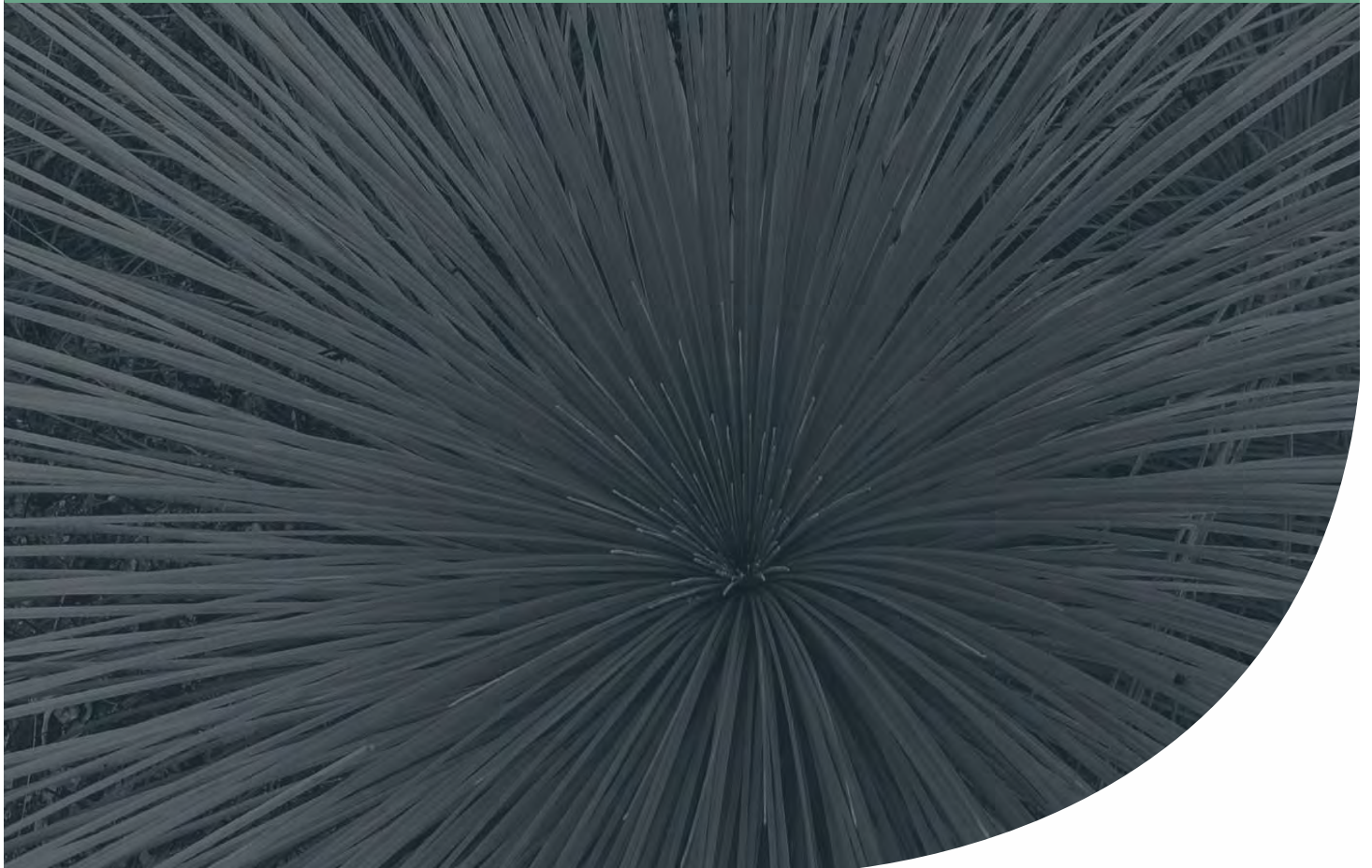


# Conservation Area Management Plan

Hamersley Residential Development and  
Conservation

Project No: EP24-129(07)

**Prepared for BAI Communications  
October 2025**



# Conservation Area Management Plan

## Hamersley Residential Development and Conservation



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# Conservation Area Management Plan

## Hamersley Residential Development and Conservation



## Executive Summary

This Conservation Area Management Plan (CAMP) outlines the conservation management actions to be implemented as a part of the Hamersley Residential Development and Conservation project within Lot 802 Erindale Road, and Lot 1 and Lot 803 Wanneroo Road, Hamersley in Western Australia (herein referred to as the 'site').

The conservation management actions relate to the Matters of National Environmental Significance (MNES) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and environmental factors under the *Environmental Protection Act 1986* (EP Act), including threatened and priority species and communities. This CAMP has been prepared to support the Preliminary Documentation (PD) report and Environmental Review Document (ERD) prepared to enable the Department of Climate Change, Energy, the Environment and Water (DCCEEW) and Environmental Protection Authority (EPA) to assess the proposed development under the EPBC Act and EP Act, respectively. The proposed development comprises a residential development area and a conservation area; this CAMP applies only to the conservation area.

As the proposed development is anticipated to have residual impacts there are offset obligations pursuant to the EPBC Act and EP Act assessments. A separate Offset Strategy has been prepared to address the entire offset requirements, the restoration outlined in this CAMP is a minor contribution to the total offset requirements. The restoration to occur within the conservation area is proposed to be implemented to increase the Banksia Woodlands of the Swan Coastal Plain TEC (Banksia Woodland TEC) and Black Cockatoo habitat quality scores across the conservation area. This increase in habitat quality scores will provide partial contribution, including 2.3% of the total DCCEEW offset requirement and a rehabilitation credit of 0.29 ha for EP Act offset requirements of the proposed development. It is noted that the current broadcast transmission land use will continue across the conservation area in the short term. This will eventually be decommissioned although the timeframe of which is not known. The continuation of the existing land uses will occur in parallel to conservation efforts and will not affect the success of the implementation of this CAMP.

The increase in the habitat quality scores of the conservation area will be achieved through the implementation of the following management actions:

- Revegetation and infill planting within patches of vegetation currently in completely degraded, degraded and good condition.
- The delineation of the conservation area with fencing and the control of access for the operations and management of the continuing land use
- Weeds pests and disease control
- Installation of educational signage, both on the public interface and internally within the conservation area
- The use of inductions to ensure personnel entering the site are aware of and acting in compliance with this CAMP
- The removal of waste from the conservation area
- The ongoing management of bushfire risks across the conservation area

To afford the conservation area long term protection a conservation covenant will be enacted with a notice put on the titles of Lot 803 and Lot 1. Once the completion criteria of this CAMP are met and

# Conservation Area Management Plan

## Hamersley Residential Development and Conservation



decommissioning of the site has occurred the conservation area will be vested with a relevant agency and ceded free of charge.

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Draft Conservation Agreement

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## Abbreviation Tables

Table A1: Abbreviations – Organisations

Organisations	
DBCA	Department of Biodiversity, Conservation and Attractions
DCCEEW	Department of Climate Change, Energy, the Environmental and Water
DWER	Department of Water and Environment Regulation
EPA	Environmental Protection Authority
OBRM	Office of Bushfire Risk Management

Table A2: Abbreviations – General terms

General terms	
FCT	Floristic community type
HQS	Habitat Quality Score
MUW	Multiple use wetland
P1	Priority 1
P2	Priority 2
P3	Priority 3
P4	Priority 4
PEC	Priority ecological community
T	Threatened
TEC	Threatened ecological community

Table A3: Abbreviations – Legislation

Legislation	
BC Act	<i>Biodiversity Conservation Act 2016 (WA)</i>
BAM Act	<i>Biosecurity and Agriculture Management Act 2007 (WA)</i>
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (federal)</i>
NTNS Act	<i>National Transmission Network Sales Act 1998</i>

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*Table A4: Abbreviations – units of measurement*

Units of measurement	
ha	Hectare
m	Metre
m AHD	m in relation to the Australian height datum

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## 1 Introduction

Digital 4 Pty Ltd (herein referred to as the 'proponent') are proposing the residential development and conservation within Lot 802 Erindale Road, and Lot 1 and 803 Wanneroo Road, Hamersley in the City of Stirling, Western Australia (herein referred to as 'the proposed development'). The proposed development envelope is approximately 33.21 ha and includes 13.55 ha for residential development within Lot 802 Erindale Road and the western portion of Lot 803 Wanneroo Road ('the residential development'), and 19.66 ha for a conservation area within Lot 803 and the eastern portion of Lot 1 Wanneroo Road ('the conservation area'). The residential development area and the conservation area are collectively referred to as 'the site' and are shown in **Figure 1**.

The residential development includes the following activities:

- The clearing of existing vegetation, comprising 12.29 ha of native vegetation
- Bulk earthworks, including cutting and filling of the land
- Civil construction works, including the construction of residential lots, roads, services infrastructure (such as sewer, water, gas, electricity, and communications) and all other associated construction works to establish a residential estate, to the point that completed residential lots are ready for individual dwellings to be built by home builders/lot purchasers
- The provision of public open space and an asset protection zone (APZ) (containing vegetation to be managed to 'low threat' for bushfire purposes only).

The conservation area (within Lot 1 and Lot 803) will be managed for conservation purposes including retention, threat abatement and revegetation efforts and no construction is proposed.

The proponent is progressing environmental assessment and approvals for the proposed development pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and the *Environmental Protection Act 1986* (EP Act). As such, it should be noted that this report has been prepared to satisfy both EPBC Act and EP Act requirements and as such 'the proposed development' is equivalent to the 'proposed action' for the purposes of the EPBC Act and the 'proposal' for the purposes of the EP Act. Additionally, 'the site' is equivalent to the 'project area' for the purposes of the EPBC Act and 'development envelope' for the purposes of the EP Act.

### 1.1 Purpose

This Construction Area Management Plan (CAMP) has been prepared to support the environmental assessment and approval processes pursuant to the EP Act and EPBC Act to enable the Department of Change, Energy, the Environment and Water (DCCEEW) and the Environmental Protection Authority (EPA) to assess the proposed development. DCCEEW and EPA have requested the proponent to detail the proposed restoration and management of environmental values to be retained within the conservation area. The relevant MNES and environmental factors associated with the proposed development are outlined in **Section 2.1** and **Section 2.2**, respectively and anticipated significant residual impacts, are outlined in **Section 2.3**.

The purpose of this CAMP is to:

- Outline the environmental values present within the conservation area (**Section 3**)

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- Assess suitability of the conservation area for protection and provide context on current site uses as well as assess restoration opportunities (onsite restoration areas). Outline the anticipated measured gains in habitat quality scores (HQS) of the relevant MNES and environmental factors (**Section 4**).
- Risks assessment to determine risks to the successful implementation of this CAMP (**Section 5**)
- Outline management actions that will be implemented and performance targets that aim to address the risks identified and ensure the long-term protection of the conservation area and associated environmental values (**Section 6**).

The CAMP applies to the conservation area only (**Figure 1**) and does not apply to the residential development area and associated construction works of the proposed development. The residential development area and associated construction works, will be managed in accordance with the Construction Environmental Management Plan (CEMP). An Asset Protection Zone (APZ) between the residential development area and the conservation area has been proposed that will simultaneously act as a buffer for the retained native vegetation in the conservation area will be implemented as outlined in the CEMP.

The conservation area will achieve avoidance, as well as providing partial contribution to the total offset requirements for the anticipated residual impacts of the proposed development. An Offset Strategy (Emerge Associates 2025e) has been developed in compliance with the *WA Environmental Offsets Policy* (Government of Western Australia 2011) and the EPBC Act *Environmental Offsets Policy* (DSEWPaC 2012) to satisfy the anticipated offset requirements pursuant to both the EPBC Act and EP Act. As outlined in **Section 4** below and the offset strategy (Emerge Associates 2025e), the restoration and management associated with this CAMP will achieve an increase of the HQS of relevant MNES and environmental factors within the conservation area. This increase in HQS will contribute 2.3% of the total DCCEEW offset requirement and provide a rehabilitation credit of 0.29 ha for EP Act offset requirements.

## 2 Environmental Impact Assessment

The works associated with the proposed development will result in significant residual impacts through the removal of up to 12.29 ha of native vegetation within the residential development area, impacting on both EPBC Act MNES and EP Act environmental factors. The relevant MNES and environmental factors are outlined in **Section 2.1** and **Section 2.2**, respectively.

### 2.1 EPBC Act MNES

The CAMP supports the Preliminary Documentation (PD) report prepared for the assessment of EPBC Act Matters of National Environmental Significance (MNES) relevant to the proposed development. The following MNES, relevant to threatened species and communities, have been identified by DCCEEW based on relevance to the proposed development (Emerge Associates 2025f):

- Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (TEC) (Banksia Woodlands TEC) – Endangered
- Carnaby's black cockatoo (CBC) (*Calyptorhynchus latirostris*) – Endangered
- Forest red-tailed black cockatoo (FRTBC) (*Calyptorhynchus banksii naso*) – Vulnerable.

### 2.2 EPA environmental factors

The CAMP also supports the Environmental Review Document (ERD) prepared for the assessment of EP Act environmental factors relevant to the proposed development. The EPA identified 'flora and vegetation' and 'terrestrial fauna' as relevant environmental factors to the proposed development. The following threatened and priority species and communities have been considered as part of this CAMP, based on relevance to the proposed development and the outcomes of the impact assessment undertaken as part of the ERD (Emerge Associates 2025d):

- Flora and vegetation:
  - Banksia woodlands of the Swan Coastal Plain Priority Ecological Community (PEC) – Priority 3 (P3) under the Western Australia (WA) policy framework. The description, area and condition thresholds that apply to the EPBC-listed TEC of the same name, also apply to this PEC and as such, it is herein referred to as 'Banksia Woodlands TEC/PEC'.
  - '*Banksia attenuata* woodlands over species rich dense shrublands' (Swan Coastal Plain (SCP) 20a) TEC - Endangered under the *Biodiversity Conservation Act 2016* (BC Act) and Endangered pursuant to the EPBC Act as it forms part of the Banksia Woodlands TEC.
  - 'Low lying *Banksia attenuata* woodlands or shrublands' Priority Ecological Community (PEC) (SCP21c) - P3 under the WA policy framework and Endangered pursuant to the EPBC Act as it forms part of the Banksia Woodlands TEC.
  - Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plains PEC – P3 under the WA policy framework and Critically Endangered pursuant to the EPBC Act. The description, area and condition thresholds that apply to the EPBC-listed TEC of the same name, also apply to this PEC and as such, it is herein referred to as 'Tuart Woodlands TEC/PEC'
  - *Acacia benthamii* - Priority 2 (P2) under the WA policy framework

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- *Jacksonia sericea* - Priority 4 (P4) under the WA policy framework
- Terrestrial fauna:
  - Carnaby's black cockatoo (CBC) (*Zanda latirostris*) – Endangered under the BC Act and the EPBC Act
  - Forest red-tailed black cockatoo (FRTBC) (*Calyptorhynchus banksii naso*) – Vulnerable under the BC Act and the EPBC Act
  - Quenda (*Isoodon fusciventer*) - P4 under the WA policy framework
  - Swan Coastal Plain shield-backed trapdoor spider (trapdoor spider) (*Idiosoma sigillatum*) - P3 under the WA policy framework
  - Black-striped snake (*Neelaps calonotos*) - P3 under the WA policy framework

### 2.3 Residual impacts

Based on the outcomes of the ERD and PD the following impacts have been identified as a result of implementation of the proposed development:

- Flora and vegetation:
  - 12.29 ha of Banksia Woodlands TEC/PEC – Endangered pursuant to the EPBC Act and Priority 3 (P3) in Western Australia (WA).
  - 0.88 ha of 'Low lying *Banksia attenuata* woodlands or shrublands' Priority Ecological Community (PEC) (SCP21c) - P3 under the WA policy framework, Endangered pursuant to the EPBC Act.
  - 3.63 ha of Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plains TEC – P3 under the WA policy framework, Critically Endangered pursuant to the EPBC Act.
  - 08 *Acacia benthamii* individuals - P2 under the WA policy framework
  - 1559 *Jacksonia sericea* individuals - P4 under the WA policy framework
- Fauna
  - 41 potential nesting trees providing breeding habitat for FRTBC, none of which contain hollows
  - 12.30 ha of 'high' quality CBC foraging habitat with a HQS of 8 (using the framework provided by DCCEEW (based on Woodman Environmental (2018)))- Endangered under the BC Act and the EPBC Act
  - 7.45 ha of 'high' quality FRTBC foraging habitat with a HQS of 7 - Vulnerable under the BC Act and the EPBC Act
  - 12.29 ha of native fauna habitat types (associated with the banksia woodland habitat type) providing:
    - suitable habitat for quenda (P4) and trapdoor spider,
    - potentially suitable habitat for one priority reptile (black-striped snake).

Based on the outcomes of the environmental impact assessment undertaken as part of the PD report (Emerge Associates 2025f) and the ERD (Emerge Associates 2025d) prepared for the assessment of EPBC Act MNES and EP Act environmental factors, as well as previous correspondence with DCCEEW and EPA, significant residual impacts are anticipated to the following MNES and environmental factors:

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- 12.29 ha of Banksia Woodlands TEC/PEC with a HQS of 5.6
- 12.30 ha of 'high' quality foraging habitat with a HQS of 8 for CBC
- 7.45 ha of 'high' quality foraging habitat with a HQS of 7 for FRTBC.

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## 3 Conservation Area Existing Environment

The following section outlines the environmental values and context of the conservation area within the site.

### 3.1 Vegetation and flora

A total of seven previous flora and vegetation surveys have been undertaken across the site from as early as 2001 until the most recent report in 2025. Additional surveys and reports were required to provide additional information to inform the PD and ERD. The most recent survey (Emerge Associates 2025c, b) was undertaken to address comments from DDCCEEW and the EPA and as such will be used to inform this CAMP.

The PD and ERD details the flora and vegetation present within the site, including the survey methodologies. The vegetation and flora relevant to the conservation area is also summarised in the below sections.

#### 3.1.1 Regional biogeography

The site is within the Swan Coastal Plain IBRA region and within the 'SWA02' or Perth subregion. The Perth subregion is characterised by mainly banksia low woodland on leached sands with melaleuca swamps where ill-drained; and woodland of *Eucalyptus gomphocephala* (tuart), *E. marginata* (jarrah) and *Corymbia calophylla* (marri) on less leached soils (Beard *et al.* 2013). This subregion is recognised as a biodiversity hotspot and contains a wide variety of endemic flora and vegetation types.

Hedde *et al.* (1980) regional vegetation complex mapping delineates the various vegetation types which would have occurred across the Swan Coastal Plain prior to European settlement. DBCA (DBCA 2021) mapping of vegetation complexes shows the development area as comprising the 'Karrakatta complex - central and south'

#### 3.1.2 Vegetation units

Seven native vegetation units were identified within the conservation area as well as areas of disturbed non-native vegetation. The native vegetation units comprise a total of 16.37 ha of the conservation area. A summary of the extent and description of each vegetation units is outlined in **Table 1** below.

Table 1: Description and extent of vegetation units within the site

Vegetation units	Description	Conservation area
<b>BMpXp</b>	Low open woodland of <i>Banksia menziesii</i> , <i>Banksia ilicifolia</i> and scattered <i>Melaleuca preissiana</i> and <i>Eucalyptus marginata</i> over shrubland of <i>Calytrix fraseri</i> , <i>Bossiaea eriocarpa</i> , <i>Eremaea pauciflora</i> var. <i>pauciflora</i> and <i>Xanthorrhoea preissii</i> over forbland of <i>Alexgeorgea nitens</i> , <i>Conostylis aculeata</i> , <i>Drosera drummondii</i> , <i>*Ursinia anthemoides</i> and <i>*Pentameris airoides</i> subsp. <i>Airoides</i> and sedgeland of <i>Schoenus subfascicularis</i>	0.55

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Table 1: Description and extent of vegetation units within the site (continued)

Vegetation units	Description	Conservation area
<b>BpGvJsXp</b>	Low woodland of <i>Banksia prionotes</i> over open shrubland to shrubland of <i>Grevillea vestita</i> , <i>Jacksonia sericea</i> (P4), <i>Xanthorrhoea preissii</i> over forbland of <i>Conostylis aculeata</i> , <i>Desmocladius flexuosus</i> , <i>Lomandra hermaphrodita</i> , <i>Trachymene pilosa</i> , <i>Ammothryon grandiflorum</i> , * <i>Pelargonium capitatum</i> and * <i>Ursinia anthemoides</i> with grassland of <i>Austrostipa compressa</i> and * <i>Ehrharta calycina</i>	2.49
<b>BpAnCf</b>	Low woodland of <i>Banksia prionotes</i> over low shrubland of <i>Calytrix fraseri</i> , <i>Daviesia nudiflora</i> , <i>Gastrolobium capitatum</i> , <i>Gompholobium tomentosum</i> , <i>Stirlingia latifolia</i> and <i>Xanthorrhoea preissii</i> over forbland of <i>Austrostipa hemipogon</i> , <i>Trachymene pilosa</i> , <i>Thysanotus manglesianus</i> , * <i>Ursinia anthemoides</i>	1.72
<b>EmBDtXp</b>	Open woodland of <i>Eucalyptus marginata</i> , <i>Banksia attenuata</i> and <i>B. menziesii</i> over shrubland of <i>Daviesia triflora</i> , <i>Gompholobium tomentosum</i> , <i>Stirlingia latifolia</i> , <i>Xanthorrhoea preissii</i> over forbland of <i>Alexgeorgea nitens</i> , <i>Burchardia congesta</i> , <i>Desmocladius flexuosus</i> , <i>Drosera erythrorhiza</i> , <i>Haemodorum laxum</i> , <i>Phyllangium paradoxum</i> and <i>Wahlenbergia preissii</i> and open sedgeland of <i>Mesomelaena pseudostygia</i> and <i>Morelotia octandra</i>	6.16
<b>EmBmPoAn</b>	Low open woodland of <i>Banksia menziesii</i> and <i>Eucalyptus marginata</i> over open shrubland of <i>Xanthorrhoea preissii</i> and over low shrubland of <i>Daviesia triflora</i> , <i>Daviesia nudiflora</i> , <i>Eremaea pauciflora</i> , <i>Monotaxis grandiflora</i> , <i>Stirlingia latifolia</i> , <i>Gastrolobium capitatum</i> and <i>Hibbertia huegelii</i> over forbland of <i>Alexgeorgea nitens</i> , <i>Patersonia occidentalis</i> , <i>Scaevola repens</i> , <i>Stylidium androsaceum</i> , <i>Ptilotus manglesii</i> and <i>Lomandra</i> spp. and open sedgeland of <i>Mesomelaena pseudostygia</i> and <i>Morelotia octandra</i>	1.87
<b>EmBHh</b>	Low woodland of <i>Eucalyptus marginata</i> , <i>Banksia attenuata</i> , <i>Banksia menziesii</i> and <i>Banksia prionotes</i> over shrubland of <i>Daviesia triflora</i> , <i>Hibbertia hypericoides</i> , <i>Stirlingia latifolia</i> and <i>Xanthorrhoea preissii</i> over forbland of <i>Alexgeorgea nitens</i> , <i>Burchardia congesta</i> , <i>Caesia micrantha</i> , <i>Conostylis setigera</i> , <i>Corynotheca micrantha</i> , <i>Drosera erythrorhiza</i> , <i>Scaevola canescens</i> and <i>Microlaena stipoides</i> and open sedgeland of <i>Mesomelaena pseudostygia</i> and <i>Morelotia octandra</i>	3.27
<b>JfAsXp</b>	Tall shrubland of <i>Jacksonia furcellata</i> and <i>Acacia saligna</i> over shrubland <i>Xanthorrhoea preissii</i> and <i>Macrozamia fraseri</i> over grassland of * <i>Ehrharta calycina</i>	0.30
<b>Cleared</b>	Disturbed areas and cleared tracks with limited native species	3.29

### 3.1.3 Vegetation condition

Emerge Associates assessed vegetation condition within the site after the fire that occurred on the western portion of the site on 1 January 2023 as ranging from 'Degraded' to 'Excellent' condition detailed in **Table 2**. Cleared areas within the site including bare ground and tracks were identified to be in 'completely degraded' condition. It is noted that differences in vegetation condition between this survey and previous surveys are likely due to the occurrence of the fire and resulting weed invasion. It is also noted that the previous report by JBS&G (2023), only covered lot 802, not the entire site, and used a different methodology resulting in intermediate condition categories (i.e. Very Good – Excellent).

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Table 2: Extent of vegetation condition categories within the site

Condition Category (EPA 2016)	Conservation Area (ha)	Proportion of the Conservation Area (%)
Pristine	0	0
Excellent	2.60	13.23
Very Good	11.11	56.53
Good	1.03	5.26
Degraded	1.62	8.26
Completely Degraded	3.29	16.73
Total	19.66	100

### 3.1.4 Threatened and priority ecological communities

Several threatened and priority ecological communities (TEC/PEC) were identified as potentially occurring within the site during desktop analysis and searches of relevant databases. The *Detailed Flora and Vegetation Assessment* (2025c) recorded the presence of the following TECs and PECs within the site:

- Banksia Woodlands of the Swan Coastal Plain ecological community (Banksia Woodlands TEC): 'Endangered' under the EPBC Act and comprised of multiple listed TEC/PEC under the BC Act, (including those below)
- Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal TEC) which is listed as 'Critically Endangered' under the EPBC P3 under the WA policy framework, Critically Endangered pursuant to the EPBC Act.
- SCP 20a 'Banksia attenuata woodland over species rich dense shrublands' TEC which is listed as 'Endangered' under the EPBC and 'Critically Endangered' under the BC Act
- SCP21c 'low lying Banksia attenuata woodlands or shrublands' PEC.

### 3.1.5 Flora

The *Detailed Flora and Vegetation Assessment* undertaken by Emerge Associates (2025c), recorded a total of 167 native and 41 non-native (weed) species representing 46 families and 151 genera within the site. Two priority flora species pursuant to the BC Act were recorded during the surveys. The dominant families containing native taxa were Fabaceae (18 native taxa and three weed taxa) and Orchidaceae (15 native taxa and one weed taxa). Sampling recorded 189 species from 27 samples with an additional 27 species recorded opportunistically across the survey area.

### 3.1.6 Weeds and diseases

A total of 41 introduced species were recorded across the whole site. Two species listed as a declared pest (C3) pursuant to the *Biosecurity and Agriculture Management Act 2007* (BAM Act) were recorded within the site: \**Moraer flaccida* (one-leaf Cape tulip) and *Opuntia stricta* (prickly pear). *Opuntia stricta* is also listed as a Weed of National Significance.

Pathogens such as the soil borne water mould *Phytophthora spp.* (dieback) affect susceptible plants by attacking their root system which inhibits uptake of water and nutrients (DPaW 2015). No records

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of dieback occur in the residential development area or immediate surrounds, but no formal testing has been undertaken (SCNRM 2022).

### 3.1.7 Threatened and priority flora species

During the *Detailed Flora and Vegetation Assessment* (2025c), two priority flora pursuant to the BC Act were recorded on site, which require consideration in this CAMP. The priority flora species include:

- *Acacia benthamii* (P2)
- *Jacksonia sericea* (P4).

No threatened flora species listed pursuant to the EPBC Act were recorded or considered likely to occur within the site after field surveys.

## 3.2 Fauna

A total of eight previous fauna and black cockatoo surveys have been undertaken across the site from 2019 until the most recent report in 2025. Additional surveys and reports were required to provide additional information to inform the PD and the ERD. The most recent *Basic Fauna and Targeted Black Cockatoo Assessment* was undertaken by Emerge Associates (2025a, 2025b) to address comments from DCCEEW and the EPA and as such will be used to inform this CAMP.

The PD and ERD details the fauna and fauna habitat present within the site, including the survey methodologies. The fauna and fauna habitat types relevant to the conservation area is also summarised in the below sections.

### 3.2.1 Fauna habitat

Three broad fauna habitat types were identified within the site including banksia woodland, scattered trees and shrubs and bare ground and grassland. These habitat types present within the conservation area are summarised in **Table 3** below.

Table 3: Fauna Habitats found within the site

Fauna Habitat	Description	Conservation area (ha)	Proportion of conservation area (%)
Banksia woodland	Woodland with <i>Banksia attenuata</i> , <i>B. menziesii</i> , <i>B. prionotes</i> and <i>B. ilicifolia</i> and <i>Eucalyptus marginata</i> and <i>Eucalyptus gomphocephala</i> over native shrubs, particularly <i>Xanthorrhoea preissii</i> and native and nonnative grasses. Areas vary in value to fauna depending on level of disturbance. <ul style="list-style-type: none"> <li>• High microhabitat complexity.</li> <li>• Microhabitats consist of woody debris, runnels, dense leaf litter, dense shrub cover, fallen logs and sandy soils.</li> <li>• Vegetation cover is continuous throughout the survey area with minor separation by sand tracks. Fencing fragments the survey area from outside vegetation.</li> <li>• Disturbances largely comprised of dense weed cover, recent fire and dieback.</li> <li>• Provides habitat for all species likely to occur within the survey area.</li> </ul>	16.37	83.26

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Table 3: Fauna Habitats found within the site (continued)

Fauna Habitat	Description	Conservation area (ha)	Proportion of conservation area (%)
Scattered trees and shrubs	<p>Scattered patches of native and non-native <i>Eucalyptus</i> spp. mostly located in and around infrastructure.</p> <ul style="list-style-type: none"> <li>• Low microhabitat complexity.</li> <li>• Microhabitats consist of some woody debris and dense leaf litter where habitat is not actively managed.</li> <li>• Habitat is mostly disconnected in isolated patches.</li> <li>• May serve a traversal function between patches of banksia woodland habitat.</li> </ul> <p>Provides habitat for <b>Carnaby's black cockatoo</b> and <b>Forest red-tailed black cockatoo</b>.</p>	0.05	0.25
Bare ground and grassland	<p>Vehicle tracks, cleared areas and infrastructure.</p> <ul style="list-style-type: none"> <li>• Provides little to no value to fauna aside from a traversal function between habitats.</li> </ul>	3.24	16.48

### 3.2.2 Fauna species

During the *Basic Fauna and Targeted Black Cockatoo Assessment* a total of 22 native and two introduced fauna species were directly or indirectly recorded in the site. One species listed as a declared pest pursuant to the BAM Act, *Vulpes vulpes* (fox), was recorded within the site.

### 3.2.3 Threatened and priority fauna species

Two MNES fauna species (CBC and FRTBC), one priority mammal (quenda (P4)) and one priority invertebrate (trapdoor spider (P3)) were directly or indirectly recorded during field surveys within the site (Bennelongia Environmental Consultants 2023; Emerge Associates 2025a). Additionally, the conservation area is considered to provide potentially suitable habitat for the black striped snake, associated with the banksia woodland habitat type.

## 3.3 Conservation areas and regional ecological linkages

Within the area surrounding the site there are a number of Bush Forever Sites that provide protected areas of native vegetation and habitat for threatened and priority species and communities. Bush Forever Site 202 (Warick Bushland) to the north and Bush Forever Site 203 (Carine Regional Open Space) to the northwest are within 2km of the site and contain approximately 60 ha and 24 ha of native vegetation, respectively. A total of 15 Bush Forever sites occur within 6km of the site, providing native vegetation and habitat for threatened and priority species and communities.

The site occurs at the intersection of two ecological linkages. Ecological Linkage No. 6 runs north from the site and ecological linkage No. 22 runs east to west across the site. These ecological linkages connect a number of bushland areas in the wider local area including a number of the Bush Forever Sites mentioned above.

The site is currently fenced for the purpose of safety and security associated with the broadcasting infrastructure within Lot 803, thus the vegetation and associated fauna habitat within the

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development envelope provides limited function as an ecological linkage for ground-dwelling fauna but is likely to provide links for avian fauna.

