



## 1. Application details

### 1.1. Permit application details

Permit application No.: 1825/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Optus Mobile Pty Ltd

### 1.3. Property details

Property: CROWN RESERVE 11933 ( WILBINGA 6041)  
LOT 5611 ON PLAN 208677 (Lot No. 5611 MILITARY WILBINGA 6041)

Local Government Area: Shire Of Gingin

Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	3	Mechanical Removal	Infrastructure 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
Beard Vegetation Association:  - 1948: Low woodland; banksia on limestone  (Shepherd et al. 2001)	The application as proposed includes the trimming / removal of three native trees for the installation of electrical supply to the Warbling Hill Fire Tower. The proposed transmission line predominantly traverses an existing cleared fire break located between a pine plantation to the south and native remnant bushland to the north.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation clearing description based on information obtained during a DEC site inspection of the area undertaken 28 June 2007 (TRIM Ref: DOC27326)
Heddle Vegetation Complexes:  - Cottesloe Complex - North: Predominantly low open forest and low woodland of Banksia attenuata - Banksia menziesii - Eucalyptus todtiana; closed heath on the Limestone outcrops.  - Karrakatta Complex - North: Predominantly low open forest and low woodland of Banksia spp. - Eucalyptus todtiana, less consistently open forest of Eucalyptus gomphocephala - Eucalyptus todtiana - Banksia species.  (Heddle et al. 1980)	A site inspection undertaken for the proposed power line footprint identified the vegetation required for removal as pine wildlings and potentially one marri tree, all located on the northern side of the existing firebreak.  Given the level of disturbance associated with the firebreak and pine plantation, vegetation within the area under application is considered to be in degraded condition.		

### 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**

Although the clearing is occurring within an Environmentally Sensitive Area, being within State Forest 65, within the buffer to a Threatened Ecological Community (TEC) and within the Gngangara EPP Area, the clearing as proposed is limited to three native trees that are not considered of conservation significance (Site inspection 2007). In addition, it is not considered likely that the vegetation proposed to be removed is representative of high biological diversity, when viewed in the context of vegetation within the local area.

**Methodology**      Reference:

- Site Inspection (2007) (TRIM Ref: DOC21326)
- GIS Database:
- Swan Coastal Plain North 20cm Orthomosaic - DLI06

#### (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 vegetation under application is located within State Forest 65 (the Gngangara-Moore River State Forest), an area forming a relatively large tract of contiguous vegetation.

The vegetation proposed for removal includes up to three native trees located directly adjacent to an existing cleared fire break, located between a pine plantation to the south and native remnant bushland to the north (Site Inspection 2007).

Given the extent of vegetation within the local area, the majority of which would be less disturbed than that under application, it is considered unlikely that the three trees are not likely to be representative of significant habitat.

**Methodology**      Reference:

- Site Inspection (2007) (TRIM Ref: DOC21326)
- GIS Databases:
- CALM Managed Lands and Waters - CALM 01/07/05
- Swan Coastal Plain North 20cm Orthomosaic - DLI06

#### (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**

Declared Rare Flora (DRF) and Priority Flora mapping confirms the presence of both *Eucalyptus argutifolia* (R) and *Conostylis pauciflora* (P3) within a relatively close proximity to the area under application.

As the vegetation under application is limited to up to three native trees, it is considered that these known populations of DRF or Priority species will not be disturbed. In addition, as a requirement of access, the DEC officer will be present during clearing activities (TRIM Ref: DOC26918).

**Methodology**      Reference:

- Site Inspection (2007) (TRIM Ref: DOC21326)
- GIS Database:
- SAC Bio dataset 27/06/2007

#### (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**

The area adjacent to that under application contains multiple examples of the Threatened Ecological Community 26a, identified as 'Melaleuca huegelii - Melaleuca acerosa shrublands on limestone ridges'.

The proposed vegetation removal consists of up to three native trees located directly adjacent to the existing firebreak. As the Limestone ridges associated with the TEC do not contain trees species (Gibson et al 1994), it is considered unlikely that removal of these trees will impact on the TEC.

**Methodology**      Reference:

- Gibson et al (1994)
- GIS Database:
- SAC Bio dataset

**(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 area under application is identified as a component of Beard Vegetation Association 1948 and Heddle Vegetation Complexes Cottesloe Complex - North and Karrakatta Complex - North, of which 21.4%, 71.1%, and 36.9% remain respectively.

