GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 10907/1
Permit Holder:	Co-operative Bulk Handling Limited (CBH)
Duration of Permit:	From 2 July 2026 to 2 July 2036

ADVICE NOTE

Allocation of *revegetation/rehabilitation* site
In relation to condition 9 of this permit, it is noted that 2.4 hectares of Lot 25 on Deposited Plan 425195, Dowerin, will be attributed to the mitigation for this project. The nominated site will be *revegetated/rehabilitated* to provide suitable foraging and roosting habitat for Carnaby's black cockatoo species and to mitigate clearing of *native vegetation* that is also representative of the vegetation association 1049 within an extensively cleared landscape.

Allocation of offset site
In relation to conditions 11 and 12 of this Permit, it is noted that 1.50 hectares of Lot 18239 on Deposited Plan 139910, North Baandee, will be attributed to the offset for this project. The nominated area contain vegetation representative of the 'Western Australian Wheatbelt Woodlands' Threatened Ecological Community, habitat for *black cockatoo species* and vegetation that is a significant remnant within an extensively cleared landscape.

The permit holder is authorised to clear *native vegetation* subject to the following conditions of this permit.

PART I – CLEARING AUTHORISED

1. Clearing authorised (purpose)

The permit holder is authorised to clear *native vegetation* for the purpose of Railway infrastructure expansion.

2. Land on which clearing is to be done

Lot 25 on Deposited Plan 425195, Dowerin
Railway Reserve (PIN 675642), Dowerin

3. Clearing authorised

The permit holder must not clear more than 1.29 hectares of *native vegetation* within the area cross-hatched yellow in Figures 1a to Figure 1c of Schedule 1.

4. Period during which clearing is authorised

The permit holder must not clear any *native vegetation* after 2 July 2031.

PART II – MANAGEMENT CONDITIONS

5. 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.

6. Weed management

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*:

(a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;

(b) ensure that no known *weed*-affected soil, mulch, fill, or other material is brought into the area to be cleared; and

(c) restrict the movement of machines and other vehicles to the limits of the areas

(d) to be cleared.

7. Directional clearing

The permit holder must conduct clearing activities in a slow, progressive manner towards areas of adjacent *native vegetation* to allow fauna to move into adjacent *native vegetation* ahead of the clearing activity.

8. Land degradation – Wind erosion

The permit holder must begin construction works within three (3) months of the cessation of clearing to mitigate against land degradation through wind erosion.

9. Mitigation - Revegetation/Rehabilitation

Within 24 months of undertaking clearing authorised under this permit, and no later than two years after permit issued, for the areas cross-hatched red in Figure 2 of Schedule 1, the permit holder must implement and adhere to the '*Dowerin Revegetation Management Plan*' prepared by CBH Group (CBH, 2025) (DWER Ref: DWERDT1317871), including but not limited to the following actions:

(a) commence *revegetation* and *rehabilitation* of 2.4 hectares by;

  (i) ripping the ground on the contour to remove soil compaction prior to *planting*;

  (ii) deliberately *planting* and/or *direct seeding native vegetation*, of which provides:

i. species which provide suitable foraging habitat for Carnaby's black cockatoo (*Zanda latirostris*) species; and

ii. species representative of vegetation association Guangan_1049.

(iii) ensuring only *local provenance* seeds and propagating material are used to *revegetate* and *rehabilitate*.

(b) establish six 10 x 10 metre quadrat monitoring sites across the areas cross-hatched red in Figure 2 of Schedule 1;

(c) undertake *weed* control activities prior to *planting*, and annually thereafter until the completion criteria in the attached Schedule 2 have been met;

(d) the permit holder must engage an *environmental specialist* to monitor the quadrats specified in condition 9(b) annually until the completion criteria specified in the attached Schedule 2 have been met;

(e) undertake remedial actions for areas *revegetated* and *rehabilitated*, where monitoring indicates that *revegetation/rehabilitation* has not met the completion criteria detailed in the attached Schedule 2, including;

(i) *revegetate/rehabilitate* the area by deliberately *planting* and/or *direct seeding native vegetation* that will result in the minimum completion criteria detailed in the attached Schedule 2 and ensuring only *local provenance* seeds and *propagating material* are used;

(ii) additional *weed* control activities; and

(iii) continue the annual monitoring of the *revegetated* and *rehabilitated* areas by an *environmental specialist*, until the completion criteria in the attached Schedule 2 are met.

(f) where a determination is made by an *environmental specialist* that the completion criteria in the attached Schedule 2 are met, that determination shall be submitted to the *CEO* within three months of the determination being made by the *environmental specialist*.

(g) Where the *CEO* does not agree with the determination made by an *environmental specialist*, the *CEO* may require the permit holder to undertake remedial actions in accordance with the requirements under condition 9(e).

10. Vegetation management – Revegetation/Rehabilitation

Within 24 months of undertaking clearing authorised under this permit, in relation to the areas cross-hatched red in Figure 2 of Schedule 1, the permit holder must;

(a) implement and maintain effective measures to protect the *revegetation* and *rehabilitation* area cross hatched red in Figure 2 of Schedule 1;

(b) ensure that the measures implemented under condition 10(a) are sufficient to:

(i) prevent physical disturbance, grazing, vehicle access, and unauthorised entry into the *revegetation* and *rehabilitation* area; and

(ii) minimise the risk of degradation of the *revegetation* and *rehabilitation* area through indirect impacts such as *weed* introduction, altered drainage, erosion, dust, or construction related activities;

(c) within 24 months of undertaking clearing, provide written notice to the *CEO* describing the measures implemented to achieve the outcome in condition 10(a); and

(d) maintain the measures implemented under condition 10(a) for the duration of the clearing activities, or for as long as impacts may reasonably negatively affect the *revegetation* and *rehabilitation* outcomes under condition 9.

11. Offset – Vegetation Management

(a) The permit holder must maintain or improve the condition of at least 1.50 hectares of *native vegetation* representative of the Eucalypt Woodlands of the Western Australian Wheatbelt in Very Good (Keighery, 1994) condition within the area cross-hatched red in Figure 3 of Schedule 1 (Lot 18239 on Deposited Plan 139910, North Baandee) by:

(i) adhering to the *Dowerin Offset Proposal CPS 10907-1* prepared by CBH Group (2025) (DWER Ref: DWERDT1317872); and

(ii) maintain the condition of vegetation in 'Very Good' (Keighery, 1994) condition as specified in attached Schedule 3.

(b) within 24 months of the commencement of clearing, and at least every 2 years subsequent, the permit holder must obtain a determination by an *environmental specialist* to assess whether the vegetation condition rating over the area under conditions 11(a) has been maintained.

(c) where, in the opinion of an *environmental specialist*, the vegetation condition rating under conditions 11(a) of this permit have not been maintained, remedial actions must be implemented including:

(i) *weed* control;

(ii) rubbish and litter removal;

(iii) periodic baiting for rabbits, if required;

(iv) installing/upgrading fencing to restrict thoroughfare and access by stock and grazers;

(v) installation of signage; and

(vi) *rehabilitating* the area by deliberately *planting* and/or *direct seeding native vegetation* ensuring only *local provenance* seeds and propagating material are used that will result in the areas under conditions 11(a) achieving at minimum, a condition of vegetation in 'Very Good' (Keighery 1994) condition as specified in attached Schedule 3.

(d) where remedial actions are undertaken in accordance with condition 11(c) of this permit, the permit holder shall repeat condition 11(b) within 24 months of undertaking the deliberate *planting*, *direct seeding*, or *weed* control and repeat remedial actions in accordance with condition 11(c) until the condition of vegetation in 'Very Good' (Keighery, 1994) condition at minimum, as specified in attached Schedule 3 is achieved.

(e) if the *CEO* does not agree with the determinations made by an *environmental specialist* under condition 11(b) of this permit, the *CEO* may require the permit holder to undertake remedial actions including additional *planting*, *direct seeding*, or *weed* control in accordance with the requirements under condition 11(c).

12. Offset – Conservation covenant

Within 24 months of undertaking clearing authorised under this permit, the permit holder must provide to the *CEO* a copy of a conservation covenant under section 30B of the *Soil and Land Conservation Act 1945* over the areas cross-hatched red in Figure 3 of Schedule 1 (at Lot 18239 on Deposited Plan 139910, North Baandee).

PART III - RECORD KEEPING AND REPORTING

13. 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 clearing activities generally	(a) the species composition, structure, and density of the cleared area; (b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA2020), expressing the geographical coordinates in Eastings and Northings; (c) the date that the area was cleared; (d) the direction of the clearing; (e) the size of the area cleared (in hectares); (f) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 5; (g) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 6; and (h) actions taken to mitigate against wind erosion in accordance with condition 8.
2.	In relation to *revegetation* and *rehabilitation* activities pursuant to condition 9 and 10.	(a) a description of the *revegetation* and *rehabilitation* activities undertaken; (b) the size of the area *revegetated* and *rehabilitated*; (c) the date/s on which the *revegetation* and *rehabilitation* was undertaken; (d) the boundaries of the area *revegetated* and *rehabilitated* (recorded digitally as a shapefile); (e) determinations made by an *environmental specialist*; (f) other actions taken in accordance with condition 9; (g) actions taken in accordance with condition 10 to protect the *revegetation* and *rehabilitation* area.
3.	In relation to offset management pursuant to conditions 11 and 12.	(a) the location and boundary of the allocated 1.50 hectare offset area within Lot 18239 on Deposited Plan 139910, North Baandee (recorded digitally as a shapefile); (b) a copy of the relevant conservation covenant under section 30B of the *Soil*

No.	Relevant matter	Specifications
		and Land Conservation Act 1945 in accordance with condition 12; and (c) actions undertaken in accordance with condition 12.

14. Reporting

(a) The permit holder must provide to the *CEO*, on or before 31 December of each calendar year, a written report containing:

(i) the records required to be kept under condition 13; and

(ii) records of activities done by the permit holder under this permit between 1 July of the preceding calendar year and 30 June of the current calendar year.

(b) If no clearing authorised under this permit has been undertaken, a written report confirming that no clearing under this permit has been undertaken, must be provided to the *CEO* on or before 31 December of each calendar year.

(c) Prior to 2 July 2036, the permit holder must provide to the *CEO* a written report of records required under condition 13, where these records have not already been provided under condition 14(a).

DEFINITIONS

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

Table 2: Definitions

Term	Definition
Black cockatoo species	means one or more of the following species: (a) *Zanda latirostris* (Carnaby's cockatoo); (b) *Zanda Calyptorhynchus* (Baudin's cockatoo); and/or (c) *Calyptorhynchus banksii naso* (forest red-tailed black cockatoo).
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*.
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.
dieback	means the effect of *Phytophthora* species on native vegetation.
department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
direct seeding	means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species.
environmental specialist	means a person who holds a tertiary qualification in environmental science or equivalent, and has a minimum of two (2) years work experience relevant to the type of environmental advice that an environmental specialist is required to provide under this permit, or who is approved by the *CEO* as a suitable environmental specialist.

Term	Definition
EP Act	*Environmental Protection Act 1986* (WA)
fill	means material used to increase the ground level, or to fill a depression.
Local provenance	means native vegetation seeds and propagating material from natural sources within 50 kilometers and the same IBRA subregion of the area cleared.
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.
optimal time	means the period from April to June.
planting	means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species.
rehabilitate/ed/ing/ion	means the re-establishment of a cover of local provenance native vegetation in an area using methods such as natural regeneration, direct seeding and/or planting, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.
revegetate/ed/ing/ion	means actively managing an area containing native vegetation in order to improve the ecological function of that area.
weeds	means any plant – (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; 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
08.06.2026
11.08AM

