



## CLEARING PERMIT

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

<b>Purpose Permit number:</b>	CPS 3794/7
<b>Permit Holder:</b>	Roy Hill Infrastructure Pty Ltd
<b>Duration of Permit:</b>	19 September 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*, road construction and access track widening.

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

Licence number Lic 00727/2009\_4\_8; 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) and *Railway* (Roy Hill Infrastructure Pty Ltd) *Agreement Act 2010* - Miscellaneous Licence 4SA (Railway and Other Purposes), located within the following properties:

CROWN RESERVE 23045 (MARBLE BAR 6760)  
CROWN RESERVE 23046 (MARBLE BAR 6760)  
UNALLOCATED CROWN LAND (MARBLE BAR 6760)  
FORREST LOCATION 20 (MARBLE BAR 6760)  
LOT 90 ON PLAN 211104 (BOODARIE 6722)  
LOT 1203 ON PLAN 70562 (BOODARIE 6722)  
LOT 1204 ON PLAN 70562 (BOODARIE 6722)  
LOT 1279 ON PLAN 70562 (BOODARIE 6722)  
LOT 1280 ON PLAN 70562 (BOODARIE 6722)  
LOT 1281 ON PLAN 70562 (BOODARIE 6722)  
LOT 1282 ON PLAN 70562 (BOODARIE 6722)  
LOT 1283 ON PLAN 70562 (BOODARIE 6722)  
LOT 1500 ON PLAN 68275 (NULLAGINE 6758)  
LOT 1501 ON PLAN 68276 (NULLAGINE 6758)  
LOT 164 ON PLAN 183379 (BOODARIE 6722)  
LOT 190 ON PLAN 91708 (MARBLE BAR 6760)  
LOT 197 ON PLAN 30401 (NEWMAN 6753)  
LOT 203 ON PLAN 220594 (BOODARIE 6722)  
LOT 208 ON PLAN 238219 (INDEE 6721)  
LOT 209 ON PLAN 238236 (MARBLE BAR 6760)  
LOT 218 ON PLAN 220376 (MULGA DOWNS 6751)  
LOT 221 ON PLAN 238388 (MULGA DOWNS 6751)  
LOT 228 ON PLAN 238638 (MARBLE BAR 6760)

LOT 257 ON PLAN 192219 (BOODARIE 6722)  
LOT 272 ON PLAN 219540 (BOODARIE 6722)  
LOT 273 ON PLAN 219540 (BOODARIE 6722)  
LOT 281 ON PLAN 193734 (BOODARIE 6722)  
LOT 282 ON PLAN 193734 (BOODARIE 6722)  
LOT 297 ON PLAN 219540 (BOODARIE 6722)  
LOT 299 ON PLAN 221428 (BOODARIE 6722)  
LOT 311 ON PLAN 194620 (BOODARIE 6722)  
LOT 323 ON PLAN 220768 (BOODARIE 6722)  
LOT 324 ON PLAN 220768 (BOODARIE 6722)  
LOT 347 ON PLAN 55942 (MARBLE BAR 6760)  
LOT 349 ON PLAN 55942 (MARBLE BAR 6760)  
LOT 350 ON PLAN 55942 (MARBLE BAR 6760)  
LOT 352 ON PLAN 55943 (MARBLE BAR 6760)  
LOT 354 ON PLAN 217400 (MARBLE BAR 6760)  
LOT 358 ON PLAN 217402 (MARBLE BAR 6760)  
LOT 372 ON PLAN 35620 (TOWN OF PORT HEDLAND)  
LOT 386 ON PLAN 221146 (BOODARIE 6722)  
LOT 487 ON PLAN 61851 (BOODARIE 6722)  
LOT 500 ON PLAN 46738 (BOODARIE 6722)  
LOT 65 ON PLAN 48920 (MARBLE BAR 6760)  
LOT 3003 ON PLAN 46738 (BOODARIE 6722)  
ROAD RESERVE (BOODARIE 6722)  
ROAD RESERVE (MARBLE BAR 6760)

**3. Area of Clearing**

The Permit Holder must not clear more than 351.51 hectares of native vegetation within the area hatched yellow on attached Plan 3794/7.