### 3.4 Topology, geology and soils

The topography of the site is undulating with elevation ranging from a maximum of 40 m Australian Height Datum (AHD) in the north to 20 mAHD in the south of the site.

The site occurs on the Swan Coastal Plain, the geomorphic unit that characterises much of the Perth metropolitan area. Within the Swan Coastal Plain the site is within the Spearwood System and the Karrakatta association within that (Churchward and McArthur 1980). The Karrakatta association comprises an undulating landscape with deep yellow sands over limestone.

Finer scale soil landscape mapping by DPIRD (2023) shows that the site consists of the Sands (S7) mapping unit which is described as: 'Sand - pale and olive yellow, medium to coarse-grained, sub-angular to sub-rounded quartz, trace of feldspar, moderately sorted, of residual origin.'

There are no unique geological features or restricted landforms within the site.

### 3.5 Hydrology

#### 3.5.1 Groundwater

The site is situated within the Gwelup groundwater subarea of the Gwelup groundwater area of the Perth- Superficial Swan Aquifer as indicated by Department of Water and Environmental Regulation (DWER) Water Register (2024b).

Groundwater levels across the site have been mapped in DWER's Perth Groundwater Map database (2025). Groundwater levels across the conservation area range from 16 mAHD to 14mAHD with the depth to groundwater ranging from 25m below ground level (bgl) to 5mbgl in the south of the site. There is approximately 1m difference between the maximum groundwater depth and the minimum groundwater depth.

#### 3.5.2 Wetlands

Wetlands are areas of seasonally, intermittently or permanently waterlogged land such as poorly drained soils, ponds, billabongs, lakes, swamps, tidal flats, estuaries, rivers and their tributaries (Wetlands Advisory Committee 1977). Many wetlands provide important habitat and support high levels of biodiversity and endemism.

Wetlands of national or international significance may be afforded special protection under Commonwealth or international agreements. A review of the *Ramsar List of Wetlands of International Importance* (DBCA 2017) and *A Directory of Important Wetlands in Australia – Western Australia* (DBCA 2018) indicates that no Ramsar or listed 'important wetlands' are located within or near the site.

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A review of DBCA's Geomorphic wetland dataset identifies no wetlands within or in close proximity to the site (DBCA 2024). A number of constructed earth dams occur within proximity to the site as indicated in DWER's hydrography dataset (DWER 2020).

#### 3.5.3 Public drinking water source areas

DWER's Public Drinking Water Source Area Mapping Tool indicates that the site is within the P3 Public Drinking Water Source Area (PDWSA) in the Perth Coastal and Gwelup Underground Water Pollution Control Area (DWER 2024a). P3 areas occur within PDWSA's where land is zoned for urban, commercial or light industrial uses. Within P3 areas, drinking water sources need to co-exist with higher intensity land uses compared to P1 and P2 areas.

For urban (residential) developments in P3 areas it is recommended that there is deep sewerage connection and urban water sensitive design practices are implemented.

#### 3.6 Bushfire risk

The site is nearly entirely located within 'Area 2' (designated bushfire prone) on the state-wide *Map of Bush Fire Prone Areas* prepared by the Office of Bushfire Risk Management (OBRM 2024b), as shown in **Plate 1**. The identification of the site within 'Area 2' necessitates a further assessment of the determined bushfire risk affecting the site in accordance with *Australian Standard 3959:2018 Construction of buildings in bushfire prone areas* (AS 3959), and the satisfactory compliance of the proposal with the policy measures described in *State Planning Policy 3.7 Bushfire* (SPP 3.7) (WAPC 2024b) and the *Planning for Bushfire Guidelines - For the implementation of State Planning Policy 3.7 Bushfire* (the Guidelines) (WAPC 2024a).

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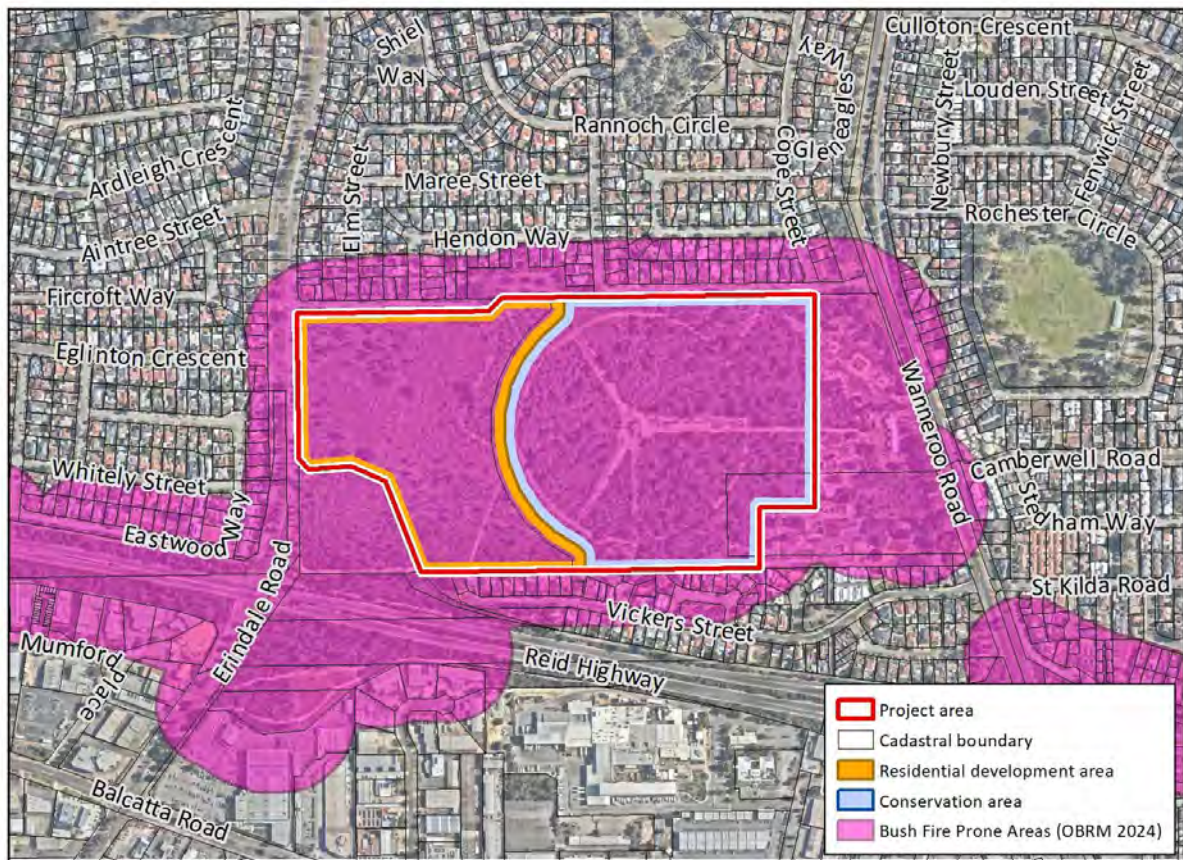


Plate 1: Areas within and surrounding the site, identified as a 'designated bushfire prone' (under the state-wide Map of Bush Fire Prone Areas (OBRM 2024a))

### 3.7 Conservation area environmental outcomes

The avoidance and subsequent retention of vegetation and habitat within the 19.66 ha of conservation area will result in the conservation and protection of the following environmental values:

- 16.37 ha of native vegetation units associated with the 'Karrakatta complex - central and south' vegetation complex in varying condition including:
  - 2.60 ha of 'excellent' condition vegetation
  - 11.11 ha of 'very good' condition vegetation
  - 1.03 ha of 'good' condition vegetation
  - 1.62 ha of 'degraded' condition vegetation
  - 3.29 ha of 'completely degraded' vegetation
- 16.08 ha of Banksia woodlands of the Swan Coastal Plain TEC
- 1.87 ha of SCP 20a 'Banksia attenuata woodland over species rich dense shrublands' PEC
- 0.02 ha of SCP21c 'low lying Banksia attenuata woodlands or shrublands' PEC
- 16.37 ha of 'high' quality CBC foraging habitat
- 15.71 ha of 'high' quality FRTBC foraging habitat
- 3.35 ha of FRTBC roosting habitat
- 19 black cockatoo habitat trees
- 97 *Acacia benthamii* plants

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- 1,333 *Jacksonia sericea* plants
- 16.37 ha of suitable habitat associated with the 'banksia woodland' fauna habitat type for quenda (*Isoodon fusciventer*)
- 16.37 ha of suitable habitat associated with the 'banksia woodland' fauna habitat type for the trapdoor spider (*Idiosoma sigillatum*)
- 16.37 ha of potentially suitable habitat for the Black-striped snake (*Neelaps calonotos*), associated with the 'banksia woodland' fauna habitat type.

Additionally, the conservation area will achieve the retention of 19.66 ha of the total 32.38 ha of the existing ecological linkages and allow continued movement of mostly avian fauna species. The removal of the residential development area will result in increased distances between habitat islands along the ecological linkages; however the landscape is already highly fragmented.

*A Black Cockatoo and Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community Habitat Quality Score Assessment* was undertaken by Emerge Associates (2025b). The HQS assessment included Banksia Woodland TEC, CBC and FRTBC for the residential development area and the conservation area the results of which is summarised in **Table 4** below. These assessments were undertaken to determine the current quality of habitat for impact assessment purposes in the residential development area and the conservation area. Additionally, the HQS assessment report identified areas that may be suitable for restoration within the conservation area.

Table 4: Habitat Quality Scores across the site for the relevant MNES

Habitat Assessed	Conservation Area	Residential Area
Banksia Woodland TEC	6.5	5.6
CBC habitat	8	8
FRTBC habitat	7	7

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## 4 Conservation Area Suitability

The approach for the conservation area is to conserve existing environmental values as well as undertake restoration and revegetation works to achieve a net increase conservation outcome. Current land uses and the broader site context, including operational requirements, decommissioning processes, and the potential for changes in land use, have been considered in the development of this CAMP. This ensures that conservation efforts can be implemented in parallel with ongoing site activities and in alignment with the site's context and constraints. These considerations are discussed in **Section 4.1** below and further assessed for risks in **Section 5**.

Additionally, restoration suitability has been assessed and considered, as discussed in **Section 4.2** below.

### 4.1 Current site use and context

A portion of Lot 803 and Lot 1 currently supports broadcast transmission land uses in Lot 803, operated by BAI communications Pty Ltd (BAI Communications). It is noted that Digital 4 is a wholly owned subsidiary of BAI Communications, who are the landowners of the site. The broadcasting facility plays a critical role in delivering Australian Broadcasting Corporation (ABC) services, including ABC News Radio, Local Radio, and Radio National. These broadcasts serve not only the Perth metropolitan area but also reach regional communities. The location of the broadcasting facility and future conservation area is uniquely suited to this purpose. The conservation area holds commercial value for continued broadcasting or related uses and may have presented opportunities for upgrades or intensification of its existing functions. Additionally, there is potential opportunity to repurpose the conservation area aligned with its Urban zoning under the Metropolitan Region Scheme (MRS) at a future date. However, as part of a broader residential development and conservation initiative, the proponent has committed to surrendering the remaining area across Lot 801 and Lot 1 (19.66 ha), which is surplus to current broadcasting requirements, to form the onsite conservation area.

The broadcasting transmission infrastructure currently in operation within the conservation area will continue in parallel with implementation of this CAMP and associated management actions. Detailed liaison with the facility's operations team has been undertaken to understand the operational requirements and ensure continued operations and decommissioning will not impact conservation works. To facilitate the ongoing operations and management of the site the following will need to be retained:

- Access roads are to be maintained at a width of 6-7 m.
- All existing guy lines are to be retained and maintained including access to the guy anchor foundations.
- Unrestricted access to all infrastructure including masts, towers and antennas including climbing of structures.

These areas have been committed to by the proponent and BAI Communications, as the current operation and maintenance areas, with the remaining areas to be avoided and conserved. The proponent and BAI Communications understands this will restrict any intensification of current site uses. Areas where access is required for operations and maintenance of the site have been excluded

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from potential restoration. This allows the implementation of this CAMP to occur in parallel to the ongoing operations and maintenance of the site.

Under the provisions of the *National Transmission Network Sales Act* (NTNS Act), all broadcasting related activities within the site, including the replacement and upgrading of infrastructure, are “immune” from state laws. While provision will be made to enable continuation of the current land use and operations in parallel with the implementation of this CAMP, the formal designation of the conservation area, together with the management action outlined within this CAMP, will secure the conservation area for long-term protection and ecological restoration. The proponent and BAI Communications are effectively surrendering the use of the land from more intensive broadcasting related uses and effectively overrides its immunity from state planning and environmental regulations. Such immunity would otherwise conflict with the long-term conservation objectives for the land. To afford the conservation area long term protection, a conservation covenant will be enacted with a notice placed on the titles of Lot 803 and Lot 1. Once the performance targets are met, the conservation area will be ceded to a public authority free of charge for ongoing future management.

The broadcasting transmission infrastructure within the site will be decommissioned in the future, although the exact timeframe of this has not yet been determined. Decommissioning does not form part of the proposed development itself. Standard decommissioning practice for broadcast transmission infrastructure (such as masts, towers, and antennas) typically involves the use of controlled demolition (e.g. explosives) to bring down the structure within a designated, pre-cleared area. While this method is effective, it carries a potential risk to surrounding vegetation and fauna, particularly from the impact of the falling mast and trailing guy wires. Although the risks of this are unlikely, these risks are not negligible.

In recognition of the ecological sensitivity of the site, and despite any exemptions from state legal requirements, the proponent has proactively investigated alternative decommissioning methods. A commitment has been made to adopt approaches that reduce the risk of disturbance to native vegetation within the conservation area. These alternatives are intended to provide greater confidence that decommissioning can occur with minimal environmental impact, and that necessary management actions outlined in this plan can be implemented concurrently.

The preferred decommissioning approach, which presents the least risk and impact to environmental values, involves the use of cranes to dismantle the tower and remove components from the site. This activity will be confined to existing tracks and operational areas, with no anticipated disturbance to surrounding vegetation. The proponent has received detailed advice from the operations and decommissioning team regarding the feasibility of crane-based decommissioning, alongside consideration of alternative methods. While the use of cranes for this purpose is considered feasible, it has not previously been undertaken by BAI Communications and will be contingent upon factors such as crane size and the availability of suitable site access points. Accordingly, the current decommissioning strategy is to proceed with crane use, noting that implementation will be subject to logistical constraints at the time of decommissioning. This strategy is considered appropriate to mitigate potential risks and demonstrates that there are viable alternatives, which will continue to be explored and refined as required.

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Therefore, decommissioning activities are not expected to interfere with the outcomes of this CAMP. In the event that decommissioning presents a risk to surrounding vegetation, the activity will be subject to a reassessment of environmental impacts in accordance with the EPBC Act.

#### 4.2 Restoration areas

Emerge Associates (2025b) undertook a HQS assessment of the conservation area to determine the HQS for CBC, FRTBC and Banksia Woodlands TEC as well as identify the extent of areas suitable for restoration works (proposed management areas) within the conservation area. The HQS assessment methodology and proposed management areas have been used to determine the restoration areas and restoration treatment types.

The HQS assessment undertaken by Emerge Associates (2025b) identified twelve proposed management areas that have the potential for restoration efforts to increase black cockatoo habitat and Banksia Woodland TEC extent and condition. The restoration areas are shown in **Figure 2** and comprise 3.15 ha of vegetation in completely degraded, degraded and good condition and where access for the ongoing operations and maintenance of the site is not required.

To better understand the potential for restoration, a HQS was assigned to each of the twelve restoration areas. It is recognised that the HQS assessments are usually applied to whole sites for impact assessment purposes, however, they have been used in this context to give a baseline HQS to demonstrate improvement in HQS, following management actions.

Emerge Associates (2025b) described the current flora and black cockatoo attributes within each management area based on field survey results and assessed the HQS for CBC, FRTBC and Banksia Woodlands TEC, as summarised in **Table 5** and shown in **Figure 3**. Associated vegetation unit and vegetation condition in summarised in

**Table 6.**

The survey methodology and HQS for each management area is provided in Emerge Associates (2025b) (**Appendix B**).

*Table 5: Current flora and black cockatoo attributes within each restoration area*

ID	Description	HQS		
		CBC	FRTBC	Banksia Woodland TEC
1	Dense native ground layer of herbs <i>Alexgeorgea nitens</i> and <i>Corynotheca micrantha</i> across most of the area. Moderate to high cover of non-native grasses. Part of the area subject to a recent burn. Very low cover of <i>Banksia</i> spp. and <i>Xanthorrhoea</i> spp. Vegetation in degraded condition.	5	5	3.7
2	Dense native ground layer of herbs <i>Alexgeorgea nitens</i> and <i>Corynotheca micrantha</i> and shrub <i>Grevillea vestita</i> across most of the area. Moderate to high cover of non-native grasses. Some mature and some scattered juvenile <i>Banksia</i> spp. plants. Scattered jarrah trees in eastern portion and <i>Xanthorrhoea</i> spp. in southern and eastern portions. Large woody weed (shrub) * <i>Gaudium laevigatum</i> present. Vegetation in degraded condition.	6	6	3.7

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Table 5: Current flora and black cockatoo attributes within each restoration area (continued)

ID	Description	HQS		
		CBC	FRTBC	Banksia Woodland TEC
3	Native ground layer of herbs <i>Alexgeorgea nitens</i> and <i>Corynotheca micrantha</i> and scattered native shrubs across most of the area. Moderate to high cover of non-native grasses. Some mature and some scattered juvenile <i>Banksia</i> spp. plants, jarrah trees and <i>Xanthorrhoea</i> spp. Vegetation in good condition.	6	6	4.7
4	Mature <i>Banksia prionotes</i> trees over mostly non-native grasses with some scattered native plants and bare ground. Vegetation in good condition.	8	4	3.8
5	No native vegetation – area comprises part of a cleared track in completely degraded condition.	3	3	2.2
6	Mature <i>Banksia prionotes</i> trees over mostly non-native grasses with some scattered jarrah trees, scattered native shrubs and bare ground. Variable in structure and diversity. Large woody weed (shrub) <i>*Chamelaucium uncinatum</i> present. Vegetation in good condition.	8	6	4.7
7	Scattered <i>Banksia</i> spp. throughout most of patch, with higher PFC in the southern portion. Ground layer comprises mainly non-native grasses and bare ground. Vegetation in degraded condition.	7	5	3.7
8	Scattered <i>Banksia</i> spp. trees over scattered native shrubs <i>Xanthorrhoea</i> spp., <i>Jacksonia furcellata</i> , <i>Acacia saligna</i> over non-native weeds. Vegetation in degraded condition.	5	4	3.7
9	Jarrah and <i>Banksia</i> spp. trees and <i>Banksia</i> sp. seedlings over <i>Xanthorrhoea</i> sp. and scattered native shrubs, with non-native grasses and bare ground. Vegetation in good condition.	7	6	5.6
10	Mostly cleared and devoid of native vegetation. Small patch of <i>Xanthorrhoea preissii</i> and scattered native shrubs. Large woody weed (shrub) <i>*Chamelaucium uncinatum</i> present on boundary and <i>*Eucalyptus camaldulensis</i> in eastern portion. Vegetation in completely degraded condition.	4	4	2.3
11	Mostly cleared with scattered native shrub regrowth or juvenile plants. A few scattered juvenile <i>Banksia</i> sp. shrubs. Low weed cover. Vegetation in completely degraded condition.	4	3	2.3
12	Mostly cleared with scattered native shrub regrowth or juvenile plants. Low weed cover. Vegetation in completely degraded condition.	3	3	2.3

Table 6: Vegetation units and condition of each restoration area

Restoration area ID	Vegetation unit	Vegetation Condition
1	<b>BpGvJsXp</b>	Degraded
2	<b>BpGvJsXp/EmBhh</b>	Degraded
3	<b>BpGvJsXp</b>	Good
4	<b>BpGvJsXp</b>	Good
5	<b>BpGvJsXp</b>	Good
6	<b>BpGvJsXp</b>	Completely degraded

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Table 6: Vegetation units and condition of each restoration area (continued)

Restoration area ID	Vegetation unit	Vegetation Condition
7	BpGvJsXp/EmBHh	Good
8	BMpXp	Degraded
9	JfAsXp	Degraded
10	EmBmPoAn	Good
11	EmBDtXp	Completely degraded
12	EmBDtXp	Completely degraded

### 4.2.1 Restoration efforts

Restoration efforts are proposed to involve a variety of management actions including planting of local native species and weed control. The management actions proposed were informed by the Emerge Associates (2025b) field survey.

A species list for restoration (**Appendix A**) has been compiled using local native species currently present in the site and recorded during field surveys and comprises the following:

- Black cockatoo foraging species: local native plant species known to provide primary foraging habitat for CBC and/or FRTBC (*Banksia* spp., *Eucalyptus marginata*).
- Banksia woodland species: local native species that occur within Banksia Woodlands TEC/PEC within the site.

Four restoration treatment types have been established and applied to the restoration areas, as outlined in **Table 7** and **Figure 4**.

Table 7: Treatment types applied to each restoration area

Treatment Type	Restoration Area ID	Treatment Description
A	1, 2, 3	<ul style="list-style-type: none"> <li>• Infill planting around existing native vegetation</li> <li>• 1-2<sup>+</sup> plants per square meter</li> <li>• Planting of 50% black cockatoo foraging species</li> <li>• Planting 50% other local native banksia woodland species</li> <li>• Weed control prior to planting and routinely.</li> </ul>
B	4, 9	<ul style="list-style-type: none"> <li>• Infill planting around existing native vegetation.</li> <li>• 1-2<sup>+</sup> plants per square meter</li> <li>• 0% black cockatoo foraging species</li> <li>• 100% other local native banksia woodland species</li> <li>• Weed control prior to planting and routinely.</li> </ul>
C	6, 7, 8	<ul style="list-style-type: none"> <li>• Heavy planting (4 plants/m<sup>2</sup>) of currently cleared areas and infill planting where appropriate at 1-4 plants/m<sup>2</sup></li> <li>• 2-4<sup>+</sup> plants per square meter</li> <li>• 50% black cockatoo foraging species</li> <li>• 50% other local native banksia woodland species</li> <li>• Weed control prior to planting and routinely.</li> </ul>

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Table 7: Treatment types applied to each restoration area (continued)

Treatment type	Restoration area ID	Treatment approach
C	6, 7, 8	<ul style="list-style-type: none"> <li>• Heavy planting (4 plants/m<sup>2</sup>) of currently cleared areas and infill planting where appropriate at 1-4 plants/m<sup>2</sup></li> <li>• 2-4<sup>^</sup> plants per square meter</li> <li>• 50% black cockatoo foraging species</li> <li>• 50% other local native banksia woodland species</li> <li>• Weed control prior to planting and routinely.</li> </ul>
D	5, 10, 11, 12	<ul style="list-style-type: none"> <li>• Heavy planting of currently cleared areas, infill planting where appropriate at 1-5 plants/m<sup>2</sup></li> <li>• 3-5<sup>^</sup> plants per square meter</li> <li>• 50% black cockatoo foraging species</li> <li>• 50% other species local native banksia woodland species</li> <li>• Weed control prior to planting and routinely.</li> </ul>

<sup>^</sup>Planting density will be dependent on available space for planting following weed control, as determined by existing native species cover. Planting will comprise infill installation surrounding native plants. The exact number of plants to be installed will be determined by an experienced revegetation contractor engaged to do the works.

### 4.2.2 Restoration goals

Through the implementation of the above restoration efforts, it is expected that the baseline HQS can be increased for each management area. The HQS that can realistically be achieved through the implementation of this CAMP are outlined below in **Table 8** is shown in **Figure 5** and provided in **Appendix B**. The current vegetation condition for each restoration area and the goal condition after the implementation of this CAMP is outlined in

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**Table 9.** Note targets are based on the (Gibson *et al.* 1994) average species richness of the floristic community types (FCTs) recorded within and adjacent to restoration areas (FCT 20a and FCT 28) and DoEE (2016) Banksia Woodlands TEC/PEC indicative vegetation condition category measures.

Table 8: Habitat quality score target for each restoration area

MNES	Restoration area											
	1	2	3	4	5	6	7	8	9	10	11	12
HQS prior to restoration												
Banksia Woodland TEC	3.7	3.7	4.7	3.8	2.3	4.7	3.7	3.7	5.6	2.3	2.3	2.3
CBC	5	6	6	8	3	8	7	5	7	4	4	3
FRTBC	5	6	6	4	3	6	5	4	6	4	3	3
HQS post restoration												
Banksia Woodland TEC	4.7	4.7	4.7	5.6	5.6	5.6	5.6	5.6	6.5	5.6	5.6	5.6
CBC	6	6	6	8	6	8	8	8	7	8	8	8
FRTBC	6	6	6	4	6	6	7	7	6	7	7	7

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Table 9: Current vegetation condition and target vegetation condition of each restoration area

Restoration area	Current vegetation condition	Target vegetation condition	Target number of species /100m <sup>2</sup>	Target weed cover
1	Degraded	Good	20	<30%
2	Degraded	Good	20	<30%
3	Good	Good	20	<30%
4	Good	Very Good	40	<20%
5	Good	Very Good	40	<20%
6	Completely degraded	Very Good	40	<20%
7	Good	Very Good	40	<20%
8	Degraded	Very Good	40	<20%
9	Degraded	Very Good	40	<20%
10	Good	Very Good	40	<20%
11	Completely degraded	Very Good	40	<20%
12	Completely degraded	Very Good	40	<20%

The restoration measures outlined above will provide partial contribution, including 2.3% of the total DCCEW offset requirement and a rehabilitation credit of 0.29 ha for EP Act offset requirements for the anticipated residual impacts to Banksia Woodland TEC and CBC and FRTBC foraging habitat associated with the proposed development (Emerge Associates 2025e). In addition to this the restoration measures also improve the quality and extent of habitat suitable or potentially suitable for the remainder of environmental factors identified as occurring or potentially occurring within the site as outlined in **Section 2.2**. Further details are provided in the Offset Strategy (Emerge Associates 2025e).

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## 5 Risk assessment

A risk assessment has been prepared to support this CAMP to determine the risks to the successful implementation of the CAMP and the achievement of the environmental outcomes.

The risk assessment is based on the risk matrix provided in **Table 10**. The risk matrix uses the risk categories outlined in the *Department of Water and Environmental Regulation's Risk Assessments Guidelines* (DWER 2020) utilising the *Australian Standard (AS) 4360:2004: Risk Management* and *AS 31000:2009 Risk Management – Principles and Guidelines*.

**Table 11** and **Table 12** provide the criteria to assess the 'consequences and 'likelihood' of a risk event occurring.

The risk assessment is provided in **Table 13** and outlines the risks to the successful implementation of the CAMP, including those related to restoration area activities and outcomes, as well as ongoing site uses.

The outcome of the risk assessment demonstrates an overall reduction of environmental risk (when comparing initial risk to the residual risk subsequent to the implementation of management measures. The initial risk assessment identified one 'high,' five 'moderate' and two 'low' risks compared to eight 'low' residual risks subsequent to the implementation of management measures discussed in detail in **Section 6**.

Table 10: Risk Assessment Matrix (AS 4360)

Probability/Likelihood	Consequence/Impact				
	Slight (A)	Minor (B)	Moderate (C)	Major (D)	Severe (E)
Almost certain (5)	Low	Moderate	High	Extreme	Extreme
Likely (4)	Low	Low	Moderate	High	Extreme
Possible (3)	Low	Low	Moderate	High	Extreme
Unlikely (2)	Very Low	Low	Low	Moderate	High
Rare (1)	Very Low	Very Low	Low	Moderate	Moderate

Table 11: Criteria to assess the consequence of a risk event occurring (based on DWER 2020)

Consequence	Criteria
Severe	<ul style="list-style-type: none"> <li>Onsite impacts: <b>catastrophic</b></li> <li>Offsite impacts local scale: <b>high level or above</b></li> <li>Offsite impacts wider scale: <b>mid-level or above</b></li> <li><b>Mid to long-term or permanent impact to an area of high conservation value or special significance</b></li> <li><b>Specific Consequence Criteria (for environment) are significantly exceeded</b></li> </ul>
Major	<ul style="list-style-type: none"> <li>Onsite impacts: <b>high level</b></li> <li>Offsite impacts local scale: <b>mid-level</b></li> <li>Offsite impacts wider scale: <b>low level</b></li> <li><b>Short-term impact to an area of high conservation value or special significance</b></li> <li><b>Specific Consequence Criteria (for environment) are exceeded</b></li> </ul>

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Table 11: Criteria to assess the consequence of a risk event occurring (based on DWER 2020) (continued)

Consequence	• Criteria
Moderate	<ul style="list-style-type: none"> <li>• Onsite impacts: <b>mid-level</b></li> <li>• Offsite impacts local scale: <b>low level</b></li> <li>• Offsite impacts wider scale: <b>minimal</b></li> <li>• <b>Specific Consequence Criteria (for environment) are at risk of not being met</b></li> </ul>
Minor	<ul style="list-style-type: none"> <li>• Onsite impacts: <b>low level</b></li> <li>• Offsite impacts local scale: <b>minimal</b></li> <li>• Offsite impacts wider scale: <b>not detectable</b></li> <li>• <b>Specific Consequence Criteria (for environment) likely to be met</b></li> </ul>
Slight	<ul style="list-style-type: none"> <li>• Onsite impact: <b>minimal</b></li> <li>• <b>Specific Consequence Criteria (for environment) met</b></li> </ul>

Table 12: Criteria to assess the likelihood of a risk event occurring (based on DWER 2020)

Likelihood	Criteria
Almost certain	The risk event is expected to occur in most circumstances.
Likely	The risk event will probably occur in most circumstances.
Possible	The risk event could occur at some time.
Unlikely	The risk event will probably not occur in most circumstances.
Rare	The risk event may only occur in exceptional circumstances.

