



GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 5609/1
File Number: 2013/002979-1
Duration of Permit: From 27 July 2013 to 27 July 2015

PERMIT HOLDER

Western Australian Sports Centre Trust trading as VenuesWest

LAND ON WHICH CLEARING IS TO BE DONE

Lot 520 on Deposited Plan 59626, Floreat.

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.17 hectares of native vegetation within the area hatched yellow on attached Plan 5609/1.

CONDITIONS

Nil.

A handwritten signature in black ink, appearing to read 'M Warnock', written over a horizontal line.

M Warnock
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH





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

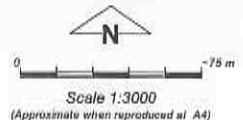
27 June 2013

Plan 5609/1



LEGEND

- | | |
|---|---|
|  Clearing Instruments
Areas Approved to Clear |  Cadastre
Perth Metropolitan Central
15cm Orthomosaic - Landgate
2011 |
|  Local Government
Authorities | |
|  Road Centrelines | |



Geocentric Datum Australia 1994

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

M Warnock Date 27/6/13
M Warnock

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.



Department of Environment and Conservation

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1. Application details

1.1. Permit application details

Permit application No.: 5609/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Western Australian Sports Centre Trust TA VenuesWe

1.3. Property details

Property: LOT 520 ON PLAN 59626 (House No. 201 UNDERWOOD FLOREAT 6014)
Local Government Area: City of Nedlands

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.17		Cutting	Building or Structure

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 27 June 2013

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 998: Medium woodland - tuart (Shepherd et al. 2001).	The applicant proposes to clear 0.17 hectares of native vegetation for the purpose of constructing a car park. The vegetation to be cleared is comprised of isolated Eucalyptus marginata, Corymbia calophylla and Agonis flexuosa (Emerge Associates, 2013).	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The Vegetation description and condition was determined from information supplied by the applicant (ATA Environmental 2007 and Emerge Associates, 2013) and aerial imagery.
Hedde Vegetation Complex Karrakatta Complex Central and South: Predominantly open forest of Eucalyptus gomphocephala (Tuart) - Eucalyptus marginata (Jarrah) - Corymbia calophylla (Marri) and woodland of Eucalyptus marginata (Jarrah) - Banksia species (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 applicant proposes to clear 0.17 hectares of native vegetation within Lot 520 on Deposited Plan 59626 for the purpose of constructing a car park. The vegetation under application consists of ten dead trees, two trees in deteriorating health and five small saplings. The species under application are Eucalyptus marginata (three individuals), Corymbia calophylla (eight individuals) and Agonis flexuosa (one individual) (Emerge Associates, 2013). The vegetation is considered to be in a completely degraded (Keighery 1994) condition (ATA Environmental, 2007).

There are several priority flora species mapped within the local area (10 kilometre radius), however given that there are no native understorey species on site (Emerge Associates, 2013), it is unlikely that priority flora occur within the application area.

The Northern Spearwood Shrublands and Woodlands, a priority ecological community (PEC) (Priority 3) is mapped approximately 270 metres north west of the application area, however, the vegetation under application is not representative of this PEC.

The fauna habitats within the application area are better represented elsewhere within the local area (10 kilometre radius), particularly within the adjacent Bold Park which retains approximately 361 hectares of remnant vegetation. Therefore it is not likely that the proposed clearing will impact on significant habitat for indigenous fauna.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology References:
-ATA Environmental (2007)

-Emerge Associates (2013)
-Keighery (1994)

GIS Databases:
-SAC Bio Datasets (Accessed June 2013)

(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

Several fauna species of conservation significance have been recorded within the local area (10 kilometre radius), including *Calyptorhynchus banksii* subsp. *naso* (Forest Red-tailed Black-Cockatoo), *Calyptorhynchus latirostris* (Carnaby's Cockatoo), *Dasyurus geoffroyi* (Chuditch), *Phascogale tapoatafa* subsp. *tapoatafa* (Southern Brush-tailed Phascogale), *Merops ornatus* (Rainbow Bee-eater), *Arbanitis inornatus* (trapdoor spider), *Neelaps calonotos* (Black-striped Snake) and *Isodon obesulus* subsp. *fusciventer* (Quenda) (DEC, 2007-).

