



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 4318/1
Permit Holder:	The Pilbara Infrastructure Pty Ltd
Duration of Permit:	27 June 2011– 27 June 2016

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 the construction of the Hamilton Motel Facility.

2. Land on which clearing is to be done

Lot 5530 on Plan 215840, SOUTH HEDLAND 6722
North Circular Road Reserve, SOUTH HEDLAND 6722
Unnamed Road Reserve, SOUTH HEDLAND 6722

3. Area of Clearing

The Permit Holder must not clear more than 9.3 hectares of native vegetation within the area cross hatched yellow on attached Plan 4318/1.

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. 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 *Land Administration Act 1997* or any other written law.

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:

- 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.

8. Weed control

- (a) 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*:
- (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 soil, *mulch*, *fill* or other material is 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.
- (b) 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.

PART III - RECORD KEEPING AND REPORTING

9. Records must be kept

The Permit Holder must maintain the following records in relation to the clearing of native vegetation authorised under this Permit:

- (a) the species composition, structure and density of the cleared area;
- (b) 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;
- (c) the date that the area was cleared; and
- (d) the size of the area cleared (in hectares).

10. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
- (i) of records required under condition 9 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 27 March 2016 the Permit Holder must provide to the CEO a written report of records required under condition 9 of this Permit where these records have not already been provided under condition 10(a) of this Permit.


DEFINITIONS

The following meanings are given to terms used in 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;

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*

2 June 2011

Plan 4318/1



LEGEND

- | | | |
|--------------------------------------|----------------------------------------|----------------------------------------------------------------------------|
| Road Centrelines | Marine Park | Water |
| Cadastre for labelling | Crown Lease | Clearing Instruments |
| Freehold | Lease / Reserve | Areas Approved to Clear |
| Crown Reserve | Lease on State Forest / Timber Reserve | Port Hedland South Hedland
15cm Orthomosaic - Landgate
2004 |
| State Forest / Timber Reserve (cont) | Public Roads | |
| | Unallocated Crown Land (cont) | |



Scale 1:9562
(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 2/6/11

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.



1. Application details

1.1. Permit application details

Permit application No.: 4318/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: The Pilbara Infrastructure Pty Ltd

1.3. Property details

Property: ROAD RESERVE (SOUTH HEDLAND 6722)
LOT 5530 ON PLAN 215840 (Lot No. 5530 HAMILTON SOUTH HEDLAND 6722)
ROAD RESERVE (SOUTH HEDLAND 6722)

Local Government Area:

Colloquial name:

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 2 June 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 Association: 647 - Hummock dwarf-shrub Acacia translucens over soft spinifex.	The proposed clearing of 9.3ha is for the purpose of expanding Hamilton Motel Facility.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition of the vegetation was established from a flora survey undertaken in March 2011 by Ecologica (Ecologica 2011).
	Consist of low to medium height sparse Acacia stellaticeps heathland over open Triodia schinzii and hummock grassland and sparse Themeda triandra tussock grassland in very good condition (7.5ha).		
As above	Shallow drainage channel consisting of Low to medium open Acacia stellaticeps heathland over open Cenchrus ciliaris and Themeda triandra tussock grassland in degraded condition (0.3ha).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	As above
As above	Cenchrus ciliaris (buffle grass) tussock grassland in a completely degraded condition (1.5ha).	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	As above

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 proposed clearing of 9.3ha is for the purpose of expanding Hamilton Motel Facility. The majority of the

vegetation under application consists of low to medium height sparse *Acacia stellaticeps* heathland over open *Triodia schinzii* and hummock grassland and sparse *Themeda triandra* tussock grassland in very good (Keighery 1994) condition (Ecologia Environment 2011).

Tephrosia rosea var. *venulose* (P1) is a sprawling shrub that flowers in July -Sep on sand plain with red-brown sandy loam soils (WA Herbarium 1998-). The closest recording of this species is ~200m west of the application area and it occurs in the same soil and Beard vegetation types as the application area.

