



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 10841/1
File Number: DWERVT17186
Duration of Permit: From 9 July 2026 to 9 July 2036

PERMIT HOLDER

Shire of Merredin

LAND ON WHICH CLEARING IS TO BE DONE

Bailey Road Reserve (PIN 1310915), Nokaning

AUTHORISED ACTIVITY

The permit holder must not clear more than 0.45 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

CONDITIONS

1. Period during which clearing is authorised

The permit holder must not clear any *native vegetation* after 9 July 2031.

2. 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.

3. 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;
- c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

4. Directional clearing

The permit holder must:

- a) conduct clearing under this permit in one direction, towards adjacent *native vegetation* and away from existing cleared areas;
- b) allow reasonable time for fauna present within the area being cleared to move into adjacent *native vegetation* ahead of the clearing activity.

5. Revegetation and rehabilitation

- a) The permit holder must, within 24 months of undertaking clearing authorised under this permit:
 - (i) *revegetate* and *rehabilitate* 10 trees comprised of species that provide foraging habitat for *Zanda latirostris* (Carnaby's cockatoo) in the area crosshatched red in Figure 2b of Schedule 1;
 - (ii) *revegetate* and *rehabilitate* 1.65 hectares of *native vegetation* in the area crosshatched red in Figure 2b of Schedule 1, with tree species that are representative of the of *Avon Wheatbelt - Muntadgin 1023 vegetation association*;
 - (iii) ensure only *local provenance* seeds and propagating material are used;
 - (iv) undertake *planting* at an *optimal time*;
 - (v) undertake *weed* control activities for at least three years post *planting*.
- b) the permit holder must, within 24 months of undertaking the *revegetation* and *rehabilitation* in accordance with condition 5(a) of this permit, engage an *environmental specialist* to make a determination that the *planting* of ten (10) native trees under condition 5(a)(i) and 1.65 hectares of *native vegetation* under 5(ii) will succeed.
- c) where, in the opinion of an *environmental specialist*, the *planting* of ten (10) native trees under condition 5(a)(i) and 1.65 hectares of *native vegetation* under 5(ii) will not succeed, the permit holder must undertake remedial actions including *revegetating* the area by deliberately *planting* and/or *direct seeding native vegetation* that will result ten (10) native trees under condition 5(a)(i) and 1.65 hectares of *native vegetation* under 5(ii) will survive.

- d) where additional *planting* or *direct seeding of native vegetation* is undertaken in accordance with condition 5(c) of this permit, the permit holder shall repeat condition 5(b) and 5(c) within 24 months of undertaking the additional *planting* or *direct seeding of native vegetation*.
- e) where a determination by an *environmental specialist* that the *planting* of ten (10) native trees under condition 5(a)(i) and 1.65 hectares of *native vegetation* under 5(ii) will succeed, as determined under condition 5(b) of this permit, that determination shall be submitted for the *CEO's* consideration.
- f) if the *CEO* does not agree with the determination made under condition 5(b), the *CEO* may require the permit holder to undertake additional *planting* and *direct seeding* in accordance with the requirements under condition 5(c).

6. 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	<p>(a) the species composition, structure, and density of the cleared area;</p> <p>(b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings;</p> <p>(c) the date that the area was cleared;</p> <p>(d) the size of the area cleared (in hectares);</p> <p>(e) the direction of clearing;</p> <p>(f) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 2; and</p> <p>(g) actions taken to minimise the risk of the introduction and spread of <i>weeds</i> in accordance with condition 3.</p>
2.	In relation to the <i>revegetation</i> and <i>rehabilitation</i> of areas pursuant to condition 5	<p>(a) the size of the area <i>revegetated</i> and <i>rehabilitated</i>;</p> <p>(b) the date(s) on which the area <i>revegetation</i> and <i>rehabilitation</i> was undertaken;</p> <p>(c) the boundaries of the area <i>revegetated</i> and <i>rehabilitated</i> (recorded digitally as a shapefile);</p> <p>(d) details of the <i>revegetation</i> and <i>rehabilitation</i> activities undertaken;</p>

No.	Relevant matter	Specifications
		(e) monitoring activities of the <i>revegetation</i> and <i>rehabilitation</i> areas; (f) remedial actions undertaken; and (g) date criteria has been met.

7. Reporting

The permit holder must provide to the *CEO* the records required under condition 6 of this permit when requested by the *CEO*.

DEFINITIONS

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

Table 2: Definitions

Term	Definition
Avon Wheatbelt Muntadgin 1023 vegetation association -	means vegetation described as; Wattle, casuarina and teatree acacia-allocauarina-melaleuca alliance.
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the <i>Environmental Protection Act 1986</i> .
clearing	has the meaning given under section 3(1) of the EP Act.
condition	a condition to which this clearing permit is subject under section 51H of the EP Act.
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
department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 2.
environmental specialist	means a person who holds a tertiary qualification in environmental science or equivalent and has 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 <i>CEO</i> as a suitable environmental specialist.
EP Act	<i>Environmental Protection Act 1986</i> (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 kilometres 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.

Term	Definition
optimal time	means the period from April to July for undertaking planting and seeding.
planting	means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species.
rehabilitate	means actively managing an area containing native vegetation in order to improve the ecological function of that area.
revegetate	means the re-establishment of a cover of native vegetation in an area such that the species composition, structure and density is similar to pre-clearing vegetation types in that area, and can involve regeneration, direct seeding and/or planting
weeds	means any plant – <ul style="list-style-type: none"> (a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i>; or (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or (c) not indigenous to the area concerned.

