



1. Application details

1.1. Permit application details

Permit application No.: 275/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Chief Executive Officer, Shire of Ravensthorpe**
Postal address: Sinclair Knight Merz 1st Floor, 62 Wittenoom St Bunbury WA 6230
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1.3. Property details

Property: LOT 1217 ON PLAN 211648 (RAVENSTHORPE 6346)
LOT 402 ON PLAN 151736 (Lot No. 402 JERDACUTTUP JERDACUTTUP 6346)
UNALLOCATED CROWN LAND (RAVENSTHORPE 6346)

Colloquial name: Lee and Jerdacuttup Road intersection and associated road reserve

1.4. Application

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

2. Site Information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard vegetation association- 516- Shrublands; mallee scrub, black marlock	Flora survey by Craig (2003) describes two Priority flora species on Lee Road and Jerdacuttup Road (4 species in all). Another taxon of uncertain priority status was also identified. The Priority species included: <i>Beyeria</i> sp A (Priority 1), <i>Goodenia phillipsiae</i> (Priority 1), <i>Acacia ophiolithica</i> (Priority 3) and <i>Philothea gardneri</i> subsp +- <i>globulosa</i> (status uncertain). The <i>Acacia ophiolithica</i> thicket (north and west of gravel reserve no 38641) is a significant community and provides important habitat for native fauna.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	A site visit on 10/11/04 showed that the vegetation was in excellent condition (after Keighery, 1991)

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 at variance to this Principle**
(a1) Native vegetation should not be cleared if it is representative of an area of outstanding biodiversity in the Bioregion.

The area subject to application has a high level of biodiversity and contains priority flora. However the design of the road has taken into account the sensitive environment and minimises impacts on significant flora. In addition, 2.8 ha of the site will be rehabilitated to local native species (SKM 2004).

Methodology Site visit (10/11/04) SKM (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**

Based on advice provided by CALM, there is a low probability of the proposed clearing being at variance with this principle.

Methodology CALM (2005)

(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**

Three species of priority flora have been found within the area proposed to be cleared: P1 *Beyeria* sp. A Ravensthorpe (AS George 9474); P 1 *Goodenia phillipsiae*; P3 *Acacia ophiolithica*. To preserve the identified populations of priority plants the road will pass between the two populations of *Beyeria* sp, and has aimed to minimise fragmentation of either population. In total the stand of *Beyeria* sp covers approximately 0.27ha and the new road will disturb 0.04ha of this area. The thicket of *Acacia ophiolithica* covers an area of 3.4ha and the new road will disturb 0.4ha of this area (SKM 2004). The topsoil collected from these disturbed areas will be used to revegetate the old road that borders these two plant communities (SKM 2004). *Eucalyptus purpurata* P1, (proposed DRF) is found at TEC site 15km NE however the likelihood of it also occurring at this site is negligible due to differences in topography, and soil substrate. According to CALM advice, there appears to be a low probability of the proposed clearing to be at variance with this principle. There is no Declared Rare Flora at the site and plans have been made to minimise the impact on Priority Flora (Craig, 2003).

Methodology CALM (2005), Craig (2003)

(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**

Although Priority TEC '*Eucalyptus purpurata* woodlands of Bandalup Hill' is situated 15km to the north east of the proposed clearing, it is unlikely to be found at this site due to changes in topography and geology. According to advice from CALM, there is a low probability of the proposed clearing being at variance with this principle

Methodology CALM (2005)

(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**

The proposal is not at variance with this Principle as the vegetation is relatively well represented.

	Pre-European Area (ha)	Current extent (ha)	Remaining %*	Conservation status**	% in reserves/CALM-managed land
IBRA -Esperance Plains	2,909,675	1,534,396	52.7	Least concern	
Shire- Ravensthorpe	1,355,762	865,382	59.3	Least concern	
Beard veg type-516	1,541,361	666,416	43.2	Depleted	35.9

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

Methodology Shepherd et al. (2001), Department of Natural Resources and Environment (2002)

(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 likely to be at variance to this Principle**

Although the project is associated with a section of the Jerdacuttup River, the proposed realignment will cross the river in a location close to/overlapping the existing river crossing, so impacts will be minimal.

Methodology SKM (2004)

(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**

Commitments have been made by the proponent to manage impacts so that there is no risk of land degradation.

Methodology SKM (2004)

(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**

CALM Nature Reserve 31128 abuts the subject area to the north west. The proposed clearing is linear and on the periphery of this nature reserve. The proposed clearing represents a slight increase in the risk of weed invasion from vehicular traffic using the upgraded road. CALM has advised that there is a low to medium probability of the proposed clearing being at variance with this principle. If the Shire of Ravensthorpe implements adequate weed hygiene methodology into work practice and drainage design, the risks will be minimal.

Methodology CALM (2004)

(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 Shire of Ravensthorpe has committed to construction and management practices which will prevent sedimentation, erosion and surface water run off likely to cause degradation to water quality (SKM 2004).

Methodology SKM (2004)

(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 Shire of Ravensthorpe has committed to construction and management practices that will prevent any flood risk relating to the removal of the vegetation (SKM 2004).

Methodology SKM (2004)

Planning instrument or other matter.

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

This proposal is not at variance with any planning instruments.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Road construction or maintenance	Mechanical Removal	3.6	Grant	<p>Recommend that the clearing permit for realignment of approach and intersection of Lee and Jerdacuttup North Rd be granted. Although there are impacts on Priority Flora, the proponent has committed to reduce impacts through road design and rehabilitation. The area to be rehabilitated is 2.8ha. Local native species, topsoil and vegetative material from the site will be used in the rehabilitation.</p> <p>The old gravel road base needs to be removed in rehabilitation areas as some of the significant flora species rely on the underlying magnesite soils. As dieback is a risk in the construction of the new road, measures should be taken to minimise the risk of introduction and spread of dieback (eg sourcing materials from certified dieback free gravel pits and use of techniques such as clean down of vehicles prior to use on the site).</p> <p>These points have been discussed and agreed to by the proponent.</p>

5. References

CALM (2005) Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref HD19407.

Craig GF (2003) Declared rare and priority flora survey. Jerdacuttup Road/ Lee Road Realingment and Hamersley Drive Upgrade. Prepared for Sinclair Knight Merz. Unpublished report. DoE TRIM ref AI646

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.

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

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.

SKM (2004) Supporting documentation for the application for a clearing permit. Upgrading of local roads associated with Ravensthorpe Nickel Operations. Shire of Ravensthorpe. DoE TRIM ref IN18514.