

### **CLEARING PERMIT**

Granted under section 51E of the Environmental Protection Act 1986

#### PERMIT DETAILS

Area Permit Number: CPS 10866/1

File Number: DWERVT17289

Duration of Permit: From 5 July 2025 to 5 July 2027

#### **ADVICE NOTE**

#### Monetary contribution to the Offsets Fund

The monetary contribution to the Offsets Fund referred to in condition 5 of this permit is intended to contribute towards the purchase and conservation, in perpetuity of *native vegetation* that provides high quality foraging habitat for Carnaby's black cockatoos (*Zanda latirostris*) and *native vegetation* that is representative of the low-lying *Banksia attenuata* woodlands or shrublands (FCT 21c) Priority Ecological Community.

#### PERMIT HOLDER

Carey Baptist College Ltd

#### LAND ON WHICH CLEARING IS TO BE DONE

Lot 2 on Diagram 75868, Forrestdale

#### **AUTHORISED ACTIVITY**

The permit holder must not clear more than 0.48 hectares of *native vegetation* within the areas cross-hatched yellow in Figure 1 of Schedule 1.

#### **CONDITIONS**

#### 1. Avoid, minimise, and reduce impacts and extent of clearing

In determining the *native vegetation* authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending order of preference:

- (a) avoid the clearing of *native vegetation*;
- (b) minimise the amount of *native vegetation* to be cleared; and
- (c) reduce the impact of *clearing* on any environmental value.

#### 2. Weed and dieback management

- (a) When undertaking any *clearing* authorised under this permit, the permit holder must take the following measures to minimise the risk of introduction and spread of *weeds* and *dieback*:
  - (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
  - (ii) ensure that no known *dieback* or *weed*-affected soil, *mulch*, *fill*, or other material is brought into the area to be cleared; and
  - (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared; and
  - (iv) where *dieback* or *weed*-affected soil, mulch, fill or other material is to be removed from the area to be cleared, ensure it is transferred to areas of comparable soil disease status.
- (b) At least once in each 12-month period for the term of this Permit, the permit holder must remove or kill any *weed* growing within areas cleared under this Permit.

### 3. Directional clearing

The permit holder must:

- (a) conduct clearing activities in a slow, progressive manner towards adjacent *native vegetation*; and
- (b) allow a reasonable time for fauna present within the area being cleared to move into adjacent *native vegetation* ahead of the *clearing* activity.

#### 4. Vegetation management – Fencing

- (a) Prior to *clearing*, the permit holder must construct a fence along the western boundary of the area cross-hatched red on Figure 2 of Schedule 1.
- (b) The fence constructed in accordance with Condition 4(a) should allow for the movement of wildlife by being raised 15 centimetres from the ground; and
- (c) Within one month of installing the fence constructed in accordance with condition 4(a), the permit holder must notify the *CEO* in writing that the construction of the fence has been completed.

#### 5. Offset – Monetary contribution to the Offset Fund

Prior to undertaking any *clearing* authorised under this permit, and no later than 5 July 2027, the permit holder must provide documentary evidence to the *CEO* that funding of \$152,600 has been transferred to the Department of Water and Environmental Regulation for the purpose of acquisition, establishing or maintaining *native vegetation* as an environmental offset for the *clearing* activities authorised under this permit.

### 6. Wind erosion management

The permit holder must commence the construction works within the area cross hatched yellow on Figure 1 of Schedule 1 no later than three (3) months after undertaking the authorised *clearing* activities.

## 7. Records that must be kept

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

**Table 1: Records that must be kept** 

No.	Relevant matter	Specifications
1.	In relation to the authorised <i>clearing</i>	(a) the species composition, structure, and density of the cleared area;
	activities generally	(b) the location where the <i>clearing</i> occurred, recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings;
		(c) the date that the area was <i>cleared</i> ;
		(d) direction of clearing;
		(e) the size of the area <i>cleared</i> (in hectares);
		(f) actions taken to avoid, minimise, and reduce the impacts and extent of <i>clearing</i> in accordance with condition 1;
		(g) actions taken to minimise the risk of the introduction and spread of <i>weeds</i> and <i>dieback</i> in accordance with condition 2; and
		(h) actions taken to fence in accordance with condition 4.
2.	In relation to erosion management pursuant to condition 6.	(a) Wind erosion management measures undertaken in accordance with condition 6.

### 8. Reporting

The permit holder must provide to the *CEO* the records required under condition 7 of this permit when requested by the *CEO*.

### **DEFINITIONS**

In this permit, the terms in Table 2 have the meanings defined.

**Table 2: Definitions** 

Term	Definition				
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the <i>Environmental Protection Act 1986</i> .				
clearing	has the meaning given under section 3(1) of the EP Act.				
condition	a condition to which this clearing permit is subject under section 51H of the EP Act.				
fill	means material used to increase the ground level, or to fill a depression.				
dieback	means the effect of <i>Phytophthora</i> species on native vegetation.				
department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.				
dry conditions	means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches				
EP Act	Environmental Protection Act 1986 (WA)				
mulch	means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation.				
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.				
weeds	means any plant —  (a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i> ; or  (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or  (c) not indigenous to the area concerned.				

### **END OF CONDITIONS**

C Robertson 11.06.2025 12.41PM

Caron Robertson MANAGER

NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

11 June 2025

# **SCHEDULE 1**

The boundary of the area authorised to be *cleared* is shown in the map below (Figure 1).

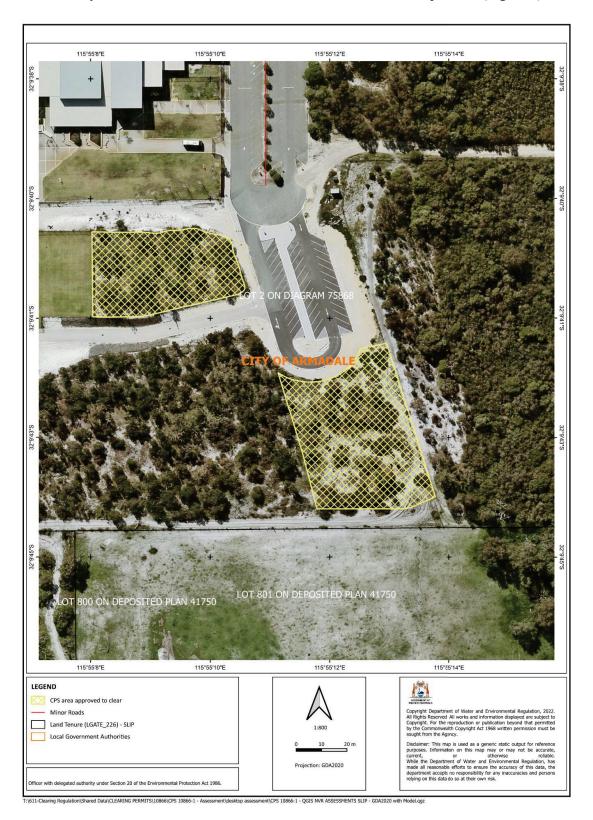


Figure 1: Map of the boundary of the area within which clearing may occur

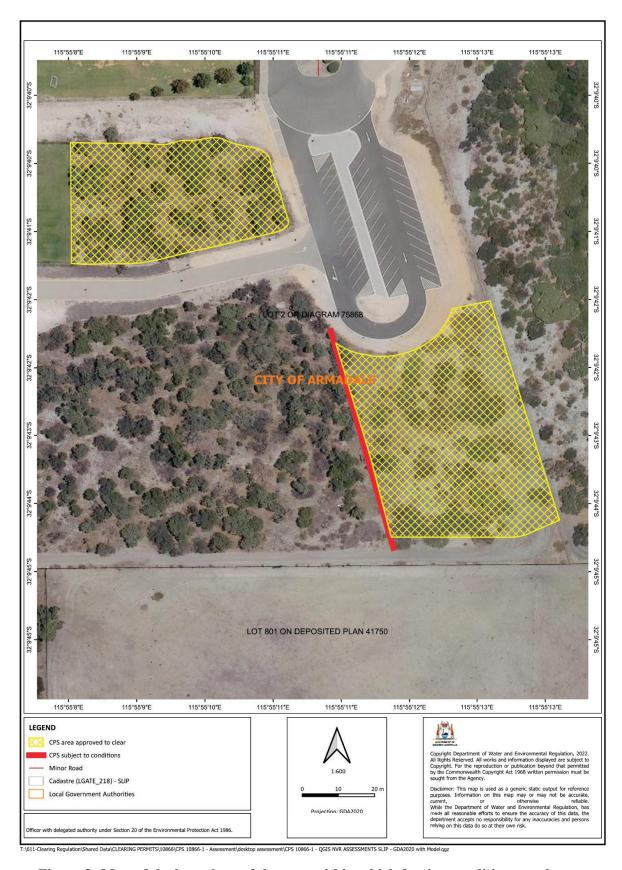


Figure 2: Map of the boundary of the area within which fencing conditions apply.



