

A decorative graphic on the left side of the page consisting of several concentric, irregular contour lines in a light grey color, resembling a topographic map.

South Creek West Precinct 5 – Biodiversity Assessment

JJ Cobbitty Development Pty Ltd

DOCUMENT TRACKING

Project Name	South Creek West Precinct 5 – Biodiversity Assessment
Project Number	24SYD - 9075
Project Manager	David Bonjer
Prepared by	Millie Hatch
Reviewed by	David Bonjer
Approved by	David Bonjer
Status	Final
Version Number	13
Last saved on	27 May 2026

This report should be cited as 'Eco Logical Australia 2026. *South Creek West Precinct 5 – Biodiversity Assessment*. Prepared for JJ Cobbitty Development Pty Ltd.'

ACKNOWLEDGEMENTS

This document has been prepared by Eco Logical Australia Pty Ltd with support from JJ Cobbitty Development Pty Ltd.

Disclaimer

This document may only be used for the purpose for which it was commissioned and in accordance with the contract between Eco Logical Australia Pty Ltd and JJ Cobbitty Development Pty Ltd. The scope of services was defined in consultation with JJ Cobbitty Development Pty Ltd, by time and budgetary constraints imposed by the client, and the availability of reports and other data on the subject area. Changes to available information, legislation and schedules are made on an ongoing basis and readers should obtain up to date information. Eco Logical Australia Pty Ltd accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this report and its supporting material by any third party. Information provided is not intended to be a substitute for site specific assessment or legal advice in relation to any matter. Unauthorised use of this report in any form is prohibited.

Template 2.8.1

Contents

1. Introduction	1
1.1 Overview.....	1
1.2 Proposal.....	1
1.3 Methodology Overview	2
2. Statutory Framework.....	6
2.1 Statutory Framework.....	6
3. Methods	11
3.1 Literature review	11
3.2 Desktop assessment	11
3.3 Field survey.....	11
4. Results	12
4.1 Vegetation communities.....	12
4.1.1 Cumberland Plain Woodland	12
4.1.2 River-Flat Eucalypt Forest	15
4.1.3 Exotic Cover	15
4.1.4 Vegetation Community and Condition Assessment Area Calculations.....	19
4.2 Validated ENV Area Calculations and Identification of any Further AHCVV.....	20
4.3 Recovery Potential.....	22
4.4 Ecological Constraints Assessment	24
4.5 Threatened Species Habitat.....	26
5. Precinct Plan	31
5.1 ILP and Proposed zoning.....	31
5.2 Consistency with NSW Biodiversity Certification and EPBC Approval.....	32
5.3 Management of vegetation	32
5.4 Development controls	32
6. Conclusion	34
7. References	35
Appendix A Methodology	37
A1 Field Survey	37
Survey limitations	37
A2 Recovery potential	37
A3 Ecological constraints	40

List of Figures

Figure 1: South Creek West release area with Sub-Precinct 5 in red outline.....	3
Figure 2: Indicative Layout Plan	4
Figure 3: Subject site	5
Figure 4: Biodiversity Certified Land under the Biodiversity Conservation Act 2016.....	8
Figure 5: South West Growth Area Protected Lands from Draft Growth Centres Conservation Plan (Growth Centres Commission 2007)	9
Figure 6: ENV as per Figure 5 of the Growth Centres Conservation Plan within the subject site	10
Figure 7: Vegetation communities and conditions identified during field survey.....	16
Figure 8: Cumberland Plain Woodland identified in varying conditions. Top left: Good (BC Act and EPBC Act). Top right: Moderate (BC Act and EPBC Act). Bottom left: Good (BC Act). Bottom right: Poor (BC Act).	17
Figure 9: Derived Native Grassland (a sub-community of Cumberland Plain Woodland).....	18
Figure 10: Poor condition River-Flat Eucalypt Forest.....	18
Figure 11: Areas of exotic cover	19
Figure 12: AHCVV within the subject site.....	21
Figure 13: Recovery potential	23
Figure 14: Ecological constraints analysis	25
Figure 15: Areas of potential habitat for threatened species.....	29
Figure 16: Key fish habitat within the study area (DPI Fisheries)	30
Figure 17: AHCVV to be retained within ILP	33
Figure 18: Ecological Constraints Flowchart	40

List of Tables

Table 1: Statutory framework and relevance to this study.....	6
Table 2: Different conditions of Cumberland Plain Woodland identified within survey area.....	13
Table 3: Summary of area (ha) occupied by vegetation communities and their condition.....	19
Table 4: Amount of ENV and AHCVV in subject site (ha)	20
Table 5: Area of different recovery potential classes identified within the subject site.	22
Table 6: Area of different ecological constraints rankings identified within the subject site	24
Table 7: Threatened fauna species likely or with the potential to occur in the survey area.....	26
Table 8: Likelihood of occurrence of threatened aquatic species occurring in the study area	28
Table 9: Recovery potential matrix (ELA 2003)	38
Table 10: Conservation significance matrix (NSW NPWS, 2002)	41
Table 11: Decision matrix step one	41
Table 12: Decision matrix step two.....	41

Abbreviations

Abbreviation	Description
AHCVV	Additional High Conservation Value Vegetation – vegetation meeting the requirements for ENV that was not mapped in the Growth Centres Conservation Plan
BC Act	<i>Biodiversity Conservation Act 2016</i>
CEEC	Critically Endangered Ecological Community
DAWE	Department of Agriculture, Water, and the Environment (now Commonwealth DCCEEW)
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DCP	Development Control Plan
DotEE	Department of the Environment and Energy (now DCCEEW)
DPE	Department of Planning and Environment (now DPHI)
DPHI	Department of Planning, Housing, and Infrastructure
DPI – Fisheries	Department of Primary Industries - Fisheries
DPIE	Department of Planning, Industry and Environment (now DPHI)
FM Act	<i>Fisheries Management Act 1994</i>
ELA	Eco Logical Australia Pty Ltd
ENV	Existing Native Vegetation, as defined in the Growth Centres Conservation Plan
EP&A Act	<i>NSW Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>
IPC & AES	Ian Perkins Consultancy Services and Aquila Ecological Surveys
ILP	Indicative Layout Plan
KFH	Key fish habitat
MNES	Matters of National Environmental Significance
NPWS	NSW National Parks and Wildlife Service
OEH	NSW Office of Environment and Heritage (now DPE – Environment and Heritage)
SCW	South Creek West
SCWLA	South Creek West Land Release area
SWGA	South West Growth Area
TSC Act	<i>Threatened Species Conservation Act 1995</i>
TSSC	Threatened Species Scientific Committee

Executive Summary

Eco Logical Australia Pty Ltd (ELA) was engaged by JJ Cobbitty Development Pty Ltd to undertake an update to the Biodiversity Assessment for Precinct Planning of the South Creek West (South West) precinct, 'Precinct 5'. The aim of this report is to identify key ecological constraints to assist design of an Indicative Layout Plan (ILP).

Biodiversity Certification of the Growth Centres Conservation Plan identifies a regional offsets package, effectively facilitating the strategic loss of ecological values on 'certified lands' without triggering further assessment under the former *Threatened Species Conservation Act 1995* (TSC Act – now the *Biodiversity Conservation Act 2016* (BC Act)). This strategic loss is offset through the retention and management of areas of higher ecological value across the Growth Centres and through a levy that will be used to protect and manage areas of high ecological value outside of the Growth Centres. A Strategic Assessment under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) was approved by the Commonwealth (the then Department of Sustainability, Environment, Water, Population and Communities). Therefore, provided development proceeds in accordance with the Growth Centres Biodiversity Certification Order, the assessment and approval of threatened species and endangered ecological communities under Commonwealth legislation is not required.

The site has several significant environmental features, including Cumberland Plain Woodland (a critically endangered ecological community under both the BC Act and EPBC Act), River-Flat Eucalypt Forest (an endangered ecological community under the BC Act and critically endangered under the EPBC Act) and potential habitat for several threatened flora and fauna species.

No vegetation in the precinct was identified in the Draft Growth Centres Conservation Plan 2007 as requiring protection and therefore no Existing Native Vegetation (ENV) within the subject site was counted towards achieving the 2000-hectare conservation outcome. Sub-Precinct 5 is wholly biodiversity certified.

The precinct contains 17.46 ha of native vegetation that is categorised as 'Additional High Conservation Value Vegetation' (AHCVV). This is native vegetation that has a canopy of at least 10% and exists in patches greater than 0.5 ha but was not mapped in the draft Growth Centres Conservation Plan. Protecting any such vegetation would provide biodiversity outcomes beyond what was anticipated by the biodiversity certification.

The ILP will protect a minimum of 2.63 ha of validated AHCVV, through the protection of native vegetation within the proposed Environmental Conservation zone. There is a further 0.62 ha of AHCVV in the C2 zone, however as this is also within a transmission line easement it may be subject to management by the transmission line authority. The C2 Environmental Conservation zone contains a further 8.10 hectares that will be restored to Cumberland Riverflat Eucalypt Forest under a Vegetation Management Plan.

Through a site specific Development Control Plan (DCP) and State Environmental Planning Policy (SEPP) controls, there are also opportunities to further protect 1.88 ha of AHCVV within the Open Space zone.

1. Introduction

1.1 Overview

Eco Logical Australia Pty Ltd (ELA) was engaged by JJ Cobbitty Development Pty Ltd to undertake an update to the Biodiversity Assessment for Precinct Planning of the South Creek West (South West) Precinct within the South-West Growth Centre.

The South Creek West Land Release Area forms part of the South West Growth Area (SWGA). Given the scale of the release area, the Department of Planning, Housing, and Infrastructure (DPHI) divided it into five distinct precincts numbered 1 – 5. The land to which this Planning Proposal relates to is referred to as Cobbitty Sub-Precinct 5, also known as Precinct 5. It totals approximately 303 hectares (ha) and has been characterised by rural residential and agricultural land uses and activities. JJ Cobbitty Pty Ltd holds approximately 172.67 ha of land in Precinct 5, the area to which this assessment applies.

The precinct was released by the Minister for Planning on 24 November 2017 for urban development. The release formally commenced the rezoning process for land within the precinct, including the subject site.

Precinct 5 is located within the south-west portion of the South Creek West Land Release (SCWLA) area within the suburb of Cobbitty in the Camden LGA. The Precinct adjoins the Lowes Creek Maryland Precinct, which has recently been rezoned to the north, the Pondicherry precinct to the east which is in the process of being rezoned and the growing town centre and suburbs of Oran Park to the south. Figure 1 illustrates the site boundaries of the Cobbitty Precinct and SCWLA.

1.2 Proposal

JJ Cobbitty Pty Ltd, as the major landholder in the precinct, seeks to initiate the preparation of a planning proposal for the rezoning of Precinct 5, consistent with the Draft Indicative Layout Plan (ILP). This is to facilitate the orderly redevelopment of 172.67 ha of Precinct 5 into a residential community.

The intended outcome of this Planning Proposal is to amend the current *State Environmental Planning Policy (Precincts – Western Parkland City) 2021* to facilitate the urban development of Precinct 5 as part of the South West Growth Centre as envisaged in the Greater Sydney Commission's Regional Plan and District Plan.

The Draft ILP has been prepared to support the planning proposal and precinct rezoning and has been informed by extensive specialist consultant studies. The site will comprise approx. 2,650 dwellings and a population of approx. 8,049 people with 18.90 ha of passive and active open space.

The proposed new planning controls comprise amendments to *State Environmental Planning Policy (Precincts – Western Parkland City) 2021* and associated environmental planning instruments including the rezoning of the precinct to reflect land uses shown in the Draft ILP. This Planning Proposal also seeks to introduce a site-specific Schedule to the *Camden Growth Centre Precincts Development Control Plan* to support the Precincts development in accordance with the Draft ILP and supporting technical investigations.

1.3 Methodology Overview

An overview of the methodology is provided below. For full details see Appendix A.

- Database search for threatened species, populations, and ecological communities under the NSW *Biodiversity Conservation Act 2016* (BC Act) and Matters of National Environmental Significance (MNES) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- Assessment of State and Federal statutory requirements.
- Validation of vegetation threatened species and habitat condition mapping. Assessments include the identification of Additional High Conservation Value Vegetation (AHCVV).
- Assessment of biodiversity values and mapping including analysis and identification of ecological constraints (rated low, moderate, and high).
- Desktop assessment of subject site outside of the survey area.
- Recommendations for the development.

Figure 3 illustrates the location of the precinct ('subject site').

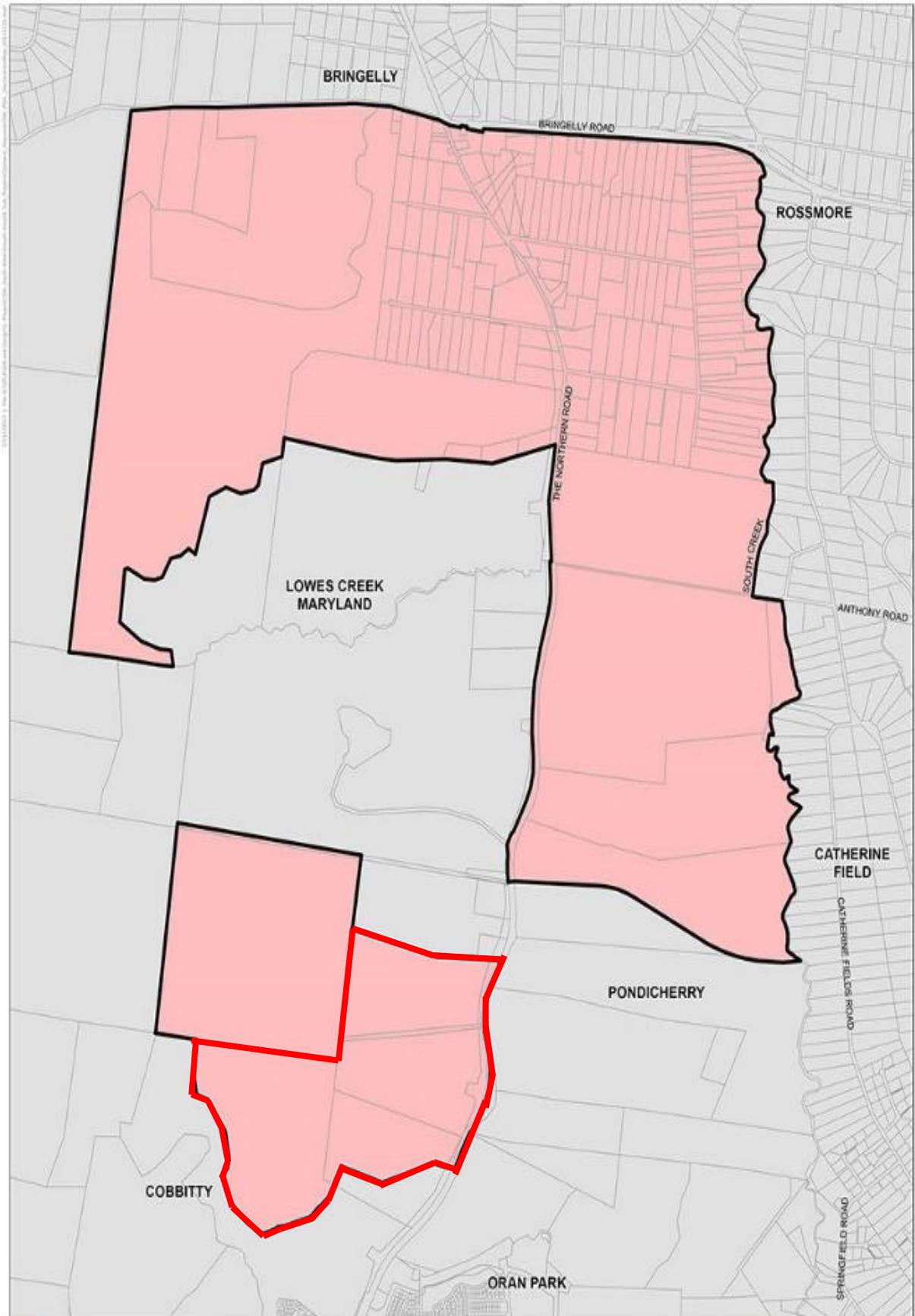


Figure 1: South Creek West release area with Sub-Precinct 5 in red outline.

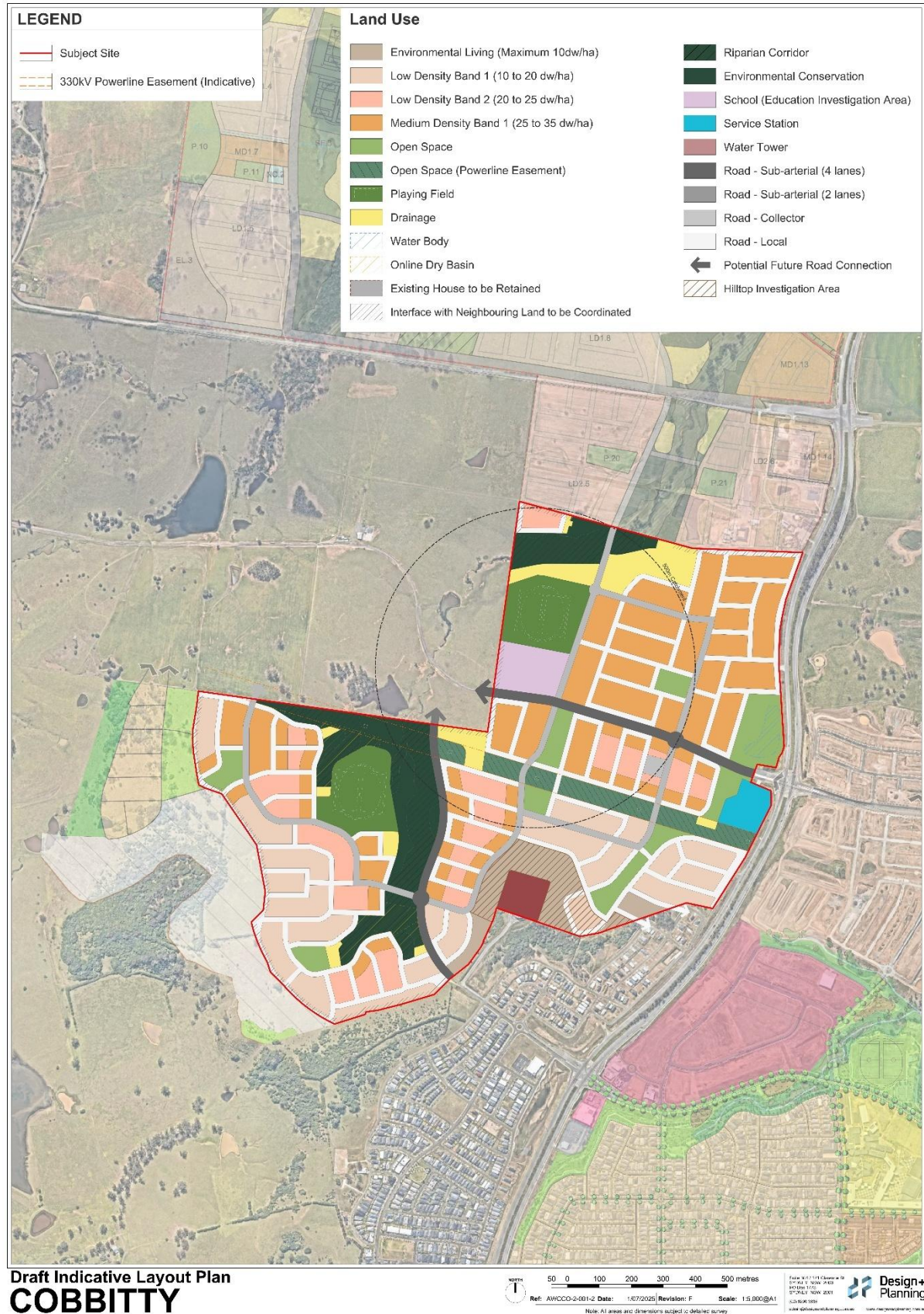


Figure 2: Indicative Layout Plan



Figure 3: Subject site

2. Statutory Framework

An array of strategic plans, legislation, policies, and guidelines apply to the planning and management of biodiversity issues within the subject site. This information was reviewed and used to identify priority issues and approaches for the subject site and are summarised below.

2.1 Statutory Framework

Table 1 summarises the relevant legislation and policies that apply to the subject site, which are required to be considered.

