CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 8080/1
File Number: DER2018/000865-1
Duration of Permit: From 17 November 2018 to 17 November 2025

PERMIT HOLDER

Temma Nominees Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 52 on Deposited Plan 39849, Muchea

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 1.8 hectares of native vegetation within the area hatched yellow on attached Plan 8080/1.

CONDITIONS

1. **Type of clearing authorised**
   The Permit Holder shall not clear any native vegetation after 17 November 2020.

2. **Avoid, minimise and reduce the impacts and extent of clearing**
   In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in 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. **Dieback and weed control**
   When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:
   (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
   (b) ensure that no known *dieback* or *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.

4. **Retain vegetative material and topsoil, revegetation and rehabilitation**
   The Permit Holder shall:
   (a) Retain the vegetative material and topsoil removed by clearing authorised under this Permit for the area hatched yellow on attached Plan 8080/1, and stockpile the vegetative material and topsoil in an area that has already been cleared.
   (b) At an *optimal time* following clearing authorised under this Permit for the area hatched yellow on attached Plan 8080/1, *revegetate* and *rehabilitate* the area(s) that are no longer required for the purpose for which they were cleared under this Permit by:
      (i) re-shaping the surface of the land so that it is consistent with the surrounding 5 metres of uncleared land; and
      (ii) ripping the ground on the contour to remove soil compaction;

(iii) ripping the pit floor and contour batters within the extraction site; and
(iv) laying the vegetative material and topsoil retained under condition 4(a) on the cleared area(s).

(c) Within 24 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 4(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 4(c)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, *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 to pre-clearing vegetation types in that area and ensuring only *local provenance* seeds and propagating material are used.

RECORD KEEPING AND REPORTING

5. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, in relation to the clearing of native vegetation authorised under this Permit:

(a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
(b) the date that the area was cleared;
(c) the size of the area cleared (in hectares);
(d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 2 of this Permit;
(e) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 3 of this Permit; and
(f) in relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 4 of this Permit:
(i) the location of any areas *revegetated* and *rehabilitated*, recorded using a GPS unit set to GDA94, expressing the geographical coordinates in Eastings and Northings or decimal degrees;
(ii) a description of the *revegetation* and *rehabilitation* activities undertaken;
(iii) the size of the area *revegetated* and *rehabilitated* (in hectares); and
(iv) the species composition, structure and density of *revegetation* and *rehabilitation*.

6. Reporting

(a) The Permit Holder must provide to the *CEO* on or before 30 June of each year, a written report:
(i) of records required under condition 5 of this Permit; and
(ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.

(b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the *CEO* on or before 30 June of each year.

(c) Prior to 6 June 2025, the Permit Holder must provide to the *CEO* a written report of records required under condition 5 of this Permit where these records have not already been provided under condition 6(a) of this Permit.

DEFINITIONS

The following meanings are given to terms used in this Permit:

CEO means the Chief Executive Officer of the Department responsible for administering the *Environmental Protection Act 1986;*

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 experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

fill means material used to increase the ground level, or fill a hollow;

local provenance means native vegetation seeds and propagating material from natural sources within 50 kilometres and the same Interim Biogeographic Regionalisation for Australia (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;

optimal time means the period from May to August for undertaking *direct seeding*, and *planting*;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing *mulch*;

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area; and

revegetate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as natural *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.