# **Clearing Permit Decision Report**

### 1.1. Permit application details

Permit number: CPS 10866/1

Permit type: Area permit

Applicant name: Carey Baptist College Ltd

**Application received:** 2 December 2024

**Application area:** 0.48 (revised)

**Purpose of clearing:** construction of the future centre for community and an extension to the existing car

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Method of clearing: Mechanical clearing

Property: Lot 2 on Diagram 75868

Location (LGA area/s): City of Armadale

Localities (suburb/s): Forrestdale

### 1.2. Description of clearing activities

The vegetation proposed to be cleared is contained within two separate areas (see Figure 1, Section 1.5).

The site is approximately ten hectares in area and currently supports a school, surrounded by a mixture of native and non-native vegetation, as well as cleared areas.

According to the information submitted by Coterra Environmental (2024) about the project, the following works are proposed to be undertaken withing the application area.

Retention of mulched organic material onsite for use in landscaping and site stabilisation works

- · Earthworks for creation of appropriate levels within the development footprint
- Building construction
- · Service and access road installation
- Landscaping

## 1.3. Decision on application

**Decision:** Granted

**Decision date:** 11 June 2025

**Decision area:** 0.48 hectares (revised) of native vegetation, as depicted in Section 1.5, below.

#### 1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (department) advertised the application for 21 days and no submissions were received.

In making this decision, the Delegated Officer had regard for:

- · avoidance and minimisation actions implemented by the applicant;
- site characteristics and analysis of flora, fauna and ecological communities recorded/mapped within the local area (a 10 kilometres radius buffer from the application area);

- the 10 Clearing Principles set out in Schedule 5 of the EP Act (see Appendix C);
- a detailed assessment of the clearing impacts on environmental values (see Section 3.2);
- available datasets at the time of the assessment (see Appendix G); and
- additional information obtained during the assessment, including the findings of:
  - o flora and vegetation survey (Plantecology, 2024);
  - o findings of a black cockatoo habitat assessment (Coterra, 2012); and
  - offset proposal submitted by the applicant.

In addition to the above, the Delegated Officer also considered that the proposed facilities are necessary for the school to provide community resources that benefit the public when making the decision to grant the clearing permit application. It is noted that the school has concurrently revegetated available portions of the site. The revegetation extent commitments to date extend over the majority of the available land being that which is not proposed for development in the future, and which does not fall within the Dampier to Bunbury Natural Gas Pipeline (DBNGP) corridor (Coterra, 2024).

After consideration of the above information, as well as the avoidance, minimisation and mitigation actions taken by the applicant, the Delegated Officer determined that the clearing would result in the following significant residual impacts:

- a total loss of 0.48 hectares of suitable foraging habitat for conservation significant fauna species Carnaby's cockatoo (*Zanda latirostris*); and
- a total loss of 0.44 hectares of native vegetation in good condition that is representative of a Priority Ecological Community, FCT 21c, listed as a Priority three community 'Low lying *Banksia attenuata* woodlands or shrublands'.

To address the above significant residual impacts and applying the WA environmental offsets calculator (the offsets metric) along with the environmental offsets metric guideline, and consistent with the WA Environmental Offsets Policy (2011) (the Offsets Policy) and Western Australia's Environmental Offsets Guidelines (2014) (the Offsets Guidelines), the Delegated Officer determined that providing a monetary contribution to the Part V Offsets Fund to fund the purchase of at least 4.36 hectares of high quality foraging habitat for Carnaby's black cockatoo which is also representative of the Low lying *Banksia attenuata* woodlands or shrublands would address 100 per cent of the significant residual impacts of the clearing. Further information on the suitability of the offset provided is summarised in Section 4 of this decision report.

In addition to the above, the Delegated Officer also determined that the proposed clearing will result in:

- the potential introduction and spread of weeds into adjacent vegetation, which could impact the quality of the adjacent vegetation and its habitat values;
- increased likelihood of mortality of fauna that may be utilising the application area at the time of clearing; and
- potential land degradation in the form of wind erosion.

The Delegated Officer determined that the proposed clearing is unlikely to have any long-term adverse impacts on the environment, subject to management, mitigation and offset measures being conditioned on the permit to mitigate and offset the potential impacts identified above. The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback;
- undertake slow, progressive one directional clearing to allow fauna to move into adjacent habitat ahead of the clearing activity;
- installation of a fence:
- commence construction of the works associated with clearing no later than three months after undertaking the authorised clearing activities, to reduce the potential for soil erosion; and
- provide a monetary contribution to the Part V Offsets Fund.

Given the above and noting that the offset provided (see Section 4) counterbalances the significant residual impacts, the Delegated Officer determined that the proposed clearing is unlikely to lead to an unacceptable risk to the environment.

### 1.5. Site map



EKMTTS/10866/CHS 10866-1 - Assessment/desktop assessment/CHS 10866-1 - QGIS NAK ASSESSMENTS SFIR - ADAZOZO MILU Wodel

Figure 1 Map of the application area

The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

### 2 Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection* (Clearing of Native Vegetation) Regulations 2004 (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the polluter pays principle
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- Biodiversity Conservation Act 2016 (WA) (BC Act)
- Conservation and Land Management Act 1984 (WA) (CALM Act)
- Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act)
- Planning and Development Act 2005 (WA) (P&D Act)
- Soil and Land Conservation Act 1945 (WA)

Relevant policies considered during the assessment include:

• Environmental Offsets Policy (2011)

The key guidance documents which inform this assessment are:

- A guide to the assessment of applications to clear native vegetation (DER, December 2013)
- Procedure: Native vegetation clearing permits (DWER, October 2019)
- Environmental Offsets Guidelines (August 2014)
- Technical guidance Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016)
- Technical guidance Terrestrial Fauna Surveys for Environmental Impact Assessment (EPA, 2016)

### 3 Detailed assessment of application

#### 3.1. Avoidance and mitigation measures

The department was informed through supporting document compiled by Coterra Environmental (2024) that:

- the construction within the site is limited due to the Dampier to Bunbury Natural Gas Pipeline Easement, extending from the southwest of the site through the northern boundary, and its associated restricted land uses.
- Development of the school site has been considerate of the 50-metre buffer to the Conservation Category Wetland (CCW) (UFI 7233), which borders the east of the Lot 2 and the CCW (UFI 14835) which borders the southwest corner of Lot 2.
- Proposed development has targeted specific facilities required by the school as it continues to expand and provide community resources.

In addition to the above, following a 'request for further infomation letter' dated 29 January 2025, the applicant modified the application area from 1.245 hectares to 0.48 hectares by removing the area proposed for a future auditorium and future staff parking. As a result, the applicant excluded the majority of the vegetation classified as being in 'good' condition from the proposed clearing footprint.

The Delegated officer determined that that the applicant has appropriately demonstrated avoidance and mitigation measures, however, an offset to counterbalance the significant residual impacts to Carnaby's black cockatoos and Banksia Woodland PEC was necessary. In accordance with the Government of Western Australia's *Environmental Offsets Policy* and *Environmental Offsets Guidelines*, these significant residual impacts have been addressed through the conditioning of environmental offset requirements on the permit. The nature and suitability of the offset provided are summarised in Section 4.

#### 3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix B) and the extent to which the impacts of the proposed clearing present a risk to biological values.

