



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

<b>Purpose Permit number:</b>	CPS 10327/1
<b>Permit Holder:</b>	Vocus Fibre Pty Ltd
<b>Duration of Permit:</b>	From 16 December 2023 to 16 December 2033

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 installing fibre optic cabling.

#### **2. Land on which clearing is to be done**

Great Northern Highway Road Reserve (PIN 11726914), Meekatharra  
Lot 270 on Deposited Plan 218692, Meekatharra  
Lot 237 on Deposited Plan 218692, Meekatharra

#### **3. Clearing authorised**

The permit holder must not clear more than 1.14 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

#### **4. Period during which clearing is authorised**

The permit holder must not clear any *native vegetation* after 16 December 2028.

### **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 to be cleared.

## 7. Directional clearing

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

## 8. Soil erosion management

The permit holder must commence fibre optic cable installation no later than three (3) months after undertaking the authorised clearing activities to reduce the potential for soil erosion.

## 9. Fauna Management

The Permit Holder must:

- (a) fence all trenches for the duration of fibre optic cable installation activities with fine mesh to prevent fauna access; or
- (b) cover all trenches for the duration of fibre optic cable installation activities with a cover which prevents entry to the pits by fauna species and backfill upon completion; and
- (c) cover all bore holes at the end of each day and backfill upon completion.

## 10. Revegetation and rehabilitation (temporary works)

The Permit Holder must:

- (a) retain the vegetative material and topsoil removed by clearing authorised under this permit and stockpile the vegetative material and topsoil in an area that has already been cleared;
- (b) at an *optimal time* within twelve (12) months following clearing authorised under this permit, *revegetate and rehabilitate* the area(s) that are no longer required for the authorised purpose under this permit by:
  - (i) re-shaping the surface of the land so that it is consistent with the surrounding five metres of uncleared land;
  - (ii) ripping the ground on the contour to remove soil compaction; and
  - (iii) laying the vegetative material and topsoil retained under condition 10(a) on the cleared area(s).
  - (iv) undertake *weed* control activities on an ‘as needed’ basis to reduce *weed* cover within the cleared areas to no greater than the *weed* cover within the

surrounding five (5) metres of uncleared land.

- (c) within 12 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 10(b) of this permit:
- (i) engage an *environmental specialist* to determine the species composition, structure and density of the area revegetated and rehabilitated; and
  - (ii) where, in the opinion of an *environmental specialist*, the composition, structure and density determined under condition 10(c)(i) of this permit will not resemble the surrounding five (5) metres of uncleared land, the Permit Holder must *revegetate* the area by deliberately planting and/or *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation of the surrounding five (5) metres in that area, ensuring only *local provenance* seeds and propagating material are used.

### **PART III - RECORD KEEPING AND REPORTING**

#### **11. 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**

<b>No.</b>	<b>Relevant matter</b>	<b>Specifications</b>
1.	In relation to the authorised clearing activities generally	<ul style="list-style-type: none"> <li>(a) the species composition, structure, and density of the cleared area;</li> <li>(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;</li> <li>(c) the date that the area was cleared;</li> <li>(d) the size of the area cleared (in hectares);</li> <li>(e) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 5; and</li> <li>(f) actions taken to minimise the risk of the introduction and spread of <i>weeds</i> in accordance with condition 6;</li> </ul>
2.	In relation to fauna management pursuant to condition 9	<ul style="list-style-type: none"> <li>(a) Actions taken to cover or backfill all trenches and boreholes;</li> </ul>
3.	In relation to <i>revegetation</i> and <i>rehabilitation</i> pursuant to condition 10	<ul style="list-style-type: none"> <li>(a) the size of the area <i>revegetated</i> and <i>rehabilitated</i>;</li> <li>(b) the location of any <i>revegetated</i> and <i>rehabilitated</i> areas, recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings;</li> <li>(c) a description of the <i>revegetation</i> and</li> </ul>

No.	Relevant matter	Specifications
		<i>rehabilitation</i> activities undertaken; and (d) the date(s) on which the <i>revegetation</i> and <i>rehabilitation</i> was undertaken.

## 12. Reporting

The permit holder must provide to the *CEO* the records required under condition 11 of this permit when requested by the *CEO*.

## DEFINITIONS

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

**Table 2: Definitions**

Term	Definition
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the <i>Environmental Protection Act 1986</i> .
clearing	has the meaning given under section 3(1) of the EP Act.
condition	a condition to which this clearing permit is subject under section 51H of the EP Act.
department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
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 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.
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.
optimal time	means the period from April to June for undertaking planting and seeding.
rehabilitate/ rehabilitated/ rehabilitation	means actively managing an area containing native vegetation in order to improve the ecological function of that area.
revegetate/ revegetated/ revegetation	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.

Term	Definition
temporary works	means access tracks, spoil areas, side tracks, site offices, storage areas, laydown areas, extraction sites, camps, project surveys, pre-construction activities, and similar works associated with a project activity that are temporary in nature.
weeds	means any plant – (a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i> ; or (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or (c) not indigenous to the area concerned.