END OF CONDITIONS


Mathew Gannaway
SENIOR MANAGER
NATIVE VEGETATION REGULATION

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

15 June 2026

Schedule 1

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

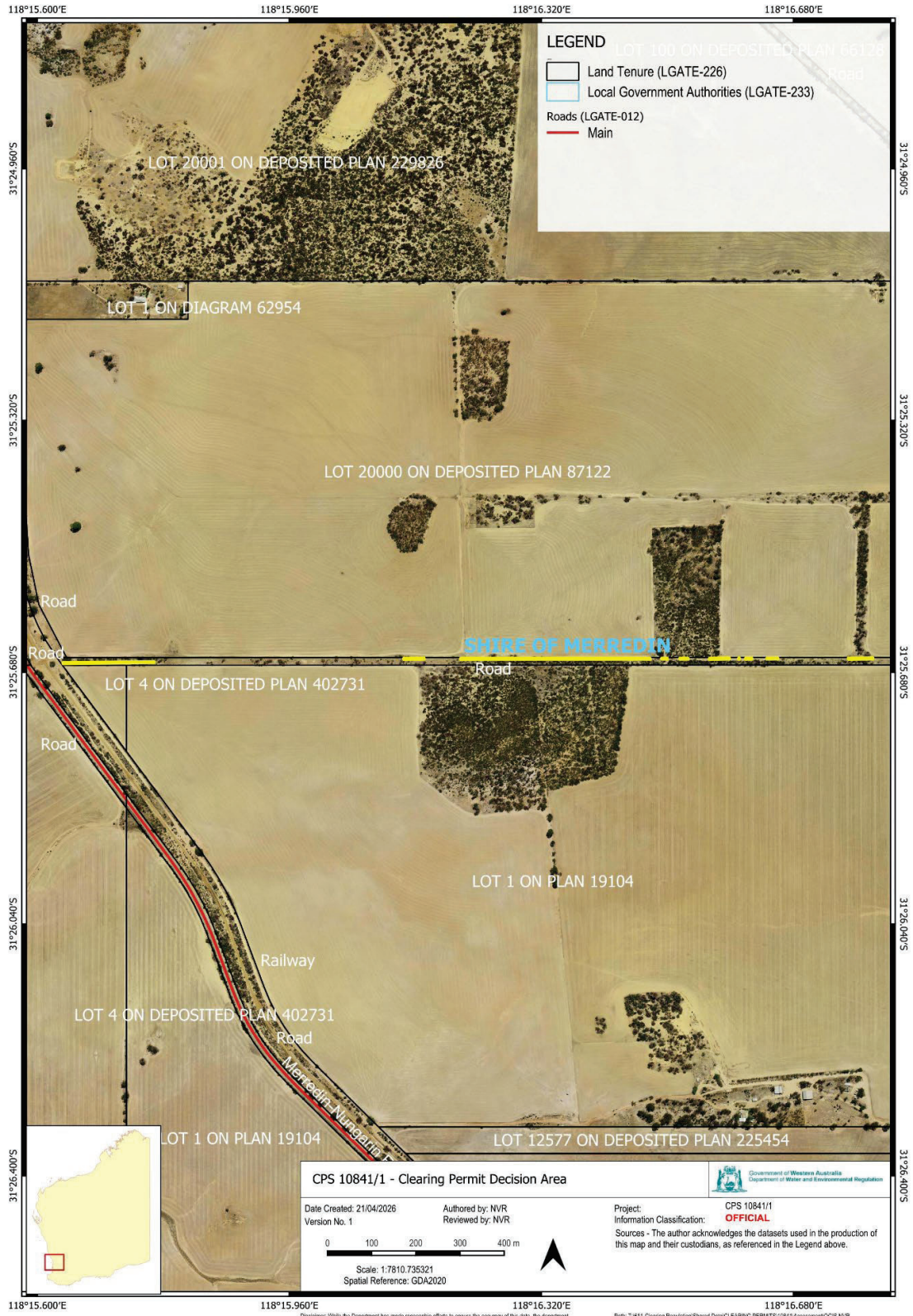


Figure 1: Map of the boundary of the area within which clearing may occur



Figure 2: Map of the boundary of the area subject to condition 5 – revegetation



Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 10841/1
Permit type:	Area permit
Applicant name:	Shire of Merredin
Application received:	19 November 2024
Application area:	0.452 hectares of native vegetation
Purpose of clearing:	Road construction
Method of clearing:	Mechanical
Property:	Bailey Road reserve (PIN 1310915)
Location (LGA area/s):	Shire of Merredin
Localities (suburb/s):	Nokaning

1.2. Description of clearing activities

The vegetation proposed to be cleared is distributed across multiple separate areas within the same road reserve (see Figure 1, Section 1.5). The purpose of the clearing is to construct a direct access route to the surrounding paddocks for a local farmer to help reduce the number of heavy machinery movements on public roads (Shire of Merredin, 2024).

1.3. Decision on application

Decision:	Granted
Decision date:	15 June 2026
Decision area:	0.452 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 (DWER) advertised the application for 21 days and 30 submissions were received. Consideration of matters raised in the public submissions is summarised in Appendix B.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix C), relevant datasets (see Appendix H.1), the findings of a flora and vegetation survey (see Appendix F), the clearing principles set out in Schedule 5 of the EP Act (see Appendix D), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3). The Delegated Officer also took into consideration the purpose of the clearing is to improve road safety by diverting the passage of heavy vehicles to the newly constructed road.

The assessment identified that the proposed clearing will result in:

- the loss of native vegetation that is suitable habitat for malleefowl (*Leipoa ocellata*) and low quality foraging habitat Carnaby's black cockatoo (*Zanda latirostris*)
- is significant as a remnant of native vegetation in an area that has been extensively cleared; and

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing can be minimised and managed to unlikely lead to an unacceptable risk to environmental values. The applicant has suitably demonstrated avoidance and minimisation measures. The revegetation provided counterbalance the impacts to significant remnant vegetation and impacts to conservation significant fauna habitat (see Section 3.1 and Appendix G).

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 planting and ensure long-term survival of 1.65 hectares of native vegetation which is representative of Avon Wheatbelt - Muntadgin 1023 vegetation association, including species suitable for black cockatoo foraging.

