



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 3721/1
Permit Holder:	Regional Power Corporation T/A Horizon Power
Duration of Permit:	3 July 2010– 3 July 2015

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 underground powerlines

2. Land on which clearing is to be done

LOT 500 ON PLAN 61425 BULGARRA 6714
LOT 3000 ON PLAN 54462 BULGARRA 6714
LOT 4202 ON PLAN 187664 BULGARRA 6714
ROAD RESERVE (BULGARRA 6714) PIN 11440730
ROAD RESERVE (BULGARRA 6714) PIN 11440723
ROAD RESERVE (BULGARRA 6714) PIN 11440762
ROAD RESERVE (BULGARRA 6714) PIN 11440760
ROAD RESERVE (BULGARRA 6714) PIN 11440752
ROAD RESERVE (PEGGS CREEK 6714) PIN 11441930
ROAD RESERVE (NICKOL 6714) PIN 11441935
ROAD RESERVE (MILLARS WELL 6714) PIN 11437444
ROAD RESERVE (MILLARS WELL 6714) PIN 11436794
ROAD RESERVE (MILLARS WELL 6714) PIN 11441934
ROAD RESERVE (MULATAGA 6714) PIN 11440761
ROAD RESERVE (STOVE HILL 6714) PIN 11451973
ROAD RESERVE (KARRATHA INDUSTRIAL ESTATE 6714) PIN 11441933
ROAD RESERVE (KARRATHA INDUSTRIAL ESTATE 6714) PIN 11437914

3. Area of Clearing

The Permit Holder must not clear more than 16 hectares of native vegetation within the combined areas cross-hatched yellow on attached Plan 3721/1a and Plan 3721/b and Plan 3721/1c and Plan 3721/1d.

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 *Energy (Powers) Operators Act 1979* 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:

- (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

(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.

PART III - RECORD KEEPING AND REPORTING

9. 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 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;
- (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 of records required under condition 9 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 3 April 2015, 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;

term means the duration of this Permit, including as amended or renewed;

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*

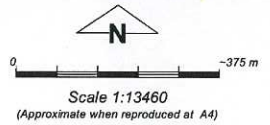
3 June 2010

Plan 3721/1a



LEGEND

- | | | |
|--------------------------|---------------------------|--------------------------------|
| □ Cadastre for labelling | MR | □ Local Government Authorities |
| — Road Centrelines | N | |
| FW | TR | Dampier and Extensions 50cm |
| HY | Clearing Instruments | Orthomosaic - Landgate |
| LRO | ■ Areas Approved to Clear | 2008 |
| LRS (cont) | | |



Geocentric Datum Australia 1994
 Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

[Signature] Date 3/6/10
 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.



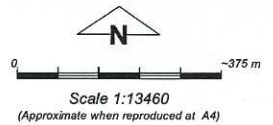
* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.

Plan 3721/1b



LEGEND

- | | | |
|--------------------------|-------------------------|--------------------------------|
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| Road Centrelines | N | Dampier and Extensions 50cm |
| FW | TR | Orthomosaic - Landgate |
| HY | Areas Approved to Clear | 2008 |
| LRO | | |
| LRS (cont) | | |



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 3/6/10
 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.