The assessment against the clearing principles (see Appendix C) identified that the impacts of the proposed clearing present a risk to biological values, including conservation significant ecological communities, flora and fauna. The

consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

#### 3.2.1. Biological values (flora and ecological communities) - Clearing Principles (a, c and d)

#### Assessment

The application area is located within the Swan Coastal Plain IBRA region of Western Australia. A botanist from Plantecology Consulting conducted a flora and vegetation survey of the site on October 17 and 18, 2023 (Plantecology, 2024) in accordance with the recommended timing for surveys within the south-west botanical province (EPA, 2016). The survey involved a systematic on-foot assessment of the area, including detailed vegetation analysis within ten 100-square-metre sampling plots (10m x 10m quadrats).

The survey results indicate that the vegetation within the application area consist of *Banksia attenuata-Banksia menziesii* open woodland (Plantecology, 2024), which can be further described as open woodland of *Banksia attenuata* and *Banksia menziesii* with *Eucalyptus todtiana* over open shrubland of *Adenanthos cygnorum* subsp. *cygnorum* over tussock grassland of \**Ehrharta calycina*, *Conostylis aculeata* and \**Hypochaeris glabra* on loamy to clayey sands on low rises. The vegetation condition of the application area ranges from completely degraded to good (Keighery, 1994) condition (Plantecology, 2024).

According to the survey results (Plantecology, 2024), the dominants species of each strata within the application area are:

- Strata 1 Banksia menziesii, Banksia attenuata, Eucalyptus todtiana
- Strata 2 Adenanthos cygnorum, Styphelia tenuiflora
- Strata 3 Ehrharta calycina, Conostylis aculeata

During the survey, approximately 51 per cent of the species were identified as weed species. Three Declared Pest weed species were recorded on the site, these being:

- \*Asparagus asparagoides (Bridal Creeper)
- \*Moraea flaccida (Cape Tulip)
- \*Zantedeschia aethiopica (Arum-lily)

Weeds have the potential to out-compete native flora and reduce the biodiversity of an area. Potential impacts to biodiversity as a result of the introduction and spread of weeds may be minimised by the implementation of weed management conditions and the installation of fencing.

#### Conservation significant flora

According to the available datasets, 51 conservation significant flora species were identified from local area (10-kilometre radius of the application area), that comprises of 14 threatened flora and 37 priority species. A likelihood of occurrence assessment of conservation significant flora within the local area was undertaken for the application area. Noting the distribution and preferred habitat types, including soil and vegetation types mapped within the application area, the likelihood analysis concluded that the application area may provide suitable habitat for four conservation significant flora species, which are further discussed below in the decision report. The flora identified associated with swamps and wetland were excluded as these habitats do not occur within the application area. During the flora and vegetation survey (Plantecology, 2024). *Leucopogon* sp. Busselton (D. Cooper 243) was not considered as suitable habitat features are not present within the site.

No Threatened flora pursuant to either the BC Act or the EPBC Act species were recorded during the survey. One Priority 3 species, *Jacksonia gracillima* that is listed by Department of Biodiversity, Conservation and Attractions (DBCA) was recorded at five locations within the *Banksia attenuata – Kunzea glabrescens* open woodland and the *Eucalyptus todtiana* open woodland vegetation type identified within the survey area. These records were located greater than 100 metres from the application area.

Jacksonia gracillima is described as a low spreading shrub that grows up to approximately 50 centimetres high and one metre wide, with orange flowers in October. It is usually associated with low woodland, often marri-jarrah, Banksia spp., or Melaleuca spp. dominated, with sheoak, Xanthorrhoea spp., Hypocalymma spp., Adenanthos spp., Astartea spp., Regelia ciliata, Meeboldina spp., Kunzea spp., Lepidosperma spp., and open sedgeland; often swampy vegetation or winter wet flats. This flora species grows on brown-grey sand within the range from Wanneroo to Busselton (WAH, 1998-).

Caladenia huegelii was not recorded from the survey area, but it was recorded from 72 locations across the local area with the nearest record at 1.64 kilometres from the application area. This flora is a perennial herb growing up to 0.6 metres high with green, cream and red flowers in September and October months. The species is associated with mixed woodland of jarrah, Banksia spp., Allocasuarina spp., and marri, over dense shrubs including *Stringia latifolia*, *Hypocalymma robustum*, Hibbertia spp., *Xanthorrhoea preissii*, Adenanthos spp., and Conostylis spp.;

favours dense undergrowth. It grows on grey-white sand, sometime yellow calcareous sands. Found within the range of Wanneroo to Busselton (WAH, 1998-). Given the condition of the vegetation within the application area ranges from completely degraded to good (Keighery, 1994) with the absence of a dense shrub layer, it is unlikely that this species would grow in the habitat of the application area. This species was searched for during the flora survey as it was identified as having a likelihood of occurrence during the desktop assessment. However, this species was not identified during the flora survey (Plantecology, 2024).

Drakaea elastica was not recorded from the survey area. According to the desktop assessment, this species was previously recorded from 10 locations with the closest record at 2.08 kilometres from the application area. This flora is a perennial herb growing up to 0.3 metres high with red, green and yellow flowers in October to November. This species is associated with Banksia or Eucalyptus woodland, often associated with Kunzea sp. in thickets or tall shrubland (WAH, 1998-). It grows on white-grey sand and found within the range from Dandaragan to Busselton. The survey was undertaken at the flowering period for this flora. If the flora was to occur within the application area, it is likely to have been found within the application area.

Verticordia lindleyi subsp. Lindleyi was not recorded from the survey area. There were 13 records of this species within the local area with the closest record identified 2.78 kilometres from the application area. This flora is described as an erect shrub that grows up to 0.75 metres high. It has pink flowers that flowers in May or November to December or in January. This species is associated with Low woodland or heath usually with Banksia spp., Melaleuca spp., Eucalyptus over Nuytsia floribunda, Xanthorrhoea spp., Astartea spp., Kunzea spp., Jacksonia spp., Verticordia spp., Regelia ciliata and sedges. It grows on grey to white sand within the range of Dandaragan to Busselton (WAH, 1998). Given the flora survey was undertaken at the correct flowering time of this flora species, it is likely to have been found if it occurred within the application area.

#### **Ecological community**

According to the findings of the flora and vegetation survey (Plantecology, 2024), the vegetation within the application area is assigned FCT21c. FCT21c is listed as a Priority three community 'Low lying *Banksia attenuata* woodlands or shrublands, under state BC Act 2016, and also forms part of the 'Banksia-woodlands of the Swan Coastal Plain IBRA Region', which is listed as an 'Endangered' Threatened Ecological Community pursuant to the EPBC Act.

According to the approved conservation advice for the Banksia Woodlands TEC, the key diagnostic criteria for the TEC includes the presence of at least one of the four diagnostic Banksia species, and distinct low woodland to forest structure comprising a canopy co-dominated by *Banksia attenuata* or *Banksia menziesii*, where the emergent tree layer often includes marri, jarrah, or tuart, over a diverse shrub or herbaceous understorey (DoEE, 2016).

The thresholds for patch size and condition for the Banksia Woodlands TEC (set out in the approved conservation advice for this community) state that a patch should meet at least Good (Keighery, 1994) or better condition according to the definitions in Table 2 of the approved conservation advice document, to be considered part of the listed community. Also, for a patch in 'Good' condition, the area of the patch must be at least two hectares size at minimum. The area of the FCT 21c within the application area is 0.44 hectares, of which 0.2 hectares is in 'Good' condition and 0.24 hectares is in 'Degraded' condition. Therefore, the vegetation within the application area does not meet the criteria for inclusion as part of the 'Banksia-dominated woodlands of the Swan Coastal Plain IBRA Region' TEC.

The survey area extended beyond the application area. The condition of the vegetation adjacent to the application area is in good condition (Keighery, 1994) as represented by the Figure 2 below. The area of the patch of the vegetation in good condition is 1.36 hectares, which is also below the two hectare minimum patch size to meet the criteria for a TEC. Hence, the application cannot be considered to be a part of a TEC as well.

