



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 3682/2
File Number: DEC11052
Duration of Permit: From 13 June 2010 to 13 June 2012

PERMIT HOLDER

Northern Corridor Developments Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 1001 Romeo Road, Alkimos

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 2.014 hectares of native vegetation within the areas hatched yellow on attached Plan 3682/2.

CONDITIONS

1. 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) shall not move soils in wet conditions;
- (c) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

DEFINITIONS

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

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

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; and

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*.

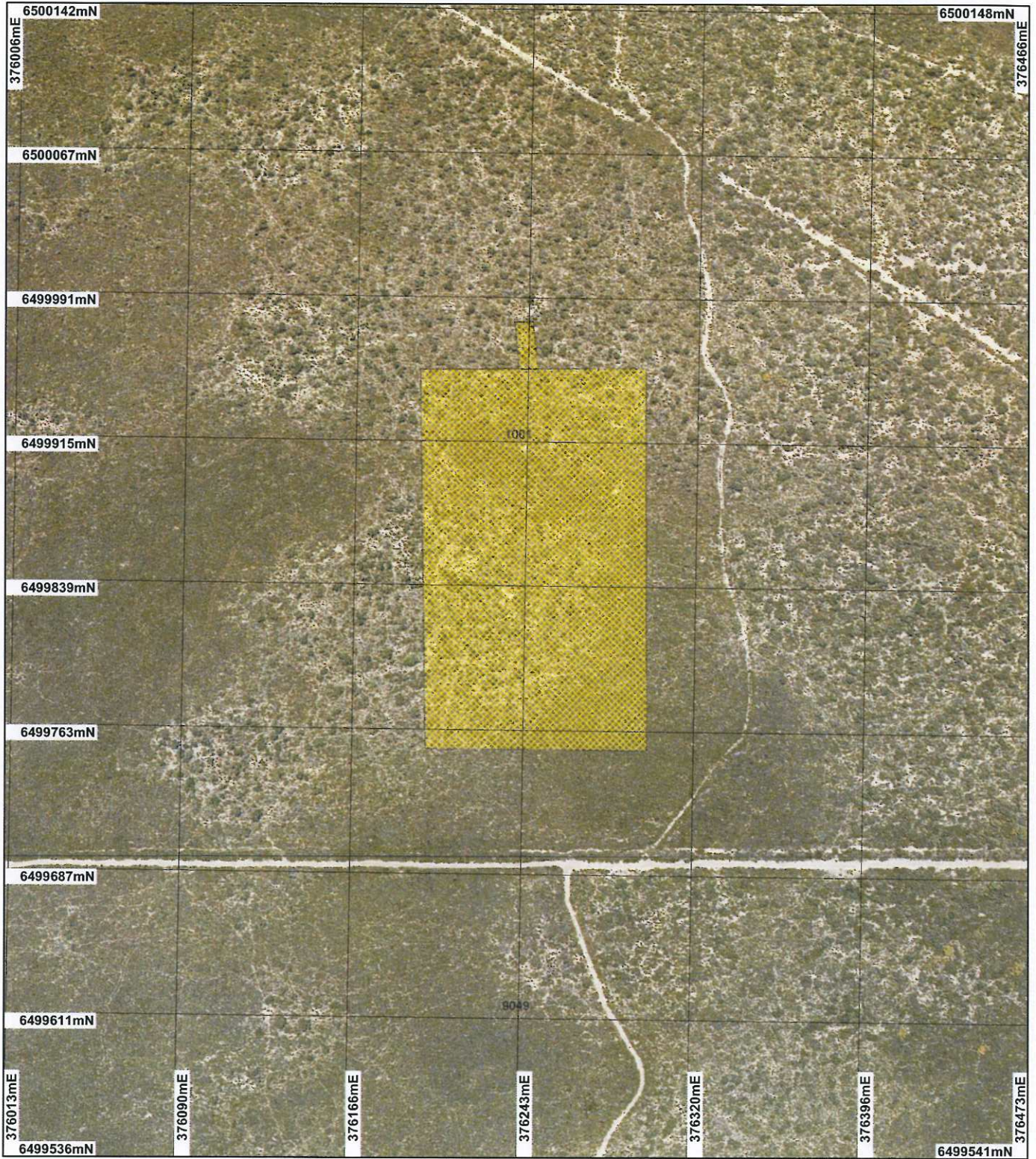


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

28 October 2010

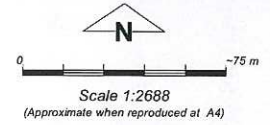
Plan 3682/2



LEGEND

- Cadastre for labelling
- Road Centrelines
- FW
- HY
- LRO
- LRS (cont)
- MR
- N
- TR
- Clearing Instruments
- Areas Applied to Clear
- Areas Subject to Conditions (cont)
- Areas Approved to Clear

Swan Coastal Plain North
20cm Orthomosaic - Landgate
2009



Geocentric Datum Australia 1994

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

K. Faulkner Date 28/1/10
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.



* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.