Table 1: Statutory framework and relevance to this study

Act	Relevance
Commonwealth	
<i>Environment Protection & Biodiversity Conservation Act 1999</i> (EPBC Act)	On 28 February 2012, the Commonwealth Minister for the Environment announced the program of development related activities within the Growth Centres that had been approved under the Growth Centres Strategic Assessment. (This was the second stage of the approval of the Strategic Assessment of the Growth Centres under the Commonwealth EPBC Act). Specifically, <i>“All actions associated with the development of the Western Sydney Growth Centres as described in the Sydney Region Growth Centres Strategic Assessment Program Report (Nov 2010) have been assessed at the strategic level and approved regarding their impact on the following matters of national environmental significance (MNES):</i> • <i>World Heritage Properties</i> • <i>National Heritage Places,</i> • <i>Wetlands of International Importance,</i> • <i>Listed threatened species, populations, and communities, and</i> • <i>Listed migratory species.”</i> This approval essentially means that the Commonwealth is satisfied that the conservation and development outcomes that will be achieved through development of the Growth Centres Precincts will satisfy their requirements for environmental protection under the EPBC Act. Therefore, provided development activity proceeds in accordance with the Growth Centres requirements (such as the Biodiversity Certification Order, the Western Parkland City SEPP and Development Control Plans (DCPs), Growth Centres Development Code etc), then there is no requirement to assess the impact of development activities on MNES and hence no requirement for referral of activities to the Commonwealth. The requirement for assessment and approval of threatened species and endangered ecological communities and the other MNES issues listed above under the EPBC Act has now been “turned off” by the approval of the Strategic Assessment.
State	
<i>Biodiversity Conservation Act 2016</i> (BC Act)	The subject site is biodiversity certified under the BC Act 2016. The effect of granting certification is that any development or activity requiring consent (Under Part 4 and 5 of the EP&A Act) is ‘development that is not likely to significantly affect threatened species’. This certification removes the need to address threatened species considerations and the test of significance (s.7.3 of the BC Act), including the preparation of Species Impact Statements (SIS) for Part 5 activities or triggering the Biodiversity Offset Scheme (BOS) for Part 4 developments.

Act	Relevance
	Biodiversity Certification of the Sydney Region Growth Centres has three main functions. It requires the protection of 2,000 ha of Existing Native Vegetation (ENV) within the Growth Centres; it allows for development to proceed without further biodiversity assessment at the Development Application stage on land that is 'biodiversity certified', and it establishes a funding mechanism for conservation outcomes outside of the Growth Centres. The Sydney Region Growth Centres was 'bio-certified' by order of the Minister for the Environment under s.126G of the TSC Act. Under the BC Act, existing biodiversity certified areas remain valid following the repealed TSC Act. The Minister's certification was based on the overall improvement or maintenance of biodiversity values and the mechanism for achieving this is outlined in the <i>Growth Centres Conservation Plan</i> (Eco Logical Australia, 2007) and the conditions for bio-certification are documented in the Ministers order for consent. Areas which are currently biodiversity certified and non-biodiversity certified are shown in Figure 4. The subject site is required to be assessed against the conditions of the Biodiversity Conservation Order to ensure that the planned rezoning and subsequent development of the subject site complies.
Environmental Planning Instruments and Other Policies	
<i>State Environmental Planning Policy (Precincts – Western Parkland City) 2021</i>	The subject site does not contain any ENV mapped under the SEPP and is wholly biodiversity certified. Biodiversity certification is discussed below.
<i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i>	Cumberland Plain Conservation Plan Although the subject site is within land subject to the Cumberland Plain Conservation Plan (CPCP) under Chapter 13 of the Biodiversity and Conservation SEPP, it is not within any of the respective land categories (i.e., urban capable land or non-certified land) nor is it within a Strategic Conservation Area. Koala Habitat Protection The aim of Chapters 3 and 4 of the Biodiversity and Conservation SEPP is to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas to support a permanent free-living population over their present range and reverse the current trend of koala population decline. The subject site is not on land to which this applies.

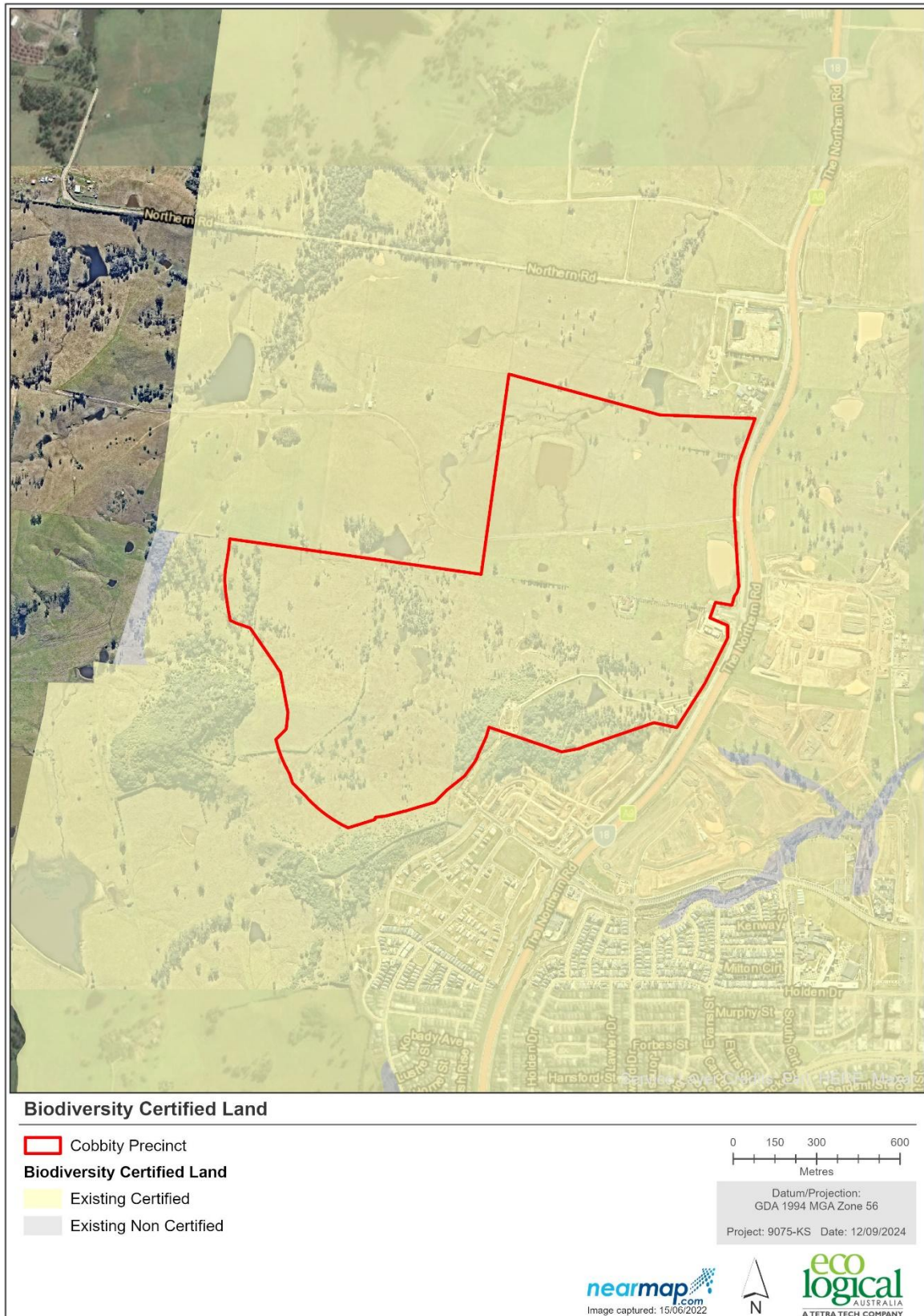


Figure 4: Biodiversity Certified Land under the Biodiversity Conservation Act 2016

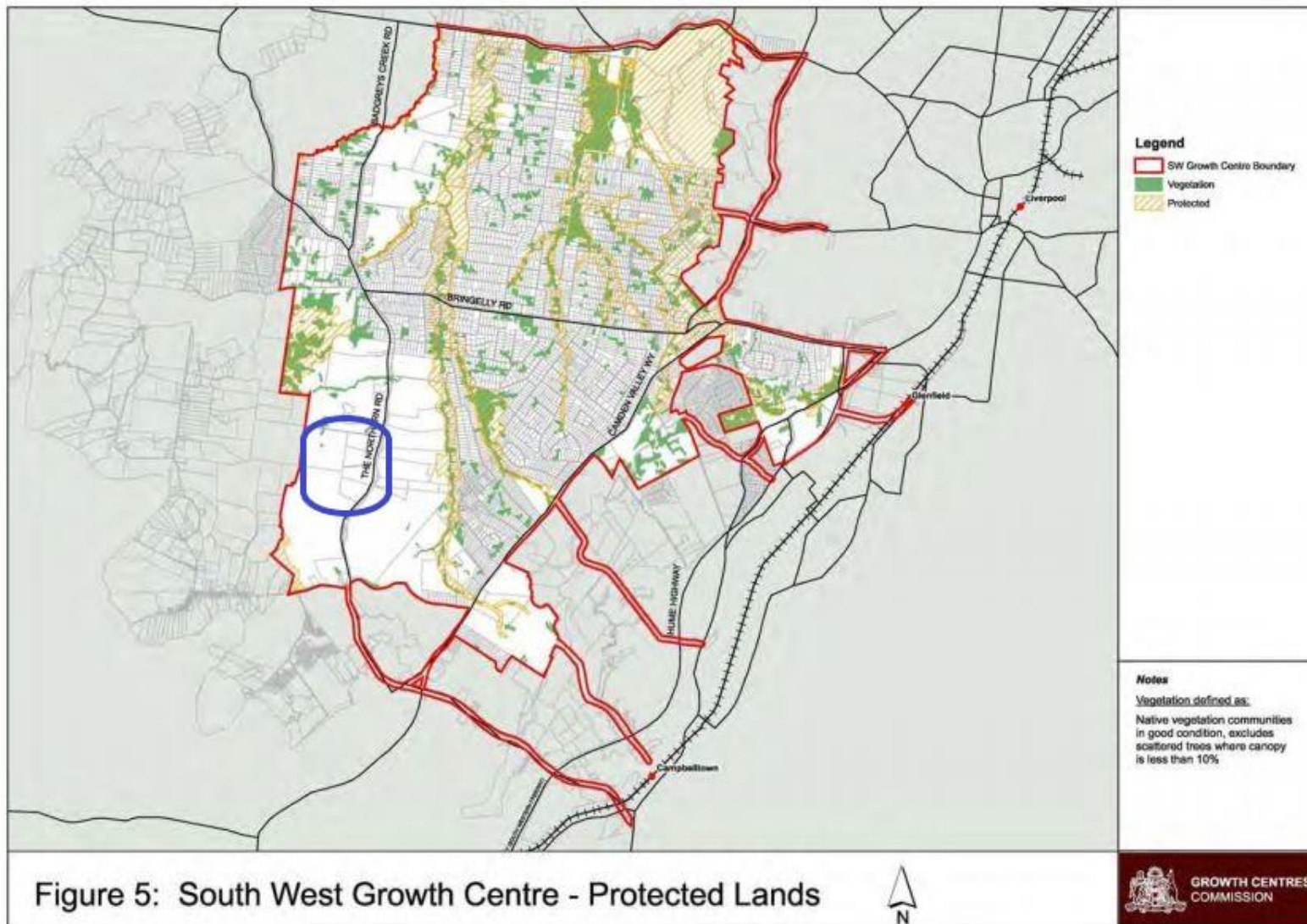


Figure 5: South West Growth Area Protected Lands from Draft Growth Centres Conservation Plan (Growth Centres Commission 2007)



Figure 6: ENV as per Figure 5 of the Growth Centres Conservation Plan within the subject site

3. Methods

3.1 Literature review

A desktop literature review was undertaken by ELA to determine the location and extent of previous surveys, identify the constraints within the subject site and evaluate the presence of any threatened species, populations and ecological communities listed under the BC Act, FM Act and the Commonwealth EPBC Act that could potentially occur within the subject site. The following documentation and mapping were reviewed:

- Aerial photography of the subject site
- NSW Atlas of Wildlife Database (5 km radius)
- NSW Atlas of Living (ALA) database (5 km search) for FM Act listed species
- EPBC Act online Protected Matters Search Tool (5 km radius)
- Native Vegetation Maps of the Cumberland Plain – Interpretation Guidelines (DECC, 2000b)
- Draft Growth Centres Conservation Plan’ prepared by Eco Logical Australia (2007) for NSW Growth Centres Commission
- Office of Environment and Heritage (OEH) 2013 vegetation mapping
- NSW *Fisheries Management Act 1994* listed protected and threatened species, populations and communities, including species profiles; ‘Primefact’ publications and expected distribution maps (Riches et al 2016).
- DPI Fisheries spatial portal

3.2 Desktop assessment

The north-west portion of the subject site was not field validated as site access was not available. Where land access was not available, the OEH 2013 Vegetation map was updated based on aerial photo interpretation. Vegetation mapping was edited to removed portions mapped over buildings.

A desktop assessment was conducted to determine the following:

- Potential vegetation communities
- Potential for patches of vegetation to meet the definition of AHCVV or ENV
- Potential threatened species habitat
- Potential constraints and recovery potential

3.3 Field survey

Vegetation was validated over two (2) days by two (2) ecologists in March 2020. A basic floristic survey of the precinct was undertaken to confirm the vegetation communities present, including their condition and extent. This survey included classification of native vegetation communities in accordance with DPIE (2020b) profiles and the Commonwealth listing and conservation advice (where relevant). A threatened species habitat assessment was also conducted across the entire subject site.

A detailed methodology is presented in Appendix A.

4. Results

4.1 Vegetation communities

The following two (2) native vegetation communities were identified within the subject site in varied condition and structure:

- *Cumberland Plain Woodland in the Sydney Basin Bioregion / Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest*
- *River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions.*

The subject site also contained areas dominated by exotic vegetation. The location of each vegetation community is presented in Figure 7. Each vegetation community, and their varied conditions, are described below.

4.1.1 Cumberland Plain Woodland

Cumberland Plain Woodland in the Sydney Basin Bioregion is listed as a critically endangered ecological community under the BC Act and forms part of the critically endangered ecological community *Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest*, listed under the EPBC Act.

Cumberland Plain Woodland is an open eucalypt woodland with an open shrub layer and grassy ground cover and is commonly found on clay-loam soils derived from the Wianamatta shale (DPIE 2020b). This community is restricted to the Cumberland Plain in the Sydney region and typically contains *Eucalyptus moluccana* (Grey Box), *E. tereticornis* (Forest Red Gum), with *E. crebra* (Narrow-leaved Ironbark), *E. eugenioides* (Thin-leaved Stringybark) and *Corymbia maculata* (Spotted Gum) occurring less frequently. The midstorey is comprised of *Bursaria spinosa* (Blackthorn). Typical groundcover species include *Dichondra repens* (Kidney Weed), *Aristida vagans* (Threeawn Speargrass), *Microlaena stipoides* var. *stipoides* (Weeping Grass), *Themeda triandra* (Kangaroo Grass), *Brunoniella australis* (Blue Trumpet), *Desmodium varians* (Slender Tick-trefoil), *Opercularia diphylla*, *Wahlenbergia gracilis* (Sprawling Bluebell) and *Dichelachne micrantha* (Shorthair Plumegrass).

Cumberland Plain Woodland within the survey area was observed in five conditions, each detailed in Table 2 below.

Table 2: Different conditions of Cumberland Plain Woodland identified within survey area.

Condition	Description	BC Act	EPBC Act and Justification [#]
Good (BC Act and EPBC Act)	Cumberland Plain Woodland in this condition was present throughout the southern half of the subject site (Figure 8). These areas were characterised by a canopy dominated by <i>Eucalyptus tereticornis</i> (Forest Red Gum) and <i>Eucalyptus moluccana</i> (Grey Box). The open midstorey was dominated by exotic species <i>Lycium ferocissimum</i> (African Boxthorn) and <i>Olea europaea</i> subsp. <i>cuspidata</i> (African Olive), with occasional intrusions of <i>Lantana camara</i> (Lantana) and <i>Gomphocarpus fruticosus</i> (Narrow-leaved Cotton Bush) in some areas. The groundcover was dominated by a large number of native grasses and forbs, including <i>Microlaena stipoides</i> (Weeping Grass), <i>Bothriochloa macra</i> (Red Grass), <i>Einadia hastata</i> (Berry Saltbush) and more. Exotic groundcover species were also present, though to a significantly lesser extent, and included <i>Eragrostis curvula</i> (African Lovegrass), <i>Setaria parviflora</i> and <i>Sida acuta</i> (Spinyhead Sida).	CEEC	CEEC – Cumberland Plain Woodland in this condition met the key diagnostic characteristics for listing under the EPBC Act and met the following condition thresholds: • minimum patch* size is > 0.5 ha • > 50% of the perennial understorey vegetation cover** is made up of native species.
Moderate (BC Act and EPBC Act)	One patch of Cumberland Plain Woodland in moderate condition was present near the southern boundary of the subject site (Figure 8). Cumberland Plain Woodland in this condition contained an assemblage of native species similar to that of the ecological community in good (BC Act and EPBC Act) condition. However, Cumberland Plain Woodland in moderate (BC Act and EPBC Act) condition was characterised by the following: • The midstorey entirely comprised a dense layer of <i>Olea europaea</i> subsp. <i>cuspidata</i> (African Olive). • The groundcover in this patch was sparser in comparison to patches in Good (BC Act and EPBC Act) condition.	CEEC	CEEC – Cumberland Plain Woodland in this condition met the key diagnostic characteristics for listing under the EPBC Act and met the following condition thresholds: • minimum patch* size is > 0.5 ha • > 30% of the perennial understorey vegetation cover** is made up of native species • contained large trees above large tree benchmark (50 DBH) or trees with hollows.
Good (BC Act)	Three patches of Cumberland Plain Woodland in this condition were identified within the southern half of the subject site (Figure 8). These patches were characterised by a canopy dominated by <i>Eucalyptus tereticornis</i> (Forest Red Gum) and <i>Eucalyptus moluccana</i> (Grey Box). The midstorey was sparse and included <i>Bursaria spinosa</i> (Blackthorn), <i>Lycium ferocissimum</i> (African Boxthorn) and <i>Olea europaea</i> subsp. <i>cuspidata</i> (African Olive), or absent. The groundcover was dominated by native species including <i>Paspalidium distans</i> , <i>Sporobolus creber</i> (Western Rat-tail Grass), <i>Glycine tabacina</i> and <i>Einadia nutans</i> (Climbing Saltbush).	CEEC	No – Cumberland Plain Woodland in this condition did not meet condition thresholds because the patch size was <0.5 ha.
Poor (BC Act)	Cumberland Plain Woodland in poor (BC Act) condition was scattered throughout the subject site (Figure 8). Cumberland Plain Woodland in this condition contained an assemblage of canopy and midstorey species like that of the ecological community in good (BC Act) condition. However, Cumberland Plain	CEEC	No – Cumberland Plain Woodland in poor condition did not meet condition thresholds because < 30% of the perennial

Condition		Description	BC Act	EPBC Act and Justification [#]
		Woodland in poor (BC Act) condition was characterised by the dominance of exotic groundcover species including <i>Cenchrus clandestinus</i> (Kikuyu Grass), <i>Chenopodium album</i> (Fat Hen) and <i>Chloris gayana</i> (Rhodes Grass). Native species were also present in the groundcover, including <i>Einadia polygonoides</i> , <i>Portulaca oleracea</i> (Pigweed) and <i>Glycine tabacina</i> .		understorey vegetation cover ^{**} is made up of native species.
Derived Grassland (BC Act)	Native	Derived native grasslands which result from the removal of woody strata are included in the BC Act listing of the ecological community (DPIE 2020b). Vegetation in this condition was dominant throughout the southern half of the subject site (Figure 9). These areas were dominated by a diverse range of native grasses and forbs, including <i>Bothriochloa macra</i> (Red Grass), <i>Cymbopogon refractus</i> (Barbed Wire Grass), <i>Themeda triandra</i> (Kangaroo Grass), <i>Cheilanthes sieberi</i> , <i>Desmodium varians</i> (Slender Tick-trefoil) and <i>Tricoryne elatior</i> (Yellow Autumn-lily).	CEEC -	No – Derived grassland and shrublands are not included as part of the nationally listed ecological community.

CEEC = critically endangered ecological community.

[#] Based on key diagnostic features and condition thresholds (TSCC 2009).

^{*} A patch is defined as a discrete and continuous area that comprises the ecological community.

^{**} Perennial understorey vegetation cover includes vascular plant species of the ground and shrub layers with a lifecycle of more than two growing seasons. Cover excludes annuals, cryptogams, leaf litter or exposed soil.

4.1.2 River-Flat Eucalypt Forest

River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions is listed as an endangered ecological community under the BC Act and a critically endangered ecological community under the EPBC Act.

The canopy of this ecological community is typically comprised of *Eucalyptus tereticornis* (Forest Red Gum), *E. amplifolia* (Cabbage Gum) and *Angophora floribunda* (Rough-barked Apple) (DPIE 2020b). The mid-storey contains *Acacia parramattensis* subsp. *parramattensis* (Parramatta Wattle), *Casuarina glauca* (Swamp Oak) and *Melaleuca linariifolia* (Flax-leaved Paperbark). Common groundcover species include *Microlaena stipoides* (Weeping Grass), *Oplismenus aemulus* (Basket Grass), *Dichondra spp.*, *Entolasia marginata* (Bordered Panic), *Solanum prinophyllum* (Forest Nightshade), *Pratia purpurascens* (Whiteroot), *Echinopogon ovatus* (Forest Hedgehog Grass), *Desmodium gunnii* (Slender Tick Trefoil), *Commelina cyanea*, *Veronica plebeia* (Creeping Speedwell).

