



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 3870/3
Permit Holder:	Roy Hill Infrastructure Pty Ltd
Duration of Permit:	16 October 2010 – 16 October 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 *geotechnical and hydrological investigations*.

2. Land on which clearing is to be done

Licence number Lic 00727/2009_3_10 Roy Hill to Port Hedland Railway Investigation Licence (UCL Section); Licence number Lic 00727/2009_3_8 Roy Hill to Port Hedland Railway Investigation Licence (BFS 2); Licence number Lic 00727/2009_3_11 Roy Hill to Port Hedland Railway Investigation Licence (Abydos Woodstock) and Licence number Lic 00727/2009_2_177 Roy Hill to Port Hedland Railway Investigation Licence (BFS 1).

Located within the following properties:

LOT 352 ON PLAN 55943 (MARBLE BAR 6760)
LOT 347 ON PLAN 55942 (MARBLE BAR 6760)
LOT 65 ON PLAN 48920 (MARBLE BAR 6760)
LOT 350 ON PLAN 55942 (MARBLE BAR 6760)
CROWN RESERVE 23046 (MARBLE BAR 6760)
UNALLOCATED CROWN LAND (MARBLE BAR 6760)
FORREST LOCATION 20 (MARBLE BAR 6760)
PART LOT 251 ON PLAN 238654 (NULLAGINE 6758)
LOT 218 ON PLAN 220376 (Lot No. 218 GREAT NORTHERN MULGA DOWNS 6751)
PART LOT 251 ON PLAN 238654 (MULGA DOWNS 6751)
LOT 221 ON PLAN 238388 (MULGA DOWNS 6751)
LOT 218 ON PLAN 220376 (Lot No. 218 GREAT NORTHERN MULGA DOWNS 6751)
LOT 197 ON PLAN 30401 (NEWMAN 6753)
LOT 87 ON PLAN 30401 (NEWMAN 6753)

3. Area of Clearing

The Permit Holder must not clear more than 177.5 hectares of native vegetation within the area hatched yellow on attached Plan 3870/3.

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:

- (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:
 - (i) no clearing of identified *priority flora* or *undescribed flora* occurs; and
 - (ii) 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.

11. Drainage management

The Permit Holder shall not cause or permit the discharge of sediments, from within those areas permitted to be cleared under this permit, into the Fortescue Marshes.

12. Vegetation management

The Permit Holder shall not clear native vegetation within 100 metres of the Fortescue Marshes.

13. Environmental management plan

- (a) The Permit Holder must prepare, implement and adhere to a Mulga Community *EMP*, if clearing within Mulga communities.
- (b) The Mulga Community *EMP* must include:
 - (i) a plan for managing the *impacts*;
 - (ii) a table setting out the Permit Holder's commitments to the Mulga Community *EMP*'s requirements; and
 - (iii) a program for monitoring compliance with the Permit Holder's commitments;
- (c) Once the Permit Holder has developed a Mulga Community *EMP*, the Permit Holder must provide that Mulga Community *EMP* to the CEO for the CEO's approval. The clearing to which the Mulga Community *EMP* relates and the implementation of the Mulga Community *EMP* shall not take place until the Permit Holder receives approval from the CEO.

PART III - RECORD KEEPING AND REPORTING

14. 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*.
- (d) In relation to the drainage management of areas pursuant to condition 11 a description of the drainage management activities undertaken.
- (e) In relation to the environmental management plan of areas pursuant to condition 13 a description of the environmental management plan activities undertaken, in accordance with that environmental management plan.

15. 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 14 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 14 of this Permit where these records have not already been provided under condition 15(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;

EMP means environmental management plan;

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;

Geotechnical and hydrological investigations means activities that include drill pad construction and drilling, test pitting, temporary laydown areas for equipment (drill casings and supplies, sample storage), park up areas for equipment (trucks and excavators) and construction of access tracks;

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.

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*.