**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 *Railway (Roy Hill Infrastructure Pty Ltd) Agreement Act 2010* 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. 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 9(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 9(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 9(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.
- (d) Where additional *planting* or *direct seeding* of native vegetation is undertaken in accordance with condition 9(c)(ii) of this permit, the Permit Holder shall repeat condition 9(c)(i) and 9(c)(ii) within 24 months of undertaking the additional *planting* or *direct seeding* of native vegetation.
- (e) Where a determination by an *environmental specialist* that the composition, structure and density within areas *revegetated* and *rehabilitated* will result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, as determined in condition 9(c)(i) and (ii) of this permit, that determination shall be submitted for the CEO's consideration. If the CEO does not agree with the determination made under condition 9(c)(ii), the CEO may require the Permit Holder to undertake additional *planting* and *direct seeding* in accordance with the requirements under condition 9(c)(ii).

#### 10. 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.

#### 11. Vegetation management

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

#### 12. 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**

#### **13. 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 or decimal degrees;
  - (iii) the date that the area was cleared; and
  - (iv) the size of the area cleared (in hectares).
- (b) In relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 9 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 or decimal degrees;
  - (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*.
- (c) In relation to the drainage management of areas pursuant to condition 10 a description of the drainage management activities undertaken.
- (d) In relation to the environmental management plan of areas pursuant to condition 12 a description of the environmental management plan activities undertaken, in accordance with that environmental management plan.

#### **14. 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 13 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 19 June 2015, the Permit Holder must provide to the CEO a written report of records required under condition 13 of this Permit where these records have not already been provided under condition 14(a) of this Permit.

### **DEFINITIONS**

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

***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;

***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;

***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;

**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;

**weed/s** means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in the former Department of Environment and Conservation Regional Weed Assessments, regardless of ranking; or
- (c) not indigenous to the area concerned.

