



1. Application details

1.1. Permit application details

Permit application No.: 955/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: A Scott Hambley, Architect acting on behalf of Baptistcare

1.3. Property details

Property: LOT 108 ON PLAN 192036 (House No. 18 TURNER BYFORD 6122)

Local Government Area: Shire Of Serpentine-Jarrahdale

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.13		Mechanical Removal	Building or Structure

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>Heddlle Vegetation complex:</p> <p>- Guildford Complex: A mixture of open forest to tall open forest of E. calophylla - E. wandoo - E. marginata and woodland of E. wandoo (with rare occurrences of E. lane-poolet). Minor components include E. rudis - M. raphiophylla.</p> <p>Beard Vegetation Association:</p> <p>- 999: Medium woodland; marri</p>	<p>Vegetation under application is classified as Eucalyptus calophylla very open woodland over exotic species. The two areas under application are located adjacent to an existing car park and effluent disposal field. These areas are considered to be within completely degraded to degraded condition, being heavily influenced by invasive weeds.</p>	<p>Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)</p>	<p>Vegetation clearing description based on a site inspection conducted 22/07/2006, and information obtained from Syrinx Environmental Pty Ltd (2005).</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
	<p>The area under application is within Brickwood Reserve, a remnant recognised for its environmental values, being classified as Bush Forever Site 321 (Government of Western Australia, 2000) and listed on the Register of the National Estate. CALM (2005) advice provided for another clearing proposal within Lot 108 Turner Road, highlighted that Declared Rare and Priority Flora taxa have been recorded in close proximity to the applied area, as well as Threatened Ecological Community 3a. Collectively a high level of biodiversity is therefore likely to occur at this Lot.</p> <p>Despite this the area under application is considered to be within a completely degraded to degraded condition, being located on the edge of an existing effluent disposal field, and subject to highly invasive exotic species. Based on the degraded nature of the areas under application this proposal is not likely to be at variance with this Principle.</p>
Methodology	CALM (2005) Government of Western Australia (2000)

(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

A site inspection undertaken by the Department of Environment on 12/07/2006 identified that the majority of vegetation within the applied area was in a completely degraded to degraded condition, and limited to areas directly adjacent to existing cleared areas and firebreaks. The inspection did not identify any areas of vegetation within the applied area which would provide habitat not well represented in the adjacent good to excellent condition vegetation. The proposal is therefore not likely to be at variance to this Principle.

Methodology Site inspection (12/07/2006)

(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

Comments provided by the Department of Conservation and Land Management (CALM, 2005) in relation to another clearing application within Lot 108 Turner Road identified numerous Declared Rare and Priority species potentially present within Brickwood Reserve, protected under both the Wildlife Conservation Act 1950 and the Environmental Protection and Biodiversity Conservation Act 1999.

An appropriately timed vegetation survey undertaken by Syrinx Environmental Pty Ltd (2005) in early October 2005 did not locate any Declared Rare Flora or Priority Flora species within the area under application. The proposed vegetation clearing is therefore not likely to be at variance to this principle.

Methodology CALM (2005)
Syrinx Environmental Pty Ltd (2005)

(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 may be at variance to this Principle

Advice provided by CALM (2005) in relation to another clearing application within Lot 108 Turner Road identified that there are seven occurrences of Threatened Ecological Communities (TEC) within a 5 kilometre radius of the notified area. Two of these TEC are listed as 'Endangered' under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999, and are listed below:

Type 3a *Eucalyptus calophylla* - *Kingia australis* woodlands on heavy soil (Critically Endangered, listed as 'Endangered' under the EPBC Act 1999).

Type 3c *Eucalyptus calophylla* - *Xanthorrhoea preissii* shrublands and woodlands (Critically Endangered / listed as 'Endangered' under the EPBC Act 1999).

A Floristic Community Type survey conducted by Syrinx Environmental Pty Ltd (2005) in early October 2005 identified vegetation adjacent to the proposed area as TEC 3a. This TEC is separated from the area under application by a firebreak, and is not likely to be directly impacted through the proposed clearing. Syrinx Environmental Pty Ltd (2005) identified that invasive weeds present within the site are likely to pose an on-going threat to the TEC's viability. The proposed clearing however will reduce the already limited buffer distance to the TEC, and thus may be at variance to this principle.

