



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 5349/1
Permit Holder:	Shire of Kojonup
Duration of Permit:	25 January 2013 – 25 January 2018

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of road widening.

2. Land on which clearing is to be done

Collie-Changerup Road reserve, Changerup (PIN 11023378 and 1382707)
Kojonup-Frankland Road reserve, Jingalup (PIN 1389010, 1388973, 1388074 and 1388998)
Kojonup-Frankland Road reserve, Mobrup (PIN 11627386 and 11627389)
Broomehill-Kojonup Road reserve, Kojonup (PIN 11179128, 1386493 and 1386551)

3. Area of Clearing

The Permit Holder must not clear more than 1.5 hectares of native vegetation within the combined areas shaded yellow on attached Plan 5349/1a and Plan 5349/1b and Plan 5349/1c and Plan 5349/1d.

4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

5. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for the activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Local Government Act 1995* or any other written law.

6. Compliance with Assessment Sequence and Management Procedures

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

7. Avoid, minimise etc 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.

8 Fauna management

(a) Prior to undertaking any clearing authorised under this Permit within Plan 5349/1b and Plan 5349/1c the areas shall be inspected by a *fauna specialist* who shall identify *habitat tree(s)* suitable to be utilised by fauna species listed below:

- (i) Brush-tailed Phascogale (*Phascogale tapoatafa* ssp. (WAM M4340)); and
- (ii) Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*)

(b) Prior to clearing, any *habitat tree(s)* identified by condition 8(a) shall be inspected by a *fauna specialist* for the presence of fauna listed in condition 8(a).

(c) Where fauna are identified in relation to condition 8(b) of this Permit, the Permit Holder shall ensure that:

- (i) no clearing of the identified *habitat tree(s)* occurs, unless first approved by the CEO and
- (ii) where fauna are identified in relation to condition 8(b) of this Permit, the Permit Holder shall ensure that no taking of identified fauna occurs unless first approved by the CEO.

PART III - RECORD KEEPING AND REPORTING

9. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

(a) In relation to the clearing of native vegetation authorised under this Permit:

- (i) 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;
- (ii) the date that the area was cleared; and
- (iii) the size of the area cleared (in hectares).

(b) In relation to fauna management pursuant to condition 8 of this Permit:

- (i) the location of each habitat tree identified 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; and
- (ii) the species name of fauna reasonably likely to utilise, or that have been observed utilising, the habitat tree(s).

10. 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 9 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 31 March of each year.

(c) Prior to 25 October 2017 the Permit Holder must provide to the CEO a written report of records required under condition 9 of this Permit where these records have not already been provided under condition 10(a) of this Permit.

DEFINITIONS

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

fauna specialist means a person with training and specific work experience in fauna identification or faunal assemblage surveys of Western Australian fauna;

habitat tree(s) means trees that have a diameter, measured at 1.5 metres from the base of the tree, of 50 centimetres or greater, that contains or has the potential to develop hollows or roosts suitable for native fauna;