1.5. Site maps

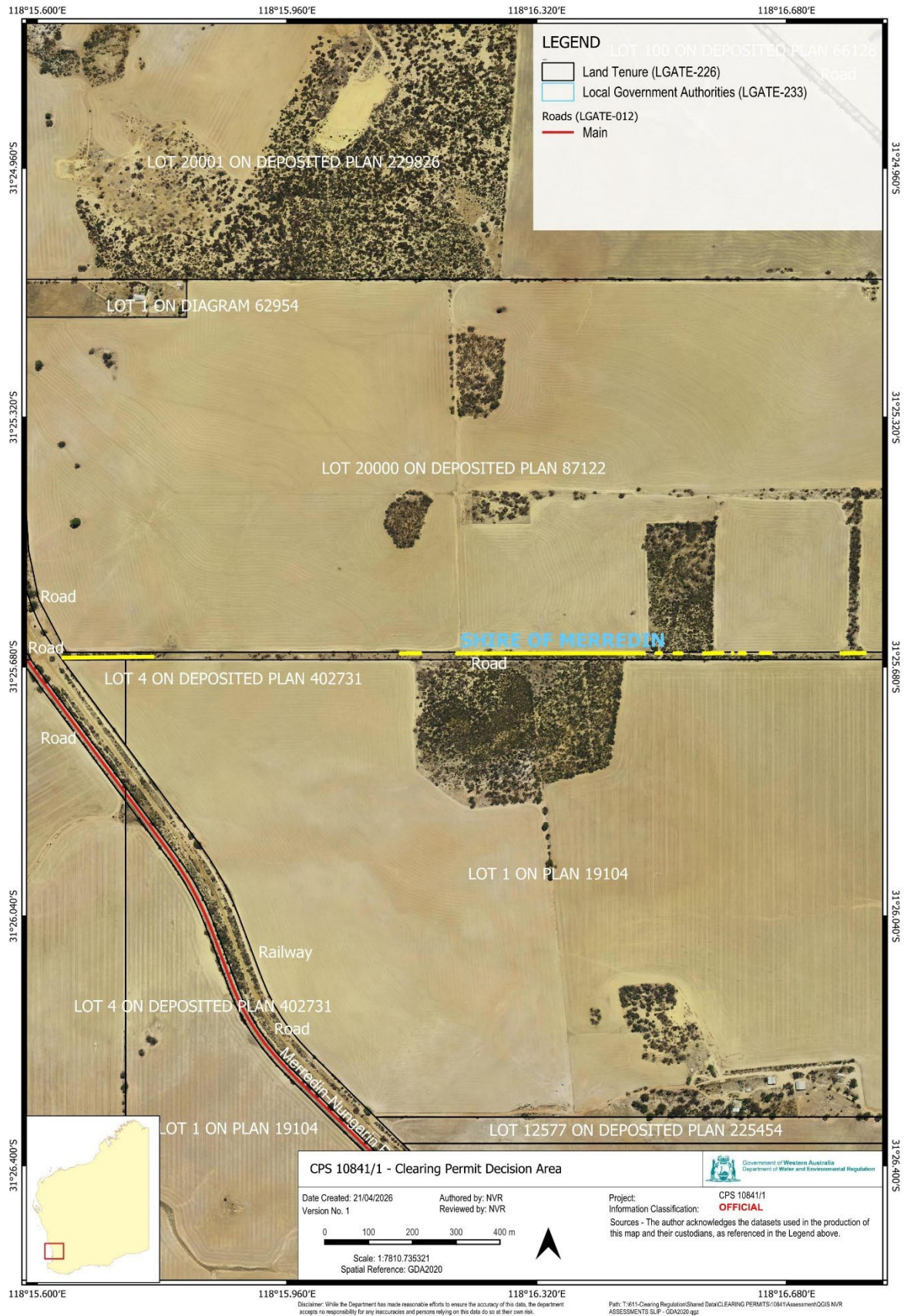


Figure 1 Map of the application area

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



Figure 2 Map of the application area
 The areas cross-hatched red indicate areas within which specific conditions apply.

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 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)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)

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)
- *Environmental Offsets Guidelines* (August 2014)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

Avoidance measures:

The Shire of Merredin (the Shire) has selected an alignment with minimal environmental disturbance while maintaining the road's functionality for both farming operations and public use.

An on-site inspection of trees along Bailey Road was conducted by the Shire's staff to minimise environmental impact while ensuring road safety and functionality. Criteria for tree removal included:

- **Tree Density and Environmental Impact:** The selected road alignment was carefully chosen to avoid areas with higher densities of trees and native flora, aiming to preserve as much existing vegetation as possible. This approach helps reduce habitat disturbance and maintains local biodiversity (Shire of Merredin, 2024).
- **Maintenance and Operational Costs:** Trees with root systems that could intrude on the road surface or drainage structures were identified for removal. Where feasible, the road was also positioned further from these potential root ingress trees to avoid future maintenance issues. This selection process helps reduce long-term operational costs and ensures the road remains safe and functional with minimal upkeep (Shire of Merredin, 2024).

Mitigation measures:

The Shire has carefully assessed the proposed route to minimise the extent of vegetation clearing needed for this project. By prioritizing areas with lower tree density, the applicant has preserved as much of the natural flora as possible while meeting project requirements.

To compensate for any cleared vegetation, a revegetation program will be implemented along the road reserve (see Figure 2), covering 1.65 hectares. The Shire will utilise native plant species that are ecologically appropriate and representative of the Avon Wheatbelt - Muntadgin 1023 vegetation association, ensuring the revegetation effort supports local biodiversity. Selected vegetation will include species suitable for black cockatoo foraging, contributing to local wildlife conservation and ecosystem diversity. The revegetation will take place along the same stretch of Bailey Road where the environmental impact occurs.

The Shire has committed to monitor the revegetation site over a two-year period to assess plant establishment and growth. The management plan will be adjusted as necessary to support successful plant growth and establishment. The maintenance of revegetation include mulching, and additional planting if required, will be conducted to ensure the success of revegetation efforts (Shire of Merredin, 2026).

To prevent the spread of invasive species during and after construction, a weed management plan will be in place, including:

- **Monitoring and Maintenance:** Ongoing monitoring of the revegetation area to manage and control emerging weed species.
- **Preventative Measures:** Implementing measures to prevent the introduction of weed seeds through machinery and construction activities.

By implementing these mitigation measures, the Shire is committed to managing the environmental impact of the Bailey Road construction project, supporting local wildlife, and restoring the natural habitat in the affected areas.

