



## **CLEARING PERMIT**

*Granted under section 51E of the Environmental Protection Act 1986*

### **PERMIT DETAILS**

Area Permit Number: 2897 / 1  
File Number: DEC10053  
Duration of Permit: From 17 October 2009 to 17 October 2011

### **PERMIT HOLDER**

Peters Investments Pty Ltd

### **LAND ON WHICH CLEARING IS TO BE DONE**

Lot 22 on Diagram 78267

### **AUTHORISED ACTIVITY**

The Permit Holder shall not clear more than 0.2 hectares of native vegetation within the area hatched yellow on attached Plan 2897/1.

### **CONDITIONS**

Nil.

A handwritten signature in blue ink, reading "Keith Claymore", written over a horizontal line.

Keith Claymore  
A/ ASSISTANT DIRECTOR  
NATURE CONSERVATION DIVISION

*Officer delegated under Section 20  
of the Environmental Protection Act 1986*

17 September 2009

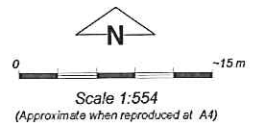


# Plan 2897/1



## LEGEND

Clearing Instruments  
 Cadastre  
 Swan Coastal Plain Central  
 20cm Orthomosaic - Landgate



Geocentric Datum Australia 1994  
 Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

*K. Claymore* 17/9/03  
 K Claymore Date

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



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**1. Application details**

**1.1. Permit application details**

Permit application No.: 2897/1  
 Permit type: Area Permit

**1.2. Proponent details**

Proponent's name: Peters Investments Pty Ltd

**1.3. Property details**

Property: LOT 22 ON DIAGRAM 78267 (House No. 80 BEDFORD FORRESTFIELD 6058)  
 Local Government Area: Shire Of Kalamunda  
 Colloquial name:

**1.4. Application**

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.2		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
Hedde Vegetation Complex: Southern River Complex: Open woodland of E. calophylla - E. marginata - Banksia species with fringing woodland of E. rudis - M. raphiophylla along creek beds.	The proposal is to clear 0.2 hectares of native vegetation to extend an existing hardstand.  The 0.07 hectares of native vegetation that has not been recently cleared ranged from good to very good condition with vegetation being dominated by a Banksia attenuata and Marri overstorey and species rich shrub layer.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Vegetation clearing description is based on information obtained from a site inspection on 5th January 2009
Beard Vegetation Unit:  -1018: Mosaic: Medium Forest; Jarrah & Marri/ Low Woodland; Banksia/ Low Forest			
Beard Vegetation Unit:  -1018: Mosaic: Medium Forest; Jarrah & Marri/ Low Woodland; Banksia/ Low Forest	Approximately 0.13 hectares of vegetation under application have been previously cleared and although some native vegetation has regenerated it is in a degraded condition.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation clearing description is based on information obtained from a site inspection on 5th January 2009

**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**  
 The vegetation under application was considered to be a Banksia/Marri open woodland in good to very good condition with a species rich understorey. The vegetation under application has been inferred as a Threatened Ecological Community (TEC) and is mapped as Floristic Community Type (FCT) 20a, 'Banksia attenuata woodland over species rich dense shrublands'. The rare flora Conospermum undulatum was also identified within the area under application (DEC, 2009).

Given the vegetation under application is mapped as a TEC and contains a population of rare flora it is considered the vegetation under application is representative of an area with a high level of biological diversity and is therefore at variance to this principle.

**Methodology** GIS Databases  
- SAC Bio Datasets 9/1/2009  
DEC (2009)

**(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 majority of the vegetation within the area under application comprises of a dense understorey and well established leaf litter layer suitable for a range of ground-dwelling fauna such as reptiles and mammals like the Quenda (*Isodon obesulus fusciventer*) which has been recorded in the local area (5km radius). During the Site inspection (DEC, 2009) Quenda diggings were observed within the area under application.