Caron Robertson
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

8 June 2026

Schedule 1

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

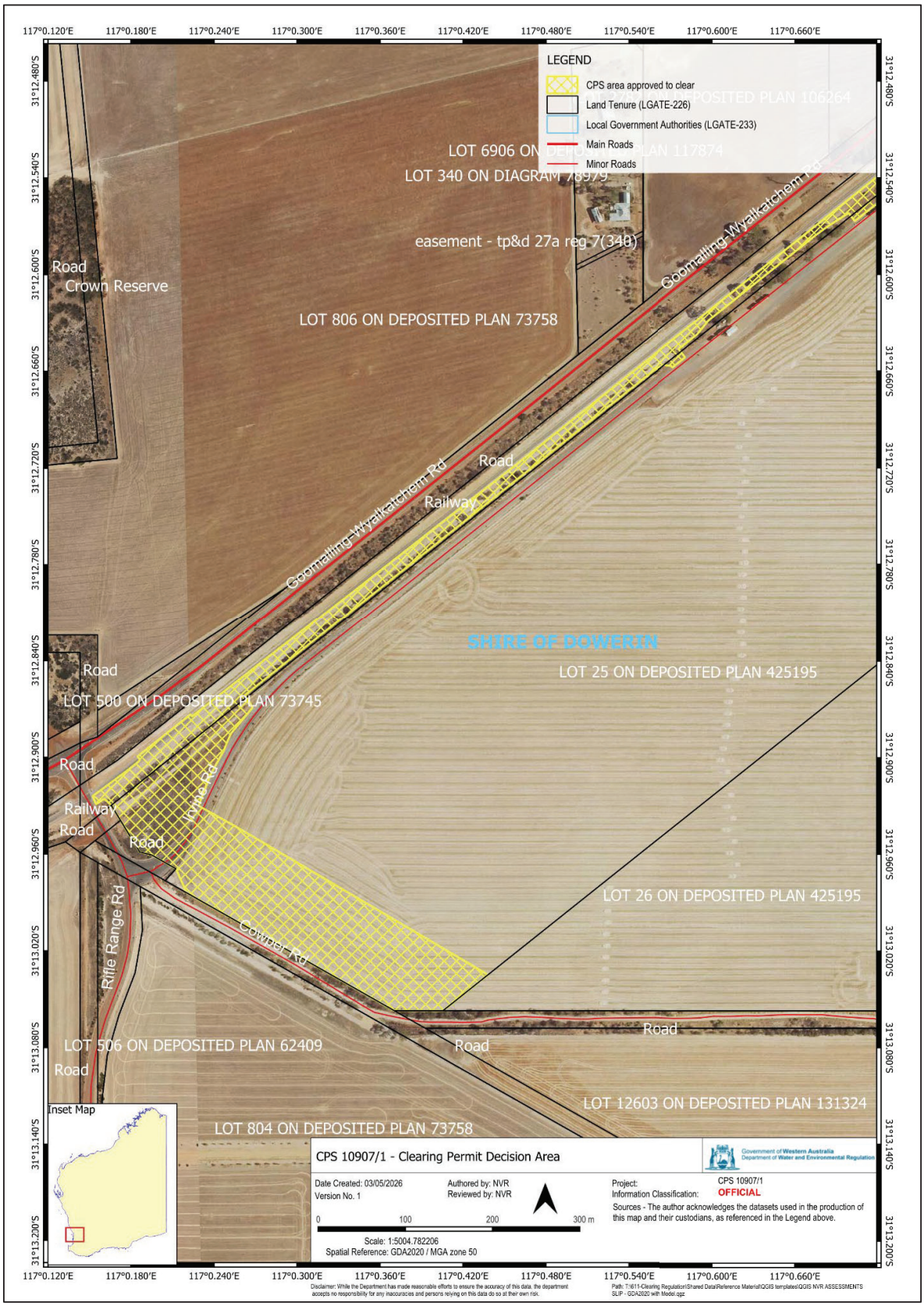

Figure 1a: Map of the boundary of the area within which clearing may occur.

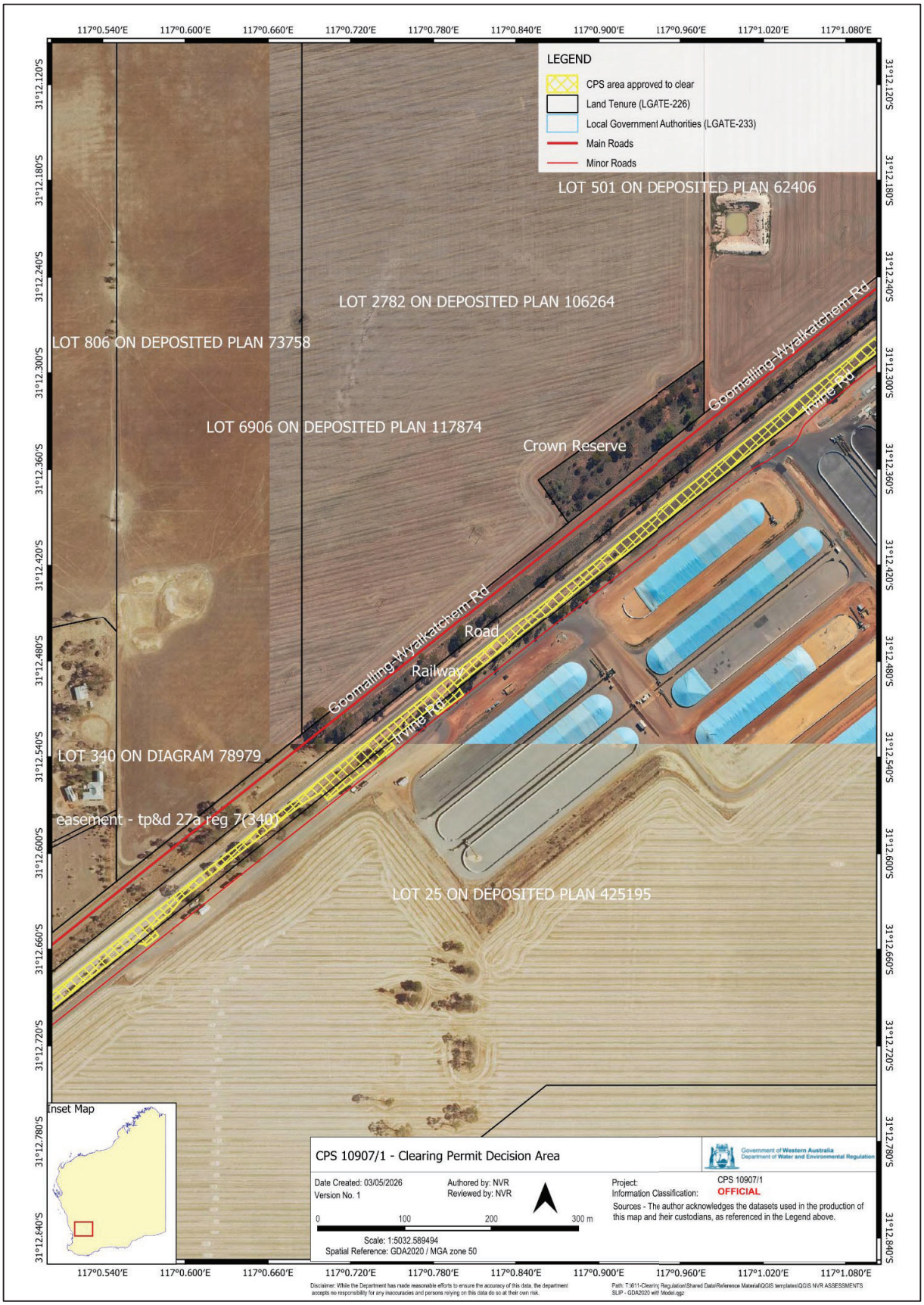

Figure 2b: Map of the boundary of the area within which clearing may occur.

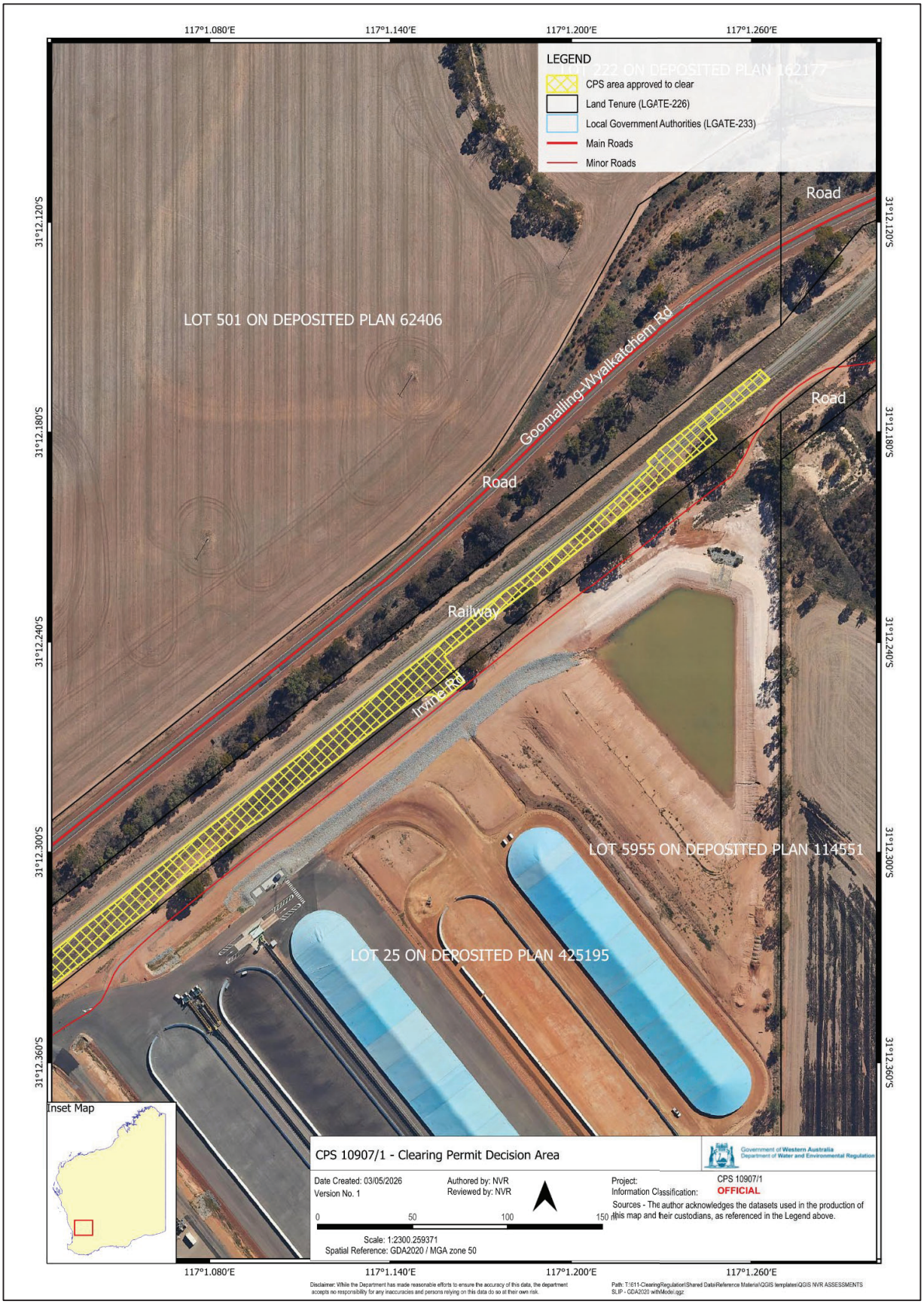

Figure 3c: Map of the boundary of the area within which clearing may occur.

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

Figure 3: Map of the boundary of the area within which conditions apply.

Schedule 2

Table 1: Completion criteria for the revegetation within the areas cross-hatched red in Figure 2 of Schedule 1 (mitigation).

Criterion	Revegetation target	Completion Criteria	Monitoring
Vegetation - density	80% of reference sites (average) across Shrub and Understorey strata	60% of reference sites (average) across Shrub and Understorey strata	In late spring-early summer at the end of years 2, 3, 5 and 10. The following to be recorded: • Native species present (diversity) • Vegetation condition • Density (stems/ha) native plants • Cover (%) native plants • Bare areas • Black cockatoo forage habitat assessment • Pest and native fauna activity • Erosion • Salt impacts or waterlogging • Dead and declining native species • Photographic record
Diversity (No. of native species)	80% of reference sites (average) across Tree, Shrub and Understorey strata	60% of reference sites (average) across Tree, Shrub and Understorey strata	
Dominant tree form	Tree layer is dominated by Eucalypts with a single trunk.	Tree layer is dominated by Eucalypts with a single trunk.	
Carnaby's Black Cockatoo foraging value	Good (score of 5 or more)	Moderate (score of 3 or more)	
Vegetation - condition	Vegetation is self-sustaining (i.e., evidence of plant maturity, flowering and seed set observed).	Good condition vegetation (score of 5 or more)	
weed	No new weeds. Weed cover and bare areas less than 80% for reference sites. No declared weeds or exotic woody weeds present onsite	No new weeds. Weed cover and bare areas less than reference sites. No declared weeds or exotic woody weeds present onsite	Annually Autum and Spring for Weed cover and dominant weed species

Fencing	-	Fence is sufficient to prevent stock and people access of the revegetation site.	Annually until completion criteria have been met and maintained for two years

Table 2: Revegetation target species list within the areas cross-hatched red in Figure 2 of Schedule 1 (mitigation).

Vegetation layer	Target plant species	Rate	Source
Tree species	*Eucalyptus salmonophloia*; *E. camuldensis*, *E. loxophleba* subsp. *Supralaevis*, *E. loxophleba* subsp. *Loxophleba*, *E. longicornis*	400 stems/ha	Seedling
Tall shrub species	*Acacia erinacea, A. merrallii, Alyxia buxifolia, Leptomeria preissiana*	As required to achieve 10% - 30% cover in each layer after 5 years.	Seed
Other shrub species	*Rhagodia drummondii*, *Enchylaena tomentosa, Atriplex stipitata, A. semibaccata, Sclerolaena diacantha*		seed
Herb, sedge and grass species	*Austrostipa elegantissima, Rytidosperma caespitosum, Dianella revoluta*		Seed or seedlings (if available)

Schedule 3

Table 1. 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.

Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 10907/1
Permit type:	Purpose permit
Applicant name:	Co-operative Bulk Handling Limited's (CBH)
Application received:	20 December 2024
Application area:	1.29 hectares within a 7.63-hectare (revised) footprint
Purpose of clearing:	Railway infrastructure expansion
Method of clearing:	Mechanical clearing
Property:	Lot 25 on Deposited Plan 425195 and Railway Reserve (PIN 675642)
Location (LGA area/s):	Shire of Dowerin
Localities (suburb/s):	Dowerin

1.2. Description of clearing activities

Co-operative Bulk Handling Limited (CBH), a Western Australian based agricultural co-operative proposes to expand rail infrastructure at the CBH Dowerin site, located approximately one kilometre southwest of the Dowerin town centre (CBH, 2025).

The project includes the following (CBH, 2025):

- new rail siding construction: approximately 2.1 kilometres in length, located adjacent to the existing mainline;
- improved transport capacity: facilitating grain haulage from Dowerin to port by rail, with capacity to accommodate 60-wagon trains;
- infrastructure works: development of an over-rail loading facility and a new ring road;
- installation of communications, power, and water services across the site; and
- removal, installation, and relocation of assets linked to the siding and loading facility.

Of the 7.63 hectares development envelope, approximately 6.34 hectares has already been cleared. The vegetation proposed to be cleared is along a railway reserve and equates to 1.29 hectares (see Figures 1a to Figure 1c, Section 1.5). For the purposes of this decision report, the "development envelope" refers to the 7.63 hectares area, while the "application area" referring to the 1.29 hectare clearing area.

1.3. Decision on application

Decision:	Granted
Decision date:	8 June 2026
Decision area:	1.29 hectares 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. However, during the assessment, CBH increased its development footprint from 3.24 hectares to 7.63 hectares to incorporate the proposed revegetation area within the overall development area. The extent of clearing remains unchanged at 1.29 hectares. The application was subsequently re-advertised for a further seven days, during which one submission was received.

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

- avoidance and minimisation actions implemented by the applicant along with consideration of alternative sites (see section 3.1);
- 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) (see Appendix C);
- the 10 Clearing Principles set out in Schedule 5 of the EP Act (see Appendix D);
- a detailed assessment of the clearing impacts on environmental values (see Section 3.2);
- available datasets at the time of the assessment (see Appendix H);
- other matters considered relevant to the assessment (see Section 3.3), which includes:
    - the clearing area being zoned as 'Railway' under the Shire of Dowerin Local Planning Scheme no 88; and
    - the department receiving correspondence from the Shire of Dowerin regarding the Shire's support for the project.
- the additional information obtained during the assessment (see Appendix A), including the findings of:
    - Targeted and reconnaissance flora and vegetation survey report (BDS, 2025).
    - Targeted Flora and Vegetation Survey Report (BDS, 2024b).
    - Targeted Black-cockatoo and Trapdoor Spider Assessments (Bamford consulting, 2024).
    - Wheatbelt woodlands threatened ecological community mapping review (BDS, 2024c).

In addition to the above, the Delegated Officer considered the need and justification for the proposed clearing (CBH, 2025), including the following:

- Dowerin has been identified as a strategic priority site within the network and is a key focus for rail-out loading investment under the Australian Supply Chain Improvement (ASCI) program.
- The Dowerin rail project supports supply chain efficiencies and delivers value to growers, aligning with CBH's strategic objectives.
- The proposal enables an increase in peak export capacity of approximately 10,000 tonnes per month to meet the demands of Western Australia's growing grain production.
- Improved loading and unloading processes are expected to reduce wait times and congestion.
- The project is anticipated to deliver economic and community benefits, including a reduction in haulage trucks on roads, contributing to fewer road accidents and decreased risk of roadside impacts to fauna species including the Carnaby's black cockatoo (*Calyptorhynchus latirostris*).
- Additional benefits include reduced noise, lower emissions, and decreased road maintenance requirements.

The assessment identified that the proposed clearing will result in:

- the loss of native vegetation that is suitable habitat for Carnaby's black cockatoos and is significant as a remnant of native vegetation in an area that has been extensively cleared;
- the loss of remnant vegetation representative of the vegetation association 1049 in an area that has been extensively cleared;
- the loss of native vegetation representative of Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community (Wheatbelt Woodlands TEC);
- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;
- potential land degradation in the form of wind erosion; and
- potential direct impacts to fauna utilising the application area during the time of clearing.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (including the revegetation planting commitments) (see Section 3.1), the Delegated Officer determined that some of the impacts of the proposed clearing, including direct impacts to individual fauna, the risk of land degradation, the potential to facilitate the introduction of weeds and clearing of Carnaby's black cockatoo foraging habitat within an extensively cleared landscape can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values through permit conditioning. However, impacts to native vegetation that is representative of the Wheatbelt Woodlands TEC within an extensively cleared landscape remained significant even after the application of minimisation and mitigation measures and will have a significant residual impact.

Having considered the environmental impacts outlined above, the applicant's implementation of the mitigation hierarchy and planning and other matters (including the consistency of the proposal with the planning framework and the public benefit of the proposed railway expansion), the Delegated Officer determined that there is sufficient reason to grant the clearing permit subject to an adequate environmental offset being provided by the proponent, consistent with the *WA Environmental Offsets Policy* (2011) and the *WA Environmental Offsets Guidelines* (2014), to counterbalance the significant residual impacts associated with the loss of native vegetation that is representative of the Wheatbelt Woodland TEC (see Section 4).

Given the above, the Delegated Officer determined that the proposed clearing can be managed through approval mechanisms to avoid significant long-term impacts on the environment. Management, mitigation and offset measures conditioned on the clearing permit will mitigate and offset impacts in accordance with the mitigation heirarchy. 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;
- undertake slow, progressive one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity;
- undertake rehabilitation and revegetation of 2.4 hectares from a completely degraded (Keighery, 1994) condition to a good condition (Keighery, 1994) in accordance with a revegetation management plan;
- manage, conserve and protect in perpetuity, of 1.50 hectares of native vegetation representation of the Wheatbelt Woodland TEC (see section 4 below).

1.5. Site maps

The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit (Figure 1a – 1c)

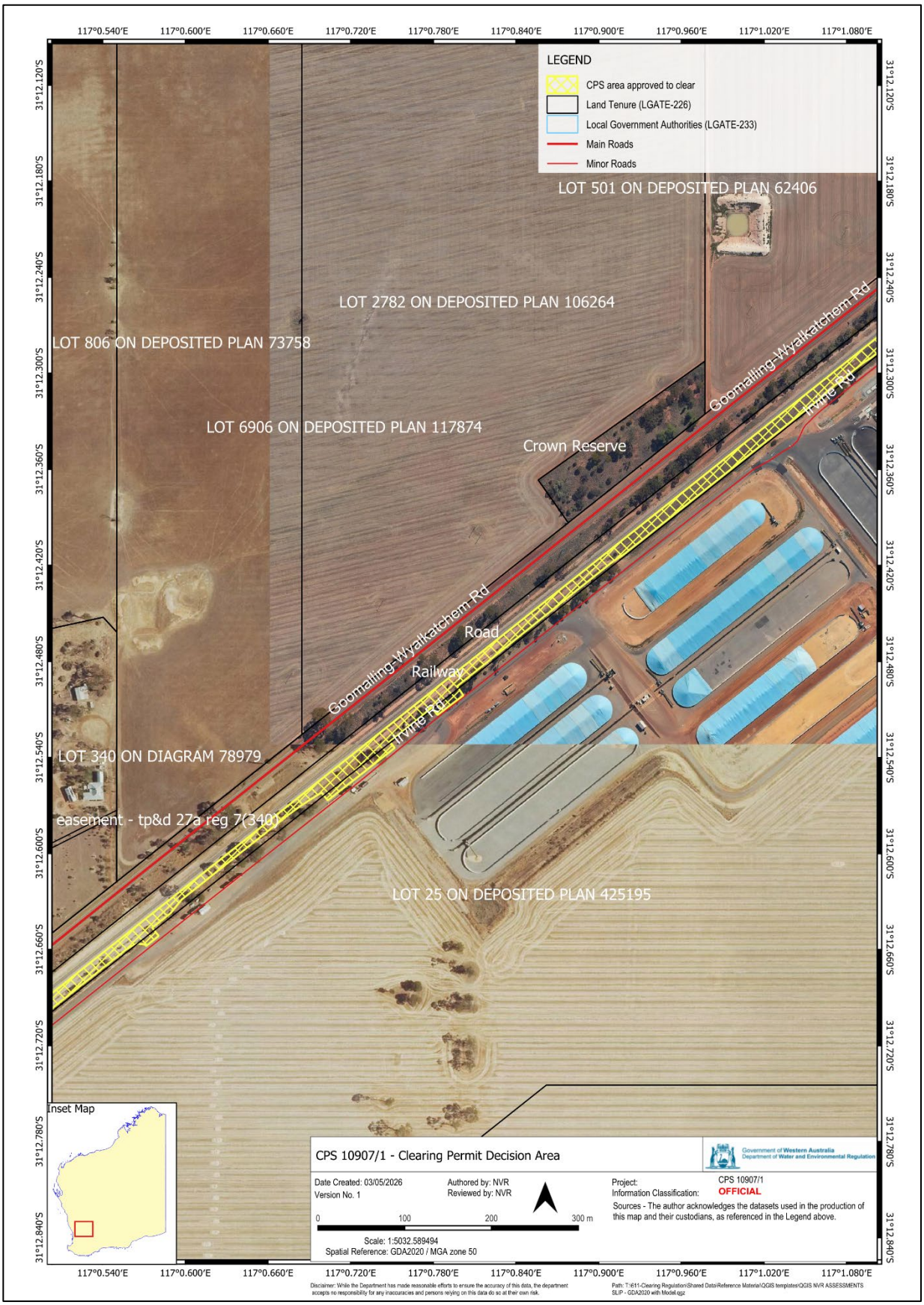

Figure 1a Map of the application area

Figure 1b Map of the application area

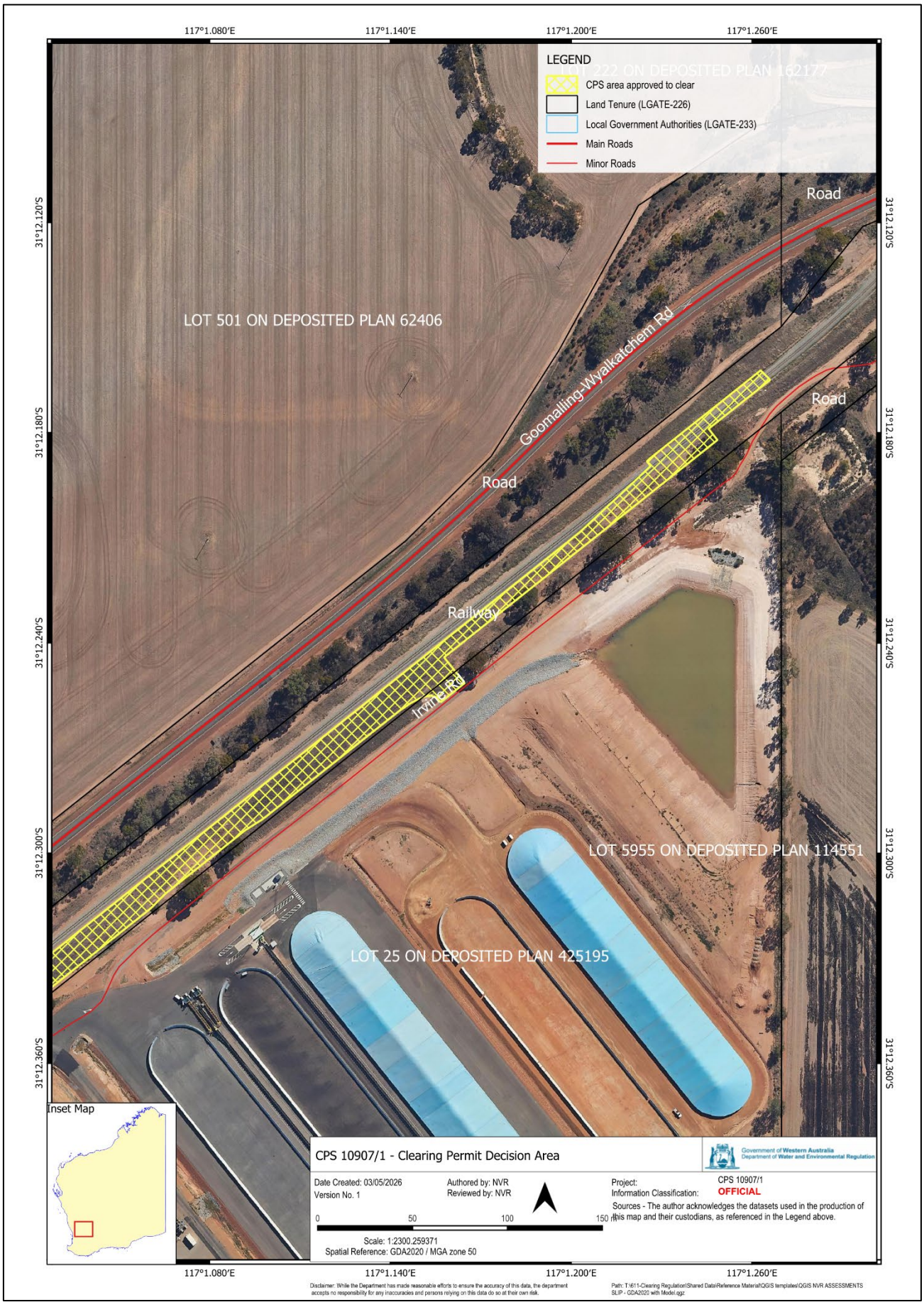

Figure 1c Map of the application area

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 Delegated Officer was satisfied that the applicant made a reasonable effort to avoid, minimise and mitigate potential impacts of the proposed clearing on environmental values.

