



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose permit number:	CPS 2493/3
File number:	2011/006798-1
Permit holder:	City of Rockingham
Duration of permit:	18 January 2009 –18 January 2014

The permit holder is authorised to clear native vegetation, subject to the conditions of this Permit.

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of extension and upgrade of Mundijong Road and associated works within the Parmelia Gas Pipeline Easement.

2. Land on which clearing is to be done

Lot 288 on Plan 202704 (Lot No. 288 Kerosene Baldivis 6171)
Lot 2209 on Plan 211650 (Lot No. 2209 Millar Baldivis 6171)
Lot 777 on Plan 3893 (Leda 6170)
Lot 478 on Plan 27774 (Cooloongup 6168)
Lot 4335 on Plan 11170 (Leda 6170)
Unallocated Crown Land (Leda 6170)
Lot 776 on Plan 3893 (Leda 6170)
Lot 503 on Plan 56798 (Leda 6170)
Lot 4639 on Plan 27786 (Leda 6170)
Lot 283 on Plan 202704 (Lot No. 283 Millar Baldivis 6171)
Lot 1387 on Plan 218497 (Lot No. 285 Mandurah Baldivis 6171)
Lot 6 on Diagram 51529 (Lot No. 6 Kerosene Baldivis 6171)
Lot 5 on Diagram 51529 (Lot No. 5 Kerosene Baldivis 6171)
Lot 290 on Plan 202704 (Baldivis 6171)
Lot 291 on Plan 202704 (Lot No. 291 Kerosene Baldivis 6171)
Lot 292 on Plan 202704 (Lot No. 292 Baldivis Baldivis 6171)
Lot 292 on Plan 202704 (Lot No. 292 Baldivis Baldivis 6171)
Lot 776 on Plan 3893 (Leda 6170)
Lot 3 on Diagram 45369 (Lot No. 3 Baldivis Baldivis 6171)
Road Reserve (Baldivis 6171)
Lot 34 On Diagram 97594 (Baldivis 6171)
Mundijong Road reserve (Baldivis 6171)
Baldivis Road reserve (Baldivis 6171)
Bodham Road reserve (Baldivis 6171)
Millar Road reserve (Baldivis 6171)
Mandurah Road reserve (Cooloongup 6168)

3. Area of Clearing

The Permit Holder must not clear more than 11.11 hectares of native vegetation within the area shaded yellow on attached Plan 2493/3.

4. Type of Clearing Authorised

This Permit authorises the permit holder to clear native vegetation for activities to the extent that the permit holder has the power to clear native vegetation for those activities under the *Local Government Act 1995* or any other written law.

5. Application

This Permit allows the permit holder to authorise persons, including employees, contractors and agents of the permit holder, to clear native vegetation pursuant to this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

6. Compliance with Assessment Sequence and Management Procedures

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the permit holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

7. Avoid, minimise etc clearing

In determining the amount of native vegetation to be cleared for the purpose of road upgrades, the Permit Holder must have regard to the following principles, set out in order of preference:

- (a) Avoid the clearing of native vegetation;
- (b) Minimise the amount of native vegetation to be cleared; and
- (c) Reduce the impact of clearing on any environmental value.

8. Dieback and weed control

- (a) When undertaking any clearing, or other activity pursuant to this Permit the Permit Holder must take the following steps to minimise the risk of introduction and spread of *dieback*:
 - (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (ii) avoid the movement of soil in wet conditions;
 - (iii) ensure that no *dieback*-affected *road building materials, mulch* or *fill* or other material are brought into an area that is not affected by *dieback*; and
 - (iv) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) When undertaking any clearing, or other activity pursuant to this Permit the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds*:
 - (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (ii) ensure that no *weed*-affected *road building materials, mulch, fill* or other material are brought into the area to be cleared; and
 - (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (c) 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.

9. Fauna Management

- (a) Prior to clearing pursuant to this Permit during the months of September through to February the areas shall be inspected by a *fauna specialist* who shall identify the presence of *Merops ornatus* (Rainbow Bee-eater) or their nesting burrows.
- (b) The permit holder shall not clear during the months of September through to February if *Merops Ornatus* (Rainbow Bee-eater) or their nesting burrows identified under condition 9(a).
- (c) Prior to clearing within the area described in Clearing Authorised above, the area shall be inspected by a *fauna specialist* who shall identify trees that contain hollows suitable to be utilised as habitat by fauna listed in the *Wildlife Conservation (Specially Protected Fauna) Notice 2005*.
- (d) Prior to clearing the Permit Holder shall ensure that any fauna identified in condition 9(c) shall be removed by a *fauna clearing person*, in accordance with a licence issued by the Department of Environment and Conservation.