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**END OF CONDITIONS**


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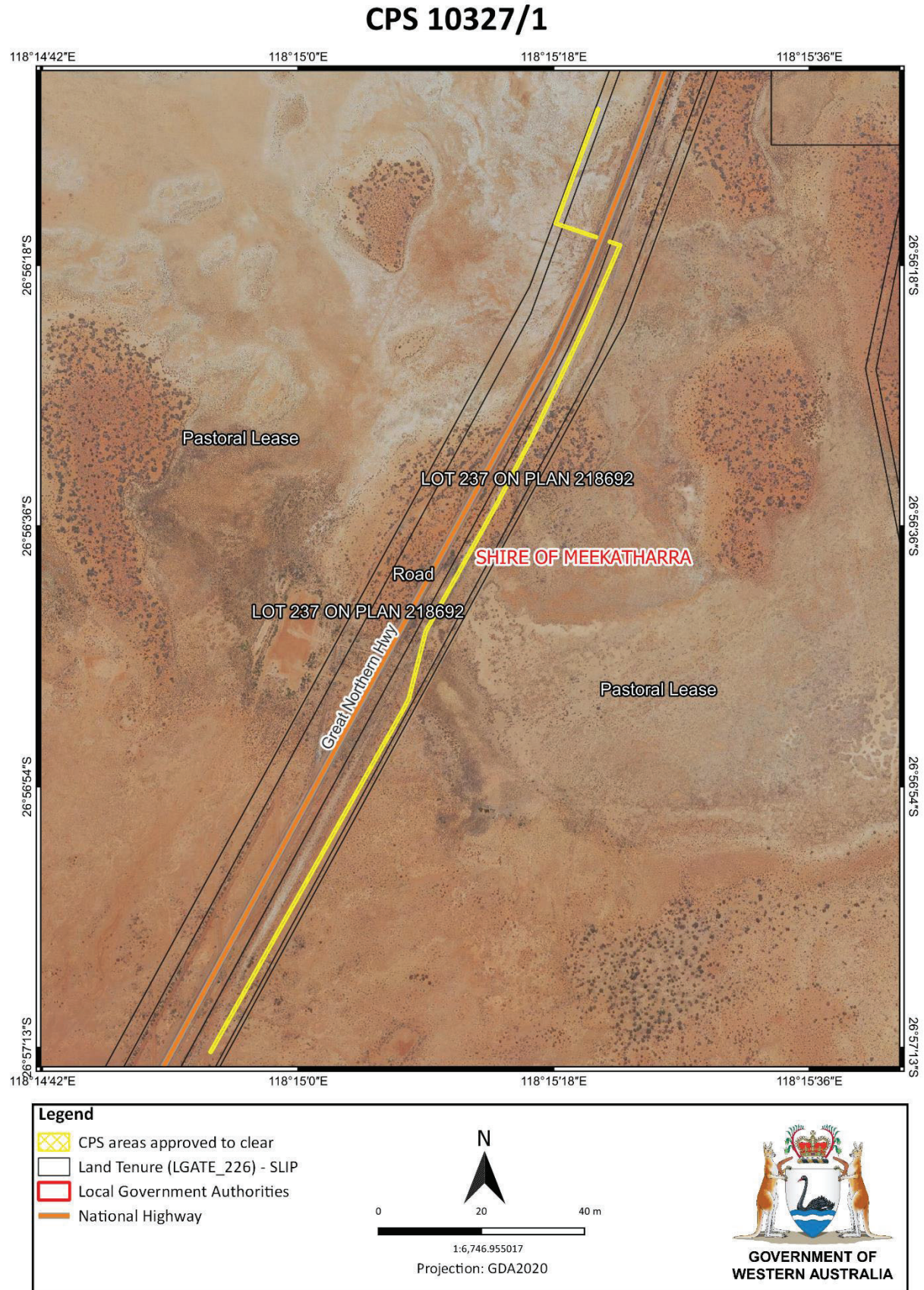
Ryan Mincham  
 MANAGER  
 NATIVE VEGETATION REGULATION

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

23 November 2023

# 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**



# Clearing Permit Decision Report

## 1 Application details and outcome

### 1.1. Permit application details

<b>Permit number:</b>	CPS 10327/1
<b>Permit type:</b>	Purpose permit
<b>Applicant name:</b>	Vocus Fibre Pty Ltd
<b>Application received:</b>	5 September 2023
<b>Application area:</b>	1.14 hectares of native vegetation
<b>Purpose of clearing:</b>	Installation of underground telecommunications cabling
<b>Method of clearing:</b>	Mechanical
<b>Property:</b>	Great Northern Highway Road Reserve (PIN 11726914) Lot 270 on Deposited Plan 218692 Lot 237 on Deposited Plan 218692
<b>Location (LGA area/s):</b>	Shire of Meekatharra
<b>Localities (suburb/s):</b>	Meekatharra

### 1.2. Description of clearing activities

The application is to temporarily clear vegetation for the installation of fibre optic telecommunications cabling. The area proposed to be cleared is linear in shape, approximately five metres wide and 2.21-kilometres long and is located within road reserve along Great Northern Highway.

The proposed clearing is part of a larger project entitled 'Project Horizon' which involves the installation of telecommunications cable from Geraldton to Port Hedland (Vocus, 2023b). The installation of the fibre optic cable involves a combination of ripping, trenching and boring.

The majority of native vegetation clearing for the project is being completed under Schedule 3 of the *Telecommunications Act 1997*. *Schedule 3 – Carriers powers and immunities* contains provisions to allow carriers to install a 'low-impact facility' on land without the need to obtain approvals from local, state or territory governments. Part of the criteria of a 'low-impact facility' is that it cannot be located in an area of 'environmental significance'. This section of the project is mapped as an Environmentally Sensitive Area (ESA) as it is contained within a lake listed under the Directory of Important Wetlands in Australia (DIWA) and therefore cannot be considered a 'low-impact' facility.

### 1.3. Decision on application

<b>Decision:</b>	Granted
<b>Decision date:</b>	23 November 2023
<b>Decision area:</b>	1.14 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 no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix A), relevant datasets (see Appendix E.1), photographs of the vegetation (see Appendix D), the clearing principles set out in Schedule 5 of the EP Act (see Appendix B), 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 'Project Horizon' which is to improve Western Australia's telecommunications network which will benefit the public and industry within regional areas.