weed/s means any plant -

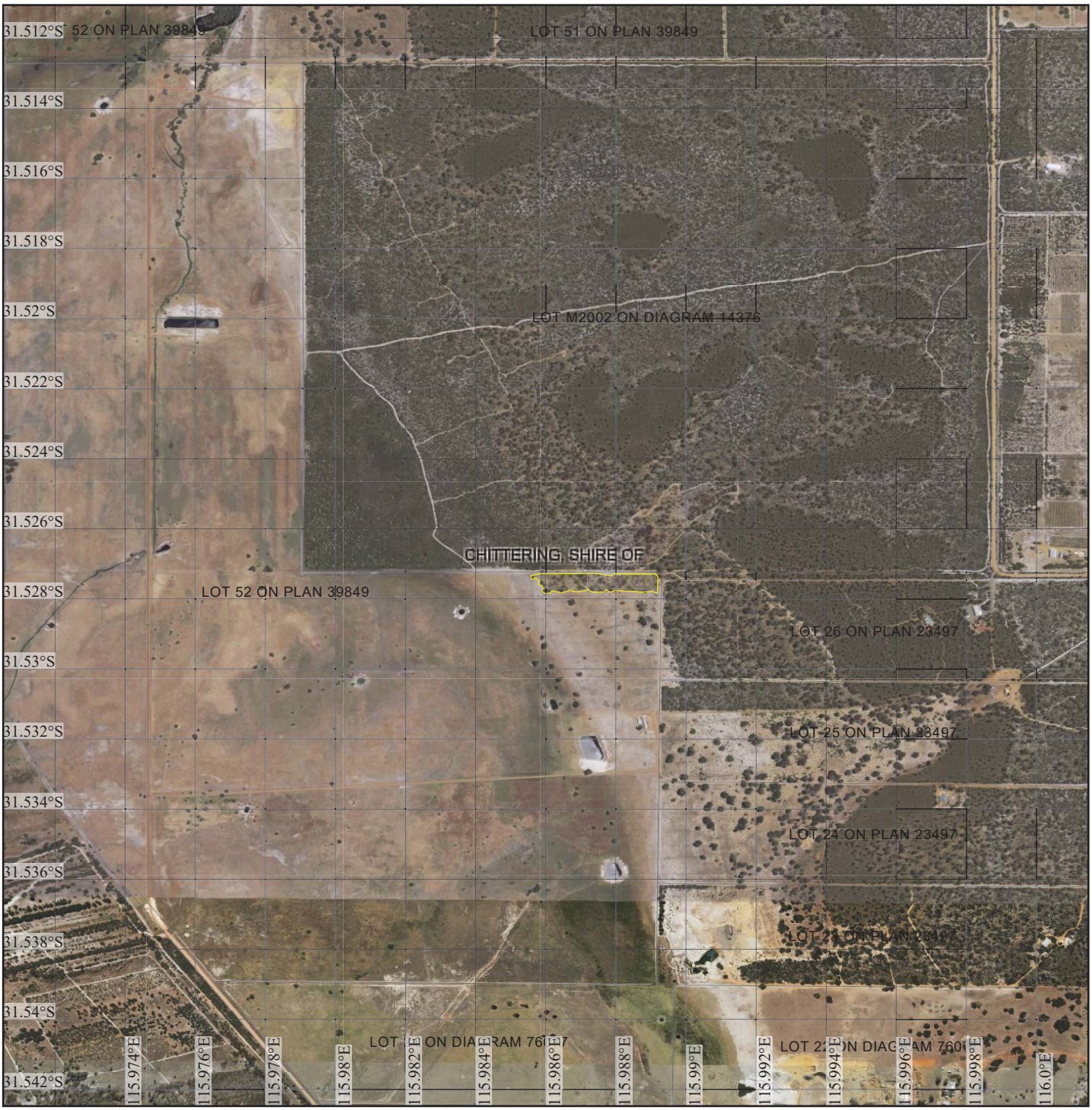
(a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
(b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or
(c) not indigenous to the area concerned.

Mathew Gannaway
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

18 October 2018

Plan 8080/1



Legend

- Imagery
- Clearing Instruments Activities
- Local Government Authority

N

0 500m

1:15,577

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

..... Date .....

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

GOVERNMENT OF WESTERN AUSTRALIA

Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8080/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Temma Nominees Pty Ltd

1.3. Property details

Property: Lot 52 on Deposited Plan 39849, Muchea
Local Government Authority: Chittering, Shire of
Localities: Muchea

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.8		Mechanical Removal	Extractive Industry

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 18 October 2018
Application Received: 21 May 2018
Reasons for Decision: The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*, and it has been concluded that the proposed clearing may be at variance to principle (d) and is not likely to be at variance to the remaining clearing principles.

