



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 6546/1
Permit Holder:	Shire of Serpentine Jarrahdale
Duration of Permit:	11 July 2015 to 11 July 2017

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

1. Purpose for which clearing may be done

Clearing for the purpose of road widening and table drains.

2. Land on which clearing is to be done

Hopeland Road reserve (Hopeland 6125) (PIN: 11606677)
Kargotich Road reserve (Mardella 6125) (PIN: 11609239)
Rowley Road reserve (Forrestdale 6112) (PIN: 11868115 and PIN: 11868117)

3. Area of Clearing

The Permit Holder must not clear more than 0.29 hectares of native vegetation within the combined areas cross-hatched yellow on attached Plan 6546/1a, Plan 6546/1b and Plan 6546/1c.

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.

A handwritten signature in black ink, appearing to read "M Warnock", written over a horizontal line.

M Warnock
SENIOR MANAGER
CLEARING REGULATION

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

11 June 2015

CPS 6546/1a



Legend

-  Areas approved to clear
-  Roads
-  Cadastre
-  local_gov_authority
- Virtual Mosaic



1:3,000

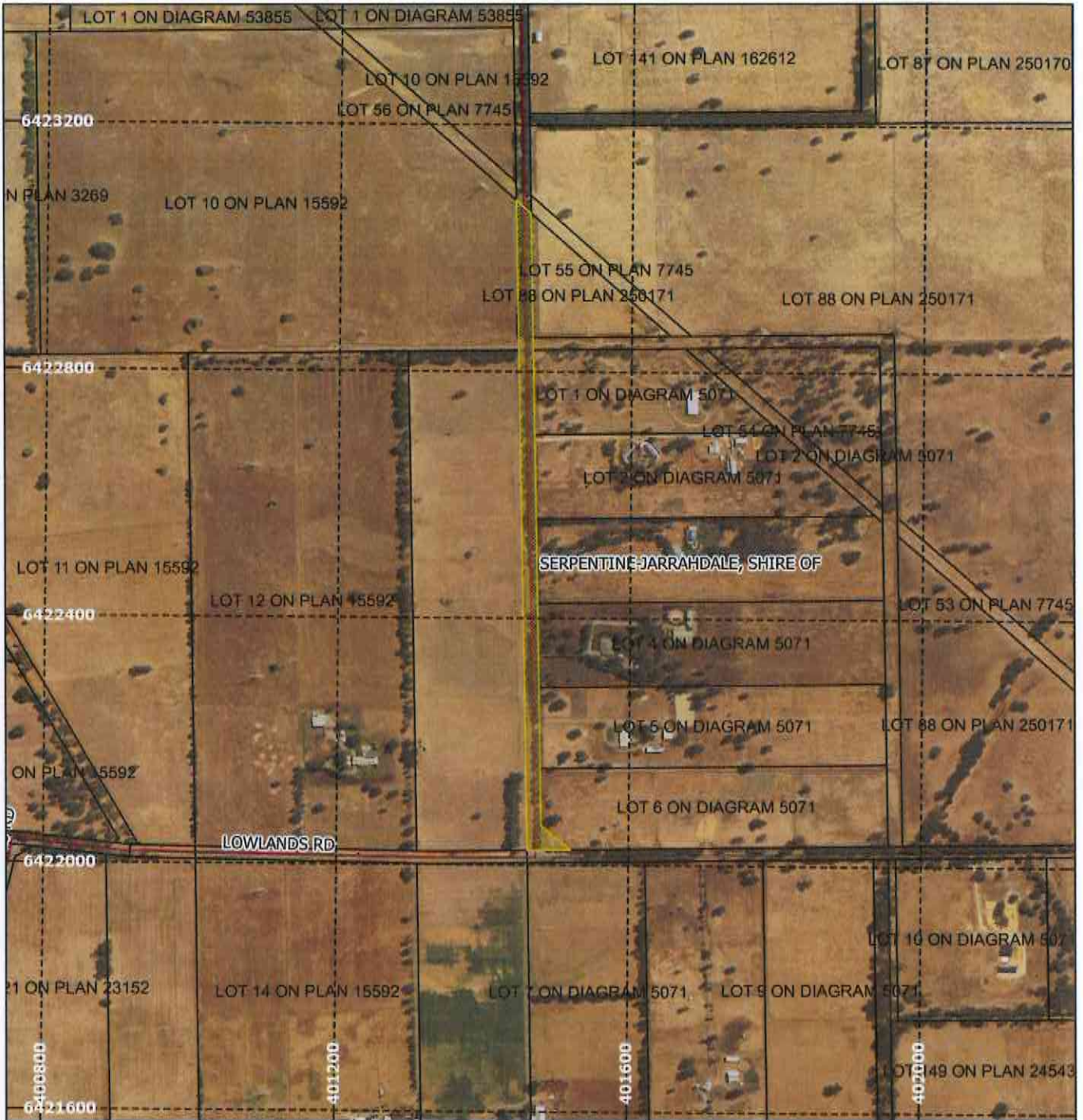
MGA 94
Geocentric Datum of Australia 1994

