

AEP Ref: 2185
Date: 19 May 2021

Perception Planning

Attention: Jeff Bretag

Via Email: jeff@perceptionplanning.com.au

Dear Jeff,

**Re: Ecological Advices – Gingers Lane Sub- Precinct
Gingers Lane, Sawyers Gully, NSW**

Anderson Environment & Planning (AEP) herewith provide ecological advices to Perception Planning relating to a Planning Proposal for the proposed rezoning of Gingers Lane Sub- Precinct. The Land is situated in Cessnock City Council Local Government Area (LGA) and is currently zoned RU2 – Rural Landscape.

Site Particulars:

- **Address** – Gingers Lane, Sawyers Gully, NSW
- **Title** – Lot 2721 DP 1104897, Lot 2722 DP 11044897, Lot 2731 DP 884423, Lot 2732 DP 884423, Lot 274 DP 755231, Lot 283 DP 755231, Lot 282 DP 755231, Lot 275 DP 755231, Lot 281 DP 755231, Lot 276 DP 755231, Lot 280 DP 755231, Lot 277 DP 755231, Lot 1 DP 345294, Lot 11 DP 710071, Lot 10 DP 710071, Lot 1 DP 663726, Lot 1 DP 371151, Lot 2 DP 314641 and Lot 1 DP 308003.
- **LGA** – Cessnock City Council
- **Subject Site** – The Subject Site covers approximately 94ha.
- **Zoning** – Under the *Cessnock Local Environmental Plan 2011*, the site is zoned RU2- Rural Landscape, R5 large Lot Residential, E1 National Parks and Nature Reserve, RE1 Public Recreation and IN3 Heavy Industrial.
- **Current Land Use** – The current land use consists of rural-residential properties, utilising the land for their own purposes.
- **Surrounding Land Use** – The surrounding properties are all zoned as R5 – Large Lot Residential, whilst along the southern side of Gingers Lane are zoned RE1- Public Recreation.

The Proposal:

AEP understands that the proposal from Perception Planning (the client) is to rezone the Gingers Lane Sub- Precinct from RU2- Rural Landscape to R5- Large Lot Residential, R2- Low Density Residential and E2- Environmental Conservation.

A concept subdivision plan has been produced which will enable 374 lots of sizes ranging from 800sqm to 2000sqm to be allocated for the site.

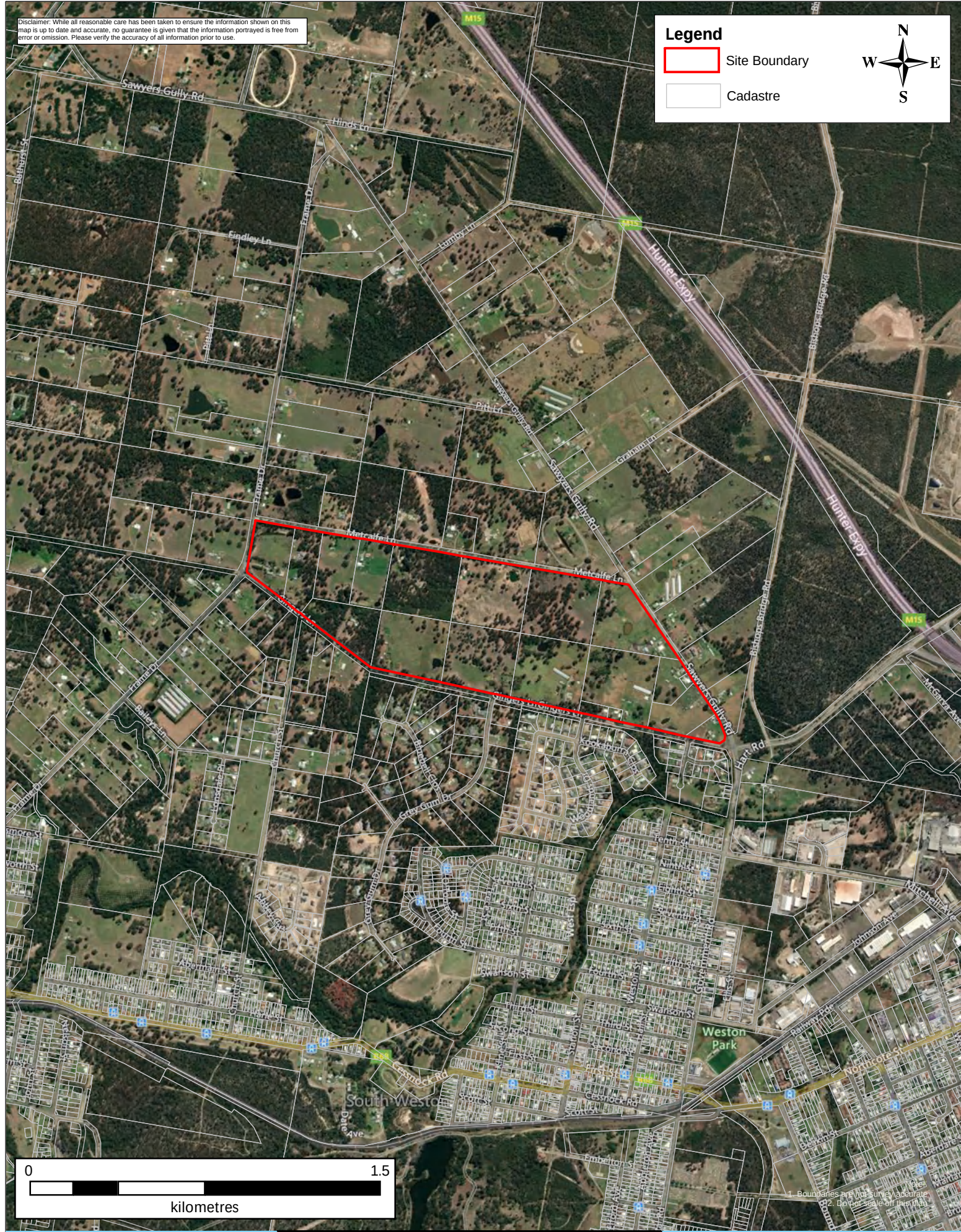
Figure 1 depicts the location of the Planning Proposal and **Figure 2** show preliminary concept plan used for the preliminary Ecological Surveys.