The Delegated Officer determined that the proposed clearing may indirectly impact on the environmental values of an adjacent area of remnant vegetation through the introduction or spread of weeds.. To minimise this impact, a condition has been placed on the permit requiring the implementation of weed and dieback management measures.

A revegetation condition has been placed on the clearing permit requiring the applicant to revegetate to the pre-clearing vegetation type.

In determining to grant a clearing permit subject to conditions, the Delegated Officer found that the porpsoed clearing is not likely to lead to an unacceptable risk to the environment.

2. Site Information

Clearing Description: The proposed clearing of 1.8 hectares of native vegetation within Lot 52, Old Gingin Road, Muchea is for the purpose of extractive industry (Figure 1).

Vegetation Description: Two Heddle vegetation complexes are mapped within the application area, namely:

- Reagan complex - described as Low open woodland to closed heath; and
- Coonambidgee Complex - described as low open forest and low woodland to open woodland (Heddle et al., 1980).

A flora and vegetation survey of the application area described the vegetation as sparse low woodland of *Eucalyptus todtiana*, *Banksia attenuata* and *Nuytsia floribunda* with emergent *Corymbia calophylla* over *Xanthorrhoea preissii* mid dense heath over mixed low shrubs and is considered to be in good to degraded (Keighery, 1994) condition (Bayley Environmental Services (BES), 2018 and Bennett Environmental Consulting, 2011).

Vegetation Condition: The condition of the vegetation within the application area ranges from good to degraded, described as:

- Good - Vegetation structure significantly altered by various signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate to it (Keighery, 1994); to
- Degraded - Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

Soil/Landform Type: The soils within the application area consist of colluvial sands with grey to grey brown sandy topsoil and yellow sandy subsoil (BES, 2018).

Comments: The condition and description of the vegetation was determined by a flora and vegetation survey undertaken by BES (April, 2018) and Bennett Environmental Consulting (November, 2011).

The local area considered in the assessment of this application is a 10 kilometre radius measured from the perimeter of the application area.