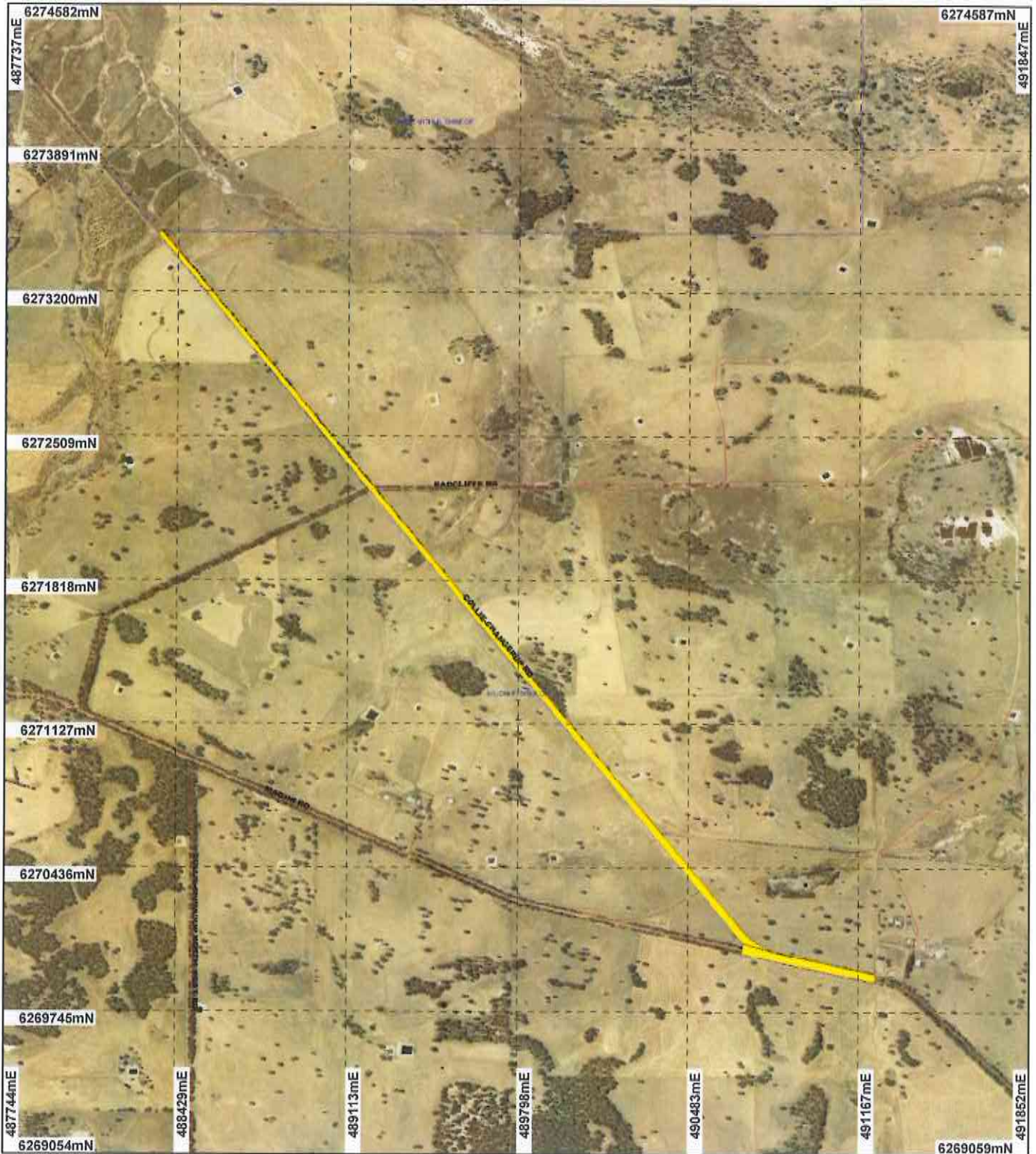


M Warnock
A/MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

3 January 2013

Plan 5349/1a



LEGEND

- Bridgetown Dinninup 50cm Orthomosaic - Landgate 2003
- Road Centrelines
- Local Government Authorities
- Clearing Instruments
 - Areas Approved to Clear



Scale 1:24353
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

M Warnock Date **3-1-13**

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

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.