Disclaimer: While all reasonable care has been taken to ensure the information shown on this map is up to date and accurate, no guarantee is given that the information portrayed is free from error or omission. Please verify the accuracy of all information prior to use.

Legend

 Site Boundary

 Cadastre



0 1.5
kilometres

1. Boundaries are not survey accurate.
2. Do not scale off this map.



AEP

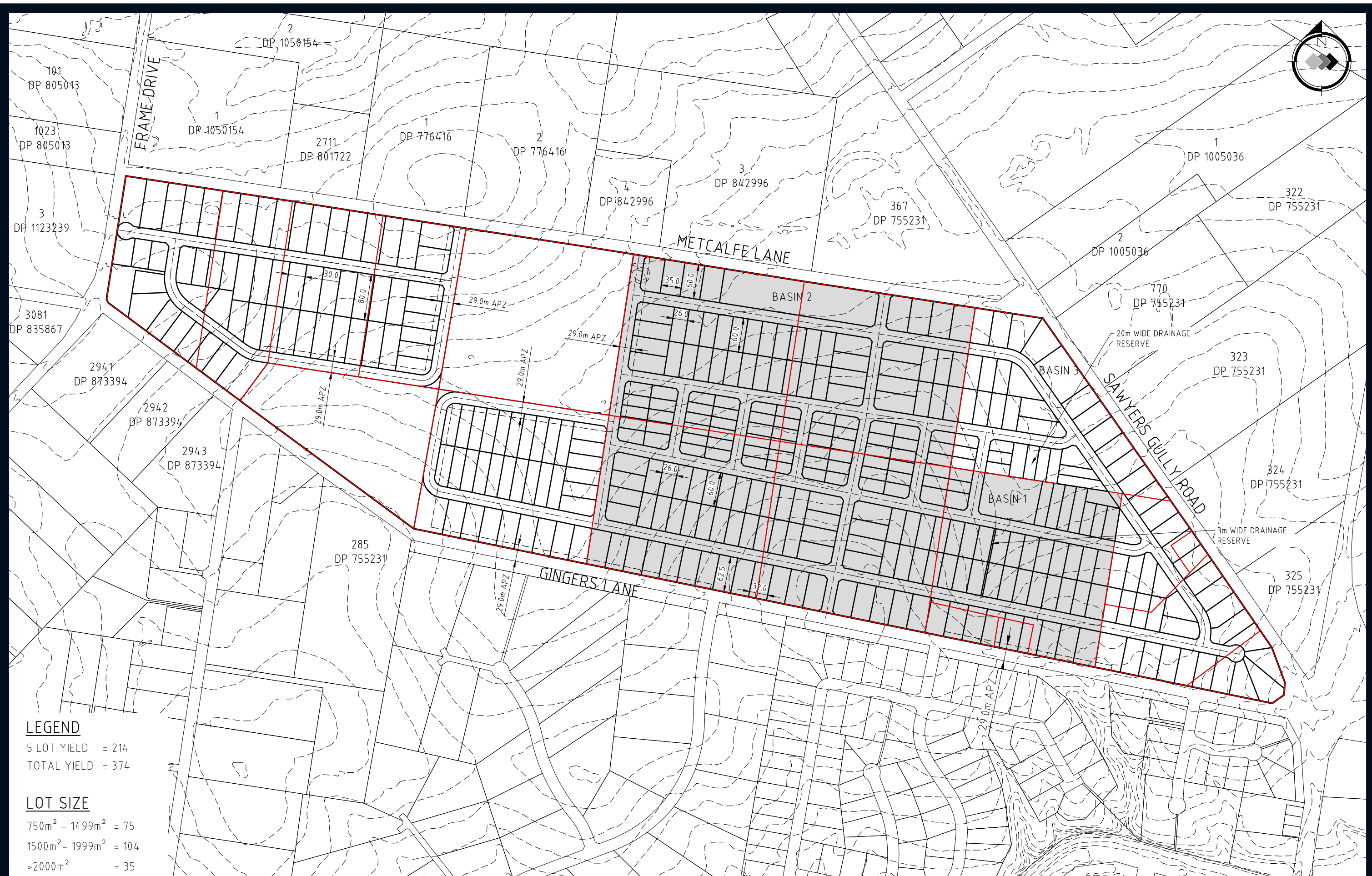
Title: Figure 1 - Site Location

Date: February 2021

Location: Gingers Lane, Sawyers Gully NSW

Client: Newquest Property Pty Ltd

AEP Ref: 2185



LEGEND

5 LOT YIELD = 214
TOTAL YIELD = 374

LOT SIZE

750m² - 1499m² = 75
1500m² - 1999m² = 104
>2000m² = 35



Geoff Craig & Associates
1 Hartley Drive,
P.O. Box 3337,
Thornton NSW 2322
Phone: 49641811

TITLE:
PROPOSED SUBDIVISION
GINGERS LANE
SAWYERS GULLY
PLAN SHEET

Cad Ref: 18184LD LD06 r1		Scale: 1:6000		Designed: DB		Project No	
						18184LD	
						Drawing No	
						Revision	
1	ORIGINAL ISSUE			DB	27.04.21	LD06	1
No	Amendment			Drawn	Date		

Existing Site Condition:

The site was initially inspected on 10 February, 2021 included a general site reconnaissance and traversal, with a view to verifying the information that had been gathered at the desktop level, and identify the presence of potential important ecological features such as hollow-bearing trees, large woody debris, waterbodies and potential habitat for Threatened Species and / or Endangered Ecological Communities.

The site consists of a number of a residents dwelling set within a rural-residential purpose. The site contains native vegetation in a mosaic of disturbance and management states. Disturbances include past and present grazing, access tracks, fencing, farm dams, farms sheds and dwellings. Vegetation can be described as managed grassland with aspects of remnant vegetation typical of Lower Hunter Spotted Gum Forest.

Regional Vegetation mapping shows *Lower Hunter Spotted Gum – Red Ironbark Forest - Endangered Ecological Community (EEC)* present on site (**Figure 3**). Preliminary Site investigations identified the Plant Community Types (PCT) as PCT 1592 *Spotted Gum - Red Ironbark - Grey Gum shrub - grass open forest of the Lower Hunter* and PCT 1593 *Red Ironbark - Spotted Gum - Prickly-leaved Paperbark shrubby open forest of the Lower Hunter*. Detailed investigation would need to be undertaken to confirm both communities within the Subject Site. The preliminary investigation showed that the PCT varied conditions, with some highly disturbed areas. Disturbances include access tracks, fencing, gravel covered storage spaces, areas of recent tree clearing and areas of regenerating native vegetation.

Photographs of the vegetation type are presented in **Appendix A**.

Ecological Characteristics:

Key points of note from our initial investigations are:

- **Threatened Flora** - No threatened flora species were observed during the recent inspection. However, habitat is available for some species and the density of vegetation along with the size of the Site suggests that their presence cannot be entirely discounted.
- **Fauna Habitat / Key Features** – Previous logging of the area has removed potential large habitat trees, reducing the likelihood of arboreal mammals being present on site. A number of stag trees and large Grey Ironbark's (*Eucalyptus paniculata*) are located on site and may provide nesting/roosting opportunities for small arboreal mammals, microbats and small birds.

There are minor occurrences of fallen logs and dense grassy shrub layers which could provide habitat opportunities for ground-dwelling mammals and herpetofauna including Long-nosed bandicoot (*Perameles nasuta*). Given the disturbance history of the site, lack of contiguous vegetation and based on listed state and federal atlas searches, no terrestrial, ground-dwelling listed threatened species would be expected to be present.

There is aquatic habitat present, watercourses and drainage lines occur within the Site. These features are potential habitats for threatened frogs, fish thus targeted surveys for these species would need to take place.

- **Connectivity** – The site is boarded by roads on all boundaries. Metcalfe Lane to the north, Gingers Lane to the south, Sawyers Gully Road to the east and Frame Drive in the west. There is a marginal connectivity of vegetation in the south-west section which could lead to larger areas of quality habitat, however, this is moderately disturbed by other residential properties and infrastructure.