There are two trees (*Corymbia callophylla*) within the application area with a diameter of greater than 500 mm, measured at 1.3 m above ground level (Emerge Associates, 2013). These trees do not contain hollows, and thus are unlikely to be utilised as breeding habitat by the two abovementioned species of black cockatoo.

A portion of the application area is located within the boundary of a confirmed Carnaby's cockatoo roost area. Black cockatoo roosts are generally located in the tallest trees in an area (Commonwealth of Australia, 2012). The two abovementioned *Corymbia callophylla* may be large enough to provide potential roost sites, however given that they are surrounded by high levels of disturbance, and that high quality vegetation is located immediately west of the application area, it is unlikely that they provide significant roosting habitat.

Given that the fauna habitats within the application area are better represented elsewhere within the local area, particularly within the adjacent Bold Park, which retains 361 hectares of remnant vegetation, it is unlikely that the vegetation under application comprises significant habitat for fauna indigenous to Western Australia.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology References:
-DEC (2007-)
-Emerge Associates (2013)
-Commonwealth of Australia (2012)

GIS Databases:
-Bush Forever sites
-Carnaby's Cockatoo Roost Areas Confirmed

(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 no species of rare flora mapped within the local area (10 kilometre radius).

Given that the vegetation under application is in completely degraded (Keighery, 1994) condition and consists of little to no understorey vegetation, it is unlikely that rare flora occurs within the application area.

The proposed clearing is not likely to be at variance to this Principle.

Methodology References:
-Keighery (1994)

GIS Databases:
-SAC Bio Datasets (Accessed June 2013)

(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 threatened ecological communities mapped within the local area (10 kilometre radius).

The proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Databases:
-SAC Bio Datasets

(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 national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). However the area under application is located within the 'constrained area' of the Perth Metropolitan Region (EPA 2006). Within this area the EPA (2006) provides for the reduction of vegetation complexes to a minimum of 10 per cent pre- European extent.

Beard Vegetation Association 998 and Karrakatta Complex-Central and South retain approximately 38 per cent and 30 per cent pre-European vegetation within the Swan Coastal Plain respectively. The City of Nedlands retains approximately 14 per cent pre-European vegetation.

Given that the application area falls within a 'constrained area', and contains vegetation in a completely degraded (Keighery, 1994) condition, the proposed clearing is not likely to be at variance to this Principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Swan Coastal Plain	1,501,209	587,833	39	35
Shire*				
City of Nedlands	1,980	269	14	0
Beard Vegetation Association in Bioregion*				
998	50,867	19,373	38	41
Hedde Vegetation**				
Karrakatta Complex-Central and South	49,912	14,729	30	2.5

Government of Western Australia (2013)*
Hedde et al (1980)**

Methodology References:
-Government of Western Australia (2013)
-Commonwealth of Australia (2001)
-EPA (2006)
-Hedde et al (1980)

(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

Given that no wetlands or watercourses are located within 500 metres of the application area and that the vegetation identified on site is not considered riparian, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Databases:
-Hydrography, linear
-Hydrography, hierachy
-Geomorphic Wetlands, Swan Coastal Plain

(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 soils within the application area have been mapped by Northcote et al (1960-68) as brown sands with associated siliceous sands on the deeper dunes, and leached sands on the more subdued dunes.

Given the relatively small size of the application area, and the completely degraded (Keighery, 1994) condition of the vegetation, it is unlikely that the proposed clearing will cause appreciable land degradation.

The proposed clearing is not likely to be at variance to this Principle.