Field survey confirmed the presence of three (3) small patches of River-Flat Eucalypt Forest in poor condition along watercourses in the northeast of the survey area (Figure 10). The canopy consisted of scattered *Angophora floribunda* (Rough-barked Apple). The midstorey was absent except for one (1) *Melaleuca decora*. The groundcover was limited to exotic pasture grasses and forbs such as *Cenchrus clandestinus* (Kikuyu Grass) and *Plantago lanceolata* (Lamb's Tongues). This occurrence of the community only conforms to the endangered ecological community listed under the BC Act as the three small patches totalled 0.29 ha and is therefore less than 0.5 ha. Further, the groundcover did not contain 30% native groundcover species.

4.1.3 Exotic Cover

Vegetation mapped as Exotic Cover was prevalent throughout the survey area (Figure 11). Most of this vegetation was characterised by groundcover dominated by exotic pasture grasses. Infestations of *Olea europaea* subsp. *cuspidata* (African Olive) were prominent throughout this vegetation, especially near the southern boundary of the survey area. Canopy surrounding the residential dwelling near the eastern boundary of the survey area consisted almost entirely of planted *Phoenix canariensis* (Canary Island Date Palm).

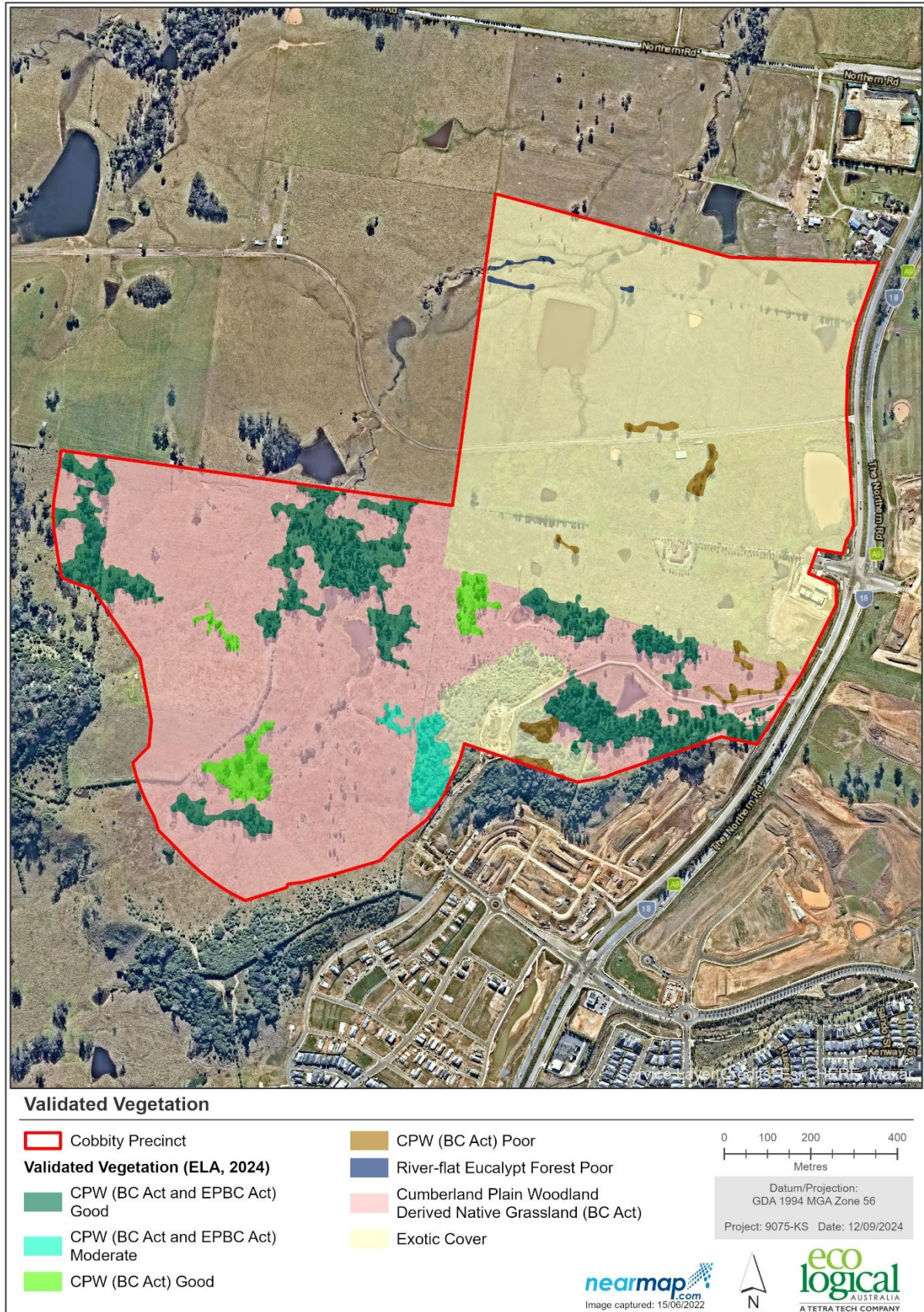


Figure 7: Vegetation communities and conditions identified during field survey.



Figure 8: Cumberland Plain Woodland identified in varying conditions. Top left: Good (BC Act and EPBC Act). Top right: Moderate (BC Act and EPBC Act). Bottom left: Good (BC Act). Bottom right: Poor (BC Act).



Figure 9: Derived Native Grassland (a sub-community of Cumberland Plain Woodland).



Figure 10: Poor condition River-Flat Eucalypt Forest.



Figure 11: Areas of exotic cover

4.1.4 Vegetation Community and Condition Assessment Area Calculations

Area calculations of each vegetation community within the subject site are provided Table 3.

Table 3: Summary of area (ha) occupied by vegetation communities and their condition.

Vegetation community	Condition	Area (ha)
Cumberland Plain Woodland	Good (BC Act and EPBC Act)	15.93
Cumberland Plain Woodland	Moderate (BC Act and EPBC Act)	1.78
Cumberland Plain Woodland	Good (BC Act only)	2.63
Cumberland Plain Woodland	Poor (BC Act only)	1.63
Cumberland Plain Woodland	Derived Native Grasslands (BC Act only)	66.54
River-Flat Eucalypt Forest	Poor (BC Act only)	0.29
TOTAL Native Vegetation		88.82
Exotic Cover	N/A	83.87
TOTAL		172.67

4.2 Validated ENV Area Calculations and Identification of any Further AHCVV

Desktop aerial photo analysis and field survey was undertaken to validate the extent of the mapped 'Existing Native Vegetation' to confirm whether it still existed. This process resulted in the following classifications:

- Validated Existing Native Vegetation.
- Additional High Conservation Value Vegetation: Vegetation which meets criteria a) and b) of the definition of ENV (i.e., a 10% of greater canopy cover and a patch size of greater than 0.5 ha) but was not mapped in the original conservation plan. This is a combination of mapping inaccuracies in the original mapping or changes to the condition and size of the vegetation on site since the Conservation Plan map production.

As the entire site is currently biodiversity certified, the 'existing native vegetation' on the site was not counted as a contribution to the 2,000-ha target for the Growth Centres. Areas of AHCVV within the subject site are presented in Table 4 and Figure 12.

Table 4: Amount of ENV and AHCVV in subject site (ha)

	Certified Land	Non-Certified Land	Total
Mapped ENV in Draft Conservation Plan	0	0	0
Additional Native Vegetation (AHCVV)	17.46	0	17.46

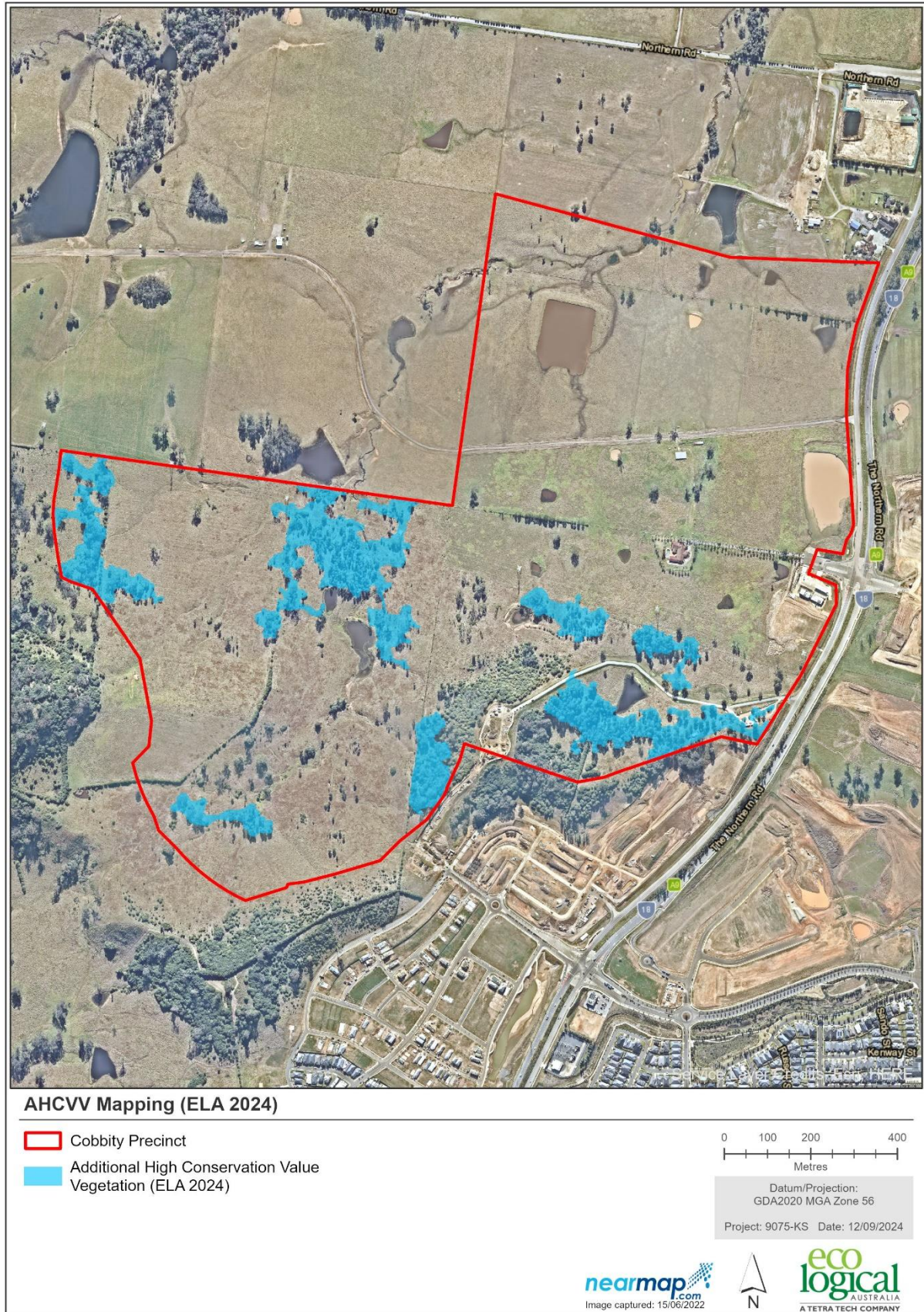


Figure 12: AHCVV within the subject site.

4.3 Recovery Potential

Recovery potential relates to the ability of the land to be managed for an improvement in the condition of the remnant vegetation and to increase linkages (wildlife corridor) between extant stands of vegetation. Identifying areas of recovery potential is consistent with the aims of the BC Act; to protect and encourage the recovery of threatened species, populations and communities listed under the Act.

With appropriate management actions, areas identified as having a moderate recovery potential would improve the condition of threatened species habitat and ecosystem connectivity within the precinct. Management actions would need to be on-going and facilitate the natural regeneration of the overstorey and/or regeneration of native species (grasses, herbs, and forbs) in the seed bank.

Four classes of recovery potential have been identified within the precinct which has been informed by the assessments (desktop and field) conducted in this report. Where land access was not available, the OEH 2013 Vegetation map was used to inform classification. The four classes are shown in Figure 13 and are described below:

- High Recovery Potential – native vegetation mapped as areas that meet the definition of AHCVV which generally have native canopy cover of greater than 10% and contained native species in each structural layer
- Moderate Recovery Potential – other areas of native vegetation with some canopy, less structural complexity, and a higher level of weed infestation or ongoing disturbance
- Low Recovery Potential – areas which show some potential for natural regeneration. Some native species present in some structural layers, very high level of weed infestations, not all structural layers present
- Very Low Recovery Potential – all other areas including cleared and heavily cultivated and/or pasture improved areas.

Area calculations of each recovery potential class within the subject site are presented in Table 5.

Table 5: Area of different recovery potential classes identified within the subject site.

Recovery potential class	Area (ha)
High	20.36
Moderate	73.03
Low	1.37
Very Low	77.92

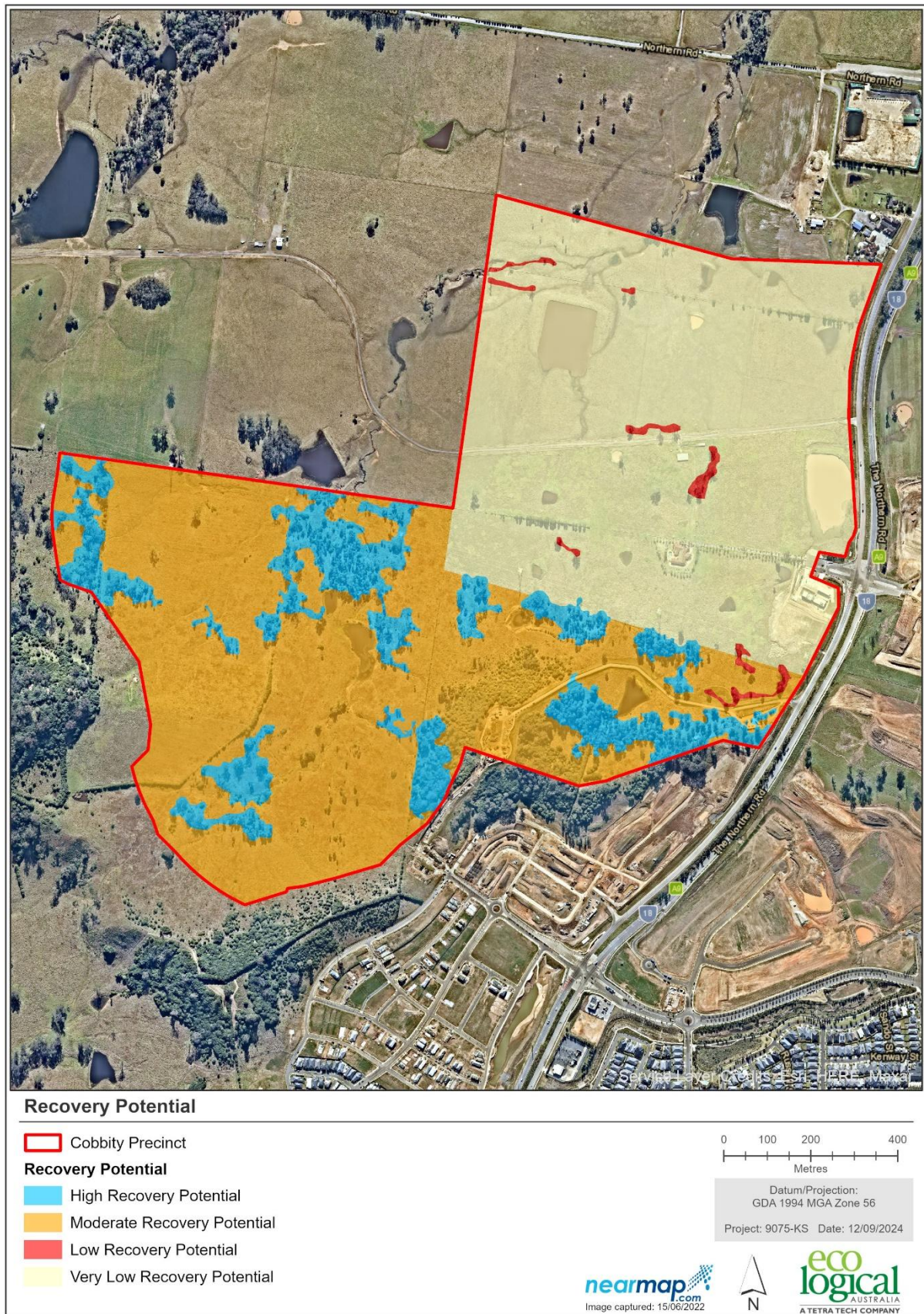


Figure 13: Recovery potential

4.4 Ecological Constraints Assessment

An ecological constraint ranking was derived by assessing size, condition, and recovery potential of an area (see Appendix A). Note that this assessment doesn't consider the fact that the land is currently biodiversity certified.

Broadly, the rankings are as follows:

- **High constraint:** High ecological value, relatively large areas of good quality, well connected vegetation.
- **Moderate constraint:** Moderate ecological value, smaller areas of good quality vegetation or large areas of poorer quality vegetation.
- **Low constraint:** Low ecological value, areas infested with weeds and exotics, with a low recovery potential or completely cleared or developed.

The results of this analysis are presented in Table 6 and Figure 14.

Table 6: Area of different ecological constraints rankings identified within the subject site

Ecological constraints ranking	Area (ha)
High	20.36
Moderate	67.91
Low	84.42

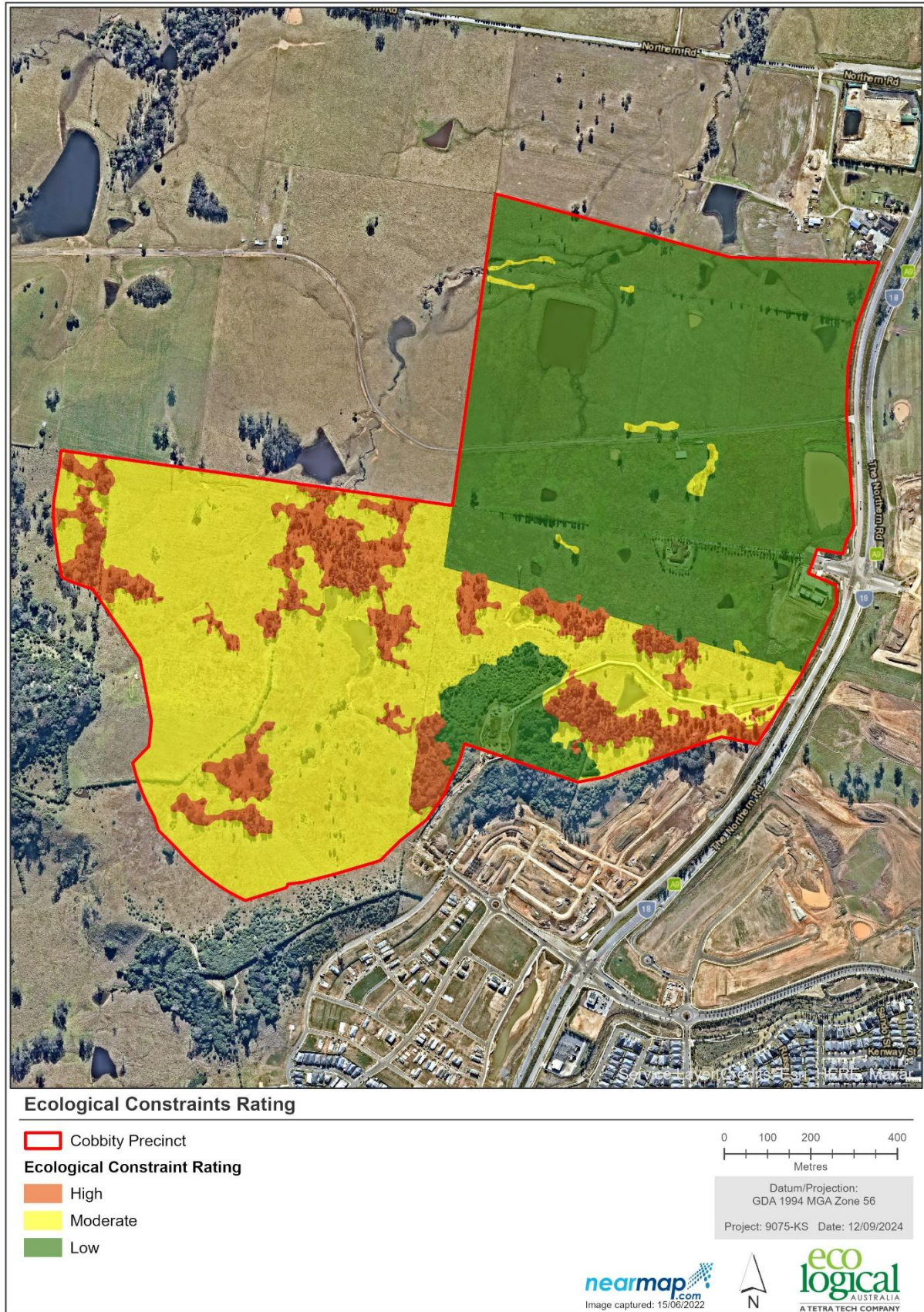


Figure 14: Ecological constraints analysis

4.5 Threatened Species Habitat

The following threatened flora species are associated with Cumberland Plain Woodland and were therefore identified as having the potential to occur within the subject site (Figure 15):

- *Cynanchum elegans*, listed as endangered under the BC Act and EPBC Act
- *Grevillea juniperina* subsp. *juniperina* (Juniper-leaved Grevillea), listed as vulnerable under the BC Act
- *Marsdenia viridiflora* subsp. *viridiflora* (Native Pear), listed as an endangered population under the BC Act
- *Pimelea spicata* (Spiked Rice-flower), listed as endangered under the BC Act and EPBC Act.

