectations of Council and DPIE for the purposes of conservation and management.</p> <p>Hence, the PP will not reduce the environment protection standards that apply to the land or the reduction of environmentally sensitive areas across the site, but aims to improve future management of the site by permitting the practical subdivision of ecologically valuable land.</p> <p>An Ecological Constraints Assessment (ECA) has been prepared for the site (Ecoplanning, 2020) to inform the PP and NP and assesses the potential impacts of this PP and NP.</p> <p>Based on the above reasons and evidence, the PP is not inconsistent with the objectives of Direction 2.1.</p>
2.2 Coastal Management	<p>The Coastal Management SEPP covers a portion of land within Zone IN3 in the eastern portion of the site, with both coastal environment area and coastal use area occurring. Any future development application for land covered by this SEPP must satisfy the consent authority as to the impacts caused by the proposed development in relation to coastal processes.</p> <p>Specifically water management processes and vegetation management for the site will have beneficial impacts to water quality and water quantity consistent with improvements to the environmental assets of the coastal zone and delivery of sustainable urban land uses.</p>
2.3 Heritage Conservation	<p>The proposal is consistent with Direction 2.3 in that it will preserve and enhance items of heritage significance.</p> <p>To support the NP and PP process, Biosis Pty Ltd (Biosis) prepared an Aboriginal Cultural Heritage Assessment (ACHA), an Archaeological Report (AR) (REFER Appendix E) and a Statement of Heritage Impact (SoHI) (refer Appendix H) for the site.</p> <p><u>Aboriginal Heritage</u></p> <p>A field investigation consisting of an archaeological survey identified seven existing registered Aboriginal cultural heritage sites (AHIMS) and two new sites. Of the existing AHIMS sites, 3 were found to have low significance and 2 were found to have moderate significance. An attempt was made to relocate the existing AHIMS sites across the site, however this proved unsuccessful due to visibility issues. During the</p>

		<p>investigation, 11 areas of archaeological sensitivity were also identified.</p> <p>It is recommended that any future development applications for the site comply with the recommendations made within Section 7 of the ACHA and AR (Biosis, 2019) (Appendix X); including, but not limited to, the avoidance of areas of high archaeological potential where possible, obtaining a s139 exemption for excavation near the crest landform in the western portion of the site, and the incorporation of unexpected find protocols into any future Construction Environmental Management Plan (CEMP).</p> <p><u>European Heritage</u></p> <p>A field investigation consisting of a historical heritage assessment identified a number of historical sites across the site, with the following identified as the items of primary significant heritage value:</p> <ul style="list-style-type: none"> <li>&gt; Two heritage items, including Group of Bunya Pines, Moreton Bay Figs and Hills Figs (Local Item no. 6326) and Moreton Bay Fig (Local Item no. 6329)</li> <li>&gt; Five areas of archaeological potential related to Clarke's huts and stockyard, McGhee's hut, the Travellers Inn on the West Dapto Road, Barrett's house including an outbuilding and circular driveway, and a cottage and outbuilding in close proximity to the locally listed Moreton Bay Fig.</li> </ul> <p>The NP has been designed to conserve Item no. 6326 in a 'pocket park' within the residential precinct, creating a unique open space for the community and for the broader West Dapto area. Item no. 6329 occurs within E2 zoned land, and is not proposed for any future development.</p> <p>It is recommended that any future development applications for the site comply with the recommendations made within Section 7.2 of the SoHI (Biosis, 2019) (Appendix H); including, but not limited to, additional archaeological investigation for areas of high potential (s140 approval), obtaining a s139 exemption for excavation near the location of Clarke's hut in Lot 1 DP 588139, and the inclusion of heritage interpretation in detail the historical relevance on the site and adjacent heritage values.</p>
2.4 Recreation Vehicle Areas	N/A	This direction does not apply as the planning proposal is not located within a Recreational Vehicle area.



