



## 1. Application details

### 1.1. Permit application details

Permit application No.: 2188/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Telstra Corporation Ltd

### 1.3. Property details

Property: LOT 1 ON DIAGRAM 34033 (House No. 620 GNANGARA LANDSDALE 6065)  
Local Government Area: City Of Swan  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.8		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
Heddl complex Bassendean complex Central and South: Vegetation ranges from woodland of E. marginata - C. fraseriana - Banksia spp. to low woodland of Melaleuca species, and sedge/land on the moister sites. This area includes the transition of E. marginata to E. tottiana in the vicinity of Perth (Heddl et al 1980)	The applied area of 0.8ha is located within Lot 1, a 287ha site. The purpose of the clearing is for hazard reduction.  BSD Consultants (2002) identified two vegetation units within the area under application:  - Marri/Jarrah/Banksia Woodland/Tall Woodland vegetation type comprises marri and/or jarrah dominant or co-dominant with banksia species.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition of the native vegetation under application was sourced from the Site Inspection (2007). The condition ranged from good (small area on northern edge) to very good, with an overall condition of Very Good.
Beard vegetation complex- 1001: Medium sparse woodland; jarrah, with low woodland; banksia and casurina (Shepherd 2006).	- The Banksia Woodlands/Low Forest vegetation type mainly comprises of banksia species with an understorey of Low Heath, Open Low Heath or Low Shrubland.		

## 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 may be at variance to this Principle

BSD Consultants (2002) conducted a flora and fauna survey of the entire Telstra Perth International Telecommunications Centre (PITC) 287ha property (Lot1), which includes the applied area (0.8ha), during Spring 2001. A total of 178 flora Taxa representing 48 families were recorded from the Telstra PITC area including two records of declared rare flora and 10 records of priority species. Also 40 species of birds, seven species of reptile, and four mammal species have been recorded across the Telstra site (URS Consultants 2007).

The applied area is open woodland, consisting predominantly of Banksia attenuata and B. menziesii, with a few marri and jarrah (Site Inspection 2007). There is a distinct moderately dense mid layer consisting of many

native shrub species including *Xanthorrhoea preisii*, *Adenanthos cygnorum*, *Jacksonia* sp. and *Hibbertia hypericoides*. The lower storey was dense and consisted of native sedge and grass species with some weed species including perennial veldt grass (Site Inspection 2007). Although the area under application is subject to invasion by exotic grass species such as perennial veldt grass there is still considerable populations of native grass species. The vegetation is considered to be in very good condition (Site Inspection 2007).

Given the high level of biodiversity within Lot 1 and the very good vegetation condition of the applied area, the clearing as proposed may be at variance to this principle.

- Methodology**    **References:**
- BSD Consultants (2002)
  - Site Inspection (2007)
  - URS Consultants (2007)

**(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**

There are 24 records of 4 fauna species of conservation significance within the local area (5km radius). The closest records are *Isoodon obesulus fusciventer* (Quenda) (P5) and *Macropus irma* (Western Brush Wallaby) (P4), located approximately 1.5km south east of the applied area. There is also a record of a Quenda in a small pocket of remnant vegetation located 1.7km south west of the applied area.

URS Consultants (2007) noted that *Calyptorhynchus latirostris* (Carnaby's Black Cockatoo) and *Falco Peregrinus* (Peregrine Falcon) have been historically recorded in the PITC site. However, neither of these species was observed by URS during their survey.

Given the size of the area under application is relatively small (0.8ha), and is located within a 287ha site it is considered unlikely the vegetation applied to be cleared would be significant habitat for fauna indigenous the Western Australia. Therefore it is unlikely the proposal will be at variance with this Principle.

- Methodology**    **References:**
- Site Inspection (2007)
  - URS Consultants (2007)
- GIS Databases:**
- SAC Bio datasets (11/08/07)
  - Swan Coastal Plain North 20cm

**(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**

There are two known records of Declared Rare Flora (DRF) in the local area (5km radius), *Caladenia huegelii* and *Pityrodia axillaris*. *Caladenia Huegelii* is located approximately 3.5km east of the applied area. *C. huegelii* is a tuberous, perennial, herb that flowers during September and October.

*P. axillaris* is located approximately 3.2 km to the north west of the applied area. *P. axillaris* is a diffuse shrub that flowers from July to December.