10. Offsets

The Permit Holder must implement and adhere to the offset proposal 'Mundijong Road Extension - Environmental Offsets Strategy, 15 April 2009' and to 'Attachment A: Proposed Rehabilitation Methods and Measurement, 5 May 2009'.

PART III – RECORD KEEPING AND REPORTING

11. Records must be kept

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

- (a) In relation to the clearing of native vegetation authorised under this Permit:
 - (i) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (ii) the date that the area was cleared; and
 - (iii) the size of the area cleared (in hectares).
- (b) In relation to Fauna Management pursuant to condition 9:
 - (i) the number of species identified, and that have been observed utilising the area;
 - (ii) the species of fauna reasonably likely to utilise, or that have been observed utilising the habitat trees;
 - (iii) the species and number of each species relocated; and the location and date where relocated fauna was released, using Geocentric Datum Australia 1994.
- (c) In relation to the *offsets* of areas pursuant to condition 10:
 - (i) the location of any area of *offsets* recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
 - (ii) a description of the *offset* activities undertaken; and
 - (iii) the size of the *offset* area (in hectares).

12. 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 11 and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 18 October 2013, the permit holder must provide to the CEO a written report of records required under condition 11 where these records have not already been provided under condition 12(a).

DEFINITIONS

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

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

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;

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;

offset means an offset required to be implemented under Condition 10 of this Permit;

road building materials means rock, gravel, soil, stone, timber, boulders and water;

weed 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 *Agricultural and Related Resources Protection Act 1976*.



Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

26 October 2011

Plan 2493/3



LEGEND

- Clearing Instruments**
- Areas Approved to Clear
 - Road Centrelines
 - Cadastral

Swan Coastal Plain Central
20cm Orthomosaic - Landgate
2009



0 625 m

Scale 1:23307

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

Date 26/10/11

K. Faulkner
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.: 2493/3
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: City of Rockingham

1.3. Property details

Property:
 LOT 288 ON PLAN 202704 (Lot No. 288 KEROSENE BALDIVIS 6171)
 LOT 2209 ON PLAN 211650 (Lot No. 2209 MILLAR BALDIVIS 6171)
 LOT 777 ON PLAN 3893 (LEDA 6170)
 LOT 478 ON PLAN 27774 (COOLOONGUP 6168)
 LOT 4335 ON PLAN 11170 (LEDA 6170)
 UNALLOCATED CROWN LAND (LEDA 6170)
 LOT 776 ON PLAN 3893 (LEDA 6170)
 LOT 503 ON PLAN 56798 (LEDA 6170)
 LOT 4639 ON PLAN 27786 (LEDA 6170)
 ROAD RESERVE (COOLOONGUP 6168)
 LOT 283 ON PLAN 202704 (Lot No. 283 MILLAR BALDIVIS 6171)
 LOT 1387 ON PLAN 218497 (Lot No. 285 MANDURAH BALDIVIS 6171)
 LOT 6 ON DIAGRAM 51529 (Lot No. 6 KEROSENE BALDIVIS 6171)
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 ROAD RESERVE (BALDIVIS 6171)
 LOT 34 ON DIAGRAM 97594 (BALDIVIS 6171)
 ROAD RESERVE (BALDIVIS 6171)

Local Government Area: City of Rockingham
 Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.11		Mechanical Removal	Water/gas/cable/pipeline/power installation
11		Mechanical Removal	Road construction or maintenance

1.5. Decision on application

Decision on Permit Application: Grant
 Decision Date: 26 October 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
Beard vegetation association : 968 - Medium woodland; jarrah, marri & wandoo. 998 - Medium woodland; tuart. 1001 - Medium very sparse woodland; jarrah, with low woodland; banksia & casuarina.	This amended application proposes to clear 11.11 hectares of native vegetation over a total of distance of approximately 4 km for the upgrade and extension of Mundijong Road between the Kwinana Freeway in the east and Dixon Road in the west.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The vegetation description and condition of the vegetation under application is based on a consultant's report (GHD 2008).
Hedde vegetation complex : Karrakatta Complex - Central and South: Predominantly open forest of E. gomphocephala - E. marginata - C. calophylla and woodland of E.	The area under application is located within an undulating landscape incorporating both bushland and cleared areas, ranging from completely degraded condition to very good		

marginata - Banksia species.

condition.

Serpentine River Complex - Closed scrub of Melaleuca species and fringing woodland of E. rudis - M. rhapsiophylla along streams. (Heddle et al 1980).

The vegetation in the eastern portion of the area under application has previously been parkland cleared and comprises isolated C. calophylla trees over mixed pasture grasses and weed species and is considered to be in a completely degraded condition.

Beard vegetation association :
998 - Medium woodland; tuart.
(Shepherd 2009).