Habitat features for several threatened fauna species were identified within the survey area during field survey. These species have also been recorded within 5 km of the survey area (DPIE 2020a). The species and the habitat features relevant to them are presented in Table 7 and Figure 15.

Table 7: Threatened fauna species likely or with the potential to occur in the survey area.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat features
<i>Artamus cyanopterus cyanopterus</i>	Dusky Woodswallow	V	-	The survey area contained open eucalypt woodland and farmland adjoining woodland.
<i>Daphoenositta chrysoptera</i>	Varied Sittella	V	-	The survey area contained open eucalypt woodland.
<i>Glossopsitta pusilla</i>	Little Lorikeet	V	-	The survey area contained open eucalypt woodland and riparian areas.
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	V	-	The survey area contained open eucalypt woodland and riparian areas.
<i>Hieraaetus morphnoides</i>	Little Eagle	V	-	The survey area contained open eucalypt woodland and riparian areas.
<i>Lathamus discolor</i>	Swift Parrot	E	CE	Native canopy in the survey area was dominated by <i>Eucalyptus tereticornis</i> , a favoured feed tree of this species.
<i>Meridolum corneovirens</i>	Cumberland Plain Land Snail	E	-	Leaf litter was present at the base of trees within Cumberland Plain Woodland in Good (BC Act and EPBC Act) and Moderate (BC Act and EPBC Act).
<i>Micronomus norfolkensis</i>	Eastern Coastal Free-tailed Bat	V	-	The survey area contained hollow bearing trees and intact sections of native vegetation.
<i>Miniopterus orianae oceanensis</i>	Large Bent-winged Bat	V	-	The survey area contained intact sections of native vegetation.
<i>Myotis macropus</i>	Southern Myotis	V	-	The survey area contained hollow bearing trees and intact sections of native vegetation.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat features
<i>Ninox strenua</i>	Powerful Owl	V	-	The survey area contained intact sections of native vegetation.
<i>Phascolarctos cinereus</i>	Koala	E	E	The survey area contained favoured feed tree species <i>Eucalyptus tereticornis</i> and <i>Angophora floribunda</i> .
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V	V	The survey area contained intact sections of native vegetation.
<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-bat	V	-	The survey area contained hollow bearing trees and intact sections of native vegetation.
<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat	V	-	The survey area contained hollow bearing trees and intact sections of native vegetation.

V = vulnerable, E = endangered, CE = critically endangered, - = Not Listed.

The proposed development site contains key fish habitat (KFH), as discussed within the Riparian Assessment (ELA 2026) (Figure 16). A review of the expected distribution of threatened species, populations and communities listed under the FM Act (Riches et al. 2016) indicates the study area is within or in close proximity to the indicative distribution of two FM Act listed threatened species, including:

- *Archaeophya adamsi* (Adams Emerald Dragonfly) - Endangered
- *Macquaria australasica* (Macquarie Perch) - Endangered

Adams Emerald Dragonfly has a potential distribution spanning from south of Newcastle to south of Wollongong, extending west beyond the Great Dividing Range, past Lithgow (DPI 2013). However, this species prefers intact habitat with moss, abundant riparian vegetation and narrow, shaded riffle zones along small to moderate sized creeks with gravel or sandy bottoms. No such suitable riparian habitat exists within the study area, as highlighted in the Riparian Assessment (ELA 2026). Moreover, the nearest ALA occurrence record of the species is ~47 km northeast in Berowra Valley National Park. Therefore, the occurrence of Adams Emerald Dragonfly within the study area is unlikely and no further assessment under the FM Act is required.

KFH within the proposal site is 4.5 km east of the Nepean River, which has good freshwater fish community status and is a tributary of the Hawkesbury-Nepean, where Macquarie Perch has a mapped potential distribution. One ALA record of this species exists within 5 km of the study area, within the Nepean River. However, the site is separated from the Nepean River and its tributaries by a drainage divide, and the nearest major waterway, Wianamatta/South Creek is mapped by DPI Fisheries as having poor freshwater fish community status and is not within the mapped potential distribution of Macquarie Perch. Moreover, the ephemeral and discontinuous nature of the watercourses within the study area limit habitat connectivity between these watercourses and major watercourses such as Wianamatta/South Creek. Therefore, the occurrence of Macquarie Perch within the study area is unlikely and no further assessment under the FM Act is required.

The likelihood of occurrence of these threatened aquatic species is summarised in Table 8, below.

Table 8: Likelihood of occurrence of threatened aquatic species occurring in the study area

Scientific name	Common name	FM Act	EPBC Act	Habitat associations	ALA records	Likelihood of occurrence and impact
<i>Archaeophya adamsi</i>	Adams Emerald Dragonfly	E	-	Aquatic larvae have been found in narrow, shaded riffle zones with moss and abundant riparian vegetation (often closed canopy) in small to moderate sized creeks with gravel or sandy bottoms.	0	No, no suitable habitat within development area. No further assessment of significance required.
<i>Macquaria australasica</i>	Macquarie Perch	E	E	Habitat for this species is bottom or mid-water in slow-flowing rivers with deep holes, typically in the upper reaches of forested catchments with intact riparian vegetation. Macquarie Perch also do well in some upper catchment lakes. In some parts of its range, the species is reduced to taking refuge in small pools which persist in midland-upland areas through the drier summer periods.	1	Unlikely, as species prefers intact habitat. Nearest record is within the Nepean River, which is separated from the study area by a drainage divide. No further assessment of significance required.

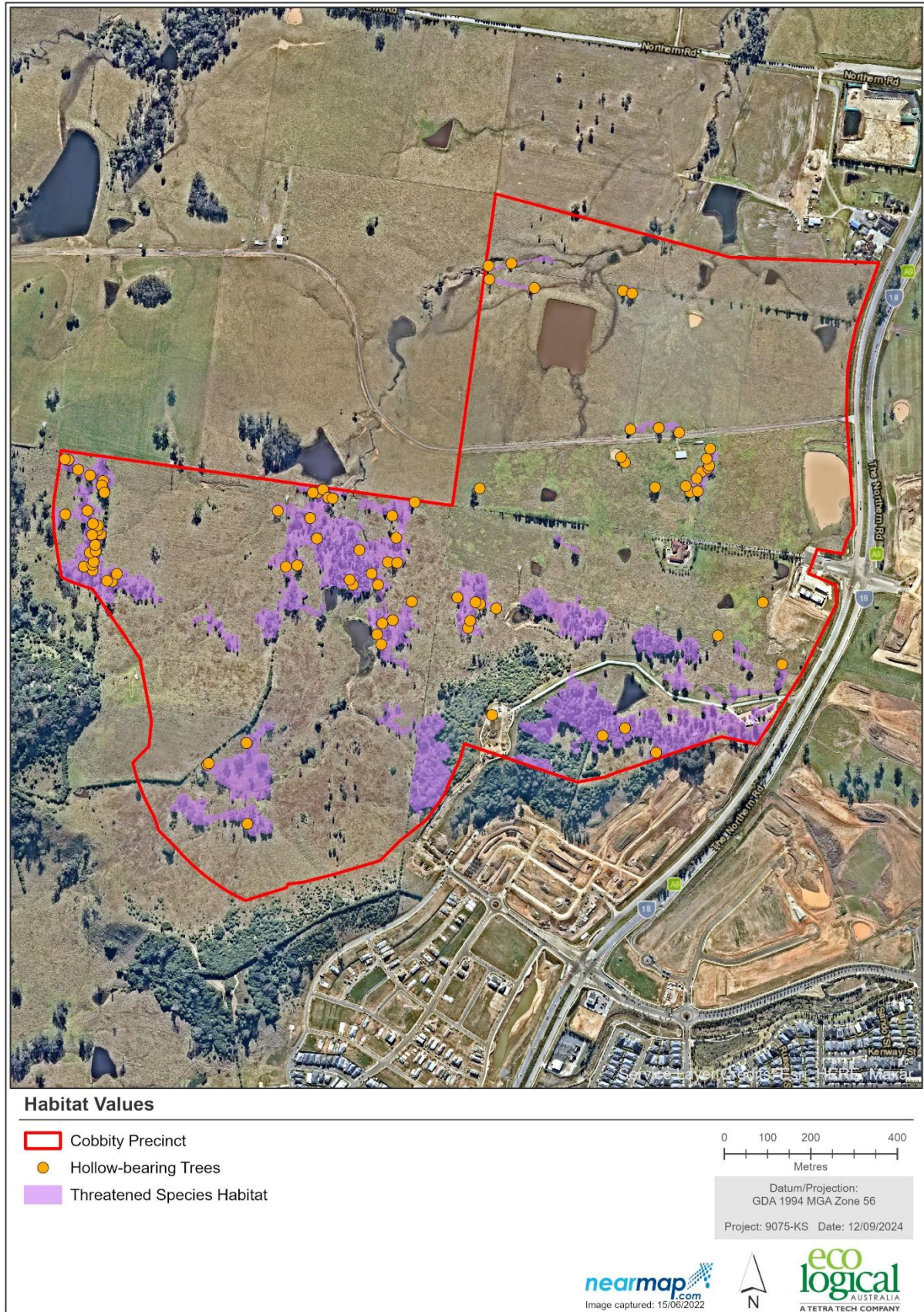


Figure 15: Areas of potential habitat for threatened species

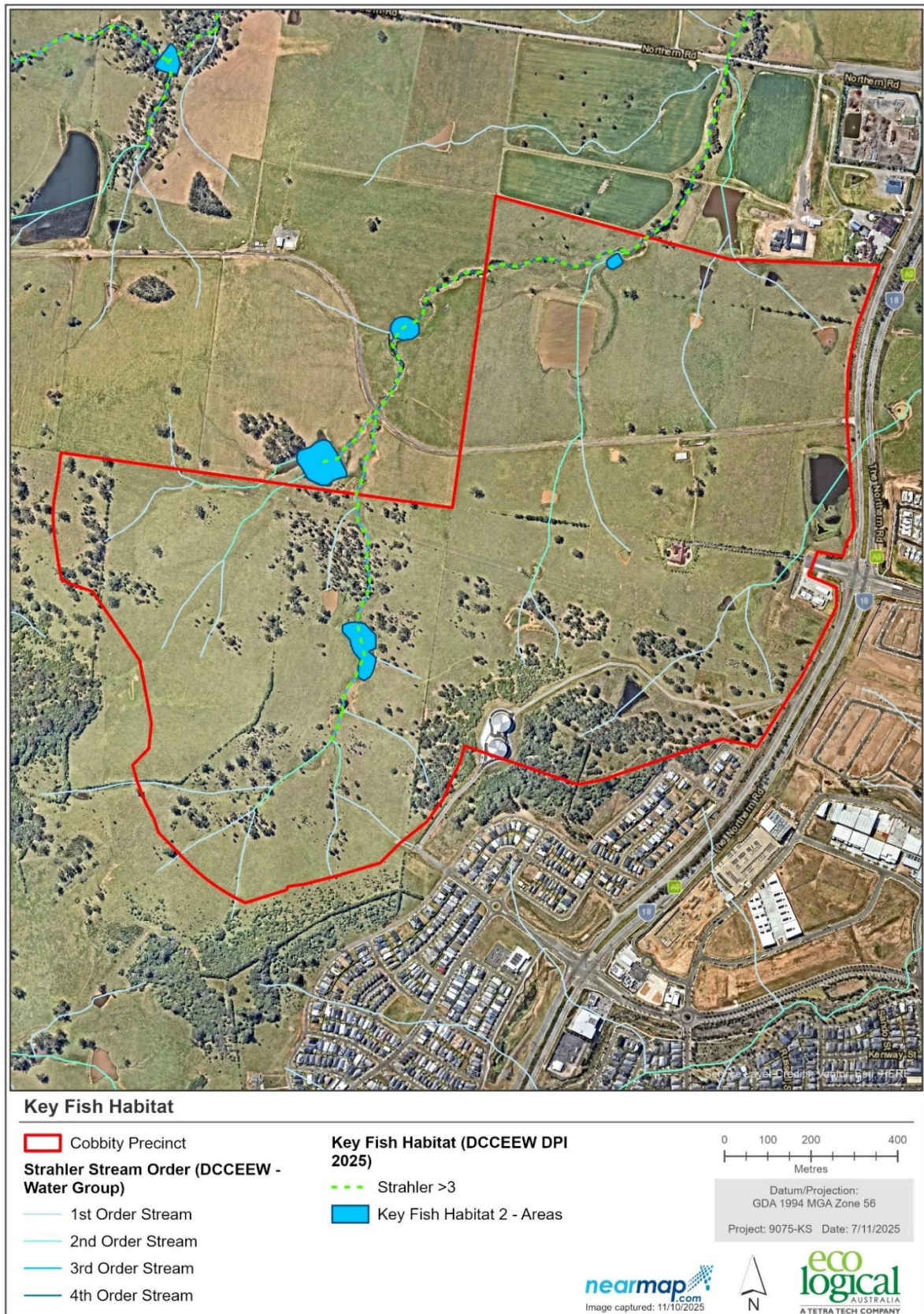


Figure 16: Key fish habitat within the study area (DPI Fisheries)

5. Precinct Plan

5.1 ILP and Proposed zoning

The plan for Sub-Precinct 5 includes the following elements:

- an Indicative Layout Plan;
- a zoning plan;
- application of clauses in Appendix 5 (Camden Growth Centres Precinct Plan) to the SEPP (Precincts -Western Parkland City) 2021.
- A site-specific DCP

No vegetation in this precinct was mapped as Existing Native Vegetation under the Growth Centres Biodiversity Certification Order and therefore no vegetation contributes to the 2,000-ha target for the Growth Centres. However, the precinct does contain Cumberland Plain Woodland and River-Flat Eucalypt Forest in varying conditions, the protection of which would enhance biodiversity outcomes within the precinct and the broader Growth Centres.

The precinct contains a total of 17.46 ha of native vegetation that meets the definition of AHCVV. The C2 zone will protect a minimum 2.63 hectares of Additional High Conservation Value Vegetation in the precinct. A further 0.62 ha of AHCVV is also to be zoned C2 Environmental Conservation, but is within the transmission line easement and therefore may be subject to management and maintenance by the transmission line authority. 8.10 ha of the riparian corridor will be revegetated to Riverflat Eucalypt Forest in accordance with VMPs to be prepared at the DA stage. The on-line basins will also be revegetated with native species associated with Riverflat Eucalypt Forest.

1.88 hectares of AHCVV is located within the Open Space zones. Whilst some of this vegetation in the Open Space zone may be retained, the primary purpose of this zone is to allow for recreation and therefore this vegetation has not been counted as being retained.

The justification for the proposed ILP and its impact on biodiversity is as follows:

- The Growth Centres undertook a strategic assessment of biodiversity values to identify those areas where conservation values were high, due to the patch size of vegetation, its condition and its connectivity. This strategic assessment identified vegetation throughout the Growth Centres that needed to be protected. No such vegetation was identified in the Sub-Precinct 5 area.
- Vegetation condition in Sub-Precinct 5 was mapped and ground-truthed to establish their conservation value. This information (in section 4 of this report) was provided to the project design team.
- Areas of high conservation value which co-incided with riparian corridors were identified for protection as restoration of riparian zones offered an opportunity to connect patches of vegetation and thus provide habitat connectivity through the site. Such areas are proposed to

be zoned C2 Environmental Conservation and be further protected via the biodiversity and riparian clauses in the Camden Growth Centres Precinct Plan (Appendix 5 of the SEPP).

- On-line stormwater basins were originally proposed in the riparian corridors, however these were later removed and basins placed outside the C2 Environmental Conservation zone except for 2 on-line basins on second order streams, which is consistent with the DCCEEW Guidelines for Riparian Corridors on Waterfront Land. The C2 riparian corridors will be subject to future Vegetation Management Plans to restore and manage native vegetation.
- The final ILP reflects consideration of biodiversity values, flooding, drainage and infrastructure delivery and the development yield of the site. Some additional vegetation may be retained in the Open Space zones however due to the need for bulk earthworks, the remaining vegetation is assumed to be removed.

5.2 Consistency with NSW Biodiversity Certification and EPBC Approval

Consistency with the NSW Order to Confer Biodiversity Certification and the Commonwealth EPBC Strategic Assessment is assessed in the following documents, both of which demonstrate that the Precinct plan is consistent with these approvals:

- NSW Biodiversity Consistency Report (2026)
- Commonwealth EPBC Consistency Report (2026)

5.3 Management of vegetation

Riparian habitat throughout the site varied in quality but did include areas of Cumberland Plain Woodland and hollow bearing trees, therefore it is recommended that riparian zones be rehabilitated and form the core of the biodiversity outcome for the precinct. This area will be mapped Native Vegetation Retention under the *State Environmental Planning Policy (Precincts – Western Parkland City) 2021*. The riparian corridor / Environmental Conservation area within the ILP covers a total area of 17.02 ha. Riparian habitat and proposed management strategies is further discussed within the South Creek (South West) Precinct Riparian Assessment (ELA, 2026).

Vegetation within the Riparian Zone will be subject to a Vegetation Management Plan prepared at the Development Application stage. The VMP is to be prepared consistent with the Controlled activities – Guidelines for vegetation management plans on waterfront land (DPE 2022).

Infestations of *Olea europaea* subsp. *cuspidata* (African Olive), especially prominent near the southern boundary of the survey area, should be cleared. Retaining native canopy in this area of the subject site is recommended where possible.

5.4 Development controls

A Development Control Plan will be in place prior to the approval of any subdivision approvals and/or consents. The DCP will include a requirement to meet Biodiversity Certification Relevant Biodiversity Measure 19 for the reuse of native plants and topsoil. The DCP is to also provide for dam dewatering, pre-clearance surveys, fauna relocation and the re-use of hollows, felled trunks and root balls where appropriate and under the direction of an ecologist.