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Table 13: Risk based impact assessment and mitigation

Risk ID	Risk Event	Impact Pathway	Initial Risk Rating			Mitigation and Management	Residual Risk Rating		
			Likelihood	Consequence	Rating		Likelihood	Consequence	Rating
1.	Restoration efforts fails to achieve performance targets	The disturbance of restoration through trampling of tubestock failure to reach target habitat quality scores due to low survival rate.	Unlikely	Moderate	Low	Activities associated with the operations and maintenance of the site will be restricted from entering areas of native vegetation as well as restoration areas. Pest control will be undertaken.	Unlikely	Moderate	Low
2.	Intensification or change of current land uses	Expansion of BAI Communications operations within the site or the site is repurposed in line with its Urban zoning, may lead to increased infrastructure development and disturbance within the conservation area. This could result in direct loss or degradation of native vegetation and habitat, fragmentation of ecological values, and reduced ecological integrity of the conservation area.	Possible	Moderate	Moderate	The proponent and BAI Communications have committed to excluding any expansion of operational and management requirements from the conservation area. Fencing will be installed and maintained along the perimeter of the conservation area to prevent encroachment and unauthorised access. A conservation covenant will be established, with a notice registered on the titles of Lot 803 and Lot 1. The conservation area will be formally ceded to a relevant public agency under the terms of the conservation covenant to ensure its long-term protection and ongoing management for conservation purposes. Further details are provided in <b>Section 4.1</b>	Unlikely	Minor	Low

## Conservation Area Management Plan

### Hamersley Residential Development and Conservation



Table 13: Risk based impact assessment and mitigation (continued)

Risk ID	Risk Event	Impact Pathway	Initial Risk Rating			Mitigation	Residual Risk Rating		
			Likelihood	Consequence	Rating		Likelihood	Consequence	Rating
3.	Decommissioning of broadcasting transmission infrastructure	The removal of masts and towers using standard practice (i.e. controlled demolition through explosives) could result in damage to surrounding native vegetation.	Almost certain	Moderate	High	To mitigate this risk and provide greater confidence that decommissioning can occur with minimal environmental impact, and that necessary management actions outlined in this plan can be implemented concurrently, the proponent and BAI Communications have investigated and committed to a decommissioning strategy that involves adopting an alternative low-impact decommissioning approach, as further detailed in <b>Section 4.1</b> . The preferred decommissioning approach, which presents the least risk and impact to environmental values involves the use of cranes to dismantle the tower and remove components from the site. Should crane-based decommissioning prove unfeasible at the time of execution, proponent and BAI Communications will seek to implement an alternative low-impact decommissioning method to avoid or minimise disturbance to native vegetation. Further details are provided in <b>Section 4.1</b> above.	Possible	Minor	Low
4.	Unauthorised access	Unauthorised access to the conservation area leading to the dumping of rubbish, soil contamination and the spread of weeds, pests and disease	Unlikely	Moderate	Moderate	Access will be controlled through installation of fencing and signage to eliminate public access and control works within the conservation area. Access of BAI Communications personnel to the conservation area will be limited to specific tasks and permitted only outside restoration areas.	Unlikely	Minor	Low
5.	Spread of weeds and disease	Spread of weeds and disease through retained vegetation and restoration areas as a result of operational activities	Possible	Moderate	Moderate	Usual site operations (excluding in the event of an operations emergency) would include checking vehicles on a regular basis to ensure free of weeds and disease and any personnel entering site to clean boots upon sign in. Any additional vehicles required to promptly enter site in the event of an emergency to remain on existing access tracks.	Unlikely	Minor	Low

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Table 13: Risk based impact assessment and mitigation (continued)

Risk ID	Risk Event	Impact Pathway	Initial Risk Rating			Mitigation	Residual Risk Rating		
			Likelihood	Consequence	Rating		Likelihood	Consequence	Rating
6.	Spread of pests	Pest animals such as rabbits and rats destroying tubestock as well as pests such as foxes threatening native fauna.	Possible	Moderate	Moderate	A suitably qualified professional will undertake pest control within the conservation area targeted to pests recorded during monitoring (e.g. Foxes)	Unlikely	Minor	Low
7.	Disturbance to fauna	The disturbance to fauna through vehicle movement across the conservation area related to operations and maintenance.	Unlikely	Moderate	Low	Vehicle speed limits will be imposed within the conservation area to mitigate the risk of disturbance to fauna.	Unlikely	Moderate	Low
8.	Ignition of bushfire	Current operations have the potential to ignite a bushfire by driving over long grass or vegetation, discarded cigarettes for example	Possible	Moderate	Moderate	The driving of vehicles will be restricted to existing tracks, and no parking over long grass is to occur. Smoking will not be permitted in the conservation area.	Unlikely	Moderate	Low

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## 6 Environmental management measures

### 6.1 Management actions

A range of management actions will be implemented to protect existing environmental values within the conservation area as well as increase the quality of Banksia Woodland TEC and Black Cockatoo habitat within the conservation area. These have been informed by site-specific surveys and will achieve the identified performance targets.

Performance targets have been established to identify outcomes achieved from management actions. The management actions are specific to the conservation efforts and mitigate any potential impacts to threatened and priority species and communities within the conservation area, as well as achieve a net positive environmental outcome. Each management action and the associated performance targets are outlined in **Table 14** below.

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Table 14: CAMP Management actions

Relevant Risk ID/s	Management Action	Management Action Description	Timing	Performance Targets	Indicator of Achieved Performance Target
1. Restoration efforts fails to achieve performance targets	Revegetation	Revegetation will be undertaken as outlined in <b>Section 4.2.1</b> above, including the infill planting of appropriate species (outlined in <b>Appendix A</b> ) of specific densities for each treatment type.	To commence within one year of proposal approval.	Density and species mix outlined in <b>Section 4.2.1</b> are met	Monitoring reports completed outlining compliance with density and species mix outlined in <b>Section 4.2.1</b>
1. Restoration efforts fails to achieve performance targets 2. Intensification or change of land use. 4. Unauthorised access 6. Disturbance to fauna	Delineation and Access	Security fencing will be installed along the boundary of the conservation area and the residential development area to block public access to the conservation area. Post decommissioning this will be replaced by conservation fencing. Temporary fencing will also be installed on western edge of the APZ prior to the vegetation clearing works as detailed in the CEMP. The locations of proposed fences are shown on <b>Figure 6</b> . Existing fences on the perimeter of the conservation area as well as the conservation fencing will be maintained to ensure they are effectively controlling access. Access to the conservation area will be limited to works associated with operations or restoration. Access tracks are to be maintained free of vegetation to allow access to infrastructure for maintenance and operational requirements and prevent additional clearing of vegetation required for current operations and maintenance. Vehicle speed limits of 40 km/h are to be followed at all times within the conservation area.	Security fencing and temporary fencing to be erected prior to the commencement of adjacent construction works. Maintenance of fencing is to be ongoing. Vehicle access is to be limited to established tracks, the maintenance of tracks to be free of vegetation and the enforcement of speed limits is to occur at all times.	No degradation of environmental values within the conservation area as a result of unauthorised access.	Monitoring report outlining the maintained integrity of fences, the maintenance of vegetation free tracks and all vehicles kept on those tracks

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Table 14: CAMP Management actions (continued)

Risk IDs	Management Actions	Management Action Description	Timing	Performance Targets	Indicator of Achieved Performance Target
2. Intensification or change of current land use	Operations area and conservation covenant	<p>Detailed liaison with the facility's operations team has been undertaken to understand the operational requirements and ensure continued operations and decommissioning will not impact conservation works. The proponent and BAI Communications have committed to excluding any expansion of operational and management requirements from the conservation area and understand this will restrict any intensification of current site uses.</p> <p>A conservation covenant will be established, with a notice registered on the titles of Lot 803 and Lot 1. The formal designation of the conservation area will secure it for long term protection and ecological restoration. The proponent and BAI Communications are effectively surrendering the use of the land from more intensive broadcasting related uses and effectively overrides its immunity from state planning and environmental regulations. In doing this the proponent relinquish any commercial development potential or entitlements that might otherwise have arisen under existing planning and environmental (and other legislative) frameworks. A draft Conservation Agreement between BAI Communications and the Commonwealth of Australia is shown in <b>Appendix C</b>.</p> <p>The conservation area will be formally ceded to a relevant public agency under the terms of the conservation covenant to ensure its long-term protection and ongoing management for conservation purposes.</p>	At all times post the approval of the proposal and until completion	No degradation of environmental values within the conservation area as a result of intensification or change of current land use	Current operation and maintenance areas, as outlined in <b>Section 4.1</b> , are not expanded. Conservation covenant established. Conservation area ceded to relevant public authority.
3. Unauthorised access	Signage	Signage will be installed externally on the west of the conservation area to discourage unauthorised access and increase awareness of the management actions being undertaken within the conservation area. Appropriate locations for the signs on the western side will be determined once master planning of the residential area is complete, to ensure signs are in appropriate areas with high exposure. Proposed signage locations along the eastern boundary within the proponent's landholdings are shown in <b>Figure 6</b> . These signs will alert personnel that they are entering the conservation area and that they will need to have completed hygiene measures before proceeding.	Signage to be erected prior to the commencement of adjacent construction works.	No degradation of environmental values within the conservation area as a result of unauthorised access.	Photographic evidence of signage installed included in monitoring report.

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Table 14: CAMP Management actions (continued)

Risk IDs	Management Actions	Management Action Description	Timing	Performance Targets	Indicator of Achieved Performance Target
<p>1. Restoration efforts fails to achieve performance targets</p> <p>3. Unauthorised access</p> <p>4. Spread of weeds and disease</p>	Weeds and disease	<p>In addition to the weed control specified in <b>Section 4.2</b> weed control will also be undertaken across the whole conservation area at least twice a year. This can include both manual weeding and chemical spraying, with the most appropriate method to be determined at the time of work by suitably experienced subcontractors. Weed management practices are to be planned with consideration to BAI Communications operations and maintenance works and are to stay clear of all BAI Communications Infrastructure for safety reasons.</p> <p>To ensure dieback or other pathogens and weeds are not introduced to or spread within the conservation area the following hygiene measures are to be undertaken:</p> <ul style="list-style-type: none"> <li>• Vehicles (excluding in the event of an operations emergency), tools, equipment and machinery shall be free of all mud, soil and plant material on arrival at the site.</li> <li>• If vehicles, tools, equipment and machinery are temporarily removed from the site during works they must be free of all mud, soil and plant material on return.</li> <li>• Vehicles are to always remain on established tracks within current site operations area.</li> <li>• Imported tubestock shall be certified free of dieback and disease.</li> </ul>	Twice a year, initially occurring prior to revegetation planting	<p>For restoration areas weed densities are to comply with those outlined in <b>Section 4.2.1</b>.</p> <p>For the entire conservation area no degradation of environmental values within the conservation area as a result of weeds and disease.</p>	<p>Weed control undertaken based on recommendations of monitoring reports.</p> <p>No increase in presence or abundance of weeds or disease.</p>
<p>1. Restoration efforts fails to achieve performance targets</p> <p>3. Unauthorised access</p> <p>5. Spread of pests</p>	Pests	<p>The proponent will engage a suitably qualified subcontractor to undertake pest/feral animal control within the conservation area. Foxes are listed as a declared pest pursuant to the BAM Act and were detected in the site during the most recent surveys (Emerge Associates 2025a). Therefore, the control programs will be specifically targeted to foxes, as well as any other pest fauna detected during monitoring.</p>	Twice a year initially occurring prior to revegetation, then as required based on monitoring results	No degradation of environmental values within the conservation area as a result of pests through herbivory and predation of native fauna.	Monitoring reports completed noting no increase in presence or abundance of pests within the conservation area.

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Table 14: CAMP Management actions (continued)

Risk IDs	Management Actions	Management Action Description	Timing	Performance Targets	Indicator of Achieved Performance Target
All risks	Inductions	<p>Access by BAI Communications operations and maintenance staff and any other personnel required to work within the conservation area will need to be sufficiently inducted prior to entering. BAI Communications has an existing induction protocol due to the risks associated with the broadcasting transmission infrastructure. The conservation management induction will be incorporated into this. The inductions will:</p> <ul style="list-style-type: none"> <li>• Provide information on the environmental values present within the conservation area including the restoration efforts and no access within restoration areas.</li> <li>• Specify areas where access is not permitted (i.e. areas of native vegetation)</li> <li>• Specify speed limits to be followed within the conservation area</li> <li>• Outline hygiene practices that need to be undertaken prior to entering the conservation area.</li> </ul> <p>Detail the legal requirements of this CAMP pursuant to the EPBC Act and EP Act and the importance of not interrupting the management actions.</p>	At all times post the approval of the proposal	No degradation of environmental values within the conservation area as a result of unauthorised access.	Induction register completed
1. Restoration efforts fails to achieve performance targets 3. Unauthorised access	Waste	<p>Where present, rubbish is to be removed in a way that minimises native vegetation degradation. Where possible, areas of rubbish will be accessed on foot and rubbish removed by hand. Where required, removal using machines may occur, but machinery shall remain on existing tracks. Removal of rubbish should be undertaken prior to revegetation and the conservation area will be monitored for rubbish regularly.</p> <p>Boundary fencing and signage will increase the public awareness of the conservation area and aim to reduce rubbish dumping. Site inductions will specify that no rubbish or surplus operational materials are to be left within the conservation area. Any waste associated with the operations and maintenance of the broadcast transmission land uses are to be removed from the conservation area and disposed of appropriately.</p>	Prior to the prior to initial revegetation planting.	No degradation of environmental values within the conservation area as a result of unauthorised access.	Monitoring report outlining the absence of waste within the conservation area.

## Conservation Area Management Plan

### Hamersley Residential Development and Conservation



Table 14: CAMP Management actions (continued)

Risk IDs	Management Actions	Management Action Description	Timing	Performance Targets	Indicator of Achieved Performance Target
1. Restoration efforts fails to achieve performance targets 8. Ignition of Bushfire	Bushfire	<p>There is a small likelihood that the operations and maintenance of the broadcasting transmission infrastructure will lead to the ignition of a fire within the site. Fires could be ignited as a result of operations and maintenance through driving/parking vehicles over long grass, smoking in the conservation area or hot works associated with operations occurring in close proximity to vegetation. BAI Communications have existing management and mitigation measures in place to reduce this risk. The following measures are outlined to support this:</p> <ul style="list-style-type: none"> <li>• No parking of vehicles on long grass</li> <li>• No driving of vehicles over vegetation (limited to established tracks)</li> <li>• No smoking within the conservation area</li> <li>• Maintain cleared access tracks within the conservation area</li> </ul>	At all times post the approval of the proposal	Vehicles are contained to tracks and the tracks are maintained clear of vegetation. All bushfire management strategies as per management actions are implemented.	Monitoring report outlines tracks maintained clear of vegetation, completed induction register. No accidental fires as a result of maintenance and operations of infrastructure

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## 6.2 Monitoring program

Monitoring is to be undertaken to ensure that the implementation of the CAMP is on track to meet its targets and improve the HQS. The monitoring actions proposed as well as the timing, relevant evaluation criteria and the party responsible are outlined in **Table 15** below.

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Table 15: Monitoring requirements of management actions

Environmental Outcome	Risk ID's	Management action	Performance indicator	Parameters to be monitored	Methodology	Frequency and timing	Responsibility and reporting
Improve the habitat quality of the environmental values within the conservation area	1. Failure of restoration efforts	Revegetation	Density and species mix outlined in <b>Section 4.2.1</b> are met	Density and species mix of native species in restoration areas	Vegetation surveys across the restoration areas	At least once a year	Responsibility of the proponent and revegetation sub-contractors, to be presented in annual monitoring report
Improve the habitat quality of the environmental values within the conservation area AND protect threatened and priority flora and fauna species and communities from threatening processes within the conservation area	5. Spread of weeds and disease	Weeds and disease control	For restoration areas weed densities are to comply with those outlined in <b>Section 4.2.1</b> . For the entire conservation area no degradation of environmental values within the conservation area as a result of weeds and disease. Weed control is undertaken based on monitoring recommendations.	Record any change in weed cover and identify need for weed control treatment.	Weed survey across restoration areas and the whole conservation area.	At least once a year	Responsibility of the proponent and weed/disease control sub-contractors, to be presented in annual monitoring report
					Incident reporting of occurrences of weeds not previously managed/monitored	As discovered by staff and sub-contractors working within the conservation area.	
Protect threatened and priority flora and fauna species and communities from threatening processes within the conservation area	2. Intensification of current land uses 4. Unauthorised access 7. Disturbance to fauna	Delineation and access, Signage, Inductions, Waste, Operations area and conservation covenant	No degradation of environmental values within the conservation area as a result of unauthorised access or intensification or change of current land use. Signage and fencing is installed and maintained. Inductions are implemented. Waste removal is undertaken.	Integrity of operational activity confinement and delineation measures to be checked such as fencing, signage, speed limits and use of inductions. Implementation of conservation covenant with notice put on titles.	Visual inspection and induction register maintained	At least once a year	Responsibility of the proponent, to be presented in annual monitoring report. Incident reports to be actioned as soon as possible once received.
					Incident reporting of wastes within the conservation area, operations occurring outside the designated areas or fences and signage lacking integrity.	As discovered by staff and sub-contractors working within the conservation area	
					Progress of implementation of conservation covenant	At least once a year until conservation covenant in place.	

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Table 15: Monitoring requirements of management actions (continued)

Environmental Outcome	Risk ID's	Management action	Performance indicator	Parameters to be monitored	Methodology	Frequency and timing	Responsibility and reporting
Protect threatened and priority flora and fauna species and communities from threatening processes within the conservation area	6. Spread of pests	Pests	No degradation of environmental values within the conservation area as a result of pests through herbivory and predation of native fauna.	Presence or pests within the conservation area and evidence of herbivory and/or predation	Pest surveys across the restoration areas and the whole conservation area.	At least once a year	Responsibility of the proponent and pest control sub-contractors, to be presented in annual monitoring report
					Incident reporting of occurrences of pests not previously managed/monitored	As discovered by staff and sub-contractors working within the conservation area	
	8. Ignition of bushfire	Bushfire	Vehicles are contained to tracks and the tracks are maintained clear of vegetation. All bushfire management strategies as per management actions are implemented.	Vegetation on tracks, use of inductions and occurrences of fire	Tracks maintained free of vegetation, induction register maintained and incidences of fire are recorded.	Bi-annual track monitoring, induction register and incident reports maintained at all times.	Responsibility of the proponent, to be presented in annual monitoring report

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If during monitoring an evaluation criterion is not being met corrective actions may need to be taken. The triggers and corrective actions for each evaluation criterion are outlined in **Table 16** below.

Table 16: Corrective actions

Management Action	Corrective Action Trigger	Action/ Response	Responsibility
Revegetation	<ul style="list-style-type: none"> <li>Plant density and diversity is below the targets outlined in <b>Section 4.2.1</b> and <b>Section 4.2.2</b>.</li> </ul>	<ul style="list-style-type: none"> <li>Subsequent planting to increase density and/or diversity</li> </ul>	Revegetation contractor
Delineation and Access	<ul style="list-style-type: none"> <li>Fences no longer hold their integrity.</li> <li>Vehicle identified off tracks or exceeding speed limits</li> <li>Fauna injury as a result of vehicle collision</li> <li>Vegetation identified on tracks</li> </ul>	<ul style="list-style-type: none"> <li>Determine the cause of any damage and prevent its recurrence. Undertake necessary repairs</li> <li>Remove vegetation from tracks</li> </ul>	Proponent
Operations area and conservation covenant	<ul style="list-style-type: none"> <li>Operational activities occur outside designated areas</li> <li>Implementation of conservation covenant is not progressed or implemented</li> </ul>	<ul style="list-style-type: none"> <li>Determine the cause of any activities outside designated areas and prevent its recurrence. Undertake necessary repairs</li> <li>Determine cause of lack of progression or implementation of conservation covenant. Determine appropriate strategy to progress which will lead to the implementation of the conservation covenant.</li> </ul>	Proponent
Signage	<ul style="list-style-type: none"> <li>Signs are not visible to staff or the public.</li> </ul>	<ul style="list-style-type: none"> <li>Replace or repair signage</li> </ul>	Proponent
Weeds and Disease	<ul style="list-style-type: none"> <li>Weed density exceeds those specified in <b>Section 4.2.1</b> for the restoration areas.</li> <li>Weed presence is detected in areas not previously detected.</li> <li>The presence of dieback is detected in the conservation area.</li> </ul>	<ul style="list-style-type: none"> <li>Undertake subsequent weed control</li> <li>Limit the spread of detected diseases</li> </ul>	Revegetation contractor
Pests	<ul style="list-style-type: none"> <li>The presences of pests are identified within the conservation area.</li> </ul>	<ul style="list-style-type: none"> <li>Undertake supplementary pest control</li> </ul>	Pest control contractor
Inductions	<ul style="list-style-type: none"> <li>Staff or subcontractors enter the conservation area prior to completing an induction</li> </ul>	<ul style="list-style-type: none"> <li>Undertake review of induction process</li> <li>Provide any supplementary inductions necessary.</li> </ul>	Proponent
Waste	<ul style="list-style-type: none"> <li>Accumulated wastes are detected in the conservation area</li> </ul>	<ul style="list-style-type: none"> <li>Subsequent waste removal efforts are to be undertaken</li> </ul>	Proponent
Bushfire	<ul style="list-style-type: none"> <li>Vegetation detected on tracks</li> <li>Smoking detected within the conservation area</li> <li>Driving/parking of vehicles detected on long grass or vegetated areas</li> </ul>	<ul style="list-style-type: none"> <li>Remove vegetation from tracks</li> <li>Determine the cause of any diversion from acceptable processes and prevent its recurrence</li> </ul>	Proponent / Revegetation contractor

### 6.3 Reporting

A report is to be prepared by the proponent (or their subcontractors) annually to outline the progress of the implementation of this CAMP. This report is to be provided to the City of Stirling, EPA

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and DCCEEW. The report may be used as evidence of legal compliance or non-compliance and must be correct and auditable. The annual monitoring report is to include, at a minimum:

- Methods used during monitoring
- Monitoring results against evaluation criteria
- Details of any triggers met, and contingency measures implemented
- Recommendations for improvements to the CAMP if required.

The above reporting will be a requirement under the conservation covenant for the duration of this CAMP.

#### 6.4 Completion criteria

Decommissioning of broadcasting transmission infrastructure needs to occur prior to the cessation of the management strategies within this CAMP. Specific environmental management measures will be required for the activities proposed to occur during decommissioning. No degradation of environmental values including the Banksia Woodland TEC, CBC and FRTBC habitat scores can occur during decommissioning.

To indicate the completion of the implementation of the CAMP the gains in HQS outlined in **Section 4.2.1** and **Section 4.2.2** are to be met as well as all indicators of Indicator of Achieved Performance Target outlined in **Section 6.1**. In addition, a conservation covenant needs to be applied to the conservation area with a notice put on the title. Once decommissioning has occurred and BAI Communications is no longer operating in the site, the conservation area is to be vested with a relevant agency for ongoing management. The conservation area is to be ceded to the agency free of charge.

#### 6.5 Roles and responsibilities

The implementation of this CAMP is the responsibility of the proponent. This CAMP applies to all activities occurring within and in close proximity to the conservation area and includes all operational staff working under BAI Communications on site and any sub-contractors.

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## 7 References

### 7.1 General references

The references listed below have been considered as part of preparing this document.

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## Conservation Area Management Plan

### Hamersley Residential Development and Conservation



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# Figures



*Figure 1: Site Location*

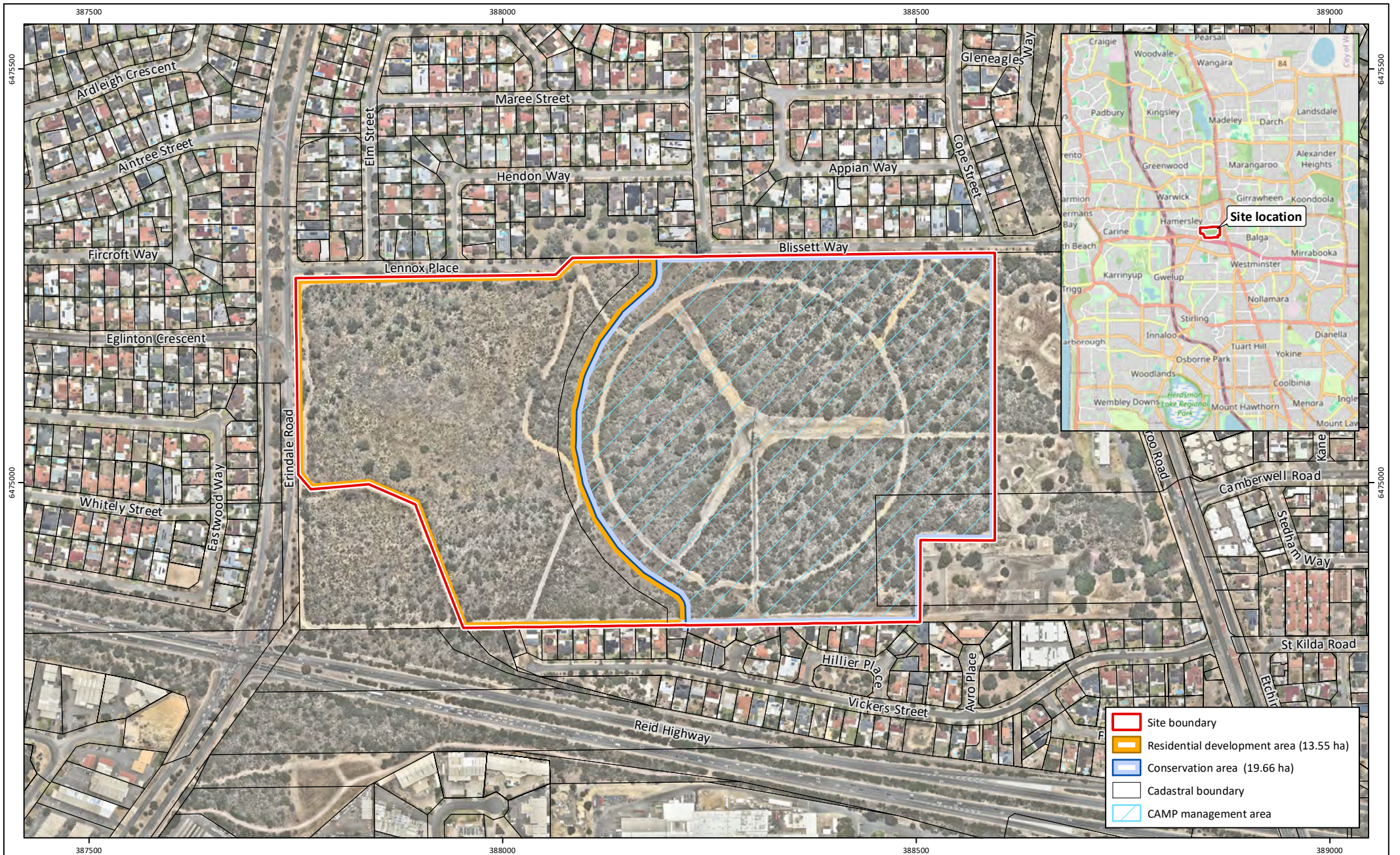
*Figure 2: Restoration areas*

*Figure 3: Pre-management Habitat Quality Scores*

*Figure 4: Restoration Areas Treatment Types*

*Figure 5: Post-management Habitat Quality Scores*

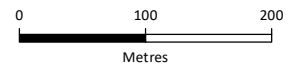
*Figure 6: Management Actions*



**Figure 1: Site Location**

**Project:** Conservation Area Management Plan  
 Lot 802 & 803 Erindale Road, Hamersley  
**Client:** BAI Communications

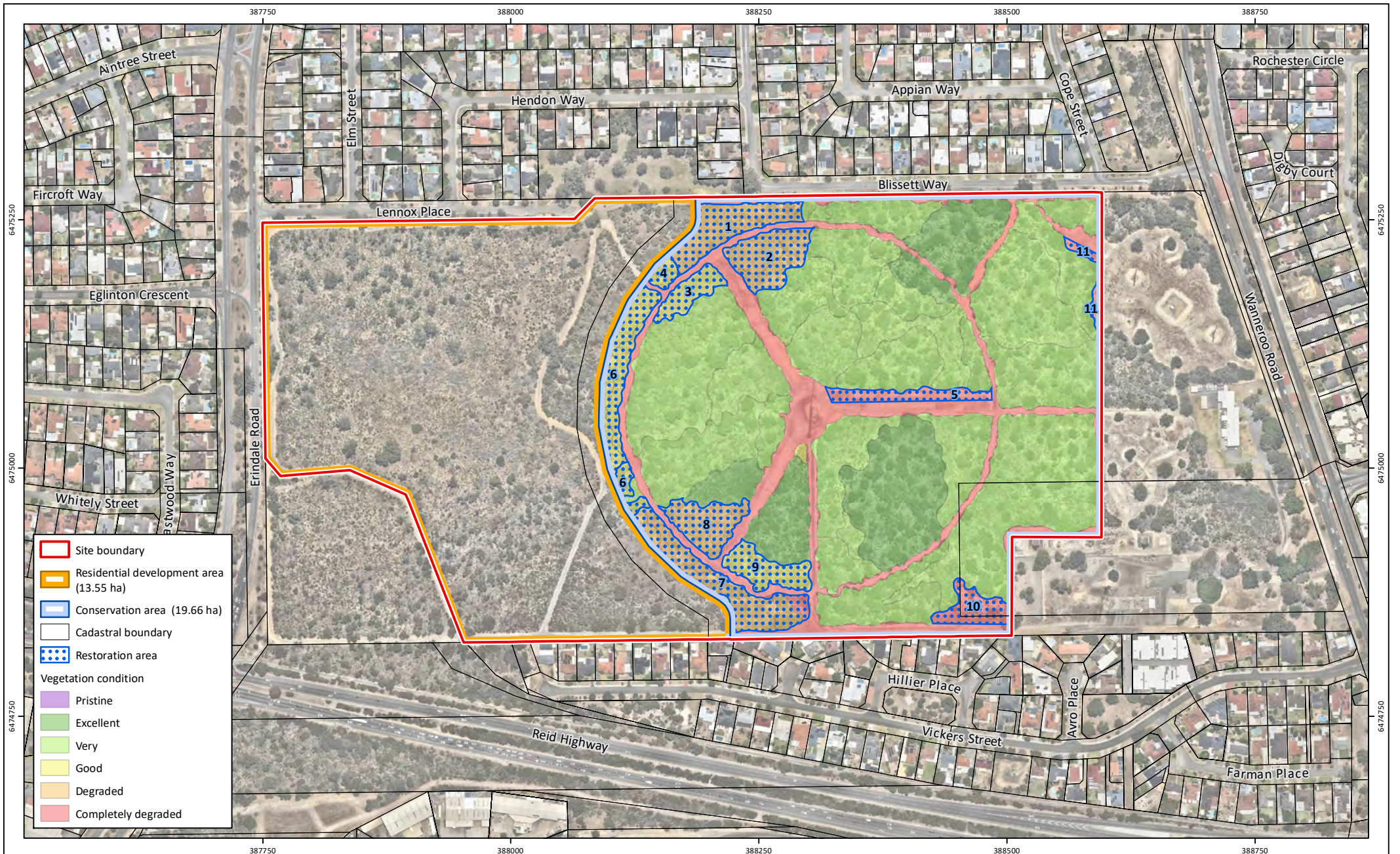
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**Date:** 19/05/2025  
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**Approved:** EKB  
**Date:** 30/05/2025



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 GDA2020 MGA Zone 50



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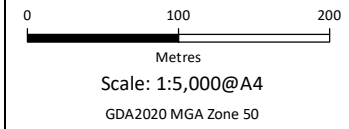


Site boundary  
 Residential development area (13.55 ha)  
 Conservation area (19.66 ha)  
 Cadastral boundary  
 Restoration area  
**Vegetation condition**  
 Pristine  
 Excellent  
 Very  
 Good  
 Degraded  
 Completely degraded