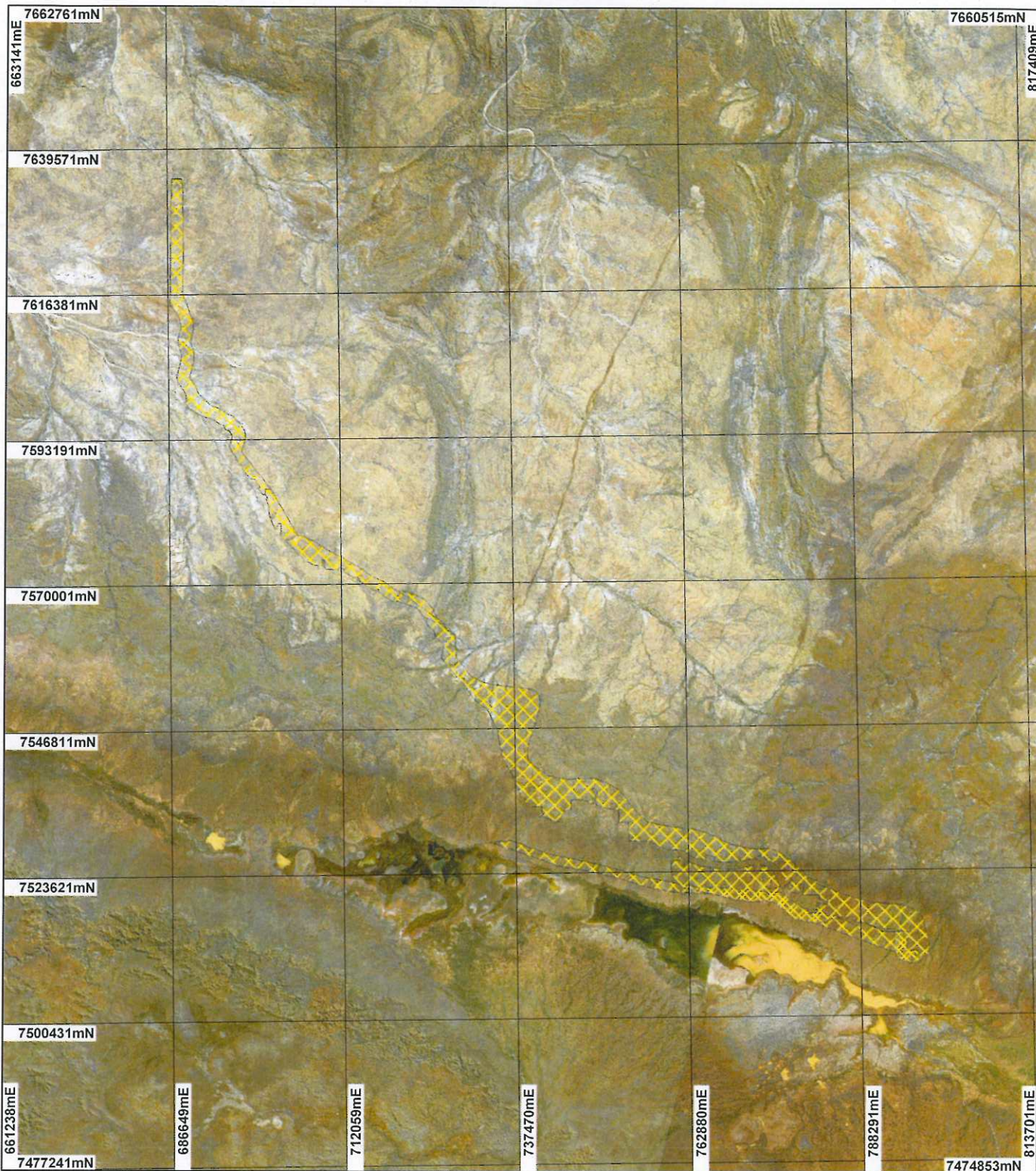


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

17 February 2011

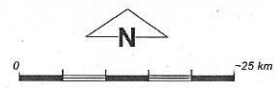
Plan 3870/3



LEGEND

Clearing Instruments

-  Areas Approved to Clear
 -  Road Centrelines
 -  Cadastre
- Western Australia Landsat
Mosaic 25m - AGO 2006




Scale 1:849496

(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 17/2/11

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.



Department of Environment and Conservation

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1. Application details

1.1. Permit application details

Permit application No.: 3870/3
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Roy Hill Infrastructure Pty Ltd

1.3. Property details

Property:

- LOT 352 ON PLAN 55943 (MARBLE BAR 6760)
- LOT 347 ON PLAN 55942 (MARBLE BAR 6760)
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Local Government Area: Town of Port Hedland, Shire of East Pilbara and Shire of Ashburton

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
177.5		Mechanical Removal	Geotechnical investigations

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 17 February 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
The following Beard vegetation associations were mapped as persisting within the applied area:			
Beard 93: Hummock grasslands, shrub steppe; kanji over soft spinifex - (dominant vegetation type)	The condition of the vegetation ranges from degraded to pristine (Keighery, 1994) (RHIO, 2010), with some areas showing signs of disturbance such as grazing and weed invasion, while other areas remain undisturbed (RHIO, 2010). The proposed works are to occur over the length of the application area, which is over 180km long and crosses multiple land systems.	Pristine: No obvious signs of disturbance (Keighery 1994). Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994).	The condition and description of the vegetation under application was determined via the use of supporting information provided by the applicant (RHIO, 2010) and EPA Report 1342 (EPA, 2009a).
Beard 29: Sparse low woodland; mulga, discontinuous in scattered groups		Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994).	
Beard 173: Hummock grasslands, shrub steppe; kanji over soft spinifex & Triodia wiseana on basalt			

Beard 562: Mosaic: Low woodland; mulga in valleys / Hummock grasslands, open low tree-steppe; snappy gum over *Triodia wiseana*

Beard 676: Succulent steppe; samphire - (only small amounts within applied area)

Beard 82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana* - (only small amount within applied area)

Shepherd (2009)

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994).

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994).

3. Assessment of application against clearing principles

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

This amendment was required due to an administrative error on the previous permit (Lic00727/2009_2_177 was not included on Clearing Permit), therefore, the assessment against the clearing principles has not changed and can be found in the Clearing Permit Decision Report CPS 3870/2.

Methodology

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

Comments

The assessment against planning instruments and other matters has not changed and can be found in the Clearing Permit Decision Report CPS 3870/2.

Methodology