M Warnock Date 11/6/15
M Warnock

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



CPS 6546/1b



Legend

-  Areas approved to clear
-  Roads
-  Cadastre
-  local_gov_authority
- Virtual Mosaic



1:6,000

MGA 94
Geocentric Datum of Australia 1994

M Warnock Date *11/6/15*
M Warnock

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



CPS 6546/1c



Legend

-  Areas approved to clear
-  Roads
-  Cadastre
-  local_gov_authority
- Virtual Mosaic



1:4,000

MGA 94
Geocentric Datum of Australia 1994

M Warnock Date *11/6/15*
M Warnock

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





1. Application details

1.1. Permit application details

Permit application No.: 6546/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Serpentine Jarrahdale

1.3. Property details

Property: Hopeland Road reserve (PIN 11606677) Hopeland
Kargotich Road reserve (PIN 11609239) Mardella
Rowley Road reserve (PIN 11868117 and PIN 11868115) Forrestdale

Colloquial name:
Local Government Authority: Shire of Serpentine-Jarrahdale and City of Armadale
DER Region: Greater Swan
DPaW District: Swan Coastal
LCDC: Serpentine - Jarrahdale
Localities: Forrestdale, Hopeland and Mardella

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.29		Mechanical Removal	Road widening and table drains

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 11 June 2015

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
Two Beard vegetation associations have been mapped within the application area: 968: Medium woodland; jarrah, marri and wandoo; and 1000: Mosaic: Medium forest; jarrah-marri/Low woodland; banksia/Low forest; teatree (<i>Melaleuca</i> spp.) (Shepherd et al. 2001). A total of 135 trees are proposed to be cleared under the current application. These trees comprise 83 <i>Melaleuca raphiophylla</i> , 40 <i>Casuarina obesa</i> , 5 <i>Melaleuca uncinata</i> , 5 <i>Corymbia calophylla</i> , and 2 <i>Eucalyptus rudis</i> .	The Shire of Serpentine Jarrahdale proposes to clear 0.29 hectares of native vegetation within the Hopeland Road, Kargotich Road and Rowley Road reserves in Hopeland, Mardella and Forrestdale, for the purpose of widening roads and associated table drains.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994).	Vegetation condition was determined based aerial imagery and information provided by the applicant (Shire of Serpentine Jarrahdale 2015a).

3. Assessment of application against clearing principles

Comments The clearing of 0.29 hectares of native vegetation (approximately 135 trees) within the Hopeland Road, Kargotich Road and Rowley Road reserves is for the purpose of road widening and associated table drains. Vegetation within the application areas is in a degraded (Keighery 1994) condition, and is surrounded by semi-rural and residential areas in the intensive land use zone of the south west.

The application area does not intersect any Threatened Ecological Communities or Priority Ecological Communities.

A search of the Naturemap database returned records for 135 bird, 28 mammal, 37 reptile, eight amphibian and 50 invertebrate species within a 10 kilometre radius of the application areas, including 23 species of conservation significance (Parks and Wildlife 2007-).