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

land	Pre-European (ha)*	Current Extent (ha)	Remaining (%)	Conservation Status****	% In reserves / DEC managed
IBRA Bioregion					
- Swan Coastal Plain**	1,501,456	571,758	38.1	Depleted	-
Shire of Gingin*	315,560	177,688	56.3	Least concern	-
Beard Vegetation Association					
- 1948*	81,002	17,315	21.4	Vulnerable	37.8
Heddle Vegetation Complexes					
- Cottesloe Complex - North***		21,412	15,216	71.1	Least concern
	9.9				
- Karrakatta Complex - North***		25,579	9,444	36.9	Depleted 0.2
* (Shepherd et al. 2001)					
** (Shepherd 2006)					
*** (EPA, 2006)					
**** (Department of Natural Resources and Environment 2002)					

While the current extent of Beard Association 1948 is below the recommended 30% target, given the proposed clearing is limited in extent to three trees, the vegetation is not considered significant as a remnant of native vegetation in an area that has been extensively cleared.

**Methodology**

**References:**

- Department of Natural Resources and Environment (2002)
  - EPA (2006)
  - Shepherd et al. (2001)
  - Shepherd (2006)
- GIS Databases:**
- Heddle Vegetation Complexes - DEP 21/06/95
  - Pre-European Vegetation - DA 01/01
  - Interim Biogeographic Regionalisation of Australia - EA 18/10/00

**(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 known water courses or wetlands within or adjacent to the area under application, with the nearest being Tick Flat Conservation Category Wetland approximately 2.5 kilometres to the north-east.

It is therefore considered that the removal of up to three native trees would not be at variance to this Principle.

**Methodology**

**GIS Databases:**

- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC
- 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**

Soil mapping of the area under application defines the applied area as Soil Unit JK9. This unit is identified as an undulating dune landscape with some steep dune slopes and underlain by aeolianite at depth, with chief soils being brown sands (Northcote et al. 1960-68)

Acid Sulphate Soil (ASS) mapping classifies the area under application as having a Class 3 risk of ASS. This class is recognised as having no known risk of ASS or potential ASS occurring within 3 metres of the soil surface.

Given the limited disturbance associated with the removal of up to three trees, it is considered unlikely that there would be an appreciable increase of wind or water erosion.

**Methodology** Reference:  
- Northcote et al. (1960-68)  
GIS Databases:  
- Acid Sulphate Soil Risk Map, Swan Coastal Plain - DEC  
- Soils, Statewide, DA 11/99

**(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 area under application is located within State Forest 65, an area forming a relatively large tract of contiguous vegetation. In addition, the proposed area is also located adjacent to the south-eastern extent of Bush Forever Site 406, a reserve of approximately 9158 hectares in size (Government of Western Australia, 2000).

As the vegetation under application consists of up to three native trees located adjacent to a existing fire break and pine plantation, it is considered unlikely that the clearing would impact on the conservation values of the State Forest, or contribute to the buffering of, or corridor to, nearby conservation reserves.

**Methodology** Reference:  
- Government of Western Australia (2000)  
GIS Databases:  
- Bushforever - MFP 07/01  
- CALM Managed Lands and Waters - CALM 01/07/05

**(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 under application is located within the Environmental Protection (Gnangara Mound Crown Land) Policy 1992 area, the purpose of which is to protect to the level and quality of groundwater, and native vegetation and wetlands, on or under the policy area.

Given the vegetation under application consists of up to three native trees, it is considered unlikely that their removal will have any appreciable impact on the quality of surface or groundwater.

**Methodology** GIS Database:  
- Public Drinking Water Source Areas (PDWSAs) - DOE 07/02/06

**(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 at variance to this Principle**  
Given the limited extent of vegetation under application and the distance to known water courses and wetlands, it is considered that the removal of vegetation from the site would have no impact on peak flood height or duration.

**Methodology** GIS Databases:  
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC  
- Hydrography, linear - DOE 01/02/04

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

**Comments**  
The Swan Coastal District Office of the Department of Environment and Conservation (DEC) has advised that they have no concerns with the construction of a power line to the Wabling Hill Fire Station, provided that appropriate approvals are sort for the removal of vegetation, that Phytophthora (dieback) hygiene procedures are followed, and that equipment or rubbish generated from the construction phase be removed offsite. (TRIM Ref: DOC26918)

The Department of Planning and Infrastructure have advised that they have no objections to the proposed construction (TRIM Ref: DOC19321).

The Shire of Gingin have issued Development Approval for the construction of a telecommunications tower within Reserve 11933 (TRIM Ref: DOC27499).

There is no Works Approval or Environmental Protection Act licence required that will affect the area under application.

**Methodology**

**4. Assessor's comments**

Purpose	Method Applied	area (ha)/ trees	Comment
Infrastructure Maintenance	Mechanical Removal	3	The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing is not at variance to principle (f) and (j) and not likely to be at variance to all other clearing Principles.

**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.

EPA (2006) 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.

Gibson et al. (1994). A Floristic Survey of the Southern Swan Coastal Plain. Western Australian Department of Conservation and Land Management.

Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.

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

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.

Shepherd, D.P. (2006). Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

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
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
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 DEC)

