



## **CLEARING PERMIT**

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

<b>Purpose Permit number:</b>	CPS 3619/1
<b>Permit Holder:</b>	Bushido Holdings (WA) Pty Ltd
<b>Duration of Permit:</b>	15 May 2010 – 15 May 2018

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 extractive industry, access roads and fire breaks.

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

Lot 1 on Plan 6244

**3. Area of Clearing**

The Permit Holder must not clear more than 7 hectares of native vegetation within the area hatched yellow on attached Plan 3619/1.

**4. Authorised Clearing**

The Permit Holder shall not clear more than 2 hectares within a 12 month period.

**5. 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.

**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 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.

## 8. 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*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *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.

## 9. Wind erosion management

The Permit Holder shall not clear native vegetation under authorised activity on this Permit unless actively mining that cleared area, within one week of clearing the native vegetation.

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

The Permit Holder shall:

- (a) The Permit Holder shall retain the vegetative material and topsoil removed by clearing in accordance with this Permit.
- (b) Within six month of the area no longer being required for the purpose of limestone extraction the permit holder must *revegetate* the area by:
  - (i) deliberately planting and/or 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;
  - (ii) ensuring only local provenance seeds and propagating material from within 10km of the area cleared are used to *revegetate* the area; and
  - (iii) lay vegetative material and topsoil retained in accordance with condition 10(a) on the area.
- (c) Within one year of undertaking *revegetation* in accordance with condition 10(b), the Permit Holder must:
  - (i) determine the species composition, structure and density of the area revegetated; and
  - (ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 10(c)(i) will not result in a similar species composition, structure and density to pre-clearing vegetation types in that area the Permit Holder must undertake additional planting or seeding of native vegetation in accordance with the requirements of condition 10(b)(i) and (ii).

## 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

- (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* of areas pursuant to condition 10:
  - (i) the commencement date of *revegetation*;
  - (ii) the location of any area *revegetated* recorded using Geocentric Datum Australia 1994;
  - (iii) a description of the *revegetation* activities undertaken;
  - (iv) the size of the area *revegetated* (in hectares); and
  - (v) the species, structure and composition of *revegetation* measured.

## 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 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 16 February 2018, the Permit Holder must provide to the CEO a written report of records required under condition 11 of this Permit where these records have not already been provided under condition 12(a) of this Permit.

### Definitions

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

*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;

*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;

*revegetate, revegetated, revegetation* means the re-establishment of a cover of native vegetation in an area such that the species composition, structure and density is similar to pre-clearing vegetation types in that area, and can involve regeneration, direct seeding and/or planting;

*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*.