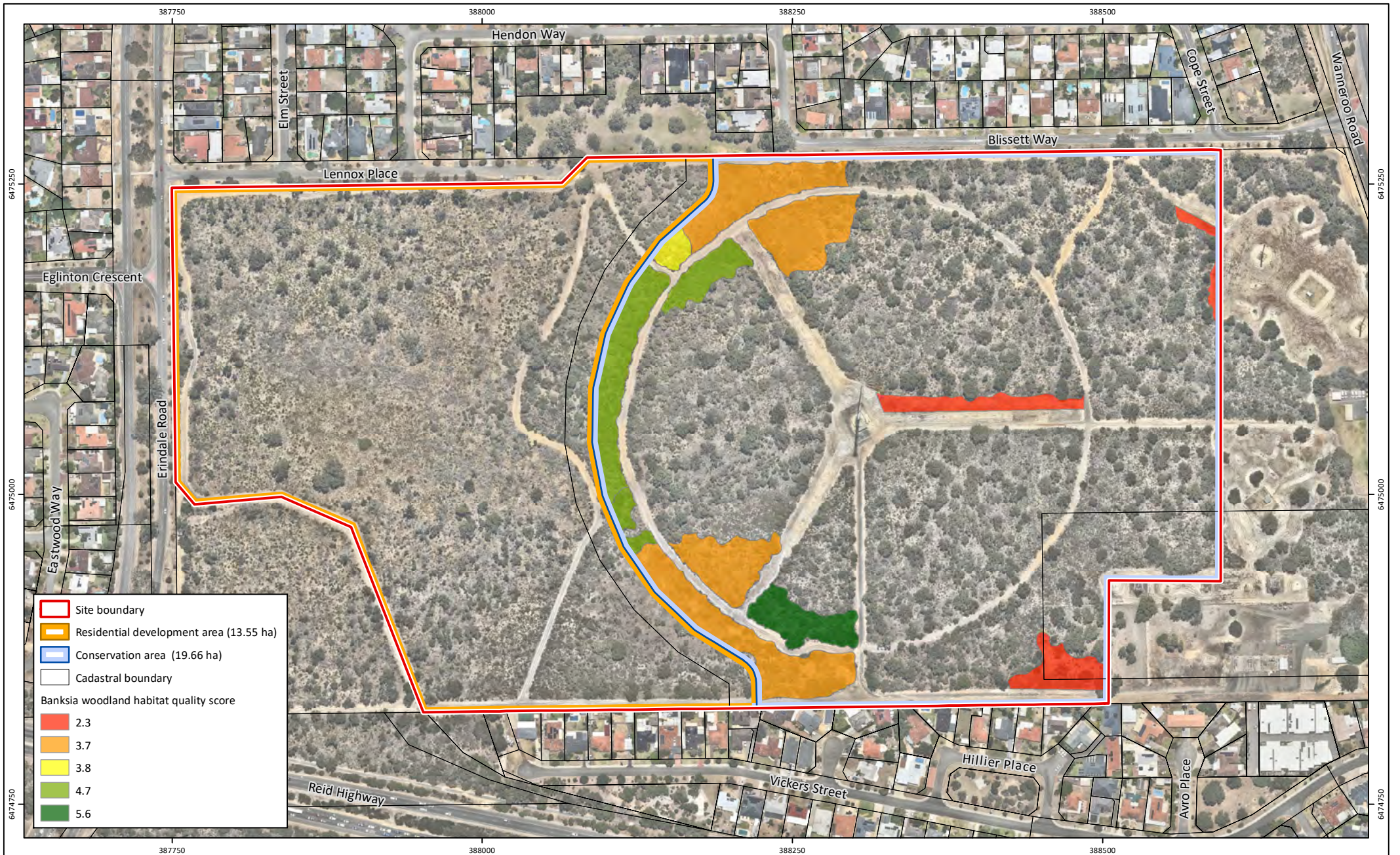
**Figure 2: Restoration Areas**

**Project:** Conservation Area Management Plan  
 Lot 802 & 803 Erindale Road, Hamersley  
**Client:** BAI Communications

**Plan Number:**  
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**Drawn:** WJC  
**Date:** 16/05/2025  
**Checked:** CSR  
**Approved:** EKB  
**Date:** 24/06/2025



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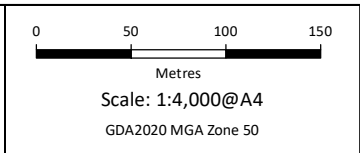


**Figure 3a: Pre-management Habitat Quality Scores - Banksia Woodland**

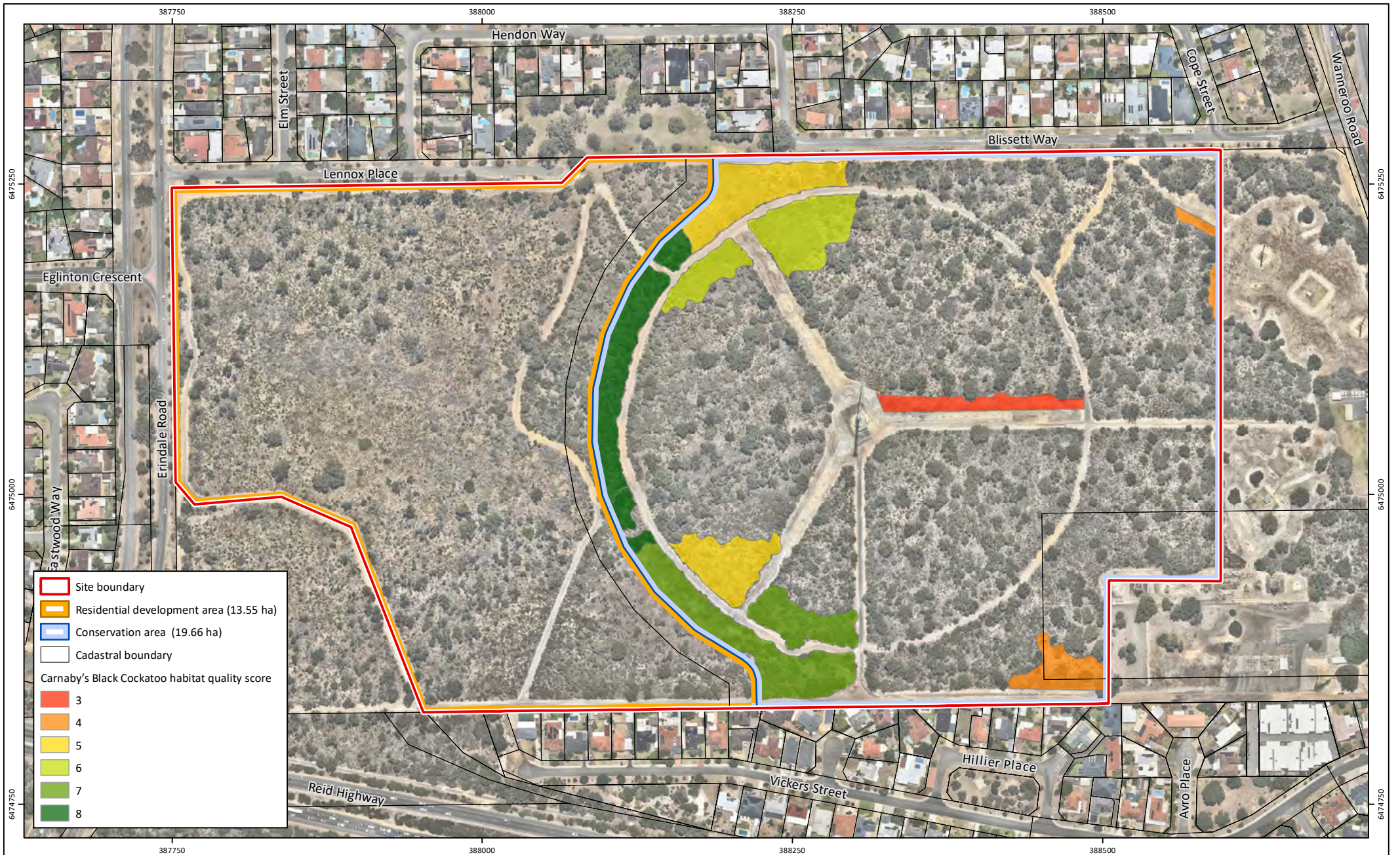
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 Lot 802 & 803 Erindale Road, Hamersley

**Client:** BAI Communications

**Plan Number:** EP24-129(07)--F77a  
**Drawn:** CTH  
**Date:** 26/05/2025  
**Checked:** CSR  
**Approved:** EKB  
**Date:** 24/06/2025



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Site boundary  
 Residential development area (13.55 ha)  
 Conservation area (19.66 ha)  
 Cadastral boundary

Carnaby's Black Cockatoo habitat quality score

	3
	4
	5
	6
	7
	8

**Figure 3b: Pre-management Habitat Quality Scores - Carnaby's Black Cockatoo**

**Project:** Conservation Area Management Plan  
 Lot 802 & 803 Erindale Road, Hamersley

**Client:** BAI Communications

**Plan Number:** EP24-129(07)--F78a  
**Drawn:** CTH  
**Date:** 26/05/2025  
**Checked:** CSR  
**Approved:** EKB  
**Date:** 24/06/2025

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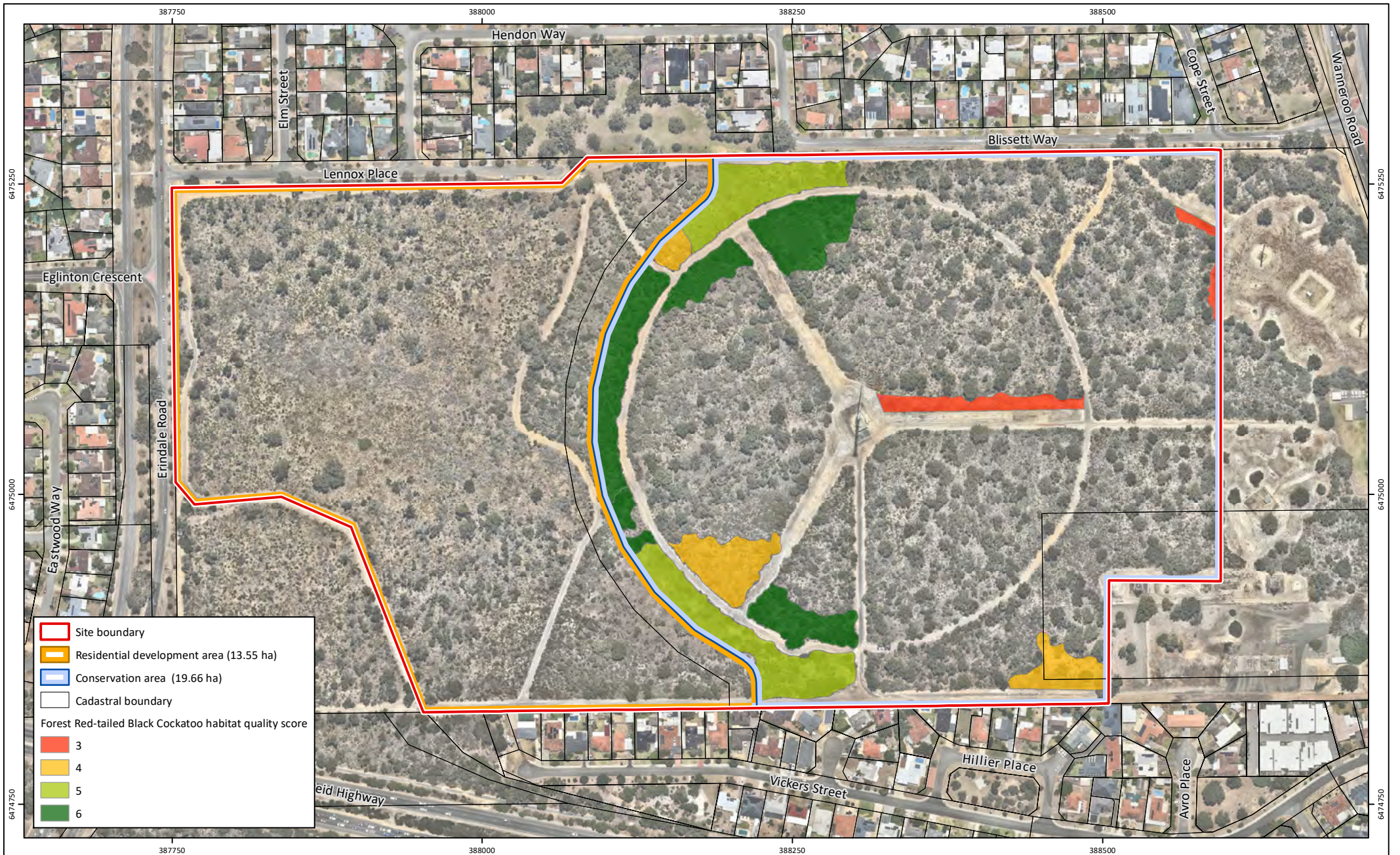
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Metres

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 GDA2020 MGA Zone 50



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- Site boundary
- Residential development area (13.55 ha)
- Conservation area (19.66 ha)
- Cadastral boundary

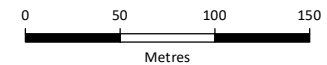
Forest Red-tailed Black Cockatoo habitat quality score

- 3
- 4
- 5
- 6

**Figure 3c: Pre-management Habitat Quality Scores - Forest Red-tailed Black Cockatoo**

**Project:** Conservation Area Management Plan  
 Lot 802 & 803 Erindale Road, Hamersley  
**Client:** BAI Communications

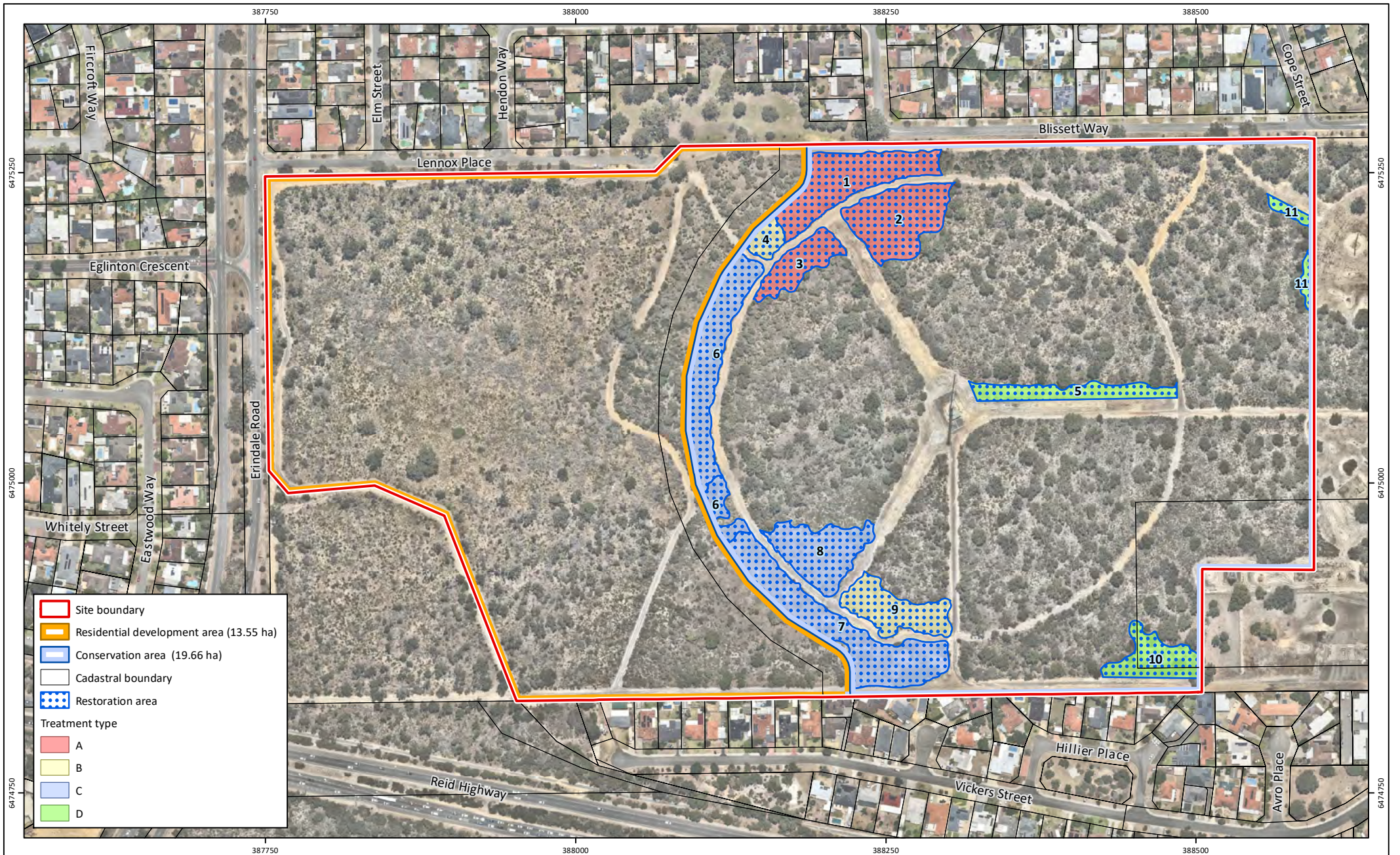
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**Approved:** EKB  
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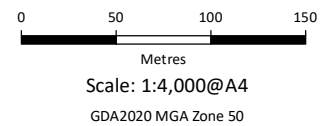
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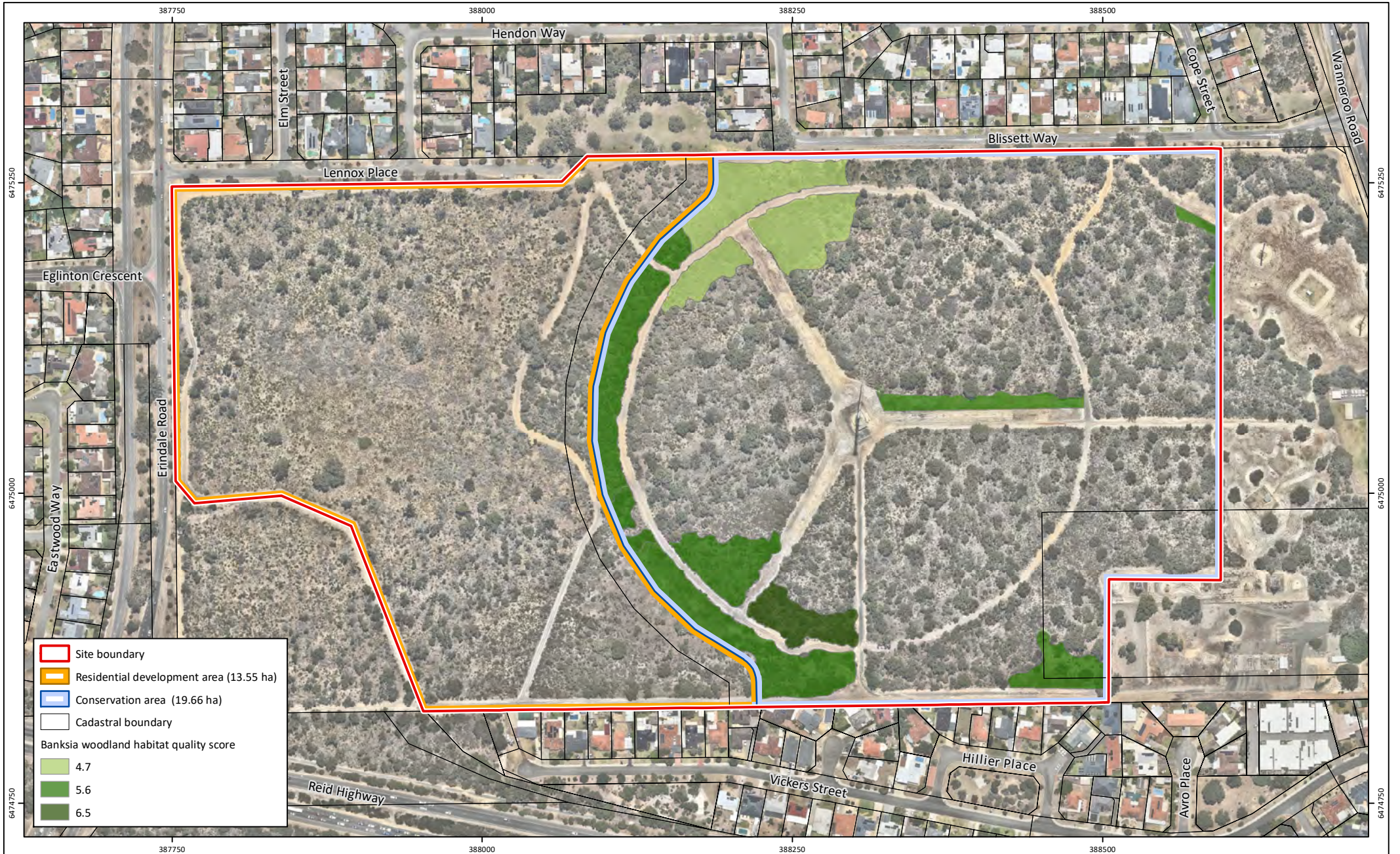


**Figure 4: Restoration Areas Treatment Types**

**Project:** Conservation Area Management Plan  
 Lot 802 & 803 Erindale Road, Hamersley  
**Client:** BAI Communications

**Plan Number:**  
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**Drawn:** WJC  
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**Date:** 24/06/2025



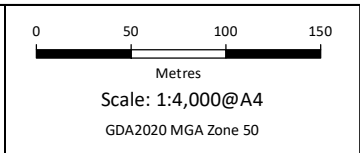


**Figure 5a: Post-management Habitat Quality Scores - Banksia Woodland**

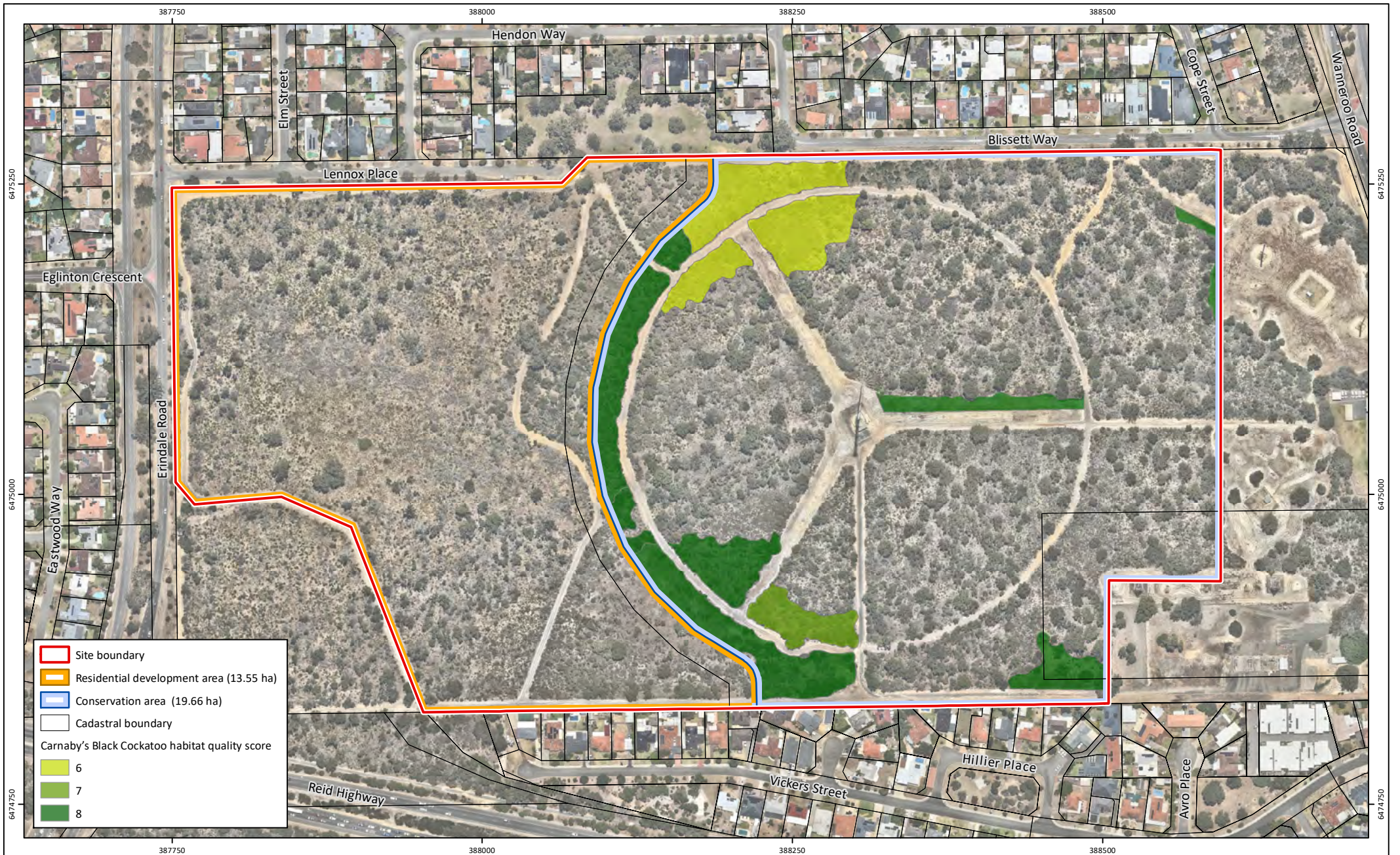
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Lot 802 & 803 Erindale Road, Hamersley

**Client:** BAI Communications

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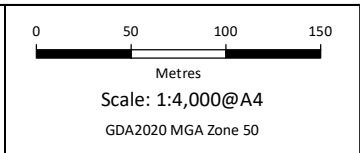


**Figure 5b: Post-management Habitat Quality Scores -- Carnaby's Black Cockatoo**

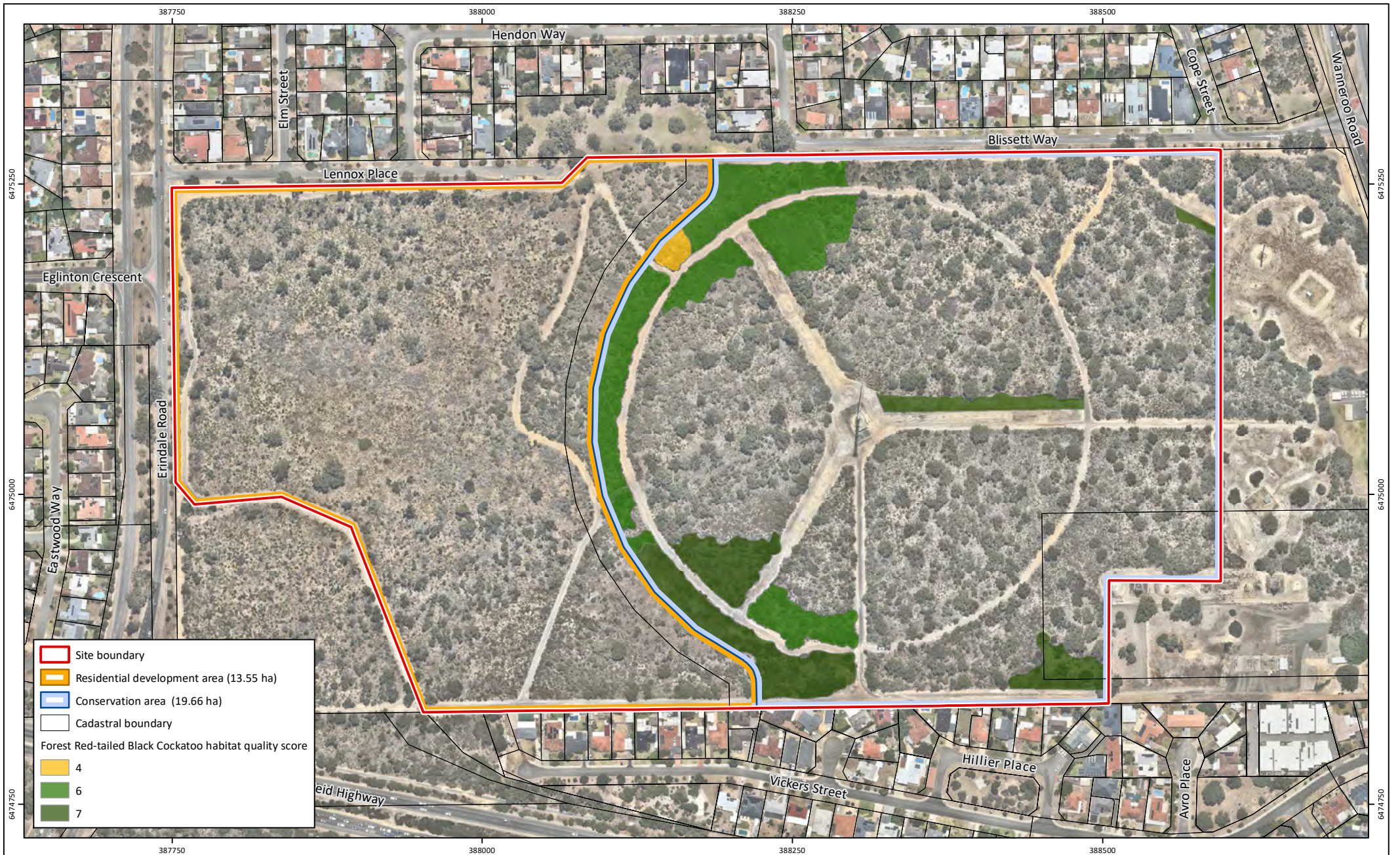
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 Lot 802 & 803 Erindale Road, Hamersley

**Client:** BAI Communications

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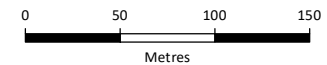
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**Figure 5c: Post-management Habitat Quality Scores -- Forest Red-tailed Black Cockatoo**

**Project:** Conservation Area Management Plan  
 Lot 802 & 803 Erindale Road, Hamersley  
**Client:** BAI Communications

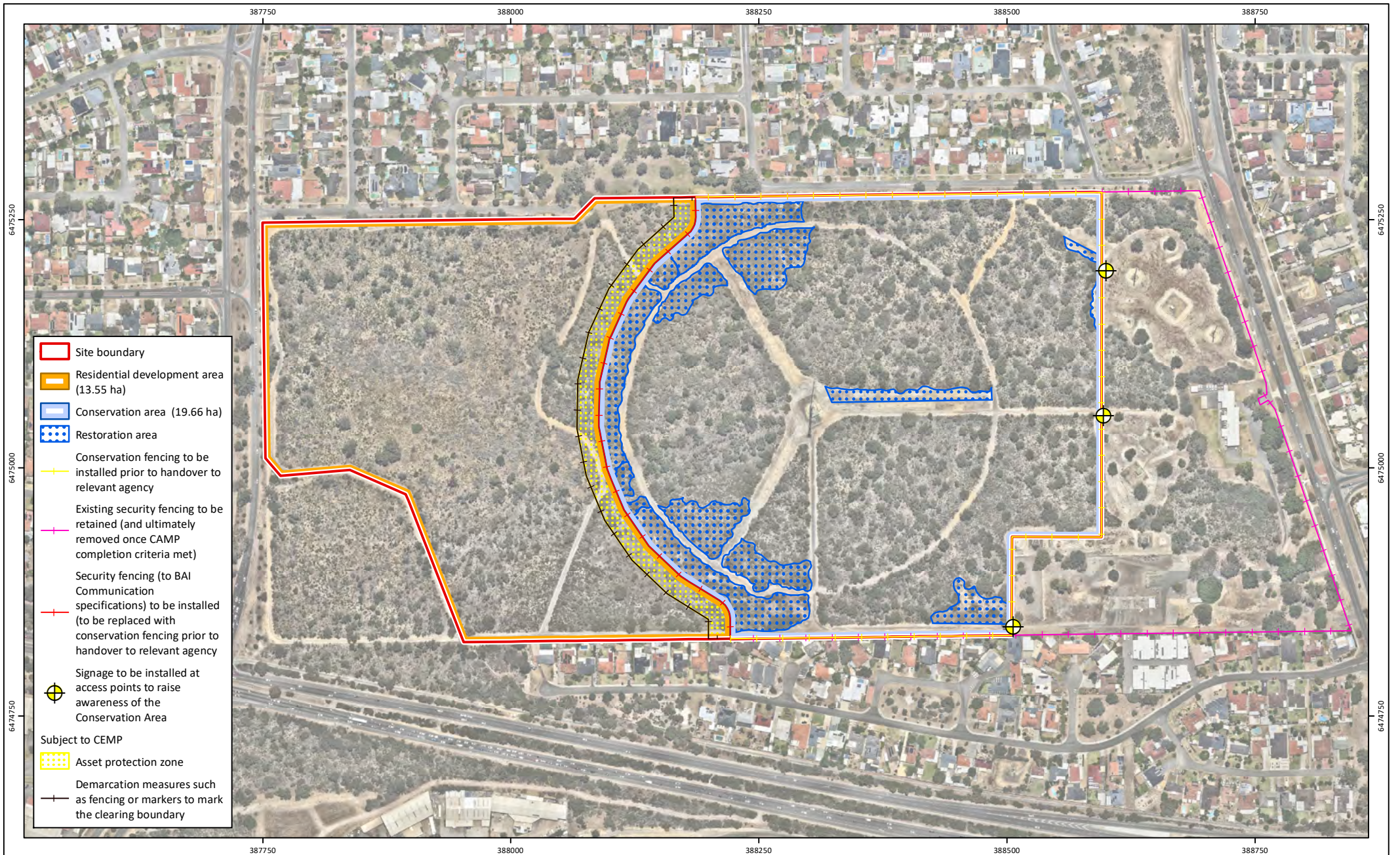
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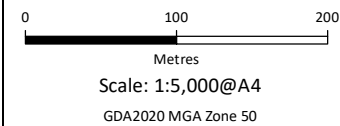
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**Figure 6: Management Actions**