A flora survey of the application area, undertaken in March 2011 did not identify this species within the site (Ecologia Environment 2011).

The local area (20km radius) is well vegetated, containing approximately 95 % vegetation. The application area is unlikely to represent an area of higher biodiversity value when compared to representative vegetation in a local and regional context. Considering the above, the proposed clearing is not likely to be at variance to this Principle. The disturbance resulting from the proposed clearing will increase the risk of weeds spreading into adjacent land. A weed condition will assist in mitigating this risk.

Methodology **References**
-Ecologia Environment (2011)
-WA Herbarium (1998-)
-Keighery (1994)
GIS Databases
-SAC Bio datasets (19/4/2011)

(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**
Four terrestrial fauna species of conservation significance have been recorded within the local area (20km radius); *Dasyercus cristicauda* (Crest-tailed Mulgara), *Dasyurus hallucatus* (Northern Quoll), *Lagostrophus fasciatus* subsp. *fasciatus* (Bernier Is. Banded Hare-wallaby) and *Macrotis lagotis* (Bilby, Dalgtye).

Two fauna habitat types occur within the application area, being *Acacia* heathland and drainage lines. A fauna habitat study of the application area (Ecologia Environment 2011) considers it likely for the Brush-tailed Mulgara to utilize the application area (Ecologia Environment 2011). The fauna habitat survey also considered it likely for the Eastern Great Egret (*Anaea modesta*) to use the drainage lines within the application area and that the Australian Bustard (*Aredotis australis*) is likely to utilize the application area for foraging (Ecologia Environment 2011).

The application area may also provide foraging and breeding habitat for the Rainbow Bee-eater (*Merops ornatus*) (Ecologia Environment 2011).

The fauna habitats within the area proposed to be cleared are well represented elsewhere within the local and regional area, and no significant loss of habitat for fauna indigenous to Western Australia is expected. The area to be cleared does not represent a fauna corridor and therefore the clearing will not remove an ecological linkage that is necessary for the maintenance of fauna.

Based on the above, the application area is not considered to contain significant fauna habitat and the proposed clearing is not likely to be at variance to this Principle.

Methodology **References**
-Ecologia Environment (2011)
GIS Databases
-NatureMap, DEC

(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**
No records of rare flora were identified within the local area (20km radius).

In addition, Ecologia Environment (2011) conducted a flora and vegetation survey over the application area and did not identify any rare flora.

Therefore, this application is not likely to be at variance to this clearing principle.

Methodology **References**
-Ecologia Environment (2011)
GIS Databases

-SAC Bio datasets (19/4/2011)
 -Pre-European Vegetation

(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**
 No records of threatened ecological communities (TEC) or priority ecological communities (PEC) have been identified within the local area (20km radius).

Therefore, this application is considered likely to contain or be necessary for the maintenance of a TEC.

Methodology GIS Databases
 -SAC Bio datasets (19/4/2011)
 -Pre-European Vegetation

(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 647, which there is 100% of pre-European extent remaining (Shepherd 2009).

The Beard vegetation association retains more than the threshold level (30%) recommended in the National Objectives Targets for Biodiversity Conservation, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Western Australia 2001).

In addition, the application area does not occur within an extensively cleared landscape as ~ 84.50% remains in the Town of Port Hedland. Therefore, the proposal is not likely to be at variance to this principle.

	Pre-European (ha)	Current extent (ha)	(%)
IBRA Bioregion*			
Pilbara	17,804,193	17,785,000	99.89
Shire*			
Port Hedland	697,370	589,248	84.50
Beard Vegetation Association in Bioregion*			
647	196,370	196,370	100.00

*(Shepherd 2009)

Methodology References
 -Shepherd (2009)
 -Commonwealth of Western Australia (2001)
 GIS Databases
 -Pre-European Vegetation
 -Interim Biogeographic Regionalisation of Australia

(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**
 A drain runs through the application area. A flora survey of the vegetation associated with this drainage line established that the vegetation did not consist of riparian vegetation (Ecologia Environment 2011).