The assessment identified that the proposed clearing will result in:

- the loss of native vegetation that is suitable habitat for the Priority 3 flora species *Tecticornia cymbiformis*
- the loss of native vegetation that is suitable habitat for migratory birds and the west coast mulga slider (*Lerista eupoda*)
- potential impacts to Lake Annean through the potential introduction and spread of weeds and alterations to surface hydrology; and
- potential land degradation in the form of wind and water erosion.

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 impacts on environmental values can be minimised and managed to unlikely lead to an unacceptable risk.

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
- staged clearing to minimise wind erosion;
- cover all trenches and boreholes at the end of each day and backfill all trenches and boreholes with excavated material upon completion; and
- revegetating and rehabilitating the area post-cable installation.



1.5. Site map

CPS 10327/1

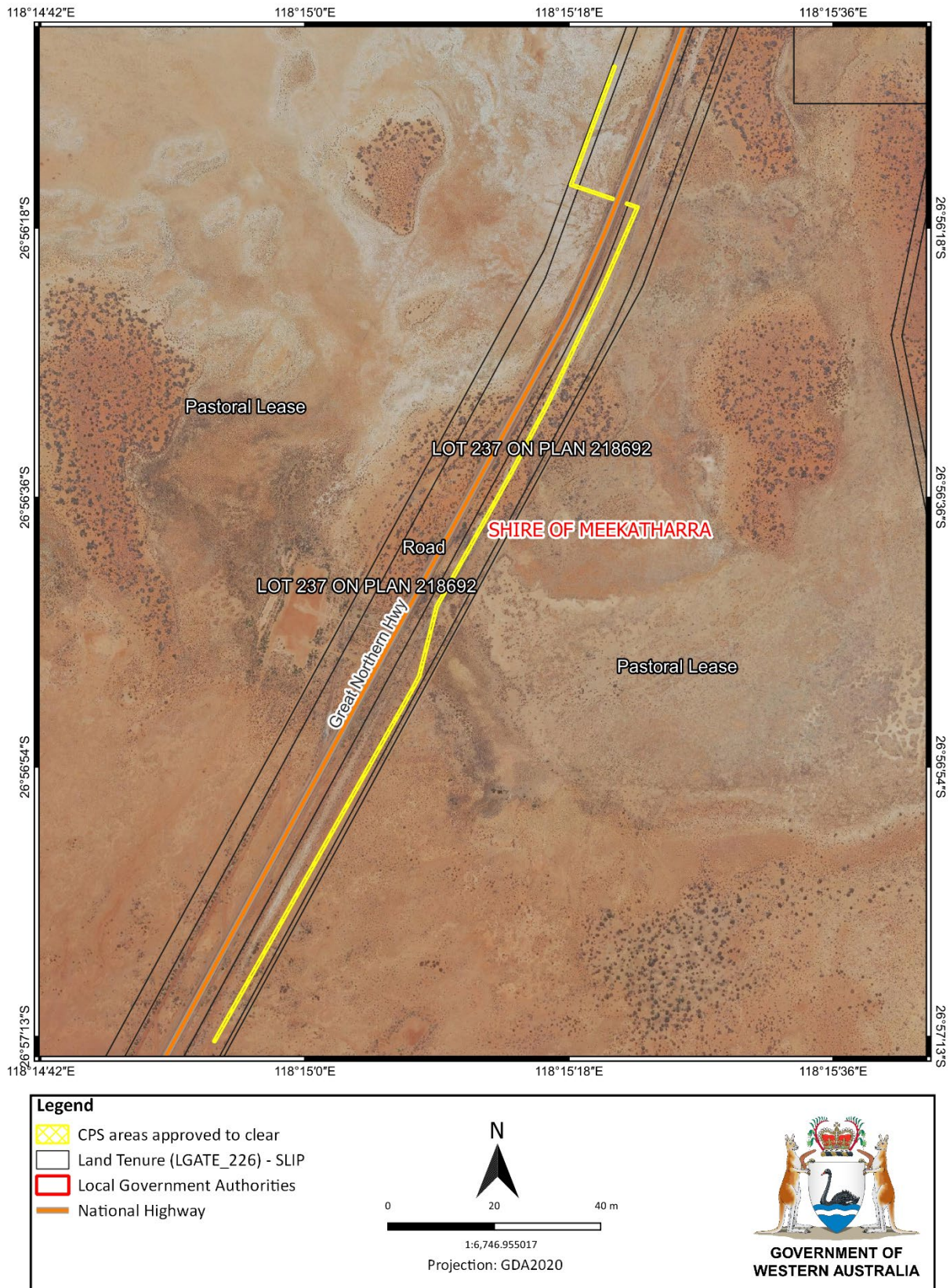


Figure 1. Map of the application area

The areas cross-hatched yellow indicates the areas authorised to be cleared under the granted clearing permit.

## 2 Legislative context

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

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

- the precautionary principle
- the principle of intergenerational equity
- the 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)

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)

## 3 Detailed assessment of application

### 3.1. Avoidance and mitigation measures

To minimise impacts to Lake Annean, the applicant has implemented realignments to remain within existing disturbance footprints along Great Northern Highway, including following the disturbance footprint of a former railway (Vocus, 2023).

The applicant has also included a number of avoidance and mitigation measures for the project including environmental controls, no-go zones for sensitive areas, erosion and sediment controls, pollution and spills, air quality and dust suppression, and noise and vibration (Vocus, 2023). See Appendix D for specific detail regarding the applicant's avoidance and mitigation measures.