CBH considered several design options for the proposal to reduce environmental impacts while ensuring efficient and cost-effective operations. Four main options were considered, including the preferred design, taking into account environmental impacts, regulatory requirements, design standards, and operational efficiency (CBH, 2025).

Alternative 1

This option aimed to avoid clearing native vegetation and protect nesting trees by:

- keeping a 55-metre distance from the main rail line; and
- using a shorter 1.6 kilometre siding to avoid native vegetation in the northeast.

However, the above option was not practical because:

- it required major relocation of infrastructure;
- it would block the mainline during loading; and
- it reduced train capacity, lowering efficiency.

Alternative 2

This option attempted to keep the environmental benefits of Alternative 1 while improving operations by:

- maintaining the 55-metre offset within the CBH site; and
- extending the siding to handle 60-wagon trains.

However, alternative 2 option was not suitable because:

- the design created technical issues connecting to the mainline;
- it may require moving more infrastructure and changing traffic flow; and
- it would need additional land in the northeast.

Alternative 3
This option used a loop ("balloon") design west of the site, with benefits such as:

- less vegetation clearing;
- efficient operation with 60-wagon trains; and
- separation from the mainline.

However, Alternative three option was not suitable because:

- it required major upgrades and new crossings;
- it needed significant changes to the site layout; and
- significant trees would still be impacted.

Preferred Design Alternative
This option adjusted the earlier designs by:

- aligning the siding mostly within CBH land;
- changing the connection angle to avoid significant trees; and
- allowing 60-wagon loading without blocking the mainline

However, it still had drawbacks:

- It could impact significant trees and Carnaby's cockatoo habitat within an extensively cleared landscape.
- A small area of threatened ecological community would be impacted.
- Infrastructure relocation would still be required.
- Trains would still need to use the mainline for some movements.

Final Design
The preferred design was further amended to better reduce environmental impacts. The final layout keeps the rail line within the existing rail corridor and limits the extent of native vegetation required to be cleared.

This was achieved by:

- reducing the distance between the existing rail line and the new siding from 55 metres to 7.5 metres, following consultation. This allows the rail line to be placed around important areas such as Carnaby's black cockatoo nesting trees; and
- avoiding the need to move existing infrastructure on the site.

This design was selected because it balances environmental protection with operational needs. It:

- minimises clearing of native vegetation;
- keeps the main rail line clear so trains can continue to pass through;
- does not block the nearby road crossing during loading;
- allows efficient loading of full 60-wagon trains.

The early designs would have resulted in the following environmental impacts:

- loss of 2.65 hectares of native vegetation;
- loss of 0.47 hectares of Wheatbelt Woodlands TEC; and
- loss of 7 potential black cockatoo breeding trees.

After multiple redesigns, CBH was able to finalise the development envelope with the following environmental impacts:

- loss of 1.29 hectares of native vegetation;
- loss of 0.45 hectares of Wheatbelt Woodlands TEC and
- no potential breeding trees to be impacted.

Revegetation and Rehabilitation Planting:
Following the above measures to avoid and minimise the area of clearing, the department's assessment determined that a significant residual impact remains. That is:

- loss of 1.29 hectares of native vegetation that provides suitable foraging habitat for Carnaby's black cockatoo species.
- loss of 0.45 hectares of native vegetation that is representative of the Wheatbelt Woodland TEC; and
- loss of 1.29 hectares of native vegetation that is a significant remnant, representative of the vegetation association 1049, and occurring within an extensively cleared landscape.

The Department therefore requested that the applicant provide additional mitigation measures to ensure that no significant residual impacts remain after applying the mitigation hierarchy.

CBH has proposed the re-establishment of native vegetation over an area of 2.90 hectares of currently degraded land as a mitigation measure. The revegetation will use native species that provide foraging habitat for Carnaby's black cockatoo and is intended to counterbalance the impacts associated with both Carnaby's habitat and vegetation loss in an extensively cleared landscape, which is also representative of the vegetation association 1049 (CBH, 2026b).

The proposed revegetation area is located at Lot 25 on Deposited Plan 425195, Dowerin, a property owned by CBH adjacent to the railway reserve. This area has previously been cleared for farming and is currently devoid of native vegetation. However, it is situated next to retained native vegetation within nearby rail and road reserves, which provides an opportunity to link and enhance existing habitat (CBH, 2026b).

The objective of the revegetation plan is to re-establish native vegetation communities that, as far as practicable, reflect the composition, structure, condition, and ecological function of the vegetation impacted by the clearing. The revegetated area is also intended to become resilient and self-sustaining over time, requiring no greater level of management than surrounding natural vegetation remnants (CBH, 2026b).

The area (2.90 hectares) will be revegetated to meet the following broad description: Mixed Eucalyptus open woodland and open shrubland, over mixed endemic herbs, sedges and/or grasses. The revegetation area will be dominated by eucalypt species recorded in the reference sites that are known forage plants for Carnaby's black cockatoos. The species list for the shrub and herb layers is derived from the reference sites. These plants will be re-established by direct seeding at a rate calculated to achieve a cover of between 10 per cent and 30 per cent cover for each species. The two grass species (*Austrostipa elegantissima* and *Rytidosperma caespitosum*) will be seeded (or planted) once the tree and shrub layers have become established and pasture grasses has been reduced as a result (CBH, 2026b).

The key threats to revegetation success identified in the revegetation management plan were:

- grazing from stock, kangaroos and rabbits:
- weeds;
- wind erosion;
- soils may not be saline enough to support salt-tolerant plants recorded in the reference sites; and
- soil nutrient levels excessive to the requirements of native plant species.

A detailed revegetation plan was prepared by CBH which addresses the key threats mentioned above. The revegetation management plan is available on the department's FTP site Index of /permit/10907. The baseline survey quadrats Q03 (EucsalW) and Q04 (EucW) have been used as reference sites for the development of completion criteria (CBH, 2026b).

According to the calculations undertaken by the department using the rehabilitation calculator of the environmental offset metric, the revegetation of 2.90 hectares of land currently in a completely degraded condition (Keighery, 1994) to a good condition (Keighery, 1994), using species that provide foraging habitat for Carnaby's black cockatoos, will fully counterbalance the clearing of 1.29 hectares of Carnaby's foraging habitat. This same revegetation effort will also fully counterbalance the loss of remnant native vegetation within an extensively cleared landscape, representing the vegetation association 1049, again achieving 100 per cent mitigation. Based on the calculation output, the required offset to counterbalance this impact is estimated to be approximately 2.4 hectares, meaning the proposed revegetation exceeds this requirement.

After consideration of avoidance and mitigation measures a significant residual impact remains for clearing of Wheatbelt Woodland TEC. An offset proposal was developed by CBH and assessed and approved by the delegated officer. The assessment of the offset proposed was undertaking in accordance with the Government of Western Australia's *Environmental Offsets Policy* and *Environmental Offsets Guidelines*, the 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 had regard for the site characteristics (see Appendix C) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles (see Appendix D) identified that the impacts of the proposed clearing present a risk to biological values (fauna and ecological communities), and significant remnant vegetation. 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 community) - Clearing Principles (a and d)

Assessment

The application area is located within the Avon Wheatbelt IBRA region of Western Australia. Four environmental surveys were conducted within the application area to determine the vegetation type, vegetation condition, presence of conservation significant flora species and the extent of the threatened ecological community (BDS, 2024b; BDS, 2024c; BDS, 2025; Bamford Consulting Ecologists, 2025).

According to the targeted flora and vegetation survey undertaken by Bio Diverse Solutions (BDS) in 2024. The vegetation type within the application area was determined as:

- *Eucalyptus salmonophloia* Woodland (EucsalW)
- Mixed Eucalyptus Woodland (EucW)
- Mixed Shrubland (MSL)

See Appendix C for a detailed description of the above vegetation types. Additional information regarding the vegetation mapped within the application area is also available through the supporting documents submitted to the department available from Index of /permit/10907.

The condition of the vegetation within the application area ranges from good (Keighery, 1994) to completely degraded (Keighery,1994) condition with majority of the area in a degraded (Keighery,1994) condition.

- 0.28 hectares is in completely degraded condition.
- 0.5 hectares is in degraded condition.
- 0.42 hectares is in good condition.

Conservation significant flora

According to the available databases, the desktop assessment identified 22 conservation-significant flora species within the local area. Of these, five species are associated with the same soil and vegetation types as those present in the application area. A pre-survey likelihood assessment undertaken by BDS (2025) identified 12 taxa as having potential to occur within the survey area. However, following field surveys and subsequent reassessment, no conservation-significant flora are considered likely to occur within the application area (BDS, 2025).

The 2025 survey did not record any conservation-significant flora within the application area. Habitat previously considered suitable for species assessed as having a 'possible' likelihood of occurrence is now largely absent, likely due to extensive site degradation. It is also considered that, if such species were once present, the soil seed bank has been substantially reduced or degraded. This is likely the result of ongoing disturbance from grazing animals, off-site impacts from agricultural chemical and fertiliser use, and the long-term disturbance history of the site. A taxon initially resembling *Bossiaea atrata* (Priority 3) was recorded in the targeted survey area, with 143 individuals observed (BDS, 2024b). However, further assessment undertaken from 14 to July 2025 confirmed these individuals to be the more widespread species *Mirbelia trichocalyx* (BDS, 2025).

Previous data indicate that three conservation-significant flora species have been recorded within the application area: *Acacia campylophylla*, *Bossiaea atrata* and *Cryptandra dielsii* (BDS, 2024b). Accordingly, these three species have been considered in detail as part of this assessment.

Acacia campylophylla

Acacia campylophylla is listed as a Priority three species by Department of Biodiversity, Conservation and Attraction (DBCA). It is a dense, spreading shrub, typically 0.1–0.6 metres high, flowering between July and August. The species is generally associated with low heath and shrubland communities and commonly occurs with genera such as *Allocasuarina, Daviesia, Acacia, Grevillea, Banksia* and *Gastrolobium spinosum*. It has also been recorded in degraded roadside vegetation and is known to occur on brown to grey sandy loam soils (WA Herb, 1998-).

The desktop review identified a record of *A. campylophylla* within the application area in 2022, where it was recorded in a mixed native shrubland community. A targeted flora survey undertaken in 2024 (BDS, 2024) did not record the species, and a subsequent survey in 2025 (BDS, 2025b) also failed to detect any Acacia species within the application area. Both surveys were conducted during the known flowering period for *A. campylophylla.*

Based on the available information, including database records and targeted field surveys, it is considered unlikely that *A. campylophylla* currently occurs within the application area.

Bossiaea atrata

Bossiaea atrata is listed as a Priority three flora species. It is a compact, dense, rigid, and intricately branched spinescent herb reaching up to 1.2 metres in height, with orange, yellow, red to brown flowers typically observed between May and August. The species is associated with mallee woodland and shrubland communities and commonly co-occurs with *Eucalyptus* spp., *Acacia* spp*., Melaleuca* spp*., Grevillea* spp., *Hakea* spp*., Eremophila drummondii, Calothamnus spp., Dryandra* spp*., Gastrolobium* spp., *Beyeria sulcata, Petrophile spp., and Daviesia benthamii*. It typically occurs on white sand or sandy loam substrates over laterite or clay (WA Herb, 1998-).

Desktop assessment did not identify any records of *B. atrata* within a 10 kilometres radius of the application area. However, the species was initially reported during a flora survey undertaken in 2024 (BDS, 2024b). To verify this record, a targeted survey was conducted from 14th to the 16th of July 2025 (BDS, 2025), focusing on habitat considered suitable for *B. atrata*. The survey area was assessed on foot using traverses and relevés to identify and map vegetation units, determine their condition, record flora species, and carry out targeted surveys in habitats likely to support *B. atrata* (BDS, 2025).

B. atrata was not recorded during the 2025 survey. The BDS (2025) report determined that the earlier record was a misidentification, as specimens and photographs from previous surveys were inconsistent with *B. atrata*. Further review, including confirmation by the WA Herbarium, verified that the species is not present within the development envelope (BDS, 2025b).