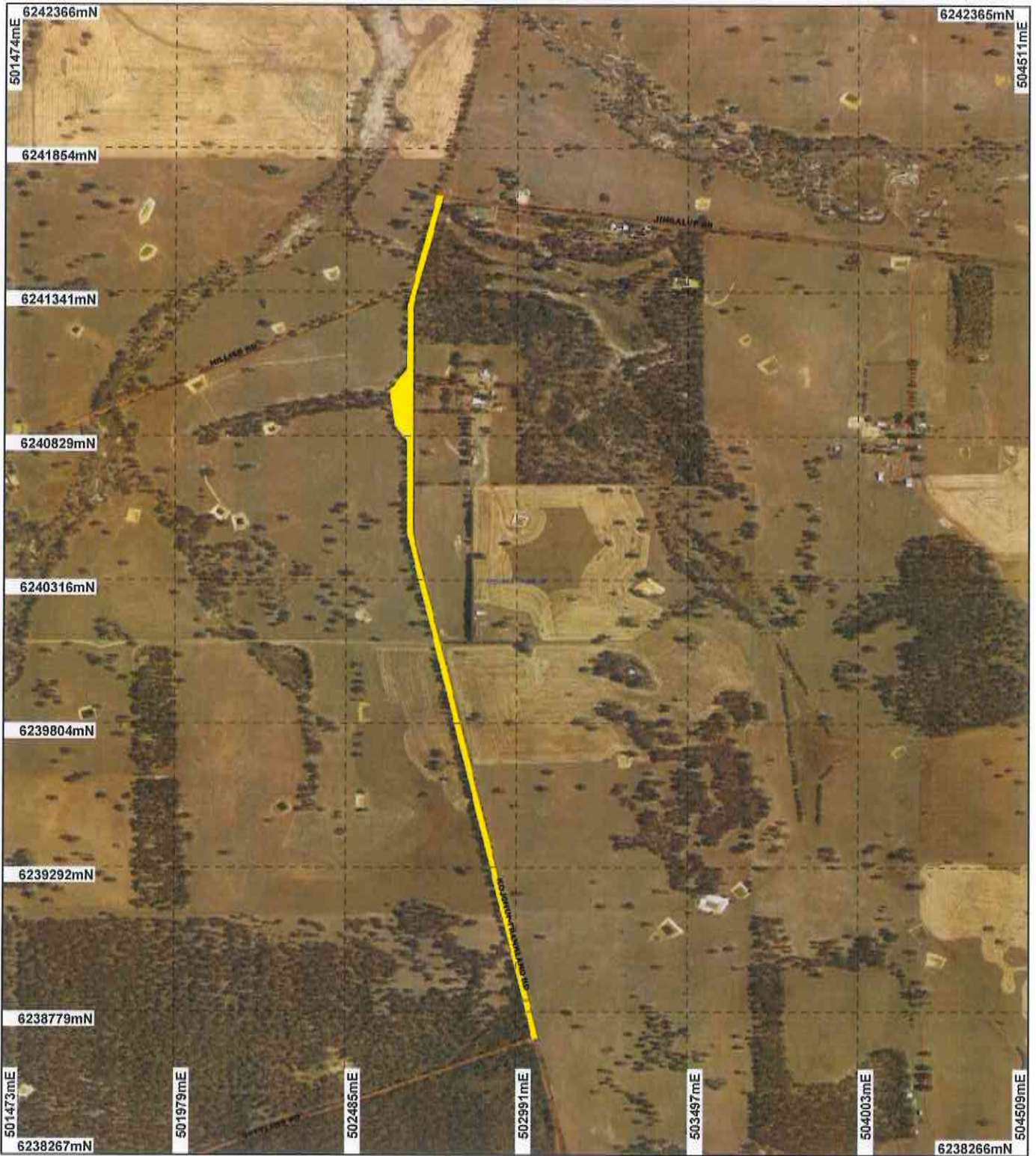


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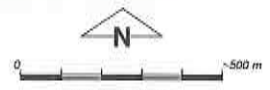
* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.

Plan 5349/1b



LEGEND

- | | |
|--|---|
| <ul style="list-style-type: none"> • Kojonup 50cm Orthomosaic - Landgate 2010 — Road Centrelines □ Local Government Authorities | <ul style="list-style-type: none"> • Clearing Instruments ■ Areas Approved to Clear |
|--|---|



Scale 1:18037
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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M Warnock Date **3.1.13**

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

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.