The applicant has proposed the following revegetation and rehabilitation measures for the disturbance footprint following the completion of the activities associated with the clearing (Vocus, 2023):

- the clean-up dozer reinstates the rip-line and tows a grid roller through to compact the rip line;
- any vegetation that may have been removed is pulled back across the rip line;
- any large rocks that are brought to the surface will be maintained on site but off the rip line; and
- smaller rocks will be left on the rip line to mitigate possible erosion if/when there is water flow.

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

### 3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix A) 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 B) identified that the impacts of the proposed clearing present a risk to biological values and land and water resources. 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) - Clearing Principles (a) and (c)

##### Assessment

The desktop assessment identified 214 records across 31 species of conservation significant flora within the local area, the majority of which are Priority species, with one threatened species, *Eremophila rostrata* subsp. *rostrata* recorded. Based on the mapped vegetation and soil types, the Priority 3 species *Tecticornia cymbiformis* is considered to have suitable habitat within the proposed clearing area.

### ***Eremophila rostrata* subsp. *rostrata* (T)**

*E. rostrata* subsp. *rostrata* (beaked eremophila) grows on saline clays at the base of quartzite hills on open shrubland of Acacia and Eremophila species over *Ptilotus polakii* (DEWHA, 2009). The desktop assessment identified one record of this species within the local area, approximately 46.19 km from the proposed clearing.

While the mapped vegetation may be suitable for the beaked eremophila, the soils and landform described above do not match that of the proposed clearing area which is described as salt lakes with fringing saline alluvial plains, kopi dunes and sandy banks, supporting halophytic shrublands and acacia tall shrublands (DPIRD, 2019). Furthermore, the known distribution of this species appears to be restricted to two locations near Lake Austin, therefore, it is unlikely that the proposed clearing would contain suitable habitat for the beaked eremophila.

### ***Tecticornia cymbiformis* (P3)**

The desktop assessment found eight records of *T. cymbiformis* within the local area, the nearest being 5.51 km from the proposed clearing. There are few records of the species making it difficult to determine its full distribution, however, records indicate that the species may have a wide distribution with known populations appearing to be found near salt lakes throughout the Mid West Region. The isolation of the species from other populations may be a result of its habitat preferences which are saline flood ways and creek lines. The largest known population of *T. cymbiformis* is within Lake Annean.

The applicant's avoidance and mitigation measures (see Section 3.1.) states that they intend to remain largely within an area of previous disturbance from Great Northern Highway and a former railway. Based on the photographs provided of the aforementioned disturbed area (see Appendix D) the existing disturbance footprint is largely devoid of vegetation, with much of the site in disturbed condition due to the proximity of the proposed clearing to the highway. Given the ongoing disturbance within the road reserve, it is unlikely that the proposed clearing area contains critical habitat for *T. cymbiformis*.

It is noted that revegetation is planned for the site following the installation of the cable, hence, suitable habitat for *T. cymbiformis* will not be permanently lost. With the presence of better quality vegetation beyond the road reserve, it is noted that the introduction and spread of weeds into these areas may impact suitable habitat for *T. cymbiformis*.

### Conclusion

Based on the above assessment, the proposed clearing will result in the loss of suitable habitat for the Priority 3 species *Tecticornia cymbiformis*.

For the reasons set out above, it is considered that the impacts of the proposed clearing on priority flora can be managed by implementing weed and hygiene practices and revegetating and rehabilitating the site post-cable installation so the habitat is not permanently lost.

### Conditions

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

- Weed management to minimise and mitigate the introduction and spread of weeds into adjacent native vegetation.
- Revegetation and rehabilitation of the areas cleared for temporary works so habitat is not permanently lost.

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

### Assessment

The desktop assessment identified 23 species of conservation significant fauna in the local area composed of eighteen birds, two invertebrates, two mammals, and one reptile. A likelihood of occurrence assessment identified that the proposed clearing area contains suitable habitat for several species of migratory birds, in particular, *Gelochelidon nilotica* (gull-billed tern), and two other Priority fauna species namely:

- *Idiosoma clypeatum* (northern shield-backed trapdoor spider) (P3); and
- *Lerista eupoda* (West Coast mulga slider) (P1)

The clearing and cable installation methods may pose a risk to fauna generally by trapping them in trenches or boreholes which can lead to injury and mortality. Placing covers over exposed areas and limiting the time that these areas are exposed can help to minimise the risk to fauna species moving through the area.

### **Gull-billed tern and other migratory birds**

The proposed clearing is mapped within Lake Annean which is listed under the Directory of Important Wetlands in Australia, which is known to be a significant breeding spot for migratory birds when it fills with water, in particular, *Gelochelidon nilotica* (gull-billed tern). The desktop assessment identified 14 species of migratory birds within the local area, twelve of which may have suitable habitat within the proposed clearing area.

The gull-billed tern is a large migratory bird with a large range across most continents. It breeds in a variety of locations but generally in sparsely vegetated areas by water (DAWE, 2020). One of the biggest threats to the species is human disturbance at breeding sites. Gull-billed terns are known to abandon breeding sites due to human disturbance, however, dispersal of the birds prior to the disturbance appears to be an effective mitigation measure (DAWE, 2020). The desktop assessment identified 28 records of the gull-billed tern within the local area, the nearest being 2.23 km from the proposed clearing.

Lake Annean is considered to be one of the most important spots in Western Australia for breeding for the gull-billed tern with up to several hundred individuals seen at the lake at one time (DIWA, 1992).

The small size of the proposed clearing and its proximity to Great Northern Highway is unlikely to support significant habitat for the gull-billed tern and other migratory birds due to ongoing human disturbance and the birds may only be present if there is water available, however, steps should be taken to minimise disturbance to the gull-billed tern in the event that they are present within the area.