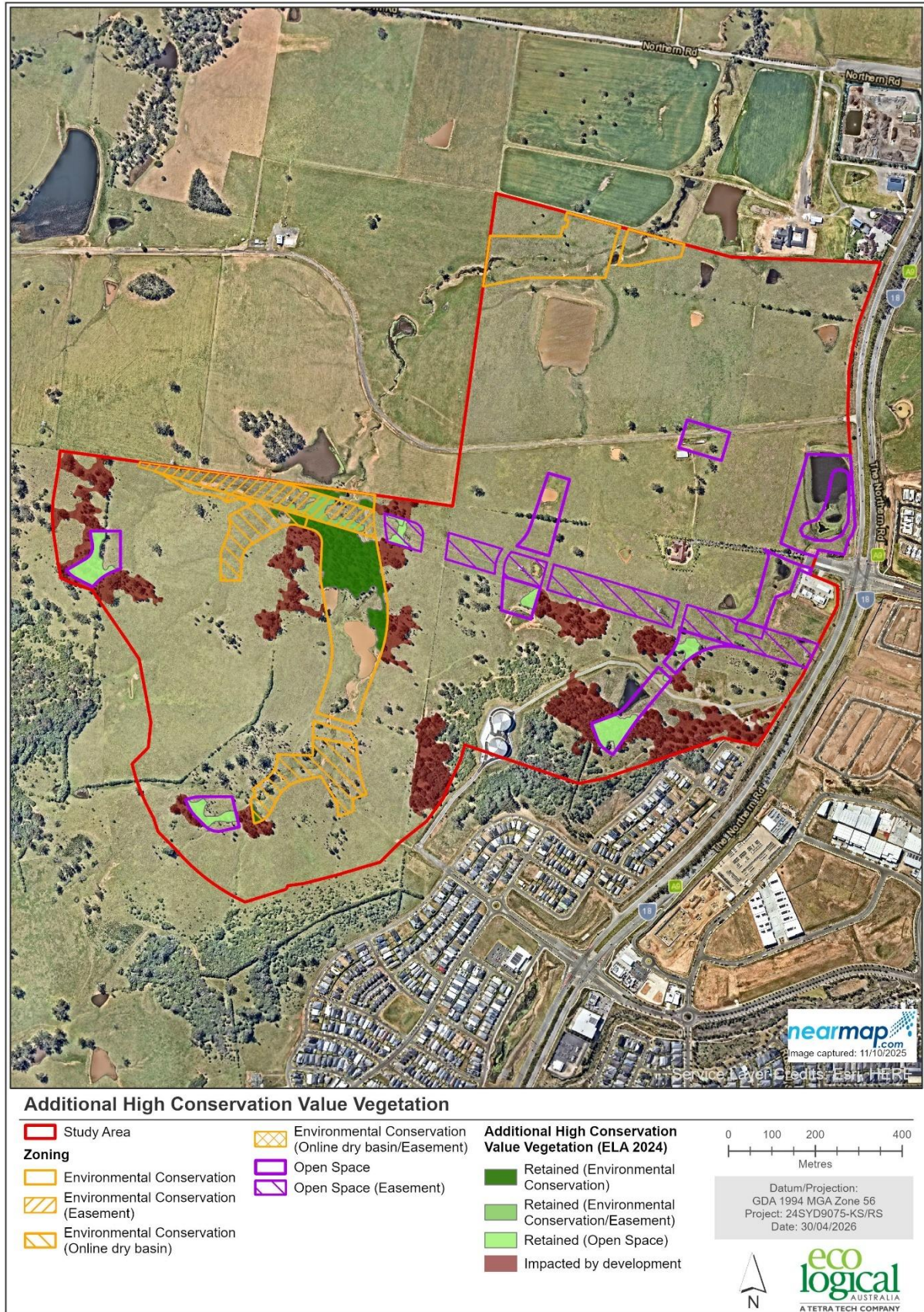


Figure 17: AHCVV to be retained within ILP

6. Conclusion

The aim of this report is to identify key ecological constraints to assist design of an ILP. The site was found to contain several significant environmental features, including Cumberland Plain Woodland (a critically endangered ecological community under both the BC Act and EPBC Act), River-Flat Eucalypt Forest (an endangered ecological community under the BC Act) and habitat features associated with potential habitat for several threatened flora and fauna species.

No vegetation in the precinct was identified for protection in the Draft Growth Centres Conservation Plan 2007. Desktop assessment and field survey identified 17.46 ha of AHCVV.

The whole of Sub-Precinct 5 is biodiversity certified. Therefore, Sub-Precinct 5 is not obligated to retain any areas of ENV. The precinct, however, contains a total of 17.46 ha of native vegetation that meets the definition of AHCVV therefore, providing opportunity to provide biodiversity outcomes beyond what was anticipated by the biodiversity certification by protecting native vegetation in riparian areas and their adjoining lands where possible.

The ILP will protect 2.63 ha of validated AHCVV, through the protection of native vegetation within the proposed Environmental Conservation area. Through specific DCP and SEPP controls, there are also opportunities to further protect 1.88 ha of AHCVV within the open space network, which would also support Connecting to Country principles (Design + Planning 2024).

7. References

Cropper, S. (1993). Management of Endangered Plants. CSIRO Publications, East Melbourne, Victoria.

Department of the Environment and Energy (DotEE) 2020b. Species Profile and Threats Database. Available <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>.

Design + Planning 2024. Cobbitty ILP – Designed with Country [DRAFT ISSUE]. 16 February 2024. Prepared for JJ Cobbitty.

NSW Department of Planning, Industry and Environment (DPIE) 2006. Order to confer biodiversity certification on the State Environmental Planning Policy (Sydney Region Growth Centres) 2006. Available: <https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/Orders-register/western-sydney-growth-centres-order.pdf?la=en&hash=18163D2D08ECEA8B5BF9394E77299A102CFF9F47>

NSW Department of Planning, Industry and Environment (DPIE) 2020a. Threatened Species Database (5 km radius search). DPIE Sydney, NSW.

NSW Department of Planning, Industry and Environment (DPIE) 2020b. Threatened Species Profiles. Available: <http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?>

NSW Department of Primary Industries (DPI) 2013. *Adam's Emerald Dragonfly – Archaeophya adamsi*. December 2013, Primefact 187, Third edition. Fisheries Ecosystems Unit, Port Stephens Fisheries Institute

Eco Logical Australia Pty Ltd (ELA) 2003. 'Managing Sydney's Urban Growth: Ecological Assessment South West Subject site'. Unpublished report prepared for Planning NSW. Available: <https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/turner-road-ecological-assessment-2007-03.pdf>

Eco Logical Australia Pty Ltd (ELA) 2026. *South Creek West (South-West) Precinct Riparian Assessment*. Prepared for JJ Cobbitty

Growth Centres Commission 2007. Growth Centres Conservation Plan: Exhibition Draft February 2007. Available: <https://www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/growth-centres-conservation-plan-exhibition-draft-2007-02.pdf>

Ian Perkins Consultancy Services and Aquila Ecological Surveys (IPC & AES) (2002). Harrington Park Stage 2. Ecological assessment. Unpublished report for Harpak Pty Ltd. Available: <https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/turner-road-ecological-assessment-2007-03.pdf>

NSW Government (n.d.). South Creek West Release Area – Precinct 5: Biodiversity and Riparian Corridors Proposal Request.

NSW National Parks and Wildlife Service (NPWS) 2002. NPWS Annual Report 2001-2002: Conservation assessment. Available:

<https://www.environment.nsw.gov.au/resources/about/annualReport010201ConservationAssessment.pdf>

NSW Office of Environment and Heritage (OEH) 2016. 'The Native Vegetation of the Sydney Metropolitan Area'.

Riches, M., Gilligan, D., Danaher, K. and Pursey, J. 2016. *Fish Communities and Threatened Species Distributions of NSW*. NSW Department of Primary Industries

Threatened Species Scientific Committee (TSSC) 2009. Advice to the Minister for the Environment, Heritage and the Arts from the Threatened Species Scientific Committee (the Committee) on an Amendment to the List of Threatened Ecological Communities under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Available at: <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/112-listing-advice.pdf>

Appendix A Methodology

A1 Field Survey

Field survey was conducted by ELA ecologists Alex Gorey and Carolina Mora. The survey area was traversed using the random meander method (Cropper 2003) and focused on the following:

- classification of vegetation not previously mapped as ENV
- identification of additional high conservation value vegetation (AHCVV),
- identification of condition of native vegetation
- an assessment of habitat significance for threatened flora and fauna species
- hollow bearing tree (HBT) identification
- incidental sightings of flora and fauna.

When vegetation community boundaries differed to those previously mapped or were not previously mapped, they were documented using digital maps. Floristic summaries were composed for areas of vegetation not previously mapped to determine the type of native vegetation community (where applicable) and to assess the condition of the vegetation. Occurrences of Cumberland Plain Woodland were assessed against the EPBC Act listing advice.

The presence of threatened fauna species identified as having potential to occur in the survey area was determined through a habitat assessment. Where important habitat features, such as hollow bearing trees, rocky outcrops, deep leaf litter, waterways or abandoned buildings were observed, their location was noted. Hollow bearing trees, where present were marked spatially using AvenzaMaps on a mobile device.

Survey limitations

This assessment was not intended to provide an inventory of all species present across the survey area but instead an overall assessment of its ecological values. The survey was conducted with an emphasis on threatened species, threatened ecological communities and key fauna habitat features. It is important to note that some species may not have been detected within the survey area during the inspection as they may be cryptic or seasonal and only detectable during flowering or during breeding. In this case the likelihood of their occurrence has been assessed based on the presence of potential habitat.

The field survey was undertaken using hand-held GPS units. It should be noted that these units can have errors in accuracy of up to 20 m (subject to availability of satellites on the day).

A2 Recovery potential

Using information collected in the field 'recovery potential' is determined for each area of vegetation. This is defined as "the anticipated capacity of (an) area to recover to a state representative of its condition prior to the most recent disturbance event" (IPC & AES 2002).

Table 9 outlines the decision rules used in this step, resulting in a ranking of High, Moderate, Low or Very Low recovery potential for each vegetation remnant.

Table 9: Recovery potential matrix (ELA 2003)

Current condition and land use	Past land use and disturbance	Soil Condition	Vegetation	Recovery Potential
Cleared (no woodland canopy). Includes <i>Bursaria</i> thickets in grassland	Recently cleared (<2 years)	Unmodified or largely natural. Uncultivated.	Native dominated	High
			Exotic dominated	Moderate
		Modified. Heavily cultivated and/or pasture improved. Imported material.	Either	Low
	Historically cleared (>2 years) and consistently managed as cleared.	Unmodified or largely natural. Uncultivated.	Native dominated	Moderate
			Exotic dominated	Low
		Modified. Heavily cultivated and/or pasture improved. Imported material.	Either	Very Low
Wooded/Native Canopy present or regenerating	No recent clearing of understorey	Unmodified or largely natural. Uncultivated.	Native understorey relatively intact or in advanced state of regeneration. Native dominated.	High
			Native understorey significantly structurally modified, absent or largely absent. Includes areas dominated by African Olive.	Moderate
			Exotic dominated	Low
		Moderately modified by long term grazing or mowing.	Native dominated	Low
		Modified. Heavily cultivated and/or pasture improved. Imported material.	Native understorey significantly structurally modified, absent or largely absent. Includes areas dominated by African Olive.	Very Low
			Native understorey present. Heavily weed invaded.	Low
	Understorey patchily intact	Disturbed	Native dominated	Moderate
			Exotic dominated	Low

Current condition and land use	Past land use and disturbance	Soil Condition	Vegetation	Recovery Potential
	Recent clearing of understorey and or native understorey significantly structurally modified due to existing land use (e.g. Mowing, grazing).	Unmodified or largely natural. Uncultivated.	Native dominated. If no vegetation present, assume native dominated.	High
			Exotic dominated	Moderate
		Modified. Heavily cultivated and/or pasture improved. Imported material.	Native dominated	Low
			Exotic dominated	Very Low

A3 Ecological constraints

An ecological constraints analysis based on a methodology previously used by ELA elsewhere in Western Sydney was applied across the subject site. An ecological constraints analysis is a stepped analysis of the environmental values of an area. It provides a combined measure of ecological values and is increasingly used as a basis for negotiations over locations, types, and densities of land development. It includes measurement of:

- The legislative status of vegetation communities;
- the structural condition of vegetation remnants;
- type and severity of disturbance and associated recovery potential;
- connectivity between remnants on and off site;
- the size of the vegetation remnant; and
- the value of the remnant as threatened species habitat.

The steps involved in this type of ecological constraints analysis are illustrated in Figure 18. Vegetation mapping is combined with field survey work, threatened species assessment, recovery potential and the NPWS (2002) conservation significance assessment methodology to determine the relative level of ecological value or constraint across a site.

Information derived from the recovery potential, conservation significance and threatened species calculations are combined to determine ecological constraint. The process for combining this information is detailed on Table 10, Table 11 and Table 12.

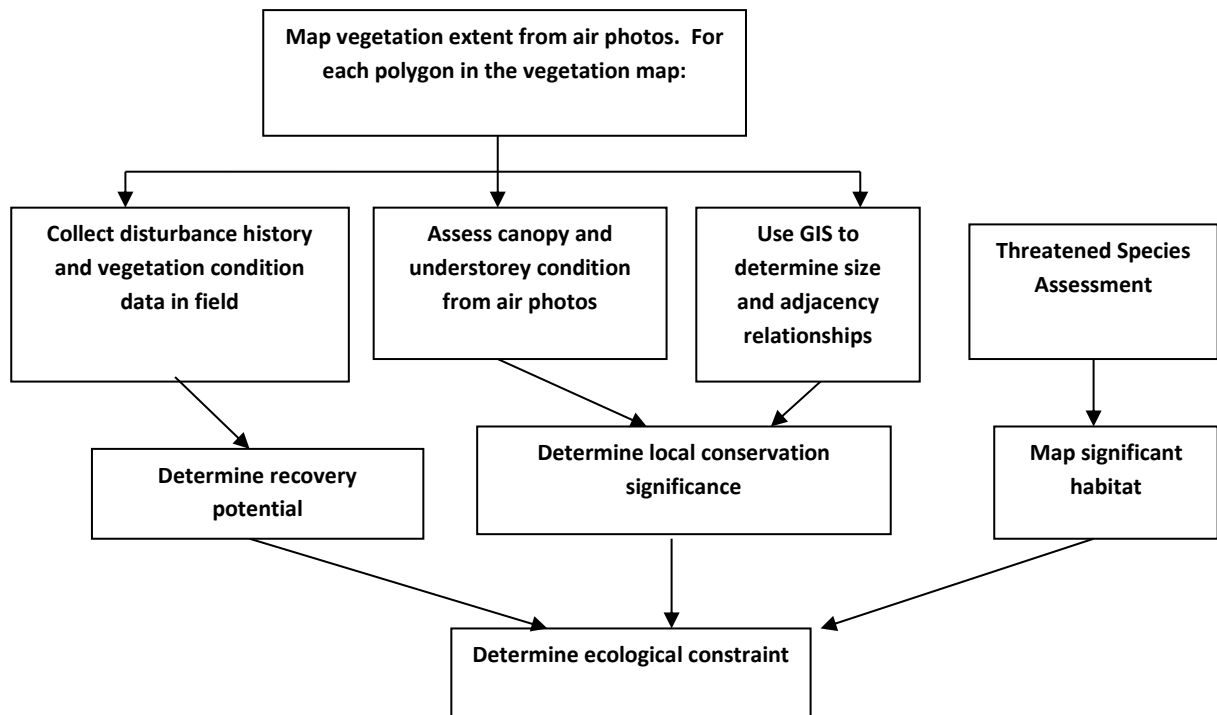


Figure 18: Ecological Constraints Flowchart

Table 10: Conservation significance matrix (NSW NPWS, 2002)

Community type	Condition code	Patch size^	Connectivity	Code	Conservation significance
Endangered Ecological Community (Critically endangered) (CEEC)	ABC, TX or Txr	Any	Any	C3	Core
	Txu	Any	Any	URT	Urban remnant trees (critically endangered communities)
Endangered Ecological Community (EEC)	ABC (with Understorey in good or moderate condition)	> 10 ha	Any	C1	Core
		< 10 ha	Adjacent to C1 or CEEC	C2	Core
			Adjacent to S1	S2	Support for core
			None	O	Other remnant vegetation
	TX or Txr, ABC (with poor Understorey condition)	Any	Adjacent to any Core	S1	Support for core
			None	O	Other remnant vegetation
	Txu	Any	Any	O	Other remnant vegetation

^ Patch size is based on a 15m adjacency analysis

Table 11: Decision matrix step one

Recovery Potential					
Conservation Significance		High	Moderate	Low	Very Low
	Core	High	High	High	High
	Support for core	High	Moderate	Moderate	Low
	Other	Moderate	Moderate	Low	Low

Table 12: Decision matrix step two

Combined Recovery Potential and Conservation Significance (result of Table above)				
Threatened Species Assessment		High	Moderate	Low
	Known (High)	High	High	High
	Likely (Moderate)	High	Moderate	Moderate
	Nil (Low)	High	Moderate	Low



Growth Centres Biodiversity Certification

Assessment of Consistency between the Relevant Biodiversity Measures of the Biodiversity Certification Order and Sub-Precinct 5 of the South Creek West Precinct

May 2026

Prepared by	David Bonjer – Senior Principal Eco Logical Australia
Version	3
Date	04/05/20026

1. Introduction

In December 2007 an order conferring biodiversity certification on *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* (Growth Centres SEPP) was made by the then Minister for the Environment under section 126G of the then *Threatened Species Conservation Act 1995* (TSC Act).

In July 2008, the Minister's certification was validated by the *Threatened Species Conservation Amendment (Special Provisions) Act 2008* which was subsequently incorporated into Part 7 of Schedule 7 of the TSC Act. The amendment gives the Minister for the Environment the power to suspend or revoke the certification if any of its conditions, termed Relevant Biodiversity Measures (RBMs), are not complied with. RBMs refer to the conditions under Schedule 1 of the *Order to confer biodiversity certification on the State Environmental Planning Policy (Sydney Region Growth Centres) 2006* – referred to as the Biodiversity Certification Order.

The RBMs applying to the certification have remained unaltered since gazettal of the original order and require (among other things) the permanent protection of 2,000 hectares of high-quality vegetation within the Growth Centres.

On 25 August 2017, the *Biodiversity Conservation Act 2016* (BC Act) came into force, replacing the TSC Act. However, section 35 of the Biodiversity Conservation (Savings and Transitional) Regulation 2017 provides that

35 Biodiversity certification that was conferred on land under Part 7AA of the [Threatened Species Conservation Act 1995](#) and that was in force on the repeal of that Act is taken to be biodiversity certification conferred on the land under Part 8 of the new Act

This report has been prepared to fulfil the requirement of RBM 35 for an assessment of the consistency of proposed Sub-Precinct 5 of the South Creek West Precinct with the biodiversity certification and the RBMs.

This report has been prepared in a table format and addresses all RBMs that are relevant to precinct planning. It is noted that some RBMs related to other government policies and programs and are not specific to precinct planning and have therefore not been included in the report.

A complete copy of the relevant biodiversity measures can be found on the Department of Planning, Industry and Environment's website at [Register of biodiversity certification orders | NSW Environment, Energy and Science](#).

Where this report indicates that the proposed master plan is inconsistent with the precinct planning and/or biodiversity certification, full justification for the inconsistency is provided as part of the Biodiversity Assessment Report for the precinct.

Definitions

Terms defined below appear in **bold** in the table. Where the terms are also defined in the Biodiversity Certification Order, the definitions provided are consistent with those in the Order.

Note that where the conditions refer to the Growth Centres Commission (GCC) or

- **Additional High Conservation Value Vegetation (AHCVV)** means areas of vegetation which were found during ground-truthing which would otherwise meet the definition of Existing Native Vegetation but was not originally identified as “vegetation” on maps 4 and 5 of the draft Growth Centres Conservation Plan.
- **Biodiversity Certification Maps** means the maps marked “North West Growth Centre – Biodiversity Certification” and “South West Growth Centre – Biodiversity Certification” dated November 2007 and included in Schedule 2 of the Biodiversity Certification Order.
- **BC Act** means the *Biodiversity Conservation Act 2016* (replaces the *Threatened Species Conservation Act 1995*).
- **Certified Area** means an area marked as a certified area on a biodiversity certification map.
- **Clearing** of existing native vegetation means any one or more of the following:
 - a) cutting down, felling, thinning, logging, or removing existing native vegetation in whole or in part,
 - b) killing, destroying, poisoning, ringbarking, uprooting, or burning existing native vegetation in whole or in part.
- **DECC** means the former NSW Department of Environment and Climate Change. This organisation is now known as the NSW DCCEEW (Department of Climate Change, Energy, the Environment and Water).
- **GCC** means the Growth Centres Commission. The function of this organisation is now fulfilled by the NSW Department of Planning, Housing and Infrastructure (DPHI).
- **EP&A Act** means the *Environmental Planning and Assessment Act, 1979*.
- **Western Parkland City SEPP**, or ‘the SEPP’, refers to the relevant State Environmental Planning Policy which applies to the subject land, being the State Environmental Planning Policy (Precincts – Western Parkland City SEPP).
- **Existing Native Vegetation (ENV)** means areas of indigenous trees (including any sapling) that:
 - c) had 10% or greater over storey canopy cover present,
 - d) were equal to or greater than 0.5 Ha in area, and
 - e) were identified as “vegetation” on maps 4 and 5 of the draft Growth Centres Conservation Plan.
- **Minister** means the Minister administering the TSC Act and/or the BC Act.
- **Non-certified Area** means an area marked as a non-certified area on a biodiversity certification map.
- **Protection or Protected** in relation to land means land that is protected by a land use zoning under an environmental planning instrument or public ownership arrangements that provide for the protection of biodiversity values as a priority, or another arrangement that provides in perpetuity security for biodiversity on the subject land.
- **Relevant Biodiversity Measures** means the conditions in Schedule 1 of the Biodiversity Certification Order.
- **TSC Act** means the *Threatened Species Conservation Act 1995*.

2. Consistency Assessment

Table 1: Assessment of consistency between the relevant biodiversity measures of the Biodiversity Certification Order and Sub-Precinct 5 of the South Creek West Precinct.

