



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 9018/2

File Number: DWERVT6339

Duration of Permit: From 26 November 2020 to 26 November 2022

PERMIT HOLDER

City of Cockburn

LAND ON WHICH CLEARING IS TO BE DONE

Lot 500 on Deposited Plan 416546, Jandakot

Lot 501 on Deposited Plan 416549, Jandakot

Lot 502 on Deposited Plan 416550, Jandakot

Lot 504 on Deposited Plan 416552, Jandakot

Lot 505 on Deposited Plan 416551, Jandakot

Lot 508 on Deposited Plan 416548, Jandakot

Lot 509 on Deposited Plan 416547, Jandakot

Boeing Way road reserve (PIN 1184357), Jandakot

Jandakot Road reserve (PINs 1187135, 11871425 and 11871426), Jandakot

Solomon Road reserve (PIN 1184356), Jandakot

Un-named Road reserves (PINs 11861474, 12251168, 12278473, 12354710, and 12354709), Jandakot

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 2.15 hectares of native vegetation within the area cross-hatched yellow on attached Plan 9018/2a and Plan 9018/2b.

CONDITIONS

1. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, 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.

2. Dieback and weed control

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*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no known *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

3. Fauna management (directional clearing)

Clearing shall be conducted in a slow, progressive manner from east to west to allow fauna to move out of the clearing area and into adjacent remnant vegetation.

4. Offset – Land acquisition

Prior to 1 August 2021, the Permit Holder shall provide to the *CEO* a copy of the executed change in purpose of Lot 500 on Plan 413034 (being Crown Reserve 1820) from ‘Recreation’ to ‘Conservation’ on Plan 9018/2c.

5. Offset - Vegetation management - fencing

- (a) Within six months of clearing, the Permit Holder shall construct a fence enclosing the area coloured orange on Plan 9018/2c.
- (b) By 17 April 2022, the Permit Holder shall construct a fence enclosing the area coloured grey on Plan 9018/2c.
- (c) Fences should allow for the movement of wildlife by being raised 15cm from the ground.
- (d) Within one month of installing the above fences, the Permit Holder shall notify the *CEO* in writing that the fence has been completed.

6. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, in relation to the clearing of native vegetation authorised under this Permit:

- (a) 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;
- (b) the date that the area was cleared;
- (c) the size of the area cleared (in hectares);
- (d) the direction that clearing was undertaken;
- (e) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 1 of this Permit;
- (f) actions taken to minimise the risk of the introduction and spread of dieback and weeds in accordance with condition 2 of this Permit; and
- (g) evidence supporting compliance with conditions 4 and 5 of this Permit.

7. Reporting

- (a) The permit holder must provide to the *CEO*, on or before 30 June of each calendar year, a written report containing:
 - (i) the records required to be kept under condition 8; and
 - (ii) records of activities done by the permit holder under this permit between 1 January and 31 December of the preceding calendar year.
- (b) If no clearing authorised under this permit has been undertaken, a written report confirming that no clearing under this permit has been undertaken, must be provided to the *CEO* on or before 30 June of each calendar year.
- (c) The permit holder must provide to the *CEO*, no later than 90 calendar days prior to the expiry date of the permit, a written report of records required under condition 6, where these records have not already been provided under condition 7(a).

DEFINITIONS

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

black cockatoo habitat tree/s: means trees that have a diameter, measured at 1.5 metres from the base of the tree, of 50 centimetres or greater;

CEO: means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

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

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

land degradation includes salinity, erosion, soil acidity and waterlogging;

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 any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*;
or
- (b) published in a Department of Biodiversity, Conservation and Attractions Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



Mathew Gannaway
MANAGER
NATIVE VEGETATION REGULATION

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

10 December 2020

Plan 9018/2a



Legend

-  CPS areas approved to clear base layers
-  Local Government Authorities
-  Cadastre - LGATE 218
-  Roads - Landgate 012

Image



Mathew
Gannaway
2020.12.10
08:33:55 +08'00'

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



MGA 94
Geocentric Datum of Australia 1994




GOVERNMENT OF
WESTERN AUSTRALIA

WA Crown Copyright 2018

Plan 9018/2b



Legend

-  CPS areas approved to clear base layers
-  Local Government Authorities
-  Cadastre - LGATE 218
-  Roads - Landgate 012