Necessity:

The Delegated Officer also notes that the applicant's decision to open the section of Bailey Rd was made with a focus on reducing potential road hazards from large agricultural machinery.

As of April 2025, Tresilico Farms no longer lease an adjacent block, resulting in the requirement of them to use Merredin-Chandler and Merredin-Nungarin Roads. These roads are heavily used by farmers, commuters, school buses, and tourists, with traffic volumes increasing in recent years. As part of the Tresilico Farms farming operations, oversized machinery and livestock are required to move on these main arterial roads (Western Environmental, 2026).

The avoidance of extending the road past Old Nukarni Road will further limit the extent of vegetation clearing. After thorough consideration of both safety needs and environmental impacts, the Shire believes that the removal of the identified trees is necessary to provide a safer road for the community and industry. This proposed clearing aims to enhance road safety, align with Austroads Guidelines, and support the regional freight network (Western Environmental, 2026).

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

The above revegetation measures proposed by the Shire were input into the DWER WA environmental offsets calculator to determine the quantum of mitigation afforded by these measures. A summary of these calculations is available in Appendix G. The Delegated Officer determined that the revegetation action was sufficient that no significant residual impact remained.

Additional to the revegetation, the Shire will be required to additionally implement the following avoidance and mitigation measures:

- avoid the clearing of native vegetation; and
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has 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 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 (fauna) - Clearing Principles (a) and (b)

Assessment

The desktop assessment has found eight species of priority and threatened species of fauna within the local area (10 km radius from the application area), with three of the species possibly or likely to utilise the application area based on the habitat features and vegetation proposed to be cleared.

***Idiosoma nigrum* (shield-backed trapdoor spider)**

The shield-back is listed as Endangered under the BC Act and Vulnerable under the EPBC Act. The species is known from three locations. One location consists of a number of severely fragmented populations in the central and northern wheatbelt (Main et al., 2000). The second and third locations are at Jack Hills and Weld Range, two isolated populations approximately 200 km further north, in more arid areas. The shield-back spider typically inhabits clay soils of eucalypt woodlands and acacia vegetation, and relies heavily on leaf-litter and twigs to build its burrow (DSEWPC, 2013).

The shield-backed trapdoor spider was recorded three times within the local area, with the closest record located 6.8 kilometres from the application area. Whilst the vegetation type within the application area is consistent with the spiders vegetation type preference, the soil type does not reflect the habitat preferences, with the majority of the application area comprising sandy or silty sandy soils. Given the application area has a high weed cover within the understory with many degraded areas and unsuitable mapped soils, it is unlikely for the application area to be significant habitat for the species.

***Idiosoma castellum* (tree-stem trapdoor spider)**

The tree-stem trapdoor spider is listed as a Priority 4 species by the Department of Biodiversity, Conservation and Attractions (DBCA). The species is geographically moderately widespread but is generally restricted to hillslopes (lower slopes to upper ridges) and banded ironstone formations in gravelly loam soils and has been found to be reasonably common around hills (Bamford, 2009). The desktop assessment found 160 records of this species within the local area. The nearest record is located 1.9 kilometres from the application area. Given the high number of records, high weed cover of the application area, and unsuitable mapped soils, the application area is unlikely comprise significant habitat for the species. If the clearing impacts any individuals, it is unlikely for this to impact the populations survival, noting the high number of records in the local area.

***Leipoa ocellata* (malleefowl)**

The Malleefowl is listed as Vulnerable under the BC Act and EPBC Act. The Malleefowl occurs in all mainland states except Queensland and is recognised as threatened wherever it occurs. The Malleefowl is found principally in the semi-arid to arid zone in shrublands and low woodlands dominated by mallee and associated habitats such as broombush (*Melaleuca uncinata* complex) and Scrub Pine (*Callitris verrucosa*) (DCEEW, 2024). Based on the photographs of the application area (Shire of Merredin, 2024; Trudgen, 2025), there seems to be no Malleefowl mounds within the application area, suggesting the area is not used for Malleefowl breeding. However, the application area may be utilised by Malleefowl to navigate between remnant patches of native vegetation linked together by this vegetation corridor and possibly for foraging purposes. Impacts to individuals can be managed by clearing from the east to the west, providing the individuals a chance to move towards adjacent vegetation.

***Zanda latirostris* (Carnaby's cockatoo)**

Habitat critical to survival for Carnaby's cockatoos can be summarized as;

- The eucalypt woodlands that provide nest hollows used for breeding, together with nearby vegetation that provides feeding, roosting and watering habitat that supports successful breeding;
- Woodland sites known to have supported breeding in the past and which could be used in the future, provided adequate nearby food and/or water resources are available or are re-established; and
- In the non-breeding season, the vegetation that provides food resources as well as the sites for nearby watering and night roosting that enable the cockatoos to effectively utilise the available food resources.

The application area occurs at the edge of the known range for Carnaby's cockatoo. The flora survey (Trudgen, 2025) recorded 74 native species and 12 weed species. Out of these, 17 are species suitable for black cockatoo foraging. The survey did not record any eucalypts known to develop suitable breeding hollows or be of a size suitable for roosting. After review of the site images and trees present (Shire of Merredin, 2024; Trudgen, 2025), a small number of trees throughout the application area (mostly within sites 1 and 2) include mature trees which provide low quality black cockatoo foraging habitat. Many of the other trees are juvenile or degraded with many dead branches and will likely not provide suitable foraging habitat for Carnaby's black cockatoo. Whilst a black cockatoo roost is located approximately nine kilometres south west of the application area and the clearing is in an extensively cleared landscape, the low quality foraging habitat is not likely to comprise significant foraging habitat for black cockatoos.

Conclusion

Based on the above assessment, the proposed clearing will result in the loss of habitat suitable for black cockatoo and mallee fowl foraging. The vegetation is also acting as a link for fauna to transverse through to other patches of remnant vegetation. Slow directional clearing will reduce the impacts to individuals that may be present at the time of clearing. Weed management measures will minimise impacts to adjacent suitable vegetation. Whilst not considered to be high quality foraging habitat, to reduce the impact to the loss of suitable black cockatoo foraging habitat in an extensively cleared landscape, the applicant will revegetate 1.65 hectares of native vegetation within the adjacent road reserve that includes species suitable for black cockatoo foraging.

