



## 1. Application details

### 1.1. Permit application details

Permit application No.: 873/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Sotico Pty Ltd

### 1.3. Property details

Property: LOT 530 ON PLAN 218207 (House No. 298 SOLDIERS BANNISTER 6390)  
Local Government Area: Shire Of Boddington  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.5		Mechanical Removal	Hazard reduction or fire control

## 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 Vegetation association 3: Medium forest; Jarrah-marri. (Shepherd et al. 2001)	The area under application comprises approximately 0.5ha. This includes the pit areas, which have been previously cleared, and the surrounding vegetation within approximately 10m of the pit edges. The purpose of the clearing is hazard reduction, as the gravel pits are deep, and members of the public often use the area for recreation. The edges of the pits will be battered and the cleared vegetation will be used along with the topsoil to fill the pits.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description of the vegetation under application was obtained after a site visit to the property on Thursday 12th January 2006.
Mattiske vegetation complex Pindalup (Pn): Open forest of <i>Eucalyptus marginata</i> subsp. <i>thalassica-Corymbia calophylla</i> on slopes and open woodland of <i>Eucalyptus wandoo</i> with some <i>Eucalyptus patens</i> on the lower slopes in semiarid and arid zones. (Mattiske Consulting 1998)	The vegetation under application is medium to open forest dominated by <i>Eucalyptus</i> sp. including <i>E. marginata</i> and <i>E. calophylla</i> , with <i>Banksia grandis</i> , <i>Acacia</i> sp., and <i>Allocasuarina</i> sp. interspersed (Site visit 12 January 2006). Vegetation immediately surrounding the pits is Degraded, but becoming Good to Very Good approximately 10m from the pit edges.		
Hedde Vegetation Complex: Dwellingup Yalanbee and Hester/ Complex in low to medium rainfall. Swamp complex. (Hedde et al. 1980)			

## 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 vegetation under application surrounds two gravel pits, of which the edges are severely eroded, and is degraded through previous clearing and human activity. The area under application is surrounded by an

extensive area of vegetation and, considering the small amount of vegetation to be cleared, it is unlikely that it represents a significant proportion of biodiversity.

**Methodology** Site visit (12/01/06)

**(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**

Within the local area (10km radius) of the vegetation under application, 26 populations of Specially Protected and Priority fauna are known to occur, the closest of which occur approximately 1.5km from site 1, and 1km from site 2. It is possible that these fauna also occur within the area under application, however, during the site inspection no evidence was found of nesting hollows or structures amongst the vegetation or on the ground. Given the limited understorey structure and the small size of the area under application, it is unlikely that it provides significant habitat for fauna.

**Methodology** Site visit (12/01/06)  
GIS Database: Threatened Fauna - CALM 30/9/05

**(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**

The local area, defined as a 10km radius surrounding the proposed sites, contains no known populations of Declared Rare Flora, but contains five known populations of Priority Flora comprising *Chordifex gracilior* (P3), *Eucalyptus aspersa*, *Eucalyptus latens* (P4) and *Lasiopetalum cardiophyllum* (P4). The closest population is approximately 5km to the proposed sites and comprises *E.aspersa*, of which there is no data available. As there are no known populations of DRF, the proposal is unlikely to be at variance with this principle.

**Methodology** GIS Databases:  
Declared Rare and Priority Flora List, CALM 2005  
Flora Base, CALM

**(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 records of Threatened Ecological Communities (TEC) within 10km of the proposed clearing sites. Based on the limited area of vegetation under application, the percentage of vegetation remaining in the complex and the distance to the nearest TEC it is unlikely that the proposed clearing will impact this principle.

**Methodology** GIS Database: Threatened Ecological Communities - CALM 12/4/2005

**(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 likely to be at variance to this Principle**

Vegetation within the applied area is defined by Mattiske Consulting (1998) as Pindulup complex, and by Beard et al. (Shepherd et al. 2001) as vegetation association 3. These complexes have pre-European representation of 80.6% and 72.1% respectively (Shepherd et al. 2001, Mattiske Consulting 1998) and are considered in the category of least concern (Department of Natural Resources and Environment 2002). Heddl (1980) defines the vegetation within the area as Dwellingup Yalanbee and Hester complex, however current representation values are not available for this complex.

**Methodology** Department of Natural Resources and Environment 2002  
Mattiske Consulting 1998  
Shepherd et al.2001  
Heddl 1980  
GIS Databases:  
Heddl Vegetation Complexes - DEP 21/06/95  
Mattiske Vegetation - CALM 24/3/98  
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 likely to be at variance to this Principle**

The property is located approximately 2.5km North of the Hotham River and the 34 Mile Brook is located approximately 3km to the West of the property. There are no wetlands identified within 10km of the area under application. Due to the distance from any wetland or watercourse, and the fact that no wetland vegetation was

observed during the site visit, vegetation from the site is not considered to be in association with a wetland and watercourse.

**Methodology** GIS Database: Hydrography, linear (hierarchy), DOE 2005

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

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

The soil types are classified as Tf3, which are hard acidic yellow mottled soils along with sandy acidic yellow mottled soils. Salinity risk in the area under application is considered low, however this soil type has a susceptibility to erosion, as shown by the severe erosion of the gravel pits. The clearing of vegetation will expose more soil to the elements, which may exacerbate the current erosion problem. However, if the area under application remains in its current state the erosion is likely to become worse, and may result in damage to and loss of the vegetation. Therefore the proposal may be at variance with this principle.

**Methodology** Site visit (12/01/06)  
GIS Databases:  
Soils, Statewide - DA 1999  
Salinity Risk LM 25m - DOLA 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 Dwellingup State Forest is the only CALM managed conservation reserve within the local area (10km) of the property, and is located approximately 5km to the west. Given the limited area that is proposed for clearing, and the significant areas of vegetation that surround the area under application, the proposal is unlikely to effect the environmental values of any nearby conservation areas.

**Methodology** GIS Databases:  
Register of National Estate 2003  
CALM Managed Lands and Waters 2005

**(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 rainfall in the proposed clearing area is less than 800mm and is not within a prescribed groundwater area or a public drinking water source area. When considering that the proposed clearing area is small, does not form part of the PDWSA and is in a moderate rainfall area, it is unlikely to significantly affect ground or surface waters.

**Methodology** GIS Databases:  
Rainfall, Mean Annual - BOM 30/09/01  
Public Drinking water Source Area (PDWSAs) - DOE 2004

**(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 property is located approximately 2.5km North of the Hotham River and the 34 Mile Brook is located approximately 3km to the West of the property. Due to the relatively small scale of clearing and distance from any watercourse it is unlikely that the removal of vegetation from the site would have an impact on peak flood height or duration.

**Methodology** GIS Database: Hydrography, linear - DOE 1/2/04

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

**Comments**

The Shire of Boddington has raised no objections to the proposed clearing.

No other statutory approvals are required by Sotico for this proposal.

**Methodology** Shire of Boddington submission.

**4. Assessor's recommendations**

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
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Hazard reduction or fire control      Mechanical Removal      0.5

**Grant**

Assessable criteria have been addressed and the proposal may be at variance with principle (g).

Principle (g): The removal of vegetation has the potential to result in land degradation in the form of erosion due to the sandy substrate. If the vegetation under application was not cleared it is likely to be adversely affected by the worsening state of the severely eroded gravel pits. The applicant has advised that if the proposal is approved, the cleared vegetation will be used to fill the pits along with topsoil from the battering of the pit edges.

The assessing officer therefore recommends that the permit should be granted upon recommendation of this methodology, as it is likely to minimise the risk of erosion and the risk to public safety.

**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.

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.

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.

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)