



1. Application details

1.1. Permit application details

Permit application No.: 1074/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Thompson McRobert Edgeloe

1.3. Property details

Property: ROAD RESERVE (DARKAN 6392)

Local Government Area: Shire Of West Arthur

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.71		Mechanical Removal	Miscellaneous

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
Beard: Unit 4 - Medium woodland; marri & wandoo.	Roadside vegetation consisting of scattered trees with little under storey.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation condition established through aerial photography.
Mattiske: Darkan (Dk3) - Open woodland of Allocasuarina huegeliana-Acacia acuminata with occasional Eucalyptus rudis and Eucalyptus wandoo on variable slopes near granite outcrops and woodland of Eucalyptus astringens-Eucalyptus wandoo on breakaways in the arid zone.		Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	
Darkan (Dk5) - Low woodland of Casuarina obesa-Melaleuca spp. on low lying moister soils, and woodland of Banksia prionotes with occasional Corymbia calophylla and Eucalyptus rudis over Acacia acuminata on sandy lunettes in the arid zone.		Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	

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 at variance to this Principle**

The area proposed to be cleared is sparsely vegetated and in Degraded (Keighery 1994) condition consisting of scattered mature trees and little under storey species.

Due to the condition and structure of the vegetation proposed to be cleared, the area under application is not considered to hold a high level of biological diversity.

Methodology Keighery (1994)
GIS database:
- Darkan 1m Orthomosaic - DOLA 03/01

(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

The area under application is within road reserve and consists of scattered trees and little under storey. The vegetation is not linked to any significant remnants with potential habitat value within the local area. Given its isolation, and the lack of vegetation linkages to other significant remnants, it is unlikely the area proposed for clearing holds habitat value for fauna.

The area proposed to be cleared is unlikely to hold significant habitat for native fauna species due to its isolation and Degraded (Keighery 1994) condition.

The Department concludes the proposal is not likely to be at variance to this principle.

Methodology Keighery (1994)
GIS database:
- Darkan 1m Orthomosaic - DOLA 03/01

(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

Tribonanthes purpurea, a Declared Rare Flora species, is located 8.5km north east of the area proposed to be cleared.

There are no Priority 1, Priority 2 or Priority 3 Flora species within the local area of the proposed clearing.

Eucalyptus latens, a Priority 4 Flora species, is located 8.6km north east of the area proposed to be cleared.

There are no vegetation links between the area under application and local Declared Rare and Priority Flora populations. Therefore it is unlikely the proposed clearing is necessary for the continued existence of rare flora.

Methodology GIS database:
- Declared Rare and Priority Flora List - CALM 13/08/03
- Darkan 1m Orthomosaic - DOLA 03/01

(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

There are no Threatened Ecological Communities or Threatened Plant Communities found within the local area (10km radius) of the proposed clearing.

It is therefore unlikely the proposed clearing is at variance to this principle.

Methodology GIS databases:
- Threatened Ecological Communities - CALM 15/7/03
- 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 likely to be at variance to this Principle

The application is located in the Jarrah Forest Bioregion in the Shire of West Arthur. The extent of native vegetation in these areas is 58.3% and 29.8% respectively (Shepherd et al. 2001).

The vegetation of the area applied to clear is a component of Beard Unit 4 (Hopkins et al. 2001) of which there is 23.5% (Shepherd et al. 2001) of the pre-European extent remaining, and therefore of 'vulnerable' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

The vegetation of the area applied to clear is a component of Mattiske Darkan (Dk3) (Havel 2002) of which there is 5.0% of the pre-European extent remaining and therefore of a 'endangered' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

The vegetation of the area applied to clear is a component of Mattiske Darkin (Dk5) (Havel 2002) of which there is

12.0% of the pre-European extent remaining and therefore of a 'vulnerable' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

Due to the Degraded (Keighery 1994) condition of the vegetation under application, the proposed clearing is not considered significant within the local area.

Through negotiation the proponent has agreed to revegetate the area after the proposed works are completed with native shrub and ground cover species. This will be a condition of the permit.

Methodology Keighery (1994)
GIS database:
- Mattiske Vegetation - CALM 24/3/98
- Interim Biogeographic Regionalisation of Australia - EM 18/10/00
- Local Government Authorities - DLI 8/07/04
- Pre European Vegetation - DA 01/01

(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 EPP Areas or EPP Lakes within the local area of the proposed clearing. There are no Geomorphic wetlands, RAMSAR wetlands or ANCA wetlands within the local area of the proposed clearing.

The Collie River East Branch is located 5.2km south west of the area proposed to be cleared. There are no vegetation links between the area under application and the Collie River East Branch.

Therefore the area under application is not considered to be growing in or in association with a watercourse or wetland.

Methodology GIS database:
- ANCA, Wetlands - CALM 08/01
- EPP Areas - DEP 06/95
- EPP Lakes - DEP 28/07/03
- Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04
- Hydrography Linear - DoE 1/2/04
- RAMSAR, Wetlands - CALM 21/10/02
- Darkan 1m Orthomosaic - DOLA 03/01

(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

The area proposed to be cleared has no known Acid Sulphate Soils risk.
The ground water salinity level has been measured at 14000-35000mg/L. The Department acknowledges this high reading however believes it is unlikely to become a degradation issue, given the applicant has committed to only remove mature trees when absolutely necessary, and to revegetate the area on completion of the works.

The proposal is unlikely to cause appreciable land degradation.

Methodology GIS database:
- Acid Sulfate Soil Risk Map, SCP - DoE 01/02/04
- Salinity Risk LM 25m - DOLA 00
- Groundwater Salinity, Statewide - 22/02/00

(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 Hillman Nature Reserve is located 6.3km north east of the area proposed to be cleared. There is no vegetation link between the area under application and the Hillman Nature Reserve. It is therefore unlikely the proposed clearing will impact on the environmental values of any adjacent or nearby conservation areas.

Methodology GIS database:
- CALM Managed Lands and Waters - CALM 1/06/04
- Register of National Estate - EA 28/01/03
- Darkan 1m Orthomosaic - DOLA 03/01

(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

The area proposed to be cleared is within the Hardy Estuary-Blackwood River Hydrographic Catchment Area.

The area under application is not within a Public Drinking Water Source Area or any RIWI areas.

Due to the scale of the proposed clearing, it is unlikely to degrade local water quality.

Methodology GIS databases:

- Hydrographic Catchments, Catchments - DoE 3/4/03
- Public Drinking Water Source Areas (PDWSAs) - DOE 29/11/04
- RIWI Act Groundwater Areas - WRC 13/06/00

(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

Due to the scale of the proposed clearing, flooding impacts are unlikely to occur.

Methodology GIS databases:

- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The area proposed to be cleared is zoned road reserve in the Town Planning Scheme.

Advice received from the Shire of West Arthur indicating they have no objections and do not wish to make any comments.'

Thompson McRobert Edgeloe (TME) have received written permission to act on behalf of Main Roads Western Australia.

Methodology Shire of West Arthur advice TRIM ref HD27835

Written consent for TME to carry out works TRIM ref HD27558

GIS database:

- Town Planning Scheme Zones - MFP 8/98

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Miscellaneous	Mechanical Removal	0.71	Grant	Recommendation to grant permit to undertake works for reticulation, with revegetation conditions.

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.
- Havel, J.J. and Mattiske Consulting Pty Ltd (2002) Review of management options for poorly represented vegetation complexes, Conservation Commission.
- 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, B.J. (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.
- 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.

6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
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 DoE)