

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number: CPS 3869/4

Permit Holder: Roy Hill Infrastructure Pty Ltd

Duration of Permit: 16 October 2010 – 16 October 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 geotechnical investigations.

2. Land on which clearing is to be done

Licence number Lic 00727/2009_3_9 Roy Hill to Port Hedland Railway Investigation Licence (Port Infrastructure) and Roy Hill Infrastructure Pty Ltd Port Lease and License Area

Located within the following properties:

LOT 372 ON PLAN 35620 (PORT HEDLAND, TOWN OF)

LOT 47 ON PLAN 241374 (BOODARIE 6722)

LOT 1199 ON PLAN 70562 (BOODARIE 6722)

LOT 1301 ON PLAN 70562 (BOODARIE 6722)

LOT 203 ON PLAN 220594 (BOODARIE 6722)

LOT 311 ON PLAN 194620 (BOODARIE 6722)

LOT 1200 ON PLAN 70562 (BOODARIE 6722)

LOT 1302 ON PLAN 70562 (BOODARIE 6722)

LOT 1201 ON PLAN 70562 (BOODARIE 6722)

LOT 1303 ON PLAN 70562 (BOODARIE 6722)

LOT 1202 ON PLAN 70562 (BOODARIE 6722)

LOT 1304 ON PLAN 70562 (BOODARIE 6722)

LOT 1203 ON PLAN 70562 (BOODARIE 6722)

LOT 1280 ON PLAN 70562 (BOODARIE 6722)

LOT 1279 ON PLAN 70562 (BOODARIE 6722)

LOT 1281 ON PLAN 70562 (BOODARIE 6722)

3. Area of Clearing

The Permit Holder must not clear more than 27.75 hectares of native vegetation within the area hatched yellow on attached Plan 3869/4.

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

(a) 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:

- (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.
- (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.

9. Flora management

- (a) Prior to undertaking any clearing authorised under this Permit, the Permit Holder shall engage a botanist to undertake a flora survey of the area to be cleared in accordance with Guidance Statement No. 51.
- (b) Where *priority* or *undescribed flora* are identified in relation to condition 9(a) of this Permit, the Permit Holder shall ensure that:
 - no clearing of identified *priority flora* or *undescribed flora* occurs and no clearing occurs within 10 metres of identified *priority flora* or *undescribed flora*, unless approved by the CEO.

10. Retain vegetative material and topsoil, revegetation and rehabilitation

The Permit Holder shall:

- (a) 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 six months following clearing authorised under this permit, *revegetate* and *rehabilitate* the area(s) that are no longer required for the purpose for which they were cleared under this by:
 - (i) re-shaping the surface of the land so that it is consistent with the surrounding 5 metres of uncleared land; and
 - (ii) ripping the ground on the contour to remove soil compaction; and
 - (iii) laying the vegetative material and topsoil retained under condition 10(a) on the cleared area(s).
- (c) within 24 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 10(b) of this Permit:
 - (i) engage an *environmental specialist* to 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 10(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, *revegetate* the area by 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 ensuring only *local provenance* seeds and propagating material are used.

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 flora management pursuant to condition 9 of this Permit:
 - (i) the location of each *priority flora* or *undescribed flora* recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
 - (ii) the species name of each priority flora or undescribed flora identified; and
 - (iii) a copy of the botanists flora survey report.
- (c) In relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 10 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.

12. 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 11 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 16 July 2015, 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:

botanist means a person with specific training and/or experience in the ecology and taxonomy of Western Australian flora;

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;

fill means material used to increase the ground level, or fill a hollow;

Guidance Statement No. 51 means the Environmental Protection Authority Guidance Statement No 51, Guidance for the Assessment of Environmental Factors - Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia (2004);

impacts means any impact of clearing on environmental values;

local provenance means native vegetation seeds and propagating material from natural sources within 50 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;

priority flora means those plant taxa described as priority flora classes 1, 2, 3 or 4 in the Department's Declared Rare and Priority Flora List for Western Australia (as amended);

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;

undescribed flora taxa means any flora taxon (either at the generic, species or infraspecies level) that has been discovered, but not yet formally described as per the International Code of Botanical Nomenclature; 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.