2.5 Application of E2 and E3 Zones and Environmental Overlays in Far North Coast LEPs	N/A	This direction does not apply as the planning proposal is not located at the Far North Coast of NSW.
2.6 Remediation of Contaminated Land	Yes	<p>The PP is consistent with Direction 2.6.</p> <p>Two (2) PSI reports (refer Appendix G) for the site have identified the presence of Potential Areas of Environmental Concern. A DSI is being prepared for the future residential subdivision to determine the nature and extent of specific contaminants.</p> <p>The need to remediate the land and potential implementation of a RAP will be resolved during the assessment and prior to the public exhibition of the PP. It is acknowledged the suitability of the land for the proposed uses must be demonstrated prior to a decision to change land use zones if that change could potentially expose humans and the environment to risks of harm.</p>
<b>Housing, Infrastructure and Urban Development</b>		
3.1 Residential Zones	Yes	<p>The Proposal is consistent with Direction 3.1.</p> <p>The proposal meets the objectives of the Direction which are:</p> <p><i>(a) to encourage a variety and choice of housing types to provide for existing and future housing needs,</i></p> <p><i>(b) to make efficient use of existing infrastructure and services and ensure that new housing has appropriate access to infrastructure and services, and</i></p> <p><i>(c) to minimise the impact of residential development on the environment and resource lands</i></p> <p>Specifically, the proposal seeks to:</p> <ul style="list-style-type: none"> <li>&gt; Broaden the choice of building types by including areas of land in Zone R3</li> <li>&gt; Increase residential densities to optimize efficient use of infrastructure and enhance the streetscape of some roads for prioritised pedestrian and cyclist movement</li> </ul> <p>The proposal seeks to increase the density of residential zoned land to make best use of land suitable to accommodate a range of housing forms.</p>
3.2 Caravan Parks and Manufactured Home Estates	N/A	This direction does not apply as the planning proposal is not impacted by Caravan Parks or Manufactured Home Estates and does not reduce the land available for these uses.

3.3 Home Occupations	N/A	This direction does not apply as the planning proposal does not change the LEP provisions for Home Occupations.
3.4 Integrating Land Use and Transport	Yes	<p>A Traffic Impact Assessment (TIA) (Cardno, 2020) (Appendix C) has been prepared as part of the NP and PP process for the site. The PP is consistent with the objectives of Direction 3.4 for the following reasons:</p> <p><u>Public Transport</u></p> <ul style="list-style-type: none"> <li>&gt; The current public transport network for Kembla Grange is very limited. There is a train station located near the T-Junction of West Dapto Road and bus stops along Princes Highway are within the station vicinity. The remaining area of Kembla Grange has no bus stops currently available, largely due to the lack of residential density in the area at the present time.</li> <li>&gt; Future residential and industrial developments in West Dapto/Kembla Grange will need to integrate with the existing public and active transport network before functioning with the full public and active transport network envisaged within the WDURA.</li> <li>&gt; For the interim (i.e. without the Northcliffe Drive Extension), connectivity to bus routes 31 (Wollongong to Horsley) and/or 32 (Dapto to Brooks Reach) to service the residential and employment lands is favoured. To facilitate interim connection to the existing bus network, it is likely that bus stops on West Dapto Road and Sheaffes Road will be required to provide safe access.</li> <li>&gt; Under the NP, the bus corridor is most likely going to favour the Northcliffe Drive Extension with additional routes via Road 1 a potential consideration (subject to the road cross section supporting bus movements through the residential precinct).</li> </ul> <p>Overall, the West Dapto Urban Release Area anticipates 19,000 new dwellings to be integrated into the future transport strategy. Car based, public and active transport links to regional centres (i.e. Dapto) and the Satellite city of Wollongong will be achieved through Council's contributions plan which allocates road network improvements to support all transport modes. The proposed associated NP will be keeping with the development requirements set by Council to facilitate the strategic transport requirements.</p> <p><u>Access and Travel Demand</u></p>