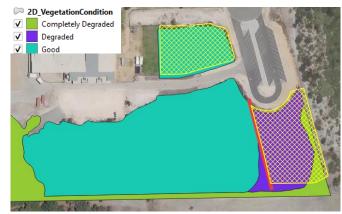


Figure 2: A representation of vegetation condition (Keighery, 1994) from the survey area.

Given the key diagnostic criteria for the Banksia Woodlands of the SCP TEC is not met due to the patch size not meeting the minimum patch size (at least 2 ha for vegetation in good condition for the Banksia Woodlands TEC, the vegetation was not determined to be representative of the Banksia woodland TEC. However, the clearing will include loss of 0.44 hectares of vegetation in degraded to good condition (Keighery, 1994) that is representative of the FCT 21c PEC.

Given the cumulative impacts to this community resulting from the surrounding ongoing clearing, the loss of 0.44 hectares of PEC in degraded to good condition (Keighery, 1994) is a significant residual impact and the department has determined that an offset is required to counterbalance significant residual impact of the clearing.

Given the proposed clearing area is located adjacent to a mapped PEC in good (Keighery, 1994) condition, the proposed clearing may degrade the PEC indirectly through weed invasion and weed and dieback spread. Consideration should be given to installation of fencing around the application area to mitigate the risk of indirect impacts from weed and dieback on the PEC vegetation. Further, the department notes that the development approval has considered the impacts that may occur from dust and drainage in its assessment.

#### Conclusion

Given the key diagnostic criteria for the Banksia Woodlands of the SCP TEC is not met due to the patch size not meeting the minimum patch size (at least 2 ha for vegetation in good condition (Keighery, 1994) for the Banksia Woodlands TEC, the vegetation was not determined to be representative of the Banksia woodland TEC. However, the clearing will include loss of 0.44 hectares of vegetation that is representative of the FCT 21c PEC.

Given the cumulative impacts to this community resulting from the surrounding ongoing clearing, the loss of 0.44 hectares of PEC constitutes a significant residual impact that requires an environmental offset (see section 4 for additional information).

Based on the avoidance and minimisation measures proposed by the applicant, it is considered that the indirect impacts of the proposed clearing on FCT 21c PEC and adjacent vegetation generally, can be managed through implementing appropriate weed and dieback control measures and the installation of fencing.

#### Conditions

To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- Installation of a fence between the application area and the good condition vegetation to the west of the southern portion of the application area; and
- Weed and dieback management.

#### 3.2.2. Biological values (fauna) - Clearing Principles (b)

#### Assessment

According to the desktop assessment, 58 conservation significant fauna species were recorded from the local area. This included of 36 bird species, eight invertebrates, 10 mammal species and four reptile species. Seventeen of the 58 fauna recorded from the local area are listed as threatened under the BC Act, with the remainder of fauna are listed as Priority, Migratory and conservation dependent.

Twenty-two bird species protected under International Agreements have been recorded within the local area. The majority of these birds are migratory (including priority and threatened) shorebirds that breed in northern latitudes. Most are coastal but some species will also utilise flooded inland waters. Peregrine Falcon (*Falco peregrinus*) (other specially protected fauna) may overfly the application area without utilising any of the habitats present.

A black cockatoo habitat assessment was previously undertaken over the site in August 2010. According to the results of this survey, good quality foraging habitat was found within the survey area and no potential breeding or roosting opportunities for Carnaby's black cockatoos were identified (Coterra, 2012).

Noting the habitat requirements, distribution of the recorded species, the mapped vegetation type, the condition (Keighery, 1994) of the vegetation within the application area, as well as the findings of the vegetation assessment, the application area is likely to comprise habitat for the following species:

- Swan Coastal Plain shield-backed trapdoor spider (Idiosoma sigillatum) (Priority 3);
- a short-tongued bee (Leioproctus contrarius) Endangered
- Quenda (Isoodon fusciventer) Priority 4
- Carnaby's cockatoo (Zanda latirostris) Endangered

#### Carnaby's black cockatoos

The application area is mapped within the modelled distribution of Carnaby's cockatoo. Carnaby's are classified as threatened under the BC Act. Under the EPBC Act, the Carnaby's are listed as Endangered. The Swan Coastal Plain is used by black cockatoos primarily for foraging resources, with some small patches of breeding habitat (DAWE, 2022). Available databases indicate Carnaby's cockatoos are locally common with approximately 1648 records of Carnaby's and 108 records of white-tailed black cockatoos across the local area, with the closest record 0.63 kilometres from the application area. Black cockatoo habitat can be considered in terms of breeding habitat, night-roosting habitat, and foraging habitat (DAWE, 2022).

Preferred foraging habitat for Carnaby's cockatoo includes jarrah and marri woodlands and forests, and proteaceous woodlands and heath dominated by plant species such as Banksia spp., Hakea spp. and Grevillea spp. (DAWE, 2022). Vegetation within the application area (Banksia woodland) provides high quality foraging habitat for Carnaby's cockatoo due to the majority of the application area containing Banksia attenuate and *Banksia menziesii* species.

Food resources within the range of breeding sites and roost sites are important to sustain populations of black cockatoos. Black cockatoos will generally forage up to 12 kilometres from an active breeding site. Following breeding, they will flock in search of food, usually within six kilometres of a night roost (DAWE, 2022) but may range up to 20 kilometres. According to available databases, 67 roost record (1.5 kilometres from the application area) and no breeding records occur within a 12 kilometres radius buffer from the application area. The closest breeding record is at 12.6 kilometres from the application area.

A black cockatoo habitat assessment was previously undertaken over the site in August 2010. According to the results of this survey, good quality foraging habitat was found within the survey area and no potential breeding or roosting opportunities for Carnaby's black cockatoos were identified (Coterra, 2012).

Noting the survey results, wetlands and watercourses in the local area and that the application area is within the foraging distance of several known roost sites, the application area is considered to provide important foraging resources for Carnaby's cockatoo within the local area. The exact quantity of the foraging habitat within the application area is not known. Therefore, the department has used the precautionary principle and has assumed that the entire application area proved foraging habitat for the Carnaby's black cockatoo species. Based on the above, the clearing of this vegetation would result in a significant residual impact on the availability of Carnaby's cockatoo foraging habitat and therefore, an offset is required to counterbalance this impact.

Roosting habitat for black cockatoos is usually located in the tallest trees within an area, and preferably in close proximity to both food supply and surface water (DAWE, 2022). Noting the vegetation type identified through the flora survey (Plantecology, 2024), no suitable roosting habitat for Carnaby's cockatoo is recorded across the application area.

Breeding habitat for species of black cockatoos is described within the 'EPBC Act referral guidelines for three threatened black cockatoo species' (DAWE, 2022) which includes a list of tree species known to support breeding which either, have a suitable nest hollow or are of a suitable diameter at breast height (DBH) to develop a nest hollow. For most tree species, suitable DBH is 500 millimetres. According to the vegetation survey (Plantecology, 2024), and fauna survey (Coterra Environment, 2012), no suitable habitat trees for Carnaby's cockatoo are likely to be present within the survey area.

#### Other conservation significant fauna

#### • Idiosoma sigillatum

Many of the Swan Coastal Plain shield-backed trapdoor spider (SCPSBT) records are historical in nature and occur within the Perth metropolitan area. Burrows of this spider usually occur in Banksia woodland and heathland on sandy soils (Rix et al. 2018). It has a known range of 7,100 square kilometres, and an area of occupancy within that range of less than 3,000 square kilometres.

The application area may provide suitable habitat for the SCPSBT. Significant habitat to the SCPSBT's survival is described as open forest remnant vegetation. Microhabitats for the healthy survival of the species are attached to the presence of Sheaok (*Allocasuarina* spp.), which the species uses to construct their burrows (Mason et al., 2018). Sheaok was not recorded within the application area based on the flora and vegetation report. Given the relatively small footprint of the application area and the absence of Sheaok within the application, the chance of this species occurring within the application area is low.

Slow directional clearing towards areas of remnant native vegetation will minimise impacts to individuals potentially utilising the site at the time of clearing.