Conditions

For the reasons set out above, it is considered that the impacts of the proposed clearing on significant fauna habitat can be managed by the following conditions;

- Undertake planting and ensure long-term survival of 1.65 hectares of native vegetation which is representative of Avon Wheatbelt - Muntadgin 1023 vegetation association, including species suitable for black cockatoo foraging.
- Slow directional clearing to allow fauna to move into adjacent vegetation ahead of the clearing activity will minimise impact to individuals.

3.2.2. significant remnant vegetation - Clearing Principle (e)

Assessment

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance 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 local area (10 kilometre radius) retains approximately 12.4 percent per cent of its pre-European vegetation. The mapped vegetation type (MUNTADGIN) retains approximately 18.53 percent remnant vegetation. The desktop assessment identifies that the

application area is located within a highly cleared landscape. Noting the presence of suitable habitat for conservation significant fauna, the application area is considered to be a significant remnant.

The application area also acts as an ecological linkage for fauna, linking patches of vegetation between road reserves. The proposed clearing will create a break between two properties to the north and south of the extended road that provide suitable Malleefowl habitat. The break will cause the need for Malleefowl to traverse a road to get between the two properties. The clearing could also break a linkage for other (non-conservation significant) fauna.

Conclusion

Based on the above assessment, the Delegated Officer has determined that the proposed clearing will result in;

- the loss of significant remnant vegetation within an extensively cleared area and;
- the loss of vegetation that forms part of an informal ecological linkage.

Condition

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

- undertake planting and ensure long-term survival of 1.65 hectares of native vegetation which is representative of Avon Wheatbelt - Muntadgin 1023 vegetation association.
- undertake slow, progressive one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity.

3.3. Relevant planning instruments and other matters

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.

End

Appendix A. Additional information provided by applicant

Information provided	Consideration of information
Additional information regarding the necessity of clearing	See Section 3.1
Flora and vegetation survey for the proposed area to be cleared	See Section C.1

Appendix B. Details of public submissions

Summary of comments	Consideration of comment
The proposed clearing will impact on native vegetation that comprises a high level of biodiversity	Public submissions raise the matter of impacts to native fauna and flora. The flora and vegetation survey undertaken by Trudgen (2025) did not record a high level of biodiversity within the application area. The majority of the application area was in degraded condition. Conditions requiring revegetation and directional clearing have been implemented to mitigate impacts as detailed and discussed in section 3.2.1.
The proposed clearing will result in the loss of significant fauna habitat	The flora and vegetation survey undertaken by Trudgen (2025) did not record any eucalypts known to develop suitable breeding hollows. Only a small area of low quality Carnaby's black cockatoo foraging habitat occurs within the application area. The application area does not include any suitable breeding habitat for Malleefowl. However, it is recognised that the application area may act as an ecological linkage. Conditions of revegetation that includes suitable black cockatoo foraging species and directional clearing have been implemented to mitigate impacts as detailed and discussed in section 3.2.1.
The proposed clearing will result in the loss of habitat for rare flora	No threatened or priority flora was found within the application area (Trudgen, 2025). The targeted flora survey was deemed adequate to determine the presence or absence of threatened or priority flora.
The proposed clearing will result in the spread of weeds and pests	Weed a management measures have been implemented to ensure no weed spread effects the revegetation areas and adjacent vegetation.
The proposed clearing will result in land degradation	Land degradation information has been considered in the assessment against the clearing principles, Appendix D. Land degradation impacts not likely to occur due to the already degraded condition of the vegetation.
There are inconsistencies and misrepresentation in the supporting documentation	Additional information was provided by the Shire to confirm the clearing requirements, summarised in section 3.1.
Dispute the necessity of clearing as there already is an access to adequate roads	Additional information was provided by the Shire to support the necessity of clearing, summarised in section 3.1.

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 DWER 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 area proposed to be cleared is part of a long thin corridor of native vegetation in the intensive land use zone of Western Australia. It is in between Merredin Nungarin road and Old Nukani Road with cleared agriculture lands on both sides of the

Characteristic	Details
	<p>application area. The proposed clearing area contributes to a linkage present within a highly cleared landscape.</p> <p>Aerial imagery indicates the local area (10-kilometre radius from the centre of the area proposed to be cleared) retains approximately 12.4 per cent of the original native vegetation cover.</p>
Ecological linkage	There are no mapped ecological linkages intersecting or adjacent to the application area, however the application area forms an informal ecological linkage connecting two patches of remnant vegetation.
Conservation areas	The closest conservation area is located approximately four kilometres north of the application.
Vegetation description	<p>Vegetation survey (M.E Trudgen and Associates, 2025) indicate the vegetation within the proposed clearing area consists of two main types; those dominated by various <i>Eucalyptus</i> species and those dominated by <i>Allocasuarina</i> species. There are also some that are intermediate, but these have shrub or tall shrub species rather than the tall shrub/low tree species <i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i>.</p> <p>The survey identified the vegetation within 19 sections of the survey area (see figure 15). Representative photos, survey descriptions are available in Appendix F.</p> <p>This is broadly consistent with the pre-european mapped vegetation type:</p> <ul style="list-style-type: none"> MUNTADGIN, which is described as wattle, casuarina and teatree acacia-allocasuarina-melaleuca alliance. <p>The mapped vegetation type retains approximately 12.4 per cent of the original extent (Government of Western Australia, 2019).</p>
Vegetation condition	<p>Vegetation survey (Trudgen, 2025) indicate the vegetation within the proposed clearing area ranges from Very good to completely degraded (Keighery, 1994) condition. The majority of the application area is in a good to degraded condition.</p> <p>The full Keighery (1994) condition rating scale is provided in Appendix E. The full survey descriptions and mapping are available in Appendix F.</p>
Climate and landform	<p>The area proposed to be cleared has a relatively flat topography, with mapped risk of wind erosion.</p> <p>The average temperature in Merredin is between 11.5 and 25.2 degrees, with the hottest average temperature of 34.1 degrees in January. Merredin receives an average annual rainfall of 324.6mm, with the highest average rainfall of 50mm during July.</p>
Soil description	The soil is mapped as Tandegin, Ulva Subsystem, described as Yellow sandplain and gravel plain of the Eastern wheatbelt. This unit contains small areas of pale sand.
Land degradation risk	The mapped soils and surrounding landscape indicate the application area is at moderate risk of wind erosion and acid sulphate soils.
Waterbodies	The desktop assessment and aerial imagery indicated that no waterbodies transect the area proposed to be cleared.
Hydrogeography	<p>The application area is not mapped within a clearing control catchment.</p> <p>The area is mapped within the Avon River System surface water area, however no waterlines intersect the application area.</p> <p>The Mapped salinity is high, at >35000 TDS MG/L.</p>
Flora	The desktop survey found 18 individuals of seven species of conservation significant flora within the local area (10km radius). Three species are found within similar vegetation type. No threatened flora were found within the local area.