The vegetation under application is in a degraded to very good condition with an overstorey consisting of *Banksia* sp and *Eucalyptus* sp that may provide some suitable foraging habitat for the Carnaby's Black-Cockatoo (*Calyptorhynchus latirostris*)

While it is likely that the area provides habitat for a range of fauna including species of conservation significance, given the size of the area under application it is not considered to be considered significant habitat and therefore is not consider likely to be at variance with this principle.

**Methodology** DEC (2009)  
GIS Databases  
- SAC Bio Datasets 9/1/2009

**(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.**

**Comments Proposal is at variance to this Principle**

There are over 100 recorded occurrences of rare flora within the local area (5km radius of area under application) with the majority being individuals of *Conospermum undulatum*. Other known rare flora within the local area include populations of *Macarthuria keigheryi*, *Thelymitra stellata*, *Darwinia apiculata*, *Acacia anomola*, *Dryandra mimica*, *Caladenia huegelii*, *Lepidosperma rostratum*, *Eleocharis keigheryi*, *Diuris purdei*, *Tetraria australiensis*, *Andersonia gracilis* and *Calytrix breviseta* subsp. *breviseta*.

The closest mapped population of rare flora is *Conospermum undulatum*, located within 70m of the cleared area on the adjacent Lot 21 (1.83ha) with 170 individuals of *Conospermum undulatum* identified (EPA 2004). During the site inspection (DEC, 2009) individuals of *Conospermum undulatum* were identified within the area under application and on the road reserve and adjacent property.

On the 14th September 2009 a permit to take declared rare flora (Permit No. 30 - 0910) under Section 23F of the Wildlife Conservation Act 1950 was issued for the area under application

Given that *Conospermum undulatum* was identified within the area under application the vegetation is considered to include rare flora and therefore be at variance to this principle.

**Methodology** EPA (2004)  
DEC (2009)  
GIS Databases  
- SAC Bio Datasets 21/10/2008  
- Soils, Statewide

**(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 at variance to this Principle**

There are seven occurrences of the Threatened Ecological Community (TEC) Floristic Community Type (FCT) 20a, 'Banksia attenuata woodland over species rich dense shrublands' (Gibson et al. 1994) within the local area. The FCT 20a is considered Endangered in Western Australia (DEC, 2004).

The TEC FCT 20a is mapped as being present over the whole of the adjacent Lot 21 Bedford Crescent and the vegetated portion of Lot 22 which is the area under application.

Given the 0.2 hectares area under application is mapped as the endangered TEC 'Banksia attenuata woodland over species rich dense shrublands' the clearing as proposed is considered to be at variance to this principle.



Methodology GIS Databases  
- SAC Bio Datasets 9/1/2009

**(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 under application is associated with Beard Vegetation Association 1018 and Heddle Southern River Complex, of which approximately 22.7% and 19.8% pre-European extent remain respectively (Heddle et al. 1980 and Shepherd 2007).

The Environmental Protection Authority (EPA) supports a 30% threshold level as recommended in the National Objectives Targets for Biodiversity Conservation; below which species loss appears to accelerate exponentially at an ecosystem level (EPA, 2000).

Both of the mapped vegetation complexes associated within the area under application are below the 30% threshold, however 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 the Pre-European extent.

The area under application is considered relatively small and the site is surrounded by a more contiguous remnant of vegetation protected within Bush Forever Site 319. Given the approximately 58 hectares of remnant vegetation within Bush Forever site 319 the area under application is not considered likely to be significant as a remnant in an area that has been significantly cleared.

Pre-European	Current extent (ha)	Remaining (ha)	% In reserves/ (%)	CALM managed land
IBRA Bioregion				
Swan Coastal Plain*	1,501,208	58,3140	38.84	10.4
Shire of Kalamunda*	32,354	24,140	74.6	
Beard Vegetation Unit: 1018*	14,059	3,192	22.7	3.0
Heddle: Southern River Complex**	57,979	11,501	19.8	1.5

\* (Shepherd 2007)

\*\* (EPA, 2006)

**Methodology** Shepherd (2007)  
Heddle et al. (1980)  
Commonwealth of Australia (2001)  
EPA (2006)  
GIS databases:  
- Bushforever  
-Heddle Vegetation Complexes  
-SAC Bio Datasets accessed 09/1/2009

**(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 fourteen Conservation Category Wetlands (CCWs) within the local area (3km radius). The closest wetland is a CCW located 40 metres from the area under application on the other side of Bedford Crescent. There are no watercourses within the local area. During the site inspection (DEC, 2009) no wetland dependant vegetation was observed within the area under application.