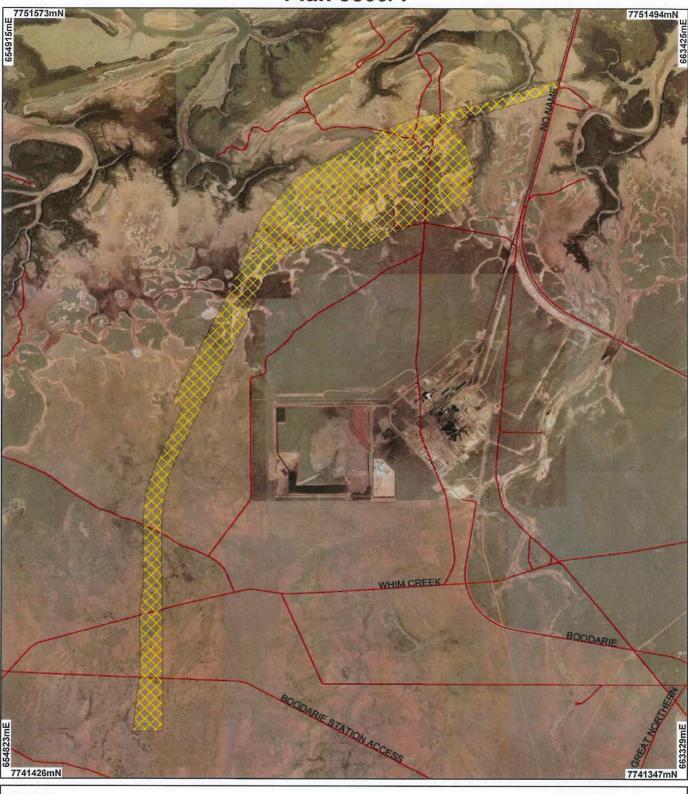
Kelly Faulkner MANAGER

NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20 of the Environmental Protection Act 1986

13 October 2011

Plan 3869/4





Cadastre_1

N Road Centrelines Clearing Instruments

Areas Approved to Clear



Information derived from this map should be confirmed with the data custodian acknowleged by the agency acronym in the legend.



Department of Environment and Conservation

Our environment, our future
WA Crown Copyright 2002







Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.:

3869/4

Permit type:

Purpose Permit

1.2. Proponent details

Proponent's name:

Roy Hill Infrastructure Pty Ltd

1.3. Property details

Property:

LOT 372 ON PLAN 35620 (PORT HEDLAND, TOWN OF)

LOT 47 ON PLAN 241374 (BOODARIE 6722)

LOT 1199 ON PLAN 70562 (BOODARIE 6722) LOT 1301 ON PLAN 70562 (BOODARIE 6722)

LOT 203 ON PLAN 220594 (BOODARIE 6722)

LOT 311 ON PLAN 194620 (BOODARIE 6722)

LOT 1200 ON PLAN 70562 (BOODARIE 6722)

LOT 1302 ON PLAN 70562 (BOODARIE 6722)

LOT 1201 ON PLAN 70562 (BOODARIE 6722)

LOT 1303 ON PLAN 70562 (BOODARIE 6722)

LOT 1202 ON PLAN 70562 (BOODARIE 6722)

LOT 1304 ON PLAN 70562 (BOODARIE 6722)

LOT 1203 ON PLAN 70562 (BOODARIE 6722)

LOT 1280 ON PLAN 70562 (BOODARIE 6722)

LOT 1279 ON PLAN 70562 (BOODARIE 6722)

LOT 1281 ON PLAN 70562 (BOODARIE 6722)

Local Government Area:

Colloquial name:

Town of Port Hedland

1.4. Application

Clearing Area (ha)

27.75

No. Trees

Method of Clearing Mechanical Removal For the purpose of:

Geotechnical investigations

1.5. Decision on application

Decision on Permit Application:

Decision Date:

6 October 2011

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

Two Beard vegetation types are mapped as occurring within the applied area:

- Beard 647: Hummock grasslands, dwarf-shrub steppe; Acacia translucens over soft spinifex

- Beard 127: Bare areas; mud flats

(Shepherd, 2009).

Clearing Description

Biota Environmental Services (2010) conducted a review of vegetation and flora surveys and recorded a total of 6 different vegetation units within the application area. These included:

1) Eucalyptus victrix low open woodland over Acacia colei var. colei open shrubland over Triodia epactia open hummock grassland - This vegetation unit was considered to be in very good (Keighery, 1994) condition and occurred in a small patch near the northern boundary

of the rail loop.

Vegetation Condition

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

Comment

The description and condition of the vegetation under application was determined via the use of aerial imagery, supporting information supplied by the applicant (RHIO, 2010) and a flora and vegetation survey conducted by Biota (2010).

2) Acacia stellaticeps low shrubland over Triodia epactia, T. secunda open hummock grassland

3) Tecticornia halocnemoides, Muellerolimon salicorniaceum low shrubland over Sporobolus virginicus scattered bunch grassland

4) Avicennia marina tall closed scrub to tall open shrubland

5) Mudflat

6) Triodia epactia, T.secunda hummock grassland

3. Assessment of application against clearing principles

Comments

The permit has been amended to increase the clearing footprint. The assessment against the clearing principles have not changed, the findings from the previous assessment are still relevant and can be found in the Clearing Permit Decision Report CPS 3869/1.

Methodology

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

Comments

The permit has been amended to increase the clearing footprint. No changes are required to the previous assessment (CPS 3869/1) and the findings are still relevant.

No submissions were received.

Methodology

4. References

Biota (2010) Biota Environmental Sciences, Boodarie Port Infrastructure Port Hedland – Level 1 Vegetation and Flora Survey and Fauna Review (DEC Ref: A332447).

DoW (2010) Department of Water Advice, DEC Ref: A330355

EPA (2010) Environmental Protection Authority, Perth, Western Australia, Advice. DEC Ref: A332303.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

RHIO (2010) Roy Hill Infrastructure Pty Ltd, Clearing permit application - supporting information. DEC Ref: A322337 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.

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)