Characteristic	Details
	An appropriately timed flora and vegetation survey of the application area recorded no threatened or priority flora (Trudgen, 2025).
Ecological communities	No threatened ecological communities were mapped within the application area (Trudgen, 2025).
Fauna	There are records of eight fauna of conservation significance within the local area with the closest record a tree-stem trapdoor spider approximately 1.9 kilometres from the application area, and one black cockatoo roost approximately nine kilometres from the application 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	9,517,109.95	1,761,187.42	18.51	174,980.68	2.42
Vegetation complex					
MUNTADGIN_36	258,537.39	47,918.11	18.53	7,886.71	3.10
Local area					
10km radius	35106.173	4359.55	12.42	-	-

*Government of Western Australia (2019)

C.3. Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)
<i>Leipoa ocellata</i> (malleefowl)	VU	Y	Y	4.8	5
<i>Idiosoma nigrum</i>	EN	Y	Y	6.8	3
<i>Idiosoma castellum</i>	P4	Y	Y	1.9	160
<i>Zanda latirostris</i>	EN	Y	Y	3.8	5

Appendix D. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p><u>Principle (a):</u> <i>“Native vegetation should not be cleared if it comprises a high level of biodiversity.”</i></p> <p><u>Assessment:</u></p> <p>The flora and vegetation survey in October identified no threatened or priority flora within the application area. No significant ecological communities were identified to occur within the site (Trudgen, 2025).</p> <p>The application area may contain assemblages of plants which support habitat for conservation significant fauna.</p>	May be at variance	Yes <i>Refer to Section 3.2.1, above.</i>
<p><u>Principle (b):</u> <i>“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.”</i></p> <p><u>Assessment:</u></p> <p>The application area contains vegetation type and features which may support habitat for four species of conservation significant fauna.</p>	At variance	Yes <i>Refer to Section 3.2.1, above.</i>
<p><u>Principle (c):</u> <i>“Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</i></p> <p><u>Assessment:</u></p> <p>The flora and vegetation survey in October identified no threatened flora within the application area (Trudgen, 2025).</p>	Not likely to be at variance	No
<p><u>Principle (d):</u> <i>“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.”</i></p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared does not contain species that can indicate a threatened ecological community (Trudgen, 2025).</p>	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
<p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u></p> <p>The extent of the mapped vegetation type and native vegetation in the local area is inconsistent with the national objectives and targets for biodiversity conservation in Australia.</p> <p>The vegetation proposed to be cleared is considered to be part of an informal ecological linkage in the local area. The presence of habitat for conservation significant fauna indicates the application is a significant remnant.</p>	At variance	Yes <i>Refer to Section 3.2.2, above.</i>
<p><u>Principle (h):</u> <i>“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.”</i></p> <p><u>Assessment:</u></p> <p>Given the distance to the nearest conservation area is 6 kilometres, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.</p>	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: land and water resources		
<p><u>Principle (f)</u>: <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment</u>:</p> <p>Given no water courses or wetlands are recorded within or adjacent to the application area, the proposed clearing is not in an environment associated with a watercourse or wetland.</p>	Not likely to be at variance	No
<p><u>Principle (g)</u>: <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p><u>Assessment</u>:</p> <p>The mapped soils may be susceptible to wind erosion and acidification risks. However given the extent of the proposed clearing, and the already highly cleared surrounding landscape and degraded nature of the vegetation, the proposed clearing is not likely to cause significant risks to land degradation.</p>	Not likely to be at variance	No
<p><u>Principle (i)</u>: <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.”</i></p> <p><u>Assessment</u>:</p> <p>Given no water courses or wetlands intersect or are adjacent to the application area, the proposed clearing is unlikely to impact surface or ground water quality. The small area of proposed clearing is not likely to cause an increase in salinity.</p> <p>There are no Public Drinking Water Sources Areas recorded within the local area.</p>	Not likely to be at variance	No
<p><u>Principle (j)</u>: <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</i></p> <p><u>Assessment</u>:</p> <p>The mapped soils indicate the proposed clearing is not likely to contribute to increased incidence or intensity of flooding however is moderately susceptible to water repellence.</p> <p>Given the soil type and no water courses are recorded within the application area, the proposed clearing is unlikely to contribute to waterlogging.</p>	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.
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. Biological survey and photographs of the vegetation

The full reconnaissance level vegetation and flora survey of a section of the Bailey Road easement in the Shire of Merredin prepared by Malcolm Trudgen, Consultant Botanist, M.E. Trudgen and Associates April 2025 is available within the supporting documents on DWER's website.