Image



Mathew
Gannaway
2020.12.10
08:32:52 +08'00'

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



MGA 94
Geocentric Datum of Australia 1994








GOVERNMENT OF
WESTERN AUSTRALIA


WA Crown Copyright 2018

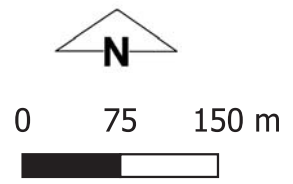
Plan 9018/2c



Legend

-  CPS subject to conditions
-  base layers
-  Local Government Authorities
-  Cadastre - LGATE 218
-  Roads - Landgate 012


 Mathew Gannaway
 2020.12.10
 08:33:23 +08'00'
 Officer with delegated authority under Section 20
 of the Environmental Protection Act 1986



MGA 94
 Geocentric Datum of Australia 1994

 GOVERNMENT OF
 WESTERN AUSTRALIA
 WA Crown Copyright 2018



Clearing Permit Decision Report

1. Application details and outcome

1.1. Permit application details

| | |
|-------------------------------|--|
| Permit number: | CPS 9018/2 |
| Permit type: | Area permit |
| Applicant name: | City of Cockburn (the City) |
| Application received: | 9 December 2020 |
| Application area: | 2.15 hectares (ha) of native vegetation |
| Purpose of clearing: | Road widening |
| Method of clearing: | Mechanical |
| Property: | Lot 500 on Deposited Plan 416546 Lot 501 on Deposited Plan 416549 Lot 502 on Deposited Plan 416550 Lot 504 on Deposited Plan 416552 Lot 505 on Deposited Plan 416551 Lot 508 on Deposited Plan 416548 Lot 509 on Deposited Plan 416547 Boeing Way road reserve (PIN 1184357) Jandakot Road reserve (PINs 1187135, 11871425 and 11871426) Solomon Road reserve (PIN 1184356) Un-named Road reserves (PINs 11861474, 12251168, 12278473, 12354710, and 12354709) |
| Location (LGA area/s): | City of Cockburn |
| Localities (suburb/s): | Jandakot |

1.2. Decision on application and key considerations

| | |
|-----------------------|---|
| Decision: | Granted |
| Decision date: | 10 December 2020 |
| Decision area: | 2.15 ha of native vegetation, as depicted in Section 1.5. |

1.3. Reasons for decision

An amendment to Clearing Permit CPS 9018/1 has been made to correct a digitising error in Plan 9018/1b.

The assessment against clearing principles has not changed and can be found in the Clearing Permit Decision Report CPS 9018/1.