The central portion of the area under application comprises of:
- Acacia rostellifera thicket
- Eucalyptus marginata, Corymbia calophylla open woodland over mixed understorey
- Melaleuca rhapsiophylla over sedges
- Scattered Eucalyptus gomphocephala, Eucalyptus marginata, Corymbia calophylla over Banksia sessilis and weeds

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994) As above

Heddle vegetation complex :
Cottesloe Complex - Central & South: Mosaic of woodland of Eucalyptus gomphocephala and open forest of E. gomphocephala, E. marginata, C. calophylla, closed heath on limestone outcrops.
(Heddle et al 1980).

Beard vegetation association :
968 - Medium woodland; jarrah, marri & wandoo.
998 - Medium woodland; tuart.
3048 - Shrublands; scrub-heath on Swan Coastal Plain. (Shepherd 2009).

The western portion of the area under application traverses Bush Forever site 356.
The vegetation within this area comprises E. gomphocephala, B. littoralis, Xanthorrhoea preissii, Templetonia retusa, Hardenbergia comptoniana, sedge species and non-native grass species is considered to be in very good condition, with degraded areas confined to an access track/firebreaks and along the edges of the vegetated areas.

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994) As above

Heddle vegetation complex :
Quindalup Complex - Coastal dune complex consisting mainly of two alliances - the strand and fore-dune alliance and the mobile and stable dune alliance. Local variations include the low closed forest of Melaleuca lanceolata - Callitris preissii and the closed shrub of Acacia rostellifera

Cottesloe Complex - Central & South: Mosaic of woodland of Eucalyptus gomphocephala and open forest of E. gomphocephala, E. marginata, C. calophylla, closed heath on limestone outcrops.
(Heddle et al 1980)

3. Assessment of application against clearing principles

Comments

This amendment has been made to relocate the current alignment of a section of Mundijong road between Mandurah road and Baldivis Road to ensure that BHP Nickel West Mining facility is not negatively impacted. This proposed realignment will decrease the total area proposed to be cleared from 19.11 hectares to 11.11 hectares. The area has been reduced as earthworks for the road construction will only be for a single carriageway rather than the double carriageway which was initially applied for.

The realignment of this section of road (between Mandurah road and Baldivis Road) has previously been assessed under clearing application CPS 4239/1 which concluded that the proposed clearing is at variance to clearing principles (b), (f) and (h).

Principle (b) is at variance as the area under application is likely to support a range of native fauna, including foraging habitat for black cockatoos and has value as part of an ecological corridor.

Principle (f) is at variance as a portion of the area under application (approximately 0.2 hectares) is located within a mapped Conservation Category Wetland, Kerosene Lane Swamp.

Principle (h) is at variance as a portion of the area under application (approximately 0.95 hectares) is located within Bush Forever site 356, east of Mandurah Road.

Appropriate offsets will mitigate the impacts identified above.

The remainder of the proposed Mundijong Road extension was assessed under clearing permit application CPS 2493/2. The assessment of the clearing principles for this area has not changed and can be found in the Decision Report for CPS 2493/2.

- Methodology** GIS Databases:
- Bushforever
 - Geomorphic Wetlands (Classification), Swan Coastal Plain
 - Pre European Vegetation
 - SAC Bio Datasets (accessed 8/4/2011)
 - Swan Coastal Plain Central 20cm Orthomosaic - Landgate 2009

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

Comments

The original application (CPS 2493/1) was for 19 hectares for the purpose of the construction and expansion of Mundijong Road.

This permit was amended in April 2009 to allow for an addition 0.11 hectares to provide access within the existing Parmelia Pipeline Easement to facilitate gas pipeline excavation.

In February 2011 a separate application (CPS 4239/1) was received from the City of Rockingham which proposed to make the same realignment which is proposed under this current application. CPS 4239/1 was withdrawn in July 2011 and the applicant was advised to amend CPS 2493/1 rather than submitting a separate application.

The City of Rockingham has provided an offset proposal to fence, rehabilitate and manage approximately 86.7 hectares at three sites. Additional information was received on 8 May 2011 providing detail on the proposed rehabilitation methods and on 15 April 2011 a letter was received from the West Australian Planning Commission (WAPC) providing authority to establish offsets on WAPC owned land. DEC consequently approves the offset proposal.

Two Aboriginal sites of significance are located within the eastern portion of the proposed clearing area. The applicant will be advised to liaise with the Department of Indigenous Affairs regarding their obligations under the Aboriginal Heritage Act 1972.

- Methodology** GIS Databases:
- Aboriginal Sites of Significance

4. References

GHD (2008) Flora and Fauna Assessment Report for the Mundijong Road Extension, unpublished report prepared for the City of Rockingham.

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)