Images of application area (figures 3-14):



Figure 3 - Images of application area and revegetation area (Shire of Merredin, 2024)



Figure 4 - Images of application area (Shire of Merredin, 2024)



Figure 5 - Images of application area and revegetation area (Shire of Merredin, 2024)



Figure 6 - Images of application area and revegetation area (Shire of Merredin, 2024)



Figure 7 - Images of application area and revegetation area (Shire of Merredin, 2024)



Figure 8 - Images of application area and revegetation area (Shire of Merredin, 2024)



Figure 9 - Images of application area and revegetation area (Shire of Merredin, 2024)



Figure 10 - Images of application area and revegetation area (Shire of Merredin, 2024)



Figure 11 - Images of application area (Shire of Merredin, 2024)



Figure 12 - Images of application area (Shire of Merredin, 2024)



Figure 13 - Images of application area and revegetation area (Shire of Merredin, 2024)



Figure 14 - Images of application area (Shire of Merredin, 2024)



Photograph 1. Section 1, *Eucalyptus capillosa* woodland over scattered shrubs over **Lolium* sp., **Ehrharta longiflora* open annual grassland. The vegetation in the background is the beginning of Section 2.



Photograph 2. Section 2. *Allocasuarina acutivalvis* subsp. *acutivalvis* open scrub to low closed woodland over *Grevillea paradoxa* scattered shrubs over *Waitzia acuminata* var. *acuminata* annual herbland



Photograph 3. Section 3, *Eucalyptus myriadena* over weeds.



Photograph 4. Section 4, *Eucalyptus burracoppinensis* over weeds.



Photograph 5. Section 5, *Allocasuarina acutivalvis* subsp. *acutivalvis* over weeds



Photograph 6. Section 6, *Avena barbata* grassland with patches of *Arctotheca calendula* low herbland



Photograph 7. Section 7, *Eucalyptus leptopoda* subsp. *leptopoda*, *Eucalyptus horistes* scattered mallees over *Avena barbata* grassland patches; *Arctotheca calendula* patches; and *Bromus diandrus* patches (with *Avena barbata* over them)



Photograph 8. Section 8, *Eucalyptus burracoppinensis*, *Eucalyptus leptopoda* subsp. *leptopoda*, scattered mallees and low trees over *Avena barbata* (*Bromus diandrus*) dense annual grassland with patches of *Arctotheca calendula* dense low herbland.



Photograph 9. Section 9. *Eucalyptus horistes* scattered trees over *Eucalyptus leptopoda* subsp. *leptopoda* scattered mallees over *Santalum acuminatum* scattered tall shrubs over *Austrostipa elegantissima*, *Ecdeiocolea monostachya* (patchy) very open grass/sedgeland with **Avena barbata* dense annual grassland



Photograph 10. Section 10. *Allocasuarina campestris*, *Santalum acuminatum* scattered tall shrubs over *Grevillea didymobotrya* subsp. *didymobotrya*, *Grevillea paradoxa*, *Hakea invaginata*, *Allocasuarina campestris* scattered shrubs over *Amphipogon caricinus* open tussock grassland



Photograph 11. Section 11. *Eucalyptus* aff. *rigidula* scattered trees over *Melaleuca hamata* high shrubland to open scrub over *Austrostipa elegantissima*, *Amphipogon caricinus* open tussock grassland over patches of *Waitzia acuminata* var. *acuminata*, *Chthonocephalus pseudevax* open herbland



Photograph 12. Section 13. *Eucalyptus* aff. *rigidula* open mallee woodland over *Melaleuca hamata* high shrubland to open scrub over *Phebalium tuberculosum* open shrubland over *Austrostipa elegantissima* scattered tussocks over *Waitzia acuminata* var. *acuminata* annual herbland



Photograph 13. Section 14. *Eucalyptus horistes* scattered mallees over *Allocasuarina campestris* scattered tall shrubs to open scrub over *Ecdeiocolea monostachya* tussock grassland (with *Amphipogon caricinus* in patches) over *Waitzia acuminata* var. *acuminata* annual herbland



Photograph 14. Section 16. *Eucalyptus horistes*, *Allocasuarina acutivalvis* subsp. *acutivalvis* low (mallee) woodland over **Lolium* sp., **Avena barbata*, **Bromus diandrus*, **Ehrharta longiflora* annual grassland



Photograph 15. Section 17. *Allocasuarina campestris* scattered tall shrubs to open scrub over *Austrostipa hemipogon*, *Amphipogon caricinus* (*Ecdeiocolea monostachya*) open grassland over *Waitzia acuminata* var. *acuminata* open annual herbland and patches of **Avena barbata* annual grassland.



Photograph 16. Section 18. *Eucalyptus burracoppinensis* mallee woodland over *Allocasuarina campestris* scattered tall shrubs over **Bromus diandrus*, **Ehrharta longiflora*, **Lolium* sp. annual grassland.



Photograph 17. Section 19. *Allocasuarina campestris* scattered tall shrubs over **Bromus diandrus*, **Lolium* sp., **Avena barbata* annual grassland

Figure 15 – Photographs of vegetation surveyed (section 1-19) (M.E. Trudgen and Associates, 2025)

Appendix G. Offset calculator justification

Rehabilitation credit for impacts to significant remnant vegetation and black cockatoo foraging were undertaken. The calculation with the highest rehab area requirement is shown, significant remnant vegetation.

Environmental values to be offset		
Calculation	Score (area)	Rationale
Conservation significance		
Description	Clearing of 0.45 hectares of significant remnant vegetation	Clearing of native vegetation which is representative of Avon Wheatbelt - Muntadgin 1023 vegetation association, including the severance of an ecological linkage and tree species suitable for black cockatoo foraging.
Type of Environmental Value	Vegetation/habitat	Significant remnant vegetation and ecological linkage