	Relevant Biodiversity Measure	Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
General				
4	Copies of all final reports, maps, reviews, plans and monitoring data referred to in the conditions of biodiversity certification must be held by the GCC and made publicly available, either on request and/or by a mechanism that is broadly publicly accessible. This does not apply to material that is commercially sensitive or contains sensitive information regarding the location of threatened species, populations or ecological communities or their habitat.	All information required by the RBMs for Sub-Precinct 5 of the South Creek West Precinct, which will be publicly exhibited.	Yes	
Native vegetation to be retained within the Growth Centres				
6	A minimum of 2,000 hectares of existing native vegetation must be retained and protected within the Growth Centres, either within the certified areas and/or the non-certified areas , subject to conditions 7 to 13 below.	The Growth Centres Biodiversity Certification did not identify any Existing Native Vegetation to be protected within the Sub-Plan 5 area.	Yes	The Draft Growth Centres Conservation Plan 2007 maps 0 ha of ENV within Sub-Precinct 5 of the South Creek West Precinct. However, Sub-Precinct 5 contains Cumberland Plain Woodland and River-Flat Eucalypt Forest in varying conditions, the protection of which would enhance biodiversity outcomes within the precinct and the broader Growth Centres. 3.25 ha of 'Additional High Conservation Value Vegetation' is within located within the proposed C2 Environment Conservation Zone. This vegetation will be subject to the Native Vegetation Protection and Riparian Protection clauses in the SEPP, Riparian. Of this 3.25 ha, 0.62 ha is within an easement that may be subject to management and maintenance by

	Relevant Biodiversity Measure	Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
				the transmission line authority. The remaining 2.63 ha of AHCVV is outside the easement. A further 1.89 ha of AHCVV is within the proposed Open Space zone. Retention and management of this vegetation is likely within a recreation context.
Retention of existing native vegetation during precinct planning				
7	During the precinct planning process, the GCC may determine to make areas of existing native vegetation within the non-certified areas available for development if the clearance of such vegetation is considered necessary for either the provision of essential infrastructure and/or to meet the required Development Parameters specified in the Growth Centres Development Code.	N/A	Yes	N/A
8	In making a determination under condition 7, the GCC must demonstrate by way of information provided during the public exhibition of the precinct plan (where that exhibition occurs after this order takes effect) that the clearing of any existing native vegetation in the non-certified areas will be offset by: (a) the protection of an equal or greater area of existing native vegetation elsewhere in the Growth Centres; and/or (b) the revegetation and/or restoration of an area of land elsewhere in the Growth Centres, subject to satisfying the following, (i) that the clearance of existing native vegetation in the non-certified areas will not affect the capacity to achieve overall improvement or maintenance of biodiversity values for threatened	N/A	Yes	N/A

	Relevant Biodiversity Measure	Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
	species, populations and ecological communities and their habitats, (ii) the revegetated and/or restored areas will be protected, (iii) the extent of revegetation and/or restoration compared to clearing of existing native vegetation must be undertaken at a ratio of at least 3:1 (to reflect the greater ecological risks relative to retaining existing native vegetation), (iv) areas subject to revegetation and/or restoration must be of a suitable boundary configuration and design to support long-term management, (v) revegetation and/or restoration of the proposed areas would not be undertaken under another scheme or regulatory requirement already in operation at the time that the clearing is approved (this includes but is not limited to any approvals, and associated conditions of such approvals, that may be required under the <i>Rivers and Foreshores Improvement Act 1948</i> and <i>Water Management Act 2000</i>), (vi) revegetation and/or restoration will be undertaken by suitably qualified and experienced persons using indigenous plant stock, and (vii) sufficient resources will be made available to undertake the revegetation and/or restoration and any necessary follow-up maintenance and monitoring for a minimum period of 5 years following the commencement of the revegetation and/or restoration.			
9	Revegetation and/or restoration may be partly counted towards meeting the overall requirement to protect 2,000	N/A	-	-

Growth Centres Strategic Assessment Program

Assessment of Consistency between the Commitments of the Strategic Assessment Program and Sub-Precinct 5 of the South West Creek Precinct Plan

May 2026

Prepared by	David Bonjer – Senior Principal Eco Logical Australia
Version	3
Date	04/05/2026

1 Introduction

In December 2011 the Federal Government endorsed the Sydney Growth Centres Strategic Assessment Program Report and in February 2012 approved the classes of actions in the Growth Centres that if undertaken in accordance with the approved program do not require separate approval under the *Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act)*.

The Program includes a range of commitments for matters of national environmental significance protected under the EPBC Act. The commitments are drawn from the analysis in the Supplementary Assessment Report and Draft Strategic Assessment Report (Part B) and build upon the Relevant Biodiversity Measures for the Growth Centres Biodiversity Certification.

This report has been prepared to assess of the consistency of proposed precinct plans with the commitments of the Strategic Assessment Program and to satisfy the evaluation and reporting requirements for the Program. Consistency with the Strategic Assessment Program is required to ensure proposals in the Growth Centres benefit from the Commonwealth approval.

This report has been prepared in a table format and addresses all commitments that are relevant to precinct planning. It is noted that some of the commitments are not specific to precinct planning and have therefore not been included in the report.

The Strategic Assessment Program can be viewed in full at:

[http://growthcentres.planning.nsw.gov.au/Portals/0/Strategic Assessment/final_program_report.pdf](http://growthcentres.planning.nsw.gov.au/Portals/0/Strategic%20Assessment/final_program_report.pdf)

Where the report indicates that precinct planning is inconsistent with the Biodiversity Certification or the Strategic Assessment Program, full justification for the inconsistency is provided as part of the ecological assessment for the precinct.

Both the Growth Centres Biodiversity Certification Relevant Biodiversity Measures and Strategic Assessment require a consistency report be prepared and publicly exhibited when the precinct plan is exhibited.

Definitions

Terms defined below appear in **bold** in the table. Where the terms are also defined in the Biodiversity Certification Order, the definitions provided are consistent with those in the Order. However, the Department of Planning and Environment (DPE) and Environment and Heritage Group (EHG) division are replaced in this report for the Growth Centres Commission and the Department of Environment and Climate Change, respectively.

- **Additional High Conservation Value Vegetation (AHCVV)** means areas of vegetation which were found during ground-truthing which would otherwise meet the definition of Existing Native Vegetation but was not originally identified as “vegetation” on maps 4 and 5 of the draft Growth Centres Conservation Plan.
- **Biodiversity Certification Maps** means the maps marked “North West Growth Centre – Biodiversity Certification” and “South West Growth Centre – Biodiversity Certification” dated November 2007 and included in Schedule 2 of the Biodiversity Certification Order.
- **BC Act** means the *Biodiversity Conservation Act 2016* (replaces the *Threatened Species Conservation Act 1995*).
- **Certified Area** means an area marked as a certified area on a biodiversity certification map.
- **Clearing** of existing native vegetation means any one or more of the following:
 - a) cutting down, felling, thinning, logging, or removing existing native vegetation in whole or in part,
 - b) killing, destroying, poisoning, ringbarking, uprooting, or burning existing native vegetation in whole or in part.
- **EP&A Act** means the *Environmental Planning and Assessment Act, 1979*.
- **Western Parkland City SEPP**, or ‘the SEPP’, refers to the relevant State Environmental Planning Policy which applies to the subject land, being the State Environmental Planning Policy (Precincts – Western Parkland SEPP).
- **Existing Native Vegetation (ENV)** means areas of indigenous trees (including any sapling) that:
 - c) had 10% or greater over storey canopy cover present,
 - d) were equal to or greater than 0.5 Ha in area, and
 - e) were identified as “vegetation” on maps 4 and 5 of the draft Growth Centres Conservation Plan.
- **High Biodiversity Value (HBV)** means the same as ENV but is the term used for ENV within the Aerotropolis under the Western Parklands City SEPP. For the purposes of this report, the term ENV is used instead as this is the term used under the Growth Centres Biodiversity Certification Order.
- **Minister** means the Minister administering the TSC Act and/or the BC Act.
- **Non-certified Area** means an area marked as a non-certified area on a biodiversity certification map.
- **Protection or Protected** in relation to land means land that is protected by a land use zoning under an environmental planning instrument or public ownership arrangements that provide

for the protection of biodiversity values as a priority, or another arrangement that provides in perpetuity security for biodiversity on the subject land.

- *Relevant Biodiversity Measures* means the conditions in Schedule 1 of the Biodiversity Certification Order.
- *TSC Act* means the *Threatened Species Conservation Act 1995*.

2 Consistency Assessment

Table 1: Assessment of consistency between the commitments of the Strategic Assessment Program and the South Creek West Precinct Plan

	Commitment	Sub-Precinct 5 of the South Creek West Precinct – Comment	Consistent with Commitment	Justification
Review of Zoning				
3	Review the provisions of the Environment Conservation and Public Recreation - Regional zones in the Growth Centres SEPP to confirm they are adequate for conservation purposes. Note this commitment is being undertaken for the Growth Centres as one exercise as does not need to be addressed separately for each precinct.	Undertake a review of the zone objectives, permitted land uses and development controls to ensure the conservation values of the land are adequately protected.	Not Applicable	
Threatened Ecological Communities				
4	Retention and protection of a minimum 998 ha of CPW within the Growth Centres, included a minimum of 363 ha of HNV CPW. i) Retention and protection of CPW in the following areas of the Growth Centres: a) 138 ha within Flood Prone Land to be protected through the vegetation clearing controls under the Growth Centres SEPP or through zoning and/or development controls following completion of precinct planning. b) 424 ha within Environment Conservation and Public Recreation – Regional zoning to be protected. RBM 12 which states that clearing of these areas is not permitted unless it is in accordance with a Plan of	Sub-Precinct 5 of the South Creek West Precinct does not contain any CPW that was identified as requiring protection under the Strategic Assessment.	Yes	As no CPW required protection in this precinct, this measure is met. However, the Precinct plan will protect approximately 2.63 ha of Cumberland Plain Woodland in the riparian corridor. This will be achieved via a Native Vegetation Protection clause in the SEPP, and the proposed C2 Environmental Protection zoning.

Assessment of Consistency between Commitments of the Strategic Assessment and the South Creek West Precinct Plan

	Commitment	Sub-Precinct 5 of the South Creek West Precinct – Comment	Consistent with Commitment	Justification
	Management endorsed by DECCW; - the zoning and vegetation clearing controls under the Growth Centres SEPP; and - the Growth Centres Conservation Fund which provides funding to acquire the land. c) 280 ha to be protected within existing reserved areas including the Westlink M7 Motorway Offsets area, the Kemps Creek Nature Reserve, and the Western Sydney Parklands. d) 79 ha to be protected within protected zones within Edmondson Park. e) 77 ha to be retained within non-certified and transitional lands. These areas will be retained subject to the confirmation of the presence of the community through survey at the precinct planning stage. ii) If for any reason the above targets cannot be achieved then the NSW Government will ensure that 998 ha of CPW is protected within the Growth Centres through the measures contained in either RBM 8a or 8b.			
5	Assessment of 14 ha HMV CPW within Marsden Park & Marsden Park Industrial Precincts to confirm its presence and if present protect, shown in red hatching on the Biodiversity Certification maps a) Assessment of the HMV CPW in accordance with RBM 14 and 15.	This measure does not apply to Sub-Precinct 5 in the South Creek West Precinct.	Not Applicable	

Assessment of Consistency between Commitments of the Strategic Assessment and the South Creek West Precinct Plan

	Commitment	Sub-Precinct 5 of the South Creek West Precinct – Comment	Consistent with Commitment	Justification
	b) Based on the outcomes of the assessment, DECCW will advise the NSW Minister for the Environment whether the area should be protected in accordance with RBM 16.			
Shale Sandstone Transition Forest (SSTF)				
8	Retention and protection of a minimum of 58 ha of SSTF within the Growth Centres. i) Retention and protection of SSTF in the following areas of the North West Growth Centre: a) 5.5 ha within Flood Prone Land to be protected through the vegetation clearing controls under the Growth Centres SEPP. b) 5.5 ha within Public Recreation – Regional zoning to be protected. • RBM 12 which states that clearing of these areas is not permitted unless it is in accordance with a Plan of Management endorsed by DECCW; • the zoning and vegetation clearing controls under the Growth Centres SEPP; and • the Growth Centres Conservation Fund which provides funding to acquire the land. c) 0.5 ha within the Westlink M7 Motorway Offsets area to be protected through maintenance of the existing	Sub-Precinct 5 in the South Creek West Precinct does not contain any SSTF.	Not Applicable	

Assessment of Consistency between Commitments of the Strategic Assessment and the South Creek West Precinct Plan

	Commitment	Sub-Precinct 5 of the South Creek West Precinct – Comment	Consistent with Commitment	Justification
	conservation area (purchased by the RTA for transfer to DECCW as part of the Westlink M7 Motorway offsets). d) 46.5 ha within the E3 Environmental Management zone in North Kellyville to be protected under the existing native vegetation and native vegetation retention controls under the North Kellyville Precinct Plan.			
Additional conservation actions within the Growth Centres – plants				
11. and 12.	During or before the preparation of the relevant precinct plan(s) under the Growth Centres Development Code relating to the areas referred to in the table below, the following actions must be undertaken:			
	Species <i>Acacia pubescens</i>	Required action Known populations at Kemps Creek and Austral – as shown in red hatching on the Biodiversity Certification maps: • survey to confirm the presence of the population in the Kemps Creek and Austral precincts, and • if the species is present and the population is identified as significant relative to the adjacent property by DECCW, provide for the protection of the area of suitable habitat for the species to the		

Assessment of Consistency between Commitments of the Strategic Assessment and the South Creek West Precinct Plan

	Commitment	Sub-Precinct 5 of the South Creek West Precinct – Comment	Consistent with Commitment	Justification
15. and 30.	satisfaction of the DECCW.			
	<i>Dillwynia tenuifolia</i> <i>Pultenaea parviflora</i> Retention and protection of habitat supporting the four important populations of <i>Dillwynia tenuifolia</i> and <i>Pultenaea parviflora</i> known to occur within the Growth Centres through acquisition of land for environmental conservation. a) Protection of the Marsden Park North population within Environment Conservation zoning in accordance with the measures outlined in commitment 8.b) b) Protection of the population within the Air Services Australia site at Shanes Park (noting that at the time of finalising the Program the site is still under care of the Commonwealth) through: RBM 12 which states that clearing of these areas is not permitted unless it is in accordance with a Plan of Management endorsed by DECCW; and	Sub-Precinct 5 of the South Creek West Precinct does not include any of the four important populations of <i>Dillwynia tenuifolia</i> or <i>Pultenaea parviflora</i>	Not Applicable	

Assessment of Consistency between Commitments of the Strategic Assessment and the South Creek West Precinct Plan

	Commitment	Sub-Precinct 5 of the South Creek West Precinct – Comment	Consistent with Commitment	Justification
27.	the zoning and vegetation clearing controls under the Growth Centres SEPP. c) Protection of the majority of the large population within Kemps Creek in accordance with the measures outlined in commitment 15.b) above. d) Protection of the large population that occurs within the Westlink M7 Motorway offset adjacent to the Colebee Precinct through maintenance of the existing conservation area (purchased by the RTA for transfer to DECCW as part of the Westlink M7 Motorway offsets).			
	<i>Pimelea spicata</i> Potential populations at Denham Court Road within the East Leppington Precinct - as shown in red hatching on the Biodiversity Certification maps: - survey to confirm the presence of population, and - if the population is present and identified as			

Assessment of Consistency between Commitments of the Strategic Assessment and the South Creek West Precinct Plan

	Commitment	Sub-Precinct 5 of the South Creek West Precinct – Comment	Consistent with Commitment	Justification
17. 18. and 19.		significant relative to adjacent property by DECCW, provide for the protection of the area of suitable habitat for the species to the satisfaction of the DECCW .		
	<i>Grevillea parviflora</i> <i>subsp. parviflora</i>	Retention and protection of habitat supporting the population known to occur within the Growth Centres through acquisition of land in Kemps Creek. a) Protection of the majority of the large population within Kemps Creek through: • RBM 12 which states that clearing of these areas is not permitted unless it is in accordance with a Plan of Management endorsed by DECCW; and • the zoning and vegetation clearing controls under the Growth Centres SEPP.	This measure does not apply to Sub-Precinct 5 in the South Creek West Precinct.	Not Applicable
23. 24. and 25.	<i>Persoonia nutans</i>	Potential populations at Kemps Creek Precinct - as shown in red hatching on the Biodiversity Certification maps : • survey to confirm the presence of population, and	This measure does not apply to Sub-Precinct 5 in the South Creek West Precinct.	Not Applicable

Assessment of Consistency between Commitments of the Strategic Assessment and the South Creek West Precinct Plan

	Commitment	Sub-Precinct 5 of the South Creek West Precinct – Comment	Consistent with Commitment	Justification
20.		if the species is present and population is identified as significant relative to adjacent property by DECCW, provide for the protection of the area of suitable habitat for the species to the satisfaction of the DECCW.	Not Applicable	
	<i>Micromyrtus minutiflora</i>	Retention and protection of habitat supporting the two important populations known to occur within the Growth Centres. a) Protection of the Marsden Park North population within Environment Conservation zoning through: - RBM 12 which states that clearing of these areas is not permitted unless it is in accordance with a Plan of Management endorsed by DECCW; - the zoning and vegetation clearing controls under the Growth Centres SEPP; and - the Growth Centres Conservation Fund which provides funding to acquire the land.		

Assessment of Consistency between Commitments of the Strategic Assessment and the South Creek West Precinct Plan

	Commitment	Sub-Precinct 5 of the South Creek West Precinct – Comment	Consistent with Commitment	Justification
22.		b) Protection of the population within the Air Services Australia site at Shanes Park (noting that at the time of finalising the Program the site is still under care of the Commonwealth) through: - RBM 12 which states that clearing of these areas is not permitted unless it is in accordance with a Plan of Management endorsed by DECCW; and - the zoning and vegetation clearing controls under the Growth Centres SEPP.	This measure does not apply to Sub-Precinct 5 in the South Creek West Precinct.	Not Applicable
	<i>Persoonia hirsuta</i>	Potential habitat at North Kellyville – as shown in red hatching on the Biodiversity Certification maps: - survey to confirm the presence of the species, and - if the species is present, provide for the protection of the habitat within the Precinct through zoning as E3 Environmental Management and existing native vegetation or native vegetation retention development controls.	This measure does not apply to Sub-Precinct 5 in the South Creek West Precinct.	Not Applicable

Assessment of Consistency between Commitments of the Strategic Assessment and the South Creek West Precinct Plan

	Commitment		Sub-Precinct 5 of the South Creek West Precinct – Comment	Consistent with Commitment	Justification
14.	<i>Darwinia biflora</i>	Known populations at North Kellyville - as shown in red hatching on the Biodiversity Certification maps : - survey to confirm the extent of the populations, and - provide for the protection and ongoing management of key populations within the Precinct through zoning as E3 Environmental Management and existing native vegetation controls.	This measure does not apply to Sub-Precinct 5 in the South Creek West Precinct.	Not Applicable	
	Note: On completion of the above actions the Minister may decide that it is appropriate to amend the boundaries of the area subject to biodiversity certification, in accordance with condition 3.				
Additional conservation actions within the Growth Centres – animals					
During or before the preparation of the relevant precinct plan(s) under the Growth Centres Development Code relating to the area referred to in the table below, the following actions must be undertaken:					
32.	Species <i>Swift Parrot</i>	Required action Protection of potential habitat for the Swift Parrot within the Growth Centres. a) Protection of 2,000 ha native vegetation within the Growth Centres through: RBM 6 which requires a minimum of 2,000 ha of	The draft Conservation Plan identifies 0 ha of Existing Native vegetation (ENV) in Sub-Precinct 5 of the South Creek West Precinct. Although no ENV was required to be	Yes	

Assessment of Consistency between Commitments of the Strategic Assessment and the South Creek West Precinct Plan

		Commitment	Sub-Precinct 5 of the South Creek West Precinct – Comment	Consistent with Commitment	Justification
34. and 35.		existing native vegetation to be retained; and the relevant development controls under the Growth Centres SEPP that relate to the retention of native vegetation.	retained, 2.63 ha of CPW will be retained.	Not Applicable	
	Green and Golden Bell Frog	Potential population at Riverstone – as shown in red hatching on the Biodiversity Certification maps: - Incorporation of habitat protection and enhancement features (as per the agreed concept design) in the Riverstone Precinct Development Control Plan for the trunk drainage land. - Inclusion of provisions in the Riverstone Precinct Plan and Development Control Plan to require the design and assessment of development on subject lands to be consistent with any recovery plan for the species and the Best Practice Guidelines for Green and Golden Bell Frog habitat (DECC 2008b). Retention of major drainage lines and associated vegetation throughout the Growth Centres through Growth Centres SEPP development controls for major creeks and flood prone areas.	Measure 34 does not apply to the Sub-Precinct 5 of the South Creek West Precinct.		