		<ul style="list-style-type: none"> <li>&gt; The NP is forecast to generate 695 peak hour vehicles.</li> <li>&gt; SIDRA results indicate that all of the intersections assessed are forecast to operate at a satisfactory level of service of LoS "B" or better, with minimal delays and queueing in both of the AM and PM peak periods. This indicates that these intersections have considerable spare capacity in each of the AM and PM peak periods.</li> <li>&gt; Under the associated NP layout, the bus corridor is most likely going to favour the Northcliffe Drive Extension with additional routes via Road 1 a potential consideration (subject to the road cross section supporting bus movements through the residential precinct) and will provide a key public transport option for residents.</li> <li>&gt; Improvements to the active transport network will be facilitated via shared paths along Northcliffe Drive extension and West Dapto Road, promoting connection between housing and employment opportunities.</li> </ul> <p>In summary, the proposed NP and PP has been shown to have minimal impact on the future road network within the WDURA and will be able to be readily integrated into strategic transport requirements for the area.</p>
3.5 Development Near Regulated Airports and Defence Airfields	N/A	This direction does not apply as the planning proposal is not located near a regulated airport which includes a defence airfield.
3.6 Shooting Ranges	N/A	This direction does not apply as the planning proposal is not located near any shooting ranges.
3.7 Reduction in non-hosted short term rental accommodation period	N/A	This direction does not apply as the planning proposal is not within the relevant location.
<b>Hazard and Risk</b>		
4.1 Acid Sulphate Soils		<p>The proposal is consistent with Direction 4.1. It does not propose to change the current adequate provisions for Acid sulfate soil (ASS).</p> <p>LEP mapping indicates that the broader site contains Class 3, 4 and 5 soils, focused towards the east within 261 West Dapto Road with the majority of 84 Sheaffes Road free of ASS.</p> <p>Any future proposed ground disturbance at the site should consider the risks of encountering ASS, even outside of the</p>

		mapped area, and an Acid Sulfate Soils Management Plan will be required to mitigate environmental risks associated with ASS in areas mapped as Class 3, 4 and 5.
4.2 Mine Subsidence and Unstable Land	N/A	This direction does not apply as the planning proposal is not within a mine subsidence or unstable land area.
4.3 Flood Prone Land		<p>The site is located on flood prone land (FPL). The proposal is consistent with Direction 4.3 because it:</p> <ul style="list-style-type: none"> <li>&gt; Meets the objectives of the direction to:               <ul style="list-style-type: none"> <li>(a) ensure that development of flood prone land is consistent with the NSW Government's Flood Prone Land Policy and the principles of the Floodplain Development Manual 2005, and</li> <li>(b) notes the provisions of the LEP for flood prone land will need to be updated commensurate with flood hazard and includes consideration of the potential flood impacts both on and off the subject land once works have been resolved to manage flood water in the manner proposed by the Water Cycle Management Study (Cardno, 2020) (refer Appendix A).</li> </ul> </li> <li>&gt; Does not propose additional development of land in a manner any different from the current LEP provisions – instead proposing methods to change the way in which flood waters behave within the site to best optimize future land use.</li> <li>&gt; Does not require additional government spending for flood mitigation measures, infrastructure or services.</li> <li>&gt; Identifies flood planning levels consistent with the <i>Floodplain Development Manual 2005</i> (including the Guideline on Development Controls on Low Flood Risk Areas).</li> </ul>
4.4 Planning for Bushfire Protection		<p>The proposal is consistent with Direction 4.4 to the extent that can be determined at this time.</p> <p>The PP is anticipated to be referred to the Commissioner NSW RFS following Gateway determination.</p> <p>Parts of the site are Bush Fire Prone Land Vegetation Category 1 and Vegetation Buffer.</p> <p>A Bushfire Assessment report has been prepared by Peterson Bushfire (2020) (refer Appendix D) to ensure the site, with regards to the residential and industrial lots, is compliant with relevant bushfire legislation</p>