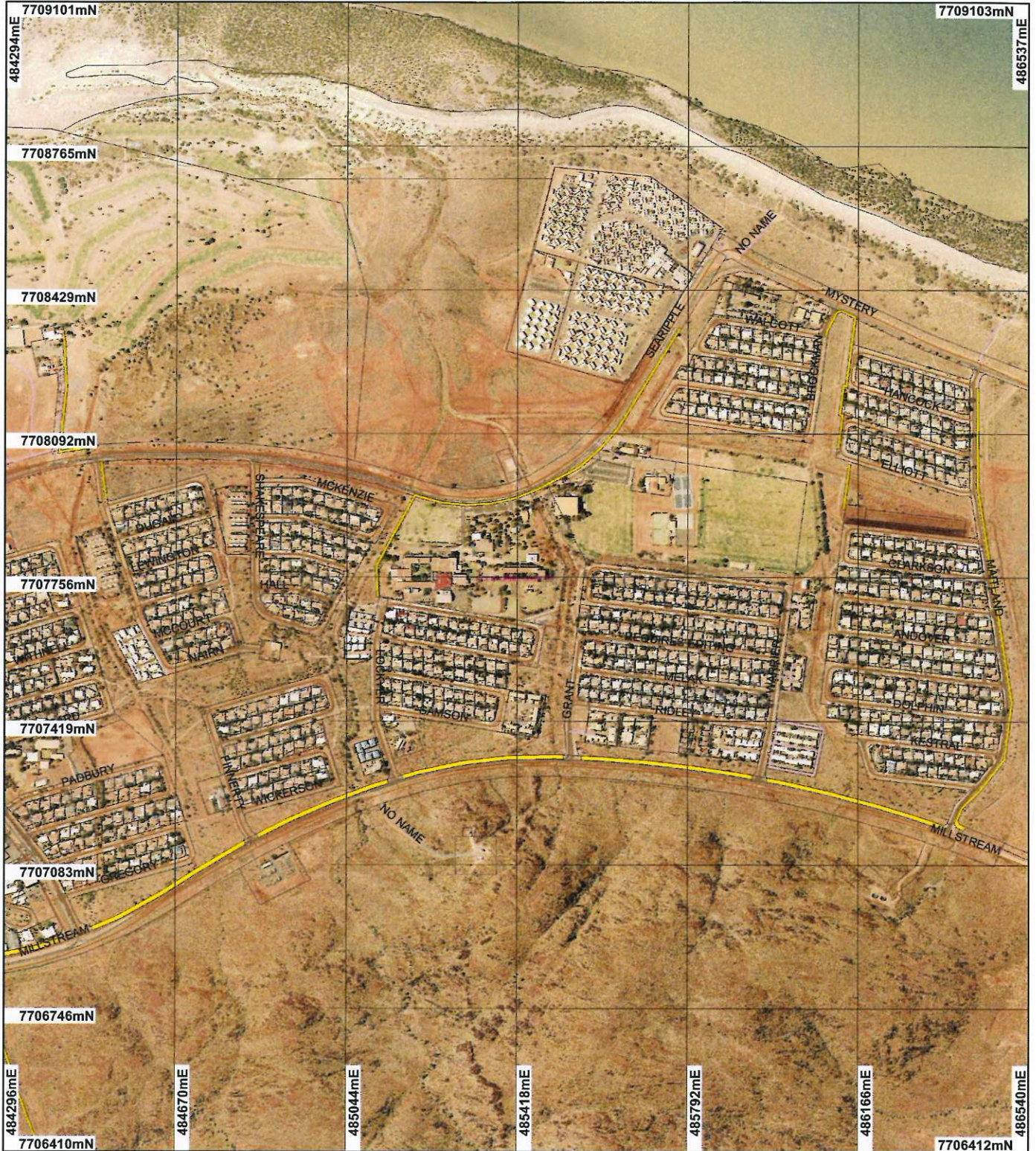


Department of Environment and Conservation

Our environment, our future
 WA Crown Copyright 2002

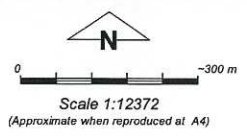
* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.

Plan 3721/1c



LEGEND

- Cadastre for labelling
- Road Centrelines
- FW
- HY
- LRO
- LRS (cont)
- MR
- N
- TR
- Clearing Instruments**
- Areas Approved to Clear
- Local Government Authorities
- Dampier and Extensions 50cm**
- Orthomosaic - Landgate 2008**



Geocentric Datum Australia 1994
 Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