1. Application details

1.1. Permit application details

Permit application No.: 3682/2
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Coffey Environments Pty Ltd on behalf of Northern Corridor Developments Ltd

1.3. Property details

Property: LOT 1001 ON PLAN 61236 (House No. 2560 MARMION ALKIMOS 6038)
Local Government Area:
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.014		Mechanical Removal	Building or Structure

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 28 October 2010

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
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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 proponent has requested to amend the size and dimensions of CPS 3682/1 to 2.014ha within Lot 1001 Romeo Road, Alkimos for the purpose of constructing a temporary onsite plant salvage nursery and associated infrastructure.

The area under application contains *Banksia attenuata* and *Banksia menziesii* low woodland and *Calothamnus quadrifidus* mixed heath in excellent (Keighery, 1994) condition (ATA Environmental, 2004).

A flora survey carried out in October 2004, identified 180 species including 30 exotic species of flora within lots 1001 and 1002 Romeo Rd. The survey did not identify any rare or priority flora species occurring within the area under application (ATA Environmental, 2004).

The flora survey identified a Priority Ecological Community (PEC) occurring within the area under application, that being Floristic Community Type (FCT) 24: Northern Spearwood shrublands and woodlands. This PEC is considered to be in excellent (Keighery, 1994) condition (ATA Environmental 2004). In addition, 66 fauna species were recorded during the fauna survey (ATA Environmental 2008) including the conservation significant species Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*).

Given that the area under application is in excellent condition, contains three vegetation communities, contains a PEC, contains habitat for conservation fauna species and contains high floral and faunal diversity, the proposed clearing is considered to be at variance to this Principle.

A dieback and weed condition will be placed on the permit to reduce impacts of the proposed clearing and an offset has already been provided in relation to clearing Carnaby's black cockatoo habitat within Lot 1001 and Lot 1002.

Methodology

References

- ATA Environmental (2004)
- ATA Environmental (2008)

-Keighery (1994)
GIS Databases
-SAC Bio Databases (07/04/2010)

(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 at variance to this Principle

Within the local area (~ 5 km radius) 5 species of conservation significant fauna have been recorded, including Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*), Quenda (*Isodon obesulus fusciventer*), Western Brush Wallaby (*Macropus irma*), Carpet Python (*Morelia spilota imbricata*) and the Black Striped Snake (*Neelaps calonotos*).

The vegetation under application is in excellent (Keighery, 1994) condition and includes an understorey that would provide suitable habitat for ground-dwelling fauna such as snakes, lizards and the conservation significant species, Quenda (*Isodon obesulus fusciventer*) and Carpet python (*Morelia spilota*). A fauna survey of both Lot 1001 and 1002 (includes the areas under application) undertaken in November 2007 identified 27 vertebrate fauna species including two species of burrowing frogs, two mammal species (Honey Possum (*Tarsipes rostratus*) and the South Western Free-tail Bat (*Mormopterus* sp) and 23 reptiles species (ATA Environmental, 2008).

The Graceful Sunmoth (*Synemon gratiosa*), has been recorded 4.3km south of the area under application. This species requires *Lomandra* spp. as host plants and shows some preference for high quality vegetation (DEC 2008, Williams 2009). The area under application contains *Banksia* woodland, coastal heath and shrublands in an excellent (Keighery, 1994) condition, as well as three *Lomandra* species (including both *L. maritima*, which is describes as common in parts of the area under application, and *L. hermaphrodita*) (ATA Environmental 2008).

Coffey Environments (2010a and 2010b) submitted reports outlining the results of two surveys, a Graceful Sun Moth survey undertaken over four days in March 2010 and a *Lomandra* presence and density survey. Four Graceful Sun Moths were captured on Lot 1001 and ten Graceful Sun Moths were captured on Lot 1002 (the lot west of Marmion Avenue). However, none were identified within the application area and none were identified within the vegetation type found within the area under application. In addition, the *Lomandra* survey found that relatively small densities of *Lomandra* occur within the vegetation type found within the application area and therefore it can be assumed that it is unlikely for Graceful Sun Moths to occur within the area under application and that the application area is not a significant habitat for this conservation significant species.

The fauna survey also recorded 39 bird species within Lots 1001 and 1002 (ATA Environmental, 2008) including the conservation significant species Carnaby's black cockatoo (*Calyptorhynchus latirostris*). The application area comprises 2ha of *Banksia* low woodland in excellent condition (ATA Environmental, 2004). Carnaby's black cockatoos are known to feed on seeds, nuts and flowers of a large variety of plants including *Banksia*, *Dryandra* and *Grevillea*, with the Northern Region of the Swan Coastal Plain considered being an important area throughout the season for this species (Shah, 2006). Therefore, it is considered that the proposed clearing is a significant feeding habitat for this species.