Methodology CALM (2005)
Syrinx Environmental Pty Ltd (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

Hedde et al (1980) defines the vegetation under application as Guildford Complex. This has a representation of 5.0% and is classified as a mixture of open forest to tall open forest of *E. calophylla* - *E. wandoo* - *E. marginata* and woodland of *E. wandoo* (with rare occurrences of *E. lane-pooliei*).

Vegetation under application is also classified as vegetation association 999 (Shepherd et al. 2001). This association has a representation of 11.8% of the pre-European extent, and is described as Medium Woodland; Marri (Shepherd et al. 2001)

The State Government is committed to the National Objectives Targets for Biodiversity Conservation which includes a target that prevents clearance of ecological communities with an extent below 30% of that present pre-1750 (Department of Natural Resources and Environment, 2002; EPA, 2000).

While these representation figures are below the recommended 30% target, the vegetation on site is recognised as being highly modified, in a completely degraded to degraded condition, and subject to invasive weed species. The vegetation proposed to be cleared is therefore considered unlikely to be representative of this vegetation complex.

reserves/CALM-	Pre-European area (ha)	Current extent (ha)	Remaining %	Conservation status***	% in managed land
IBRA Bioregion	1,529,235	657,450	43%*	Depleted	
Shire of Serpentine Jarrahdale		90,478	53,038	58.6%*	Least Concern
Beard vegetation association - 999	275,380	32,451	11.8%*	Vulnerable	8.1%*
Heddl vegetation complex - Guildford Complex	92,497	4,662	5.0%***	Endangered	0.2%***

* (Shepherd et al. 2001)
 ** (EPA 2003)
 *** (Department of Natural Resources and Environment 2002)

Methodology Department of Natural Resources and Environment (2002)
 EPA (2000)
 EPA (2003)
 Heddl et al (1980)
 JANIS (1997)
 Shepherd (2001)

(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 may be at variance to this Principle

The area under application is categorised as a Resource Enhancement Wetland (REW). Wetlands in this category are partially modified but still support substantial ecological attributes and functions and are priority wetlands for protection, being recognised under objective one of the Wetlands Conservation Policy for Western Australia as valuable (Government of Western Australia, 1997; Water and Rivers Commission 2001).

Syrinx Environmental Pty Ltd (2005) assessed the wetland boundary, and concluded that despite the degraded condition of vegetation, the area proposed for development is within an area hydrologically connected to the wetland. It is therefore considered that the clearing of native vegetation may be at variance to this principle.

Methodology Government of Western Australia (1997)
 Water and Rivers Commission (2001)
 Syrinx Environmental Pty Ltd (2005)
 GIS Database:
 - Geomorphic Wetlands - Swan Coastal Plain - DOE 15/09/04

(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

Salinity Risk Mapping of the applied area identifies a low risk of salinity occurring within these areas, and Acid Sulphate Soil mapping identifies the applied area as having a Class 2 Risk of ASS or PASS occurring. This risk level is defined as having a moderate to low risk of ASS or PASS; generally at greater than 3 metres depth.

Given the small area and degraded nature of vegetation under application, the proposed clearing considered unlikely to be at variance to this Principle.

Methodology GIS Databases:
 - Salinity Risk LM 25m - DOLA 01
 - Acid Sulphate Soil risk map, SCP - DOE 01/02/04

(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 may be at variance to this Principle

Brickwood Reserve has been identified as an area containing significant natural values, and as such is recognised through both listing within Bush Forever as site 321 (Government of Western Australia, 2000), and through the Register of the National Estate (Place ID: 19533). The Brickwood Reserve contains substantial area of Pinjarra Plain and Ridge Hill Shelf landforms, containing rare plant communities. It also includes the most extensive area of rare marri open woodland with scattered Kingia in the metropolitan region, complex

wetland mosaics, and rare community of Eucalyptus lane-poolii woodland.

The benchmark of 15% vegetation representation in conservation areas (JANIS Forest Criteria, 1997) has not been met for either the Guildford Complex or Vegetation Association 999, which have current representations of 0.2% and 8.1% respectively. With such a low level of this vegetation complex in secure reserve, all vegetation of this type should be maintained.