Vegetation Communities:

Based on examination of Hunter, Central & Lower North Coast Region Vegetation Mapping Systems (HCCREMS) 2008 Regional Vegetation Mapping combined with preliminary on-ground examination of floristics reveals the following Plant Communities Types (PCTs) within the Subject are:

- PCT 1592 *Spotted Gum – Red Ironbark – Grey Gum Shrub – grass open forest of the Lower Hunter*; and
- PCT 1593 *Red Ironbark – Spotted Gum- Prickly- leaved Paperbark shrubby open forest of the Lower Hunter*.

PCT1 592 *Spotted Gum – Red Ironbark – Grey Gum Shrub – grass open forest of the Lower Hunter*

This PCT is mainly restricted to the lower Hunter Valley and consists of open forests dominated by *Corymbia maculata* and *Eucalyptus fibrosa* with a mid- storey is being typically shrubby with sparse climbers. The ground storey is dominated by grasses with scattered forbs.

The upper stratum is characterised by *Corymbia maculata*, *Eucalyptus fibrosa* and *Eucalyptus punctata*. The middle stratum is composed of small shrubs and trees. These include *Daviesia ulicifolia*, *Persoonia linearis*, *Bursaria spinosa* and *Lissanthe strigosa*. The dominant species in the ground stratum include: *Themeda australis*, *Aristida vagans*, *Microlaena stipoides*, *Joycea pallida*, *Lepidosperma laterale*, *Lomandra multiflora*, *Pomax umbellata*, *Pratia purpurascens* and *Glycine clandestine*. In some areas of this community, the ground is moderately disturbed with patches of regrowth occurring.

This community is associated with the *Lower Hunter Spotted Gum – Ironbark Forest* Endangered Ecological Community (EEC) within the *Biodiversity and Conservation Act 2016* (BC Act) *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act)

PCT 1593 *Red Ironbark – Spotted Gum- Prickly- leaved Paperbark shrubby open forest of the Lower Hunter*

This PCT is mainly restricted to the Lower Hunter Valley and consists of open forests with a canopy dominated by *Eucalyptus fibrosa*. The mid – storey consists of a diverse open shrub layer. The ground layer is typically dominated by grasses by forbs and small ferns.

The upper stratum is open and consists of *Eucalyptus fibrosa* and *Corymbia maculata*. The middle stratum is densely populated by the shrub *Acacia parvipinnula*. Other species include: *Melaleuca nodosa*, *Bursaria spinosa*, *Melaleuca decora*, *Pultenaea spinosa*, *Correa reflexa*, *Maytenus silvestris*, *Macrozamia flexuosa*, *Ozothamnus diosmifolius*, *Persoonia linearis* and *Myrsine variabilis*. The

ground stratum contains ferns and herbs such as *Cheilanthes sieberi*, *Dianella revoluta* and *Lepidosperma laterale*, whilst *Aristida vagans* and *Entolasia stricta*, native grasses, are present too. This community is restricted to the Lower Hunter Valley.

This community is associated with the *Lower Hunter Spotted Gum – Ironbark Forest* Endangered Ecological Community (EEC) within the *Biodiversity and Conservation Act 2016* (BC Act) *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act)

Disturbed Vegetation:

The site contains native vegetation in a mosaic of disturbance and management states. This is most prominent vegetation community in the site, which could be due to previous logging or rural-residential purposes. Disturbances include access tracks, fencing, farm dams, farms sheds and dwellings. The disturbed areas contain a mixture of native and exotic grasses and forbs. Should clearing occur on the site, the disturbed areas will be more suitable for development.

Threatened Species Assessment:

Threatened Flora Species:

Database searches have revealed potential threatened flora species in the Site. Although no threatened species were recorded on site during inspections, searches on the Bionet Database confirm a number of species are located within a 10km vicinity of the site. Appropriate targeted surveys would need to be undertaken for: and others to clarify their status on the Site.

- *Rutidosia heterogama* (Heath Wrinklewort);
- *Eucalyptus glaucina* (Slaty Red Gum);
- *Eucalyptus parrammattensis subspecies decadens* (Earp's Gum); and
- *Prasophyllum* sp.

Threatened Fauna Species:

A desktop assessment through BioNet was carried out to determine what threatened species were likely to occur on the Site.

The desktop assessment identified records of Swift Parrot (48) and Regent Honeyeater (66) within a 10 km search over the last 20 years surrounding the site. Reviewing the *Important areas Map (Attachment B)* for the Swift Parrot and Regent Honeyeater, showed that the site is mapped. Detailed seasonal surveys or an expert report would be required to confirm the presence of each species on site.