#### **Northern shield-backed trapdoor spider**

*Idiosoma clypeatum* (northern shield-back trapdoor spider) are a poorly known invertebrate and short range endemic (SRE) species that primarily occurs within the Yalgoo and Murchison Bioregions, however, is generally considered to be common within these areas. The desktop assessment identified 1261 records of this species within the local area, the nearest being 37.56 km from the proposed clearing.

The trapdoor spider is strongly correlated with areas that receive less than 250 mm of rain annually (Rix et al., 2018). The proposed clearing is located just south of Meekatharra that has an annual mean rainfall of 232.7 mm meaning that the spider may be found in the area. The spiders reside in burrows that are adorned with 'moustache-like' arrangement of twig-lines and are generally most active during winter (Rix et al., 2018).

It is common to find the trapdoor spider within disturbed vegetation and roadsides, however, given that the mapped soils are saline and that Lake Annean is subject to inundation, it is not likely that the proposed clearing area would contain suitable habitat for the species.

#### **West Coast mulga slider**

*Lerista eupoda* (west coast mulga slider) is a small lizard listed as Priority 1 in Western Australia. *Lerista* are burrowing species and are usually found beneath leaf litter, loose soil, stones, logs, termite mounds etc. and feeds on small insects (Cogger, 2014). The West Coast Mulga Slider inhabits open Mulga areas on loamy soils in the arid southern interior of WA, between Meekatharra and Cue (Chapple et al., 2019). The desktop assessment identified 23 records of the west coast mulga slider in the local area, the nearest being 0.71 km from the proposed clearing.

Available databases indicates that the majority of the west coast mulga slider's range is within 50 kilometres of the proposed clearing area, meaning that is very likely that the proposed clearing contains suitable habitat for the slider.

Given the small size of the proposed clearing, it is unlikely the proposed clearing would constitute as significant habitat for the species, however, given the small distribution of the species and the large number of records in the local area, the slider may pass through the area. The presence of trenches, boreholes, and earth moving machinery pose a risk of harming individuals who may utilise the proposed clearing area for habitat.

#### Conclusion

Based on the above assessment, the proposed clearing may result in the loss of suitable habitat for the gull-billed tern and west coast mulga slider and may result in the injury or mortality of fauna individuals if present during the clearing activities.

For the reasons set out above, it is considered that the impacts of the proposed clearing on fauna can be managed by applying a slow, directional clearing method and placing barriers to prevent fauna from becoming trapped within trenches and boreholes.

#### Conditions

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

- Slow, directional clearing to allow fauna individuals to move into adjacent vegetation.
- Covering trenches and boreholes at the end of each day and backfilling once complete to avoid trapping fauna.

### **3.2.3. Land and water resources (wetland) - Clearing Principles (f), (i)**

#### Assessment

The proposed clearing is mapped with Lake Annean which is registered under the Directory of Important Wetlands in Australia. According to the Directory of Important Wetlands in Australia (DIWA, 1992) Lake Annean is considered to be important for the following reasons:

- It is a good example of a wetland type occurring within a biogeographic region in Australia.
- It is a wetland which plays an important ecological or hydrological role in the natural functioning of a major wetland system/complex.
- It is a wetland which is important as the habitat for animal taxa at a vulnerable stage in their life cycles or provides a refuge when adverse conditions such as drought prevail.

As discussed in Section 3.2.2. Lake Annean is considered to be one of the most important breeding grounds for gull-billed terns in Western Australia and is known to support several species of migratory birds when full (DIWA, 1992). Current threats to the lake include grazing, wildflower picking, and Great Northern Highway. Polluted water from nearby ore processing may also impact the lake (DIWA, 1992).

The small size of the proposed clearing is unlikely to significantly impact Lake Annean given that the impacts from the proposed clearing are considered to be short-term and temporary and it is unlikely the lake will contain substantial water during clearing activities. Furthermore, the Department's Water Licencing Branch advised that impacts to Lake Annean are likely to be limited due to the size and installation methods being utilised for the project (DWER, 2023).

While the proposed clearing may not significantly impact on Lake Annean, activities associated with the clearing such as the movement of people and machinery may introduce and spread weeds into the lake. Weed hygiene measures should be included to minimise the risk of this occurring.

#### Conclusion

For the reasons set out above, it is considered that the impacts of the proposed clearing on Lake Annean can be managed by taking steps to minimise the risk of the introduction and spread of weeds and only clearing in dry conditions.

#### Conditions

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

- Weed management to minimise and mitigate the introduction and spread of weeds into Lake Annean.

### **3.2.4. Land and water resources (land degradation) - Clearing Principle (g)**

#### Assessment

According to available databases, the soil within all three of the proposed clearing areas are at high to extreme risk of wind erosion and water erosion. The proposed clearing may cause land degradation if soils are left exposed for extended periods post-clearing.

Given that the proposed clearing is temporary, small, and in proximity to areas of ongoing disturbance such as Great Northern Highway, it is unlikely to pose significant or long-term risks to land-degradation, however, minimising the time between clearing and installation activities and undergoing rehabilitation following the completion of works can help mitigate risk of wind and water erosion.

#### Conclusion

Based on the above assessment, the proposed clearing may result in increased risk of land degradation from wind and water erosion. For the reasons set out above, it is considered that the impacts of the proposed clearing on land degradation can be managed by restricting clearing to dry periods and staged clearing to minimise the time cleared land is left exposed.

#### Conditions

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

- Cable installation activities must commence within three (3) months of clearing.