**Project:** Conservation Area Management Plan  
 Lot 802 & 803 Erindale Road, Hamersley  
**Client:** BAI Communications

**Plan Number:**  
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# Appendix A

Landscape Masterplan (Plan E 2025)

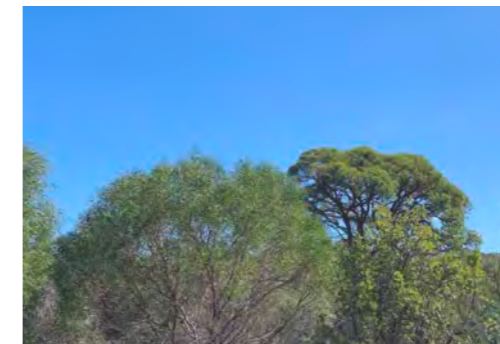




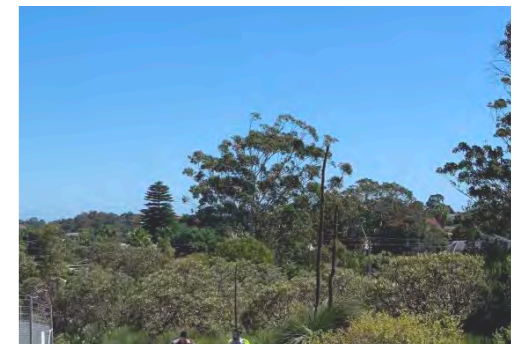
RESTORATION PLANTING MASTER PLAN



VIEW OF EXISTING TREES









VIEW OF EXISTING MIDDLE STOREY PLANTING

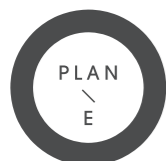


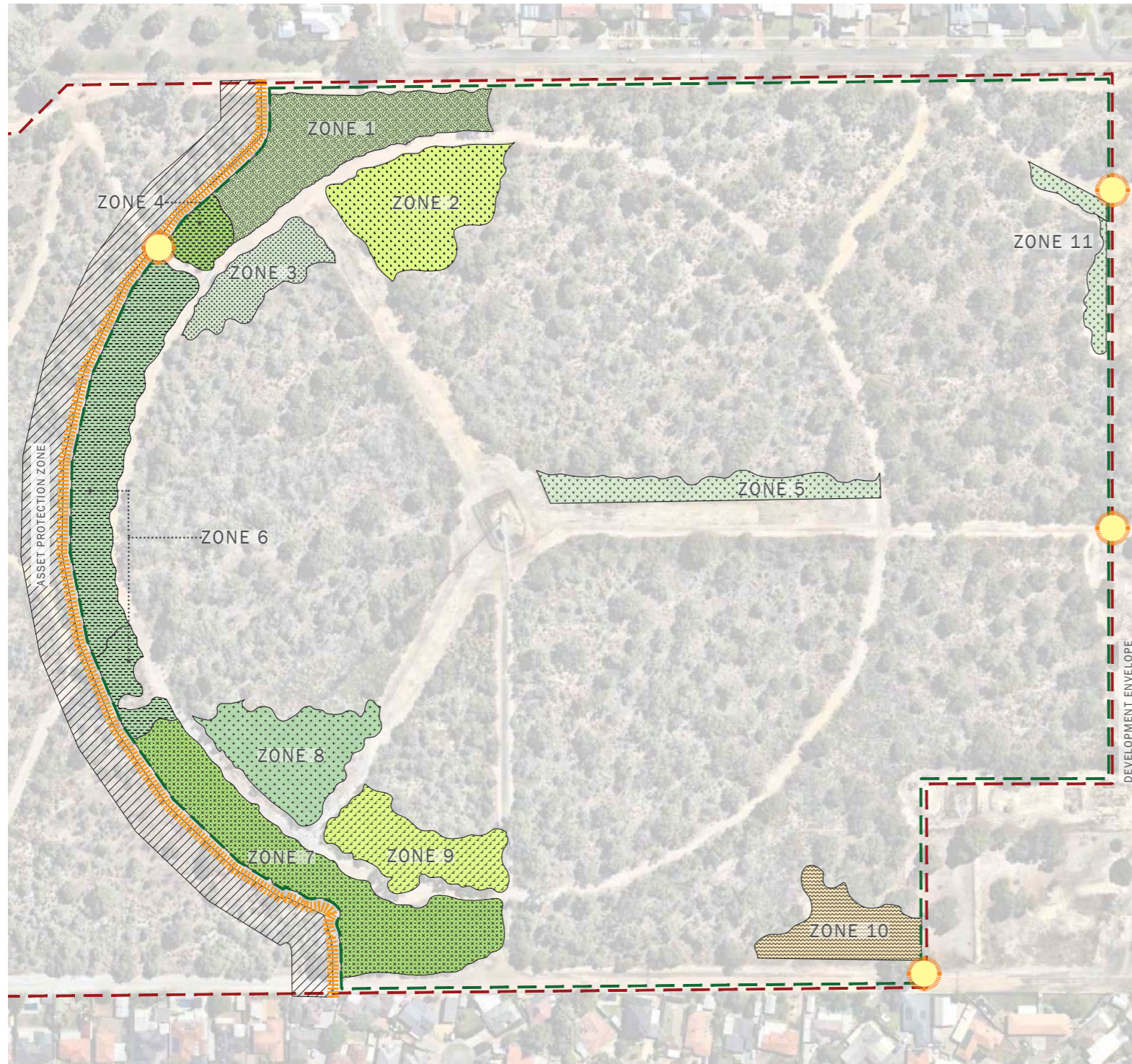
VIEW OF EXISTING UNDER STOREY PLANTING



LEGEND

-  RESTORATION AREA
-  ASSET PROTECTION ZONE
-  PROPOSED ACCESS POINT
-  FUTURE CONSERVATION FENCE TO BE INSTALLED WHEN BROADCASTING INFRASTRUCTURES IS DECOMMISSIONED
-  DEVELOPMENT ENVELOPE
-  PROPOSED SECURITY FENCE TO BAI SPECIFICATION (TO BE REMOVED WHEN BROADCASTING INFRASTRUCTURE IS DECOMMISSIONED)





**LEGEND**

- FUTURE CONSERVATION FENCE TO BE INSTALLED WHEN BROADCASTING INFRASTRUCTURES IS DECOMMISSIONED
- PROPOSED SECURITY FENCE TO BAI SPECIFICATION (TO BE REMOVED WHEN BROADCASTING INFRASTRUCTURE IS DECOMMISSIONED)
- PROPOSED ACCESS POINT

**NOTE:**

T= TREE, M= MIDDLE-STORY PLANTING , U= UNDER-STORY PLANTING  
 PLANTING DENSITY FOR ZONE 1,2,3,4,9 IS 1-2 PER SQ.M  
 PLANTING DENSITY FOR ZONE 5,10,11 IS 3-5 PER SQ.M  
 PLANTING DENSITY FOR ZONE 6,7,8 IS 2-4 PER SQ.M

ZONE 1	
T	Banksia attenuata
T	Banksia menziesii
T	Banksia prionotes
M	Acacia cyclops
M	Daviesia divaricata subsp. divaricata
M	Hakea prostrata
M	Hypocalymma robustum
M	Persoonia saccata
M	Scholtzia involucreta
U	Dianella revoluta var. divaricata
U	Gastrolobium capitatum
U	Gompholobium tomentosum
U	Hibbertia hypericoides
U	Macrozamia fraseri
U	Patersonia occidentalis
U	Philothea spicata

ZONE 2	
T	Banksia attenuata
T	Banksia menziesii
T	Banksia prionotes
M	Eucalyptus marginata
M	Acacia cyclops
M	Daviesia divaricata subsp. divaricata
M	Hakea prostrata
M	Hypocalymma robustum
M	Persoonia saccata
M	Scholtzia involucreta
U	Conostylis setigera
U	Dianella revoluta var. divaricata
U	Gastrolobium capitatum
U	Gompholobium tomentosum
U	Hibbertia huegelii
U	Hibbertia hypericoides
U	Macrozamia fraseri
U	Patersonia occidentalis
U	Philothea spicata

ZONE 3	
T	Banksia attenuata
T	Banksia menziesii
T	Banksia prionotes
M	Eucalyptus marginata
M	Acacia cyclops
M	Daviesia divaricata subsp. divaricata
M	Hakea prostrata
M	Hypocalymma robustum
M	Persoonia saccata
M	Scholtzia involucreta
U	Conostylis setigera
U	Calytrix angulata
U	Dianella revoluta var. divaricata
U	Gastrolobium capitatum
U	Gompholobium tomentosum
U	Hibbertia huegelii
U	Hibbertia hypericoides
U	Macrozamia fraseri
U	Patersonia occidentalis
U	Philothea spicata

ZONE 4	
M	Daviesia divaricata subsp. divaricata
M	Hakea prostrata
M	Hypocalymma robustum
M	Persoonia saccata
M	Scholtzia involucreta
U	Dianella revoluta var. divaricata
U	Gastrolobium capitatum
U	Gompholobium tomentosum
U	Hibbertia hypericoides
U	Macrozamia fraseri
U	Patersonia occidentalis
U	Philothea spicata

ZONE 5	
T	Banksia attenuata
T	Banksia menziesii
T	Banksia prionotes
M	Eucalyptus marginata
M	Daviesia divaricata subsp. divaricata
M	Eremaea pauciflora var. pauciflora
M	Hakea prostrata
M	Hypocalymma robustum
M	Persoonia saccata
U	Acacia applanata
U	Anigozanthos humilis subsp. humilis
U	Anigozanthos manglesii subsp. manglesii
U	Bossiaea eriocarpa
U	Calytrix angulata
U	Conostylis aculeata subsp. cygnorum
U	Dampiera linearis
U	Dianella revoluta var. divaricata
U	Gastrolobium capitatum
U	Gompholobium tomentosum
U	Hibbertia huegelii
U	Hibbertia hypericoides
U	Kennedia prostrata
U	Macrozamia fraseri
U	Orthrosanthus laxus var. laxus
U	Patersonia occidentalis
U	Verticordia densiflora

ZONE 6	
T	Banksia prionotes
M	Eucalyptus marginata
M	Acacia cyclops
M	Daviesia divaricata subsp. divaricata
M	Hakea prostrata
M	Hypocalymma robustum
M	Persoonia saccata
M	Scholtzia involucreta
U	Acacia applanata
U	Anigozanthos manglesii subsp. manglesii
U	Bossiaea eriocarpa
U	Caesia micrantha
U	Conostylis aculeata subsp. cygnorum
U	Dampiera linearis
U	Dianella revoluta var. divaricata
U	Gastrolobium capitatum
U	Gompholobium tomentosum
U	Hibbertia huegelii
U	Hibbertia hypericoides
U	Kennedia prostrata
U	Macrozamia fraseri
U	Patersonia occidentalis
U	Philothea spicata

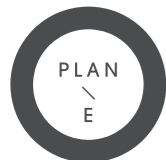
ZONE 7	
T	Banksia attenuata
T	Banksia ilicifolia
T	Banksia menziesii
M	Eucalyptus marginata
M	Melaleuca preissiana
M	Acacia cyclops
M	Eremaea pauciflora var. pauciflora
U	Acacia applanata
U	Anigozanthos humilis subsp. humilis
U	Bossiaea eriocarpa
U	Caesia micrantha
U	Conostylis aculeata subsp. cygnorum
U	Dianella revoluta var. divaricata
U	Gastrolobium capitatum
U	Gompholobium tomentosum
U	Macrozamia fraseri
U	Patersonia occidentalis
U	Philothea spicata

ZONE 8	
T	Banksia attenuata
T	Banksia menziesii
T	Banksia prionotes
M	Eucalyptus marginata
M	Daviesia divaricata subsp. divaricata
M	Eremaea pauciflora var. pauciflora
M	Hypocalymma robustum
U	Acacia applanata
U	Anigozanthos humilis subsp. humilis
U	Bossiaea eriocarpa
U	Caesia micrantha
U	Conostylis aculeata subsp. cygnorum
U	Dianella revoluta var. divaricata
U	Gastrolobium capitatum
U	Gompholobium tomentosum
U	Hibbertia huegelii
U	Hibbertia hypericoides
U	Patersonia occidentalis
U	Philothea spicata
U	Pimelea sulphurea
U	Verticordia densiflora

ZONE 9	
M	Daviesia divaricata subsp. divaricata
M	Eremaea pauciflora var. pauciflora
M	Hakea prostrata
M	Hypocalymma robustum
M	Persoonia saccata
U	Acacia applanata
U	Anigozanthos humilis subsp. humilis
U	Anigozanthos manglesii subsp. manglesii
U	Bossiaea eriocarpa
U	Calytrix angulata
U	Conostylis aculeata subsp. cygnorum
U	Dampiera linearis
U	Dianella revoluta var. divaricata
U	Gastrolobium capitatum
U	Gompholobium tomentosum
U	Hibbertia huegelii
U	Hibbertia hypericoides
U	Kennedia prostrata
U	Macrozamia fraseri
U	Orthrosanthus laxus var. laxus
U	Patersonia occidentalis
U	Verticordia densiflora

ZONE 10	
T	Banksia attenuata
T	Banksia menziesii
M	Eucalyptus marginata
M	Allocasuarina humilis
M	Daviesia divaricata subsp. divaricata
M	Eremaea pauciflora var. pauciflora
M	Hakea prostrata
M	Hypocalymma robustum
U	Acacia applanata
U	Anigozanthos humilis subsp. humilis
U	Anigozanthos manglesii subsp. manglesii
U	Bossiaea eriocarpa
U	Calytrix angulata
U	Conostylis aculeata subsp. cygnorum
U	Dianella revoluta var. divaricata
U	Gastrolobium capitatum
U	Gompholobium tomentosum
U	Hibbertia huegelii
U	Hibbertia hypericoides
U	Kennedia prostrata
U	Macrozamia fraseri
U	Orthrosanthus laxus var. laxus
U	Patersonia occidentalis
U	Philothea spicata

ZONE 11	
T	Banksia attenuata
T	Banksia menziesii
T	Banksia prionotes
M	Eucalyptus marginata
M	Daviesia divaricata subsp. divaricata
M	Eremaea pauciflora var. pauciflora
M	Hakea prostrata
M	Hypocalymma robustum
M	Persoonia saccata
U	Acacia applanata
U	Anigozanthos humilis subsp. humilis
U	Anigozanthos manglesii subsp. manglesii
U	Bossiaea eriocarpa
U	Calytrix angulata
U	Conostylis aculeata subsp. cygnorum
U	Dampiera linearis
U	Dianella revoluta var. divaricata
U	Gastrolobium capitatum
U	Gompholobium tomentosum
U	Hibbertia huegelii
U	Hibbertia hypericoides
U	Kennedia prostrata
U	Macrozamia fraseri
U	Orthrosanthus laxus var. laxus
U	Patersonia occidentalis
U	Verticordia densiflora



**LANDSCAPE ARCHITECTS**

LEVEL 1 278 RAILWAY PDE WEST LEEDERVILLE WA 6007  
 T: (08) 9388 9566 E: mail@plane.com.au

**LANDSCAPE MASTER PLAN - STAGE 1 WORKS**

PREPARED FOR BAI COMMUNICATIONS  
 JUNE 2025

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# Appendix B

Black Cockatoo and Banksia Woodlands of the Swan Coastal Plain

Threatened Ecological Community Habitat Quality Score Assessment - Lot

802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley (Emerge Associates 2025b)



## TECHNICAL MEMORANDUM

### Black Cockatoo and Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community Habitat Quality Score Assessment Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley

PROJECT NUMBER	EP24-129(07)	DOC. NUMBER	EP2129(07)—0013B RAW
PROJECT NAME	Erindale Road Development Support	CLIENT	BAI Communications
AUTHOR	EKB	REVIEWER	RAW
VERSION	B	DATE	21/10/2025

#### 1. INTRODUCTION

BAI Communications are investigating development of part of Lot 802 Erindale Road and Lot 1 and Lot 803 Wanneroo Road in Hamersley. The proposed development envelope comprises 13.55 ha for residential purposes within Lot 802 and the western portion of Lot 803 ('residential development area') and 19.66 ha retained for conservation purposes within Lot 803 and the eastern portion of Lot 1 ('conservation area'). The residential development area and the conservation area are collectively referred to as the 'site' and extend over 33.21 ha, as shown in **Figure 1**.

The following matters of National environmental significance (MNES) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) have been recorded in the site (Emerge Associates 2025b, c)<sup>1</sup>:

- *Zanda latirostris* (Carnaby's black cockatoo) which is listed as 'endangered' under the EPBC Act and the State *Biodiversity Conservation Act 2016* (BC Act) and *Calyptorhynchus banksii naso* (forest red-tailed black cockatoo) which is listed as 'vulnerable' under the EPBC Act and the BC Act (collectively referred to as 'black cockatoos').
- The 'banksia woodlands of the Swan Coastal Plain' threatened ecological community (TEC) which is listed as endangered under the EPBC Act and 'priority 3' in Western Australia (herein referred to as the 'banksia woodlands TEC').

To inform impact assessment and potential future management within the conservation area, Emerge were engaged to determine the 'habitat quality score' (HQS) for these MNES within the site, using scoring tools provided by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW). The results of the HQS for the MNES are outlined in this technical memorandum.

<sup>1</sup> Note that one other MNES, 'tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain' TEC, occurs within the site but the existing EPBC referral occurred prior to the TEC listing and so does not require further impact assessment.

## 2. BLACK COCKATOOS

### 2.1. Existing information

The site contains black cockatoo breeding, foraging and roosting habitat (Emerge Associates 2025b, a), as summarised in **Table 1** and shown in **Figure 2** and **Figure 3**.

When the DAWE (2022) black cockatoo foraging habitat quality scoring tool is applied, most of the foraging habitat in the site classifies as ‘high-quality’ native foraging habitat.

*Table 1: Black cockatoo values within the site (Emerge Associates 2025a)*

Habitat type	Values within the site	
	CBC	FRTBC
Breeding	N/A (outside of breeding distribution)	60 potential nesting trees (no hollows suitable for black cockatoo breeding)
Roosting	No roosts observed. Trees across most of the site would provide suitable roosting habitat. A known forest red-tailed black cockatoo night roosting site lies to the east of the site and trees in the north-eastern portion of the site would be considered part of a black cockatoo night roosting site.	
Foraging	28.68 ha of foraging habitat comprising: <ul style="list-style-type: none"> <li>• 28.66 ha of native primary</li> <li>• 0.02 ha of native secondary</li> </ul>	23.57 ha of foraging habitat comprising: <ul style="list-style-type: none"> <li>• 22.44 ha of native primary</li> <li>• 0.73 ha of native secondary</li> <li>• 0.04 ha of non-native secondary</li> </ul>

### 2.2. Habitat quality score

A HQS was determined for both the residential development area and the conservation area using the *Habitat scoring system for WA black cockatoo foraging habitat* provided by DCCEEW (refer **Appendix A**).

The HQS considers site condition, site context and species stocking components. The site condition component was determined through existing information (Emerge Associates 2025b, c, d, a) and a field survey conducted in May 2025, as outlined below. The site context and species stocking components were determined through existing information outlined in (Emerge Associates 2025b); Emurge Associates (2025a).

#### 2.2.1. Field survey

A botanist and an ecologist from Emurge visited the site on 14 May 2025 to conduct the field survey. The purpose of the survey was to assess the projected foliage cover of black cockatoo foraging habitat, to inform the site condition component of DCCEEW’s scoring system. The survey also aimed to identify portions within the conservation area which may be suitable for improvement to restore black cockatoo habitat and/or banksia woodland TEC vegetation.

The site was traversed on foot and 70 relevés were sampled at locations shown on **Figure 4**. Relevés were pre-selected and systematically arrayed across the site with reference to vegetation units and vegetation condition. Relevé locations were selected irrespective of aerial imagery, to avoid bias related to the variable canopy cover in the site.

The data recorded within each relevé included:

- site details (site number, observers, date, location)

- ‘projected foliage cover’ (PFC) of the following black cockatoo foraging plants<sup>2</sup>:
  - *Eucalyptus marginata* (jarrah)
  - *Corymbia calophylla* (marri)
  - *Eucalyptus gomphocephala* (tuart)
  - *Banksia attenuata*/*B. menziesii*/*B. prionotes*/*B. ilicifolia* (*Banksia* spp.)
  - *Allocasuarina fraseriana*/*A. humilis* (*Allocasuarina* spp.)
  - *Xanthorrhoea preissii*/*X. brunonis* subsp. *brunonis* (*Xanthorrhoea* spp.)
  - Other foraging species (e.g. *Hakea prostrata*, *Grevillea* spp.).

Patches of vegetation within the conservation area which may be suitable for management works to improve or create black cockatoo habitat and/or banksia woodland TEC, such as areas with low native species richness/cover and/or highly degraded areas and/or high weed cover, were identified as the team traversed the site.

### 2.2.2. Data analysis

Relevé data was stratified by development context (residential development area and conservation area). A mean PFC was calculated for each black cockatoo species in each area, based on their foraging preferences (refer to (Emerge Associates 2025b); Emurge Associates (2025a)). Ultimately, the mean PFC from the relevés was considered along with information obtained from the flora and vegetation assessment (Emerge Associates 2025c, d) and review of high-resolution aerial imagery to determine final PFC values.

A HQS was calculated using DCCEEW’s scoring system<sup>3</sup>, with inputs comprising the PFC, publicly available databases and results from (Emerge Associates 2025b); Emurge Associates (2025a).

### 2.2.3. Habitat quality score

Raw PFC data is provided in **Appendix B**.

The HQS assigned to the residential development area and conservation area for Carnaby’s black cockatoo (CBC) and forest red-tailed black cockatoo (FRTBC) is provided in **Table 2**. Detailed scoring is provided in **Appendix C**.

*Table 2: Black cockatoo habitat quality score assigned to each area within the site and each black cockatoo species*

Location	Habitat quality score (out of 10)	
	CBC	FRTBC
Residential development area	8	7
Conservation area	8	7

Part of the residential development area was subject to a fire in February 2023 (Emerge Associates 2025b). The condition of vegetation within the burnt area is predicted to improve as the vegetation matures and regeneration of *Banksia prionotes* is evident. To account for this, the regeneration of CBC foraging habitat post recent fire has been considered when attributing the HQS. As the vegetation matures within the burnt area, it is not expected to substantially change the average PFC

<sup>2</sup> Identified as providing black cockatoo foraging habitat in Emurge Associates (2025a).

<sup>3</sup> Scoring system provided by DCCEEW but not known to be publicly available.

of foraging species available across the residential development area so as to result in an increase above an average of 40% PFC. Subsequently no change in the site condition score and overall HQS for the residential development area is anticipated and no adjusted HQS has been applied. This is further discussed in **Section 2.3** below.

### 2.3. Discussion

Emerge Associates classify foraging habitat for black cockatoos as being native or non-native (to align with DAWE (2022) native and exotic categories) and primary and secondary (to assist in the interpretation of value). Most of the residential development area and conservation area was designated as primary native foraging habitat given the vegetation present includes key native foraging plants (Emerge Associates 2025b, a). This is consistent with the broad classification provided by DAWE (2022) that the vegetation represents ‘high-quality’ native foraging habitat.

DCCEEW require that a HQS be further assigned to assess impacts and associated offsets. The scoring system for calculating a HQS provided by DCCEEW assesses eight attributes of quality including the fine-scale PFC of foraging plants. Scoring habitat quality in this way may provide consistency across EPBC Act referral assessments. However, the system is arguably over-complicated, and the resultant HQS, an integer between 1 and 10, is unlikely to characterise true habitat value in a meaningful way. For example, the difference that 30-40% foraging plant PFC (score of 5) would make to black cockatoos compared to 40-50% foraging plant PFC (score of 6) is likely negligible.

This assessment found that the distribution, density and PFC of foraging plants, particularly jarrah and *Banksia* spp., varies across the site. PFC between 5% and 60% were recorded in relevés and clear differences in cover are visible in aerial imagery. Some of this variation was due to a recent fire that temporarily reduced canopy cover. Some of the variation is due to natural patterns expected to occur within banksia woodlands. Given black cockatoos forage opportunistically over large areas (6-12 km) and hence don’t need to rely on the same resource year on year, and that a proportion of canopy cover is expected to regrow in the near future, vegetation that currently had low or high PFC was not separated out. The relevé data was instead used to provide an indication of mean PFC across the site. The final PFC assigned and used in the site condition component of the HQS scoring system was ultimately determined based on a variety of information sources, including knowledge gained from comprehensive field surveys.

As outlined in (Emerge Associates 2025b); Emerge Associates (2025a), part of the residential development area was subject to a bushfire in February 2023, which killed many mature *Banksia prionotes* trees. The bushfire stimulated recruitment, and in the recent May 2025 field survey high *B. prionotes* regeneration was evident. Most of these seedlings were small plants (<1 m high) but some larger plants were flowering. As these seedlings mature into trees, the PFC of foraging plants for CBC is expected to increase to 40%, remaining within the 30-40% PFC and site condition category of 5. When applying this to the HQS tool site context, this would not increase the future HQS from the current HQS of 8. The change in PFC as vegetation matures aligns with the HQS assigned within the conservation area which was not subject to recent fire. The HQS assigned to the conservation area is likely to remain stable, provided current conditions are not altered.

### 3. BANKSIA WOODLANDS TEC

#### 3.1. Existing information

The site contains a total of 28.36 ha of the banksia woodlands TEC, of which 12.29 ha is located within the residential development area and 16.07 ha is located within the conservation area (Emerge Associates 2025c, d), as shown in **Figure 5**. The vegetation which represents the banksia woodlands TEC in the site is in ‘excellent’, ‘very good’, ‘good’ and ‘degraded’ condition according to the EPA (2016) scale (Emerge Associates 2025c).

#### 3.2. Habitat quality score

A HQS was determined for both the residential development area and the conservation area using a habitat quality scoring framework provided by DCCEE (refer **Appendix D**).

The HQS assigned to each portion of the site is provided in **Table 3** and detailed in **Appendix E**.

*Table 3: Banksia woodland TEC habitat quality score assigned to each area within the site*

Location	Habitat quality score (out of 10)
Residential development area	4.9
Conservation area	6.5

As outlined in (Emerge Associates 2025c), part of the residential development area was subject to a fire in February 2023. The condition of vegetation within the burnt area is predicted to improve as the vegetation matures, and so an ‘adjusted HQS’ was determined for the residential development area, which assumes that vegetation in ‘good’ improved to ‘very good’ and ‘degraded’ improved to ‘good’).

*Table 4: Predicted adjusted banksia woodland TEC habitat quality score*

Location	Habitat quality score (out of 10)
Residential development area	5.6

#### 3.3. Discussion

Vegetation condition is the key input to the banksia woodlands TEC scoring framework, providing up to 80 points out of a possible 140 (noting that pristine vegetation condition is not considered to exist within the applicable range of the Keighery (1994) scale). The banksia woodland vegetation in the conservation area is in overall better condition than the residential development area as it has been subject to less disturbance and has higher native species richness (Emerge Associates 2025c, d). Accordingly, the conservation area was scored a higher HQS of 6.5 out of 10.

Additionally, the presence of a state listed TEC and a priority ecological community (PEC) in the conservation area, compared to only a state-listed PEC in the residential development area, provided higher scores in the site condition component.

The lower vegetation condition in the residential development area was partly due to the recent fire reducing canopy and understorey cover. However, this area has also been subject to greater, long-term (historical) disturbance. Whilst native species regeneration was evident in portions affected by the fire, native species cover and richness were notably lower across most of the residential

development area compared to the conservation area. To account for predicted improvements, largely relating to plant maturation and vegetation structure development, an adjusted HQS was calculated, resulting in a score of 5.6 out of 10. This demonstrates that the conservation area is overall more intact than the residential development area.

#### **4. PROPOSED MANAGEMENT AREAS**

Twelve patches within the conservation area were identified as potentially suitable for restoration for the purposes of enhancing black cockatoo habitat and/or banksia woodlands TEC. A description of each area is provided in **Table 5** and the location of each patch is shown in **Figure 6**. The HQS assigned to each area is provided in **Appendix F** and shown in **Table 5**.

Table 5: Descriptions of current flora and black cockatoo attributes within each proposed management area

ID	Description	HQS		
		CBC	FRTBC	Banksia Woodland TEC
1	Dense native ground layer of herbs <i>Alexgeorgea nitens</i> and <i>Corynotheca micrantha</i> across most of the area. Moderate to high cover of non-native grasses. Part of the area subject to a recent burn. Very low cover of <i>Banksia</i> spp. and <i>Xanthorrhoea</i> spp. Vegetation in degraded condition.	5	5	3.7
2	Dense native ground layer of herbs <i>Alexgeorgea nitens</i> and <i>Corynotheca micrantha</i> and shrub <i>Grevillea vestita</i> across most of the area. Moderate to high cover of non-native grasses. Some mature and some scattered juvenile <i>Banksia</i> spp. plants. Scattered jarrah trees in eastern portion and <i>Xanthorrhoea</i> spp. in southern and eastern portions. Large woody weed (shrub) * <i>Gaudium laevigatum</i> present. Vegetation in degraded condition.	6	6	3.7
3	Native ground layer of herbs <i>Alexgeorgea nitens</i> and <i>Corynotheca micrantha</i> and scattered native shrubs across most of the area. Moderate to high cover of non-native grasses. Some mature and some scattered juvenile <i>Banksia</i> spp. plants, jarrah trees and <i>Xanthorrhoea</i> spp. Vegetation in good condition.	6	6	4.7
4	Mature <i>Banksia prionotes</i> trees over mostly non-native grasses with some scattered native plants and bare ground. Vegetation in good condition.	8	4	3.8
5	Mostly cleared with scattered native shrub regrowth or juvenile plants. Low weed cover. Vegetation in completely degraded condition.	3	3	2.3
6	Mature <i>Banksia prionotes</i> trees over mostly non-native grasses with some scattered jarrah trees, scattered native shrubs and bare ground. Variable in structure and diversity. Large woody weed (shrub) * <i>Chamelaucium uncinatum</i> present. Vegetation in good condition.	8	6	4.7
7	Scattered <i>Banksia</i> spp. throughout most of patch, with higher PFC in the southern portion. Ground layer comprises mainly non-native grasses and bare ground. Vegetation in degraded condition.	7	5	3.7
8	Scattered <i>Banksia</i> spp. trees over scattered native shrubs <i>Xanthorrhoea</i> spp., <i>Jacksonia furcellata</i> , <i>Acacia saligna</i> over non-native weeds. Vegetation in degraded condition.	5	4	3.7
9	Jarrah and <i>Banksia</i> spp. trees and <i>Banksia</i> sp. seedlings over <i>Xanthorrhoea</i> sp. and scattered native shrubs, with non-native grasses and bare ground. Vegetation in good condition.	7	6	5.6
10	Mostly cleared and devoid of native vegetation. Small patch of <i>Xanthorrhoea preissii</i> and scattered native shrubs. Large woody weed (shrub) * <i>Chamelaucium uncinatum</i> present on boundary and * <i>Eucalyptus camaldulensis</i> in eastern portion. Vegetation in completely degraded condition.	4	4	2.3
11	Mostly cleared with scattered native shrub regrowth or juvenile plants. A few scattered juvenile <i>Banksia</i> sp. shrubs. Low weed cover. Vegetation in completely degraded condition.	4	3	2.3
12	No native vegetation – area comprises part of a cleared track in completely degraded condition.	3	3	2.2

## 5. CONCLUSIONS

HQS for black cockatoo habitat and banksia woodland TEC in the residential development area and conservation area are summarised in **Table 6**. An adjusted HQS for banksia woodland TEC within the residential development area of 5.6 out of 10 applies.