The proposal is considered to be at variance to this principle.

An offset has already been provided in relation to clearing Carnaby's black cockatoo habitat within Lot 1001 and Lot 1002 and satisfies the requirement of DEC.

Methodology References
-ATA Environmental (2008)
-DEC (2008)
-Coffey Environments (2010a)
-Coffey Environments (2010b)
-Shah (2006)
-Williams (2009)
GIS Databases
-SAC Bio Datasets (07/04/2010)

(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 is one rare flora species, *Eucalyptus argutifolia*, recorded in the local area (~ 10 km radius) being 5.8 km east of the area under application.

This species occurs on shallow soils over limestone on slopes or gullies of limestone ridges or outcrops (Western Australia Herbarium 1998-).

The vegetation under application comprises mainly of *Banksia* woodland on Spearwood sands (ATA

Environmental 2004). A vegetation survey undertaken in October 2004 did not identify this species or any other rare flora within the area under application (ATA Environmental 2004). Therefore, it is not considered likely that the proposed clearing is at variance to this Principle.

- Methodology** References
 -ATA Environmental (2004)
 -Western Australia Herbarium (1998-)
 GIS Databases
 -SAC Bio Databases (08/04/2010)

(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**
 Twelve recordings of the Threatened Ecological Community (TEC) 26a: Melaleuca huegelii - Melaleuca acerosa shrublands over limestone ridges was recorded in the local area (~5 km radius). The nearest occurrence is approximately 2.3 km north of the area under application.

The area under application contains Banksia attenuata and Banksia menziesii low woodland, Dryandra sessilis closed scrub and Calothamnus quadrifidus mixed heath in excellent condition (ATA Environmental, 2004).

A flora and vegetation survey undertaken during October of 2004 did not identify any vegetation associated with a TEC within the area under application. Therefore, it is not considered likely that the proposed clearing is at variance to this Principle.

- Methodology** References
 -ATA Environmental (2004)
 GIS Databases
 - SAC Bio Databases (08/04/2010)

(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**
 Heddle et al. (1980) defines the vegetation under application as Cottesloe Complex - Central and South, of which there is 41.1% of pre-European extent remaining (EPA 2006). The vegetation under application is also described as Beard vegetation association 949, of which there is 58.4% of pre-1750 extent remaining in the bioregion (Shepherd 2007).

The area under application is located within the City of Wanneroo, which has 49.6% of pre-European vegetation extent remaining. In addition, there is approximately 55.5% of pre-European vegetation remaining in the local area (~5 km radius).

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). The vegetation types under application retain more than the 30% threshold level.

In addition, the areas under application are not a significant remnant in the local area due to its connectivity to other bushland and that it is situated in an area where large amounts of vegetation remain (55% in local area. Therefore, the proposal is not considered likely to be at variance to this Principle.

	Pre-European (ha)	Current extent (ha)	Remaining (%)
IBRA Bioregion*			
Swan Coastal Plain	1,501,208	583,141	38.8
City of Wanneroo*	67,697	33,637	49.6
Local Area (~5 km radius)	6694	~3715	~55.5
Heddle vegetation complex**			
Cottesloe Central/ South	44,995	18,474	41.1
Beard type*			
949 (SCP)	209,983	122,677	58.4

* (Shepherd 2007)

** (EPA, 2006)

Methodology References
-Commonwealth of Australia (2001)
-EPA (2000)
-EPA (2006)
-Shepherd (2007)
GIS Databases
-Hedde Vegetation Complexes
-NLWRA, Current Extent of Native Vegetation
-Pre-European Vegetation

(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**
The nearest wetland to the area under application is a Resource Enhancement Wetland, Carabooda Lake, occurring 2.3 km northwest and a Conservation Category Wetland occurring 3.1 km west of the area under application. The nearest watercourse (Chandala Brook) occurs 27 km east of the area under application.

Given the distance to the nearest watercourse and wetlands it is not considered likely for the proposed clearing to be at variance to this Principle.

Methodology GIS Databases
-Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
-Hydrography, linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments **Proposal may be at variance to this Principle**
The soils within the area under application are part of the Spearwood Dune System and comprise of siliceous sands with some brown sands and leached sands (Northcote et al. 1960-68), which are considered to have a high risk of wind erosion (Department of Agriculture 2005).

Given the high risk of wind erosion, the proposed clearing may cause short term appreciable land degradation.

Methodology References
-Department of Agriculture (2005)
-Northcote et al. (1960-68)
GIS Databases
-Soils, Statewide

(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 area is Neerabup National Park (also known as Bush Forever site 383), which occurs approximately 1.2 km east of the area under application.