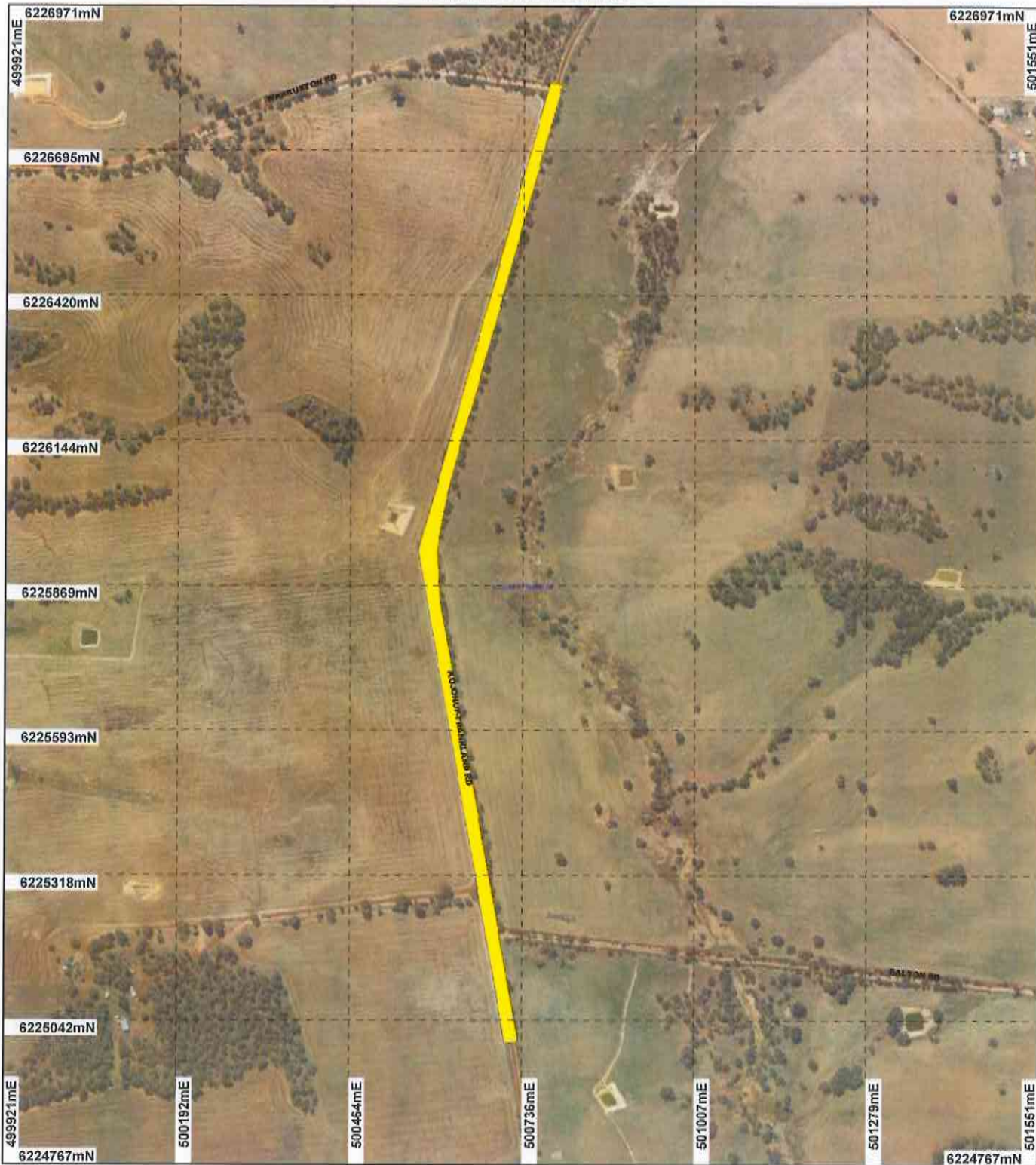


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Plan 5349/1c



LEGEND

- | | |
|--|-------------------------|
| Frankland 50cm Orthomosaic - Landgate 2010 | Clearing Instruments |
| Road Centrelines | Areas Approved to Clear |
| Local Government Authorities | |



0 250 m

Scale 1:9694

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

M Wamock Date 3.1.13
M Wamock

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

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.