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

The Shire of Meekatharra advised DWER that local government approvals are not required, and that the proposed clearing is not zoned within the Shire's Local Planning Scheme or subject to Council Policies. The Shire expressed support for the works which will assist in upgrading telecommunications of the locality (Shire of Meekatharra, 2023).

No Aboriginal sites of significance have been mapped within the application area. It is the permit holder's responsibility to ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

#### **Rights in Water and Irrigation Act 1914**

The desktop assessment identified that because the proposed clearing is located within Lake Annean, a permit to interfere with the bed and banks of a watercourse under the RIWI Act may be required.

Advice received from the Department's Water Licencing section determined that since the proposed clearing is not within a Proclaimed Surface Water Area, is located within road reserve, and does not require taking, storing or diverting water, a permit to interfere with the bed and banks of a watercourse was not required in this instance (DWER, 2023b).

**End**

## Appendix A. Site characteristics

### A.1. Site characteristics

Characteristic	Details
Local context	<p>The area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia. It is surrounded by a large salt lake and is adjacent to Great Northern Highway.</p> <p>Aerial imagery indicates the local area (50-kilometre radius from the centre of the area proposed to be cleared) retains approximately 98.95 per cent of the original native vegetation cover.</p>
Ecological linkage	The proposed clearing is not mapped within any ecological linkages.
Conservation areas	No conservation areas were mapped within the local area (50-kilometre radius).
Vegetation description	<p>Photographs provided by the applicant indicate that the vegetation within the proposed clearing area is mainly composed of scattered shrubs with areas of denser, low vegetation. Representative photos are available in Appendix D.</p> <p>This is consistent with the mapped vegetation type(s):</p> <ul style="list-style-type: none"> <li>• Beard 18, which is described as low woodland; mulga (<i>Acacia aneura</i>) (Shepherd et al, 2001)</li> <li>• Beard 1128, which is described as mosaic: Succulent steppe with open scrub; scattered <i>Acacia sclerosperma</i> &amp; <i>bowgada</i> over saltbush &amp; bluebush / Succulent steppe; samphire (Shepherd et al, 2001).</li> </ul> <p>The mapped vegetation types retain approximately 99.76 and 98.36 per cent respectively of the original extent (Government of Western Australia, 2019).</p>
Vegetation condition	<p>Photographs supplied by the applicant indicate the vegetation within the proposed clearing area is in very good (Trudgen, 1991) condition, described as:</p> <ul style="list-style-type: none"> <li>• Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.</li> </ul> <p>The full Trudgen (1991) condition rating scale is provided in Appendix C. Representative photos are available in Appendix D.</p>
Climate and landform	<p>The proposed clearing is located in the Midwest Region of Western Australia which is characterised in its northern area as a sub-tropical climate with hot, humid summers and mild winters.</p> <p>The landform of the proposed clearing area is described as depositional surfaces; salt lakes and dunes: large lake beds up to 70 km long containing saline muds, receiving episodic major catchment flows via calcreted tributary flood plains. Smaller pans with associated lunettes in areas of impeded drainage; bare.</p>
Soil description	The proposed clearing is mapped within the Carnegie soil system which is described as salt lakes with fringing saline alluvial plains, kopi dunes and sandy banks, supporting halophytic shrublands and acacia tall shrublands.
Land degradation risk	The soil within the proposed clearing area is mapped as high to extreme risk of wind erosion and phosphorous export, and a very high to extreme risk of water erosion.
Waterbodies	The desktop assessment and aerial imagery indicated that the proposed clearing intersected one waterbody listed under the Directory of Important Wetlands Australia known as Lake Annean.
Hydrogeography	The proposed clearing is mapped within the East Murchison Groundwater area proclaimed under the RIWI Act 1914.
Flora	A total of 214 records across 31 species of flora are recorded within the local area (50-kilometre radius). None of these records were found within one kilometre of the proposed clearing. The nearest record is <i>Tecticornia cymbiformis</i> (P3) which is located approximately 5.51 km from the proposed clearing area.

Characteristic	Details
	One threatened species was recorded within the local area, <i>Eremophila rostrata</i> subsp. <i>rostrata</i> , which is located 46.19 km from the proposed clearing.
Ecological communities	There are no threatened or priority ecological communities mapped within the proposed clearing area. Nine ecological communities are recorded within the local area (50-kilometre radius), the nearest being the Yagahong Land System (P3) located approximately 6.18 km from the proposed clearing.
Fauna	A total of 1,386 records across 23 species of conservation significant fauna are recorded within the local area (50-kilometre radius). Two species are recorded within one kilometre of the proposed clearing: <ul style="list-style-type: none"> <li>• <i>Calidris melanotos</i> (pectoral sandpiper) (MI) – 0.20 km</li> <li>• <i>Lerista eupoda</i> (west coast mulga slider) (P1) – 0.71 km</li> </ul>

## A.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*					
Murchison	28,120,586.77	28,044,823.42	99.73	2,185,987.96	7.77
Vegetation complex					
Beard 1128*	18,657.56	18,349.24	98.35	-	-
Beard 18*	19,890,666.60	19,842,830.40	99.76	1,317,179.00	6.62
Local area					
50 km	807,317.44	798,830.46	98.95	-	-

\*Government of Western Australia (2019a)

## A.3. Flora analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
<i>Eremophila rostrata</i> subsp. <i>rostrata</i>	T	N	Y	N	46.91	1	N/A
<i>Tecticornia cymbiformis</i>	3	Y	Y	Y	5.51	8	N/A

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

## A.4. 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)	Are surveys adequate to identify? [Y, N, N/A]
<i>Actitis hypoleucos</i> (common sandpiper)	MI	Y	N	42.21	3	N/A