Methodology References:
-Northcote et al (1960-1968)
-Keighery (1994)

(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 application area is located approximately 65 metres from a Bush Forever site 312, known as Bold Park and Adjacent Bushland. The removal of the 17 trees under application is not considered likely to impact upon the conservation values of this area.

The proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Databases:
-SAC Bio Datasets (Accessed June 2013)

(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**
Given the relatively small size of the area under application, and the distance to the closest mapped wetland or watercourse (greater than 500 metres), it is unlikely the proposed clearing will be cause a deterioration in surface water.

Groundwater salinity on site is mapped at 500 to 1000 milligrams per litre (marginal). Given the low salinity level, and the limited amount of clearing proposed, it is not likely that the removal of 17 trees will result to a perceptible rise in the watertable or an increase in groundwater salinity levels.

The proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Databases:
-Hydrography, linear
-Hydrography, hierachy
-Geomorphic Wetlands, Swan Coastal Plain

(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**
Given the completely degraded (Keighery, 1994) condition and relatively small size of the vegetation under application, the proposed clearing is not likely to cause or exacerbate the incidence or intensity of flooding.

The proposed clearing is not likely to be at variance to this Principle.

Methodology References:
-Keighery (1994)

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

Comments
The application area is located within the Perth Groundwater Water Area covered by the Rights in Water and Irrigation Act 1914.
The application area is located within an area defined within the Perry Lakes Redevelopment Regulations 2006, and is therefore subject to the Perry Lakes Redevelopment Act 2005. The local planning scheme and Metropolitan Regional Scheme do not apply within the area covered by the Perry Lakes Redevelopment Act 2005 (DSR 2009).
The Western Australian Planning Commission has given approval for the proposed development (WAPC 2013).
Two public submissions have been received in relation to this application. The first submission raises concerns over the removal of trees that are utilised by Carnaby's cockatoo for perching and potentially feeding habitat. Concern is also raised over the proposed clearing's potential to interfere within an area identified as a flora corridor within the AK Reserve Redevelopment Plan August 2007. The submission requests a guided site inspection prior to clearing, and is concerned that works on the car park have commenced (Submission, 2013a). The second submission raises concerns over the presence of Carnaby's cockatoo and other birds within the area, and objects to the clearing of dead trees and trees in deteriorating health, rather than addressing the cause of decline (Submission, 2013b).

These issues have been addressed in the above assessment (refer to Principle (b)). The applicant will be asked to contact the community group prior to clearing to organise a site inspection.

- Methodology** References:
- DSR 2009
 - Submission 2013a
 - Submission 2013b
 - WAPC 2013
- GIS Databases:
- RIWI Act areas

4. References

- ATA Environmental (2007) AK Reserve Flora and Fauna Assessment March 2007. ATA Environmental, Western Australia (A629471).
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Commonwealth of Australia (2012) EPBC Act Referral Guidelines for Three Threatened Black Cockatoo Species, Canberra.
- DSR (2009) Draft Amended AK Reserve Redevelopment Plan April 2009. Department of Sport and Recreation, Western Australia (A629471).
- Emerge Associates (2013) Additional Information for Clearing Permit Application CPS 5609/1. DEC Ref A:629471
- EPA (2006) Guidance for the Assessment of Environmental Factors - Level of Assessment for Proposals Affecting Natural Areas Within the System 6 Region and Swan Coastal Plain Portion of the System 1 Region. Guidance Statement No 10. Environmental Protection Authority, Western Australia.
- Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.
- 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, 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. Technical Report 249. Department of Agriculture Western Australia, South Perth.
- Submission (2013a) Submission is response to clearing permit application CPS 5609/1. Received on 23 June 2013 (DEC Ref: A643330).
- Submission (2013b) Submission is response to clearing permit application CPS 5609/1. Received on 22 June 2013 (DEC Ref: A643333).
- WAPC (2013) Application for Approval to Undertake Development, Western Australian Institute of Sport High Performance Service Centre. Western Australian Planning Commission, Western Australia (A629471).

5. 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