		and best practice design guidelines. Fire trail and asset protection design requirements have been factored into the NP conceptual layout and recommended zone boundaries and infrastructure requirements.
<b>Regional Planning</b>		
5.1 Implementation of Regional Strategies	N/A	The proposal is consistent with the vision, land use strategies, policies and actions of the South Coast Regional Strategy as explained in Section 3.2 above.
5.2 Sydney Drinking Water Catchments	N/A	This direction does not apply as the planning proposal is not within a Sydney Drinking Water Catchment.
5.3 Farmland of State and regional Significance on the NSW Far North Coast	N/A	This direction does not apply as the planning proposal is not within significant farmland in the stated locality.
5.4 Commercial and Retail Development along the Pacific Highway, North Coast	N/A	This direction does not apply as the planning proposal is not within a relevant location.
5.9 North West Rail Link Corridor Strategy	N/A	This direction does not apply as the planning proposal is not within a relevant location.
5.10 Implementation of Regional Plans		<p>The Illawarra-Shoalhaven Regional Plan 2036 applies. The PP is consistent with the objectives of Direction 5.10 for the following reasons:</p> <ul style="list-style-type: none"> <li>&gt; The subject site is located within the West Lake Illawarra “Regionally Significant Release Area” which will contribute up to 37,600 new lots when fully zoned and developed. The PP and NP are the first steps in facilitating the full development potential of the site, with increased residential density being introduced and additional IN3 land proposed directly supporting the strategic directions within the Regional Plan across housing, industry and employment.</li> <li>&gt; The PP and NP process is underpinned by sustainable urban design principles that ensure natural corridors and watercourses are retained and enhanced, walkways and cycleways are provided and a diversity of housing products will be provided, including higher densities in high amenity areas in close proximity to the neighbourhood centre, public transport routes and public open space.</li> </ul> <p>Overall, the PP is considered consistent with the strategic objectives of the Regional Plan.</p>
5.11 Development of Aboriginal land Council land		This direction does not apply as the planning proposal is not within a relevant location.

Local Plan Making		
6.1 Approval and Referral Requirements	Yes	The PP is consistent with Direction 6.1 because it does not introduce additional concurrence or referral requirements.
6.2 Reserving Land for Public Purposes	N/A	This direction does not apply as the PP does not impact land that is reserved for Public Purpose.
6.3 Site Specific Provisions	Yes	<p>The objective of the direction is to discourage unnecessarily restrictive site-specific planning controls.</p> <p>The PP uses existing zoning and land use controls in the LEP.</p> <p>The PP is accompanied by a NP which is consistent with the adopted plans and strategies of Council and considers infrastructure requirements, environmental protection provisions and connections and interfaces with adjoining land in the WDURA.</p> <p>Hence, the PP is not inconsistent with the objective of the direction as it will not introduce restrictive site-specific planning controls or impose any development standards or requirements in addition to those already existing in the LEP.</p>
Metropolitan Planning		
7.1 Implementation of A Metropolis of Three Cities	N/A	This direction does not apply as the planning proposal is not within the relevant Local Government Areas.
7.2 Implementation of Greater Macarthur Land Release Investigation	N/A	This direction does not apply as the planning proposal is not within the relevant Local Government Areas.
7.3 Parramatta Road Corridor Urban Transformation Strategy	N/A	This direction does not apply as the planning proposal is not within the relevant Local Government Areas.
7.4 Implementation of North West Priority Growth Area Land Use and Infrastructure Implementation Plan	N/A	This direction does not apply as the planning proposal is not within the North West Priority Growth Area.
7.5 Implementation of Greater Parramatta Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	N/A	This direction does not apply as the planning proposal is not within the Greater Parramatta Priority Growth Area.
7.6 Implementation of Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	N/A	This direction does not apply as the planning proposal is not within the Wilton Priority Growth Area.
7.7 Implementation of Glenfield to Macarthur Urban Renewal Corridor	N/A	This direction does not apply as the planning proposal is not within the Glenfield to Macarthur Urban Renewal Corridor.