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)	Are surveys adequate to identify? [Y, N, N/A]
<i>Apus pacificus</i> (fork-tailed swift)	MI	Y	Y	16.26	1	N/A
<i>Calidris acuminata</i> (sharp-tailed sandpiper)	MI	Y	Y	2.23	2	N/A
<i>Calidris ferruginea</i> (curlew sandpiper)	CR	Y	Y	2.23	1	N/A
<i>Calidris melanotos</i> (pectoral sandpiper)	MI	Y	Y	0.20	1	N/A
<i>Calidris ruficollis</i> (red-necked stint)	MI	Y	N	42.67	2	N/A
<i>Chlidonias leucopterus</i> (white-winged black tern)	MI	Y	Y	42.44	2	N/A
<i>Falco hypoleucos</i> (grey falcon)	VU	Y	Y	8.50	1	N/A
<i>Gelochelidon nilotica</i> (gull-billed tern)	MI	Y	Y	2.23	28	N/A
<i>Hydroprogne caspia</i> (caspiian tern)	MI	Y	N	42.58	1	N/A
<i>Idiosoma clypeatum</i> (northern shield-backed trapdoor spider)	P3	N	Y	37.56	1261	N/A
<i>Lerista eupoda</i> (West Coast mulga slider)	P1	Y	Y	0.71	23	N/A
<i>Oxyura australis</i> (blue-billed duck)	P4	Y	N	42.48	1	N/A
<i>Tringa nebularia</i> (common greenshank)	MI	Y	Y	2.23	19	N/A

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

#### A.5. Land degradation risk table

Risk categories	Description
Wind erosion	99% of map unit has a high to extreme hazard
Water erosion	99% of map unit has a very high to extreme hazard

#### Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
<b>Environmental value: biological values</b>		
<p><b>Principle (a):</b> "Native vegetation should not be cleared if it comprises a high level of biodiversity."</p> <p><u>Assessment:</u></p> <p>The proposed clearing area contains suitable habitat for priority flora species found within the local area, however, given that the proposed clearing is largely contained within an area of ongoing and previous disturbance, the proposed clearing is unlikely to contain significant habitat for priority flora.</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.1, above.</i>
<p><b>Principle (b):</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."</p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared is mapped within a wetland that is known to be a significant habitat for migratory birds when it fills with water. A priority invertebrate and reptile are also found within the local area and have suitable habitat within the proposed clearing area. Despite this, the small size of the</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.2, above.</i>

Assessment against the clearing principles	Variance level	Is further consideration required?
application and proximity to ongoing disturbance areas, the proposed clearing is unlikely to contain significant habitat for fauna		
<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>One threatened species is recorded in the local area, however, this was found on the very edge of the 50 kilometre buffer, and based on its species preferences, it is unlikely to be found within the proposed clearing area.</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.1, above.</i>
<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 proposed clearing is not mapped within a threatened ecological community. No threatened ecological communities were mapped within the local area.</p>	Not likely to be at variance	No
<b>Environmental value: significant remnant vegetation and conservation areas</b>		
<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 types and native vegetation in the local area is consistent with the national objectives and targets for biodiversity conservation in Australia. The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area.</p>	Not likely to be at variance	No
<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>No conservation areas are mapped within the proposed clearing or the local area.</p>	Not likely to be at variance	No
<b>Environmental value: land and water resources</b>		
<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>The proposed clearing is mapped within Lake Annean which is listed under the Directory of Important Wetlands Australia (DIWA), however, the small size of the clearing, its temporary nature and location within an already existing disturbance impact is not likely to have a significant or long-term impact on the wetland.</p>	At variance	Yes <i>Refer to Section 3.2.3, above.</i>
<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 are highly susceptible to wind erosion and water erosion. Noting the extent of the application, the proposed clearing is not likely to have an appreciable impact on land degradation.</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.4, above.</i>

Assessment against the clearing principles	Variance level	Is further consideration required?
<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>The proposed clearing intersects Lake Annean, which is listed under DIWA, however, given that the lake rarely fills with water, it is unlikely the proposed clearing is unlikely to impact on surface and groundwater quality.</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.3, above.</i>
<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>Despite the proposed clearing being mapped within Lake Annean, the small size of the proposed clearing, along with its location along Great Northern Highway is unlikely to contribute to increased incidence or intensity of flooding.</p>	Not likely to be at variance	No

### Appendix C. 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 Trudgen, M.E. (1991) *Vegetation condition scale* in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth.

#### Measuring vegetation condition for the Eremaean and Northern Botanical Provinces (Trudgen, 1991)

Condition	Description
Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
Good	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor	Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Very poor	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely degraded	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e. areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.

## Appendix D. Works methodology excerpts



Photo 1: Typical salt scald and scattered vegetation in the roadside of Lake Anneen ESA



Photo 2: Existing disturbed area through road reserve which is to be followed where possible



Photo 3: Lake Anneen, beyond the disturbed road reserve and fence line (foreground)

**Figure 2.** Photographs of the vegetation within proposed clearing area (Vocus, 2023)

### 5. Environmental controls during construction

Key environmental controls during the installation phase are detailed below.

- Limit access to essential vehicles and machinery.
- Minimize vegetation clearing and excavation of banks.
- Employ micro-siting for waterways wider than 250m with contiguous vegetation and significant landscape features.
- Under boring will be necessary in areas with significant water flow due to recent rain events.
- Pre-ripping is essential to ensure no obstructions to the laying dozer.
- Restore natural soil surface profiles by reinstating the rip line with a clean-up dozer and compacting using a grid roller.
- Sediment control is generally not required in flat T-sections with no occurring rain events.
- Ripped and reinstated waterways with no steep slopes will have vegetation and smaller rocks placed back over the rip line.

