



1. Application details

1.1. Permit application details

Permit application No.: 287/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Mundaring

1.3. Property details

Property: SWAN LOCATION 8684 (Lot No. 8684 COULSTON DARLINGTON 6070)

Local Government Area: Shire Of Mundaring

Colloquial name: Hodgson St extension

1.4. Application

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

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
<p>Beard Vegetation Association 2003:</p> <p>Medium Forest; jarrah & marri on laterite with blackbutt in valleys, swampy bottomlands with bullich and Agonis flexuosa.</p> <p>(Hopkins et al. 2001, Shepherd et al. 2001).</p> <p>Mattiske Vegetation Complex Dwellingup (D2):</p> <p>Open forest of Eucalyptus marginata subsp marginata - Corymbia calophylla on lateritic uplands in subhumid and semiarid zones.</p> <p>(Mattiske Consulting 1998).</p> <p>Hedde Vegetation Complex - Dwellingup Complex in medium/high rainfall.</p> <p>(Hedde et al 1980).</p>	<p>Mattiske Consulting Pty Ltd (2004) report the vegetation as 'an Open Forest of Eucalyptus marginata (Jarrah) - Corymbia calophylla (Marri). This site vegetation is widespread throughout the northern jarrah forest and is not locally or regionally significant'.</p>	<p>Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)</p>	<p>Mattiske Consulting Pty Ltd (2004) report the vegetation condition as ranging from 'good' to 'degraded' based on the system developed by Keighery (1994).</p>

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**

Mattiske Consulting Pty Ltd (2004) indicate that the native vegetation within the area subject to the proposal is classified as being in 'good' to 'poor' condition. The subject area is on the edge of the Mundaring townsite and has been previously disturbed by powerlines, a previous railway alignment, a walking trail, gravel extraction previous clearing activities and other human activities. Nearby are large areas of native vegetation within the Mundaring Weir catchment that are unlikely to have had the same levels of disturbance. It is unlikely that the area subject to the proposal would be considered as being significant from a biodiversity perspective.

Methodology Mattiske Consulting Pty Ltd (2004).

(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 is not likely to be at variance to this Principle

Mattiske Consulting Pty Ltd (2004) indicate that the vegetation condition is classified as being from 'good' to 'poor'. Given the condition of the vegetation and the small area of the proposal that is linear in shape, it is unlikely that this proposal will have an impact on Specially Protected or otherwise significant fauna.

Methodology Mattiske Consulting Pty Ltd (2004).

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

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

More than 20 Declared Rare and priority Flora are located within 10km of this proposal, the closest being 2km from the site. Mattiske Consulting Pty Ltd (2004) advised that no Declared Rare flora were located neither were any species pursuant to s179 of the Environmental Protection and Biodiversity Conservation Act 1999. The area has previously been disturbed by powerlines, a previous railway alignment, a walking trail, gravel extraction and other human activities. The condition of the vegetation has been assessed as being from 'good' to 'poor' condition.

Methodology Mattiske Consulting Pty Ltd (2004).
GIS Database:
- Declared Rare and Priority Flora List - CALM 13/08/03.

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

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

There are no threatened ecological communities within 10km of the proposal.

Methodology GIS Databases:
- Threatened Ecological Community Database - CALM 15/07/03.
- Threatened Plant Communities - DEP 06/95.

(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 not at variance to this Principle

Pre-European	Current Area (ha)	Remaining extent (ha)	Conservation %*	status**	Reserves/CALM-managed land, %
IBRA Bioregion; - Jarrah Forest	4,544,335	2,665,480	58.7	Least concern	
Shire - Mundaring	64,400	unknown	n/a		
Beard vegetation type: - 2003: Medium Forest; jarrah & marri on laterite with blackbutt in valleys, swampy bottomlands with bullich & Agonis flexuosa	59,261	50,939	86.0	Least concern	32.2
* (Shepherd et al. 2001)					
** (Department of Natural Resources and Environment 2002)					
Heddl Vegetation type: - Dwellingup Complex in Medium/high rainfall	83,660	71,067	84.9	Least concern	
Mattiske Vegetation type: - D2: Open forest of Eucalyptus marginata subsp marginata; Corymbia calophylla on lateritic uplands in subhumid and semiarid zones	860,918	779,190	90.5	Least concern	

Methodology Shepherd et al. (2001).
Hopkins et al. (2001).
GIS Databases:

- Pre-European Vegetation - DA 01/01.
- Heddle Vegetation Complexes - DEP 21/06/95.
- Mattiske Vegetation - CALM 24/3/98.

(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 is not at variance to this Principle**
There are no watercourses or wetlands near the site.

Methodology GIS Database:
- Hydrography, linear - DOE 01/02/04.

(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**
Given consideration to the small size of the proposal (0.24ha) and that it is located along a 'saddle' with gradients of less than 2.5% it is unlikely that clearing will cause land degradation on or off site.

Methodology GIS Database:
- Topographic Contours, Statewide - DOLA 12/09/02.

(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 at variance to this Principle**
The proposal is situated within a System 6 Reserve (ID 131). Mundaring State Forest is 800m south-east, Leschenaultia Conservation Park is 6km north-east and John Forrest National Park is 6km west of the proposal. It provides linkages between the above-mentioned CALM estates.

Although this is located within a System 6 Reserve the proposal is for a small area of 0.24ha that is linear in shape and although the road reserve is to be 30-35m in width the actual width of clearing for the road construction will be no greater than eight metres (McCarthy M., 2004).

Methodology McCarthy (2004).
GIS Databases:
- CALM Managed Lands and Water - CALM 01/08/04.
- System 6 Conservation Reserves - DEP 06/95.

(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 is not likely to be at variance to this Principle**
Clearing of 0.24ha of native vegetation is unlikely to have an effect on the quality of surface or ground water.

Methodology GIS Database:
- Groundwater Salinity, Statewide - 22/02/00.

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

Comments **Proposal is not likely to be at variance to this Principle**
The small size of the proposal (0.24ha) in porous soils is unlikely to contribute to flooding.

Methodology GIS Database:
- Hydrography, linear - DOE 01/02/04.

Planning instrument or other matter.

Comments **Proposal is not at variance to this Principle**
No invitation was provided to the Shire of Mundaring for comment because they are the applicant. The Urban Hills LCDC had no objection to the proposal.

Methodology English (2004).

4. Assessor's recommendations

Purpose	Method Applied	Decision	Comment / recommendation
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Road construction or maintenance Mechanical Removal **area (ha)/ trees** 0.24 **Grant**

The proposal is at variance with Principle (h) due to it being located within a System 6 Reserve. The proposal is for the construction of a road that will involve the clearing of 0.24ha of native vegetation in a linear strip no wider than 8m. The proposal is not expected to have a significant adverse environmental effect.

Otherwise the assessable criteria have been addressed and no objections were raised. The assessing officer therefore recommends that the permit should be granted.

5. References

- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales ; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- English, V. (2004) correspondence. Urban Hills LCDC. DOE TRIM Ref ND582
- Hedde, 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.
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
- Keighery, BJ (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.
- Mattiske Consulting Pty Ltd (2004) Flora and Vegetation Survey Proposed Extension to the Alignment of Hodgson Street. DOE TRIM Ref IN18929.
- McCarthy, M. (2004) personal communication. Shire of Mundaring.
- 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.