*Table 6: Habitat quality score for black cockatoo habitat and banksia woodland TEC in the residential development area and conservation area*

Location	Habitat quality score (out of 10)		
	Carnaby's black cockatoo	Forest red-tailed black cockatoo	Banksia woodland TEC
Residential development area	8	7	4.9
Conservation area	8	7	6.5

Twelve patches of vegetation within the conservation area are identified as having potential for restoration to improve their vegetation condition and relative HQS contribution (**Figure 6** and **Appendix F**).

## 6. REFERENCES

### 6.1. General references

- Department of Agriculture, Water and the Environment (DAWE) 2022, *Referral guideline for 3 WA threatened black cockatoo species: Carnaby's Cockatoo, Baudin's Cockatoo and the Forest Red-tailed Black-cockatoo*, Canberra.
- Emerge Associates 2025a, *Basic Fauna and Targeted Black Cockatoo Assessment - Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley*, EP24-129(03)--003B AJU, Version B.
- Emerge Associates 2025b, *Basic Fauna and Targeted Black Cockatoo Assessment Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley*, EP24-129(03)--003 AJU, Revision C.
- Emerge Associates 2025c, *Detailed Flora and Vegetation Assessment - Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley*, EP24-129(02)--009 SKP, Revision D.
- Emerge Associates 2025d, *Detailed Flora and Vegetation Assessment - Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley*, EP24-129(02)--009A SKP, Version A.
- Environmental Protection Authority (EPA) 2016, *Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment*, Perth.
- Keighery, B. 1994, *Bushland Plant Survey: A guide to plant community survey for the community*, Wildflower Society of WA (Inc), Nedlands.

# Figures



*Figure 1: Site Location*

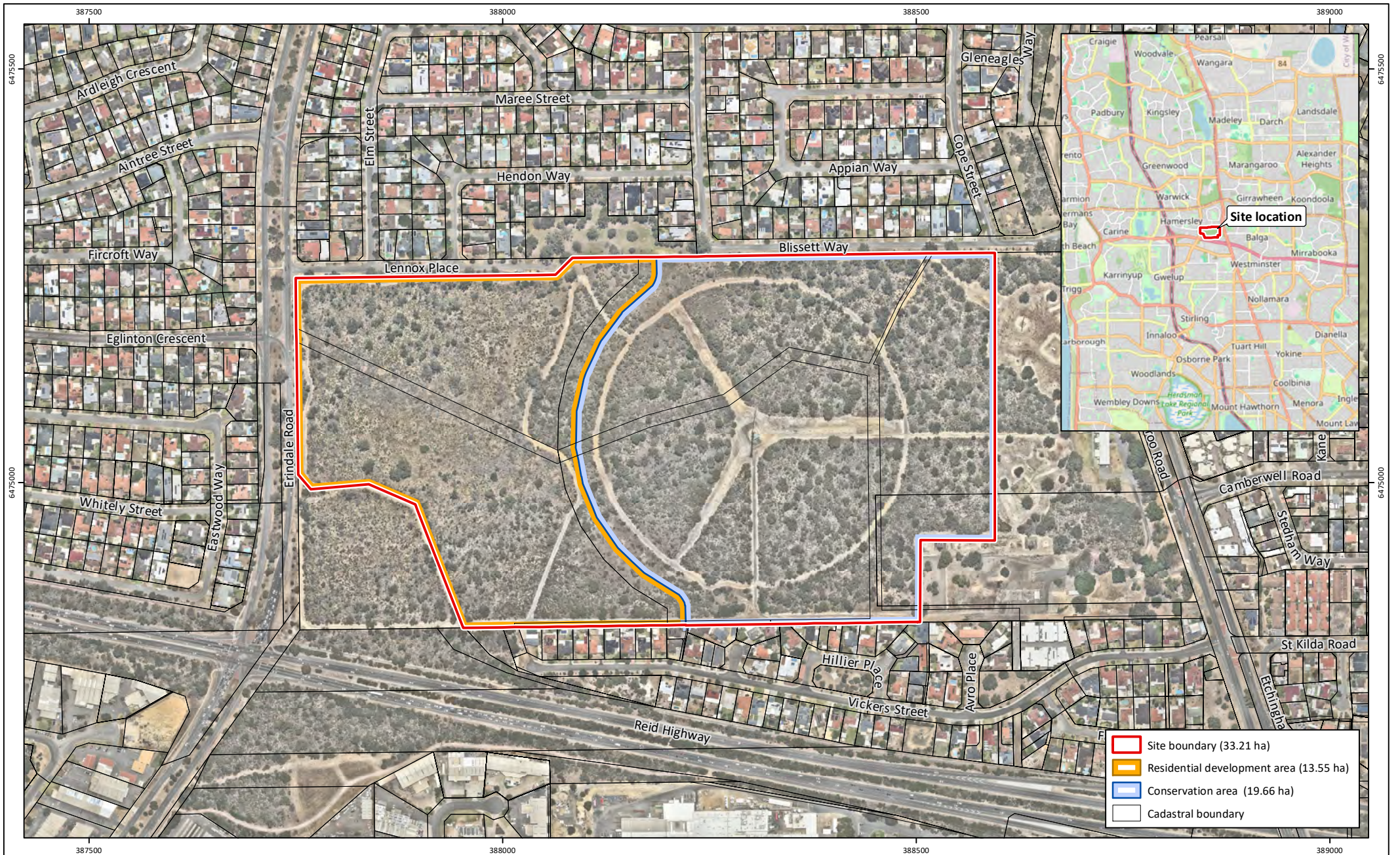
*Figure 2: Carnaby's Black Cockatoo Habitat*

*Figure 3: Forest Red-tailed Black Cockatoo Habitat*

*Figure 4: Foraging Habitat Samples*

*Figure 5: Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community*

*Figure 6: Vegetation Suitable for Future Management*



**Figure 1: Site Location**

**Project:** Black Cockatoo and Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community Habitat Quality Score Assessment, Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley

**Client:** BAI Communications

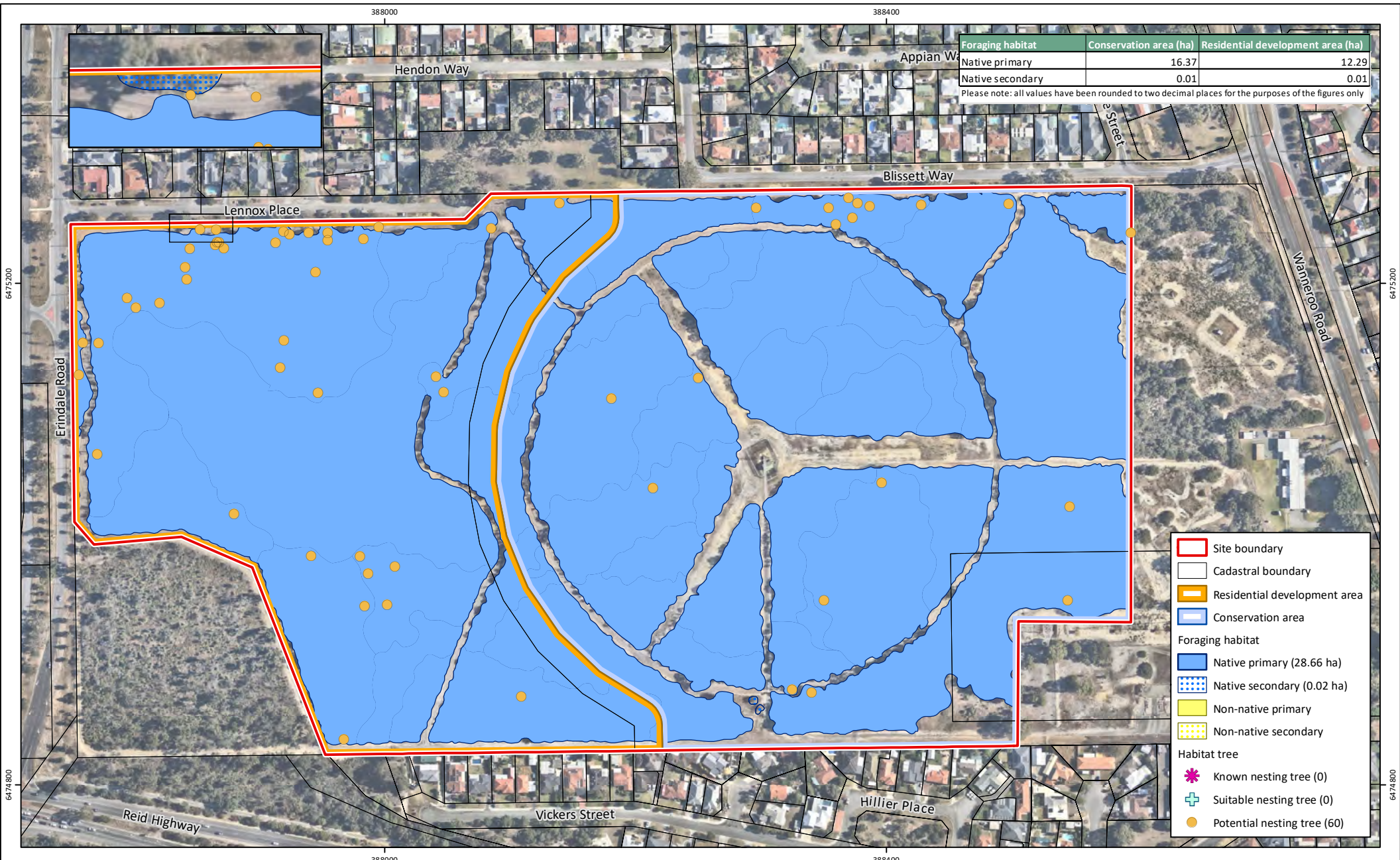
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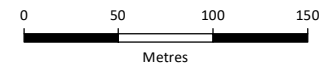
While Emmerge Associates makes every attempt to ensure the accuracy and completeness of data, Emmerge accepts no responsibility for externally sourced data used  
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**Figure 2: Carnaby Black Cockatoo Foraging Habitat**

**Project:** Black Cockatoo and Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community Habitat Quality Score Assessment, Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley  
**Client:** BAI Communications

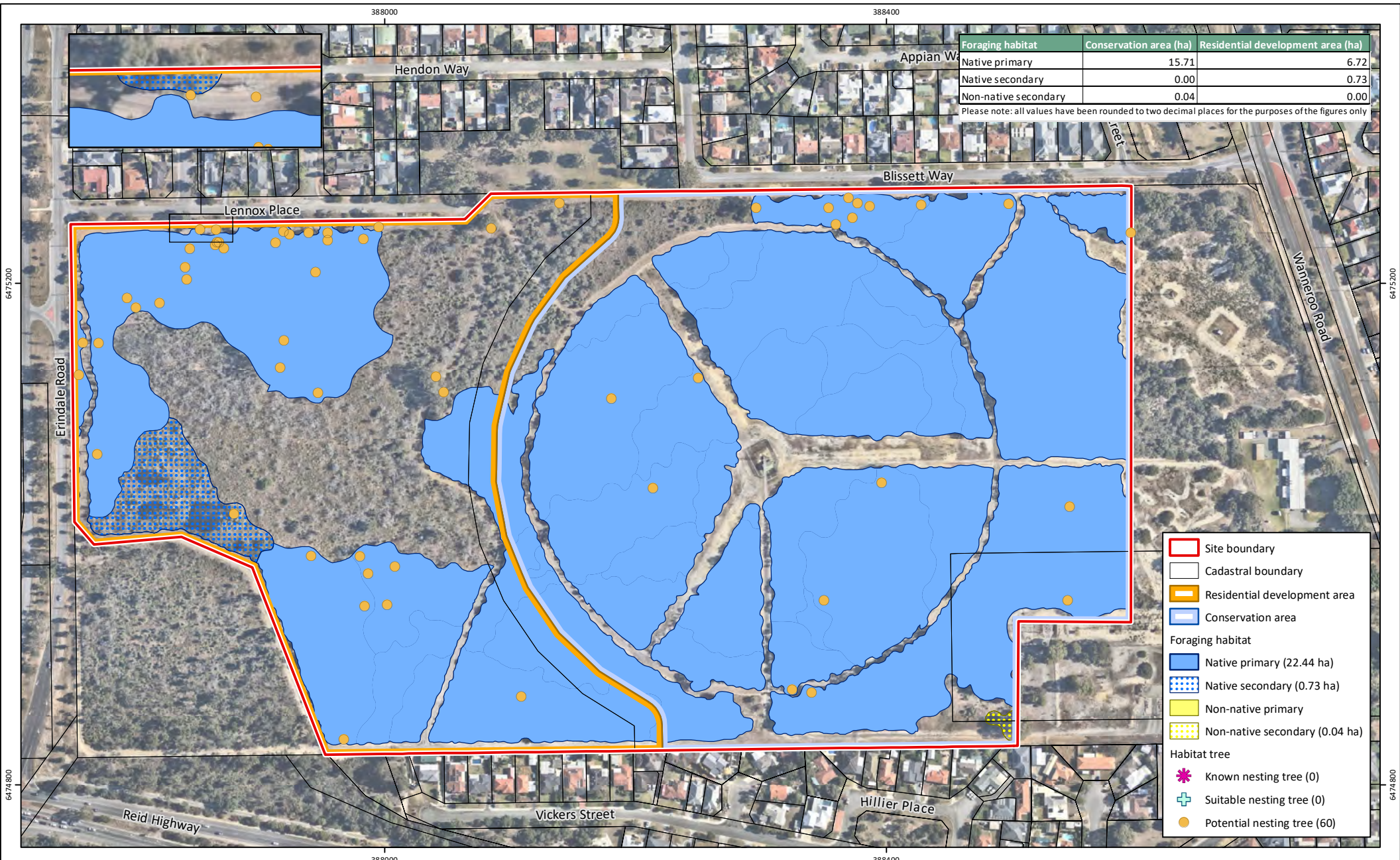
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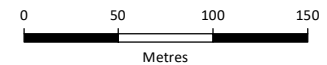
While Emerge Associates makes every attempt to ensure the accuracy and completeness of data, Emerge accepts no responsibility for externally sourced data used ©Landgate (2025). Nearmap Imagery date: 29/01/2024



**Figure 3: Forest Red-tailed Black Cockatoo Habitat**

**Project:** Black Cockatoo and Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community Habitat Quality Score Assessment, Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley  
**Client:** BAI Communications

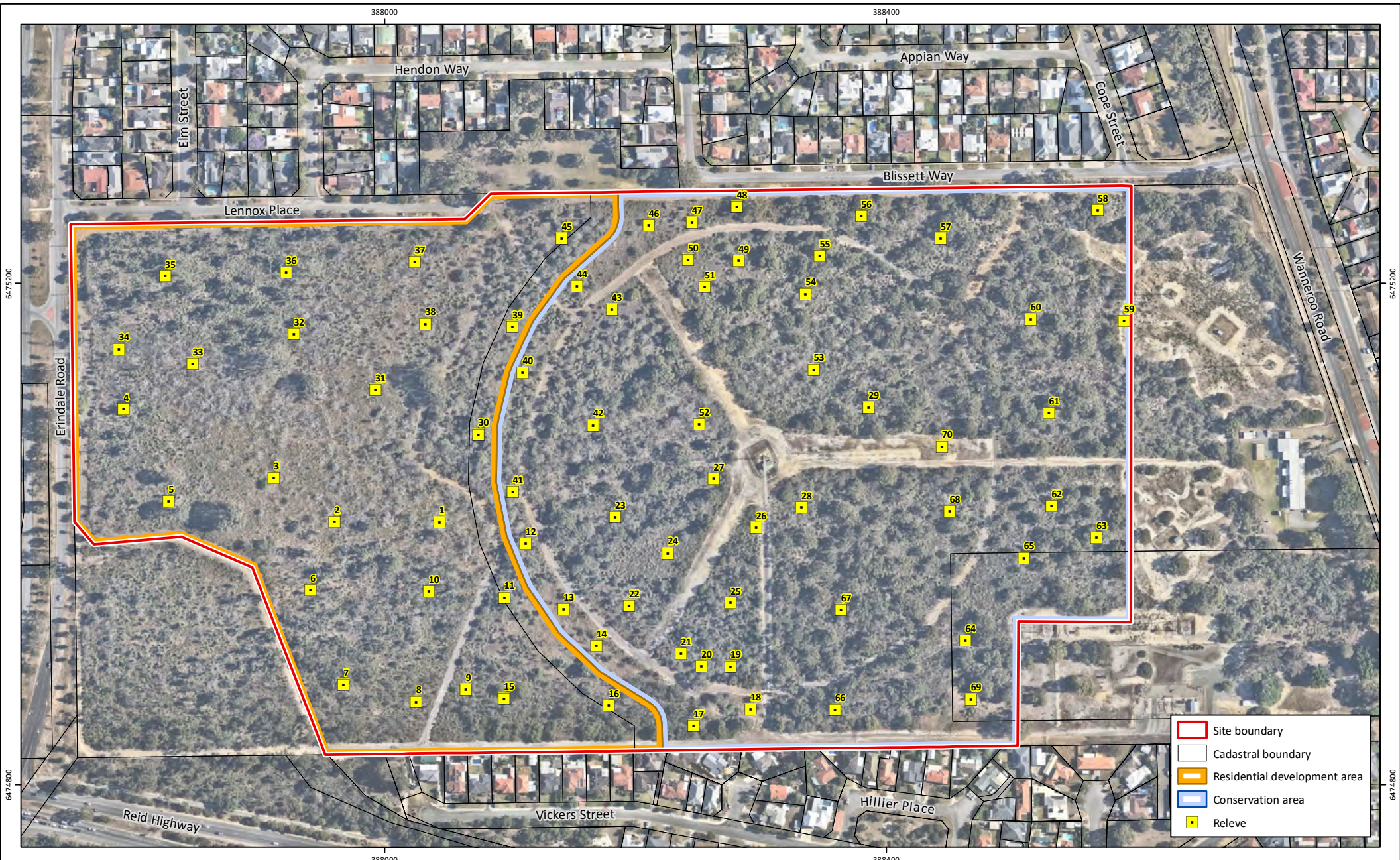
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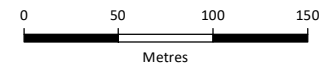
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**Figure 4: Foraging Habitat Samples**

**Project:** Black Cockatoo and Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community Habitat Quality Score Assessment, Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley  
**Client:** BAI Communications

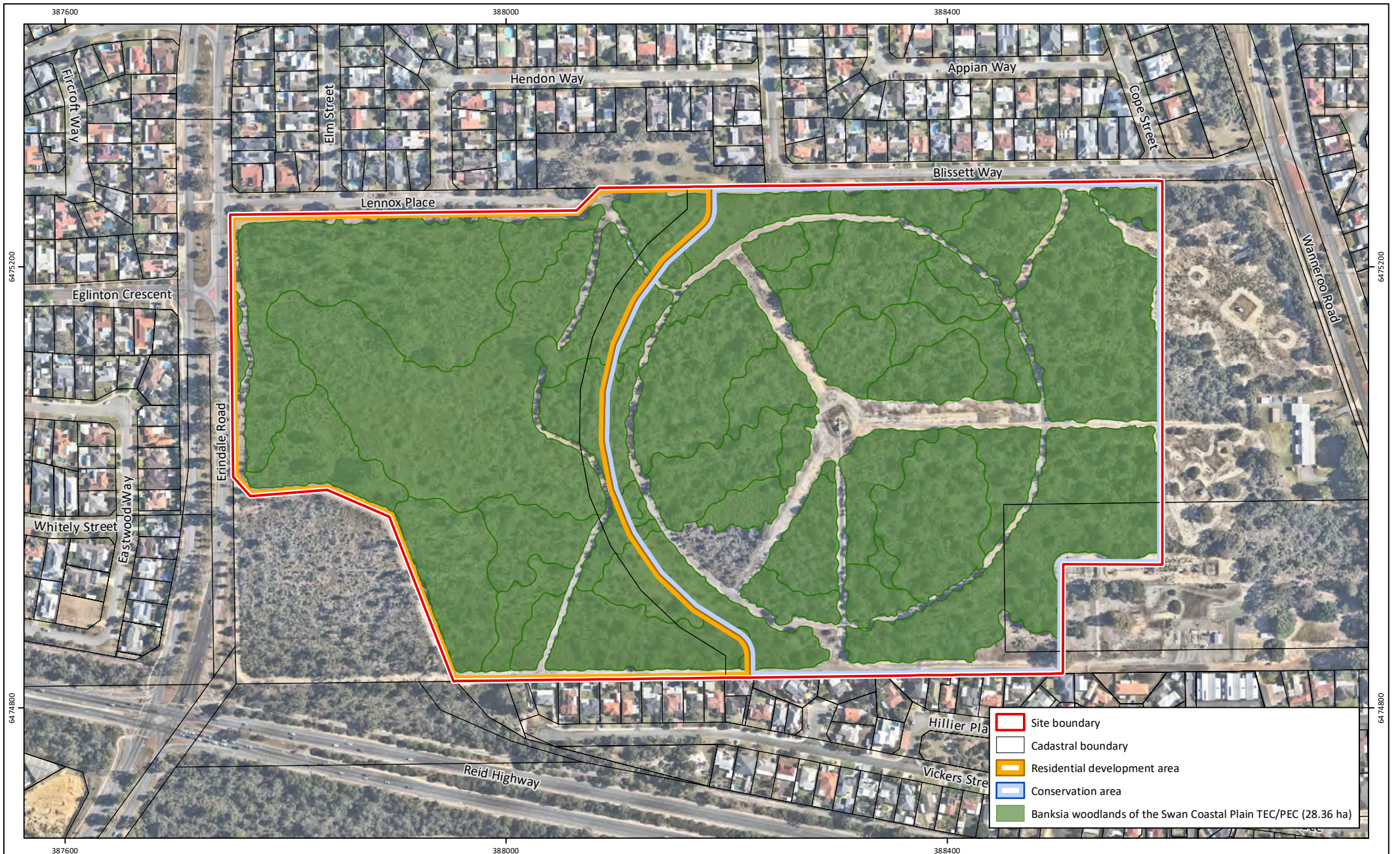
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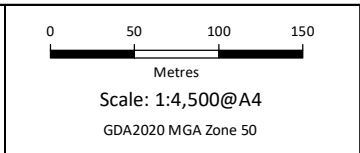


**Figure 5: Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community**

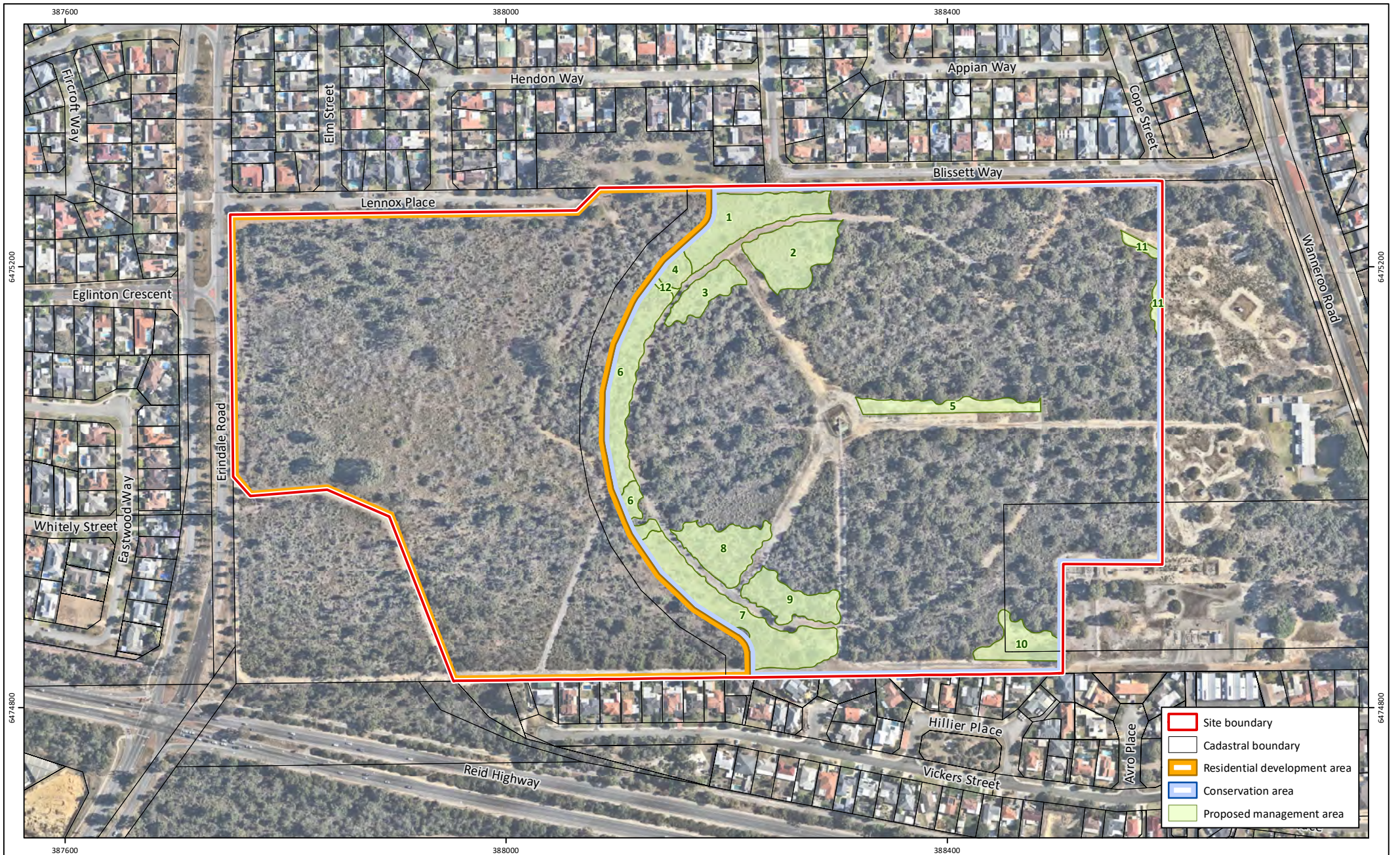
**Project:** Black Cockatoo and Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community Habitat Quality Score Assessment, Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley

**Client:** BAI Communications

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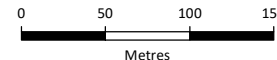
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**Figure 6: Vegetation Suitable for Future Management**

**Project:** Black Cockatoo and Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community Habitat Quality Score Assessment, Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley  
**Client:** BAI Communications

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**Checked:** RAW  
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**Date:** 24/06/2025



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 GDA2020 MGA Zone 50





# Appendix A

*Habitat scoring system for WA black cockatoo foraging habitat (DCCEEW)*



### Habitat Scoring System for WA black cockatoo foraging habitat

This habitat scoring system describes elements indicative of suitable foraging habitat<sup>1</sup> for the three WA black cockatoo species (Carnaby’s Black Cockatoo, Baudin’s Black Cockatoo and the Forest Red-tailed Black Cockatoo) in WA. Its use must be supported by survey information and reporting, undertaken by suitably qualified and experienced ecologists.

Appropriate scores will best fit a description. Where all components of the ‘detail’ column description are not met, this must be specified, and justification provided for that score to be accepted by the Department.

For an offset site to be considered by the Department, the offset site must have a start score of 1 for each indicator (e.g., there must be a species stocking rate score of at least 1).

Indicator	Score	Detail		Impact site	Offset start quality	Without offset	With offset	
<b>Site Condition</b>								
		Foraging value	Details					
Vegetation condition and structure. Habitat features	7	Very High	Carnaby’s Black Cockatoo					
			Native kwongan heath and shrubland (>30% projected foliage cover), banksia and eucalypt woodlands with >50% projected foliage cover. Low percentage (< 5%) of tree deaths <sup>2</sup> .					
			Baudin’s Black Cockatoo					
			Marri-Jarrah Forest and woodlands with >50% projected foliage cover. Low percentage (< 5%) of tree deaths.					
			Forest Red-tailed Black Cockatoo					
		6	High	Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands, with >50% projected foliage cover. Low percentage (< 5%) of tree deaths.				
	Carnaby’s Black Cockatoo							
	Native kwongan heath and shrubland (>25% projected foliage cover), banksia and eucalypt woodlands with >40% projected foliage cover. Low percentage (< 10%) of tree deaths.							
	Baudin’s Black Cockatoo							
	Marri-Jarrah Forest and woodlands with >40% projected foliage cover. Low percentage (< 10%) of tree deaths.							
			Forest Red-tailed Black Cockatoo					
			Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands, with >40% projected foliage cover. Low percentage (< 10%) of tree deaths.					

<sup>1</sup> In some cases, an impact or offset site may contain or require both foraging and breeding habitat for one or more black cockatoos. Breeding habitat is species of trees known to support breeding within the range of the species which either have a suitable nest hollow or are of a suitable diameter at breast height (DBH) to develop a nest hollow. For most species of trees, suitable DBH is 500 mm. For salmon gum and wandoo, suitable DBH is 300 mm.

<sup>2</sup>No tree deaths indicate robustness of habitat, unlikely for the habitat to decline in the medium-term. Tree deaths may be owing to disease, water stress, fire, etc.

Vegetation condition and structure. Habitat features	5	Moderate to high	Carnaby's Black Cockatoo				
			Native kwongan heath and shrubland (>20% projected foliage cover), banksia and eucalypt woodlands with 30-40% projected foliage cover; OR > 60% projected foliage cover but veg. condition reduced due to tree deaths (up to 20%).				
			Baudin's Black Cockatoo				
			Marri-Jarrah Forest or woodlands with 30-40% projected foliage cover; OR > 60% projected foliage cover but veg. condition reduced due to tree deaths (up to 20%).				
			Forest Red-tailed Black Cockatoo				
			Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands, with 30-40% projected foliage cover; OR > 60% projected foliage cover but veg. condition reduced due to tree deaths (up to 20%).				
	4	Moderate	Carnaby's Black Cockatoo				
			Native kwongan heath and shrubland, banksia or eucalypt woodlands with 20-30% projected foliage cover. Moderate percentage of tree deaths (30-40%).				
			Baudin's Black Cockatoo				
			Marri-Jarrah Forest or woodlands with 20-30% projected foliage cover; OR Marri-Jarrah Forest with 40-60% projected foliage cover but vegetation condition reduced due to tree deaths (up to 30-40%).				
			Forest Red-tailed Black Cockatoo				
			Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands with: 20-30% projected foliage cover; OR 40-60% projected foliage cover but veg. condition reduced due to tree deaths (up to 30-40%).				
	3	Low to moderate	Carnaby's Black Cockatoo				
			Native kwongan heath and shrubland, banksia or eucalypt woodlands with 10-20% projected foliage cover.				
			Baudin's Black Cockatoo				
			Marri-Jarrah Forest or woodlands with 5-20% projected foliage cover.				
			Forest Red-tailed Black Cockatoo				
			Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands with 5-20% projected foliage cover.				
2	Low	Carnaby's Black Cockatoo					
		Native kwongan heath and shrubland, banksia and eucalypt woodlands with <10% projected foliage cover; OR Paddocks and/or urban areas with scattered foraging trees such as banksias, marri.					
		Baudin's Black Cockatoo					
		Marri-Jarrah Forest or woodlands with 1-5% projected foliage cover; OR Paddocks and/or urban areas with scattered foraging trees such as banksia, hakea, dryandra.					