#### Quenda

1277 records of Quenda were identified from the local area. In their natural habitat, Quenda's live in dense understories in swampland areas, Banksia and Jarrah woodlands (DEC, 2012). Quenda area known to forage on plant material, fungi and insects by digging in leaf litter and soil. Quenda habitat is usually on sandy combination soils. However, Quendas have adapted to urban and suburban habitats in recent years (DBCA, 2017). With the closest Quenda on record being 0.63 kilometres from the application area, Quenda can likely be found along the application area during dusk and dawn as they are a crepuscular species. Given the footprint of the clearing proposed, and the amount of remnant native vegetation immediately adjacent, the application area is not considered significant habitat for Quenda.

#### a short-tongued bee

A short-tongued bee is a poorly known invertebrate with a limited range along the Swan Coastal Plain. This species is known to be associated with Scaevola sp repens var. repens and Lechenaultia spp (Atlas of living Australia, n.d). According to the flora data from the flora survey, Scaevola sp repens and Lechenaultia spp was not identified within the application area. Therefore, the likelihood of this species being present within the application area is low.

#### Conclusion

Based on the above assessment, the proposed clearing will result in the loss of 0.48 hectares of high quality Carnaby's black cockatoo foraging habitat. It is considered that this constitutes a significant residual impact requiring an offset in accordance with the WA Offset Policy and an offset, in accordance with the WA Offset Policy, is required. While habitat for Quenda may be present, the application area is not considered to constitute significant habitat for these species. Quenda may utilise the application area while dispersing throughout the landscape.

### Conditions

To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- slow directional clearing to allow fauna to move into adjacent vegetation ahead of the clearing activity will minimise impact to individuals; and
- provision of an offset to counterbalance the significant residual impacts to the loss of Carnaby's black cockatoo foraging habitat (see section 4).

#### 3.3. Relevant planning instruments and other matters

The application area is zoned for 'rural living' under the City of Armadale's local planning scheme number 4.

Other relevant authorisations required for the proposed land use include Development Approval (DA) under the *Planning and Development Act 2005* (issued by the City of Armadale). A DA was approved on the 29 May 2025 for additional carparks, bulk earthworks and a playing field on Lot 2 on Diagram 75868, Forrestdale.

Other active clearing permits over Lot 2 are:

- 9928/1 for the purpose of carpark extension with a rehabilitation of 0.073 hectare offset condition
- CPS 10281/1 for the purpose of Sports Hall and associated bushfire asset protection zone with a rehabilitation of 0.08 hectare offset condition
- CPS 8768/1 for the purpose of constructing stage 2 of the Carey Baptist College Forrestdale Campus with a revegetation plan offset

The masterplan was referred to the Department of Climate Change, Energy, the Environment and Water (DCCEEW) under the EPBC Act 1999 in 2012 (EPBC Ref: 2012/6561) (Coterra, 2022). Following assessment of the proposal, including the proposed onsite revegetation works, the referral decision was issued as 'Not a Controlled Action'.

The proposed site is classified under the *Contaminated Sites Act 2003* as Decontaminated after unauthorised disposal of wastes including asbestos-containing material (ACM) was removed and soil was excavated immediately adjacent to where waste was identified (DWER, 2022).

The site has been successfully remediated and is suitable for all land uses, classified as 'decontaminated'. However, given the risks associated with the potential to encounter unidentified contaminated soil or buried ACM during native vegetation clearance and Acid sulfate soils (ASS), the department recommends the following (DWER, 2022):

- An appropriate 'unexpected finds protocol' should be implemented incorporating work health and safety controls to address the risks associated with the potential to encounter contaminated soil or buried ACM during mechanical clearing works.
- Acid sulfate soils (ASS) risk mapping indicates that the site is located within an area identified as representing
  a low to moderate risk of ASS occurring within 3 metres of the natural soil surface. Please refer to Department
  of Water and Environmental Regulation's acid sulfate soil guidelines for information to assist with the

management of ground and/or groundwater disturbing works. https://www.der.wa.gov.au/yourenvironment/acid-sulfate-soils/69-acidsulfatesoils-guidelines.

No Aboriginal sites of significance have been mapped within the application area. It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act 1972* (WA) and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

### 4 Suitability of offsets

Through the detailed assessment outlined in Section 3.2 above, the Delegated Officer has determined that the following significant residual impacts remain after the application of the avoidance and mitigation measures summarised in Section 3.1:

- a total loss of 0.48 hectares of high quality foraging habitat for conservation significant fauna species Carnaby's cockatoo (*Zanda latirostris*); and
- a total loss of 0.44 hectares of native vegetation in good condition that is representative of a Priority Ecological Community, FCT 21c, listed as a Priority three community 'Low lying Banksia attenuata woodlands or shrublands'.

The applicant proposed an environmental offset to address the above impacts, as detailed below.

#### Finantial offset (monetary contribution)

The applicant has proposed a monetary contribution of \$173,250 to the Part V Offsets Fund, to adequately countrerbalance the significant residual impacts of the proposed clearing.

In considering the suitability of an offset, the department will require an applicant to demonstrate that they have followed a hierarchy of preferred offset outcomes when proposing offsets. Of the preferred offset outcomes, a monetary contribution to the Part V Offsets Fund is the least preferred option in most situations. In considering whether a monetary offset is appropriate, the department will take into account the following:

- the applicant's efforts to follow the hierarchy of offset types which include the use of existing strategic offset programs, local or regional rehabilitation and land acquisition and conservation in perpetuity;
- local or regional rehabilitation and rehabilitation, and land acquisition with conservation tenure;
- · the necessity of clearing;
- the magnitude of the significant residual impact; and
- the ability to find suitable land for offsets and any associated constraints i.e. land tenure.

In this instance, the Delegated Officer noted:

- the applicant has made investigations into the surrounding area for a potential land acquisition/revegetation
  offset. This investigation has included review of properties currently available for sale in proximity to the site,
  and liaison with DBCA to identify if they are aware of any potentially suitable offset sites to purchase. No
  suitable offset sites have been identified;
- the magnitude of the significant residual impact to Carnaby's black cockatoo species is less than 0.5 hectares.
- the magnitude of the significant residual impact to the Priority Ecological Community being 0.44 hectares, in which 0.2 hectares is in good condition; and
- ongoing searches for other suitable and preffered offsets will delay the progress of expanding the school infrastructure.

Given the above, the Delegated Officer considers that a monetary contribution to the Part V Offset Fund is acceptable to counterbalance the significant residual impact to Carnaby's black cockatoo foraging habitat and native vegetation that is representative of low lying *Banksia attenuata* woodlands or shrublands. Specifically, the department has identified that a monetary contribution to fund the purchase of 4.36 hectares of native vegetation that provides high quality foraging habitat for Carnaby's black cockatoo, and 3.87 hectares of native vegetation that represents low lying *Banksia attenuata* woodlands or shrublands, is required.

The size of the offset required was determined using the Western Australia Environmental Offsets Assessment Guide and the WA Offset Calculator. The monetary contribution amount required is based on the 'rate per hectare' value selected from a table of land values in different local government authorities, provided to the department by Landgate in 2023. In the assessment of the proposed offset, the Delegated Officer considered the prospects of acquiring land containing similar or better quality foraging habitat via the Part V Offsets Fund and determined that a per-hectare land value, in this instance, is appropriate and consistent with the WA Environmental Offsets Policy (2011).

Given the uncertainty surrounding the site for acquisition, the Delegated Officer determined that the unimproved land value in the City of Armadale was appropriate for use in determining a suitable monetary contribution. Based on unimproved land values for the City of Armadale, a 10-hectare parcel has a market value of \$35,000 per hectare. Therefore, a monetary contribution of \$152,600. will be required to fund the acquisition of 4.36 hectares of native vegetation of high quality foraging value for Carnaby's black cockatoo and representative of the low lying *Banksia attenuata* woodlands or shrublands

### Conclusion

The Delegated Officer considers the offset proposed adequately counterbalances the significant residual impacts listed above and is consistent with the Government of Western Australia's Environmental Offsets Policy (2011) and the WA Environmental Offsets Guidelines (2014). The justification for the values used in the offset calculations are provided in Appendix F.