Current searches within the BioNet database identified Squirrel Gliders within a 10km search surrounding the site within the last twenty years. As Squirrel Gliders are a threatened species of interest for the Council, it would be a requirement of the DA that targeted surveys are carried out.

The search also revealed other species requiring further surveys such as Large-eared Pied Bat; Koala; Grey-headed Flying; Slaty Red Gum; Earp's Gum; Prasophyllum; and Heath Wrinklewort.

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Legend



Site Boundary



Cadastre

Hydroline

Regional Vegetation



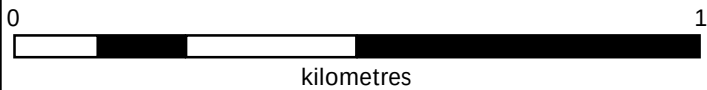
Disturbed - Canopy only



Disturbed - Regrowth



Lower Hunter Spotted Gum - Red Ironbark Forest (main variant)



Note:

1. Boundaries are not survey accurate
2. Do not scale off this plan



AEP

Title: Figure 3 - Regional Vegetation Mapping

Date: February 2021

Location: Gingers Lane, Sawyers Gully NSW

Client: Newquest Property Pty Ltd

AEP Ref: 2185

Legislative Considerations:

NSW Biodiversity Conservation Act 2016

Changes to biodiversity legislation within NSW have fundamentally changed the approvals pathway for development seeking to remove native vegetation above a certain threshold. The Biodiversity Values Map (BV Map) identifies land with high biodiversity value, as defined by the BCR. The Biodiversity Offsets Scheme (BOS) applies to all local developments, major projects or the clearing of native vegetation where the State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 applies. Any of these will require entry into the BOS if they occur on land mapped on the Biodiversity Values Map.

The BOSET report including BV Map (**Attachment C**) shows that the site does contain BV mapped land.

The BOS can be triggered by clearing above the Vegetation Area Clearing threshold for the site, which in this instance is **0.25ha**. Development as proposed is highly likely to clear more than 1ha, thus triggering a Biodiversity Development Assessment Report (BDAR).

The BDAR requires formalised assessment of biodiversity values present within the site (including vegetation plots, surveys for potentially occurring threatened species etc.), along with details of efforts made by the proponent to avoid / minimise vegetation removal and subsequently minimise impacts upon identified biodiversity (particularly threatened entities).

Residual impacts are quantified after the avoid / minimise process and, subject to conditions placed upon the proposal by Council, offsets in the form of biodiversity credits that require retirement / purchase are calculated based upon the vegetation type being removed and if particular threatened species (referred to as Species Credit species) were recorded and important habitat available within the site.

In this instance, likely a BDAR will be required, and Council position on Avoid & Minimise is likely to be such that full site development would be very difficult to achieve through this process. Early engagement with Council is recommended.

Serious and Irreversible Impacts

The concept of Serious and Irreversible Impacts (SAII) have been devised under the new legislation, and are specific to individual threatened species or ecological communities that 'meet' any of four (4) criteria, including a recent rapid rate of decline in number, a small population size, very restricted distribution, or a species / community typically unresponsive to conservation actions. Any impacts upon a species / community listed as a 'SAII candidate species' must be assessed for significance and, if deemed to be a SAI, the decision maker (i.e. Council) are 'required to refuse to grant development consent' for any development.

Although no species are likely to occur within the site that are currently listed as SAI candidate species by DPIE, Councils have the ability to recommend species / communities as SAI candidates to OEH based upon the criteria listed above.

Despite such, we do not envisage SAI being a notable approvals risk for this site.

State Environmental Planning Policy (Coastal Wetlands) 2018:

Investigations in accordance with the State Environmental Planning Policy Coastal Management (2018) found that the Subject Site is not identified within the Coastal Environment Area, or within any areas identified as Coastal wetlands, Littoral Rainforests and / or Coastal Vulnerability Areas. As such, no further provision of the policy applies to the site.

State Environmental Planning Policy (Koala Habitat Protection) 2020:

State Environmental Planning Policy (Koala Habitat Protection) 2020 came into force in November 2020, and repealed the previous State Environmental Planning Policy (Koala Habitat Protection) 2019 while a new policy is developed. This Policy aims 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 preliminary investigation did locate listed Schedule 2 Koala Feed Trees within the Subject Site. The preliminary surveys did not locate the presence of koalas within the Site; however, further investigations would be required to determine if the site contains Potential or Core Koala Habitat. The Koala SEPP has potential to impact site development, particularly if signs of Koala usage are found on site.

Water Management Act 2000:

As there are a number of first-order watercourse traversing the Subject Site consideration at the rezoning stage must be given to the retention and potential regeneration. It is also worth noting that in accordance with the *Section 91* of the *Water Management Act, 2000* any development work within 40m of a watercourse requires a Controlled Activity Application.