Based on the desktop assessment and targeted field surveys, it is considered unlikely that *B. atrata* occurs within the application area. Photographs of the species that was misidentified are available under Appendix G.

Cryptandra dielsii

Cryptandra dielsii is listed as a Priority three species. It is an intricately branched, spreading shrub typically 0.2–0.6 metres in height and producing white flowers between July and September. The species is generally associated with sandy soils, often over laterite, within sandplain habitats (WA Herb, 1998-).

The species was previously recorded within the application area in 2007 in shrubland vegetation associated with *Mirbelia trichocalyx, Ecdeiocolea monostachya,* and *Waltzia acuminata* var. *acuminata*. However, it was not recorded during the 2024 flora survey (BDS, 2024b) or the subsequent survey in 2025 (BDS, 2025). No species representative of the Rhamnaceae family was identified during the 2025 survey, despite it being undertaken during the species' known flowering period (BDS, 2025).

Given the absence of recent records from surveys conducted in appropriate seasonal conditions, it is considered unlikely that *C. dielsii* currently occurs within the application area.

Threatened and Priority Ecological communities

According to available databases, Eucalypt woodlands of the Western Australian Wheatbelt (Critically Endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)) is mapped within the application area. The database mapping indicates that the application area may support, or may have historically supported, vegetation meeting the condition thresholds for this listed ecological community. Accordingly, this community has been considered in this assessment, with field surveys undertaken to verify its presence and condition within the application area (BDS, 2024c).

The approved Conservation Advice for the Wheatbelt Woodlands community is provided by the Commonwealth of Australia (2016), which outlines criteria for its identification and assessment. Key factors in determining the presence of this community include patch size and vegetation condition. The condition thresholds generally exclude highly degraded areas, such as narrow roadside remnants, where canopy continuity is lacking and the understorey has lost significant native structure and diversity. For roadside vegetation, a minimum patch width of greater than five metres is typically required, based on the native understorey component (Commonwealth of Australia, 2016).

The Wheatbelt Woodland vegetation present within the application area is in 'Degraded' or 'Completely Degraded' (Keighery, 1994) condition. In accordance with the *Approved Conservation Advice for the EPBC-listed Wheatbelt Woodlands* (DoEE, 2015), highly degraded or modified woodland patches, while still representing remnant native vegetation, may not qualify for protection under the EPBC Act. Aerial imagery identified some areas within the investigation area that appear to lack native understorey vegetation. However, both this review and previous

assessments determined that these areas should still be considered part of the TEC. This conclusion is based on the absence of evidence of historical clearing and the presence of mature trees at densities exceeding five trees per 0.5 hectares, which meets the criteria for Category D patches (BDS, 2024c).

The extent and distribution of the Wheatbelt Woodlands community within the application area were assessed using updated aerial imagery and survey data from multiple surveys across the development envelope. Based on survey datasets provided to the department in shapefile format, it is confirmed that, within the 0.9 hectares of vegetation identified as likely to support Wheatbelt Woodland TEC, approximately 0.475 hectares is representative of Wheatbelt Woodlands TEC. Of this 0.475 hectares, 0.448 hectares meets the Category D diagnostic condition threshold for Wheatbelt Woodlands.

Noting the above, it is considered that the proposed clearing of 0.45 hectares (rounded to two decimal places) of vegetation representative of the Wheatbelt Woodlands TEC in degraded (Keighery, 1994) condition constitutes a significant residual impact within a landscape that has been extensively cleared of native vegetation. In accordance with the Government of Western Australia's Environmental Offsets Policy and Environmental Offsets Guidelines, this significant residual impact has been counterbalanced through the conditioning of an environmental offset requirement, see Section 4 below.

Conclusion
Based on the above assessment, the application area does not consist of conservation significant flora species. The proposed clearing will result in the loss of 0.45 hectares of vegetation representing the Wheatbelt Woodlands TEC and corresponding PEC.

The significant residual impacts of the proposed clearing on native vegetation, after consideration of mitigation actions, will be counterbalanced through an environmental offset for the loss of 0.45 hectares of native vegetation representative of the Wheatbelt Woodlands.

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

- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback; and
- offsets (as described in Section 4).

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

Assessment
According to available databases, three conservation significant fauna species have been recorded within the local area (10-kilometre radius of the application area). In determining the likelihood of conservation significant fauna occurring within the application area, consideration was given to the results of the preferred habitat types, proximity of records to the application area, and the type and condition (Keighery, 1994) of the vegetation within the application area. From the likelihood assessment, the application area is considered to comprise habitat for one conservation significant fauna species:

- *Zanda latirostris* (Carnaby's cockatoo), listed as Endangered under the EPBC Act and BC Act.

A targeted assessment for black cockatoos and trapdoor spiders was conducted by Bamford Consulting Ecologists in 2024 (Bamford Consulting Ecologists, 2024). The application area lies outside the known distribution of the Forest Red-tailed black cockatoo and Baudin's black cockatoo; as a result of modelled distribution and the lack of Baudins and the Forest Red-tails within the local area, Carnaby's black cockatoo is the only species of black cockatoo likely to occur within the application area.

According to the survey results, the application area contains native vegetation consisting of two fauna habitat types, which are (Bamford Consulting Ecologists, 2024):

- Eucalypt Woodland, described as York gum and White gum woodland with scattered mature Salmon gum over weedy grasses and invasive plant species on sandy brown loam.
- Mixed Shrubland, described as midstorey shrubland consisting of *Allocasuarina, Grevillea, Hakea* and *Acacia* shrubs that varies in density and diversity, on sandy brown loam.

Carnaby's black cockatoos
The Wheatbelt region contains open woodlands of Eucalypt species that are known to be used by Carnaby's cockatoo for breeding. According to available databases, only one record of Carnaby's black cockatoo was recorded within the local area. Habitat requirements for Carnaby's cockatoos can be categorised as foraging habitat, breeding habitat and night roosting habitat (DAWE, 2022).

Breeding habitat
Breeding habitat for species of black cockatoos is described within the 'EPBC Act referral guidelines for 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 50 centimetres (DAWE, 2022). Carnaby's cockatoos generally breed in woodland or forest, but also breed in former woodland or forest now present as isolated trees. They nest in hollows in live or dead trees of *Eucalyptus Salmonophloia* (salmon gum), *Eucalyptus wandoo* (wandoo), *Eucalyptus gomphocephala* (tuart), *Eucalyptus marginata* (jarrah), *Eucalyptus rudis* (flooded gum), *Eucalyptus loxophleba* subsp. *Loxophleba* (york gum), *Eucalyptus accedens* (powder bark), *Eucalyptus diversicolor* (karri) and *Corymbia calophylla* (marri).

A black cockatoo habitat survey covered an area of approximately 133 hectares. Within this survey area, 97 habitat trees meeting the potential nest-tree criteria were identified. Of these, two trees are located within the application area. The applicant has sought to minimise the clearing of habitat and potential habitat trees as far as practicable. The two habitat trees within the application area were assigned a rank of 5, indicating trees of sufficient size but lacking large hollows. These trees comprise of (Bamford Consulting Ecologists, 2024):

- *Eucalyptus salmonophloia*, 40 centimetre DBH (alive tree)
- *Eucalyptus salmonophloia*, 50 centimetre DBH (alive tree)

Foraging habitat
Black cockatoos will generally forage up to 12 kilometres from an active breeding site (DAWE, 2022). Following breeding, they will flock in search of food, usually within six kilometres of a night roost (DAWE, 2022). Food resources within the range of breeding sites and roost sites are important to sustain populations, and foraging resources are therefore viewed in the context of known breeding and night roosting sites (DAWE, 2022). A review of available data has identified that no black cockatoo roost sites and no white-tailed black cockatoo breeding sites occurred within a 12-kilometre radius of the application area. The closest roost site was identified approximately 19 kilometres from the application area, and the closest breeding site was located approximately 32 kilometres from the application area.

No Carnaby's black cockatoos, nor any evidence of their use of the application area were recorded during the black cockatoo habitat survey. A total of 2.41 hectares of potential Carnaby's black cockatoo foraging habitat was recorded within the development envelope (Bamford Consulting Ecologists, 2024). Of this 2.41 hectares:

- 0.9 hectares has moderate foraging value (score 4)
- 0.67 hectares has a low to moderate foraging value (score 3)
- 0.84 hectares has a negligible to low foraging value (score 1).

Vegetation mapping within the application area indicates that the proposed clearing will result in the removal of approximately 1.29 hectares of native vegetation that provides foraging habitat for Carnaby's black cockatoo. Black cockatoo populations have been substantially affected by historical habitat clearing, leading to fragmentation of breeding and foraging areas, loss of suitable nesting hollows, shifts in species distribution, and genetic isolation (DAWE, 2022). Consequently, remnant vegetation patches play an important role in maintaining habitat connectivity across the broader landscape.

Given the extensively cleared nature of the surrounding landscape, the remaining native vegetation in this region is of local significance. To mitigate the loss of 1.29 hectares of foraging habitat, the applicant has proposed revegetation, and rehabilitation works within the development area. Additional information regarding the proposed mitigation planting measure is outlined under section 3.1 of the decision report.

Roosting habitat
Night roosts are typically located in the tallest trees within an area and are generally situated close to reliable food sources and water (DAWE, 2022). Findings from the black cockatoo habitat assessment indicate that vegetation unit VSA1 – Eucalypt Woodland has the potential to provide roosting habitat for Carnaby's black cockatoo. Several water sources occur near the application area, which increases the suitability of this vegetation type as potential roosting habitat (Bamford Consulting Ecologists, 2024).

Given the absence of local records and the lack of evidence of use identified during the black cockatoo habitat survey (Bamford Consulting Ecologists, 2024), it is unlikely that Carnaby's black cockatoos are currently using the application area for roosting. Over the longer term, the proposed revegetation and rehabilitation areas are expected to develop suitable roosting habitat, thereby mitigating potential impacts to roosting opportunities within the application area.

The department recognises that the environmental offset area including vegetation representative of the Eucalyptus woodland also provides foraging, breeding and roosting habitat values for Carnaby's black cockatoos.

Shield-backed Trapdoor Spider (*Idiosoma nigrum*)

Records of shield-backed trapdoor spider (*Idiosoma nigrum)* (trapdoor spider) was not identified within a 10-kilometre radius of the application area (local area). However, given the application area falls within the known range of this species and because a survey was conducted for this species, the assessment has further considered this species in the department's assessment of impacts.

Shield-backed trapdoor spider (*Idiosoma* spp.) is listed as Vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This is a poorly known invertebrate species, with limited information available regarding its habitat preferences. It has been recorded across an extent of approximately 8,500 km² within the central-western Wheatbelt bioregions, where it is generally associated with woodland habitats. The species constructs distinctive burrows characterised by a "moustache-like" arrangement of twig lines at the entrance (Rix et al, 2018). During the survey, areas of potential habitat particularly those surrounding shrubs that provide leaf litter and shelter were systematically inspected for evidence of trapdoor spider burrows (Bamford Consulting Ecologists, 2024).

The trapdoor spider assessment consisted of a much larger area than the application area and within the trapdoor spider assessment area, suitable habitat for trapdoor spiders was present in two Vegetation and Substrate Associations (VSA). These shrublands provided suitable shelter and sufficient ground little cover for the trapdoor spiders (Bamford Consulting Ecologists, 2024):

- VSA 4a. Proteaceous Shrubland: Midstorey shrubland with high density of Grevillea and Hakea, with Allocasuarina and Acacia shrubs on sandy brown loam. This VSA makes up 0.4 per cent (0.5 hectares) of the development envelope.
- VSA 4b. Mixed Shrubland: Midstorey shrubland consisting of *Allocasuarina, Grevillea, Hakea* and *Acacia* shrubs that varies in density and diversity, on sandy brown loam. This VSA makes up to six per cent (7.7 hectares) of the overall development envelope,

Following a further analysis of the survey results, the application area consists of 0.63 hectares of the VSA 4b, however, no evidence of trapdoor spiders was observed within this area (Bamford Consulting Ecologists, 2024).

Ecological linkage

Given the high level of historical clearing in the surrounding area, the application area may play a role in facilitating fauna movement across the landscape. However, as vegetation will be retained within the rail reserve following the proposed clearing, together with the implementation of 2.90 hectares of revegetation and rehabilitation areas proposed by CBH (refer to Section 3.1), the proposed works are not expected to result in a significant impact on local fauna linkage or dispersal values.

The proposed clearing may, however, lead to a decline in the condition of adjacent and nearby remnant native vegetation through the potential spread of weeds. These risks can be appropriately managed and mitigated through the application of permit conditions addressing weed management.

Conclusion

Based on the assessment above, the proposed clearing will result in the removal of approximately 1.29 hectares of foraging habitat considered significant for Carnaby's black cockatoos. For the reasons outlined, this loss is regarded as a significant impact on Carnaby's black cockatoo foraging habitat and required mitigation measures to reduce this impact. The clearing will remove habitat suitable for roosting by the Carnaby's black cockatoos, no nesting or breeding habitat for the Carnaby's will be removed. The proposed clearing is not likely to impact significant habitat for other conservation-significant fauna known to occur in the local area.