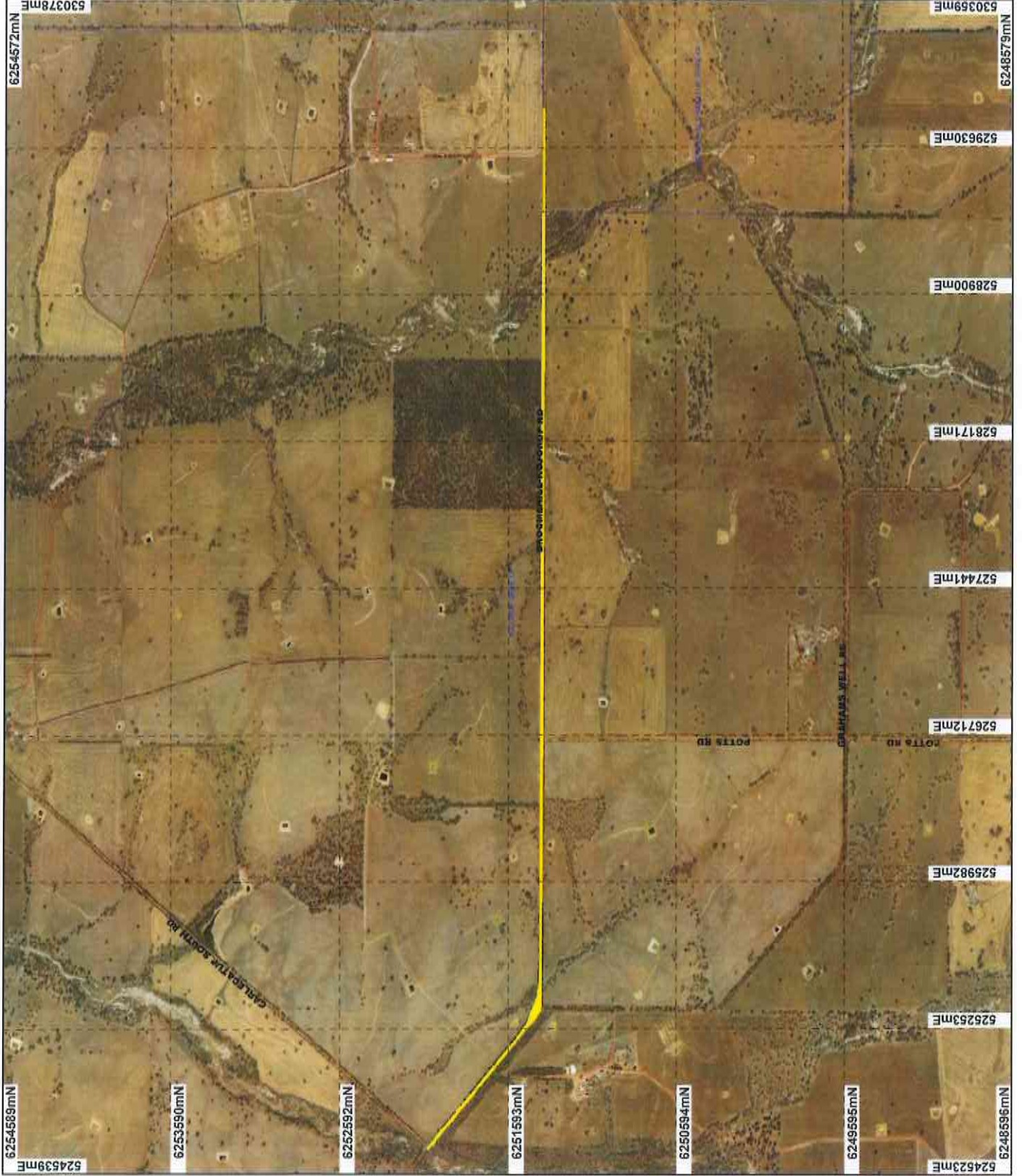


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Plan 5349/1d



LEGEND

- Kojonup 50cm Orthomosaic - Landgate 2010
- Road Centrelines
- Local Government Authorities
- Clearing Instruments
- Areas Approved to Clear

* Project Data is denoted by asterisk.
 This data has not been quality assured.
 Please contact map author for details.