7.8 Implementation of Western Sydney Aerotropolis Interim Land Use and Infrastructure Implementation Plan	N/A	This direction does not apply as the planning proposal is not within the relevant Local Government Areas.
7.9 Implementation of Bayside West Precincts 2036 Plan	N/A	This direction does not apply as the planning proposal is not within the Bayside Local Government Area.
7.10 Implementation of Planning Principles for the Cooks Cove Precinct	N/A	This direction does not apply as the planning proposal is not within the Cooks Cove Precinct.

Evidenced by this assessment, it is considered that the PP is consistent with all relevant Ministerial Directions issued under Section 9.1(2) of the EP&A Act to the extent that can be established at this time.

### 3.3 Section C - Environmental, Social and Economic Impacts

**Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?**

An Ecological Constraints Assessment (ECA) has been prepared for the site (Ecoplanning, 2020) that assesses the presence of listed species under the *Biodiversity Conservation Act 2016* (BC Act) and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The full report is contained in Appendix B and is discussed in Section 1.4.1.

**Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?**

#### Contamination

Two Preliminary Site Investigations (PSIs) have been undertaken for the site to inform contamination matters on site (refer Appendix G for full reports and Section 1.4.7 for discussion). A Detailed Site Investigation (DSI) and Remedial Action Plan (RAP) are currently being prepared for Lot 1 DP 588139 to inform a future residential subdivision DA.

#### Heritage

Biosis completed an Aboriginal Cultural Heritage Assessment (ACHA), an Archaeological Report (AR) and a Statement of Heritage Impact (SoHI) to inform the existing heritage environment and likely impacts due to the Neighbourhood Plan and future development applications (refer to Appendices E and H for full reports and Sections 1.4.3 and 1.4.4 for summaries of the findings).

#### Bushfire

The Bushfire Assessment (Peterson Bushfire, 2020) (Appendix D) concludes that the proposed road layout has adequate access (refer Section 1.4.2 for additional discussion).

**Has the planning proposal adequately addressed any social and economic effects?**

#### Social benefits

The PP is considered appropriate in context of the WDURA and surrounding developments, including the future Darkes Road Town Centre. The increase in housing yield and diversity as a result of the introduction of R3 to the existing residential zoned land in Lot 1 DP 588139 is unlikely to place significant pressure on existing and planned community facilities within the LGA.

Specific social benefits arising from an increase in residential density in this area include the proximity to the Biobank site and other environmental lands, which would provide ample open space for recreation and well-being, and active transport opportunities to the employment hub within the site. The increase in IN2 and IN3 zoned land would also increase employment opportunities for the local area by increasing the developable industrial land available within a flood constrained environment.

The NP and PP would also provide for increased public access to local open space via shared pathways and local roads, specifically the Biobank reserve and potential future stewardship sites.

The proposal is likely to provide a positive impact for the community as it offers greater housing choice and diversity to meet the anticipated population growth of the Wollongong LGA on a site that has specific qualities that maximise these benefits, such as the future NDE and Darkes Road Town Centre.

### Economic benefits

The PP will provide additional housing and choice in a location with good access to nearby major employment, strategic and local centres; while also increasing the availability of employment across the site by increasing developable industrial land space.

## **3.4 Section D - State and Commonwealth Interests**

### **Is there adequate public infrastructure for the planning proposal?**

It is not anticipated that the proposal will place significant pressure or demand on existing public infrastructure. The site is located within the WDURA where future growth is expected and being planned for, and the site is adjacent to existing and future residential and commercial development which is serviced by utilities and essential services. Infrastructure and servicing plans have been adopted by Council for this stage of the WDURA. The Traffic Impact Assessment (TIA) (Cardno, 2020) prepared as part of the NP and PP process for the site is contained in Appendix C and is discussed in Section 1.4.8 and elaborates on the suitability of the road network and future demand as a result of the NP and PP.

Utility providers would be consulted as part of any Gateway Determination to determine the existing and future capacity of the site.