Vegetation condition and structure.	1	Negligible to low	Forest Red-tailed Black Cockatoo				
			Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands with 1-5% projected foliage cover; OR Paddocks and/or urban areas with scattered food plants such as Cape Lilac, <i>Eucalyptus caesia</i> and <i>E. erythrocorys</i> .				
Habitat features	0	None	All species				
			No Proteaceae, eucalypts or other potential sources of food. May include bare ground or developed sites devoid of vegetation (e.g. infrastructure, roads, gravel pits).				
<b>Totals</b>							

Site Context							
Proximity of the site in relation to other habitat.	3	Site is within 6km of known breeding site.	or	Site is within 12km of other foraging resources with site condition of at least 3.			
	2	Site is within 12km of known breeding site.	or	Site is within 15km of other foraging resources with site condition of at least 4.			
	1	Site is within 15km of known breeding site.	or	Site is between 15km and 20km of other foraging resources with site condition of at least 5.			
	0	Site is further than 15km from known breeding site.	or	Site is further than 20km from other foraging resources.			
<b>Totals</b>							

<b>Final Totals</b>								
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Indicator	Species Stocking Rate <sup>3</sup>		Impact Site			Offset Site		
	Yes	No	CBC	BBC	FRT	CBC	BBC	FRT
Confirm presence/absence of species.	Yes	Species is seen or reported regularly and/or there is abundant foraging evidence, e.g. chewed nuts can be identified as this species. Regularly is when the species is seen at intervals of every few days or weeks for at least several months of the year.	Yes		Yes			
	No	Species is recorded or reported very infrequently and there is little or no foraging evidence.						

<sup>3</sup> Species stocking rate is indicated by yes or no to confirm if any of the species is frequently present or not. If yes, the presence must be for the species being impacted by the proposal, not for a species that will not be impacted.

### Legend

If the site scores between 0-2 (low to no value) for site condition, 0 for the site context score, or is **No** for species stocking rate, it is extremely unlikely to be considered as suitable habitat. This would not be appropriate to use as an offset site.

The metrics used to determine Site Condition, Site Context, and Species Stocking Rate were developed by the Department of Climate Change, Energy, the Environment, and Water in consultation with species experts in WA.

A standard habitat quality scoring system for a species allocates scores out of 3 for both site condition and site context, and out of 4 for species stocking rate. However, as black cockatoos are very mobile, this HQS uses a score out of 7 for site condition and a score out of 3 for site context. Site condition is considered the key factor in determining the quality of habitat for these black cockatoo species. Species stocking rate is considered only in terms of presence or absence of the species and does not add to the total score. Note that the species, or strong indicators of the species, must be present, consistent with the presence/usage description above, for an offset to be considered suitable.



# Appendix B

Relevé Raw Data



Releve ID	Easting	Northing	Vegetation condition	Jarrah cover (%)	Tuart cover (%)	Banksia cover (%)	Allocasuarina cover (%)	Grasstree cover (%)	Other cover (%)
1	388043.6113	6475009.324	Degraded	15		30		5	
2	387959.8564	6475009.552	Degraded			15		5	Hakea 2%
3	387911.6466	6475044.642	Degraded			10		1	Hakea 1%
4	387791.5903	6475099.371	Good	20		3		40	
5	387827.7017	6475026.068	Good		35	2		25	Hakea 2%
6	387940.5932	6474955.374	Good	30		10		15	Hakea 2%
7	387966.9715	6474879.697	Good	55		2		15	
8	388025.0632	6474866.333	Very good			35		30	Melaleuca sp. 3%
9	388064.5443	6474875.891	Very good			30		40	Melaleuca sp. 5%
10	388035.0664	6474954.174	Good	45		7		30	
11	388095.2635	6474949.236	Good		15	30		35	Jacksonia furcellata 1%, Melaleuca sp. 2%
12	388112.1696	6474992.196	Good	30		5		20	Jacksonia furcellata 5%
13	388142.7325	6474940.125	Degraded			1			Jacksonia furcellata 5%
14	388168.7464	6474910.983	Degraded						Jacksonia furcellata 5%, Acacia sp. 10%
15	388095.1433	6474868.971	Very good	25		30		20	
16	388178.7935	6474863.169	Very good			40		10	Jacksonia furcellata 5%
17	388246.3017	6474847.159	Degraded	5		40		15	
18	388291.821	6474860.42	Completely degraded	3		1			Acacia saligna 5%
19	388275.946	6474894.317	Good	15		30		25	
20	388252.2974	6474894.535	Good	20		25		15	Jacksonia furcellata 1%
21	388236.0319	6474904.499	Good	2		10		10	Jacksonia furcellata 10%
22	388194.88	6474942.737	Degraded			2		3	Jacksonia furcellata 25%, Acacia saligna 5%
23	388183.8543	6475013.282	Very good	30		10		15	
24	388225.7602	6474984.647	Excellent			5		20	
25	388275.728	6474944.954	Excellent	7		10		15	
26	388296.1013	6475004.892	Good			5		10	
27	388262.1251	6475043.838	Very good	30		7		10	
28	388332.4932	6475021.061	Very good	5		25		10	
29	388385.9254	6475100.923	Very good	40		1		30	
30	388074.5764	6475079.073	Good	10	10	15	0	10	
31	387992.5666	6475114.87	Degraded	0	0	10	0	5	
32	387927.589	6475159.273	Good	30	10	10	0	25	Hakea divericata and Daviesia nudiflora 5%
33	387846.9362	6475135.587	Degraded	0	0	10	0	2	Hakea divaricata 25%
34	387787.9721	6475147.595	Degraded	15	0	15	0	10	Jacksonia furcellata 5%
35	387824.9752	6475205.66	Good	25	5	5	1	30	
36	387921.5151	6475208.454	Good	35	1	15	0	50	Daviesia divaricata and Daviesia nudiflora 2%
37	388023.9089	6475216.841	Good	1	0	4	0	5	Grevillea vestita 2%
38	388032.4531	6475167.424	Degraded	0	1	1	0	10	Jacksonia sericea 10%, Grevillea vestita 1%
39	388101.7238	6475165.292	Good	0	0	2	0	2	Jacksonia sericea 30%
40	388109.9562	6475128.625	Good	0	0	60	0	2	Pelargonium <1%, Grevillea vestita <1%
41	388102.1524	6475033.614	Good	0	0	40	0	0	Persoonia and Jacksonia furcellata 1%
42	388166.053	6475086.592	Very good	5	0	50	0	2	Jacksonia furcellata 1%
43	388180.864	6475179.156	Good	5	0	10	0	5	Grevillea vestita 10%
44	388153.3694	6475197.73	Good	0	0	40	0	30	Grevillea vestita 1%
45	388141.0411	6475235.641	Degraded	0	5	30	0	2	Grevillea vestita 1%, Pelargonium
46	388210.617	6475245.903	Degraded	0	0	5	0	1	Grevillea vestita 20%
47	388244.902	6475248.365	Degraded			20		10	Grevillea vestita 5%

**Releve Raw Data**  
**Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley**

Releve ID	Easting	Northing	Vegetation condition	Jarraah cover (%)	Tuart cover (%)	Banksia cover (%)	Allocasuarina cover (%)	Grasstree cover (%)	Other cover (%)
48	388280.9768	6475260.99	Degraded		50	10		2	
49					0	40	0	15	Daviesia divaricata, Daviesia nudiflora and Jacksonia sericea 2%
	388282.2061	6475217.774	Degraded	10					
50	388241.8923	6475218.712	Degraded	0	0	5	0	15	Grevillea vestita 5%
51	388255.02	6475196.80	Degraded			25		15	
52	388250.64	6475087.29	Very good	5	0	40	0	5	
53	388342.06	6475130.95	Very good	0	0	30	0	15	
54	388335.56	6475191.33	Very good	20	0	10	0	30	Daviesia nudiflora 1%
55	388346.79	6475221.80	Very good	40	0	2	0	40	
56	388380.15	6475253.58	Very good	30	0	5	0	30	
57	388443.53	6475235.41	Excellent	40	0	15	0	40	
58	388568.77	6475258.12	Very good	40	0	25	0	20	
59	388589.72	6475169.94	Completely degraded	0	0	<1	0	<1	Jacksonia sericea 2%
60	388515.06	6475171.31	Very good	30	0	10	0	40	
61	388529.77	6475096.40	Very good	30	0	10	1	30	Jacksonia furcellata and Jacksonia sternbergiana 1%
62	388531.78	6475022.35	Very good	20	0	10	0	15	Hakea prostrata 1%
63	388567.47	6474997.02	Very good	35	0	10	0	30	
64	388463.11	6474914.96	Very good	10	0	1	0	2	Hakea prostrata 2%
65	388509.63	6474980.93	Very good	20	0	20	0	10	Hakea prostrata 1%
66	388359.05	6474859.79	Very good	40	0	30	0	40	
67	388363.74	6474939.50	Excellent	40	0	20	0	30	
68	388450.33	6475018.38	Very good	25	0	20	0	10	
69	388467.29	6474868.25	Completely degraded	0	0	0		<5	
70	388444.35	6475069.76	Completely degraded	0	0	0	0	0	

Note: Jarrah = *Eucalyptus marginata* , marri=*Corymbia calophylla* , tuart=*Eucalyptus gomphocephala* , Banksia =*B . attenuata* , *B . menziesii* and/or *B . prionotes* , grasstree=*Xanthorrhoea preissii* .



# Appendix C

Habitat Quality Score – Black Cockatoos



**Black Cockatoo Habitat Quality Scoring System - Carnaby's Black Cockatoo**  
**Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley**

	Indicator	Applicable score	Foraging value	Details	Score - conservation area	Explanation
<b>Site condition</b>	Vegetation condition and structure. Habitat features	7	Very High	Native kwongan heath and shrubland (>30% projected foliage cover), banksia and eucalypt woodlands with >50% projected foliage cover. Low percentage (< 5%) of tree deaths <sup>2</sup> .		
		6	High	Native kwongan heath and shrubland (>25% projected foliage cover), banksia and eucalypt woodlands with >40% projected foliage cover. Low percentage (< 10%) of tree deaths.		
		5	Moderate to high	Native kwongan heath and shrubland (>20% projected foliage cover), banksia and eucalypt woodlands with 30-40% projected foliage cover; OR > 60% projected foliage cover but veg. condition reduced due to tree deaths (up to 20%).	5	Releve data, quadrat data and review of aerial imagery indicates approximately 40% projected foliage cover of jarrah and banksia trees.
		4	Moderate	Native kwongan heath and shrubland, banksia or eucalypt woodlands with 20-30% projected foliage cover. Moderate percentage of tree deaths (30-40%).		
		3	Low to moderate	Native kwongan heath and shrubland, banksia or eucalypt woodlands with 10-20% projected foliage cover.		
		2	Low	Native kwongan heath and shrubland, banksia and eucalypt woodlands with <10% projected foliage cover; OR Paddocks and/or urban areas with scattered foraging trees such as banksias, marri.		
		1	Negligible to low	Scattered specimens of known food plants but projected foliage cover of these is <2%. May include: paddocks or urban areas with scattered foraging trees.		
		0	None	No Proteaceae, eucalypts or other potential sources of food. May include bare ground or developed sites devoid of vegetation (e.g. infrastructure, roads, gravel pits).	0	
<b>Site condition total</b>					<b>5</b>	
<b>Site context</b>	Proximity of the site in relation to other habitat.	3	Site is within 6km of known breeding site.	or	Site is within 12km of other foraging resources with site condition of at least 3.	7 'potential' breeding sites occur within 6 km of the site but do not have confirmed breeding so no score applied. Other foraging resources of at least score of 3 occur within 12 km of the site and so score applies.
		2	Site is within 12km of known breeding site.	or	Site is within 15km of other foraging resources with site condition of at least 4.	
		1	Site is within 15km of known breeding site.	or	Site is between 15km and 20km of other foraging resources with site condition of at least 5.	
		0	Site is further than 15km from known breeding site.	or	Site is further than 20km from other foraging resources.	
	<b>Site context total</b>					<b>3</b>
<b>Species stocking rate<sup>^</sup></b>	Confirm presence/absence of species.	Yes	Species is seen or reported regularly and/or there is abundant foraging evidence, e.g. chewed nuts can be identified as this species. Regularly is when the species is seen at intervals of every few days or weeks for at least several months of the year.		Yes	Previous survey recorded evidence of individuals and secondary foraging evidence (chewed fruits)
		No	Species is recorded or reported very infrequently and there is little or no foraging evidence.			
<b>Final total out of 10</b>					<b>8</b>	

**Notes**

<sup>^</sup>Species stocking rate is indicated by yes or no to confirm if any of the species is frequently present or not. If yes, the presence must be for the species being impacted by the proposal, not for a species that will not be impacted.

If the site scores between 0-2 (low to no value) for site condition, 0 for the site context score, or is **No** for species stocking rate, it is extremely unlikely to be considered as suitable habitat. This would not be appropriate to use as an offset site.

The metrics used to determine Site Condition, Site Context, and Species Stocking Rate were developed by the Department of Climate Change, Energy, the Environment, and Water in consultation with species experts in WA.

A standard habitat quality scoring system for a species allocates scores out of 3 for both site condition and site context, and out of 4 for species stocking rate. However, as black cockatoos are very mobile, this HQS uses a score out of 7 for site condition and a score out of 3 for site context. Site condition is considered the key factor in determining the quality of habitat for these black cockatoo species. Species stocking rate is considered only in terms of presence or absence of the species and does not add to the total score. Note that the species, or strong indicators of the species, must be present, consistent with the presence/usage description above, for an offset to be considered suitable.

**Black Cockatoo Habitat Quality Scoring System - Forest Red-tailed Black Cockatoo**  
**Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley**

	Indicator	Applicable score	Foraging value	Details	Score - conservation area	Explanation
<b>Site condition</b>	Vegetation condition and structure. Habitat features	7	Very High	Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands, with >50% projected foliage cover. Low percentage (< 5%) of tree deaths.		
		6	High	Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands, with >40% projected foliage cover. Low percentage (< 10%) of tree deaths.		
		5	Moderate to high	Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands, with 30-40% projected foliage cover; OR > 60% projected foliage cover but veg. condition reduced due to tree deaths (up to 20%).		
		4	Moderate	Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands with: 20-30% projected foliage cover; OR 40-60% projected foliage cover but veg. condition reduced due to tree deaths (up to 30-40%).	4	Releve data, quadrat data and review of aerial imagery indicates approximately 25% projected foliage cover of jarrah and banksia trees.
		3	Low to moderate	Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands with 5-20% projected foliage cover.		
		2	Low	Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands with 1-5% projected foliage cover; OR Paddocks and/or urban areas with scattered food plants such as Cape Lilac, Eucalyptus caesia and E. erythrocorys.		
		1	Negligible to low	Scattered specimens of known food plants but projected foliage cover of these is <2%. May include: paddocks or urban areas with scattered foraging trees.		
		0	None	No Proteaceae, eucalypts or other potential sources of food. May include bare ground or developed sites devoid of vegetation (e.g. infrastructure, roads, gravel pits).		
<b>Site condition total</b>					<b>4</b>	
<b>Site context</b>	Proximity of the site in relation to other habitat.	3	Site is within 6km of known breeding site.	or Site is within 12km of other foraging resources with site condition of at least 3.	3	7 'potential' breeding sites occur within 6 km of the site but do not have confirmed breeding so no score applied. Other foraging resources of at least score of 3 occur within 12 km of the site and so score applies.
		2	Site is within 12km of known breeding site.	or Site is within 15km of other foraging resources with site condition of at least 4.		
		1	Site is within 15km of known breeding site.	or Site is between 15km and 20km of other foraging resources with site condition of at least 5.		
		0	Site is further than 15km from known breeding site.	or Site is further than 20km from other foraging resources.		
<b>Site context total</b>					<b>3</b>	
<b>Species stocking rate<sup>^</sup></b>	Confirm presence/absence of species.	Yes	Species is seen or reported regularly and/or there is abundant foraging evidence, e.g. chewed nuts can be identified as this species. Regularly is when the species is seen at intervals of every few days or weeks for at least several months of the year.		Yes	Previous survey recorded evidence of individuals and secondary foraging evidence (chewed fruits)
		No	Species is recorded or reported very infrequently and there is little or no foraging evidence.			
<b>Final total out of 10</b>					<b>7</b>	

**Notes**

<sup>^</sup>Species stocking rate is indicated by yes or no to confirm if any of the species is frequently present or not. If yes, the presence must be for the species being impacted by the proposal, not for a species that will not be impacted.

If the site scores between 0-2 (low to no value) for site condition, 0 for the site context score, or is **No** for species stocking rate, it is extremely unlikely to be considered as suitable habitat. This would not be appropriate to use as an offset site.

The metrics used to determine Site Condition, Site Context, and Species Stocking Rate were developed by the Department of Climate Change, Energy, the Environment, and Water in consultation with species experts in WA.

A standard habitat quality scoring system for a species allocates scores out of 3 for both site condition and site context, and out of 4 for species stocking rate. However, as black cockatoos are very mobile, this HQS uses a score out of 7 for site condition and a score out of 3 for site context. Site condition is considered the key factor in determining the quality of habitat for these black cockatoo species. Species stocking rate is considered only in terms of presence or absence of the species and does not add to the total score. Note that the species, or strong indicators of the species, must be present, consistent with the presence/usage description above, for an offset to be considered suitable.

**Black Cockatoo Habitat Quality Scoring System - Forest Red-tailed Black Cockatoo**  
**Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley**

	Indicator	Applicable score	Foraging value	Details	Score - residential development area	Explanation
<b>Site condition</b>	Vegetation condition and structure. Habitat features	7	Very High	Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands, with >50% projected foliage cover. Low percentage (< 5%) of tree deaths.		
		6	High	Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands, with >40% projected foliage cover. Low percentage (< 10%) of tree deaths.		
		5	Moderate to high	Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands, with 30-40% projected foliage cover; OR > 60% projected foliage cover but veg. condition reduced due to tree deaths (up to 20%).		
		4	Moderate	Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands with: 20-30% projected foliage cover; OR 40-60% projected foliage cover but veg. condition reduced due to tree deaths (up to 30-40%).	4	Releve data, quadrat data and review of aerial imagery indicates approximately 25% projected foliage cover of jarrah and banksia trees.
		3	Low to moderate	Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands with 5-20% projected foliage cover.		
		2	Low	Marri-Jarrah-Karri Forest, other eucalypt woodlands, or allocasuarina woodlands with 1-5% projected foliage cover; OR Paddocks and/or urban areas with scattered food plants such as Cape Lilac, Eucalyptus caesia and E. erythrocorys.		
		1	Negligible to low	Scattered specimens of known food plants but projected foliage cover of these is <2%. May include: paddocks or urban areas with scattered foraging trees.		
		0	None	No Proteaceae, eucalypts or other potential sources of food. May include bare ground or developed sites devoid of vegetation (e.g. infrastructure, roads, gravel pits).		
<b>Site condition total</b>					<b>4</b>	
<b>Site context</b>	Proximity of the site in relation to other habitat.	3	Site is within 6km of known breeding site.	or Site is within 12km of other foraging resources with site condition of at least 3.	3	7 'potential' breeding sites occur within 6 km of the site but do not have confirmed breeding so no score applied. Other foraging resources of at least score of 3 occur within 12 km of the site and so score applies.
		2	Site is within 12km of known breeding site.	or Site is within 15km of other foraging resources with site condition of at least 4.		
		1	Site is within 15km of known breeding site.	or Site is between 15km and 20km of other foraging resources with site condition of at least 5.		
		0	Site is further than 15km from known breeding site.	or Site is further than 20km from other foraging resources.		
<b>Site context total</b>					<b>3</b>	
<b>Species stocking rate<sup>^</sup></b>	Confirm presence/absence of species.	Yes	Species is seen or reported regularly and/or there is abundant foraging evidence, e.g. chewed nuts can be identified as this species. Regularly is when the species is seen at intervals of every few days or weeks for at least several months of the year.		Yes	Previous survey recorded evidence of individuals and secondary foraging evidence (chewed fruits)
		No	Species is recorded or reported very infrequently and there is little or no foraging evidence.			
<b>Final total out of 10</b>					<b>7</b>	

**Notes**

<sup>^</sup>Species stocking rate is indicated by yes or no to confirm if any of the species is frequently present or not. If yes, the presence must be for the species being impacted by the proposal, not for a species that will not be impacted.

If the site scores between 0-2 (low to no value) for site condition, 0 for the site context score, or is **No** for species stocking rate, it is extremely unlikely to be considered as suitable habitat. This would not be appropriate to use as an offset site.

The metrics used to determine Site Condition, Site Context, and Species Stocking Rate were developed by the Department of Climate Change, Energy, the Environment, and Water in consultation with species experts in WA.

A standard habitat quality scoring system for a species allocates scores out of 3 for both site condition and site context, and out of 4 for species stocking rate. However, as black cockatoos are very mobile, this HQS uses a score out of 7 for site condition and a score out of 3 for site context. Site condition is considered the key factor in determining the quality of habitat for these black cockatoo species. Species stocking rate is considered only in terms of presence or absence of the species and does not add to the total score. Note that the species, or strong indicators of the species, must be present, consistent with the presence/usage description above, for an offset to be considered suitable.

**Black Cockatoo Habitat Quality Scoring System - Carnaby's Black Cockatoo**  
**Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley**

	Indicator	Applicable score	Foraging value	Details	Score - residential development area	Explanation
<b>Site condition</b>	Vegetation condition and structure. Habitat features	7	Very High	Native kwongan heath and shrubland (>30% projected foliage cover), banksia and eucalypt woodlands with >50% projected foliage cover. Low percentage (< 5%) of tree deaths <sup>2</sup> .		
		6	High	Native kwongan heath and shrubland (>25% projected foliage cover), banksia and eucalypt woodlands with >40% projected foliage cover. Low percentage (< 10%) of tree deaths.		
		5	Moderate to high	Native kwongan heath and shrubland (>20% projected foliage cover), banksia and eucalypt woodlands with 30-40% projected foliage cover; OR > 60% projected foliage cover but veg. condition reduced due to tree deaths (up to 20%).	5	Releve data, quadrat data and review of aerial imagery indicates approximately 40% projected foliage cover of jarrah and banksia trees.
		4	Moderate	Native kwongan heath and shrubland, banksia or eucalypt woodlands with 20-30% projected foliage cover. Moderate percentage of tree deaths (30-40%).		
		3	Low to moderate	Native kwongan heath and shrubland, banksia or eucalypt woodlands with 10-20% projected foliage cover.		
		2	Low	Native kwongan heath and shrubland, banksia and eucalypt woodlands with <10% projected foliage cover; OR Paddocks and/or urban areas with scattered foraging trees such as banksias, marri.		
		1	Negligible to low	Scattered specimens of known food plants but projected foliage cover of these is <2%. May include: paddocks or urban areas with scattered foraging trees.		
		0	None	No Proteaceae, eucalypts or other potential sources of food. May include bare ground or developed sites devoid of vegetation (e.g. infrastructure, roads, gravel pits).	0	
<b>Site condition total</b>					<b>5</b>	
<b>Site context</b>	Proximity of the site in relation to other habitat.	3	Site is within 6km of known breeding site.	or	Site is within 12km of other foraging resources with site condition of at least 3.	7 'potential' breeding sites occur within 6 km of the site but do not have confirmed breeding so no score applied. Other foraging resources of at least score of 3 occur within 12 km of the site and so score applies.
		2	Site is within 12km of known breeding site.	or	Site is within 15km of other foraging resources with site condition of at least 4.	
		1	Site is within 15km of known breeding site.	or	Site is between 15km and 20km of other foraging resources with site condition of at least 5.	
		0	Site is further than 15km from known breeding site.	or	Site is further than 20km from other foraging resources.	
	<b>Site context total</b>					<b>3</b>
<b>Species stocking rate<sup>^</sup></b>	Confirm presence/absence of species.	Yes	Species is seen or reported regularly and/or there is abundant foraging evidence, e.g. chewed nuts can be identified as this species. Regularly is when the species is seen at intervals of every few days or weeks for at least several months of the year.		Yes	Previous survey recorded evidence of individuals and secondary foraging evidence (chewed fruits)
		No	Species is recorded or reported very infrequently and there is little or no foraging evidence.			
<b>Final total out of 10</b>					<b>8</b>	

**Notes**

<sup>^</sup>Species stocking rate is indicated by yes or no to confirm if any of the species is frequently present or not. If yes, the presence must be for the species being impacted by the proposal, not for a species that will not be impacted.

If the site scores between 0-2 (low to no value) for site condition, 0 for the site context score, or is **No** for species stocking rate, it is extremely unlikely to be considered as suitable habitat. This would not be appropriate to use as an offset site.

The metrics used to determine Site Condition, Site Context, and Species Stocking Rate were developed by the Department of Climate Change, Energy, the Environment, and Water in consultation with species experts in WA.

A standard habitat quality scoring system for a species allocates scores out of 3 for both site condition and site context, and out of 4 for species stocking rate. However, as black cockatoos are very mobile, this HQS uses a score out of 7 for site condition and a score out of 3 for site context. Site condition is considered the key factor in determining the quality of habitat for these black cockatoo species. Species stocking rate is considered only in terms of presence or absence of the species and does not add to the total score. Note that the species, or strong indicators of the species, must be present, consistent with the presence/usage description above, for an offset to be considered suitable.



# Appendix D

Woodman Environmental (2018) Banksia Woodlands TEC  
Habitat Quality Framework



**Banksia woodland TEC habitat quality scoring framework (based on Woodman 2018)**

<b>Habitat Quality Scoring Framework</b>		<b>Score – Impact Site</b>	<b>Score – Offset site 1 - start</b>	<b>Score – Offset site 1 – without</b>	<b>Score – Offset site 1 - with</b>
<b>Site Condition (70%)</b>	<b>Vegetation condition (Keighery 1994)</b> <ul style="list-style-type: none"> <li>- Pristine (100)</li> <li>- Excellent (80)</li> <li>- Very good (60)</li> <li>- Good (40)</li> <li>- Degraded (20)</li> <li>- Completely Degraded (0)</li> </ul>				
	<b>Species Richness</b> <ul style="list-style-type: none"> <li>- Average native species richness within the top half of recorded range for the TEC (10)</li> <li>- Average native species richness within the bottom half of recorded range for the TEC (0)</li> </ul>				
	<b>Presence of Threatened taxa</b> <ul style="list-style-type: none"> <li>- Patch is critical habitat for, and hosts Threatened taxa (10)</li> <li>- Patch is critical habitat for Threatened taxa (5)</li> </ul>				

	<ul style="list-style-type: none"> <li>- Patch is not critical habitat for Threatened taxa (0)</li> </ul>				
	<p><b>Contains State listed TEC/PEC</b></p> <ul style="list-style-type: none"> <li>- Patch contains WA FCT listed as State TEC (20)</li> <li>- Patch contains WA FCT listed as State PEC (10)</li> <li>- Patch does not contain WA FCT listed as either TEC or PEC (0)</li> </ul>				
	<p><b>Presence of Dieback</b></p> <ul style="list-style-type: none"> <li>- Patch is dieback free (10)</li> <li>- Patch is partly dieback free (5)</li> <li>- Patch is dieback infested (0)</li> </ul>				
	<b>Condition total (out of 150)</b>				
	<b>Condition Score (Condition total / 150 * 70)</b>				

Habitat quality scoring framework	Score – Impact site	Score – Offset site 1 - start	Score – Offset site 1 – without	Score – Offset site 1 - with
Connectivity				

<b>Site Context (30%)</b>	<ul style="list-style-type: none"> <li>- Patch is continuous with remnant vegetation and forms a corridor that links different landscape units (30)</li> <li>- Patch is continuous with remnant vegetation that forms a medium to large local remnant (20)</li> <li>- Patch is within 1km of other medium to large remnants (10)</li> <li>- Patch is within 12km of other significant remnants and contributes to support of significant avifauna (i.e. known Black Cockatoo Breeding sites are located within 12km) (5)</li> <li>- Patch does not meet any of the above criteria (0)</li> </ul>				
	<b>Patch size</b> <ul style="list-style-type: none"> <li>- 20 hectares or more (50)</li> <li>- 10-20 hectares (40)</li> </ul>				

	<ul style="list-style-type: none"> <li>- 5-10 hectares (30)</li> <li>- 2-5 hectares (20)</li> <li>- Less than 2 hectares (10)</li> </ul>				
	<b>Site location and risk</b> <ul style="list-style-type: none"> <li>- Patch is located in an area where the TEC has been extensively cleared (10)</li> </ul>				
	<b>Site location and risk</b> <ul style="list-style-type: none"> <li>- Patch is located at the geographical edge of the recorded range (10)</li> </ul>				
	<b>Context total (out of 100)</b>				
	<b>Context Score (Context total / 100 * 30)</b>				
<b>Quality total (out of 100)</b>	<b>Condition Score + Context Score</b>				
<b>Final Patch Habitat Quality Score (out of 10)</b>	<b>Quality total / 10</b>				
<b>Weighted Patch Score</b>	<b>Final Patch Habitat Quality Score * area of patch (hectares)</b>	Not used, as have averaged across all patches	Not used, as have averaged across patches		
<b>Site Habitat Quality Score (out of 10)</b>	<b>All Weighted Patch Scores / total impact area</b>	As above	As above		

Sources: BORR South Offset Strategy (September 2022); BORR Southern Section Vegetation and Flora Study (BORR IPT 2020; impact site); Lots 153, 267 & 268 Ducane Road, Banksia Woodlands TEC Assessment (Biota Environmental Services, March 2021); revised BORR South Offset Strategy (December 2022), Appendix B in revised Offset Strategy (HQS for MNES); Appendix L in revised Offset Strategy (Broadscale dieback assessment of proposed offset sites for BORR – Terratree 2022 – note this is only preliminary, so final results are required).