Fauna may move through the application area as part of broader landscape dispersal, and mechanical clearing activities could present a risk of injury or mortality should individuals be present at the time of clearing. This risk can be reduced through the implementation of slow, directional clearing that allows fauna to relocate into surrounding areas of remnant native vegetation prior to clearing.

Conditions

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

- avoid and minimise clearing, to minimise the direct impacts to native vegetation.
- slow directional clearing to allow fauna to move into adjacent vegetation ahead of the clearing activity will minimise impact to individuals; and
- mitigation – revegetation of 2.90 hectares of completely degraded (Keighery, 1994) land to a good condition (Keighery, 1994) using species that provide foraging habitat for Carnaby's black cockatoos.

3.2.3. Significant remnant vegetation - Clearing Principles (e)

Assessment

The Avon Wheatbelt IBRA region currently retains 18.56 per cent of the pre-European vegetation extent (Commonwealth of Australia, 2019). The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearing of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

The application area is mapped within the Guangan_1049 vegetation association, which in the Wheatbelt is characterised by *Eucalyptus loxophleba* (York gum), *Eucalyptus salmonophloia* (salmon gum), and associated species. This vegetation association retains approximately 6.51 per cent of its pre-European extent (Commonwealth of Australia, 2019). Given the presence of York gum and Salmon gum throughout the application area, the vegetation is considered representative of the Guangan_1049 vegetation association.

Within a 10-kilometre radius of the application area, native vegetation cover is estimated to be approximately 8.1 per cent, which is below national targets (Commonwealth of Australia, 2001). As outlined above, the application area contains vegetation representative of the Wheatbelt Woodlands Threatened Ecological Community, provides foraging habitat for Carnaby's black cockatoo, and may contribute to fauna movement across the local landscape. Accordingly, the application area is considered to represent a significant remnant within a highly modified and extensively cleared environment.

To mitigate the impacts associated with the proposed clearing of 1.29 hectares of native vegetation which comprises a significant remnant representative of vegetation association 1049 within an extensively cleared landscape, the applicant has proposed the re-establishment of native vegetation across 2.90 hectares of completely degraded (Keighery, 1994) land, with the objective of restoring it to good condition (Keighery, 1994). The revegetation planting will include York gum and Salmon gum, reflecting the composition of vegetation association 1049.

Mitigation actions contribute to minimising the environmental impacts of the proposed clearing however a significant residual impact remains to the extent of native vegetation within the local area and as a occurrence of an under-represented vegetation association. An environmental offset, intended to counterbalance the significant residual impacts of clearing of Eucalyptus woodland TEC, is sufficient to counterbalance 100 per cent of the significant residual impacts of the proposed clearing and is similarly located within an extensively cleared landscape. The permanent protection of the vegetation within the offset area provides additional conservation protection against further loss of remnant vegetation within the local area.

Conclusion

Based on the above assessment, the proposed clearing will result in the removal of 1.29 hectares of significant remnant vegetation within an extensively cleared landscape. This loss represent a residual environmental impact to environmental values that has been further mitigated by measures proposed by the applicant including revegetation and rehabilitation. The mitigation measures proposed are sufficient to address the environmental impacts of clearing on a remnant of native vegetation in an extensively cleared landscape however the department recognises that the offset to counterbalance clearing of Eucalyptus woodland TEC will also counterbalance impacts to remnant vegetation in an extensively cleared landscape.

Conditions

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

- Revegetation and rehabilitation of 2.90 hectares of native vegetation (see section 3.1).

*Offset conditions are required under section 3.2.1 however will provide environmental benefit for this value as well.

3.3. Relevant planning instruments and other matters

Advice has been received from the Shire of Dowerin (Shire of Dowerin, 2025), which supports the application on the basis that it aligns with the region's economic and infrastructure development objectives. The Shire considers the proposed clearing to be consistent with the local Town Planning Scheme and broader regional planning strategies. It also recognises the importance of the project in enabling improvements to CBH's logistics and operations, which are critical to the efficiency of grain handling and the agricultural industry within the Wheatbelt (Shire of Dowerin, 2025).

The application area is within the Avon River System proclaimed under the *Rights in Water and Irrigation Act 1914* (RIWI Act). The application area does not intersect rivers proclaimed under the RIWI Act. The application area is not located within any *Country Areas Water Supply Act 1947* (CAWS Act) clearing control catchments or Public Drinking Water Source Areas (PDWSA). No additional licencing or permitting under the RIWI Act or CAWS Act is required.

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 Mitigation and offsets

According to the calculations undertaken by the department using the rehabilitation calculator within the WA environmental offset metric, the revegetation planting measures are able to mitigate the significant residual impact for Carnaby's black cockatoos and clearing within an extensively cleared landscape.

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:

- loss of 0.45 hectares of native vegetation that is representative of the Wheatbelt Woodland TEC.

Offset

Background

To counterbalance the significant residual impact of clearing of 0.45 hectares of native vegetation in degraded (Keighery, 1994) condition that is representative of the Wheatbelt Woodlands TEC, the applicant has proposed a 1.5 hectare land acquisition offset with management measures on site to maintain and improve the condition of vegetation.

The proposed offset is located at Lot 18239 on Deposited Plan 139910 in North Baandee, within the Shire of Kellerberrin, approximately 77 kilometres from the application area. The site is zoned for general agriculture and comprises Eucalyptus low woodland, which is representative of the Wheatbelt Woodland TEC, including vegetation association 1049. The vegetation at the site is in very good (Keighery, 1994) condition (CBH, 2026a).

CBH has proposed a range of management measures to ensure the long-term protection and quality of environmental values within the offset area. These include securing the site in perpetuity and maintaining 1.5 hectare of Wheatbelt Woodland TEC in very good (Keighery, 1994) condition by minimising the current threats. Management actions will include installing or upgrading fencing to limit access by stock and grazers, installing signage, undertaking periodic rabbit baiting if required, and establishing reference and monitoring sites. Additional measures include weed control, removal of rubbish and litter, implementation of hygiene protocols, and fire management. The department consideres that implementation of these measures is likely to improve the condition of the offset site to be 'very good to excellent' (Keighery, 1994) condition vegetation.

The offset area is expected to provide additional environmental benefits, as it supports eucalypt woodland vegetation that offers suitable foraging, roosting and breeding habitat value for Carnaby's black cockatoos. It is also representative of vegetation association 1049 and forms part of a larger 16.33-hectare remnant, contributing to the conservation of native vegetation in the landscape.

Offset calculated by the department

Based on the above, a calculation using the WA offset metric 'calculator' was undertaken, which determined that the acquisition of 1.50 hectares of remnant vegetation on Lot 18239 on Deposited Plan 139910, North Baandee will adequately counterbalance the significant residual impact of clearing 0.45 hectares of vegetation representative of Eucalyptus woodland of WA wheatbelt.

The Delegated Officer determined that the proposed offset is consistent with the *WA Environmental Offsets Policy* (2011) and the *WA Environmental Offsets Guidelines* (2014), and that it adequately counterbalances the significant residual impacts to native vegetation that is representative of the Wheatbelt Woodland TEC. The justification for the values used in the offset calculation is provided in Appendix F.

Banked offset

The proposed offset site is part of a larger remnant. CBH is proposing to place the remainder of the vegetation on the property under a banked offset to use in future proposals. CBH commissioned Eco Logical Australia (ELA) to conduct a desktop assessment, reconnaissance and targeted flora and vegetation survey, basic vertebrate fauna survey and targeted black cockatoo assessment of the larger remnant. Vegetation condition of this patch of remnant vegetation ranged from excellent to degraded condition (Keighery, 1994), with over half of the management area (53.4%) being in very good (Keighery, 1994) condition. Areas in excellent (Keighery, 1994) condition were *Eucalyptus salmonophloia, E. salubris* and *E. sheathiana* woodland (SSS) vegetation type.

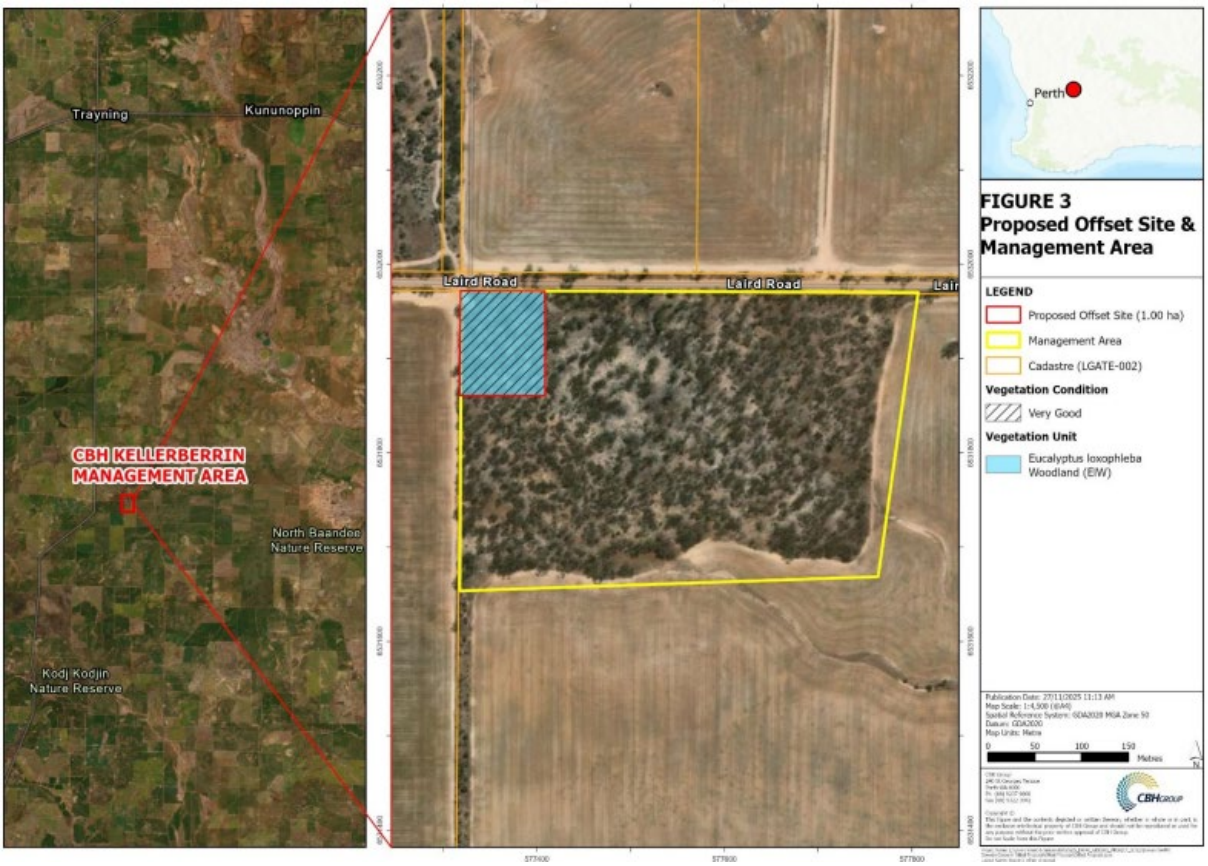

Figure 2: A map representing the proposed offset area and the banked offset area

End

Appendix A. Additional information provided by applicant

Summary of comments	Consideration of comment
Native Vegetation Clearing Permit Application Supporting Document (CBH, 2025)	CBH provided information outlining the avoidance and minimisation measures applied in determining the development footprint. This included consideration of environmental constraints during the planning process and efforts to avoid, and where necessary reduce, impacts on native vegetation and other environmental values such as avoiding trees with hollows suitable for breeding by black cockatoos. CBH also outlined the alternative options that were considered, including different layouts and configurations within the broader development area. This process informed the selection of the application area, which reflects a balance between operational requirements and the need to minimise environmental impacts as far as reasonably practicable.
Targeted and reconnaissance flora and vegetation survey report (BDS, 2025)	CBH engaged Bio Diverse Solutions as environmental consultants to undertake targeted, detailed, and reconnaissance flora and vegetation survey. The surveys were conducted between 14 and 16 July 2025. The targeted flora survey component was undertaken within a refined survey area to quantify and map the population of *Bossiaea atrata* (P3) recorded in previous surveys.
Targeted Flora and Vegetation Survey Report (BDS, 2024b)	The survey targeted three flora species: *Bossiaea atrata* (Priority 3), *Acacia campylophylla* (Priority 3), and *Millotia tenuifolia* var. *laevis* (Priority 2). In addition, a targeted assessment was undertaken for the *Eucalyptus* Woodlands of the Western Australian Wheatbelt Threatened TEC. The survey area covered 132.01 ha and was assessed between 11 and 13 September 2023. Due to access restrictions during this survey, 6.66 ha of the area could not be surveyed at that time. Additional quadrat-based surveys for the Wheatbelt Woodlands TEC were subsequently completed on 4 December 2023. All survey work was conducted on foot using a combination of traverses and quadrat sampling.
Targeted Black-cockatoo and Trapdoor Spider Assessments (Bamford consulting, 2024)	Bamford Consulting Ecologists (BCE) was engaged by CBH to undertake targeted assessments for black cockatoos and trapdoor spiders at the Dowerin site. The project area was surveyed on 9 November 2022 and 5 October 2023. The survey area was 133 ha.
Wheatbelt Woodlands TEC mapping review (BDS, 2024c)	CBH commissioned Bio Diverse Solutions as Environmental Consultants to undertake a desktop review of previously mapped native vegetation boundaries specifically within the 0.9 ha 'area of investigation' as defined by the client, using supplied high resolution spatial imagery at the Dowerin Receival Site.