Both DRF occur on the same soils and within the same Beard vegetation type, and Heddle vegetation complex as the applied area.

There are 10 records of 5 species of Priority flora within the local area (5km radius). The closest record is *Cyathochaeta teretifolia* (P4) located 3.3km north west, on the same soils and within the same Beard vegetation type, and Heddle vegetation complex as the applied area.

A flora survey within Lot 1, which includes the applied area was conducted by BSD Consultants (2002) in Spring 2001. The flora survey did not identify any DRF or Priority species.

It is unlikely that the vegetation under application includes, or is necessary for the existence of any DRF or Priority species. Therefore, it is considered unlikely that the proposed clearing will be at variance to this Principle.

- Methodology**    **References:**
- BSD Consultants (2002)
- GIS Database:**
- Heddle Vegetation Complexes DEP 21/06/95
  - Pre-European DA 01/01
  - SAC Biodatasets (11/09/07)



**(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 5 Known occurrences of Threatened Ecological Communities (TECs) within the local area (5km radius). The closest TEC is located 530m, with the buffer being approximately 55m south west of the applied area. This TEC has been identified as Floristic community Type 20a -Banksia attenuata woodlands over species rich dense shrubland (Gibson et al 1994).

The applied area is open woodland, consisting predominantly of Banksia attenuata and B. menziesii, with a few marri and jarrah (Site Inspection 2007). There is a distinct moderately dense mid layer consisting of many native species including Xanthorrhoea preisii, Adenanthos cygnorum, Jacksonia sp. and Hibbertia hypericoides. The lower storey was dense and consisted of native sedge and grass species with some weed species including perennial veldt grass (Site Inspection 2007).

The BSD Consultants report (2002) identified that the applied area comprises of Floristic Community Type (FCT) 21c- Low lying Banksia attenuata woodlands or shrublands. This FCT is considered to be well reserved and of low conservation risk. Therefore, the applied area is not considered part of, or necessary for the maintenance of a TEC.

The URS Consultants report (2007) indicated that the clearing of the applied area would not impact on the nearby TEC due to the distance from the applied area.

Given the information obtained from the two consultant's reports (BSD Consultants 2002, URS Consultants 2007) and the site inspection (2007), it is unlikely that the applied area is associated with the TEC 20a. Therefore the proposed clearing is considered unlikely to be at variance to this Principle.

**Methodology**

**References:**

- BSD Consultants (2002)
- Gibson et al (1994)
- Site Inspection (2007)
- URS Consultants (2007)

**GIS Database:**

- Heddle Vegetation Complexes DEP 21/06/95
- Pre-European Vegetation DA 01/01
- SAC Bio datasets 050407
- Soils, Statewide DA 11/99

**(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 vegetation within the area under application is identified as a component Beard vegetation association 1001 and Heddle vegetation complex Bassendean complex- central and south, which have current representation levels of 26.5% and 27% respectively (Shepherd 2006, EPA 2006).

The State Government is committed to the National Objectives and Targets for Biodiversity Conservation which includes a target that prevents the clearance of ecological communities with an extent below 30% of that present Pre-European settlement (Commonwealth of Australia 2001). The Beard vegetation type 1001 and the Heddle Bassendean complex in the area under application are below the recommended minimum of 30% representation.

Although these vegetation associations are less than the recommended 30% minimum of Pre-European extent remaining, the applied area is considered to be within a constrained area. The EPA (2006) recognises the Perth Metropolitan Region as a 'constrained area', providing for the reduction of vegetation complexes to a minimum of 10% of Pre-European extent. The native vegetation associations under assessment (Heddle and Beard) are both greater than 10%.

Given the relatively small area under application (0.8ha) and the current vegetation representation levels it is considered that the vegetation under application is not likely to be at variance to this Principle.

	Pre-European (ha)	Current extent (ha)	Remaining (%)	In secure tenure (%)
IBRA Bioregions				
- Swan Coastal Plain*	15,011,456	571, 758	38.1	4.7
City of Swan* *	104, 220	46, 043	44.2	N/A

Vegetation type*:	57, 412	15,241	26.5	4.8	
Beard 1001:					
Hedde:					
Bassendean complex- central & sth***	87, 477		23. 264	27	0.7

\*(Shepherd 2006).