Cessnock Development Control Plan 2010:

The main components of the DCP relevant to biodiversity considerations are:

- C2 - Flora and Fauna guidelines; and
- C7 - Trees & Vegetation Management.

Whilst there are principles therein that relate to vegetation protection and retention where possible, considerations and thereafter approvals gained via meeting avoid / minimise / offset obligations under the BC Act will effectively meet the principles listed within the DCP

Commonwealth Environment Protection and Biodiversity Conservation Act 1999:

Matters of National Environmental Significance (MNES) including listed ecological communities or threatened species require impact assessment as per Significant Impact Assessment guidelines 1.1 (DoE 2013) under the EPBC Act. The preliminary assessment has not identified the presence of any listed species, however listed species have been recorded in contiguous habitats and potential habitat is present. Detailed assessment will allow for certainty of the presence or absence of listed species and the requirements of an Impact assessment under the EPBC Act.

Dependent upon survey results and likely impacts, it is our opinion that a referral to the Commonwealth under the EPBC Act is not likely to be required. Several EPBC Act listed species are known from the Sawyers Gully Area, including Grey-headed Flying-fox are unlikely to be impacted as a result of the concept plan, however it should be noted that detailed investigation may result in a referral being required. A Bilateral Agreement is in place with NSW, so the state assessment process is now certified by the Commonwealth, ending process of application duplication.

Design Concept & Approvals Pathway:

Following initial evaluation and consideration of the ecological approval's pathways available for this project, it is apparent that there is a likelihood the level of vegetation removal will exceed 0.25ha hence, triggering the Biodiversity Offsets Scheme threshold under the *Biodiversity Conservation Act 2016* (BC Act). An assessment utilising the Biodiversity Assessment Method 2020 (BAM) will be required, with associated offsetting, as part of the DA approval process.

If development was to occur on site, areas of disturbed vegetation (this does include construction footprint and Asset Protection Zones) would be more suitable, in order to reduce impact to the Endangered Ecological Communities on site.

The Rezoning Process:

The rezoning process identifies areas that can be developed and quantifies the offsets required as well as the impact avoidance and minimisation strategies.

Assessment of impacts is carried out using the BAM, with the hierarchy of Avoid, Minimise and Offset being applied, with residual impacts being offset under the BOS. As a result of this process, credits may be retired on the market, a payment may be made into the Biodiversity Conservation Fund and / or credits may be generated on a Biodiversity Stewardship Site for subsequent retirement.

Therefore, the following works are required:

- Identification and mapping of vegetation communities;
- Survey for threatened species as determined by the BAM Calculator and in accordance with relevant State survey guidelines; and
- Production of Biodiversity Assessment Report (BDAR) which will include an assessment compliant with the BAM, including a Biodiversity Assessment and an Impact Assessment.

Biodiversity Offsets Considerations:

Offsetting of impacts will be required, either through credit purchase and retirement or by paying directly into the Biodiversity Conservation Fund (BCF).

The BCF was established by the Department of Planning, Industry and Environment (DPIE) as a means for proponents of making direct payments without having to source offsets themselves. This is a much quicker way to satisfy offset requirements. However, they impose a significant

premium, which includes administration fees and a 'risk premium' calculated as the risk of not being able to adequately offset the impacts.

Regardless, market price if sourcing credits without paying into the BCF would be approximately 20% lower than the overall cost of paying to the BCF.

Our experience has been that offsets can be sourced for up to one quarter of the generated BCF price, bearing in mind time and costs associated with sourcing / creating such. Conversely, additional costs may be incurred given the level of uncertainty associated with BAM Calculator inputs and the potential for other threatened Species Credit species to be identified.

A potential risk and the impediment to the use of Biobanking on this Site is the (unlikely) presence of SAIL candidate species or vegetation communities.

Summary:

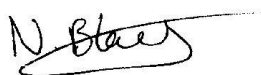
The vegetation on site is in varying condition, with areas subject to disturbance throughout. Further investigation to carry out a rezoning would be required in order to obtain approvals for the planning proposal. This would include carrying out a Biodiversity Assessment and associated seasonal surveys for threatened species such as frogs, snakes, mammals, birds, microbats and flora.

Considering that the area is mapped as an Important Area for Swift Parrot and the Regent Honeyeater, targeted seasonal surveys or utilising an expert report should be undertaken to discount these species occurring on site.

We trust the initial information herewith is suitable for considerations at this point in the investigation process. Should you require any further details or clarification, please do not hesitate to contact the writer.