Appendix B. Details of public submission

Summary of comments	Consideration of comment
No clearing of the Wheatbelt Woodland TEC should be permitted, in an area where less than 4.3% of the original natural vegetation remains (submission, 2025).	See section 3.2.1, section 4 and the Appendix 4 of the decision report. The applicant suitably demonstrated the public benefits, economic and environmental impacts of failure to act to efficiently process grains through the site and application of the mitigation hierarchy. Based on this evidence the department is satisfied that there is justification for granting a clearing permit and progressed to applying an environmental offset. The loss of 0.45 hectares of native vegetation representative of the Wheatbelt Woodland TEC has been counterbalanced through an offset requirement on the clearing permit. Offset conditions are consistent with the WA Environmental Offsets Policy 2011 and the WA Environmental Offsets Guidelines 2014.
If the permit is approved, CBH should be required to either contribute to the Wheatbelt Environmental Offsets Fund or undertake revegetation of a nearby area to a standard that qualifies for listing as a Wheatbelt Woodland TEC (submission, 2025).	
Any development required should occur on existing cleared land as there is sufficient opportunity for CBH to utilise the cleared land to expand their facility (submission, 2025).	The department's assessment of the clearing permit application is focussed on the potential impacts of clearing native vegetation, whereas the applicant is responsible for planning, providing specifications, building, and maintaining the road network within its jurisdiction See section 3.1 regarding avoid, minimise measures and the alternatives considered by CBH.
Modification of the rail alignment should occur without the need to clear (submission, 2025).	

Appendix C. Site characteristics

C.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 was used to inform the assessment of the clearing against the Clearing Principles, contained in Appendix D.

Characteristic	Details
Local context	The application area is situated within the intensive land use zone of the Wheatbelt region of Western Australia. Surrounding land uses include rural industry, agricultural land, residential dwellings, and areas of intact remnant native vegetation, some of which are mapped as Wheatbelt Woodlands TEC. The site is located approximately 1 km from the Dowerin town centre. A review of aerial imagery and spatial datasets indicates that the broader local area (within a 10 km radius of the proposed clearing) retains approximately 8.1% of its original native vegetation cover.
Ecological linkage	The application area is not mapped as part of a significant ecological linkage. However, given the highly cleared nature of the surrounding landscape and the presence of good (Keighery, 1994) condition of vegetation within the application area, it is likely that the vegetation performs an important local linkage function.
Conservation areas	No conservation areas of significance are located within or close to the application area.
Vegetation description	Vegetation survey (BDS, 2024b) indicates the vegetation within the application area consists of:

Characteristic	Details
	• *Eucalyptus salmonophloia* Woodland (EucsalW) – Open woodland dominated by *Eucalyptus salmonophloia*, over a shrub layer characterised by *Rhagodia preissii*, with an understorey of *Austrostipa elegantissima* and *Ehrharta longiflora*. Species diversity is limited, with numerous weed species present and some areas lacking vegetation cover. • Mixed Eucalyptus Woodland (EucW) – Open woodland dominated by *Eucalyptus camaldulensis*, *Eucalyptus loxophleba* subsp. *supralaevis*, and *Eucalyptus loxophleba* subsp. *loxophleba*, over shrubs including *Rhagodia drummondii* and *Enchylaena tomentosa*. The understorey is predominantly composed of introduced species. Species diversity is low, with widespread weed presence and patches of sparse or absent vegetation. • Mixed Shrubland (MSL) – Mixed native shrubland characterised by dominant shrubs such as *Allocasuarina acutivalvis* and *Grevillea teretifolia*, over the sedge *Ecdeiocolea monostachya* and other native shrubs. The understorey comprises introduced herbs and grasses, including *Romulea rosea*, *Arctotheca calendula*, and *Ehrharta longiflora*. The full survey descriptions and maps are available in Appendix G. The vegetation is mapped as: • GUANGAN_1049 in the Wheatbelt described as; *Eucalyptus loxophleba* (York gum), *E. salmonophloia.* (salmon gum) etc. Mapped vegetation type retains approximately 6.51 per cent of the original extent (Government of Western Australia, 2026).
Vegetation condition	Vegetation survey (BDS, 2024) indicates the vegetation within the application area ranges from good to completely degraded (Keighery,1994) condition with majority of the area in a degraded (Keighery,1994) condition. The full Keighery (1994) condition rating scale is provided in Appendix E. Representative photos and the full survey descriptions and mapping are available in Appendix G.
Climate and landform	The average annual temperatures at the Cunderdin Airfield station range from 4.6°C to 35.0°C (BoM, 2025), with summer temperatures typically between 15.0°C and 35.0°C, and winter temperatures between 4.6°C and 18.5°C. The mean annual rainfall for the period 1996 to 2025 is 309.5 mm (BoM, 2025), with the highest rainfall generally occurring between June and August (BDS, 2024). The application area is within the Kwolyin System, which is characterised by gently undulating granitic terrain of the Kellerberrin batholith with large outcrops of granite, dominated by duplex soils with minor sandplain (DPIRD, 2019)
Soil description	The soils underlying the mapped vegetation units within the application area are described as follows: • EucsalW – Hill crest (flat) with light brown clay, loamy and sandy soil which is well drained. • EucW – Gently sloping situated mid slope, with light brown clay, loamy and sandy soil which is well drained. • MSL - Gently sloping situated mid slope, with light brown clay, loamy and sandy soil which is well drained.
Land degradation risk	The mapped soil type within the application area has a medium risk of land degradation in the form of subsurface acidification and wind erosion. See table C.4.
Waterbodies	The desktop assessment and aerial imagery indicated that no watercourses or wetland transects the application area.

Characteristic	Details
Hydrogeography	The application area is within the Avon River System proclaimed under the RIWI Act. The application area does not intersect rivers proclaimed under the RIWI Act. The application area is not located within any CAWS Act clearing control catchments or Public Drinking Water Source Areas PDWSA. The area is also characterised by high salinity, with approximately half of the application area falling within total dissolved solids (TDS) levels of 14,000–35,000 mg/L, and the remaining area exceeding 35,000 mg/L.
Flora	According to the desktop assessment, 22 conservation significant flora species were recorded from the local area, of that 16 were priority flora and six were threatened flora species. Based on the flora analysis, five species were considered likely to occur within the application area. *Acacia campylophylla* and *Cryptandra dielsii* have previously been recorded within the application area, however, a recent survey did not find these species within the application area.
Ecological communities	The application area is within the five-kilometre buffer of Perched wetlands of the Wheatbelt region with extensive stands of living swamp sheoak (*Casuarina obesa*) and paperbark (*Melaleuca strobophylla*) across the lake floor. The assessment undertaken by CBH did not identify this community t within the application area. According to the survey results, Eucalyptus Woodlands of the Western Australian Wheatbelt is present within the application area.
Fauna	According to the desktop assessment, only three fauna species were recorded from the local area. These are *Macrotis lagotis* (Bilby), *Oxyura australis* (blue-billed duck) and Zanda sp. 'white-tailed black cockatoo' The application area is within the Carnaby's black cockatoos modelled distribution zone. No roosts or breeding records of black cockatoos are mapped within the local area.

C.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*					
Avon wheatbelt	9517107.77	1766540.64	18.56	171839.19	1.84
Vegetation association					
Guangan_1049 *	833,385.22	54,285.77	6.79	3,365.22	0.40
Local area					
10km radius	34518	2,802	8.1	-	-

*Government of Western Australia (2026)

C.3. Flora analysis table

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

Species name	Conservation status	Number of known records (total)	Distance of closest record to application area (km)	Suitable habitat features? [Y/N]	Are surveys adequate to identify? [Y, N, N/A]
Acacia campylophylla	3	6	0.00	Y	Y
Conospermum eatoniae	3	4	3.83	Y	Y
Cryptandra dielsii	3	2	0.00	Y	Y
Daviesia nudiflora subsp. amplectens	1	4	1.20	Y	Y
Grevillea dryandroides subsp. hirsuta	T	1	1.20	Y	Y

C.4. Land degradation risk table

Risk categories	***Land Unit 1***
Wind erosion	M1 - 15% of map unit has a high to extreme hazard
Water erosion	L2 - 4% of map unit has a very high to extreme hazard
Salinity	L2 - 7% of map unit has a moderate hazard
Subsurface Acidification	M2 - 34% of map unit has a high susceptibility
Flood risk	0% of the map unit has a moderate to high hazard
Water logging	L2 - 5% of map unit has a moderate to very high risk
Phosphorus export risk	L2 - 4% of map unit has a high to extreme hazard

Appendix D. 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."* Assessment: The application area contains suitable foraging habitat for Carnaby's black cockatoos within an area that has been extensively cleared. An area of 0.45 hectares of native vegetation is representative of the 'Eucalypt woodlands of the Western Australian Wheatbelt' (Priority 3) priority ecological community (PEC).	At variance	Yes *Refer to Section 3.2.1, above.*

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (b): *"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."* Assessment: The area proposed to be cleared contains foraging and roosting habitat for Carnaby's black cockatoo birds and may form as a corridor for other fauna species.	At variance	Yes *Refer to Section 3.2.2, above.*
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: The application area is unlikely to contain flora species listed under the BC Act. Several flora surveys conducted within the application area confirmed the absence of threatened flora within the application area.	Not likely to be at variance	Yes *Refer to Section 3.2.1, above.*
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."* Assessment: The native vegetation within an area of 0.45 hectares of the application area is representative of the Wheatbelt Woodland TEC.	At variance	Yes *Refer to Section 3.2.1, above.*
Environmental value: significant remnant vegetation and conservation areas		
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."* Assessment: The extent of the mapped vegetation type, and native vegetation within the local area is below levels consistent with national biodiversity conservation objectives and targets. The proposed clearing is therefore likely to further reduce an already constrained vegetation association. Given the limited availability of remnant vegetation in the surrounding landscape, the application area is also likely to function as an ecological corridor, facilitating the movement and dispersal of fauna species across the landscape.	At variance	Yes *Refer to Section 3.2.3, above.*
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."* Assessment: Given the distance to the nearest conservation area, the application area is not likely to have an impact on the environmental values of any conservation areas.	Not likely to be at variance	No
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."* Assessment: Given no water courses or wetlands are recorded within the application area, the application area does not consist of clearing riparian vegetation.	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: Mapped soils within the application area has a medium risk of land degradation in the form of subsurface acidification and wind erosion and a low risk to the remaining land degradation risks. Noting the extent and the linear arrangement of the application area and the condition of the vegetation, the proposed clearing is not likely to have an appreciable impact on land degradation. A condition will be placed on the permit to commence construction activities no later than three months after undertaking the authorised clearing to minimise the impact of wind erosion.	May be at variance	No
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."* Assessment: Given no water courses, wetlands or Public Drinking Water Sources Areas are recorded within the application area, the proposed clearing is unlikely to impact surface or ground water quality.	Not likely to be at variance	No
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."* 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. Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to contribute to waterlogging.	Not likely to be at variance	No .

Appendix E. 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.