Environmental values to be offset		
Calculation	Score (area)	Rationale
Conservation significance of environmental value	Terrestrial native vegetation complex - <30% extent remaining in the bioregion	Clearing of an ecological linkage within an extensively cleared landscape. The remnant revegetation for the local area and mapped vegetation is between 10-30%
Landscape-level value impacted	yes	yes
Significant impact		
Description	Clearing of 0.45 hectares of significant remnant vegetation	The proposal is to clear 0.45 hectares of vegetation within an extensively cleared landscape. The vegetation proposed to be cleared is significant remnant vegetation
Significant impact (hectares)/Type of feature	0.45	Area of significant remnant vegetation
Quality (scale)/Number	5	Many sections surveyed range from completely degraded to good condition. The majority is in good-degraded condition.
Rehabilitation credit		
Description		Applicant has proposed revegetation of 1.65 hectares within the adjacent road reserve.
Proposed rehabilitation (area in hectares)	1.45	Planting of species representative of the Avon Wheatbelt - Muntadgin 1023 vegetation association, including species to support black cockatoo foraging.
Current quality of rehabilitation site /Start number (of type of feature)	3	The vegetation survey recorded the condition of the revegetation site to be mostly degraded and areas of completely degraded condition. Some areas are in good to very good condition, which are mostly located within the clearing area.
Future quality WITHOUT rehabilitation (scale)/Future number WITHOUT rehabilitation	3	If no action, condition would stay the same or possible worse with construction of the adjacent road.
Future quality WITH rehabilitation (scale)/Future number WITH rehabilitation	5	Infill planting with an 80% success rate should raise the quality to good condition.
Time until ecological benefit (years)	15	Time it takes for the vegetation to benefit the ecosystem and biodiversity.
Confidence in rehabilitation result	0.8	Reasonably high level of confidence the habitat will established with management conditions and weeding proposed by the applicant.
Offset		
Description	N/A	Offset not required. Rehabilitation action reduces the total quantum of impact that no significant residual impact remains from clearing.

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

Bamford, M., S. Smith, P. Smith (2009) Investigations into the distribution and abundance of the tree stem trapdoor spider in the Koolyanobbing area. Bamford Consulting Ecologists, Kingsley, WA

Commonwealth of Australia (2001) *National Objectives and Targets for Biodiversity Conservation 2001-2005*, Canberra.

Department of Climate Change, Energy, the Environment and Water (2024). *National Recovery Plan for the Malleefowl (Leipoa ocellata)*. Department of Climate Change, Energy, the Environment and Water, Canberra. Available from: <http://www.dcceew.gov.au/environment/biodiversity/threatened/publications/recovery/malleefowl>. In effect under the EPBC Act from 04-Sep-2024.

Department of Environment Regulation (DER) (2013). *A guide to the assessment of applications to clear native vegetation*. Perth. Available from: https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf.

Department of Sustainability, Environment, Water, Population and Communities (2013). *Approved Conservation Advice for Idiosoma nigrum (shield-back spider)*. Canberra: Department of Sustainability, Environment,

Water, Population and Communities. Available from: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/66798-conservation-advice.pdf>. In effect under the EPBC Act from 14-May-2013.

Department of Water and Environmental Regulation (DWER) (2019). *Procedure: Native vegetation clearing permits*. Joondalup. Available from: https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.PDF.

Environmental Protection Authority (EPA) (2016). *Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment*. Available from: http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf.

Environmental Protection Authority (EPA) (2016). *Technical Guidance – Terrestrial Fauna Surveys*. Available from: https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Tech%20guidance-%20Terrestrial%20Fauna%20Surveys-Dec-2016.pdf.

Government of Western Australia (2024) *2024 South West Vegetation Complex Statistics. Current as of March 2024*. WA Department of Biodiversity, Conservation and Attractions, Perth, <https://catalogue.data.wa.gov.au/dataset/dbca>

Government of Western Australia. (2019) *2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019*. WA Department of Biodiversity, Conservation and Attractions. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>

Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. (2009) *South West Regional Ecological Linkages Technical Report*, Western Australian Local Government Association and Department of Environment and Conservation, Perth.

M.E. Trudgen and Associates (2025) A reconnaissance level vegetation and flora survey of a section of the Bailey Road easement in the Shire of Merredin, (DWER ref: DWERDT1316783).

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68) *Atlas of Australian Soils*, Sheets 1 to 10, with explanatory data. CSIRO and Melbourne University Press: Melbourne.

Schoknecht, N., Tille, P. and Purdie, B. (2004) *Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs* Resource Management Technical Report No. 280. Department of Agriculture.

Shah, B. (2006) *Conservation of Carnaby's Black-Cockatoo on the Swan Coastal Plain, Western Australia*. December 2006. Carnaby's Black-Cockatoo Recovery Project. Birds Australia, Western Australia.

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) *Native Vegetation in Western Australia, Extent, Type and Status*. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Shire of Merredin (2024) *Clearing permit application CPS 10841/1*, received 18 November 2024 (DWER Ref: DWERVT17186).

Western Environmental (2026) supporting information for clearing permit application CPS 10841/1, Response to RFI - Extension to Bailey Road, received 24 September 2025 (DWER Ref: DWERDT1202662).

Submission (2025) *Public submission in relation to clearing permit application CPS 10841/1*, received December 2024 (DWER Ref: DWERDT1056496, DWERDT1057040, DWERDT1057039, DWERDT1057038, DWERDT1057037, DWERDT1056901, DWERDT1056877, DWERDT1056873, DWERDT1056869, DWERDT1056867, DWERDT1056868, DWERDT1056866, DWERDT1056863, DWERDT1056860, DWERDT1056836, DWERDT1056832, DWERDT1056528, A2333335, A2333332, A2333331, DWERDT1210743, A2333330, A2333327, DWERDT1051421, DWERDT1056855, DWERDT1056523, A2333344, DWERDT1051420, DWERDT1059378).

Submission (2025) Additional *Public submission in relation to clearing permit application CPS 10841/1*, received after the submission deadline of 1 January 2025 (DWERDT1057572, DWERDT1218867, DWERDT1211118, DWERDT1211315, DWERDT1212218, DWERDT1215166, DWERDT1215366, DWERDT1215381, DWERDT1216448, DWERDT1211112, DWERDT1210865, DWERDT1210771, DWERDT1210664, DWERDT1210686, DWERDT1210805, DWERDT1057572)

Valentine, L.E. and Stock, W. (2008) *Food Resources of Carnaby's Black Cockatoo (Calyptorhynchus latirostris) in the Gnangara Sustainability Strategy Study Area*. Edith Cowan University and Department of Environment and Conservation. December 2008.

Western Australian Herbarium (1998-). *FloraBase - the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions, Western Australia. <https://florabase.dpaw.wa.gov.au/> (Accessed April 2026)