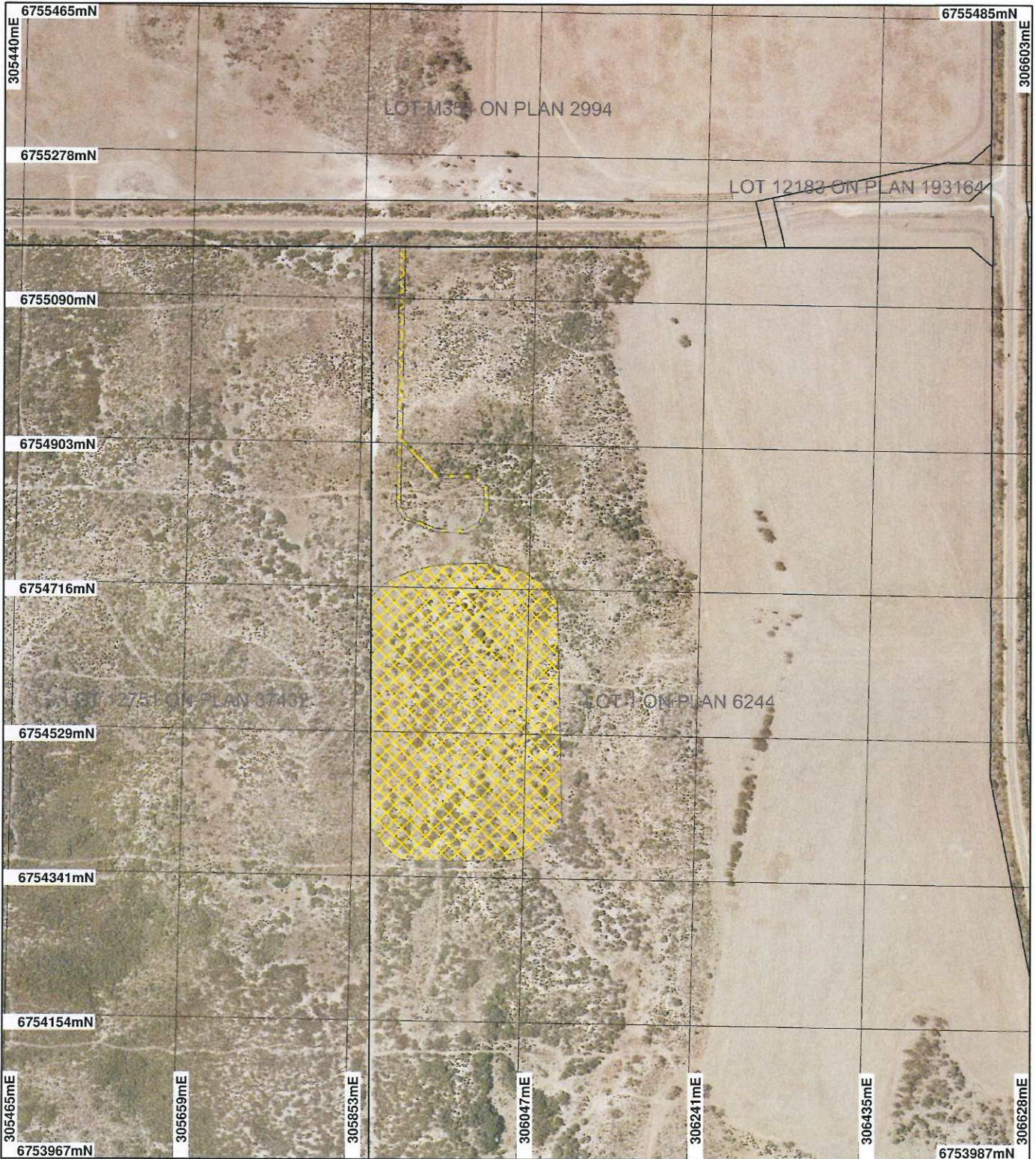


Kelly Faulkner  
MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

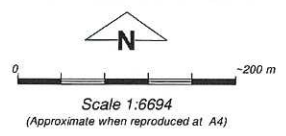
15 April 2010

# Plan 3619/1



## LEGEND

- Clearing Instruments
-  Areas Approved to Clear
- Cadastre for labelling
- Dongara 50cm Orthomosaic - Landgate 2006



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 15/4/10

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.



## 1. Application details

### 1.1. Permit application details

Permit application No.: 3619/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Bushido Holdings (WA) Pty Ltd

### 1.3. Property details

Property: LOT 1 ON PLAN 6244 (House No. 28666 BRAND MOUNT ADAMS 6525)  
Local Government Area:  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
7		Mechanical Removal	Extractive Industry

## 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: 17 - Shrublands; Acacia rostellifera thicket 433 - Mosaic: Shrublands; Acacia rostellifera & Melaleuca cardiophylla thicket / Sparse low woodland; illyarrie (Shepherd, 2007)	The proposal is for the clearing of 7 hectares of native vegetation for the purpose of extracting Lime sand.  The vegetation under application is considered to be in a good (Keighery, 1994) condition.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The condition of the vegetation under application has been assessed through site photographs and aerial imagery.

## 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 not likely to be at variance to this Principle**

The proposal is for the clearing of 7 ha of native vegetation for the purpose of lime sand extraction. From site photographs and aerial imagery the vegetation under application appears to be in good (Keighery, 1994) condition.

There are a number of declared rare and priority listed flora species recorded within the local area (20 km radius) including four rare, one P1, three P2, ten P3 and seven P4 flora species. The application area is unlikely to contain the below rare flora species as they are not known to be found in coastal environments (DEC, 2010).

8x Conostylis dielsii subsp. teres  
6x Conostylis micrantha  
1x Calectasia cyanea  
2x Wurmbea tubulosa

The application area is a part of a large north south remnant of native vegetation, and is adjacent to grazing pastures and unallocated crown land. Weed conditions will be placed on the permit to insure there is no introduction of weeds into the adjacent unallocated land managed by the Department of Environment and Conservation (DEC, 2010).

Given the vegetation under application is a small portion of a larger remnant in similar of better condition, it is unlikely that the application area comprises of a high level of biodiversity.

Methodology References:

DEC (2010)  
Keighery (1994)

GIS Databases:

- Soils, Statewide DA 11/99
- Heddl Vegetation Complexes DEP 22/06/95
- SAC Bio Datasets (19/03/10)
- CALM Managed Lands and Waters CALM 01/08/04
- Pre European Vegetation - DA 01/01

**(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 not likely to be at variance to this Principle**

There are 7 known records of fauna of conservation significance within a 20km radius of the application area, including Malleefowl and Carnaby's black-cockatoo.

The application area is a small portion within a larger north south remnant. This large remnant provides a linkage to conservation reserves and can be utilised and facilitate fauna movement as an ecological corridor.

Given the large remnant of vegetation surrounding the application area the vegetation contained within is unlikely to be significant habitat for fauna species.