0 750 m

Scale 1:28500

(Approximate when represented at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

M Wallock Date **3.11.13**

M Wallock

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

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1. Application details

1.1. Permit application details

Permit application No.: 5349/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Kojonup

1.3. Property details

Property: ROAD RESERVE (MOBRUP 6395)
ROAD RESERVE (JINGALUP 6395)
ROAD RESERVE (KOJONUP 6395)
ROAD RESERVE (CHANGERUP 6394)
Local Government Area: Shire of Kojonup
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.5		Mechanical Removal	Road construction or maintenance
0.3		Mechanical Removal	Road construction or maintenance
0.2		Mechanical Removal	Road construction or maintenance
0.5		Mechanical Removal	Road construction or maintenance

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 3 January 2013

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
The vegetation under application at each site is mapped as the following Beard Vegetation Associations (BVA): Collie-Changerup Road BVA No. 4 - medium woodland; marri and wandoo.	Open and scattered upperstorey, little or no mid-storey and a weedy under-storey. Typical road reserve vegetation structure bordered by agricultural land where often weed intrusion originates (RCC, 2003)	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The condition of the vegetation was determined via Landgate 2003 and 2010 Orthomosaic imagery and from information contained within 'A survey of roadside conservation values in the Shire of Kojonup and roadside management guidelines, April 2003 - Roadside Conservation Committee' (RCC, 2003).
Kojonup-Frankland Rd (SLK 15.5-17.5) BVA No. 4 - medium woodland; marri and wandoo; and BVA No. 1003 - medium woodland; marri and wandoo.			
Kojonup-Frankland Rd (SLK 32-35) BVA No. 3 - medium forest; jarrah and marri, and BVA No. 4 - medium woodland; marri and wandoo.			
Broomehill-Kojonup Rd			

(SLK9.5-15)

BVA No. 4 - medium
woodland; marri and
wandoo, and

BVA No. 96 - medium
woodland; wandoo and
yate.

(Shepherd et al, 2001)

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments **Proposal is not likely to be at variance to this Principle**

The application is to clear a total of 1.5 hectares (ha) of native vegetation along four road reserves for the purpose of road widening. This will involve clearing a 1.5 metre - 2 metre wide strip along both sides of the road reserve (or possibly up to 5 metre in some locations if required) with the amount of proposed clearing at each location being: Collie-Changerup Road (SLK 0-5) - 0.5ha; Kojonup-Frankland Rd (SLK 15.5-17.5) - 0.2ha; Kojonup-Frankland Rd (SLK 32-35) - 0.3ha and Broomehill-Kojonup Rd (SLK9.5-15) - 0.5ha.

Large areas within the Shire of Kojonup have been historically cleared mostly for agriculture and transport corridor purposes and retains less than 30 per cent of its Pre-European vegetation cover (RCC, 2003; Government of Western Australia, 2011). Remnant vegetation within transport corridors are important as 'bush corridors' for the movement of fauna, flora pollinators and in some instances, are the only known locations of rare and/or endemic flora species. These remnants often link with other remnant vegetation in the local area (such as on Crown reserves and private property) aiding fauna dispersal. Clearing within such corridors contributes to the continued fragmentation of remnant vegetation and the decline of these linkages (RCC, 2003).

Eight threatened flora species (*Caladenia* sp., *Conostylis* sp. (two species present), *Adenanthos* sp., *Banksia* sp., *Eleocharis* sp., *Gastrolobium* sp. and *Verticordia* sp.), 29 priority listed flora species and 11 threatened fauna species have been recorded within the Shire of Kojonup (RCC, 2003 and DEC, -2007). The Collie-Magini Road has been mapped by the Roadside Conservation Committee as having medium to high flora conservation values (RCC, 2003).

The application areas are all part of existing transport corridors and given the small amount of clearing proposed at each site (between 0.2 and 0.5ha spread over between 2-5 kilometres), the potential impacts to the existing road reserve vegetation are likely to be minimal.

The clearing as proposed is not likely to be at variance to this Principle.

Methodology **References**
DEC (-2007)
Government of Western Australia (2011)
RCC (2003)

GIS database
SAC Biodataset (accessed December 2012)

(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 indigenous to Western Australia.

Comments **Proposal may be at variance to this Principle**

There are two records of the Brush-tailed Phascogale (*Phascogale tapoatafa* ssp. (WAM M4340)) and one record of the Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) utilising the vegetation within the Kojonup-Frankland Rd (SLK 15.5-17.5) application area (DEC, 2012).