1.4. Site maps

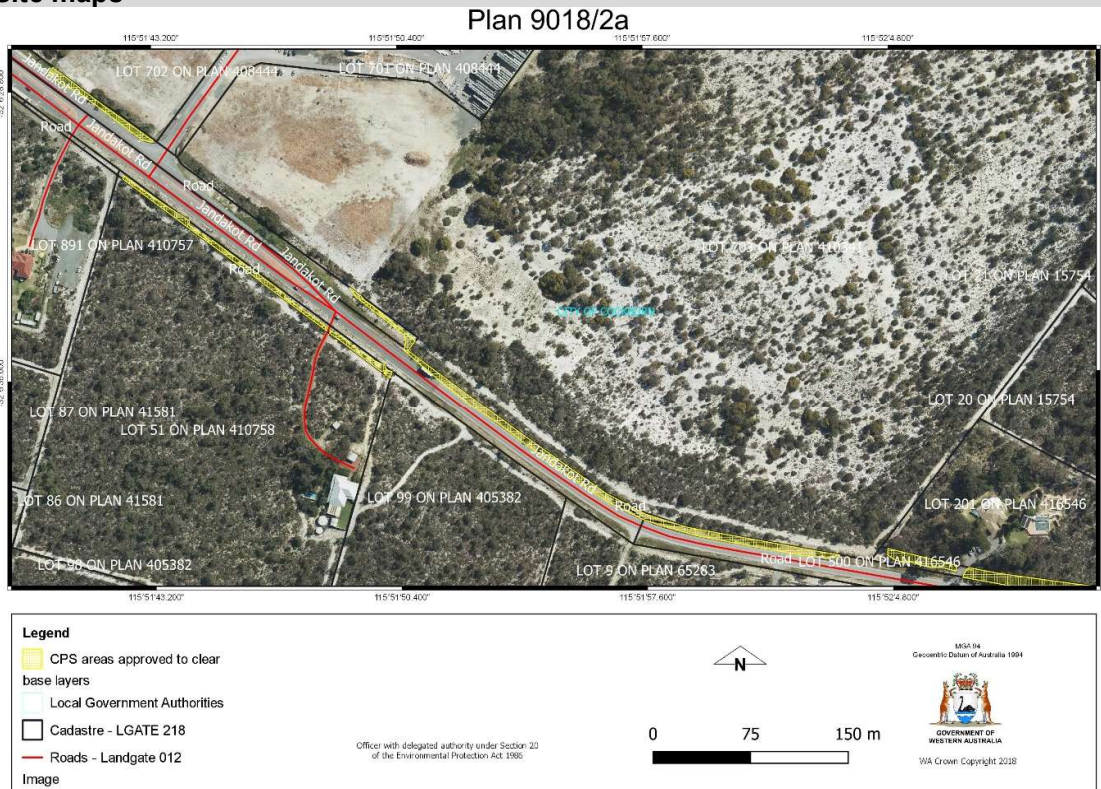


Figure 1a



Figure 1b

Figure 1a and 1b. Maps of the application area. The areas cross-hatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

1.5. Relevant planning instruments and other matters

The assessment against planning instruments and other matters has not changed and can be found in Clearing Permit Decision Report CPS 9018/1.

Appendix A – Site characteristics

The information provided below describes the key characteristics of the area proposed to be cleared and is based on the best information available to Department of Water and Environmental Regulation (DWER) at the time of the assessment.

1. Site characteristics

| Site characteristic | Details |
|------------------------|--|
| Local context | <p>Spatial data indicate the local area (10 km radius of the application area, which is equal to approximately 34,911 ha) (excluding ocean) retains approximately 17.49 per cent (6,062 ha).</p> <p>Approximately 5.92 per cent of the vegetation within the local area (approximately 2052 ha) occurs within Department of Biodiversity, Conservation and Attractions (DBCA) managed estate.</p> |
| Vegetation description | <p>Vegetation survey (GHD Pty Ltd (GHD), 2019) indicate the vegetation within the proposed clearing area consists of three vegetation types:</p> <ul style="list-style-type: none"> • VT01 (approximately 55 per cent of the application area), which is described as <i>Banksia attenuata</i>, <i>Banksia menziesii</i> and <i>Eucalyptus marginata</i> subsp. <i>marginata</i> open woodland; • VT02 (approximately 32 per cent of the application area), which is described as <i>Melaleuca preissiana</i> and <i>Banksia ilicifolia</i> isolated trees to open woodland; and • VT03 (approximately 13 per cent of the application area), which is described as <i>Eucalyptus rudis</i> open woodland over <i>Melaleuca preissiana</i> low woodland. <p>This is consistent with the Swan Coastal Plain mapped vegetation Bassendean Complex – Central and South, which is described as vegetation ranging from woodland of <i>Eucalyptus marginata</i> (Jarrah) - <i>Allocasuarina fraseriana</i> (Sheoak) - <i>Banksia</i> species to low woodland of <i>Melaleuca</i> species, and sedgelands on the moister sites. This area includes the transition of <i>Eucalyptus marginata</i> (Jarrah) to <i>Eucalyptus tottiana</i> (Pricklybark) in the vicinity of Perth (Heddl et al., 1980).</p> |
| Vegetation condition | <p>Vegetation survey (GHD, 2019) indicate the vegetation within the proposed clearing area is in:</p> <ul style="list-style-type: none"> • Very good (Keighery, 1994) condition - approximately 24.6 per cent of the application area; • Good (Keighery, 1994) condition - approximately 45.8 per cent of the application area; • Degraded (Keighery, 1994) condition - approximately 23.1 per cent of the application area; and • Completely degraded (Keighery, 1994) condition - approximately 6.5 per cent of the application area. <p>The full Keighery condition rating scale is provided in Appendix B.</p> |
| Soil description | <p>The soil within the application area is mapped as the following subsystems (Department of Primary Industries and Regional Development, 2020):</p> <ul style="list-style-type: none"> • Bassendean B1 Phase (approximately 80 per cent of the application area), which is described as extremely low to very low relief dunes, undulating sandplain and discrete sand rises with deep bleached grey sands sometimes with a pale yellow B horizon or a weak iron-organic hardpan at depths generally greater than 2 meter; banksia dominant (Schoknecht et al., 2004); • Bassendean B2 Phase (approximately 10 per cent of the application area), which is described as flat to very gently undulating sandplain with well to moderately well drained deep bleached grey sands with a pale yellow B horizon or a weak iron-organic hardpan to 1-2 meters (Schoknecht et al., 2004); and • Bassendean B4 Phase (approximately 10 per cent of the application area), which is described as broad poorly drained sandplain with deep grey siliceous |

