



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

<b>Purpose Permit number:</b>	CPS 3235/1
<b>Permit Holder:</b>	Australand Holdings Limited
<b>Duration of Permit:</b>	10 October 2009 – 10 October 2014

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

### PART I – CLEARING AUTHORISED

**1. Purpose for which clearing may be done**

Clearing for the purpose of installation of a groundwater re-injection pipeline.

**2. Land on which clearing is to be done**

Lot 2110 on Plan 219369 (NORTH COOGEE 6163)

**3. Area of Clearing**

The Permit Holder must not clear more than 0.16 hectares of native vegetation within the area shaded yellow on attached Plan 3235/1.

**4. Application**

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

**5. 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

**6. Avoid, minimise etc 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:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.



## 7. Retain vegetative material and topsoil, revegetation and rehabilitation

- (a) The Permit Holder shall retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared.
- (b) Within twelve months of the area no longer being required for installation of a groundwater re-injection pipeline, the Permit Holder must *revegetate* and *rehabilitate* the area cross-hatched yellow on attached Plan 3235/1 by:
  - (i) laying the vegetative material and topsoil retained under condition 7(a) on the cleared area;
  - (ii) deliberately *planting* and/or *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area; and
  - (iii) ensuring only *local provenance* seeds and propagating material are used to *revegetate* and *rehabilitate* the area.
- (c) Within twelve months of undertaking *revegetation* and *rehabilitation* in accordance with condition 7(b) of this Permit, the Permit Holder must:
  - (i) determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and
  - (ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 7(c)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, the Permit Holder must undertake additional *planting* or *direct seeding* of native vegetation in accordance with the requirements of condition 7(b)(ii) and (iii) of this Permit.

## PART III - RECORD KEEPING AND REPORTING

### 8. Records to be kept

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

- (a) In relation to the clearing of native vegetation authorised under this Permit:
  - (i) the species composition, structure and density of the cleared area;
  - (ii) 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;
  - (iii) the date that the area was cleared; and
  - (iv) the size of the area cleared (in hectares).
- (b) In relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 7 of this Permit:
  - (i) the location of any areas *revegetated* and *rehabilitated*, 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 *revegetation* and *rehabilitation* activities undertaken;
  - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares); and
  - (iv) the species composition, structure and density of *revegetation* and *rehabilitation*.

### 9. 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 8 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 10 July 2014, the Permit Holder must provide to the CEO a written report of records required under condition 8 of this Permit where these records have not already been provided under condition 9(a) of this Permit.



## Definitions

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

*direct seeding* means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

*environmental specialist* means a person who is engaged by the Permit Holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

*local provenance* means native vegetation seeds and propagating material from natural sources within 10 kilometres of the area cleared.

*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;

*planting* means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

*regenerate/ed/ion* means *revegetation* that can be established from in situ seed banks contained either within the topsoil or seed-bearing *mulch*;

*rehabilitate/ed/ion* means actively managing an area containing native vegetation in order to improve the ecological function of that area;

*revegetate/ed/ion* means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area;



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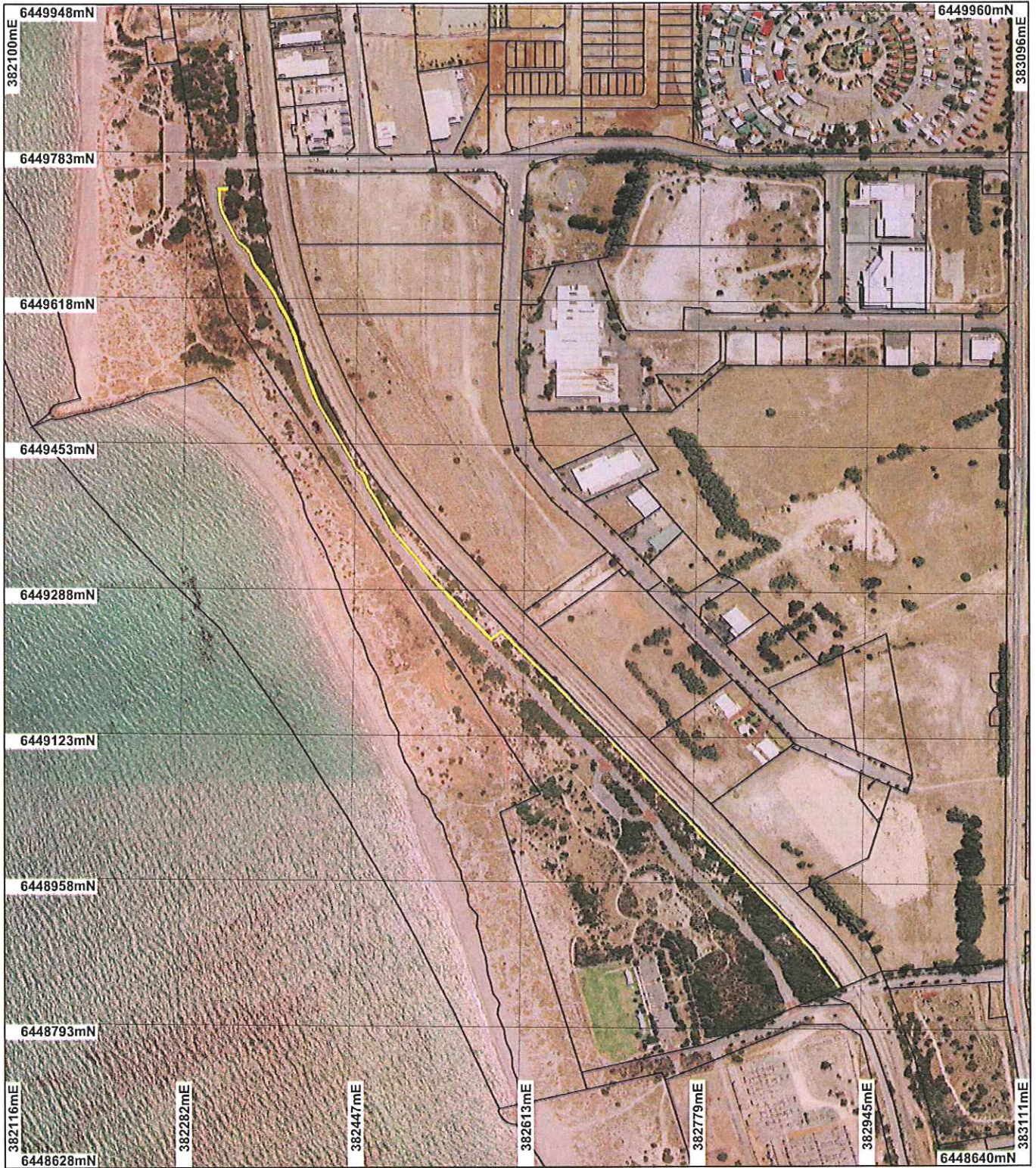
Kelly Faulkner  
MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