Assessment of Consistency between Commitments of the Strategic Assessment and the South Creek West Precinct Plan

	Commitment		Sub-Precinct 5 of the South Creek West Precinct – Comment	Consistent with Commitment	Justification
36.	<i>Large-eared Pied Bat</i>	Retention of potential roosting habitat and immediately adjacent potential foraging habitat along Cattai Creek in North Kellyville through development controls associated with the E3 Environmental Management and E4 Environmental Living zones.	This measure does not apply to Sub-Precinct 5 in the South Creek West Precinct.	Not Applicable	
38.	<i>Grey-headed Flying Fox</i>	Protection of potential habitat for the Grey-headed Flying Fox within the Growth Centres. b) Protection of 2,000 ha native vegetation within the Growth Centres through: • RBM 6 which requires a minimum of 2,000 ha of existing native vegetation to be retained; and • the relevant development controls under the Growth Centres SEPP that relate to the retention of native vegetation.	The draft Conservation Plan identifies 0 ha of Existing Native vegetation (ENV) in Sub-Precinct 5 of the South Creek West Precinct. Although no ENV was required to be retained, 2.63 ha of CPW will be retained.	Yes	
	Note: On completion of the above actions the Minister may decide that it is appropriate to amend the boundaries of the area subject to biodiversity certification, in accordance with condition 3.				

3 Conclusion

This report has undertaken an assessment of the consistency of Sub-Precinct 5 of the South Creek West Precinct with the Strategic Assessment and the applicable commitments.

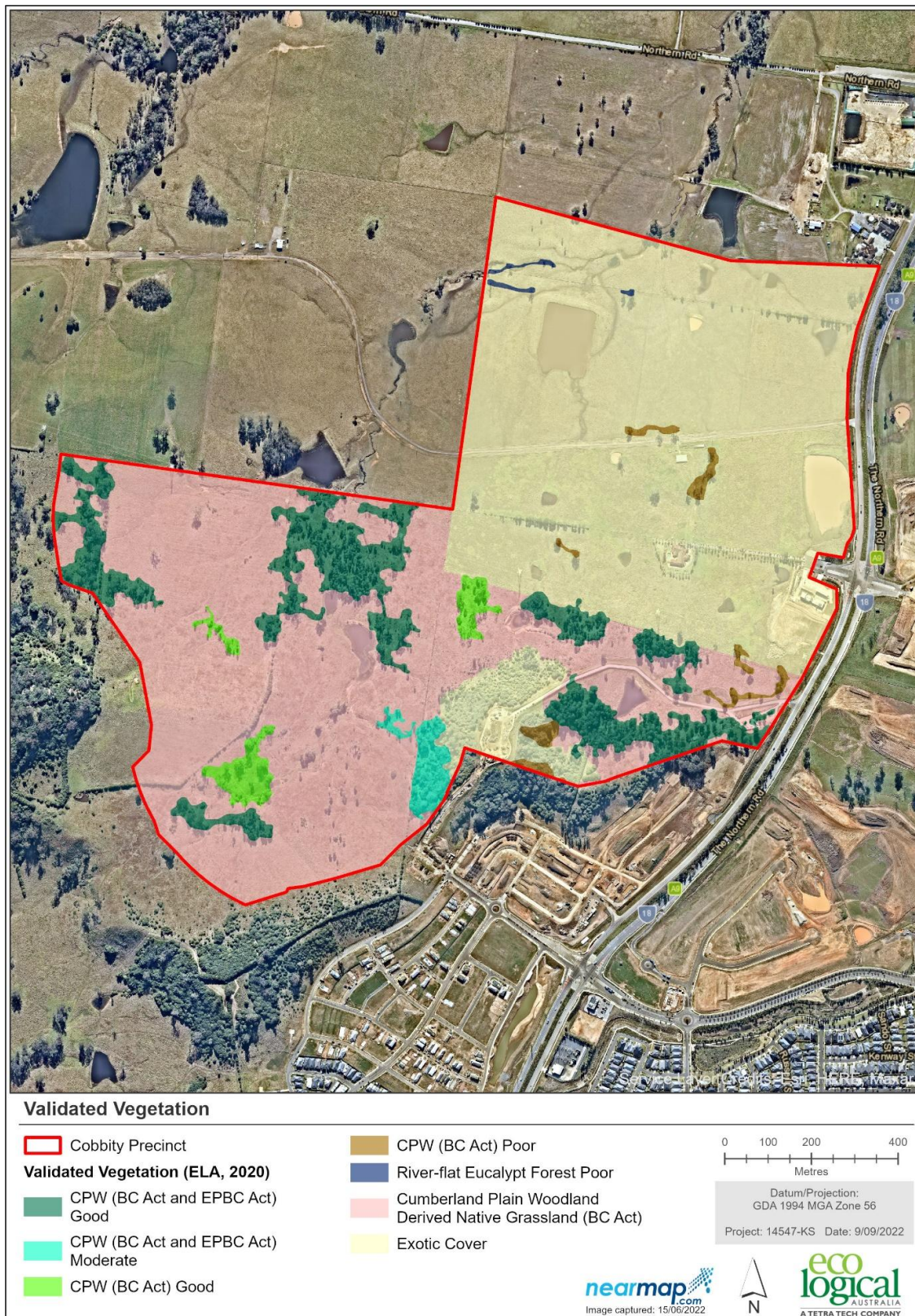
It is concluded that the Sub-Precinct 5 of the South Creek West Precinct is consistent with the Strategic Assessment of the Growth Centres SEPP, as follows:

- Although no ENV was required to be retained, 2.63 ha of CPW will be retained and protected within the Sub-Precinct 5 of the South Creek West Precinct.
- All of the CPW to be protected will be located on land to be zoned C2 Environmental Conservation.

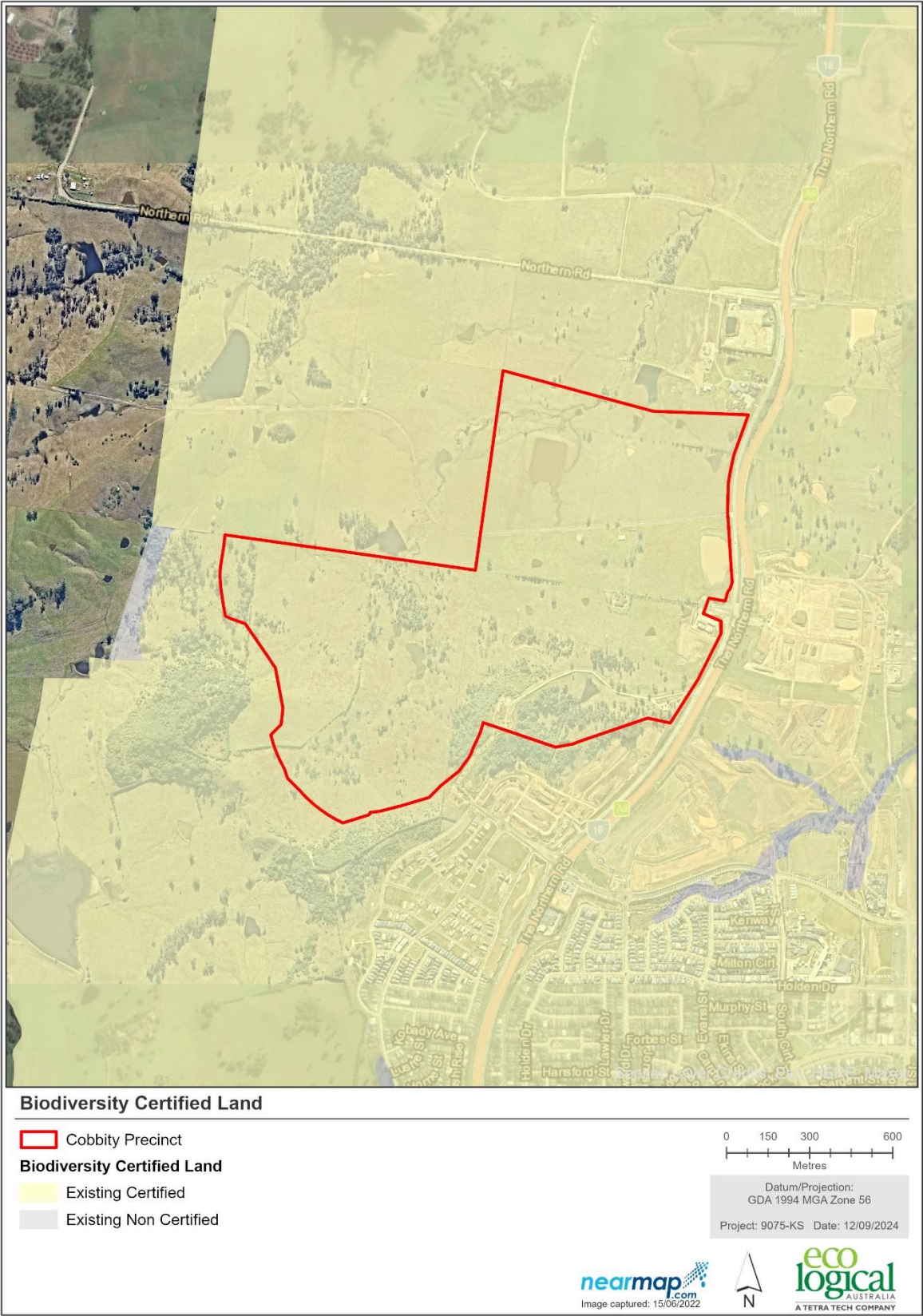
Annex A

Vegetation Communities and Biodiversity Certification maps for Sub-Precinct 5 of the South Creek West Precinct

Assessment of Consistency between Commitments of the Strategic Assessment and Sub-Precinct 5 of the South Creek West Precinct Plan



Assessment of Consistency between Commitments of the Strategic Assessment and Sub-Precinct 5 of the South Creek West Precinct Plan



Annex B

Proposed Precinct Plan for Sub-Precinct 5 of the South Creek West Precinct

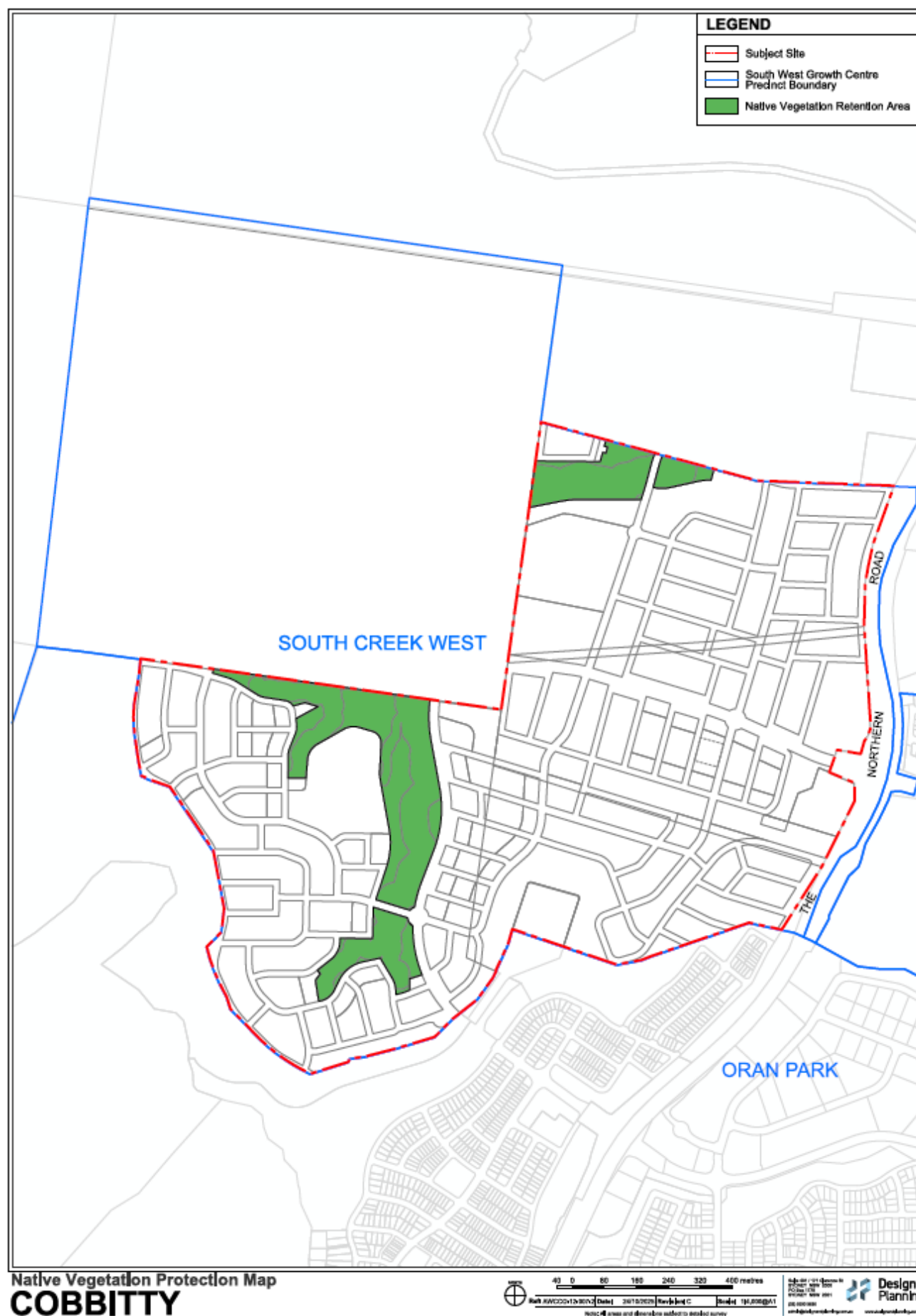
Assessment of Consistency between Commitments of the Strategic Assessment and Sub-Precinct 5 of the South Creek West Precinct Plan



Annex C

Proposed Protection Measures for Sub-Precinct 5 of the South Creek West Precinct (including Native Vegetation Protection Map)

Assessment of Consistency between Commitments of the Strategic Assessment and Sub-Precinct 5 of the South Creek West Precinct Plan



	Relevant Biodiversity Measure	Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
	hectares of existing vegetation required in condition 6. The amount that may be counted shall be calculated by dividing the total area of revegetation and/or restoration required under condition 8b (iii) by 3. Note: for example, if 9 hectares of revegetation is undertaken then 3 hectares may be counted.			

	Relevant Biodiversity Measure	Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
Retention of existing native vegetation shown in areas marked with red hatching				
12	Notwithstanding any other conditions of biodiversity certification, in the lands marked by a red hatching on the biodiversity certification maps existing native vegetation must not be cleared unless it is in accordance with a plan of management or unless such clearance has been agreed to by the DECC .	No land marked with red hatching on the biodiversity certification maps is within the subject land.	Yes	
Ground-truthing of existing native vegetation				
13	If new information becomes available after the biodiversity certification order took effect that demonstrates that the vegetation within an area does not otherwise meet the definition of existing native vegetation , then for the purposes of conditions 7 to 8 and condition 11 to 12 only the area of confirmed existing native vegetation shall be considered.	No ENV was mapped in Sub-Precinct 5.	Yes	
Additional conservation actions within the Growth Centres – native vegetation				
14	During or before the preparation of the relevant precinct plan(s) under the Growth Centres Development Code, a further detailed assessment must be undertaken of the areas adjoining or proximate to the Shanes Park Air Services Australia site marked in blue hatching on the biodiversity certification maps .	N/A	Yes	-
15	The assessment referred to in condition 14 must examine whether the areas meet the criteria specified in Schedule 3.	N/A	Yes	-

	Relevant Biodiversity Measure	Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification	
16	Based on the outcomes of the assessment the EES shall provide advice to the Minister on whether the areas should be included within the certified areas or the non-certified areas shown on the biodiversity certification maps .	N/A	Yes	-	
Additional conservation actions within the Growth Centres – plants					
17	During or before the preparation of the relevant precinct plan(s) under the Growth Centres Development Code relating to the areas referred to in the table below, the following actions must be undertaken:		N/A The black hatched areas are outside the Precinct boundaries.	Yes	-
	Species <i>Acacia pubescens</i>	Required action Potential populations at Cross Street, Kemps Creek and Thirty-second Avenue, Austral – as shown in black hatching on the biodiversity certification maps : survey to confirm the presence of the species, and if the species is present, provide for the protection of the area of suitable habitat for the species to the satisfaction of the DECC.			
	<i>Pimelea spicata</i>	Potential populations at Denham Court Road - as shown in black hatching on the biodiversity certification maps : survey to confirm the presence of species, and			

	Relevant Biodiversity Measure	Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
		if the species is present, provide for the protection of the area of suitable habitat for the species to the satisfaction of the DECC.		
	<i>Persoonia hirsuta</i>	Potential populations at North Kellyville – as shown in black hatching on the biodiversity certification maps: survey to confirm the presence of the species, and if the species is present, provide for the protection of the area of suitable habitat for the species to the satisfaction of the DECC.		
	<i>Leucopogon fletcheri</i>	Known population at North Kellyville - as shown in black hatching on the biodiversity certification maps: survey to confirm the extent of the population, and provide for the protection of the population to the satisfaction of the DECC.		
	<i>Darwinia biflora</i> <i>Hibbertia superans</i> <i>Epacris purpurascens</i> var <i>purpurascens</i>	Known populations at North Kellyville - as shown in black hatching on the biodiversity certification maps: survey to confirm the extent of the populations, and		

	Relevant Biodiversity Measure		Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
	<i>Eucalyptus sp</i> "Cattai"	provide for the protection of the population to the satisfaction of the DECC.			
	Note: On completion of the above actions the Minister may decide that it is appropriate to amend the boundaries of the area subject to biodiversity certification, in accordance with condition 3.				
Additional conservation actions within the Growth Centres – animals					
18	During or before the preparation of the relevant precinct plan(s) under the Growth Centres Development Code relating to the area referred to in the table below, the following actions must be undertaken:		N/A The black hatched areas are outside the Precinct boundaries.	Yes	-
	Species Green and Golden Bell Frog	Required action Potential population at Riverstone – as shown in black hatching on the biodiversity certification maps : <i>Option 1</i> - survey to confirm the presence of the species, and - if the species is present, provide protection of the area of suitable habitat for the species to the satisfaction of the DECC. <i>Option 2</i> - if the species is present at Riverstone but cannot be			

	Relevant Biodiversity Measure		Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
		adequately protected to the satisfaction of the DECC, then: a) undertake targeted survey to confirm the presence of the species elsewhere in the Growth Centres, and b) if the species is present elsewhere in the Growth Centres, provide for the protection of an area(s) of suitable habitat for the species to the satisfaction of the DECC. Note: On completion of the above actions the Minister may decide that it is appropriate to amend the boundaries of the area subject to biodiversity certification, in accordance with condition 3.			
Additional conservation actions within the Growth Centres – development sites					
19	Within twelve months of the biodiversity certification order taking effect, the GCC (in consultation with the DECC) must put in place procedures so that all future precinct plans (excluding any plans that were publicly exhibited before the biodiversity certification order took effect), where practicable, provide for the appropriate re-use of: (a) native plants (including but not limited to seed collection) and the re-location of native animals from development sites, prior to development commencing; and		A site specific DCP for the site will include provisions for these matters.	Yes	

	Relevant Biodiversity Measure	Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
	(b) top soil from development sites that contain known or potential native seed bank. For the purposes of condition 19a and 19b appropriate uses may include, but are not limited to, application in revegetation or restoration works and landscaping in the Growth Centres.			
Future precinct plans				
35	During the preparation of future precinct plans (excluding any precinct plans already publicly exhibited before this order took effect) the GCC must undertake and make publicly available an assessment of the consistency of the proposed precinct plan with the conditions of biodiversity certification. This may occur during or before any public exhibition of future precinct plans.	This assessment of consistency has been prepared to satisfy this RBM. This report will be publicly exhibited with the full Precinct Planning package.	Yes	This assessment addresses all RBMs applicable to Sub-Precinct 5 of the South Creek West Precinct of the South West Growth Centre.
Future threatened species listings or discoveries				
36	Where a preliminary determination is made under the Act to list a species, population or ecological community, and that species, population or ecological community may or is known to occur within the Growth Centres, then the GCC must (as soon as practicable) provide advice to the DECC on whether: (a) the species, population or ecological community is known or likely to be present in the Growth Centres; (b) it was considered during the preparation of the draft Growth Centres Conservation Plan by the GCC; and (c) whether the SEPP, and related measures, provides adequate protection for the species, population or ecological community.	DPHI does not propose to make a preliminary determination under the Act to list a species, population or ecological community. EES to provide comments during the exhibition of the precinct planning package.	Yes	

	Relevant Biodiversity Measure	Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
37	Based on the information provided in accordance with condition 36, and any other relevant matters, the DECC shall advise the Minister on whether to formally review, maintain, modify, suspend or revoke the biodiversity certification of the SEPP if the species, population or ecological community is listed under the Act.	-	Yes	-