The five Marri (*Corymbia calophylla*) trees proposed to be cleared have the potential to provide feeding habitat

for Carnaby's cockatoo (*Calyptorhynchus latirostris*; Schedule 1), Baudin's cockatoo (*Calyptorhynchus baudinii*; Schedule 1) and the forest red-tailed black-cockatoo (*Calyptorhynchus banksii* subsp. *naso*; Schedule 1). However, additional feeding trees for these species occur in the area surrounding the proposed clearing, and the removal of five Marri trees is unlikely to impact these species on a local or regional scale.

Given the isolation, linear shape and degraded condition of vegetation within the application area, the area proposed to be cleared is not likely to contain significant habitat for any fauna indigenous to Western Australia.

Of the five tree species proposed to be cleared, one may be a Priority 4 flora species. This priority flora occurs over loamy soils on flats and hillsides, and is distributed across the Perth, Southern Jarrah Forest and Warren IBRA subregions (Western Australia Herbarium 1998-). Soil mapping over the application areas indicate that soils are predominantly sand-based, however some loam material may occur and therefore one of the tree species proposed to be cleared may represent the Priority 4 subspecies. However, this species does not have a highly restricted distribution (Western Australia Herbarium 1998-), and the proposed clearing of two individuals is not likely to jeopardise the security of this species on a local or regional scale.

Two Bush Forever sites lie within one kilometre of the application areas. The proposed clearing within Rowley Road lies 0.9 kilometres east of Bush Forever site 345 (Forrestdale Lake), and the central portion lies approximately 0.4 kilometres north of Bush Forever site 371 (Serpentine River, Peel Estate to Serpentine). However, the application areas do not provide any habitat linkages to these Bush Forever sites, and the clearing for the purpose of road widening and table drains is not likely to impact on the environmental values of these sites.

Vegetation within the application area is mapped as Beard vegetation associations 968 and 1000. Approximately seven per cent and 26 per cent of Beard vegetation associations 968 and 1000 remain within the Swan Coastal Plain, respectively (Government of Western Australia 2013). While the mapped vegetation types remain at less than the recommended threshold level of 30 per cent (Commonwealth of Australia 2001), the application area is in a degraded condition with little to no native understorey (Shire of Serpentine Jarrahdale 2015a) and no longer represents the mapped Beard vegetation associations.

One minor, non-perennial watercourse crosses a portion of the application area. Given that *Melaleuca raphiophylla*, *Melaleuca uncinata*, *Casuarina obesa* and *Eucalyptus rudis* are known to occur in association with watercourses, the proposed clearing may impact riparian vegetation.

Based on the degraded condition and size of the application areas, the proposed clearing is not likely to impact on water quality, cause or exacerbate land degradation, or increase the incidence or intensity of flooding.

Based on the above, the proposed clearing may at variance to Principle (f), and is not likely to be at variance to the remaining Principles.

Methodology

Commonwealth of Australia (2001)
Government of Western Australia (2013)
Keighery (1994)
Parks and Wildlife (2007-)
Shire of Serpentine Jarrahdale (2015a)
Western Australia Herbarium (1998-)
GIS Database:
- Bush Forever - 2000
- DPaW Tenure
- Hydrography, linear
- Imagery
- Pre-European Vegetation
- Threatened and Priority Ecological Communities (TEC PEC) - Buffers

Planning instruments and other relevant matters.

Comments The current application proposes to clear up to 0.29 hectares of native vegetation within the Hopeland, Kargotich and Rowley Road reserves for the purpose of road widening and table drains. The proponent has advised it is likely that not all trees under application will be cleared, and will minimise disturbance where possible.

There is one registered Aboriginal Site of Significance located in the area applied to clear (Serpentine River: ID 3582). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

The clearing permit application was advertised on 27 April 2015 by the Department of Environment Regulation inviting submissions from the public. No submissions from the public were received.

Methodology

GIS Database:
- Aboriginal Sites Register System

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Government of Western Australia (2013) 2013 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2013. WA Department of Parks and Wildlife, 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.
- Parks and Wildlife (2007-) Naturemap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife, Perth. <http://naturemap.dpaw.wa.gov.au/default.aspx> (Accessed May 2015).
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.
- Shire of Serpentine Jarrahdale (2015a) Supplementary information provided with clearing permit application 6546/1. Shire of Serpentine-Jarrahdale, Perth.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/> (Accessed May 2015).