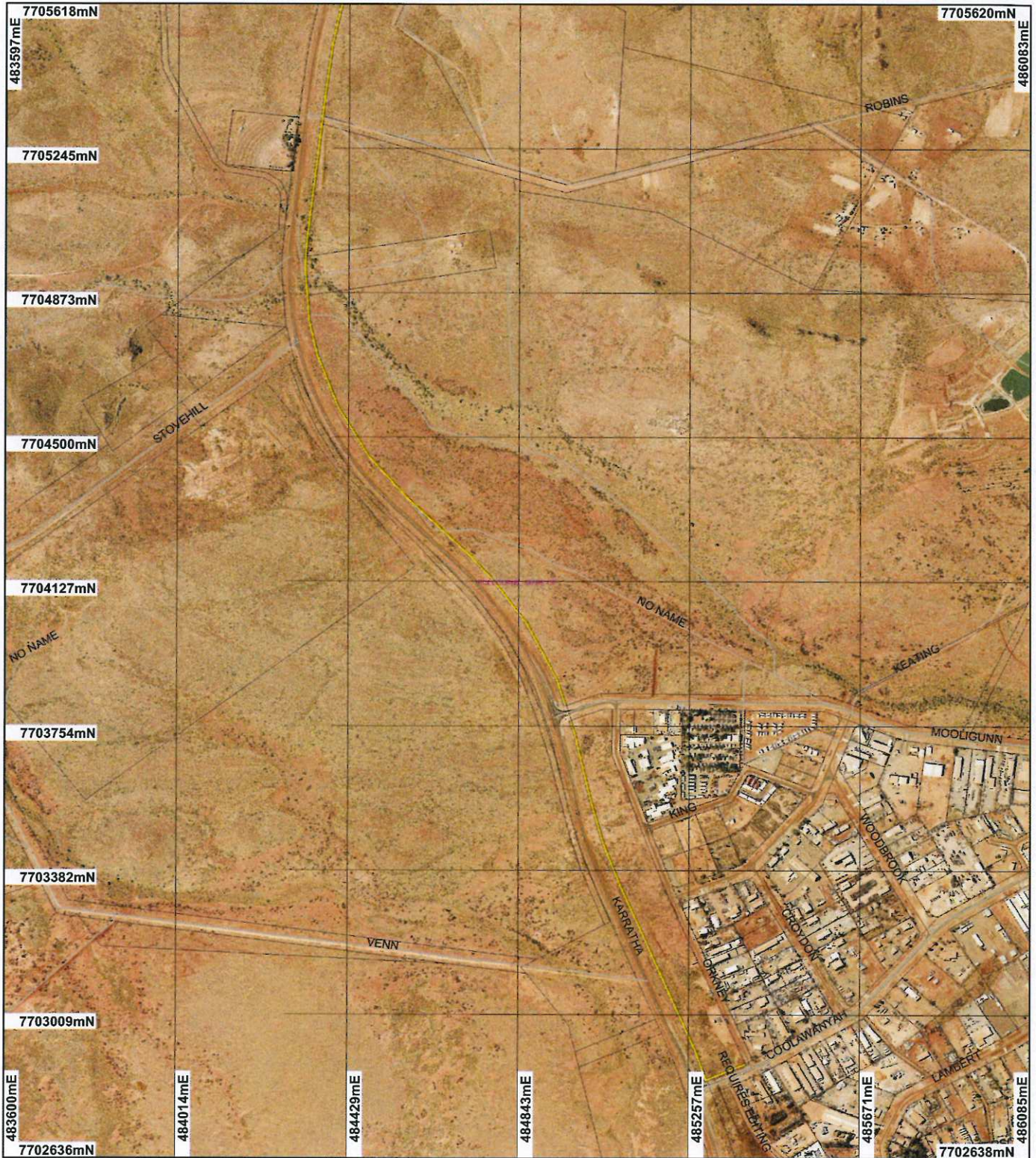
K. Faulkner Date 3/6/10
 K. Faulkner

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.



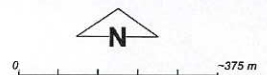
* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.

Plan 3721/1d



LEGEND

- | | | |
|---|-------------------------|---|
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| Road Centrelines | N | <input type="checkbox"/> Dampier and Extensions 50cm |
| FW | TR | <input type="checkbox"/> Orthomosaic - Landgate |
| HY | Clearing Instruments | <input type="checkbox"/> 2008 |
| LRO | Areas Approved to Clear | |
| LRS | | |
| (cont) | | |



Scale 1:13706
(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 of measurement inaccuracies.

K. Faulkner Date 3/6/10

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.: 3721/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Regional Power Corporation TA Horizon Power

1.3. Property details

Property:

- ROAD RESERVE (MILLARS WELL 6714)
- ROAD RESERVE (NICKOL 6714)
- ROAD RESERVE (STOVE HILL 6714)
- ROAD RESERVE (MILLARS WELL 6714)
- ROAD RESERVE (MULATAGA 6714)
- ROAD RESERVE (BULGARRA 6714)
- ROAD RESERVE (BULGARRA 6714)
- ROAD RESERVE (BULGARRA 6714)
- LOT 500 ON PLAN 61425 (BULGARRA 6714)
- ROAD RESERVE (BULGARRA 6714)
- LOT 3000 ON PLAN 54462 (BULGARRA 6714)
- ROAD RESERVE (PEGS CREEK 6714)
- ROAD RESERVE (KARRATHA INDUSTRIAL ESTATE 6714)
- LOT 4202 ON PLAN 187664 (House No. 4202 SEARIPPLE BULGARRA 6714)
- ROAD RESERVE (BULGARRA 6714)
- ROAD RESERVE (BULGARRA 6714)

Local Government Area:

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
16		Mechanical Removal	Miscellaneous

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 assoacation 157: Hummock grasslands, grass steppe; hard spinifex, Triodia wiseana	The proposal is to clear 16ha over ~21km linear area for the purpose of installation of underground power lines.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The vegetation condition was determined from aerial photographs.