End

# Appendix A. Additional information provided by applicant

Summary of comments	Consideration of comment
Flora and vegetation survey (Planecology, 2024)	On behalf of the applicant, Planecology consultants undertook a flora and vegetation survey on the 17th and 18th October 2023.
	The purpose of the survey was to assess the botanical values within the site by:
	Undertaking a detailed flora and vegetation survey in accordance with the Environmental Protection Authority's (EPA) Technical Guidance;
	Identifying the presence of any Threatened Ecological Communities (TECs) and Priority Ecological Communities (PECs);
	Undertaking a systematic search for all vascular plant taxa present; and
	Recording the locations and numbers present of any Threatened Flora and Priority Flora identified at the time of the field survey.
Black cockatoo habitat assessment (Coterra, 2012)	A black cockatoo habitat assessment was undertaken for the general site on 10 August 2010. The assessment includes mapping of black cockatoo foraging habitat quality within the site. The primary objective of this black cockatoo habitat assessment was to provide an initial investigation into the potential for the proposed school development area to support the breeding, foraging and roosting of three black cockatoo species.
Offset proposal (Carey Baptist College Ltd, 2025)	Following the 'request for further information' letter dated 26 January 2025, the applicant submitted an offset proposal for the department's review.

# Appendix B. Site characteristics

### **B.1.** Site characteristics

The information provided below describes the key characteristics of the area proposed to be cleared and is based on the best information available to the department at the time of this assessment. This information, along with biological surveys, was used to inform the assessment of the clearing against the Clearing Principles, contained in Appendix C.

Characteristic	Details
Local context	The area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia. The site is located approximately 23 km Southeast of the Perth CBD.
	Aerial imagery and Spatial data indicates the local area (10-kilometre radius from the centre of the area proposed to be cleared) retains approximately 22.8 per cent of the original native vegetation cover.
Ecological linkage	The application area is mapped within the EPA's Perth Biodiversity project, which is a special index of ecological linkage. The Spatial Index of Ecological Linkages (SIEL) is a spatial catalogue of areas identified as valuable for linking ecology for flora or fauna. The data is a combination of spatial data from investigations within government, academic, environmental consultancy and non-government organisations.
Conservation areas	The entire application area is located within an Environmentally Sensitive Area (ESA) (ID 1900) associated with wetlands. The land parcel within which the application area is located (Lot 2 on Diagram 75868) is surrounded by DBCA managed lands to the south

Characteristic	Details				
	and east, associated with the Jandakot Regional Park and the Gibbs Road Swamp System, as well as Bush Forever Site 344.				
	The remaining remnant vegetation on the property is under a 'restoration' offset conditioned to be placed under a conservation covenant under section 30B of the Soil and Land Conservation Act 1945.				
Vegetation description	Flora and vegetation survey (Plantecology, 2024) indicate the vegetation within the proposed clearing area consists of open woodland of <i>Banksia attenuata</i> and <i>Banksia menziesii</i> with <i>Eucalyptus todtiana</i> over open shrubland of <i>Adenanthos cygnorum</i> subsp. <i>cygnorum</i> over tussock grassland of *Ehrharta calycina, Conostylis aculeata and *Hypochaeris glabra.				
	Representative photos and the survey maps are available in Appendix F.				
	The broad scale mapped vegetation complex within the application area is:  Southern River complex (42), which is described as open woodland of <i>Corymbia calophylla</i> (Marri) - <i>Eucalyptus marginata</i> (Jarrah) - Banksia species with fringing woodland of <i>Eucalyptus rudis</i> (Flooded Gum) - <i>Melaleuca rhaphiophylla</i> (Swamp Paperbark) along creek beds.				
	The mapped vegetation type retains approximately 18 per cent of the original extent (Government of Western Australia, 2019).				
Vegetation condition	Flora and vegetation survey (Plantecology, 2024) indicate the vegetation within the proposed clearing area is in good to completely degraded condition (Keighery, 1994)				
	The full Keighery (1994) condition rating scale is provided in Appendix D.				
	Representative photos and the survey mapping are available in Appendix F.				
Climate and landform	The Forrestdale area experiences a dry Mediterranean climate of hot dry summers and cool wet winters. Long-term climatic averages indicate the site is located in an area of moderate to high rainfall, receiving 810 mm on average annually.				
	The application area is mapped within the Bassendean B1 Phase, that is described as extremely low to very low relief dunes, undulating sandplain and discrete sand rises.				
Soil description	Soil within the application area is described as deep bleached grey sands sometimes with a pale-yellow B horizon or a weak iron-organic hardpan at depths generally greater than 2 meters.				
Land degradation risk	The soils within the application area are subject to high risk of wind erosion, subsurface acidification and phosphorus export. A summary of the land degradation impacts is within Table C.6.				
	There is a moderate to low risk of Acid Sulfate soils (risk class 2). Groundwater salinity is mapped at <500 mg Total Dissolved Solids (fresh).				
Waterbodies	The desktop assessment and aerial imagery indicated that no watercourses or drainage lines transect the area proposed to be cleared. No waterbodies or wetlands occur within the application area.				
	A resource enhancement wetland occurs approximately 40 m from the application area and a conservation category wetland is present approximately 94 metres from the application area. This wetland area is also mapped in the Directory of Important Wetlands in Western Australia as Gibbs Road Swamp System.				
Hydrogeography	The application area is mapped within the Jandakot Groundwater Area proclaimed under the RiWI Act and is not within a surface water area, clearing control catchment under the CAWS Act or a Public Drinking Water source area.				
Flora	According to the desktop assessment, 51 conservation significant flora species were identified from the local area, 13 which are found on the same soil and vegetation type as the application area.				

Characteristic	Details
	Of the 51 flora species, 27 were priority flora species and 14 are threatened flora species. The threatened flora <i>Diuris purdiei</i> was the closest recorded species found approximately 0.60 kilometres from the application area. <i>Caladenia huegelii</i> was the most abundant with 72 recorded from the local area.
Ecological communities	The application area is mapped within the TEC, Banksia Woodlands of the Swan Coastal Plain ecological community. This vegetation community occurs throughout the surrounding local area as well.
Fauna	According to the desktop assessment, 58 conservation significant fauna species were recorded from the local area. This included of 36 bird species, eight invertebrates, 10 mammal species and four reptile species.
	The application area is mapped within the distribution zone of all three black cockatoo birds. According to available databases, 67 roost record (1.5 kilometres from the application area) and no breeding records occur within a 12 kilometres radius buffer from the application area. The closest breeding record is at 12.6 kilometres from the application area.

## B.2. Vegetation extent

	Pre- European extent (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre- European extent in all DBCA managed land
IBRA bioregion*					
Swan Coastal Plain	1,501,221.93	579,813.47	38.62	222,916.97	17.98
Vegetation complex					
Southern River complex (42)	58,781.48	10,832.18	18.43	940.36	1.60
Local area					
10km radius	30766	7021.38	22.8	-	-

<sup>\*</sup>Government of Western Australia (2019a)

### B.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix G.1), and biological survey information (Plantecology, 2024) impacts to the following conservation significant flora required further consideration.

Species name	Conservati on status	Suitable habitat features ? [Y/N]	Suitable vegetatio n type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Aponogeton hexatepalus	Priority 4	N	Y	Υ	7.24	3	Υ
Austrostipa jacobsiana	Т	N	Y	Y	5.71	8	Y
Caladenia huegelii	Т	Υ	Y	Υ	1.64	72	Υ

<sup>\*\*</sup>Government of Western Australia (2019b)

Species name	Conservati on status	Suitable habitat features ? [Y/N]	Suitable vegetatio n type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	known records	Are surveys adequate to identify? [Y, N, N/A]
Diuris purdiei	Т	N	Υ	Υ	0.60	24	Y
Drakaea elastica	Т	Υ	Υ	Υ	2.08	10	Y
Drosera patens	Priority 1	N	Y	Υ	7.39	2	Υ
Haloragis aculeolata	Priority 2	N	Υ	Υ	6.97	1	Υ
Jacksonia gracillima	Priority 3	Υ	Y	Υ	2.37	17	Y
Leucopogon sp. Busselton (D. Cooper 243)	Priority 2	N	Y	Y	3.97	4	Ν
Ornduffia submersa	Priority 4	N	Y	Υ	2.67	5	Υ
Schoenus capillifolius	Priority 3	N	Υ	Υ	7.24	2	Y
Schoenus pennisetis	Priority 3	Υ	Υ	Υ	3.35	2	Υ
Verticordia lindleyi subsp. lindleyi	Priority 4	Υ	Υ	Υ	2.78	13	Υ

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

### B.4. Fauna analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix G.1), and biological survey information (Plantecology, 2024) impacts to the following conservation significant fauna required further consideration.