10 September 2009

1  
2  
3

# Plan 3235/1



## LEGEND

- Clearing Instruments**
- Areas Approved to Clear
  - Cadastre
- Perth Metropolitan Area  
Central 20cm Orthomosaic -  
Landgate 2007



Scale 1:5837  
(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.

*K Faulkner* Date *10/9/09*  
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.: 3235/1  
 Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Australand Holdings Limited

### 1.3. Property details

Property: LOT 2110 ON PLAN 219369 ( NORTH COOGEE 6163)  
 Local Government Area:  
 Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.16		Mechanical Removal	Water/gas pipeline installation

## 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
The vegetation under application is mapped as consisting of the following vegetation types:	Three vegetation units were mapped within the applied area (RPS, 2009). These included:	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The description and condition of the application area was determined via the use of aerial mapping systems and a level one vegetation survey conducted by RPS Environment and Planning Pty Ltd (RPS, 2009).
Beard 3048 - Shrublands: scrub-heath on the Swan Coastal Plain	- Acacia scrub: Tall Open Scrub of acacia rostellifera with scattered trees of Eucalyptus gomphocephala, E foecunda, E utilis and Callitris preissii over Open Shrubland of Melaleuca huegii, Melaleuca systema, Spyridium globulosum and Acacia cyclops over exotic Herblan/Grassland.		
COTTESLOE COMPLEX - CENTRAL AND SOUTH : Mosaic of woodland of Eucalyptus gomphocephala (Tuart) and open forest of Eucalyptus gomphocephala (Tuart) - Eucalyptus marginata (Jarrah) - Corymbia calophylla (Marri); closed heath on the Limestone outcrops.	- Melaleuca Scrub: Tall Open Scrub of Melaleuca lanceolata over Open Shrubland of Melaleuca systema, Olearia axillaris and Scavola crassifolia over exotic Herblan/Grassland.		
	- Planted Eucalypts: Planted Eucalypts including Eucalyptus foecunda, E. utiis, E. gomphocephala with Callitris preissii over planted Calothamnus sp. over exotic Herblan/Grassland.		
	A large portion of the application area has been previously cleared for infrastructure and a significant amount of the applied area has revegetated or recolonised and is currently in a		

degraded to completely degraded (Keighery, 1994) condition. There is a section of vegetation at the southern end of the applied area that is in a good (Keighery, 1994) condition (RPS, 2009). The amount of vegetation that is in a good condition makes up approximately 14% of the entire amount of vegetation under application

As above	As above	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	As above
As above	As above	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	As above

### 3. Assessment of application against clearing principles

#### Comments

The proposed clearing of 0.16 hectares of native vegetation is for the purpose of installing a sub-surface groundwater re-injection pipeline.

The vegetation ranges from being in a completely degraded to good (Keighery, 1994) condition (RPS, 2009), with approximately 14% of the vegetation being in a good condition.

The vegetation types mapped as occurring within the applied area are well represented within the bioregion and will not be reduced to below the recommended 10% threshold level within a constrained area (EPA, 2006; Heddle et al., 1980; Shepherd, 2007).

The Graceful Sunmoth (*Synemon gratiosa*), a species listed as endangered under the Environment Protection and Biodiversity Conservation Act 1999, was recorded 1.8km north of the applied area. The species requires *Lomandra* spp. host plants and sites where the Graceful Sun Moth has been recorded have had at least 50% of the vegetation rated "Very Good" or better (DEC, 2008).

As the proposed clearing is linear in nature, small in size (0.16ha) and is mainly impacting on vegetation that is either degraded or completely degraded, no significant environmental impacts are anticipated.

The proposed clearing is not likely to be at variance to any of the clearing principles.

**Methodology** DEC (2008)  
EPA (2006)  
Heddle et al. (1980)  
Keighery (1994)  
Shepherd (2007)  
RPS (2009)  
GIS DataSets:

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

#### Comments

The WAPC (land owner) has no objection to the applicant lodging an application for a clearing permit (Trim DOC92569).

The City of Cockburn supports the proposed clearing (Trim Ref: DOC96652).

As the proposal is to clear for a subsurface pipeline the removal of vegetation should be temporary. As a result revegetation conditions have been placed on the permit to mitigate the incremental loss of native vegetation within the applied area.

#### Methodology

#### 4. Assessor's comments

##### Comment

The clearing application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986 and has found:

- All principles are not likely to be at variance

#### 5. References

- DEC (2008), Science Division, Science Research Centre, Advice on the Graceful Sunmoth. TRIM Ref DOC96623
- 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.
- Heddle, 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. (2007). 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. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

#### 6. 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)