Given that no wetland dependant vegetation was identified during the site inspection and the distance to the nearest watercourse it is not considered likely that the vegetation under application is growing in, or associated with, an environment associated with a watercourse or wetland.

**Methodology** References:  
DEC (2009)  
GIS databases:  
- EPP, Lakes  
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain  
- Hydrography, linear (hierarchy)

**(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 area under application is within the Bassendean dune system, with this system having the potential for a high risk of land degradation through wind erosion, as the sandy soils within the area under application are considered to be highly erodible.

Given the sandy soils present on site, it is considered that there is the potential for the proposed clearing to result in wind erosion however due to the limited area under application it is not considered it would result in appreciable land degradation.

In addition, wind erosion is likely to be managed on-site and the clearing as proposed is considered not likely to be at variance to this principle.

**Methodology** Northcote et al. (1968)  
GIS Databases:  
-Salinity Risk

**(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 nearest conservation reserve is the Dundas Road Bushland (Bush Forever Site 319) which is located 40 metres from the area under application on the south side of Bedford Crescent.

Although the area under application is relatively close it does not provide any ecological linkage to the Bush Forever site and given a road separates the two areas it is not considered likely that the proposed clearing would have a direct or indirect impact on adjacent or nearby conservation areas.

**Methodology** GIS databases:  
- Bushforever

**(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 fourteen Conservation Category Wetlands (CCWs) within the local area (3km radius). The closest wetlands is a CCW located 40 metres from the area under application on the other side of Bedford Crescent.

It is considered any development within 50m the boundary of a wetland can critically influence a wetland (Hill et al. 1996), however given the limited area that is proposed to be cleared and that there is a road separating the area under application and the nearest wetland it is not considered likely that the propose clearing will impact on the surface or groundwater quality of this wetland.

Given the distance to closest watercourse and the limited area under application the proposed clearing is not considered likely to cause deterioration in the quality of surface water or groundwater.

**Methodology** Northcote et al. (1968)  
GIS databases:  
- EPP, Lakes -  
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain  
- Hydrography, linear (hierarchy)

**(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 mapped within the area under application and there are no watercourses mapped within the local area (3km radius). Given size of the area under application the distance to the nearest watercourse, the clearing as proposed is not considered likely to cause or increase the incidence or intensity of localised flooding.

**Methodology** GIS databases:  
- EPP, Lakes -  
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain  
- Hydrography, linear (hierarchy)



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

### Comments

The area under application is zone for industry and planning approval has been received from Shire of Kalamunda for the proposed hardstand.

An EPA assessment of a subdivision proposal to clear 1.8 hectare on Lot 21 which is adjacent to the area under application identified 170 individuals of *Conospermum undulatum* and the presence of FCT 20a. The Minister granted approval for this proposal with condition. (EPA 2004).

On the 14th September 2009 a permit to take declared rare flora (Permit No. 30 - 0910) under Section 23F of the Wildlife Conservation Act 1950 was issued for the area under application

### Methodology

## 4. Assessor's comments

### Comment

The assessable criteria have been addressed and the clearing as proposed is at variance to Principles (a), (c) and (d) and is not likely to be at variance to the remainder of the principles.

## 5. References

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, Western Australia.

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.

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.

Hill, A.L., Semenuik, C. A., Semenuik, V. Del Marco, A. (1996) Wetlands of the Swan Coastal Plain. Volume 2b, Wetland mapping, classification and evaluation. Wetland Atlas. WRC and DEP. 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. (2007). 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.

## 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)