Species name	Common name	Conserva tion status	Distance of closest record to application area (km)	Number of known records (total)	Year of most recent record
Dasyurus geoffroii	chuditch, western quoll	VU	5.53	5	2013
Falsistrellus mackenziei	western false pipistrelle, western falsistrelle	P4	8.27	1	1993
ldiosoma sigillatum	Swan Coastal Plain shield- backed trapdoor spider	P3	2.28	24	2019
Isoodon fusciventer	quenda, southwestern brown bandicoot	P4	1.27	1277	2024
Leioproctus contrarius	a short-tongued bee	P3	1.79	2	1954
Leioproctus douglasiellus	a short-tongued bee	EN	2.56	2	2006
Lerista lineata	Perth slider, lined skink	P3	1.25	209	2019
Neopasiphae simplicior	a short-tongued bee	EN	2.58	6	2018
Notamacropus eugenii derbianus	tammar wallaby	P4	7.91	2	1971
Notamacropus irma	western brush wallaby	P4	2.28	54	2019
Synemon gratiosa	graceful sunmoth	P4	5.44	9	2011
Zanda latirostris	Carnaby's cockatoo	EN	0.63	1648	2022
Zanda sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	EN	2.97	108	2019

### B.5. Ecological community analysis table

Community name	Conservation status (WA)	Conservation status (commonwealt h)	Distance of closest record to application area (km)	Occurs within the application area?
Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	Within	No

# B.6. Land degradation risk table

Risk categories	Code	Bassendean B1 Phase (212Bs_B1)
Wind erosion	H1	50-70% of map unit has a high to extreme wind erosion risk
Water erosion	L1	<3% of map unit has a high to extreme water erosion risk
Salinity	L1	<3% of map unit has a moderate to high salinity risk or is presently saline
Subsurface Acidification	H2	>70% of map unit has a high subsurface acidification risk or is presently acid
Flood risk	L1	<3% of the map unit has a moderate to high flood risk
Water logging	L2	3-10% of map unit has a moderate to very high waterlogging risk
Phosphorus export risk	H2	>70% of map unit has a high to extreme phosphorus export risk

# Appendix C. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?	
Environmental value: biological values			
Principle (a): "Native vegetation should not be cleared if it comprises a high level of biodiversity."	At variance	Yes Refer to Section	
Assessment:		3.2.1, above.	
According to the survey that was undertaken by Plantecology Consultants in 2023, the application area does not contain conservation significant flora species			
The application area is assigned FCT21c. FCT 21c is listed as a Priority 3 community 'Low lying Banksia <i>attenuata</i> woodlands or shrublands. The condition and patch size of the application area did not meet the key diagnostic criteria to be identified as the Banksia woodland SCP TEC.			
Based on the vegetation type, it is considered that the application area provides foraging habitat for the Carnaby's black cockatoos.			
<u>Principle (b):</u> "Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."	At variance	Yes Refer to Section 3.2.2, above.	
Assessment:		,	
The area proposed to be cleared contains high quality foraging habitat for Carnaby's black cockatoo species.			
Principle (c): "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."	Not likely to be at	Yes Refer to Section	
Assessment:	variance	3.2.1, above.	
The area proposed to be cleared is unlikely to contain flora species listed under the BC Act. The flora survey did not identify any threatened flora species within the application area.			
Principle (d): "Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."	Not likely to be at variance	Yes Refer to Section 3.2.1, above.	
Assessment:			

Assessment against the clearing principles	Variance level	Is further consideration required?
The area proposed to be cleared contains species that can indicate the TEC, Banksia woodlands of the Swan Coastal Plain. However, the condition of the vegetation ranges from completely degraded to good condition (Keighery, 1994) and the good condition vegetation does not meet the minimum 2-hectare threshold to be identified as a TEC.		
Environmental value: significant remnant vegetation and conservation are	eas	
Principle (e): "Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."	Not likely to be at	No.
Assessment:	variance	
The extent of the mapped vegetation type and the remnant vegetation within the local area is inconsistent with the national objectives and targets for biodiversity conservation in Australia. However, the application area is classified as a constrained area on the SCP, where the threshold for representation of the pre-clearing of native vegetation is 10 per cent.		
The application area is not considered to be part of a significant ecological linkage in the local area, however, may contribute to linkage function with adjacent areas of native vegetation.		
Principle (h): "Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."	Not likely to be at variance	No
Assessment:		
The application area is not mapped within a conservation area. Given the distance to the nearest conservation area, which is a bush forever site and a regional park, the proposed clearing is not likely to result in a significant impact to conservation area nearby.		
Environmental value: land and water resources		
Principle (f): "Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."	Not likely to be at	No
Assessment:	variance	
Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact on- or off-site hydrology and water quality. A buffer of approximately 40 metres to the nearby resource enhancement wetland has been provided. Given the separation of the application area and the wetland by a road, it is unlikely that indirect impacts from the clearing would degrade the wetland functionality.		
The proposed clearing does not include the removal of riparian vegetation.		
Principle (g): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."	Not likely to be at	No
Assessment:	variance	
The mapped soils are highly susceptible to wind erosion and nutrient export, Noting the extent of the application area, the purpose of the clearing, the condition of the vegetation and the implementation of standard construction methodologies, it is unlikely that the proposed clearing will cause an appreciable land degradation.		
A condition is implemented on the clearing permit to undertake construction works within three months of the commencement of clearing to further mitigate this risk.		

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (i): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."	Not likely to be at variance	No
Assessment:		
Given no water courses or wetlands are recorded within the application area and given the small extent of clearing, the proposed clearing is unlikely to impact surface or groundwater quality.		
Principle (j): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."	Not likely to be at variance	No
Assessment:		
The mapped soils and topographic contours in the surrounding area do not indicate the proposed clearing is likely to contribute to increased incidence or intensity of flooding. The application area is located outside of any recognised floodplain areas.		

### Appendix D. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

# Appendix E. Offset calculator value justification

# Offset - Conservation offset for Carnaby's black cockatoos (EN).

Field Name	Description	Justification for value used
Area of impact (habitat/community) or Quantum of impact (features/individuals)	The area of habitat/community impacted, or number of features/individuals impacted	0.48 hectares of native vegetation representing high quality foraging habitat for the Carnaby's black cockatoo species. Based on the findings of biological surveys (Plantecology, 2024).
Quality of impacted area (habitat/community)	The quality score for area of habitat/community being impacted - a measure of how well a particular site supports a particular threatened species or ecological community and contributes to its ongoing viability	7 – The application area provides high-quality foraging habitat for Carnaby's cockatoo. vegetation within the application area consists of open woodland of <i>Banksia attenuata</i> and <i>Banksia menziesii</i> with <i>Eucalyptus todtiana</i> . There are 67 roost sites in the local area with the closest breeding sites 12.9 km from the application area. There are water features in the surrounding area. The black cockatoo habitat survey did not identify any foraging evidence, or any Carnaby's present on site. The application area does not provide breeding habitat.
Time over which loss is averted (habitat/community)	This describes the timeframe over which changes in the level of risk to the proposed offset site can be considered and quantified	20 - As the acquired land will be incorporated into the conservation estate, it will be protected in perpetuity. The maximum value is therefore applied
Time until ecological benefit (habitat/community) or Time horizon (features/individuals)	This describes the estimated time (in years) that it will take for the main benefit of the quality (habitat/community) or value (features/individuals) improvement of the proposed offset to be realised	1– No change to ecological values is expected, therefore the minimum value is input.
Start area (habitat/community) or Start value (features/individuals)	The area of habitat/community or number of features/individuals proposed to offset the impacts	4.36 - An area of 4.36 ha is required to be protected to counterbalance 100% of significant residual impact of the proposed clearing.
Start quality (habitat/community)	The quality score for the area of habitat/community proposed as an offset - a measure of how well a particular site supports a particular threatened species or ecological community and contributes to its ongoing viability	8 – The geographic spread of the quality values reflects that the locations of offset sites likely to be associated with those impact sites will vary in quality. The values themselves are based on the Department's understanding of land potentially available and the Department's previous experience in delivering land acquisitions. Score of 8 is used where the impact is on the northern Swan Coastal Plain.
Future quality without offset (habitat/community) or Future value without offset (features/individuals)	The predicted future quality score (habitat/community) or value (features/individuals) of the proposed offset site without the offset	8 – In the absence of specific site information that might indicate threatening processes, it is assumed no change in quality in the absence of the offset.
Future quality with offset (habitat/community) or Future value with offset (features/individuals)	The predicted future quality score (habitat/community) or value (features/individuals) of the proposed offset site with the offset	8 – As monetary contributions do not generally account for management actions that would improve site quality, it is assumed no change in quality.