3. Conclusion

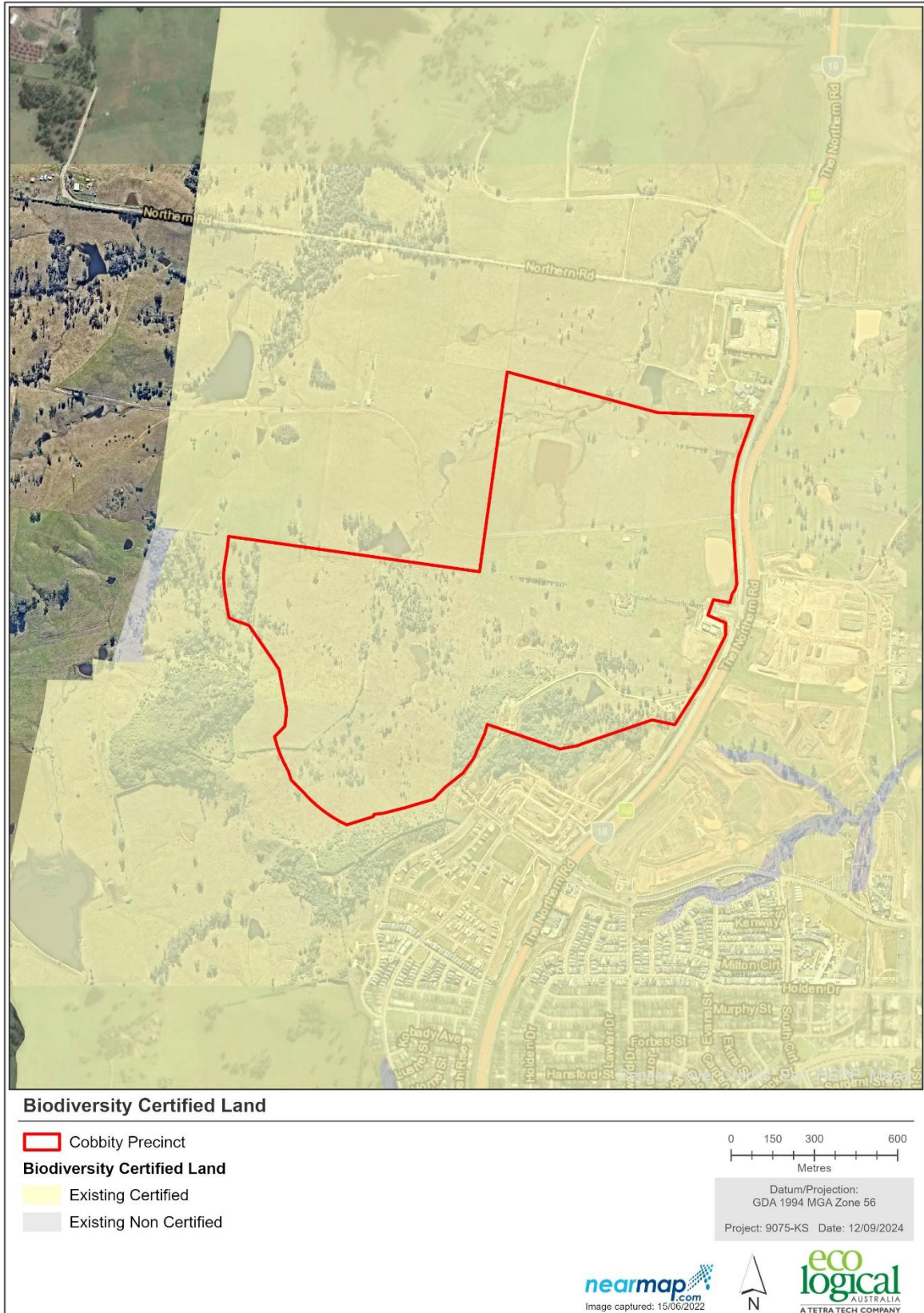
This report has undertaken an assessment of the consistency of Sub-Precinct 5 of the South Creek West Precinct, with the biodiversity certification and the applicable relevant biodiversity measures.

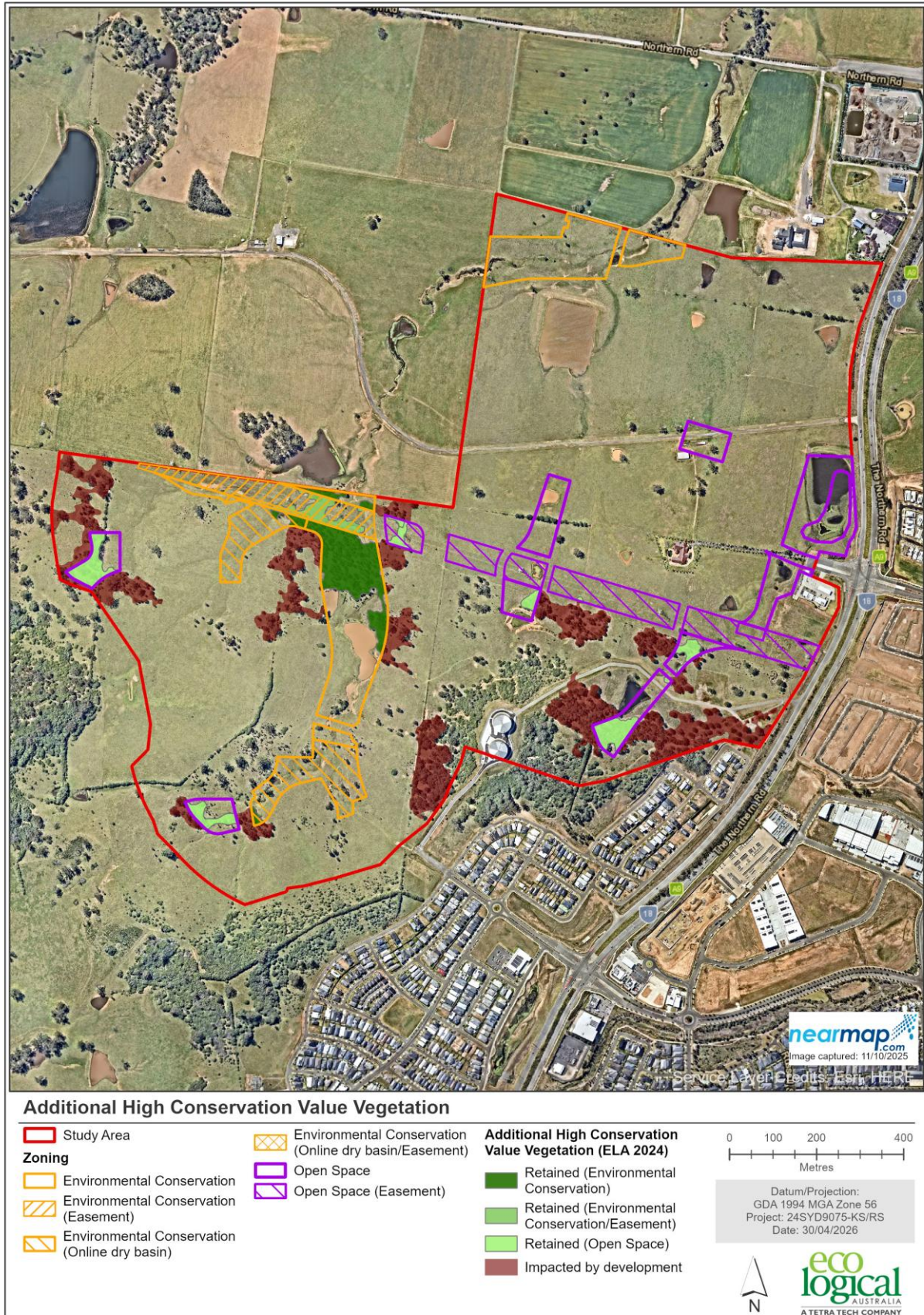
It is concluded that Sub-Precinct 5 of the South Creek West Precinct is consistent with the biodiversity certification of the Growth Centres SEPP, as follows:

- No vegetation within Sub-Precinct 5 of the South Creek West Precinct was identified for protection in the Sydney Region Growth Centres Biodiversity Certification Order.
- The whole of Sub-Precinct 5 is biodiversity certified. Therefore, Sub-Precinct 5 is not obligated to retain any areas of ENV.
- The ILP for Sub-Precinct 5 will protect 3.25 ha of field validated AHCVV within the C2 Environment and Conservation Zone. Of this, 0.62 ha is within a transmission easement that may be subject to maintenance. The remaining 2.63 ha is not within the easement. All vegetation within the C2 zone will be further protected via Clause 6.2 of Appendix 5 of the SEPP (Precincts – Western Parkland City) 2021. For the purposes of the calculation in tables below, only the 2.63 ha of AHCVV has been counted as being protected.
 - A further 1.88 of AHCVV is within the proposed Open Space zone.

Annex A

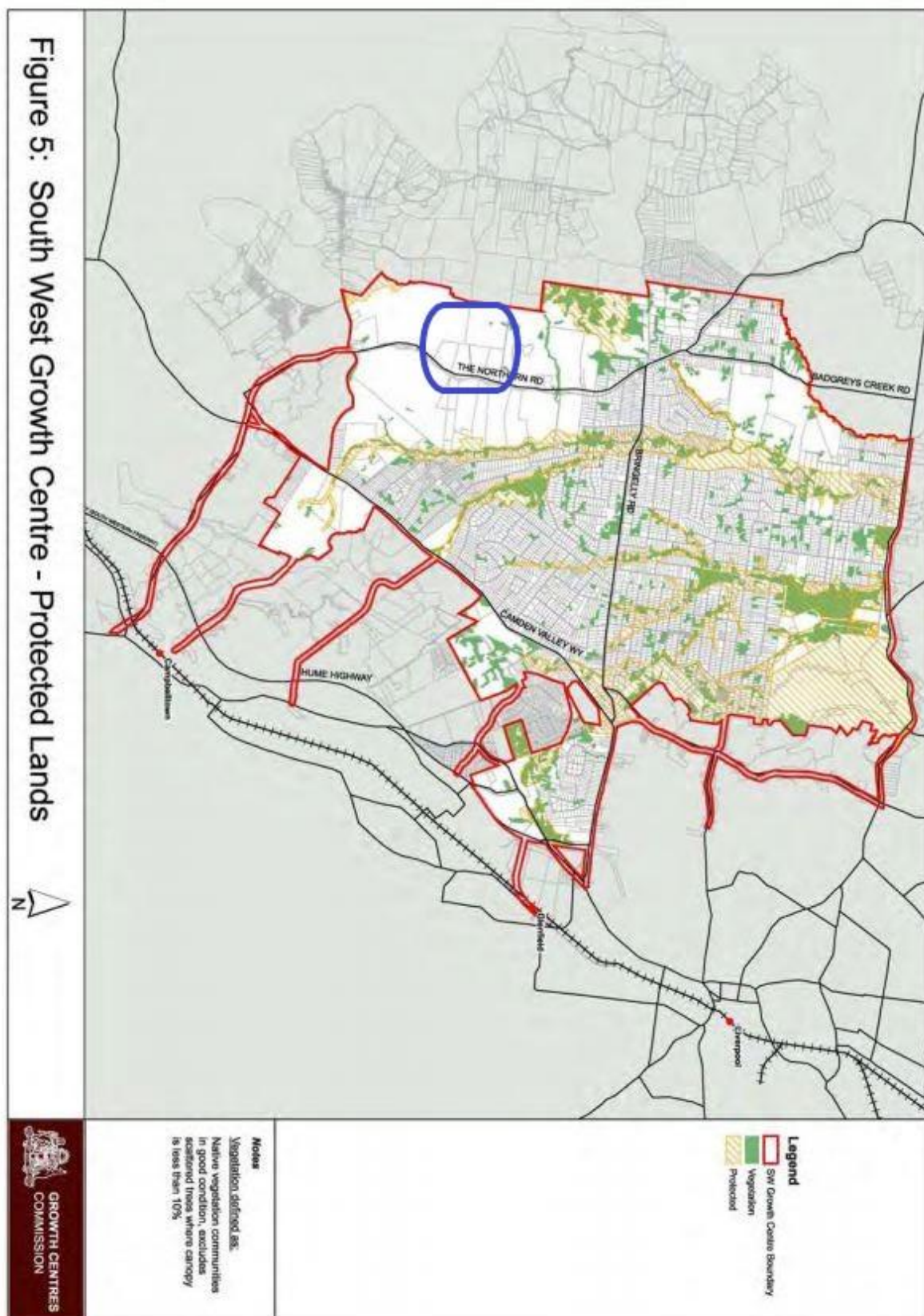
Biodiversity Certification Map for Sub-Precinct 5 of the South Creek West Precinct.





Annex B

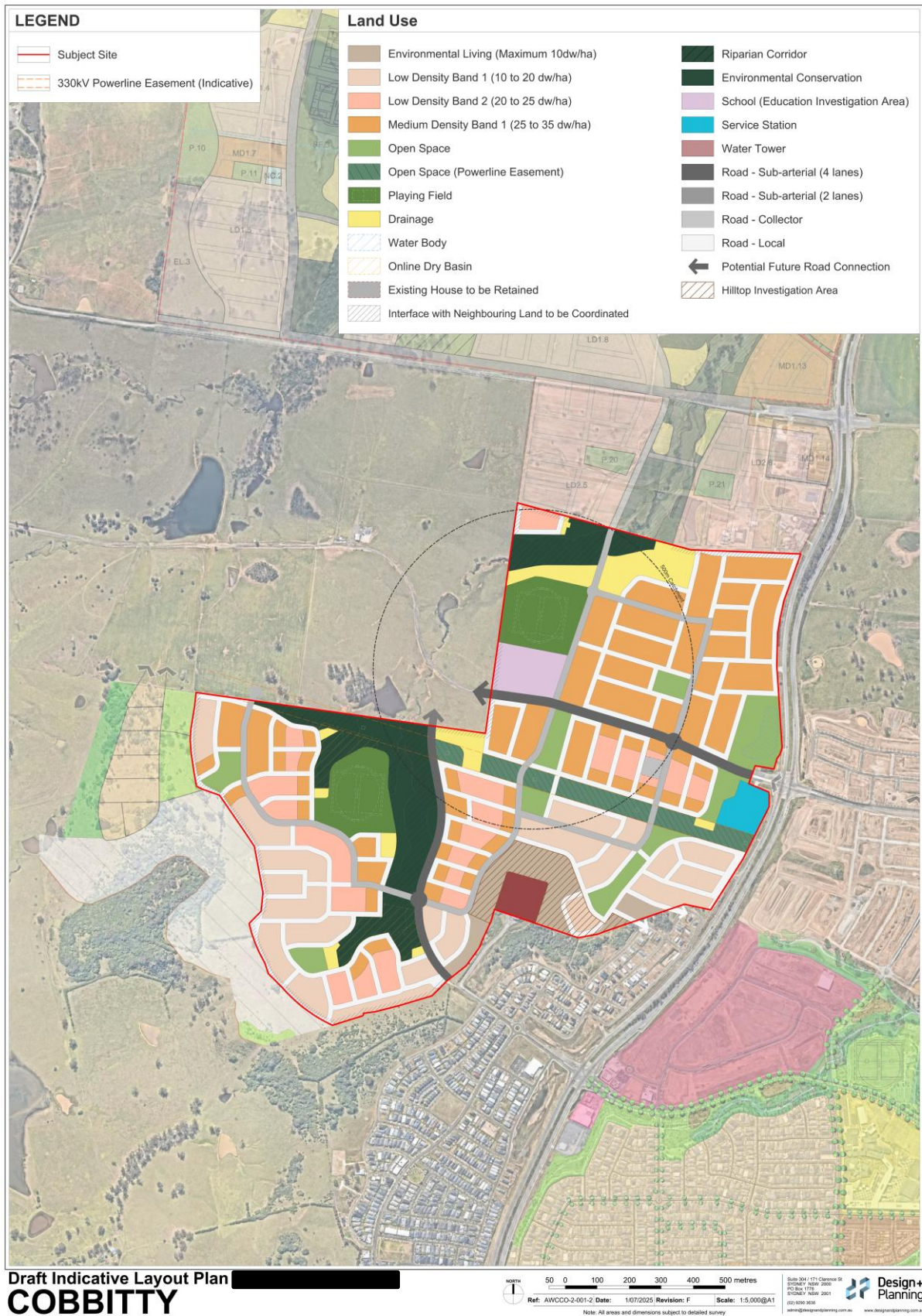
South West Growth Area Protected Lands from Draft Growth Centres Conservation Plan



South West Growth Area Protected Lands from Draft Growth Centres Conservation Plan (Growth Centres Commission 2007)

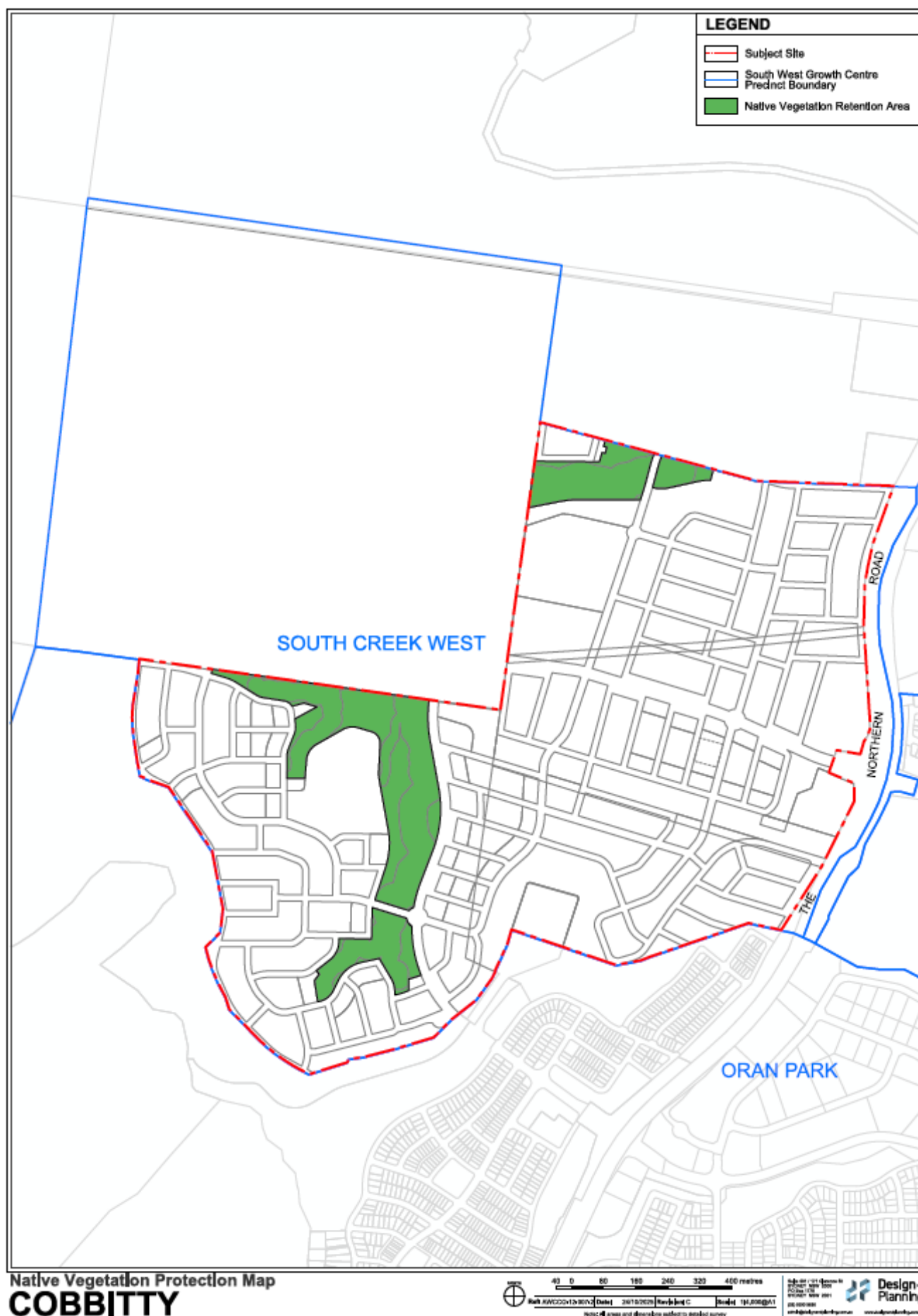
Annex C

Proposed Sub-Precinct 5 Indicative Layout Plan in the South Creek West Precinct



Annex D

SEPP Maps



Calculations of ENV and AHCVV within Sub-Precinct 5 of the South Creek West Precinct

Results of field validation for ENV and AHCVV

Reference	Item	Area (ha)
A	Area of mapped ENV in non-certified areas (as per Conservation Plan)	0.00
B	Area of validated ENV in non-certified areas	0.00
C	Area of validated ENV in certified areas	0.00
D	Total area of validated ENV in the Precinct	0.00
E	Total area of validated AHCVV in Precinct	17.46

Summary of impacts, offsets and areas of ENV to be protected

Reference	Item	Area (ha)
A	Area of mapped ENV in non-certified areas (as per Conservation Plan)	0.00
B	Area of validated ENV in non-certified areas	0.00
C	Impacts: Validated non-certified ENV to be cleared (area to become certified)	0.00
D	Offsets: Validated certified ENV to be used as offset (area to become non-certified)	N/A
E	Total area of ENV to be protected in non-certified areas (E = B-C+D)	0.00
F	Area of additional high conservation value vegetation (AHCVV) to be protected	2.63ha
H	Total area of ENV/AHCVV to be protected (H = F+E)	2.63ha