# Appendix E

Habitat Quality Score – Banksia Woodlands TEC



**Banksia woodland TEC habitat quality scoring framework (Woodman 2018)**  
**Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley**

Habitat quality scoring framework		Score - Conservation area	Explanation (site)
Site condition (70%)	<b>Vegetation condition (Keighery 1994)</b> -Pristine (100) -Excellent (80) -Very good (60) -Good (40) -Degraded (20) -Completely degraded (0)	59	2.6 ha (16%) in 'excellent' condition, 11.11 ha (69%) in 'very good', 1.04 ha (6%) in 'good' condition and 1.33 ha (8%) in degraded condition. Weighted average of 59 applied (rounded up)
	<b>Species richness</b> - Average native species richness within top half of recorded range for the TEC (10) - Average native species richness within the bottom half of recorded range for the TEC (0)	0	The native species richness for floristic community type (FCT) 28 ranges from 23 to 80 species per 10x10 sample and from 57 to 74 for FCT 20a (Gibson 1994). An average of 37 native species were recorded from samples within FCT 28 and an average of 46 native species were recorded from samples within FCT 20a in the conservation area. Therefore, the native species richness recorded from the residential development area lies in the bottom half of the recorded range for both FCTs.
	<b>Presence of threatened taxa</b> - Patch is critical habitat for, and hosts threatened taxa (10) - Patch is critical habitat for threatened taxa (5) - Patch is not critical habitat for threatened taxa (0)	10	The vegetation in the conservation area provides foraging habitat for <i>Zanda latirostris</i> (Carnaby's cockatoo) and <i>Calyptorhynchus banksii naso</i> (forest red-tailed black cockatoo) which are listed as threatened under EPBC and BC Act. Carnaby's cockatoo was observed within the conservation area and evidence of foraging by both species was also observed.
	<b>Contains State listed TEC/PEC</b> - Patch contains WA FCT listed as State TEC (20) - Patch contains a WA FCT listed as State PEC (10) - Patch does not contain a WA FCT listed as either TEC or PEC (0)	20	Part of the vegetation in the impact area comprises FCT 20a which is a State listed TEC.
	<b>Presence of dieback</b> -Patch is dieback free (10) -Patch is partly dieback free (5) -Patch is dieback infested (0)	5	No formal dieback testing was undertaken and so the status of dieback within the site is unconfirmed. As a medium measure the site is assumed to be at least partially dieback free.
	Site condition total (out of 150)	94	
	Site condition score (site condition total / 150)*70	43.87	
Site context (30%)	- Patch is continuous with remnant vegetation and forms a corridor that links different landscape units (30) - Patch is continuous with remnant vegetation that forms a medium to large local remnant (20) - Patch is within 1 km of other medium to large remnants (10) - Patch is within 12 km of other significant remnants and contributes to support of significant avifauna (i.e. known Black Cockatoo Breeding sites are located within 12 km) (5) - Patch does not meet any of the above criteria (0)	10	The vegetation associated with the conservation area is isolated on the basis of roads separating it from larger patches of vegetation to the north and east and it does not link areas of vegetation or landscape units. The patch is within 1km of other medium to large remnants, including remnants likely to represent the banksia woodland TEC.
	<b>Patch size</b> - 20 hectares or more (50) - 10-20 hectares (40) - 5-10 hectares (30) - 2-5 hectares (20) - Less than 2 hectares (10)	50	The banksia woodland TEC within the conservation area forms part of a larger patch of the TEC which is over 20 ha in size.
	<b>Site location and risk</b> - Patch is located in an area where the TEC has been extensively cleared (10)	10	The banksia woodland TEC has been cleared extensively for residential development in the wider local area of the site.
	<b>Site location and risk</b> - Patch is located at the geographical edge of the recorded range (10)	0	The site is located relatively central within the distribution of the banksia woodland TEC.
	Site context total (out of 100)	70	
	Site context score (site context total / 100)*30	21	
Site condition score + Site context score		64.87	
Quality total (out of 10)		6.5	

**Banksia woodland TEC habitat quality scoring framework (Woodman 2018)**  
**Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley**

Habitat quality scoring framework		Score - Residential development area	Explanation (site)
Site condition (70%)	<b>Vegetation condition (Keighery 1994)</b> -Pristine (100) -Excellent (80) -Very good (60) -Good (40) -Degraded (20) -Completely degraded (0)	36	1.05 ha (9%) in 'very good' condition, 6.83 ha (56%) in 'good' and 4.41 ha (36%) in degraded condition. Weighted average of 36 applied (rounded down)
	<b>Species richness</b> - Average native species richness within top half of recorded range for the TEC (10) - Average native species richness within the bottom half of recorded range for the TEC (0)	0	The native species richness for floristic community type (FCT) 28 ranges from 23 to 80 species per 10x10 sample and from 31 to 54 for FCT 21c (Gibson 1994). An average of 34 native species were recorded from samples within FCT 28 and an average of 35 native species were recorded from samples within FCT 21c in the residential development area. Therefore, the native species richness recorded from the residential development area lies in the bottom half of the recorded range for both FCTs.
	<b>Presence of threatened taxa</b> - Patch is critical habitat for, and hosts threatened taxa (10) - Patch is critical habitat for threatened taxa (5) - Patch is not critical habitat for threatened taxa (0)	10	The vegetation in the residential development area provides foraging habitat for <i>Zanda latirostris</i> (Carnaby's cockatoo) and <i>Calyptorhynchus banksii naso</i> (forest red-tailed black cockatoo) which are listed as threatened under EPBC and BC Act. Evidence of foraging by both species was observed within the residential development area.
	<b>Contains State listed TEC/PEC</b> - Patch contains WA FCT listed as State TEC (20) - Patch contains a WA FCT listed as State PEC (10) - Patch does not contain a WA FCT listed as either TEC or PEC (0)	10	Part of the vegetation in the residential development area comprises FCT 21c which is a State listed PEC.
	<b>Presence of dieback</b> -Patch is dieback free (10) -Patch is partly dieback free (5) -Patch is dieback infested (0)	5	No formal dieback testing was undertaken and so the status of dieback within the site is unconfirmed. As a medium measure the site is assumed to be at least partially dieback free.
	Site condition total (out of 150) Site condition score (site condition total / 150)*70	61 28.47	
Site context (30%)	- Patch is continuous with remnant vegetation and forms a corridor that links different landscape units (30) - Patch is continuous with remnant vegetation that forms a medium to large local remnant (20) - Patch is within 1 km of other medium to large remnants (10) - Patch is within 12 km of other significant remnants and contributes to support of significant avifauna (i.e. known Black Cockatoo Breeding sites are located within 12 km) (5) - Patch does not meet any of the above criteria (0)	10	The vegetation associated with the residential development area is isolated on the basis of roads separating it from larger patches of vegetation to the north and east and it does not link areas of vegetation or landscape units. The patch is within 1km of other medium to large remnants, including remnants likely to represent the banksia woodland TEC.
	<b>Patch size</b> - 20 hectares or more (50) - 10-20 hectares (40) - 5-10 hectares (30) - 2-5 hectares (20) - Less than 2 hectares (10)	50	The banksia woodland TEC within the residential development area forms part of a larger patch of the TEC which is over 20 ha in size.
	<b>Site location and risk</b> - Patch is located in an area where the TEC has been extensively cleared (10)	10	The banksia woodland TEC has been cleared extensively for residential development in the wider local area of the site.
	<b>Site location and risk</b> - Patch is located at the geographical edge of the recorded range (10)	0	The site is located relatively central within the distribution of the banksia woodland TEC.
	Site context total (out of 100) Site context score (site context total / 100)*30	70 21	
	Site condition score + Site context score Quality total (out of 10)	49.47 4.9	

**Banksia woodland TEC habitat quality scoring framework (Woodman 2018)**  
**Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley**

Habitat quality scoring framework		Score - Residential development area adjusted	Explanation (site)
Site condition (70%)	<b>Vegetation condition (Keighery 1994)</b> -Pristine (100) -Excellent (80) -Very good (60) -Good (40) -Degraded (20) -Completely degraded (0)	49	6.687 ha (54%) in 'very good' condition, 4.699 ha (38%) in 'good' condition and 0.900 ha (7%) in degraded condition. Weighted score of 49 applied.
	<b>Species richness</b> - Average native species richness within top half of recorded range for the TEC (10) - Average native species richness within the bottom half of recorded range for the TEC (0)	0	The native species richness for floristic community type (FCT) 28 ranges from 23 to 80 species per 10x10 sample and from 31 to 54 for FCT 21c (Gibson 1994). An average of 34 native species were recorded from samples within FCT 28 and an average of 35 native species were recorded from samples within FCT 21c in the residential development area. Therefore, the native species richness recorded from the residential development area lies in the bottom half of the recorded range for both FCTs.
	<b>Presence of threatened taxa</b> - Patch is critical habitat for, and hosts threatened taxa (10) - Patch is critical habitat for threatened taxa (5) - Patch is not critical habitat for threatened taxa (0)	10	The vegetation in the residential development area provides foraging habitat for <i>Zanda latirostris</i> (Carnaby's cockatoo) and <i>Calyptrorhynchus banksii naso</i> (forest red-tailed black cockatoo) which are listed as threatened under EPBC and BC Act. Evidence of foraging by both species was observed within the residential development area.
	<b>Contains State listed TEC/PEC</b> - Patch contains WA FCT listed as State TEC (20) - Patch contains a WA FCT listed as State PEC (10) - Patch does not contain a WA FCT listed as either TEC or PEC (0)	10	Part of the vegetation in the residential development area comprises FCT 21c which is a State listed PEC.
	<b>Presence of dieback</b> -Patch is dieback free (10) -Patch is partly dieback free (5) -Patch is dieback infested (0)	5	No formal dieback testing was undertaken and so the status of dieback within the site is unconfirmed. As a medium measure the site is assumed to be at least partially dieback free.
	Site condition total (out of 150)	74	
	Site condition score (site condition total / 150)*70	34.53	
Site context (30%)	- Patch is continuous with remnant vegetation and forms a corridor that links different landscape units (30) - Patch is continuous with remnant vegetation that forms a medium to large local remnant (20) - Patch is within 1 km of other medium to large remnants (10) - Patch is within 12 km of other significant remnants and contributes to support of significant avifauna (i.e. known Black Cockatoo Breeding sites are located within 12 km) (5) - Patch does not meet any of the above criteria (0)	10	The vegetation associated with the residential development area is isolated on the basis of roads separating it from larger patches of vegetation to the north and east and it does not link areas of vegetation or landscape units. The patch is within 1km of other medium to large remnants, including remnants likely to represent the banksia woodland TEC.
	<b>Patch size</b> - 20 hectares or more (50) - 10-20 hectares (40) - 5-10 hectares (30) - 2-5 hectares (20) - Less than 2 hectares (10)	50	The banksia woodland TEC within the residential development area forms part of a larger patch of the TEC which is over 20 ha in size.
	<b>Site location and risk</b> - Patch is located in an area where the TEC has been extensively cleared (10)	10	The banksia woodland TEC has been cleared extensively for residential development in the wider local area of the site.
	<b>Site location and risk</b> - Patch is located at the geographical edge of the recorded range (10)	0	The site is located relatively central within the distribution of the banksia woodland TEC.
	Site context total (out of 100)	70	
	Site context score (site context total / 100)*30	21	
Site condition score + Site context score		55.53	
Quality total (out of 10)		5.6	

# Appendix F

Habitat Quality Scores - Proposed Management Areas



**Banksia woodland TEC habitat quality scoring framework (Woodman 2018)**  
**Part Lot 802 Erindale Road, Lot 1 and Lot 803 Wanneroo Road, Hamersley**

Habitat quality scoring framework		Management area and score											
		1	2	3	4	5	6	7	8	9	10	11	12
Site condition (70%)	<b>Vegetation condition (Keighery 1994)</b> -Pristine (100) -Excellent (80) -Very good (60) -Good (40) -Degraded (20) -Completely degraded (0)	20	20	40	21	0	40	19	20	40	0	0	0
	<b>Species richness</b> - Average native species richness within top half of recorded range for the TEC (10) - Average native species richness within the bottom half of recorded range for the TEC (0)	0	0	0	0	0	0	0	0	0	0	0	0
	<b>Presence of threatened taxa</b> - Patch is critical habitat for, and hosts threatened taxa (10) - Patch is critical habitat for threatened taxa (5) - Patch is not critical habitat for threatened taxa (0)	10	10	10	10	0	10	10	10	10	0	0	0
	<b>Contains State listed TEC/PEC</b> - Patch contains WA FCT listed as State TEC (20) - Patch contains a WA FCT listed as State PEC (10) - Patch does not contain a WA FCT listed as either TEC or PEC (0)	0	0	0	0	0	0	0	0	20	0	0	0
	<b>Presence of dieback</b> -Patch is dieback free (10) -Patch is partly dieback free (5) -Patch is dieback infested (0)	5	5	5	5	5	5	5	5	5	5	5	5
	Site condition total (out of 150)	35	35	55	36	5	55	34	35	75	5	5	5
	Site condition score (site condition total / 150)*70	16.33	16.33	25.67	16.80	2.33	25.67	15.87	16.33	35.00	2.33	2.33	2.33
Site context (30%)	- Patch is continuous with remnant vegetation and forms a corridor that links different landscape units (30) - Patch is continuous with remnant vegetation that forms a medium to large local remnant (20) - Patch is within 1 km of other medium to large remnants (10) - Patch is within 12 km of other significant remnants and contributes to support of significant avifauna (i.e. known Black Cockatoo Breeding sites are located within 12 km) (5) - Patch does not meet any of the above criteria (0)	10	10	10	10	10	10	10	10	10	10	10	10
	<b>Patch size</b> - 20 hectares or more (50) - 10-20 hectares (40) - 5-10 hectares (30) - 2-5 hectares (20) - Less than 2 hectares (10)	50	50	50	50	50	50	50	50	50	50	50	50
	<b>Site location and risk</b> - Patch is located in an area where the TEC has been extensively cleared (10)	10	10	10	10	10	10	10	10	10	10	10	10
	<b>Site location and risk</b> - Patch is located at the geographical edge of the recorded range (10)	0	0	0	0	0	0	0	0	0	0	0	0
	Site context total (out of 100)	70	70	70	70	70	70	70	70	70	70	70	70
	Site context score (site context total / 100)*30	21	21	21	21	21	21	21	21	21	21	21	21
Site condition score + Site context score		37.33	37.33	46.67	37.80	23.33	46.67	36.87	37.33	56.00	23.33	23.33	23.33
Quality total (out of 10)		3.7	3.7	4.7	3.8	2.3	4.7	3.7	3.7	5.6	2.3	2.3	2.3



# Appendix C

Draft Conservation Agreement



# CONSERVATION AGREEMENT

Between

The Minister for the Environment and Water on behalf  
of the Commonwealth of Australia (**Minister**)

and

BAI Communications Pty Ltd (trading as Broadcast  
Australia) (ABN 99 086 048 562) (**Participant**)

in relation to

the protection and conservation of the Carnaby's Cockatoo  
(*Calyptorhynchus latirostris*) and Forest Red-tailed Black  
Cockatoo (*Calyptorhynchus latirostris*) through the preservation  
of Banksia Woodlands of the Swan Coast Plain Threatened  
Ecological Community

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## DETAILS

This CONSERVATION AGREEMENT is made on

2022.

### Parties

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1. The Minister for the Environment and Water on behalf of the Commonwealth (the **Minister**).
2. BAI Communications Pty Ltd (trading as Broadcast Australia) (ABN 99 086 048 562) (the **Participant**).

### Recitals

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- A. Subsection 305(1) of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (**EPBC Act**) provides that the Minister may, on behalf of the Commonwealth, enter into a conservation agreement for the protection and conservation of biodiversity in the Australian jurisdiction.
- B. The Participant is the owner of land described as:
  - (a) Lot 803 on Deposited Plan 413932, Wanneroo Road, Hamersley (Volume 2959 Folio 716) (**Lot 803**); and
  - (b) Lot 1 on Diagram 9162, Wanneroo Road, Hamersley (Volume 2624 Folio 437) (**Lot 1**).
- C. Digital 4 Pty Ltd, a wholly owned subsidiary of the Participant, is the owner of Lot 802 on Deposited Plan 413932, Erindale Road, Hamersley (Volume 2959 Folio 715) (**Lot 802**).
- D. Digital 4 Pty Ltd, on behalf of the Participant, intends to rezone Lot 802 from 'Local Reserve: Public Use Reserve' to 'Development Zone' to facilitate urban, including residential, development on Lot 802.
- E. The urban development of Lot 802 will result in the clearing of approximately 12.29 hectares of native vegetation on Lot 802 and Lot 803. Of the 12.9 hectares of native vegetation to be cleared, 11.22 hectares will be completely cleared and 1.07 hectares will be partially cleared to provide for an Asset Protection Zone on Lot 803.
- F. The clearing of native vegetation on Lots 802 and 803 will impact Carnaby's Cockatoo (*Calyptorhynchus latirostris*), Forest Red-tailed Black Cockatoo (*Calyptorhynchus latirostris*) as the native vegetation contains the Threatened Ecological Community Banksia Woodlands of the Swan Coastal Plain.
- G. Due to the impacts of the clearing on native vegetation on Lots 802 and 803, the Minister and the Participant have agreed to enter into a conservation agreement (**Agreement**).

to allocate 19.66 hectares within Lot 803 and Lot 1 as a conservation area to retain 16.22ha of native vegetation (**Conservation Area**).

H. The Conservation Area is to be protected and managed under this agreement.

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# AGREED TERMS

## 1. Definitions and Interpretation

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### 1.1 Definitions

In this Agreement, except where the contrary intention is expressed, terms have the meaning they are given in the EPBC Act and otherwise the following definitions are used:

<b>Action</b>	the activity described in Recital E
<b>Agreement</b>	this conservation agreement between the Minister and the Participant, as amended from time to time in accordance with section 308 of the EPBC Act or clause 10.3 and includes its Schedules and any Annexures
<b>Agreement Details</b>	set out in Schedule 1
<b>Agreement Period</b>	the period specified in clause 2
<b>Business Day</b>	in relation to the doing of any action in a place, any day other than a Saturday, Sunday or public holiday in that place
<b>Commonwealth</b>	the Commonwealth of Australia
<b>Conservation Area</b>	the area set out in Figure 1.1 of the Conservation Area Management Plan contained in Schedule 2
<b>Conservation Area Management Plan</b>	the Conservation Area Management Plan by JBS&G Australia Pty Ltd T/A Strategen-JBS&G dated 31 May 2022
<b>Conservation Area Management Plan Objectives</b>	the objectives identified in clause 1.3 of the Conservation Area Management Plan
<b>Department</b>	the Commonwealth agency responsible for administering the EPBC Act, currently the Department of Climate Change, Energy the Environment and Water
<b>Department Representative</b>	the person from time to time performing the duties of the position identified in Item 2 of the Agreement Details

<b>Electronic Communication</b>	has the same meaning as in the <i>Electronic Transactions Act 1999</i> (Cth)
<b>End Date</b>	the date specified in Item 5 of the Agreement Details
<b>EPBC Act</b>	the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth)
<b>EPBC Regulations</b>	the <i>Environment Protection and Biodiversity Conservation Regulations 2000</i> (Cth)
<b>Insolvency Event</b>	in respect of a party means: <ul style="list-style-type: none"><li>(a) if the party:<ul style="list-style-type: none"><li>(i) makes an assignment of its estate for the benefit of creditors or enters into any arrangement or composition with its creditors; or</li><li>(ii) suffers any execution against its assets which has or will have an adverse effect on its ability to perform this Agreement; or</li></ul></li><li>(b) if the party is an incorporated entity:<ul style="list-style-type: none"><li>(i) being insolvent;</li><li>(ii) an administrator, liquidator, provisional liquidator, receiver, manager or controller under the <i>Corporations Act 2001</i> (Cth) being appointed to the party; or</li><li>(iii) an order being made for the winding up of the party; or</li></ul></li><li>(c) if the party is an individual:<ul style="list-style-type: none"><li>(i) being bankrupt; or</li><li>(ii) entering into a scheme of arrangement with creditors;</li><li>(iii) a mortgagee's or a chargee's agent being appointed.</li></ul></li></ul>
<b>Minister</b>	the Minister administering the EPBC Act or a delegate of the Minister pursuant to section 515(1) of the EPBC Act
<b>Participant Representative</b>	the person identified in Item 4 of the Agreement Details
<b>Purchase Price</b>	funds required to purchase the Conservation Area and provide for any Significant Measures

**Significant Impact** the impact of actions as described under the EPBC Act and the Department's EPBC Act policy statement as amended or replaced, currently referred to as Matters of National Environmental Significance Significant Impact Guidelines 1.1, 2013

**Significant Measures** measures taken to conserve the Conservation Area indefinitely which are acceptable to the Minister or her delegate, including permanent protection and long term management to maintain its biodiversity values

## 1.2 Interpretation

- (a) This Agreement commences on the date of the execution by the last party.
- (b) This Agreement ends on and ceases to be of any effect on the earlier of:
  - (i) the End Date;
  - (ii) the date the parties subsequently agree in writing that this Agreement should end; or
  - (iii) the date this Agreement is terminated under clause 10.

## 2. Agreement Period

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- (a) This Agreement commences on the date of the execution by the last party.
- (b) This Agreement ends on and ceases to be of any effect on the earlier of:
  - (i) the End Date;
  - (ii) the date the parties subsequently agree in writing that this Agreement should end; or
  - (iii) the date this Agreement is terminated under clause 10.

## 3. Priority of documents

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If there is any inconsistency between any of the documents forming part of this Agreement those documents will be interpreted in the following order of priority to the extent of the inconsistency:

- (a) the 'Agreed terms' of this Agreement (being clauses 1 through to 13);

- (b) the Schedule(s) in their order of appearance;
- (c) any Annexure(s) in their order of appearance; and
- (d) documents incorporated by reference in this Agreement.

## **4. Protection and conservation of the Conservation Area**

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### **4.1 Obligation to adhere to the Conservation Area Management Plan**

The Participant must adhere to the Conservation Area Management Plan:

- (a) in accordance with all applicable Laws;
- (b) so as to deliver the Conservation Area Management Plan Objectives and meet all reporting requirements, in accordance with the requirements of this Agreement; and
- (c) otherwise in accordance with the provisions of this Agreement.

### **4.2 Appointment of subcontractors**

- (a) the Participant is responsible for the performance of the Participant's responsibilities under this Agreement regardless of whether the Participant has subcontracted any of its obligations.
- (b) If requested, the Participant must promptly provide to the Department a copy of any contract concerning the Conservation Area.

## **5. Representation and warranties**

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The Participant hereby represents and warrants to the Minister that:

- (a) it has not offered or otherwise used the Conservation Area as an offset, remediation or mitigation measure for the environmental effect of any action it has taken or proposes to take, other than the Action;
- (b) it has full power and authority to enter into, perform and observe its obligations under this Agreement;
- (c) the execution, delivery and performance of this Agreement has been duly and validly authorised by the Participant; and

- (d) no litigation, arbitration, mediation, conciliation or administrative proceedings are taking place, pending, or to the knowledge of any of its officers after due inquiry, are threatened which, if adversely decided, could have an adverse effect on the Participant's ability to perform its obligations under this Agreement.

## **6. Notification requirements**

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### **6.1 Significant Impact**

The Participant must notify the Department Representative within 10 Business Days of any proposed action or event, including actions proposed or undertaken by a third party, which are:

- (a) under the control or subject to the authorisation of the Participant; or
- (b) made aware to the Participant; and

could have a Significant Impact upon the environmental values or conservation values of the Conservation Area.

### **6.2 Non-compliance**

The Participant must notify the Department Representative within 10 Business Days of any proposed action or event, including actions proposed or undertaken by a third party, which are:

- (a) under the control or subject to the authorisation of the Participant; or
- (b) made aware to the Participant; and

could have an impact upon the ability of the Participant to adhere to the Conservation Area Management Plan.

## **7. Obligations of successors**

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- (a) The obligations of the Participant under this Agreement are legally binding on any person who is a successor to the whole or any part of any interest that the Participant has in the Conservation Area or any part of the Conservation Area.
- (b) For the avoidance of doubt and notwithstanding clause 7(a), section 307(c) of the EPBC Act applies to this Agreement.

## **8. Audit and access**

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### **8.1 Audit by the Department**

- (a) The Department or a representative may conduct audits relevant to the performance of the Participant's obligations under this Agreement.
- (b) The Participant acknowledges and agrees that the Department, or any authorised representative, may, at all reasonable times and on giving reasonable notice to the Participant:
  - (i) access and inspect the Conservation Area for the purposes of:
    - (A) monitoring compliance with this Agreement; and
    - (B) taking any action that is required to remedy or monitor any breach of this Agreement; and
  - (ii) require the Participant, including any subcontractors, to provide records, documents and information relevant to the performance of this Agreement in a data format and storage medium accessible by the Department.

### **8.2 Audit of Agreement**

- (a) From time to time the parties may agree to an independent audit of compliance with this Agreement.
- (b) If an audit under clause 8.2(a) is to be undertaken, the parties will agree in writing on:
  - (i) the terms of the audit;
  - (ii) the scope of the audit;
  - (iii) the date by which the audit will be completed; and
  - (iv) who will bear the costs of the audit or if these costs will be shared.

### **8.3 Cooperation and publication**

- (a) The Participant must fully cooperate with any audit conducted under this clause.
- (b) The Department may cause the results of an audit to be published on the Department's website.

#### **8.4 General**

- (a) Subject to any agreement between the parties under clause 8.2(b)(iv), each party must bear its own costs of any inspections, reviews, audits and enquiries conducted pursuant to this clause 8.
- (b) The Participant must ensure that any subcontract entered into for the purpose of this Agreement contains an equivalent clause granting the rights specified in this clause 8.
- (c) This clause 8 applies for the duration of the Agreement Period and for a period of seven years from the termination or expiry of this Agreement.

### **9. Dispute resolution**

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#### **9.1 Obligations continue**

- (a) In the event of a dispute, both parties must continue to perform their respective obligations under this Agreement, unless a direction is issued in accordance with clause 9.1(b).
- (b) If directed and notified in writing by the Department to do so, the Participant must cease performing the obligations of the Participant under this Agreement which are specified in the Department's notice until the Department issues a further written notice to the Participant directing it to resume performance of those obligations.

#### **9.2 Costs**

Each party to a dispute must pay its own costs complying with clause 9.

### **10. Termination or variation**

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#### **10.1 Termination for default**

If:

- (a) the Participant repeatedly fails to comply with any timeframe under this Agreement;
- (b) the Participant fails to remedy its failure to comply with any term or condition of this Agreement within 10 Business Days of receiving a notice (or such longer

period as the Department may at its sole and unfettered discretion specify in the notice) from the Department requiring the Participant to do so;

- (c) the Department is satisfied on reasonable grounds that any statement, representation or warranty made by the Participant is incorrect or incomplete in a way which would have affected the original decision to enter into this Agreement;
- (d) the Department is satisfied on reasonable grounds that a report (including a Report) given by the Participant is significantly misleading, or substantially incomplete or inaccurate;
- (e) there is an Insolvency Event;
- (f) the owner of the Conservation Area decides not to sell it, or the conservation of the Conservation Area is otherwise frustrated by the actions or omissions of a third party;

the Minister or the Department may by written notice to the Participant, terminate this Agreement in its entirety.

## **10.2 Termination or variation by order**

Notwithstanding any other provision of this Agreement:

- (a) this Agreement may be terminated or varied by the Minister by order published in the Gazette in accordance within section 308(4) of the EPBC Act. The Participant is not entitled to any compensation in respect of the termination or variation by such an order; and
- (b) this Agreement may be terminated by the Participant in accordance with section 308(7) of the EPBC Act.

## **10.3 Variation**

Subject to the Minister's rights under section 308 of the EPBC Act, no agreement or understanding varying or extending this Agreement is legally binding upon either party unless the agreement or understanding is in writing and signed by both parties.

## 11. Taxes, duties and government charges

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### 11.1 Liability for taxes, duties and government charges

Subject to this clause 11, all taxes, duties and government charges imposed or levied in Australia or overseas, now or in the future, in connection with this Agreement must be borne by the Participant.

### 11.2 GST

- (a) Unless otherwise indicated, any consideration for a supply made under this Agreement is exclusive of any GST imposed on the supply.
- (b) If one party (the **supplier**) makes a taxable supply to the other party (the **recipient**) under this Agreement, the recipient must pay without set-off an additional amount to the supplier equal to the GST imposed on the supply in question, subject to receipt of a valid tax invoice.
- (c) No party may claim or retain from the other party any amount in relation to a supply made under this Agreement for which the first party can obtain an input tax credit or decreasing adjustment.

## 12. Notices

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### 12.1 Services of notices

A party giving notice or notifying under this Agreement must do so in English and in writing or by Electronic Communication:

- (a) directed to the other party's contact person at the other party's address (as set out in the Agreement Details and as varied by any notice); and
- (b) hand delivered or sent by prepaid post or Electronic Communication to the address.

### 12.2 Effective on receipt

A notice given in accordance with clause 12.1 takes effect when it is taken to be received (or at a later time specified in it), and is taken to be received;

- (a) if hand delivered, on delivery;

- (b) if sent by prepaid post, on the second Business Day after the date of posting (or on the seventh Business Day after the date of posting if posted to or from a place outside Australia); or
- (c) if sent by Electronic Communication, at the time that would be the time of receipt under the *Electronic Transactions Act 1999* (Cth),

but if the delivery, receipt or transmission is not on a Business Day or is after 5.00pm on a Business Day, the notice is taken to be received at 9.00am on the next Business Day.

## **13. General clauses**

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### **13.1 Rights and powers of the Minister**

The rights and powers of the Minister under this Agreement are in addition to any rights the Minister had under the EPBC Act.

### **13.2 Ownership of Agreement**

All copyright and other intellectual property rights contained in this Agreement remain the property of the Commonwealth.

### **13.3 Approvals and consents**

Except where this Agreement expressly states otherwise, a party may, in its discretion, given conditionally or unconditionally or withhold any approval or consent under this Agreement.

### **13.4 Assignment and novation**

A party may only assign its rights or novate its rights and obligations under this Agreement with the prior written consent of the other party.

### **13.5 Costs**

Each party must pay its own costs of negotiating, preparing and executing this Agreement.

### **13.6 Counterparts**

This Agreement may be executed in counterparts. All executed counterparts constitute one document.

### **13.7 No merger**

The rights and obligations of the parties under this Agreement do not merge on completion of any transaction contemplated by this Agreement.

### **13.8 Entire agreement**

This Agreement constitutes the entire agreement between the parties in connection with its subject matter and supersedes all previous agreements or understandings between the parties in connection with its subject matter.

### **13.9 Further action**

Each party must do, at its own expense, everything reasonably necessary (including executing documents) to give full effect to this Agreement and any transaction contemplated by it.

### **13.10 Severability**

A term or part of a term of this Agreement that is illegal or unenforceable may be severed from this Agreement and the remaining terms or parts of the terms of this Agreement continue in force.

### **13.11 Waiver**

Waiver of any provision of or right under this Agreement:

- (a) must be in writing signed by the party entitled to the benefit of that provision or right; and
- (b) is effective only to the extent set out in any written waiver.

### **13.12 Relationship**

- (a) The parties must not represent themselves, and must ensure that their officers, employees, agents and subcontractors do not represent themselves, as being an

officer, employee, partner or agent of the other party, or as otherwise able to bind or represent the other party.

- (b) This Agreement does not create a relationship of employment, agency or partnership between the parties.

### **13.13 Governing law and jurisdiction**

This Agreement is governed by the law of the Australian Capital Territory and each party irrevocably and unconditionally submits to the non-exclusive jurisdiction of the courts of the Australian Capital Territory.

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## Schedule 1 – Agreement Details

Item No.	Description	Clause reference	Details
1.	Department details	1.1	Commonwealth of Australia as represented by the Department of Climate Change, Energy, the Environment and Water
2.	Department Representative	1.1, 6.1 and 6.2	
3.	Participant details	1.1	BAI Communications Pty Ltd (trading as Broadcast Australia) (ABN 99 086 048 562)
4.	Participant Representative	1.1	
5.	End Date	1.1, 1.2 and 2	None Specified
7.	Address for notice		<p><b>Department:</b> [Insert]</p> <p><b>Participant:</b> [Insert]</p>

## **Schedule 2 – Conservation Area Management Plan**

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