Yours faithfully,

ANDERSON ENVIRONMENT & PLANNING



Natalie Black

Senior Environmental Manager

BAAS: 19076

Attachment A - Site Photos



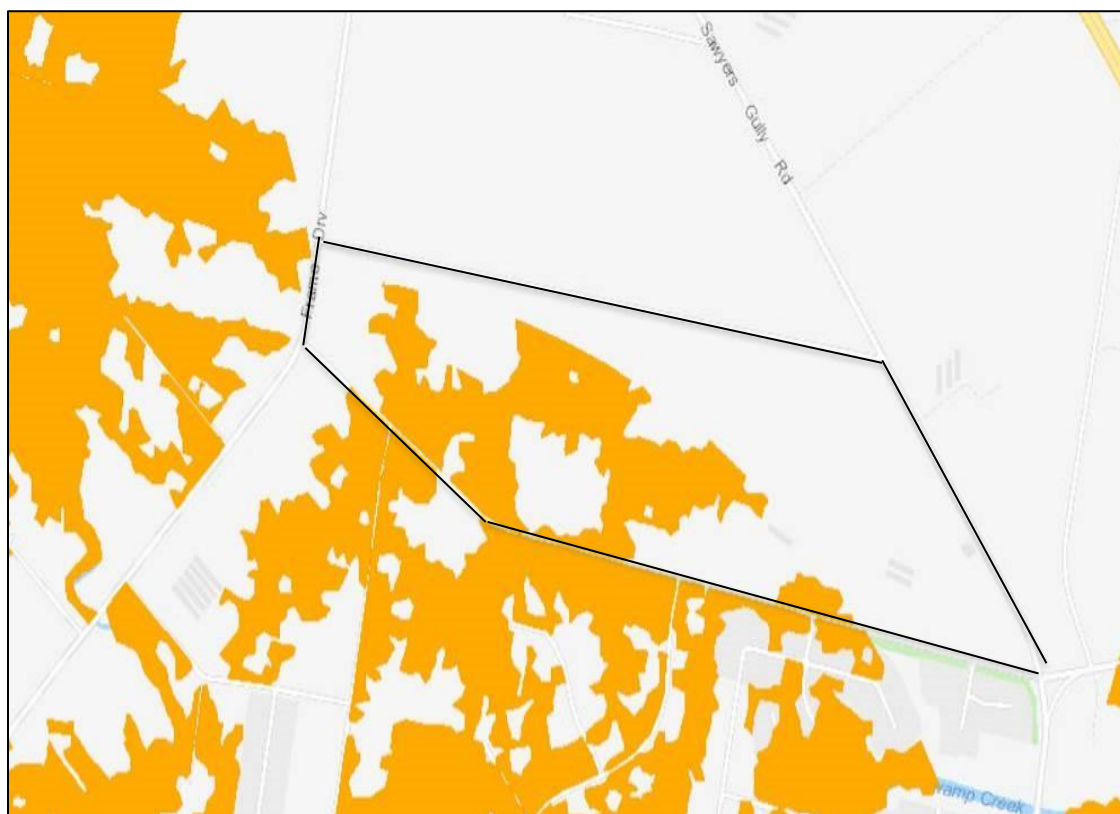
Plate 1 & 2: *Lower Hunter Spotted Gum Red Ironbark Forest*



