



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 4116/1

File Number: 2010/010660-1

Duration of Permit: From 14 February 2011 to 14 February 2013

PERMIT HOLDER

Shire of Kalamunda

LAND ON WHICH CLEARING IS TO BE DONE

ROAD RESERVE (VALENTO ROAD (PIN: 11143594), PICKERING BROOK 6076)

ROAD RESERVE (VALENTO ROAD (PIN: 11143591), PICKERING BROOK 6076)

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 44 native trees within the area hatched yellow on attached Plan 4116/1.

CONDITIONS

1. Dieback and Weed control

- (a) When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:
 - (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (ii) shall only move soils in *dry conditions*;
 - (iii) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - (iv) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) At least once in each 12 month period for the term of this Permit, the Permit Holder must remove or kill any *weeds* growing within areas cleared under this Permit.
- (c) Prior to leaving the area(s) cross-hatched yellow on attached Plan 4116/1, the Permit Holder must clean earth-moving machinery of soil and vegetation.

2. Fauna management

- (a) Prior to undertaking any clearing authorised under this Permit, the area(s) shall be inspected by a *fauna specialist* who shall:
 - (i) identify *habitat trees* suitable to be utilised by Carnaby's black cockatoo (*Calyptorhynchus latirostris*), Baudins black cockatoo (*Calyptorhynchus baudinii*) and Red-tailed black cockatoo (*Calyptorhynchus banksii naso*); and
 - (ii) inspect *habitat trees* identified under condition 2(a)(i) for the presence of Carnaby's black cockatoo (*Calyptorhynchus latirostris*), Baudins black cockatoo (*Calyptorhynchus baudinii*) and Red-tailed black cockatoo (*Calyptorhynchus banksii naso*).
- (b) Where *habitat trees* identified under condition 2(a) contain hollows suitable for use by Carnaby's black cockatoo (*Calyptorhynchus latirostris*), Baudins black cockatoo (*Calyptorhynchus baudinii*) and Red-tailed black cockatoo (*Calyptorhynchus banksii naso*); the

Permit Holder shall retain these *habitat trees* in situ, or if this is not possible the Permit Holder shall construct and install 2 artificial nesting hollows, per each habitat tree removed, as follows:

- (i) each artificial nesting hollow shall be constructed using PVC pipe 0.3m in diameter, 25mm thickness and 1m in length;
 - (ii) each artificial nesting hollow shall include an external perch constructed of wood, and an internal ladder constructed of 50mm galvanised mesh affixed to the wall, to enable access;
 - (iii) each artificial nesting hollow shall have a free-draining floor constructed of galvanised woven wire mesh and lined with weathered woodchips to a depth of 20cm;
 - (iv) each artificial nesting hollow shall be attached to a tree located within 1km of the area to be cleared;
 - (v) each artificial nesting hollow shall be attached to a tree that must have a diameter, at 1.5 metres above the ground, of at least 300 millimetres;
 - (vi) each artificial nesting hollow shall be attached to a tree at a height of no less than 3 metres above the ground, and no closer than 20 metres from any other tree to which a constructed artificial nesting hollow is attached; and
 - (vii) each artificial nesting hollow shall be attached to a tree in an inconspicuous position with the entrance hole facing away from the prevailing winds and rain, and protected from direct sunlight.
- (c) Where *habitat trees* identified under condition 2(a) contain hollows suitable for use by *Calyptorhynchus latirostris* (Carnaby's Black-Cockatoo) Baudins black cockatoo (*Calyptorhynchus baudinii*) and Red-tailed black cockatoo (*Calyptorhynchus banksii naso*), the Permit Holder shall retain these *habitat trees* in situ, or if this is not possible the Permit Holder shall:
- (i) remove and retain intact hollows;
 - (ii) each removed and retained intact hollow shall be attached to a tree located within no more than 2km from any clearing authorised under this Permit;
 - (iii) each removed and retained intact hollow shall be attached to a tree within one month of removing it; and
- (d) Within one week prior to undertaking any clearing authorised under this Permit, the Permit Holder shall engage a *fauna clearing person* to remove and relocate fauna identified under condition 4(a)(ii).

3. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the fauna management of areas pursuant to condition 2 of this Permit:
 - (i) the location of any habitat tree, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings; and
 - (ii) the location of the artificial nesting hollows, recorded; using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings.
 - (iii) the location of surrogate trees for relocation with vacant hollows, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings; and
 - (iv) the location and date where relocated fauna was released, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings

4. Reporting

- (a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 4 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 14 November 2012, the Permit Holder must provide to the CEO a written report of records required under condition 4 of this Permit where these records have not already been provided under condition 5(a) of this Permit.

Definitions

The following meanings are given to terms used in this Permit:

dieback means the effect of *Phytophthora* species on native vegetation;

dry conditions means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

fauna clearing person means a person who has obtained a licence from the Department, issued pursuant to the *Wildlife Conservation Regulations 1970* authorising them to take fauna;

fauna specialist means a person with training and specific work experience in fauna identification or faunal assemblage surveys of Western Australian fauna;

fill means material used to increase the ground level, or fill a hollow;

habitat tree(s) means trees that have a diameter, at average adult human chest height, of greater than 70cm, healthy but with dead limbs and broken crowns that are likely to contain hollows and roosts suitable for native fauna, or where these are not present then healthy but with the potential to contain hollows and roosts;

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

weed/s means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.



Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

20 January 2011



1. Application details

1.1. Permit application details

Permit application No.: 4116/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Kalamunda

1.3. Property details

Property: ROAD RESERVE (PICKERING BROOK 6076)
ROAD RESERVE (PICKERING BROOK 6076)

Local Government Area: Shire of Kalamunda

Colloquial name: Valento Road Reserve

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	44	Mechanical Removal	Road construction or maintenance

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 20 January 2011

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
Shepherd (2009) describes vegetation association 3 as Medium forest; jarrah-marri	The proposed clearing of 44 trees for the purpose of road construction. The clearing is to occur over an approx length of 1.4km.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The condition and description of the vegetation under application was determined via a site visit (DEC 2011).
Hedde Vegetation association (Hedde et al. 1980) Helena Complex - open forest and woodlands to heath and herbland to Lichens	The vegetation under application comprises of Jarrah (<i>Eucalyptus marginata</i>) and Marri (<i>Corymbia calophylla</i>) trees and surrounding vegetation in an excellent (Keighery, 1994) condition.		
Mattiske Vegetation Complex (Havel and Mattiske 2002) Murray 1(My1) - Open forest of <i>Eucalyptus marginata</i> subsp. <i>marginata</i> - <i>Corymbia calophylla</i> - <i>Eucalyptus patens</i> on valley slopes to woodland of fs24 <i>Eucalyptus rudis</i> - <i>Melaleuca raphiophylla</i> on the valley floors in humid and subhumid zones.			

3. Assessment of application against clearing principles

Comments **Proposal is not likely to be at variance to this Principle**

The proposed clearing of 44 trees for the purpose of road construction. The clearing is to occur over an approx length of 1.4km. The vegetation under application comprises of Jarrah (*Eucalyptus marginata*) and Marri (*Corymbia calophylla*) trees in an excellent (Keighery, 1994) condition.

There are 15 known records of conservation significant fauna species located within the local area (10km radius) of the application area. Black cockatoos were sighted and heard during a site visit (DEC 2011). Black cockatoos feed on Marri seeds and flowers and Jarrah nuts as well as other south west eucalypts. Breeding for black cockatoos occurs in winter/spring, mainly in the eastern forests and wheatbelt where they can find mature hollow-bearing trees to nest in (DEC 2007). Clearing and subsequent land degradation has eliminated most of

the breeding habitat for black cockatoos. These birds require old trees with large hollows in which to nest, which may take many decades for trees planted now to become suitable. Competition for nesting hollows by increasing numbers of galahs, western corellas and non native honey bees is significant (Burbridge 2004).

Tree hollows occur within the area under application, and these hollows may provide habitat for local fauna including black cockatoos.). Potential habitat trees have a diameter, at average adult human chest height, of greater than 70cm, healthy but with dead limbs and broken crowns that are likely to contain hollows and roosts suitable for native fauna, or where these are not present then healthy but with the potential to contain hollows and roosts. These types of trees were identified within the application area during a DEC site visit. Therefore, the proposed clearing may be at variance to principle (b).

A fauna condition will manage and mitigate impacts from the proposed clearing on Carnaby's black cockatoo (*Calyptorhynchus latirostris*), Baudins black cockatoo (*Calyptorhynchus baudinii*) and Red-tailed black cockatoo (*Calyptorhynchus banksii naso*).

Given the relatively small scale and the linear nature of the proposed clearing and the disturbance from the current track, the proposed clearing is not likely to significantly impact any biodiversity or environmental values, or cause any appreciable land degradation within the local or regional context.

Given the above, the proposal may be at variance to principle (b) and is not likely to be at variance to the remaining clearing principles.

Weed and dieback management conditions will minimise the risk of introduction or spread of pathogens and invasive species into the adjacent Korung National Park.

Methodology

References

- Burbridge (2004)
- DEC (2007)
- DEC (2011)
- Keighery (1994)
- GIS Databases:
 - SAC Biodatasets - accessed December 10
 - DEC tenure
 - Swan Coastal Plain Central 20cm Orthomosaic - Landgate 2009

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

Comments

The gravel road is proposed to be bituminised and any trees that are either overhanging or close to the proposed road will be removed.

Town Planning Scheme Zone: Not mapped - designated road reserve

Methodology

- Metropolitan Regional Planning Scheme - Rural
- GIS Databases:
 - Town planning schemes
 - Metropolitan Regional Scheme

4. References

- Burbridge, A. (2004) Threatened Animals of Western Australia, Department of Conservation and Land Management, Perth, Western Australia.
- DEC (2007) DEC Fauna Habitat Notes.xls. February 2007. Department of Environment and Conservation, Western Australia.
- DEC (2011) Site Inspection Report for Clearing Permit Application CPS 4116/1, Valento Road reserve, Pickering Brook. Site inspection undertaken 06 January 2011. Department of Environment and Conservation, Western Australia (DEC Ref. A351612).
- Havel, J.J. and Mattiske Consulting Pty Ltd (2002) Review of management options for poorly represented vegetation complexes, Conservation Commission.
- 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.
- Shepherd, D.P. (2009) 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.

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
WRC	Water and Rivers Commission (now DEC)