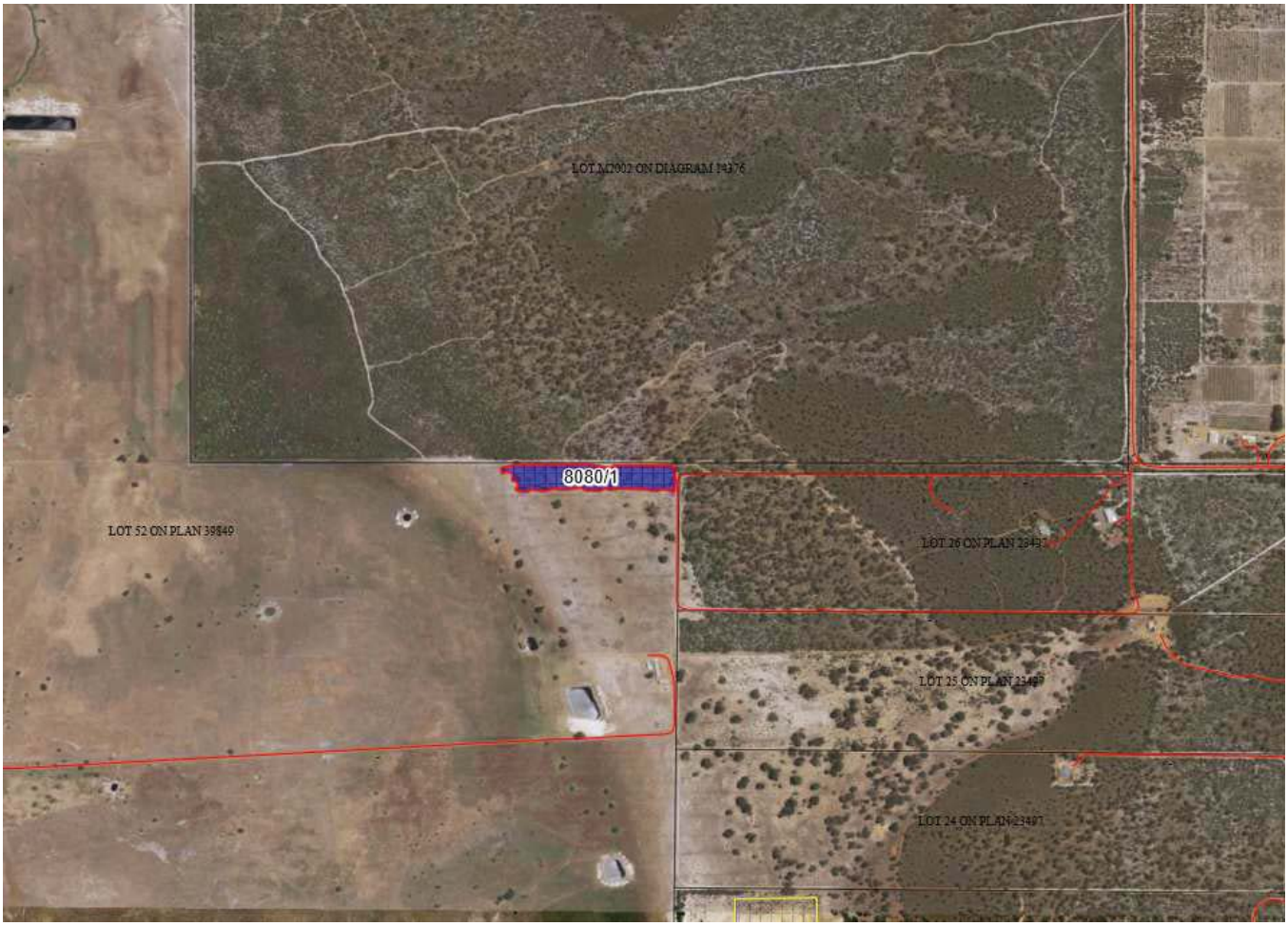


Figure 1: Application area (hatched blue).

3. Minimisation and mitigation measures

The applicant has proposed the following mitigation measures:

- Rehabilitation with topsoil and cleared vegetation once extraction has been completed; and
- Fencing to prevent access by cattle of the rehabilitated area (BES, 2018).

4. Assessment of application against clearing principles, planning instruments and other relevant matters

As described in Section 2, the vegetation within the application area is a sparse low mixed woodland over *Xanthorrhoea preissii* mid dense heath over mixed low shrubs and is considered to be in good to degraded (Keighery, 1994) condition (BES, 2018 and Bennett Environmental Consulting, 2011). The application area has been subjected to ongoing disturbance by cattle grazing, edge effects, altered fire frequency and weed invasion. Cattle has been excluded from the area since October 2017 (BES, 2018).

Between the two flora surveys of the application area, 54 native flora species and 10 weed species were identified (BES, 2018 and Bennett Environmental Consulting, 2011). The flora surveys were undertaken during October 2011 and April 2018 (BES, 2018). No rare or priority flora species or priority ecological communities (PEC) were observed within the application area during the flora surveys and therefore it is not considered likely for the proposed clearing to impact on habitat for rare or priority flora species or PECs or an area that contains high biodiversity.

The application area is situated in a landscape that is approximately 35 per cent vegetated and is located on the edge of a large remnant of native vegetation (approximately 480 hectares in size). Aerial imagery indicates that this remnant contains similar vegetation in better condition than the application area. The vegetation complexes mapped are not considered to be highly cleared. Given this, it is not considered for the application area to represent a significant remnant of vegetation in a highly cleared area.

The application area falls within the confirmed breeding area for the Carnaby's cockatoo (*Calyptorhynchus latirostris*) (Endangered under the *Wildlife Conservation Act 1950* and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)) and is considered to contain low quality foraging habitat given the sparse nature of the Banksia within the application area and the degraded to good (Keighery, 1994) condition of the vegetation. In addition, no hollow bearing trees occur within

the application area (BES, 2018). Given this and that the application area is adjacent to a remnant of vegetation containing similar habitat values in better condition, the proposed clearing is not likely to impact on significant fauna habitat.