| Site characteristic | Details |
|-----------------------|--|
| | sands or bleached sands, underlain at depths generally greater than 1.5 meters by clay or less frequently a strong iron-organic hardpan (Schoknecht et al., 2004). |
| Land degradation risk | The mapped soils within the application area have a high risk of acidification and microbial purification. In addition to this, Bassendean B1 and B2 Phases have also an increased risk of water repell and water storage. |
| Waterbodies | The desktop assessment indicates that two unknown sumpland type resource enhancement wetlands (IDs 6877 and 6881) are mapped within the application area. No watercourses are mapped within the application area. |
| Conservation areas | The closest conservation area is located approximately 2.1 km northeast of the application area. |
| Climate and landform | <i>Rainfall:</i> 900 millimetres <i>Evapotranspiration:</i> 800 millimetres <i>Groundwater Salinity (Total Dissolved Solids):</i> <500 milligrams per litre total dissolved solids |

2. Vegetation extent

| | Pre-European extent (ha) | Current extent (ha) | % remaining | Current extent in all DBCA managed land (ha) | % current extent in all DBCA managed land (proportion of pre-European extent) |
|---|--------------------------|---------------------|-------------|--|---|
| IBRA bioregion | | | | | |
| SCP | 850,785.09 | 276,461.42 | 32.49 | 153,017.73 | 17.99 |
| Vegetation complex | | | | | |
| Bassendean Complex – Central and South | 87,476.26 | 23,508.66 | 26.87 | 7,614.25 | 8.70 |
| Local area | | | | | |
| 10 km radius from the perimeter of the application area | 34,911.09 | 6,062.42 | 17.37 | 2,051.57 | 5.88 |

Appendix B – Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Measuring Vegetation Condition for the South West and Interzone Botanical Province (Keighery, 1994)

| Condition | Description |
|---------------------|--|
| Pristine | Pristine or nearly so, no obvious signs of disturbance. |
| Excellent | Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species. |
| Very Good | Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing. |
| Good | Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing. |
| Degraded | Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing. |
| Completely Degraded | The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs. |

Appendix C – References and databases

1. GIS datasets

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Consanguineous Wetlands Suites (DBCA-020)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography – Inland Waters – Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Offsets Register – Offsets (DWER-078)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Remnant Vegetation, All Areas
- Soil Landscape Mapping – Best Available
- Soil Landscape Mapping – Systems
- Soil Landscape Land Quality – Flood Risk (DPIRD-007)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)
- Soil Landscape Land Quality – Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality – Phosphorus Export Risk (DPIRD-010)
- South Coast Significant Wetlands (DBCA-018)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- RIWI Act, Groundwater Areas (DWER-034)

Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) – Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities

2. References

- Department of Primary Industries and Regional Development (DPIRD) (2020). NRInfo Digital Mapping. Accessed at <https://maps.agric.wa.gov.au/nrm-info/> Accessed December 20. Department of Primary Industries and Regional Development. Government of Western Australia.
- GHD (2019) *City of Cockburn Jandakot Rd Infill Flora and Fauna Surveys*. Biological surveys conducted in relation to clearing permit application CPS 9018/1. Received by DWER on 19 August 2020. DWER Ref: A1925359.
- Government of Western Australia (2019) 2018 South West Vegetation Complex Statistics. Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth, <https://catalogue.data.wa.gov.au/dataset/dbca>
- Government of Western Australia. (2019). 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- 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.