\*\* (Del Marco et al 2004).

\*\*\* (EPA 2006).

- Methodology** References:
- Commonwealth of Australia (2001)
  - Del Marco et al (2004)
  - EPA (2006)
  - Shephard (2006)
  - Department of Resources and Environment (2002)
- GIS Databases:
- Hedde Vegetation Complexes DEP 21/06/95
  - Interim Biogeographic Regions of Australia EA 18/10/00
  - 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**

There are no wetlands within the applied area. However, there are 11 wetlands mapped within the local area (1km radius). The nearest wetland is a Conservation Category Wetland (CCW), located approximately 80m south west of the applied area. The applied area is located outside the recommended 50m wetland buffer (Waters and Rivers Commission 2001) and there are also no water courses mapped in the local area (1km). A site inspection (2007) confirmed that there was no wetland dependent vegetation within the applied area.

Given the distance to the nearest wetland or watercourse from the applied area, it is considered the clearing as proposed is unlikely to be at variance to this Principle.

- Methodology** References:
- Site Inspection (2007)
  - Waters and Rivers Commission (2001)
- 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**

The Acid Sulphate Soil (ASS) risk mapping indicates the area under application is mapped as having a Class 2 risk. This classification is defined as having a low risk of shallow (<3m depth) ASS or potential ASS.

The landscape of the area under application can be described as occurring on subdued dune-swale terrain. (Northcote et al. 1960). Soils within the applied area are part of the Bassendean Dune System, which are described as well drained bleached grey sands. These soils have a high to very high risk of wind erosion, phosphorus export and acid sulphate soils (State of Western Australia 2005).

Given that the total area under application is limited to 0.8ha, it is not considered likely that the proposed clearing would cause salinity, wind erosion, phosphorus export or acid sulphate soils resulting in appreciable land degradation. Therefore, the proposal is considered unlikely to be at variance to this Principle.

- Methodology** References:
- State of Western Australia (2005)
  - Northcote et al. (1960)
- GIS Databases:
- Acid Sulphate Soil risk map, Swan Coastal Plain DEC
  - Soils, Statewide - DA 11/99
  - Surface Geology



**(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 at variance to this Principle**

The area under application is located within the Bush Forever Site 196. Bush Forever Site 196 (Gnangara Road Bushland: total area of 236ha) is part of a regionally significant bushland/wetland linkage system (Government of Western Australia 2000).

There are seven conservation reserves within the local area (5km radius) including Gnangara-Moore River State Forest located 1.7km north, Bush Forever Site 198 located 800km south, Bush Forever Site 193 located 1.8km north west (also identified as a System 6 Conservation Reserve), Site 304 is located 2.9km east (also identified as a System 6 Conservation Reserve), Site 493 is located 3.2km south west; Site 463 is located 3.3km west north west (also identified as a System 6 conservation Reserve); and Site 199 is located 3.4km south west of the applied area.

Given the area under application is located within a conservation site (Bush Forever Site 196). The clearing as proposed is considered at variance to this Principle. To mitigate the potential impact on the conservation area an offset will be imposed on a clearing permit if granted.

**Methodology References:**

Government of Western Australia (2000)

GIS databases:

- Bushforever - MFP 07/01

- DEC Managed Lands and Waters - CALM 1/07/05

- System 6 Conservation Reserves - DEP 06/95

**(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**

There are no wetlands within the applied area. However, there are 11 wetlands mapped within the local area (1km radius). The nearest wetland is a Conservation Category Wetland (CCW), located approximately 80m south west of the applied area. The applied area is located outside the recommended 50m wetland buffer (Waters and Rivers Commission 2001) and there are also no water courses mapped in the local area (1km).

The area under application is located 800m west of Gnangara mound EPP area and in a Public Drinking Water Source Area, being Gnangara Under Ground Water Pollution Control Area, which is a Priority 1 (P1) area. The P1 classification areas are defined to ensure that there is no degradation of the water source. P1 areas are declared over land where the provision of the highest quality public drinking water is the prime beneficial land use. The DOE (2004) policy states that existing approved land use/activities can continue at their presently approved level provided they operate lawfully (Department of Environment 2004). In addition, the applied area is considered to have a low salinity risk.