The application area is mapped by the Commonwealth Department of the Environment and Energy (DotEE) as a 'likely to occur' area for the Banksia Woodlands of the Swan Coastal Plain ecological community (Banksia Woodlands TEC), which is listed as an endangered threatened ecological community (TEC) under the EPBC Act. DotEE's mapping provides an indicative distribution of the ecological community, defining areas mapped as 'likely to occur' and 'may occur'. The approved conservation advice for this community states that "Ground-truthing (e.g. an on-ground survey) is required to verify if a particular site meets the required key diagnostic characteristics and minimum condition thresholds to be the described ecological community" (Threatened Species Scientific Committee, 2016).

It is estimated from the information provided by the applicant and by reviewing the key diagnostic characteristics and minimum condition thresholds for this TEC that approximately 1.8 hectares of the application area that occurs in a degraded (Keighery, 1994) to good condition is consistent with this TEC as it is a part of a larger TEC patch. The total mapped occurrence of this TEC is 321,728 hectares. Noting that the 1.8 hectares proposed for clearing represents approximately 0.00056 per cent of the TEC's mapped occurrence in a predominantly degraded condition, the proposed clearing is unlikely to significantly impact on this communities occurrence within the local area and the broader region. The application area is separated from a large patch of remnant vegetation in excellent (Keighery, 1994) condition by a fire break that is 10 metres in width. Clearing the vegetation under application has the potential to increase the spread of weeds and dieback into this area which is likely to represent this TEC. Weed and dieback management practices are likely to minimise this risk. Given the above, the proposed clearing may be at variance to Principle (d).

As no wetlands or watercourses are mapped within the application area and given the relatively small size of the proposed clearing and mapped soil type, the proposed clearing is not likely to impact on riparian vegetation, contribute to or cause land degradation, deteriorate the quality of ground water or surface water and is not likely to cause or exacerbate flooding.

Given the above, the proposed clearing may be at variance to Principle (d) and is not likely to be at variance to the remaining clearing principles.

Planning instruments and other relevant matters.

The clearing of 1.8 hectares of native vegetation within Lot 52, Old Gingin Road, Muchea is for the purpose of extending an existing sand extraction pit. Extractive industry within the application area is expected to take 12 months.

The Shire of Chittering approved an amendment to the Extractive Industry Licence on 28 September 2018 extending the existing sand extraction area.

The application area is zoned 'agricultural resource' under the Shire of Chittering's Town Planning scheme.

No Aboriginal sites of significance have been mapped within the application area.

The clearing permit application was advertised on the DWER website on 13 June 2018 with a 21 day submission period. No public submissions have been received in relation to this application.

5. References

Bayley Environmental Services (BES) (2018) proposed clearing of Native Vegetation Lot 52 Old Gingin Road, Muchea, Environmental Assessment. Prepared for Temma Nominees Pty Ltd, May 2018. DWER ref A1689094

Bennett Environmental Consulting Pty Ltd (2011) Flora survey for Lot 52 Old Gingin Road, Chittering. Prepared for Statewide Surveying and Planning. November 2011. DWER ref A1689094

Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

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

Shire of Chittering (2018) Advice for clearing permit application CPS 8080/1 – Lot 52 Old Gingin Road, Chittering. DWER ref A1708658

Threatened Species Scientific Committee (2016). Approved Conservation Advice (incorporating listing advice) for the Banksia Woodlands of the Swan Coastal Plain Ecological Community. Canberra: Department of the Environment and Energy. Available from: http://www.environment.gov.au/biodiversity/threatened/communities/pubs/131-conservation-advice.pdf

GIS Databases:
- Aboriginal sites register system
- Town Planning Scheme Zones
- Hydrography, linear
- Hydrography, hierarchy
- DBCA tenure
- SAC bio datasets accessed July 2018
- Virtual mosaic