There are two records of the Brush-tailed Phascogale (*Phascogale tapoatafa* ssp. (WAM M4340)) utilising the vegetation within the Kojonup-Frankland Rd (SLK 32-35) application area (DEC, 2012).

The clearing as proposed may be at variance to this Principle. However, fauna management practices, such as retention of habitat trees where possible, will assist in minimising impact to these species.

Methodology **References:**
DEC (2012)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments Proposal is not likely to be at variance to this Principle

Eight threatened flora species (Caladenia sp., Conostylis sp., (two species), Adenanthos sp., Banksia sp., Eleocharis sp., Gastrolobium sp., Verticordia sp.) are known from the Shire of Kojonup.

None of these species have been recorded or are known from the application areas. Given the small amount of proposed clearing at each site and the potential of the road reserve vegetation to be suffering from 'edge effects' associated with the adjoining agricultural land and road use, the application areas within the road reserves are unlikely to support threatened flora.

The proposed clearing is not likely to be at variance to this Principle.

Methodology GIS database
SAC Biodataset (accessed December 2012)

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments Proposal is not likely to be at variance to this Principle

No threatened ecological communities are recorded near or within the application areas.

The proposed clearing is not likely to be at variance to this Principle.

Methodology GIS database
SAC Biodatasets

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments Proposal is at variance to this Principle

The application areas are located within the Jarrah Forest Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 55 per cent of its pre-European vegetation extent remaining (Government of Western Australia, 2011).

The application areas are mapped as the following Beard Vegetation Associations (BVA):

Collie-Changerup Road
BVA No. 4 - medium woodland; marri and wandoo.

Kojonup-Frankland Rd (SLK 15.5-17.5)
BVA No. 4 - medium woodland; marri and wandoo; and
BVA No. 1003 - medium woodland; marri and wandoo.

Kojonup-Frankland Rd (SLK 32-35)
BVA No. 3 - medium forest; jarrah and marri, and
BVA No. 4 - medium woodland; marri and wandoo.

Broomehill-Kojonup Rd (SLK 9.5-15)
BVA No. 4 - medium woodland; marri and wandoo, and
BVA No. 967 - medium woodland; wandoo and yate.

Vegetation associations 967 and 4 have approximately 18 and 28 per cent of their pre-European extent remaining and 3 and 1003 have greater than 30 per cent remaining in the Jarrah Forest bioregion (Government of Western Australia, 2011).

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 proposed clearing involving BVA's 4 and 967 is at variance to this Principle. However, given the application areas are part of existing transport corridors and the small amount of proposed clearing at each site (up to 0.5 hectares per site spread over 2-5 kilometres), the potential reduction in vegetation representation is likely to be minimal.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)
IBRA Bioregion			

Jarrah Forest	4,506,657	2,473,560	55
Shire			
Shire of Kojonup	293,099	68,533	23
Beard Vegetation Association in Bioregion			
3	2,661,088	1,844,267	69
4	1,054,280	300,382	28
967	102,985	18,983	18
1003	20,109	9,011	45

Methodology References:
Commonwealth of Australia (2001)
Government of Western Australia (2011)
Shepherd et al (2001)

GIS datasets
Pre-European vegetation

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments **Proposal may be at variance to this Principle**
The proposed application area within the Broomehill-Kojonup Road traverses two floodplains and two 'channelled valley bottoms' of the Hardy Estuary-Blackwood Catchment involving the Carlecatup Creek.

The Kojonup-Frankland Road (SLK 15.5-17.5) traverses a minor, non-perennial watercourse.

The clearing proposal may be at variance to this principle. However, given the application area is part of an existing transport corridor with existing drainage and given the small amount of clearing (up to 0.5 hectares spread over 5km), the potential impacts to the adjacent water course are likely to be minimal.

Methodology GIS database
Hydrography, Linear
Geomorphic wetlands

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments **Proposal is not likely to be at variance to this Principle**
Soil erosion in the form of water and wind erosion or water logging is unlikely given the gravelly-ironstone and/or gravelly leached soils present at each application area (Northcote et al, 1960-68).