Attachment B – Important Areas Map

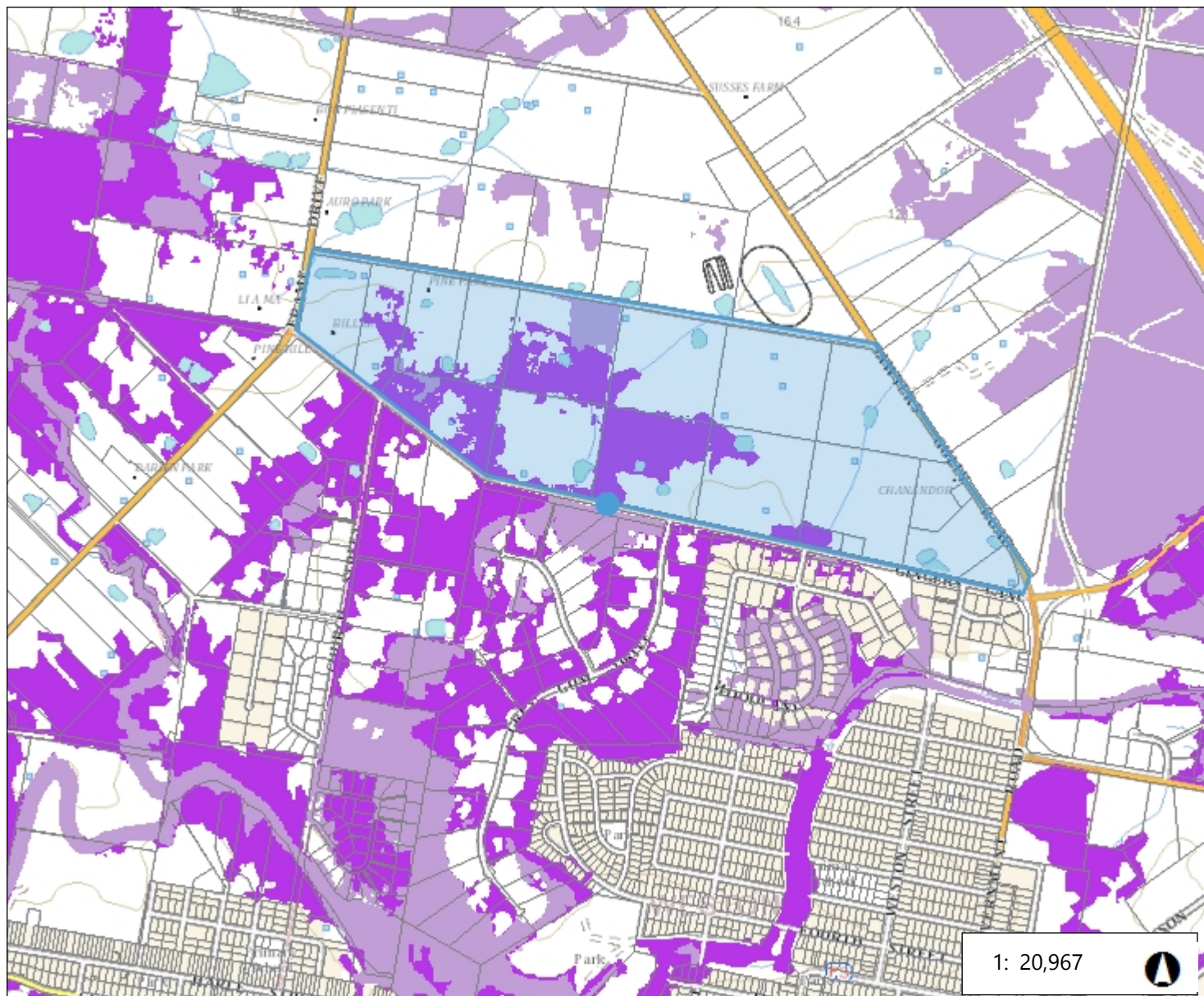


Above: Regent Honeyeater Important Areas Mapping. Below Swift Parrot Important Area Mapping.



Attachment C – Boset Report

Biodiversity Offset Scheme (BOS) Entry Threshold Map



1,065.1 0 532.55 1,065.1 Metres

WGS_1984_Web_Mercator_Auxiliary_Sphere

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Legend

- Biodiversity Values that have been mapped for more than 90 days
- Biodiversity Values added within last 90 days

Notes

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Biodiversity Values Map and Threshold Report

Results Summary

Date of Calculation	13/02/2021 9:46 PM	BDAR Required*
Total Digitised Area	100.76 ha	
Minimum Lot Size Method	LEP	
Minimum Lot Size	0.2 ha	
Area Clearing Threshold	0.25 ha	
Area clearing trigger Area of native vegetation cleared	Unknown [#]	Unknown [#]
Biodiversity values map trigger Impact on biodiversity values map(not including values added within the last 90 days)?	yes	yes
Date of the 90 day Expiry	N/A	

*If BDAR required has:

- at least one 'Yes': you have exceeded the BOS threshold. You are now required to submit a Biodiversity Development Assessment Report with your development application. Go to <https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor> to access a list of assessors who are accredited to apply the Biodiversity Assessment Method and write a Biodiversity Development Assessment Report
- 'No': you have not exceeded the BOS threshold. You may still require a permit from local council. Review the development control plan and consult with council. You may still be required to assess whether the development is "likely to significantly affect threatened species" as determined under the test in s. 7.3 of the Biodiversity Conservation Act 2016. You may still be required to review the area where no vegetation mapping is available.

Where the area of impact occurs on land with no vegetation mapping available, the tool cannot determine the area of native vegetation cleared and if this exceeds the Area Threshold. You will need to work out the area of native vegetation cleared - refer to the BOSET user guide for how to do this.

On and after the 90 day expiry date a BDAR will be required.

Disclaimer

This results summary and map can be used as guidance material only. This results summary and map is not guaranteed to be free from error or omission. The State of NSW and Office of Environment and Heritage and its employees disclaim liability for any act done on the information in the results summary or map and any consequences of such acts or omissions. It remains the responsibility of the proponent to ensure that their development application complies with all aspects of the *Biodiversity Conservation Act 2016*.

The mapping provided in this tool has been done with the best available mapping and knowledge of species habitat requirements. This map is valid for a period of 30 days from the date of calculation (above).

Acknowledgement

I as the applicant for this development, submit that I have correctly depicted the area that will be impacted or likely to be impacted as a result of the proposed development.

Signature _____ Date: 13/02/2021 09:46 PM