Condition	Description
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 F. WA Offset Metric calculations

Revegetation Planting (Mitigation) Calculation – Carnaby's black cockatoo

Calculation	Score (Area)	Rationale
Conservation significance		
Description	Native vegetation that is representative of significant Carnaby's black cockatoo foraging habitat	Application area contains 1.29 hectares of suitable foraging habitat for Carnaby's cockatoo.
Type of environmental value	Species (Fauna)	Carnaby's black cockatoo
Conservation significance of environmental value	Rare/threatened species – endangered	Carnaby's cockatoo is listed as endangered under the BC Act and EPBC Act.
Landscape-level value impacted	yes/no	Yes
Significant impact		
Description	Native vegetation that is representative of significant Carnaby's black cockatoo foraging habitat	Suitable foraging habitat was identified within the application area. • Eucalypt Woodland, described as York Gum and White Gum woodland with scattered mature Salmon Gum • Mixed Shrubland, described as Midstorey shrubland consisting of Allocasuarina, Grevillea, Hakea and Acacia shrubs that varies in density and diversity
Significant impact (hectares) / Type of feature	1.29	Based on the available information, the application area includes 1.29 hectares that represents suitable foraging habitat for Carnaby's black cockatoos.
Quality (scale) / Number	6	According to the black cockatoo habitat assessment (Bamford Consulting Ecologists, 2024), the highest score given to the foraging value is a 5. The quality of foraging habitat within the application area average to a quality score of 4, however given the extensively cleared landform, the foraging habitat has a higher significance. No roosting or breeding sites are recorded within a 12 km radius. The application area is within the eastern edge of the Carnaby's distribution zone and only one record of white-tailed BC recorded from 1977 occurs in the local area. One primary foraging species occurs within the application area, being *Eucalyptus salmonophloia.*
Rehabilitation credit		
Description	Revegetation adjacent lot	Revegetation of a completely degraded (Keighery, 1994) area to a mixed Eucalyptus open woodland and open shrubland, over mixed

Calculation	Score (Area)	Rationale
		endemic herbs, sedges and/or grasses with focus on putting back foraging species on this site.
Proposed rehabilitation (area in hectares)	2.40	As calculated - 2.40 hectares is proposed to be revegetated with suitable Carnaby's black cockatoo habitat.
Current quality of rehabilitation site	0	Condition of revegetation site in a completely degraded (Keighery, 1994) condition with minimal value for black cockatoos present.
Future quality without rehabilitation	0	Condition not likely to change without intervention.
Future quality with rehabilitation	5	It is expected for vegetation to improve to good condition (Keighery, 1994) and provide suitable foraging habitat in 17 years.
Time until ecological benefit (years)	17	15 years minimum to achieve foraging resource, plus 2 years for revegetation to commence.
Confidence in rehabilitation results (%)	80	There is a moderate level of confidence that the rehabilitation planting will achieve the desired outcome.

Revegetation Planting (Mitigation) calculation – vegetation within an extensively cleared landform that is also representative of vegetation association 1049.

Calculation	Score (Area)	Rationale
Conservation significance		
Description	Clearing within an extensively cleared landform	Clearing of native vegetation that is located within an extensively cleared landscape. Vegetation remaining in the local area is under 10%. 0.117 hectares of the vegetation is likely to be representative of the vegetation association 1049 which is also less than 10 per cent.
Type of environmental value	Vegetation/habitat	
Conservation significance of environmental value	Terrestrial native vegetation complex - <10% extent remaining in a constrained area	
Landscape-level value impacted	yes/no	Yes
Significant impact		
Description	Vegetation/habitat	Clearing of native vegetation that is located within an extensively cleared landscape. Vegetation remaining in the local area is under 10%. 0.117 hectares of the vegetation is likely to be representative of the vegetation association 1049 which is also less than 10 per cent.
Significant impact (hectares) / Type of feature	1.29	The loss of 1.29 hectares of vegetation considered significant as remnant vegetation in an extensively cleared landscape, that contains the Wheatbelt Woodlands TEC and Carnaby's black cockatoo foraging habitat.
Quality (scale) / Number	4	According to the site survey, the vegetation mapped within the application area ranges from good to completely degraded (Keighery, 1994) condition with majority of the area in a degraded (Keighery, 1994) condition. The condition across the application area is likely to averages to a condition quality of 4, taking into account the site context.
Rehabilitation credit		
Description	Revegetation	2.4 hectares of vegetation in completely degraded (Keighery, 1994) condition will be rehabilitated to good (Keighery, 1994) condition
Proposed rehabilitation (area in hectares)	2.4	

Calculation	Score (Area)	Rationale
		within the development footprint. A Rehabilitation Plan has been provided and conditioned on the clearing permit.
Current quality of rehabilitation site	0	The condition of vegetation currently present within the revegetation site is completely degraded (Keighery, 1994).
Future quality without rehabilitation	0	The condition of vegetation currently present within the revegetation area is not likely to change without intervention.
Future quality with rehabilitation	5	Achievement of the revegetation plan completion criteria would see the vegetation within the revegetation area improve to good (Keighery, 1994) condition and provide remnant vegetation, that is also representative of the vegetation association 1049 within the extensively cleared landform.
Time until ecological benefit (years)	15	The time expected for revegetation to reach a condition of good (Keighery, 1994) and be representative of vegetation association 1049 (13 years plus 2 years for revegetation to commence).
Confidence in rehabilitation results (%)	80	There is a moderate level of confidence that the rehabilitation planting will achieve the desired outcome.

Offset – Wheatbelt Woodland TEC

Calculation	Score (Area)	Rationale
Conservation significance		
Description	Eucalyptus woodland of WA wheatbelt TEC	Clearing of 0.45 hectares of vegetation representative of the Eucalyptus Woodlands of the Western Australian Wheatbelt TEC. This has been confirmed by a TEC assessment. Wheatbelt woodland TEC is listed as Critically Endangered under the EPBC Act.
Type of environmental value	Ecological community	
Conservation significance of environmental value	Threatened ecological community – critically endangered	
Landscape-level value impacted	yes/no	Yes
Significant impact		
Description	Native vegetation that is representative of Wheatbelt Woodland TEC	Vegetation along the rail reserve representative of the Critically Endangered Wheatbelt Woodlands TEC, in degraded (Keighery, 1994) condition.
Significant impact (hectares) / Type of feature	0.45 hectares	
Quality (scale) / Number	4	According to a TEC assessment and survey data provided as shapefiles, the area of TEC to be impacted is 0.45 hectares in degraded (Keighery, 1994) condition. Given the extensively cleared landscape, a quality score of 4 is used compared to the score 3 used by CBH's offset calculation.
Rehabilitation credit		
Description	N/A	
Proposed rehabilitation (area in hectares)		

Calculation	Score (Area)	Rationale
Current quality of rehabilitation site		
Future quality without rehabilitation		
Future quality with rehabilitation		
Time until ecological benefit (years)		
Confidence in rehabilitation results (%)		
Offset		
Description	Land acquisition.	Conservation of 1.50 hectares within Lot 18239 on Deposited Plan 139910, North Baandee in the Shire of Kellerberrin, located approximately 77 kilometres from the application area.
Proposed offset (area in hectares)	1.50	The offset site is part of a larger remnant.
Current quality of offset site / Start number (of type of feature)	7	CBH commissioned Eco Logical Australia (ELA) to conduct a desktop assessment, reconnaissance and targeted flora and vegetation survey, basic vertebrate fauna survey and targeted black cockatoo assessment of the larger remnant. Vegetation condition ranged from excellent to degraded (Keighery, 1994), with over half of the Management Area (53.4%) being in very good (Keighery, 1994) condition. Areas in excellent (Keighery, 1994) condition were *Eucalyptus salmonophloia, E. salubris* and *E. sheathiana* Woodland (SSS) vegetation type. This area was classified as a Category A woodland TEC.
Future quality WITHOUT offset (scale) / Future number WITHOUT offset	7	The condition of the vegetation within the offset area is not likely to change without intervention.
Future quality WITH offset (scale) / Future number WITH offset	8	The applicant is proposing to undertake a number of management measures on site, which would assist in better management of this site into the future and likely improvement in condition of the vegetation being managed. • Installing/upgrading fencing to restrict thoroughfare and access by stock and grazers; • Installation of signage • Periodic baiting for rabbits, if required. • Establishment of reference and monitoring sites • Weed control • Rubbish and litter removal • Hygiene control • Fire management
Time until ecological benefit (years)	5	Based on the management measures proposed it is estimated to take 5 years of management for the benefit of future quality without offset vs future quality with offset to be realised.
Confidence in offset result (%)	90	There is a high level of confidence that the offset outcomes will be successful.
Duration of offset implementation (maximum 20 years)	20	The offset site will be conserved in perpetuity under a conservation covenant. Therefore, the maximum of 20 years is applied.
Time until offset site secured (years)	3	Time taken for the offset site to be secured.
Risk of future loss WITHOUT offset (%)	15%	The offset area is currently zoned as general agriculture. Therefore, there is a moderate risk of future loss.

Calculation	Score (Area)	Rationale
Risk of future loss WITH offset (%)	5%	The future conservation (in perpetuity) of the offset site under a conservation covenant would result in increased security and substantially reduce the risk of loss.
Percentage of mitigation and offset that counterbalances impacts (%)	100%	Calculated value obtained through the input of variables explained above.

Appendix G. Biological survey information excerpts and photographs of the vegetation (BDS, 2024b; BDS, 2024c; BDS, 2025; Bamford Consulting Ecologists, 2025)

Vegetation Unit 3: *Eucalyptus salmonophloia* Woodland [EucsalW]

Vegetation Unit 3 consisted of an open woodland dominated by *Eucalyptus salmonophloia*, over a shrubland dominated by *Rhagodia preissii* over an understorey of *Austrostipa elegantissima* and *Ehrharta longiflora*. Limited diversity was observed with numerous weed species present within the site and areas lacking vegetation.

Vegetation Description (NVIS): U ^ *Eucalyptus salmonophloia* \^tree\8\r;M ^*Rhagodia preissii*\^shrub\2\i;G ^^ *Austrostipa elegantissima Ehrharta longiflora* \^grass\1\r.

Vegetation Description (Muirs): *Eucalyptus salmonophloia* Open Woodland over *Rhagodia preissii* open scrub over *Austrostipa elegantissima* and *Ehrharta longiflora*.

Area: 2.25 ha.

Site description: Hill crest (flat) with light brown clay, loamy and sandy soil which is well drained.

Condition: Degraded and Completely Degraded.

Figure 4: *Eucalyptus salmonophloia* Woodland (EucsalW) within the survey area.

Vegetation Unit 1: Mixed Shrubland [MSL]

Vegetation Unit 1 consisted of a mixed native shrubland characterised by dominant shrubs of Allocasuarina acutivalvis, Grevillea hookeriana and Grevillea teretifolia over the sedge, Ecdeiocolea monostachya, and other mixed native shrubs with an understorey comprising of introduced herbs and grasses including Romulea rosea, Arctotheca calendula and Ehrharta longiflora.

Vegetation Description (NVIS):	S ^^Allocasuarina acutivalvis, Grevillea hookeriana, Grevillea teretifolia\^^Shrub\1\i;V ^Ecdeiocolea monostachya\^Rush\2\bc\, H^^ Romulea rosea, Arctotheca calendula/^^herb\1\bc\.G^^ Eragrostis curvula, Ehrharta longiflora and Austrostipa elegantissima\^grass\1\w.
Vegetation Description (Muirs):	Mixed Native Shrubland dominated by Allocasuarina acutivalvis, Grevillea hookeriana and Grevillea teretifolia Scrub, over Ecdeiocolea monostachya, over Romulea rosea, Arctotheca calendula, Eragrostis curvula, Ehrharta longiflora and Austrostipa elegantissima.

Area: 7.24 ha.

Site description: Gently sloping situated mid slope, with light brown clay, loamy and sandy soil which is well drained.

Condition: Very Good, Good, Degraded and Completely Degraded.

Figure 5: Mixed Shrubland (MSL) within the survey area

Vegetation Unit 2: Mixed Eucalyptus Woodland [EucW]

Vegetation Unit 2 comprised of an open woodland dominated by *Eucalyptus camaldulensis, Eucalyptus loxophleba* subsp. *supralaevis, Eucalyptus loxophleba* subsp. *loxophleba* over *Rhagodia drummondii* and *Enchylaena tomentosa* with an understorey comprising of introduced species. Limited diversity was observed with numerous weed species present within the site and areas lacking vegetation.

Vegetation Description (NVIS):	U ^^ *Eucalyptus camaldulensis, Eucalyptus loxophleba* subsp. *supralaevis, Eucalyptus loxophleba* subsp. *loxophleba*\^^tree\6\r;M ^^ *Rhagodia drummondii* and *Enchylaena tomentosa* \^shrub\r;W *Ehrharta longiflora* \^grass\1\bc F *Romulea rosea*, *Romulea rosea var. australis* \1\bc.
Vegetation Description (Muirs):	Mixed Eucalyptus open woodland (*Eucalyptus camaldulensis, Eucalyptus loxophleba* subsp. *supralaevis, Eucalyptus loxophleba* subsp. *loxophleba*), over and open shrubland of *Rhagodia drummondii* and *Enchylaena tomentosa*, over introduced grasses and herbs, *Romulea rosea*, *Romulea rosea* var. *australis* and *Ehrharta longiflora*.

Area: 4.52 ha.

Site description: Gently sloping situated mid slope, with light brown clay, loamy and sandy soil which is well drained.

Condition: Good, Degraded and Completely Degraded.

Figure 6: Mixed Eucalyptus Woodland (EucW) mapped within the survey area.

Fauna habitats mapped within the survey area that overlaps the application area.

Plate 1. VSA 1. Eucalypt Woodland.

Plate 7. VSA 6: Open Areas.

Plate 5. VSA 4b. Mixed Shrubland.


Figure 7: Photographs of the identified as *Mirbelia trichocalyx* within the targeted survey.

Appendix H. Sources of information

H.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)

H.2. References

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Bio Diverse Solutions (BDS) (2024b) *Supporting information for clearing permit application CPS 10907-1 - Targeted flora and vegetation survey report, received,* received 20 December 2024 (DWER Ref: DWERDT1066601)

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