## 5.1 No-go zones

- Identify and map out all no-go zones and ensure they are clearly marked on site plans and communicated to all staff and contractors.
- Ensure that all staff and contractors are trained on the location and boundaries of no-go zones.
- Implement physical barriers or signage to prevent access to no-go zones.
- Regularly inspect no-go zones to ensure they are being properly enforced and to identify any potential hazards that may have developed.
- Document all incidents of unauthorised access to no-go zones and investigate to determine

## 5.2 Erosion and sedimentation

- Note: sediment control won't generally be necessary in T-sections where the land is flat, and there is no occurring or forecast rain events. Ripped and reinstated waterways won't have steep slopes of any significance that will require sediment controls, other than removed vegetation and/or smaller rocks being placed back over the rip line.
- If waterways are running a waterway will not be ripped and reinstated but instead be bored.
- When bores are greater than 250m, bore entry and exit points will be positioned in locations where there is no flow.

## 5.3 Pollution and spills

- Refuelling locations shall be planned to minimise any environmental impacts of spills. Refuelling to take place outside of sensitive areas such as PEC, or water catchment areas etc.
- Workers shall conduct appropriate training in fuel and chemical handling, spill response pertaining to works undertaken.
- Inductions to include appropriate fuel locations and chemical storage requirements for the project.
- Appropriate spill response equipment to be available for the duration of works.
- SDS or equivalent should be obtained for any chemicals and available onsite for all chemicals stored and handled.
- Inductions or toolbox meetings should include regular information on spill response processes, to ensure that work crews understand procedures and reporting requirements.
- Appropriate spill kits will be available and maintained for the duration of works.
- Spill kits will be positioned sufficiently close and clearly marked to active construction activities to enable effective deployment in the event of a fuel or chemical spill.
- If a fuel or chemical spill occurs outside a bunded area. Appropriate spill response must be followed to control, isolate, and remediate the spill.
- An inventory of spill response kits, their contents and location should be prepared and

## 5.4 Air quality & Dust Suppression

Due to the nature of construction activities involving earthworks, dust emissions, plant and equipment exhaust emissions may result. Emissions that may have an adverse effect on air quality include:

- Vehicle and machinery exhaust emissions;
- Emissions from generators supporting on-site works, site camps or offices;
- Dust blown off exposed areas during construction works; and dust emissions from vehicle and equipment movement.
- Air Quality and dust suppression will be adequately identified and controlled by completing the Project Pre-Commencement HSE Assessment to ensure that:
- All vehicles and machinery be properly serviced and maintained to ensure that they do not cause undue air pollution.
- Dust will be controlled on site, if necessary, by using acceptable dust suppression techniques, which may include the dampening down of the site, minimising the disturbance to ground cover and retaining, where possible, existing trees and shrubs to act as windbreaks.
- All vehicles transporting fill to and from a construction site, shall be covered to prevent the emission of dust and other particles; and
- Any long-term stockpiles will be placed on a flat, grassed area where possible and covered to prevent dust generation.

## 5.5 Noise & Vibration

Construction noise will generally be within normal working hours and will be controlled by the site-specific specifications. Those likely to be affected by excessive noise (e.g., generator noise, Excavation machinery etc.) will be notified prior to any work commencing. Noise will be adequately managed and reduced on Vocus worksites by implementing the following techniques:

Objectives:

- To minimise disturbance on nearby residents and other land users, biodiversity and sensitive locations from noise and dust. Sensitive locations may include childcare centres, schools, hospitals, health centres, businesses and or wildlife and habitats.
- To minimise vibration impacts on nearby buildings, particularly heritage buildings; and
- To minimise greenhouse gas emissions.

Controls:

- Don't leave your vehicle idling.
- Drive slowly on dirt roads to keep the dust down.
- Check and maintain your vehicle, plant and equipment regularly, paying particular attention to exhaust emissions,

Construction plant & equipment (noise, dust)

- Equipment must be fitted with appropriate noise abatement devices (e.g. mufflers, silencers and screens) and shall be maintained in good working order.
- Limit noisy works to within standard hours in accordance with local government bylaws, unless otherwise specified in approvals. Standard hours within residential areas are generally 7am – 7pm Monday to Friday and 8am to 3pm on Saturday. Works outside the prescribed times generally needs an out of hours permit from the local government and/or notice to occupants in close proximity to the affected area.

• Limit the use of reversing alarms or use 'low tone' alarms where practicable  
During excavation activities:

- Minimise dust generating activities. Consider using water if dust is likely to impact on surrounding properties and areas.
- Development approvals, or permits, may include requirements for dust suppression.
- Secure your load to prevent loss of material i.e. dust and spills.
- Remove debris for offsite disposal and reinstate site as soon as possible.
- Ensure that vehicles leaving the site are free of mud and other debris.

Avoiding risk of non-compliance with permit conditions (noise and vibration):

- Ensure all required permits have been obtained to undertake construction works outside standard hours prior to commencing onsite.
- Construction activities to comply with all relevant regulatory requirements and permit conditions and guidelines pertaining to noise control.
- Landowners and local residents shall receive adequate notice of all noisy activities associated with the project, prior to their commencement.
- Where vibration is likely to be an issue, dilapidation surveys shall be undertaken to record pre-construction condition of buildings in proximity to work areas that might be affected.

**Figure 3.** Avoidance and mitigation measures proposed by the applicant (Vocus, 2023)

## Appendix E. Sources of information

### E.1. GIS databases

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

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- 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

#### Restricted GIS Databases used:

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

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