Syrinx Environmental Pty Ltd (2005) identifies the vegetation under application as being within a completely degraded condition, and extensively infested with exotic species that are impacting negatively on the environmental values of the surrounding TEC and wetland vegetation. Despite the relatively small area and degraded nature of the vegetation under application, the proposal may be at variance to this principle, due to the reduction in the size of this significant remnant.

Methodology Government of Western Australia (2000)
JANIS Forest Criteria (1997)
Syrinx Environmental Pty Ltd (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 proposal is not expected to impact on groundwater tables. Vegetation within the applied area is considered to be within a completely degraded state, with a moderately disturbed overstorey and a severely weed infested understorey. Based on the condition of the vegetation, previous clearing activities, and the limited area which is required for clearing, impacts on groundwater / surface water quality are not considered likely from the clearing of vegetation.

Methodology Site inspection (12/07/2006)

(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

Although the clearing of vegetation may increase water infiltration to the groundwater table, the scale and amount of clearing makes this application unlikely to have an appreciable impact on the average annual maximum groundwater level. Due to the relatively small scale of clearing it is considered that the removal of vegetation from the site would have no impact on peak flood height or duration.

Methodology Site inspection (12/07/2006)

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

Comments

A development application for additions to existing hostel facilities was lodged with the Shire of Serpentine Jarrahdale on 14 April 2005. On the advice of the Department of Environment, this application was referred to the Environmental Protection Authority (EPA) on 21 December 2005. A level of assessment was set on 20 March 2006, as 'Not Assessed - Public Advice Given & Managed Under Part V of the EP Act (Clearing)'. The Public Advice provided by the EPA made recommendations as to the conditions for the development approval.

The Department of Planning and Infrastructures Bush Forever Office advised that Lot 108 Turner Road lies within Bush Forever site 321, but the proposed car park site is in a degraded area and does not contain DRF or TEC. Bush Forever support the construction of the carpark, subject to the preparation of an revised Environmental Management Plan, which should include provisions for the effluent disposal system, and the ongoing management of Lot 108 and Reserve 37404. Bush Forever recommends that prior to commencement of clearing, TEC should be fenced, a weed management strategy be prepared and implemented, and the owner should ensure that clearing does not result in damage to the bushland.

The Shire of Serpentine Jarrahdale have subsequently issued an approval for the proposed development, subject to conditions, incorporating advice provided by the EPA and Bush Forever Office (TRIM ref: DOC2722).

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Building or Structure	Mechanical Removal	0.13	Grant	The assessable criteria have been addressed, and the proposed clearing may be at variance to Principles (d), (f) and (h). While the removal of vegetation may impact on the wetland and conservation values of Brickwood Reserve, the threat of significant on-going weed invasion within the TEC, as identified by Syrinx Environmental Pty Ltd (2005), is considered much more

likely to pose a significant risk. While the on-going management of Brickwood Reserve has been conditioned in part through the Development Approval issued by the Shire of Serpentine Jarrahdale, the assessing officer recommends that this proposal be approved subject to conditions relating to weed management and adequate dieback hygiene methods

5. References

- CALM Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref HD25034.
- 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.
- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority.
- EPA (2003) Guidance for the Assessment of Environmental Factors -level of assessment of proposals affecting natural areas within the System 6 region and Swan Coastal Plain portion of the System 1 Region. Report by the EPA under the Environmental Protection Act 1986. No 10 WA.
- Government of Western Australia (1997) Wetlands Conservation Policy for Western Australia, Department of Conservation and Land Management and the Water and Rivers Commission, Perth WA.
- Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.
- Heddl, 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.
- JANIS Forests Criteria (1997) Nationally agreed criteria for the establishment of a comprehensive, Adequate and Representative reserve System for Forests in Australia. A report by the Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee. Regional Forests Agreement process. Commonwealth of Australia, Canberra.
- Keighery, B.J. (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.
- Syrinx Environmental Pty Ltd (2005). Graceford Hostel Environmental Impact Assessment and Management Plan for Proposed Extension.
- Water and Rivers Commission (2001). Position Statement: Wetlands.

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)