589: Mosaic: Short bunch
grassland - savanna/ grass
plain (Pilbrara)/ Hummock
grasslands, grass steppe;
soft spinifex

(Shepherd 2007)

Majority of vegetation is in
a degraded condition with
areas to the north along
Corral road in excellent
condition.

Excellent: Vegetation
structure intact;
disturbance affecting
individual species,
weeds non-aggressive
(Keighery 1994)

3. Assessment of application against clearing principles

Comments

The vegetation under application is considered to be consistent with the beard vegetation association 157: Hummock grasslands, grass steppe; hard spinifex, *Triodia wiseana* and 589: Mosaic: Short bunch grassland - savanna/ grass plain (Pilbara)/ Hummock grasslands, grass steppe; soft spinifex (Shepherd 2007). The southern portion of the area under application along Karratha Rd occurs within the 5km buffer of the Priority Ecological Community (PEC) Roebourne Plains gigai grasslands. This portion (0.011ha) of the application area is considered to be in degraded (Keighery 1994) condition and therefore not likely to be at variance to principle (a).

The areas under application that are in excellent (Keighery 1994) condition may provide habitat for priority flora that have been recorded in the local area (15 km radius). These include *Tephrosia bidwillii*, *Acacia glaucocoesia* and *Themeda* sp. Hamersley station (Western Australian Herbarium 1998-). These priority species have been recorded in the same habitat, vegetation and soil type as the application areas. However, this impact is considered minimal given that the proposed clearing is relatively small in size and is over a long and linear area. It is recommended for a weed condition to be placed on the permit to reduce the spread and introduction of weeds to surrounding better condition vegetation. In addition, avoid, minimise conditions are to be placed on the permit to reduce potential impacts.

Numerous non-perennial watercourses and drains intersect with the area under application; therefore the proposed clearing may impact on watercourse dependent vegetation. However, it is considered for this impact to be minimal given the small area proposed to be cleared and the moderately sparse nature of the vegetation, it is unlikely that the proposed clearing will significantly impact upon the watercourses and therefore the proposed clearing is not at variance to Principle (f).

Given the relatively small area to be cleared (16ha) over a long and linear area (21km) and that the areas occur adjacent to existing Karratha Town site, it is considered unlikely that the proposed clearing will result in significantly impact conservation areas, cause land degradation, impact on significant habitat for fauna or impact on environmental water values within the local or regional context.

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

Methodology

References

- Keighery (1994)
 - Shepherd (2007)
 - Western Australian Herbarium (1998-)
- ##### GIS Databases
- DEC Tenure
 - SAC Bio Datasets (7/5/2010)
 - Hydrography Linear
 - Soils, Statewide
 - Karratha Townsite 20cm Orthomosaic - Landgate (2008)

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

Comments

The proposal is to clear 16 ha for the purpose of installation of underground power lines in the Karratha Town site. Horizon Power has received a grant to relocate the existing Karratha aerial power network underground. The grant is conditional that works commence prior to the end of the 2009/2010 financial year.

The area under application is zoned parks and recreation, road reserve, controlled access, special use, golf course and public utilities under the Karratha Town Planning Scheme Zones.

Horizon Power has the power to enter and access land that is under application through section 46 of the Energy Operator (Powers) Act 1979.

Three aboriginal sites of significance occur within the application area.

DEC, notes that given the trenches have the potential to entrap fauna, the applicant should ensure all trenches are backfilled immediately. In the event that the applicant is not in a position to commit to immediately backfilling all trenches, a Fauna Management Plan must be developed to the satisfaction of DEC (DEC 2010).

No Licences or permits are required from Department of Water.

Methodology

References

- DEC (2010)
 - Horizon Power (2010)
- ##### GIS Databases
- Town Planning Scheme Zones

4. References

DEC (2010) Regional advice received from Pilbara Region, DEC regarding CPS 3721/1 - Horizon Power - Various Road Reserves and Properties Within the Karratha Town site. Department of Environment and Conservation. DEC Ref A305772

Horizon Power (2010) Purpose Permit Application Form and Additional Information for CPS 3721/1 - Horizon Power - Various Road Reserves and Properties Within the Karratha Town site. DEC Ref A299839.

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.

Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed 19/05/2010).

5. 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)