Given the relatively small area to be cleared (2.014 ha) and that it is surrounded by native vegetation in a larger remnant, it is not considered likely for the proposed clearing to be at variance to this Principle.

Methodology GIS Databases
-DEC Managed Land
-BUSH Forever

(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**
The nearest wetland to the area under application is a Resource Enhancement Wetland, Carabooda Lake, occurring 2.3 km northwest and a Conservation Category Wetland occurring 3.1 km west of the area under application. The nearest watercourse (Chandala Brook) occurs 27 km east of the area under application.

The area under application is not within a Priority Drinking Water Source Area (PDWSA) and has a low salinity risk. Therefore, it is unlikely for the proposed clearing to cause deterioration to the quality of underground water.

Given the distance to the closest wetlands and watercourse, the small area to be cleared and low salinity risk, it

is not considered likely for the proposed clearing to be at variance to this Principle.

Methodology GIS Databases
-Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
-Hydrography, linear
-Priority Drinking Water Source Area (PDWSA)
-Salinity Risk

(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 nearest wetland to the area under application is a Resource Enhancement Wetland, Carabooda Lake, occurring 2.3 km northwest and a Conservation Category Wetland occurring 3.1 km west of the area under application. The nearest watercourse (Chandala Brook) occurs 27 km east of the area under application.

Given the distance to the nearest watercourse and wetlands and the sandy soil occurring within the application area (Northcote et al 1960-68), it is not considered likely for the proposed clearing to be at variance to this Principle.

Methodology References
-Northcote et al (1960-68)
GIS Databases
-Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
-Hydrography, linear

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

Comments

The proponent has requested to amend the size and dimension of CPS 3682/1 to 2.014ha within Lot 1001 Romeo Road, Alkimos for the purpose constructing a temporary onsite plant salvage nursery and associated infrastructure (Car parking facilities, storage areas) which will be used for storing plants salvaged from other parts of Lot 1001 for use in landscaping projects to do with subdivision.

The area under application is zoned urban under the Perth Metropolitan Regional Scheme.

An Alkimos-Eglinton Metropolitan Region Scheme Amendment No. 1029/33 was assessed by the Environmental Protection Authority (EPA, 2005). The report and recommendations are outlined in EPA Bulletin 1207.

In November 2008 the Local Structure Plan (LSP) for Lots 1002 and 1001 (formerly known as Lot 3) Romeo Rd, Alkimos (which include the area under application) was referred to the Department of Environment, Water, Heritage and the Arts (DEWHA) by the proponent due to Carnaby's black cockatoo being recorded on site during a fauna survey. DEWHA assessed the impact of the proposed development on the Carnaby's black cockatoo and granted approval with conditions on the 11 September 2009 (DEWHA, 2009).

Northern Corridor Developments Ltd has developed an offset proposal for the removal of significant habitat for Carnaby's black cockatoo within an urban development proposal in Alkimos on Lots 1001 and 1002 Romeo Road, which includes this current proposal. This offset proposal includes:

- Providing \$300,000 to acquire 459 ha of Carnaby's black cockatoo foraging habitat north of Gingin;
- Providing \$314,111 to acquire 477 ha of Carnaby's black cockatoo foraging habitat east of Badgingarra; and
- Retaining as part of reserves, 5.52 ha of Carnaby's black cockatoo foraging habitat within public open space.

DEC considers that this offset proposal adequately mitigates this proposed clearing of 2.014 hectares of native vegetation.

On 3 December 2009 W.A. Planning Commission granted approval subject to conditions of the subdivision within Lot 1001 (immediately east of the area under application CPS 3682/1) (Coffey Environments, 2010). W.A. Planning Commission advised that an application was received on 24 December 2009 (No. 141275) for the western side of Lot 1001 (includes area under application) and was approved with conditions on the 9th of April 2010.

Access to the nursery area will be through an east west road directly north of the application area which is to be cleared through subdivision approval (No.141275) which has been granted on 9 April 2010.

The City of Wanneroo (2010) advised that the proposed clearing is consistent with Local Structure Plan No. 60 and the Federal approval given under the EPBC Act 1999. In addition, the City of Wanneroo advised that Development Approval is required for the plant nursery and to date no application for this purpose has been received.

In November 2009 a permit to clear 12 ha native vegetation within an area of 121 ha was granted (CPS 3085/2) for the purpose of conducting geotechnical searches within Lot 1001. The clearing permit allowed for the clearing of native vegetation to a height no less than 100 millimetres.

CPS 3519/1 also occurs within the same property and was granted for 7.3 ha on the 6 May 2010 with avoid and minimise and dieback and weed control conditions.

- Methodology** **References**
- City of Wanneroo (2010)
 - Coffey Environments (2010)
 - DEWHA (2009)
 - EPA (2005)
 - GIS Databases
 - Metropolitan Regional Scheme Zones

4. References

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)