Risk of loss (%) without offset (habitat/community)	This describes the chance that the habitat/community on the proposed offset site will be completely lost (i.e. no	15% - Land zoned 'rural' is typically acquired as offsets. 15% is a conservative risk of loss score that can
offset (habitat/community)	offset site will be completely lost (i.e. no	•
	. ,	conservative risk of loss score that can
	langer hald any value for the protected l	<u>.</u>
	longer hold any value for the protected	be applied for this zoning. It is consistent
	matter of concern) over the foreseeable	with most direct offsets accepted by the
	future without an offset	Department.
Risk of loss (%) with offset	This describes the chance that the	5% - As the acquired land will be
(habitat/community)	habitat/community on the proposed	incorporated into the conservation
	offset site will be completely lost (i.e. no	estate, the lowest risk of loss score is
	longer hold any value for the protected	therefore applied.
	matter of concern) over the foreseeable	
	future with an offset	
Confidence in result (%)	The capacity of measures to mitigate	90% - The Department is confident that
, ,	risk of loss of the proposed offset site	an acquisition will occur; monetary
		contributions for offsets with low
		likelihood of being acquitted will generally
		not be accepted.
% of impact offset	% of the significant residual impact that	100% - obtained through the input of
	•	•
		1
1	residual impact)	
Confidence in result (%)  % of impact offset	matter of concern) over the foreseeable future with an offset  The capacity of measures to mitigate risk of loss of the proposed offset site  % of the significant residual impact that would be offset by the proposed offset (note: the offset calculations combined should equate to 100% for each	90% - The Department is confident than acquisition will occur; monetal contributions for offsets with look likelihood of being acquitted will general not be accepted.

# Offset – Low lying Banksia attenuata woodlands or shrublands (PEC)

Field Name	Description	Justification for value used
Area of impact (habitat/community) or Quantum of impact (features/individuals)	The area of habitat/community impacted, or number of features/individuals impacted	0.44 – based on the flora and vegetation survey, 0.44 hectares of native vegetation is representative of the PEC.
Quality of impacted area (habitat/community)	The quality score for area of habitat/community being impacted - a measure of how well a particular site supports a particular threatened species or ecological community and contributes to its ongoing viability	7 – The vegetation condition of the PEC is mapped ranging from degraded to good condition. Given the cumulative loss of this community, regardless of the degraded condition and the small area of clearing, the vegetation holds a higher value.
Time over which loss is averted (habitat/community)	This describes the timeframe over which changes in the level of risk to the proposed offset site can be considered and quantified	20 - As the acquired land will be incorporated into the conservation estate, it will be protected in perpetuity. The maximum value is therefore applied
Time until ecological benefit (habitat/community) or Time horizon (features/individuals)	This describes the estimated time (in years) that it will take for the main benefit of the quality (habitat/community) or value (features/individuals) improvement of the proposed offset to be realised	No change to ecological values is expected, therefore the minimum value is input.
Start area (habitat/community) or Start value (features/individuals)	The area of habitat/community or number of features/individuals proposed to offset the impacts	3.87- An area of 3.87 ha is required to be protected to counterbalance 100% of significant residual impact of the proposed clearing.
Start quality (habitat/community)	The quality score for the area of habitat/community proposed as an offset - a measure of how well a particular site supports a particular threatened species or ecological community and contributes to its ongoing viability	8 – The geographic spread of the quality values reflects that the locations of offset sites likely to be associated with those impact sites will vary in quality. The values themselves are based on the Department's understanding of land potentially available and the Department's previous experience in delivering land acquisitions. Score of 8 is

		used where the impact is on the northern Swan Coastal Plain.
Future quality without offset (habitat/community) or Future value without offset (features/individuals)	The predicted future quality score (habitat/community) or value (features/individuals) of the proposed offset site without the offset	8 – In the absence of specific site information that might indicate threatening processes, it is assumed no change in quality in the absence of the offset.
Future quality with offset (habitat/community) or Future value with offset (features/individuals)	The predicted future quality score (habitat/community) or value (features/individuals) of the proposed offset site with the offset	8 – As monetary contributions do not generally account for management actions that would improve site quality, it is assumed no change in quality.
Risk of loss (%) without offset (habitat/community)	This describes the chance that the habitat/community on the proposed offset site will be completely lost (i.e. no longer hold any value for the protected matter of concern) over the foreseeable future without an offset	15% - Land zoned 'rural' is typically acquired as offsets. 15% is a conservative risk of loss score that can be applied for this zoning. It is consistent with most direct offsets accepted by the Department.
Risk of loss (%) with offset (habitat/community)	This describes the chance that the habitat/community on the proposed offset site will be completely lost (i.e. no longer hold any value for the protected matter of concern) over the foreseeable future with an offset	5% - As the acquired land will be incorporated into the conservation estate, the lowest risk of loss score is therefore applied.
Confidence in result (%)	The capacity of measures to mitigate risk of loss of the proposed offset site	90% - The Department is confident that an acquisition will occur; monetary contributions for offsets with low likelihood of being acquitted will generally not be accepted.
% of impact offset	% of the significant residual impact that would be offset by the proposed offset (note: the offset calculations combined should equate to 100% for each residual impact)	100% - Obtained through the input of variables explained above.

Appendix F. Biological survey information (Plantecology, 2024), photographs of the vegetation (Coterra, 2024) and Department mapping.

### **Department mapping**

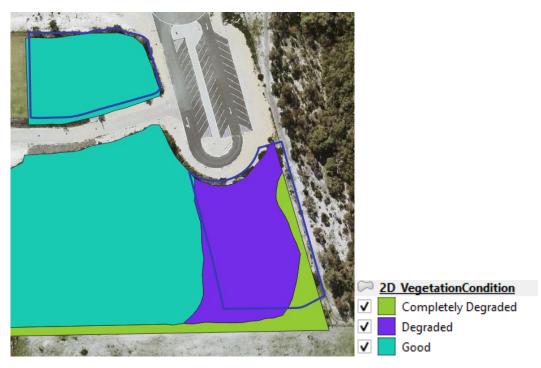


Figure 3: A map representing the condition of the vegetation within the application area (Blue polygon).



Figure 4: A map representing the vegetation type within the application area (blue polygon).

### Photographs of the application area.



**Photo location 1** 



Photo location 2



**Photo location 3** 



**Photo location 5** 



Photo location 7



**Photo location 12** 



**Photo location 14** 



**Photo location 15** 



**Photo location 16** 



**Photo location 13** 



Figure 5: A map showing the location of the photographs above.

### **Appendix G.** Sources of information

#### G.1. GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- DBCA Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography Inland Waters Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Local Planning Scheme Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Offsets Register Offsets (DWER-078)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality Flood Risk (DPIRD-007)
- Soil Landscape Land Quality Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping Best Available
- Soil Landscape Mapping Systems
- Wheatbelt Wetlands Stage 1 (DBCA-021)

#### Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

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