### **What are the views of state and Commonwealth public authorities consulted in accordance with the Gateway determination?**

The Gateway Determination will identify the relevant State and Commonwealth public authorities to be consulted as part of the PP. Consultation with the following departments and agencies should be considered:

These agencies will be consulted during the Gateway process as per the Regulations.

It is anticipated that the following agencies and authorities will be consulted during the assessment and public exhibition of the draft Planning Proposal:

- > NSW Rural Fire Service (RFS)
- > Transport for NSW (TfNSW)
- > Department of Planning, Industry and Environment (DPIE) Environment, Energy and Science (EES)
- > NSW Environmental Protection Agency (EPA)
- > National Parks and Wildlife Service (NPWS)
- > Water NSW
- > State Emergency Service (SES)
- > Heritage Council NSW
- > Endeavour Energy
- > Sydney Water.



## 4 Mapping

---

The specific amendments to the LEP maps are included within this report in Section 2.2. A summary of the maps to be amended under this proposal are outlined below:

**1. Amendment to the following Wollongong LEP Zoning Map:**

Land Zoning Map – Sheet LZN\_010

**2. Amendment to the following Wollongong LEP Lot Size Map:**

Lot Size Map – Sheet LSZ\_010

**3. Amendment to the following Wollongong LEP Floor Space Ratio Map:**

Floor Space Ratio Map – Sheet LSZ\_010.

**4. Amendment to the following Wollongong LEP Natural Resource Sensitivity Maps:**

Natural Resource Sensitivity – Biodiversity Map - Sheet NRB\_006

Natural Resource Sensitivity – Biodiversity Map – Sheet NRB\_007.

## 5 Community Consultation

---

The public exhibition period and the requirements for the PP will be outlined in the Gateway Determination. It is recommended that the PP is exhibited for 14 days as the proposal would have a low impact on the surrounding land uses and environment.

The community will be notified of the commencement of the exhibition period via a notice in a local newspaper and via a notice on Camden Council's website. The notice will:

- > Give a brief description of the objectives or intended outcomes of the PP
- > Indicate the land affected by the PP
- > State where and when the PP can be inspected
- > Give the name and address of the PPA for the receipt of any submissions
- > Indicate the last date for submissions.

During the exhibition period, the following material will be made available for inspection:

- > The PP in the form approved for community consultation by the Gateway determination
- > The Gateway determination
- > Any information or technical information relied upon by the PP.



## 6 Project Timeline

The anticipated timeframe for the completion of the PP will depend on the complexity of the matters, the nature of any additional information that may be required and the need for agency and community consultation.

Task	Timeline
Anticipated commencement date (date of Gateway determination)	October - November 2020
Anticipated timeframe for the completion of required technical information	November - December 2020
Timeframe for government agency consultation (pre and post exhibition as required by Gateway determination)	November – December 2020 (pre-exhibition if required) January – February 2021 (during exhibition) February – March 2021 (post exhibition if required)
Commencement and completion dates for public exhibition period	January – February 2021
Dates for public hearing (if required)	Not required
Timeframe for consideration of submissions	February – March 2021
Timeframe for the consideration of a proposal post exhibition	March – April 2021 (post exhibition consideration by Council)
Date of submission to the department to finalise the LEP	May - June 2021
Anticipated date RPA will make the plan (if delegated)	July 2021
Anticipated date RPA will forward to the department for notification	July – August 2021

# APPENDIX

# A

## WATER CYCLE MANAGEMENT STUDY





APPENDIX

# B

ECOLOGICAL CONSTRAINTS ASSESSMENT





APPENDIX

C

TRAFFIC IMPACT ASSESSMENT





APPENDIX

D

BUSHFIRE ASSESSMENT



# APPENDIX

# E

ABORIGINAL CULTURAL HERITAGE ASSESSMENT  
AND ARCHAEOLOGICAL REPORT





# APPENDIX

# F

## ARBORICULTURAL DEVELOPMENT ASSESSMENT REPORT





APPENDIX

G

PRELIMINARY SITE INVESTIGATIONS



APPENDIX

H

STATEMENT OF HERITAGE IMPACT