The proposed clearing is not likely to be at variance to this Principle.

Methodology References
Northcote et al (1960-68)

GIS database
Soils, Statewide

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments **Proposal is not likely to be at variance to this Principle**
The southern extent of the proposed clearing along the Kojonup-Frankland Rd (SLK 15.5-17.5) is adjacent to the Jingalup Nature Reserve. Given the application area is part of an existing transport corridor with existing drainage and given the small amount of clearing (up to 0.2 hectares spread over 2km), the potential impacts to the adjacent nature reserve are likely to be minimal.

The proposed clearing is not likely to be at variance to this Principle.

Methodology GIS database
DEC estate

(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.

Comments Proposal may be at variance to this Principle

Each of the application areas has either a high or very high salinity level (up to 35,000 TDS mg/L).

The Kojonup-Frankland Road (SLK 15.5-17.5) application area falls within Zone A under the Country Areas Water Supply Act 1947 (CAWS Act) gazetted Warren River Water Reserve area (DoW, 2012). This Act regulates native vegetation clearing to prevent salinisation of water courses. Department of Water (DoW) has advised that potential impacts are likely to be minimal given the small amount of clearing proposed (0.2 hectares over 2 kilometres) and that revegetation activities to offset previous, similar clearing actions would compensate for this proposed clearing (DoW, 2012).

This road also traverses a minor, non-perennial water course. Any taking or diversion of surface water in this area for purposes other than domestic and/or stock watering is subject to licensing by DoW. Should the clearing for road widening result in the interference of the bed and/or banks of the watercourse, a Permit will be required from DoW.

In addition, management of stormwater during clearing works and construction of the road (in terms of increased turbidity due to erosion and runoff) will be required.

The clearing as proposed may be at variance to this Principle. However, given the application area is part of an existing transport corridor with existing drainage, the small amount of proposed clearing, and if appropriate construction practices occur, any potential impacts to surface or ground water can be minimised.

Methodology References
DoW (2012)

GIS database
CAWS Act
Hydrography, Linear

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments Proposal is not likely to be at variance to this Principle

The application areas are part of existing transport corridors with existing drainage and involve small amounts of clearing (between 0.2 and 0.5 hectares spread between 2 and 5 kilometres). The gravelly-sandy soil types present are not subject to water retention.

Given the above, the clearing as proposed is not likely to be at variance to this Principle.

Methodology GIS database
Soils, Statewide
Hydrography, Linear

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

Each of the four application areas fall within the Environmental Protection Authority, Position Paper No. 2 Agriculture Region zone. As this policy relates only to the clearing for agricultural reasons, it has no bearing on this application to clear for road maintenance.

The Kojonup-Frankland Road (SLK 15.5-17.5) application area falls within Zone A under the Country Areas Water Supply Act 1947 (CAWS Act) gazetted Warren River Water Reserve area. This Act regulates native vegetation clearing to prevent salinisation of water courses. Department of Water (DoW) have advised that potential impacts are likely to be minimal given the small amount of clearing proposed (0.2 hectares over 2 kilometres) and that revegetation activities to offset previous, similar clearing actions would compensate for this proposed clearing (DoW, 2012).

This road also traverses a minor, non-perennial water course. Any taking or diversion of surface water in this area for purposes other than domestic and/or stock watering is subject to licensing by DoW. Should the clearing for road widening result in the interference of the bed and/or banks of the watercourse, a Permit will be required from DoW (DoW, 2012).

Methodology Reference
DoW (2012)

4. References

- DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed December 2012
- DEC (2012) DEC Regional advice for Clearing Permit Application CPS 5349/1, 21 December 2012. Department of Environment and Conservation, Western Australia (DEC Ref: A583760).
- DoW (2012) Advice for Clearing Permit Application CPS 5349/1, Kojonup-Frankland Road (SLK 15.5-17.5). Department of Water, Western Australia (DEC Ref: A579427 and A582257).
- Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- 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.
- RCC (2003) A survey of roadside conservation values in the Shire of Kojonup and roadside management guidelines, April 2003 - Roadside Conservation Committee
- Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

5. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DEC)