Given the applied area is in a site with existing lawful land use activities, as well as the relatively small area of the applied area (0.8ha), the clearing as proposed is considered unlikely to be at variance to this Principle.

**Methodology References:**

- Department of Environment (2004)

- Waters and Rivers Commission (2001)

GIS Databases:

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

- Hydrography, linear - DOE 01/02/04

- Public Drinking Water Source Areas (PDWSAs) DOW

- Salinity Risk LM 25m - DOLA 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**

There are no wetlands within the applied area. However, there are 11 wetlands mapped within the local area (1km radius). The nearest wetland is a Conservation Category Wetland (CCW), located approximately 80m south west of the applied area. The applied area is located outside the recommended 50m wetland buffer (Waters and Rivers Commission 2001) and there are also no water courses mapped in the local area (1km).

Given the distance to the nearest wetland or watercourse from applied area, the clearing as proposed is considered unlikely to be at variance to this Principle.

**Methodology References:**

- Waters and Rivers Commission (2001)

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

Bush Forever (2007) advised that there is a Memorandum of Understanding (MOU) between Telstra and the Western Australian Planning Commission, and the applied area to be cleared is within an area identified in the MOU as a development area. As such, Bush Forever has no objections to the proposed clearing. However, recommends an offset package for lost vegetation is to be prepared with revegetation at a 2:1 ratio. If 0.8 ha is to be cleared then 1.6ha should be revegetated with locally endemic native species. The offset package is to be of net environmental gain and prepared and approved by the Department of Environment and Conservation prior to the removal of any vegetation.

The applied area is within the Proclaimed Groundwater Area of Perth. Therefore any abstraction of groundwater would require a licence. However, this application is not associated with groundwater extraction.

There is no other Works Approval or EP Act Licence that affects the area under application.

There are no Aboriginal Sites of Significance listed within the area under application.

Lot 1 on Plan 217552 is freehold land owned by Telstra Corporation for the land use of radio transmitter. Lot 1 is zoned Special Purposes under the Metropolitan Regional Scheme.

### Methodology

#### References:

- Bush Forever (2007)

#### GIS Databases:

- Aboriginal Sites of Significance- DIA 28/02/03

- Metropolitan Regional Scheme- DPI 07/10/05

- RIWI Act, Groundwater Areas- DOW

- RIWI Act, Surface Water Areas- DOW

## 4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Hazard reduction or fire control	Mechanical Removal	0.8	The assessable criteria have been addressed and the clearing as proposed may be at variance to Principle (a) and Principle (h), but unlikely to be at variance to the remaining Principles.

## 5. References

- BSD Consultants (2002) Telstra PITC, Landsdale Environmental Management Plan, prepared for Telstra; BSD Consulting Pty Ltd, Western Australia. TRIM Ref DOC43893
- Bush Forever (2007) Direct Interest Submission. Strategic Biodiversity Planning- Department of Planning and Infrastructure. TRIM Ref 41511
- Commonwealth of Australia (2001). National Targets and Objectives for Biodiversity Conservation 2001-2005, AGPS, Canberra.
- Del Marco, A., Miles, C., Taylor, R., Clarke, K. and Savage, K. (2004) Local Government Biodiversity Planning Guidelines for the Perth Metropolitan Region - Edition 1. Western Australian Local Government Association, West Perth.
- Department of Environment (2004) Water Quality Protection Note- Land use Compatibility in Public Drinking Water Source Areas. Department of Environment, Western Australia.
- 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 N., Keighery B., Keighery G., Burbidge A. and Lyons M. (1994). A Floristic Survey of the Southern Swan Coastal Plain. Western Australian Department of Conservation and Land Management and the Western Australian Conservation Council.
- 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.
- 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., 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.
- Site Inspection (2007) Site Inspection Report, Department of Environment and Conservation (DEC), Western Australia, TRIM Ref DOC41686.

State of Western Australia (2005) Agmaps Land Manager CD Rom.  
URS Consultants (2007) Clearing Permit Application and Support Documentation- Telstra PITC Fire Hazard Clearing,  
prepared for Telstra; URS Australia Pty Ltd, Western Australia. TRIM Ref DOC38494  
Water and Rivers Commission (2001) Position Statement: Wetlands, Water and Rivers Commission, Perth.

## 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)