**Methodology** GIS Database:  
- Sac Biodatasets (19/3/10)

**(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 are a number of declared rare flora recorded within the local area (20 km radius) These are:

- 8x Conostylis dielsii subsp. teres
- 6x Conostylis micrantha
- 1x Calectasia cyanea
- 2x Wurmbea tubulosa

The application area is unlikely to contain these rare flora species as they are not known to be found in coastal environments (DEC, 2010).

Given the above it is unlikely that the vegetation under application is necessary for the continued existence of rare flora.

**Methodology** References:  
DEC (2010)  
Keighery (1994)

GIS Database:  
- Sac biodataset (19/3/2010)

**(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**

There are no mapped Threatened Ecological Communities (TECs) within the local area (20 km radius). Therefore, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** GIS Database:  
- SAC Biodatasets (19/03/10)

**(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**

The vegetation under application is described as Beard vegetation association 17 of which there is 88% of pre-European extent remaining within the State (Shepherd, 2007) and is located within the Shire of Irwin, of which there is 48% of pre-European vegetation extent remaining.

In addition, there is approximately 50% of pre-European vegetation remaining in the local area (~20km radius),

much of which has been disturbed due to exploration.

	Pre-European (ha)	Current extent (ha)	Remaining %
IBRA Bioregion			
Geraldton Sandplains	3 136 024	1 341 266	42
Shire of Irwin	236 969	114 176	48
Beard type in Bioregion*			
17	54 077	45 107	83

\* (Shepherd 2007)

The Beard vegetation association mapped for the vegetation under application retains more than the 30 percent threshold level recommended in the National Objectives Targets for Biodiversity Conservation within the Geraldton Sandplains; below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth, 2001).

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

**Methodology** References:  
Commonwealth (2001)  
Shepherd (2007)

**(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**  
There are no watercourses or wetlands in close proximity to the area under application.

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

**Methodology** GIS Database:  
- Hydrography linear - DOW 13/7/06

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

**Comments** **Proposal is at variance to this Principle**  
The soil type mapped for the area under application (B24) is described as 'undulating dune landscape underlain by aeolianite which is frequently exposed; small swales of estuarine deposits are included: chief soils are siliceous sands with smaller areas of brown sands and leached sands in the wetter sites' (Northcote et al. 1968).

The proposed clearing is likely to expose highly erodable sandy soils. Therefore, the proposed clearing is at variance to this Principle and wind erosion management as well as revegetation conditions will be placed on the permit to mitigate potential appreciable land degradation.

**Methodology** Reference:  
Northcote et al. (1968)  
  
GIS database:  
- Soils, Statewide DA 11/99

**(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**  
There are two Nature Reserves in close proximity to the area under application. The reserve 4.6 km to the east is Yardanogo Nature Reserve and the reserve 2.1 km to the west is Beekeepers Nature Reserve.

The application area is a part of a large north south remnant of native vegetation, and is adjacent to grazing pastures and unallocated crown land. Weed conditions will be placed on the permit to insure there is no introduction of weeds into the adjacent unallocated land managed by the Department of Environment and Conservation (DEC, 2010).

Given this above clearing of 7 hectares between these reserves is unlikely to incrementally reduce ecological connectivity.

**Methodology** GIS Databases:  
- DEC Tenure - DEC 28/10/09  
- Mingenew 1.4m Orthomosaic - Landgate 2001

**(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**  
There are no mapped watercourses or wetlands in close proximity to the area under application.

The proposed clearing of 7 hectares of native vegetation is unlikely to significantly impact on surface or groundwater.

**Methodology** GIS database:  
- Hydrography, linear - DOW 13/7/06

**(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**  
The limited amount of clearing proposed (7 hectares) in comparison with the extent of vegetation remaining in the Greenough River Hydrographic Catchment area is unlikely to result in an increase in peak flood height or flood peak duration.

Given the above, the assessment recommends that it is unlikely that the proposed clearing will cause or exacerbate the incidence or intensity of flooding.

**Methodology** GIS databases:  
- Hydrographic catchments, catchments - DoW 01/06/07  
- Mingenew 1.4m Orthomosaic - Landgate 2001

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

**Comments**  
The proposed clearing is for the purpose of lime sand extraction. The proponent has received an Extractive Industry Licence from the Shire for this site (DEC TRIM Ref: DOC123320).  
The application is consistent with the State Line Strategy in that if possible limesand should be sourced from private property in preference to conservation estate (DEC, 2010).

**Methodology** References:  
DEC (2010)

#### 4. Assessor's comments

**Comment**

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing is at variance to Principle (g) and not likely to be at variance to the remaining clearing Principles.

#### 5. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.  
DEC (2010) Regional Advice for Clearing Permit Application CPS 3619/1, Lot 1 on PAn 6244, Mt Adams. Department of Environment and Conservation, Western Australia (DEC Ref: DOC125245).  
Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.  
Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.  
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.



## 6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management (now DEC)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment (now DEC)
DoW	Department of Water
DMP	Department of Mines and Petroleum (ex DoIR)
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)