Therefore, it is not considered for the proposed clearing to be at variance to this Principle.

Methodology References
 -Ecologia Environment (2011)
 GIS Databases
 -Hydrography, linear

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

Comments Proposal is not likely to be at variance to this Principle

Soils of the applied area are sandy plains with chief soils of red earthy sands with some hard red soils along creek lines (Northcote, 1960-68). The area under application does not include coastal dunes and is considered not to be overly susceptible to erosion.

The topography of the site is relatively flat and rainfall is low (400mm) therefore water erosion is not likely to be an issue.

The proposed clearing is not likely to cause appreciable land degradation and is therefore not likely to be at variance to this clearing principle.

Methodology References

- Northcote (1960-68)
- GIS Databases
- Soils, statewide
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05

(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

No conservation area occurs within a 50km radius of the area under application. Therefore, it is not considered for the proposed clearing to impact on environmental values of a conservation area.

Methodology GIS Database

- DEC, Tenure

(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 topography of the site is relatively flat thus little water is likely to leave the site as runoff and is unlikely to have a significant impact on the quality or quantity of surface water.

The existing vegetation consists of shallow rooted grasses and shrubs with minimal tree root systems, thus the proposed clearing of vegetation is unlikely to significantly affect the level of the ground water table.

Given the above the proposed clearing is not likely to cause deterioration in the quality of surface or underground water. Therefore, this proposal is not likely to be at variance to this principle.

Methodology GIS Database:

- Evapotranspiration Isopleths - WRC 29/09/98
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05

(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 average annual rainfall of the region is relatively low (400mm) however; high intensity rainfall in the wet season may cause waterlogging within the cleared area.

Although the proposed clearing may cause localised waterlogging it is not likely that it will increase the incidence or intensity of flooding, therefore this proposal is not likely to be at variance to this clearing principle.

Methodology GIS Database:

- Evapotranspiration Isopleths - WRC 29/09/98
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05

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

Comments

The proposed clearing of 9.3ha is for the purpose of expanding Hamilton Motel Facility. This motel is currently used as accommodation for Fortescue personnel and requires expansion to accommodate extra personnel for the expansion of Fortescue's Herb Elliot Port Facility.

The area under application includes two road reserves for the Town of Port Hedland and Crown Land.

A section 91 licence of the Land Administration Act 1997 has been granted to Karribi Developments Pty Ltd (100% owned by Fortescue which also owns Pilbara Infrastructure Company (applicant)) to access the application area for 'Planning, geotechnical and other investigations, and preliminary site works (including civil works)' from 11 April 2011 until 10 April 2012.

The applicant is in the process of obtaining a lease form State Lands to construct and run the Hamilton Motel Facility on the property. It is expected for the lease to be finalized in the next four months.

An application for Development Approval has been granted by the Town of Port Hedland on the 26 May 2011.

Native Title: The applied area is within the boundaries of the Kariyarra People's registered native title claim. The claimants and their representatives have been notified of this proposal. No comments have been received. There are no known Aboriginal Sites of Significance within the application area.

The area under application falls within an area (Pilbara surface and groundwater area) which is proclaimed under the Rights in Water and Irrigation Act 1914. As the application area includes a drainage line, a bed and banks permit and a surface water licence may be required (Department of Water 2011).

Methodology References
-Department of Water (2011)

4. References

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

Department of Water (2011) RIWI Act Advice and Comments for CPS 4318/1 - Pilbara Infrastructure Pty Ltd - Lot 5530 on Plan 21580, North Circular and Unknown Road Reserve, South Hedland. DEC ref A396603

Ecologia Environment (2011) Fortescue Metals Group Limited Level 1 Flora and Fauna Assessment - Proposed Extension to Club Hamilton Accommodation. April 2011 (DEC ref A388128).

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. (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.

Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed 16/5/2011).

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)