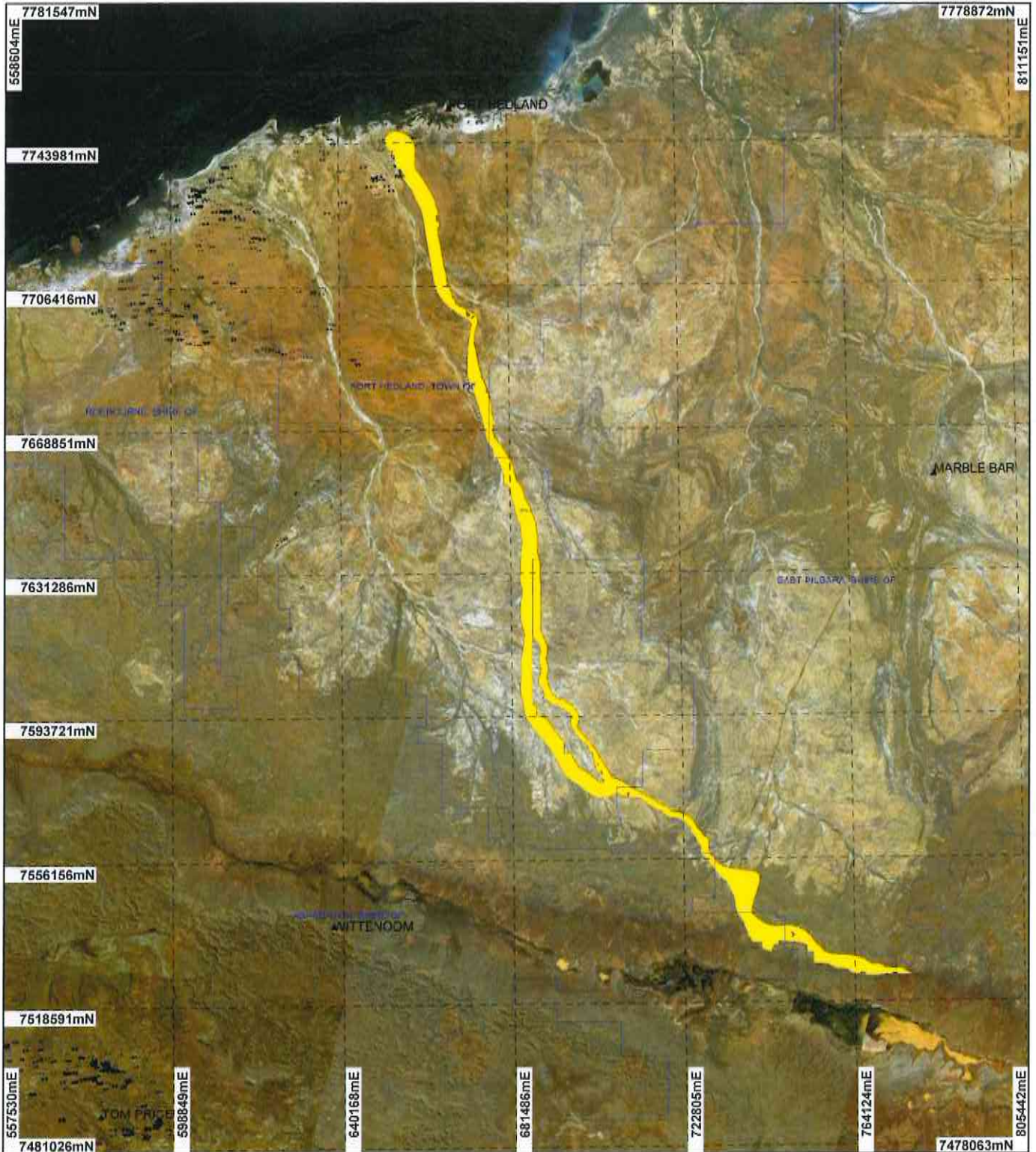


M Warnock  
MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

22 August 2013

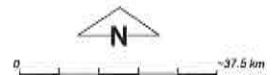
# Plan 3794/7



## LEGEND

- Clearing Instruments**
- Areas Applied to Clear
  - Towns
  - Local Government Authorities

Western Australia Landsat  
Mosaic 25m - AGO 2006



Scale 1:1382497  
(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.

*M Warrack* Date 22/8/13

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.



Government of Western Australia  
Department of Environment Regulation

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## 1. Application details

### 1.1. Permit application details

Permit application No.: 3794/7  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Roy Hill Infrastructure Pty Ltd

### 1.3. Property details

Property:

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- ROAD RESERVE (BOODARIE 6722)
- ROAD RESERVE (MARBLE BAR 6760)

Local Government Area: Town of Port Hedland and Shire of East Pilbara  
Colloquial name:

## 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
326		Mechanical Removal	Geotechnical investigations
25.51		Mechanical Removal	Road construction or maintenance

## 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 22 August 2013

## 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 Vegetation Association 29 - Sparse low woodland; mulga, discontinuous in scattered groups. Beard Vegetation Association 82 - Hummock grasslands, low tree steppe; snappy gum over <i>Triodia wiseana</i> . Beard Vegetation Association 93 - Hummock grasslands, shrub steppe; kanji over soft spinifex - (dominant vegetation type) Beard Vegetation Association 173 - Hummock grasslands, shrub steppe; kanji over soft spinifex & <i>Triodia wiseana</i> on basalt. Beard Vegetation Association 562 - Mosaic: Low woodland; mulga in valleys / Hummock grasslands, open low tree-steppe; snappy gum over <i>Triodia wiseana</i> . Beard Vegetation Association 589 - Mosaic: Short bunch grassland - savanna / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex. Beard Vegetation Association 619 - Medium woodland; river gum ( <i>Eucalyptus camaldulensis</i> ). Beard Vegetation Association 626 - Hummock grasslands, shrub-steppe; kanji over soft spinifex & <i>Triodia brizoides</i> . Beard Vegetation Association 647 - Hummock grasslands, dwarf-shrub steppe; <i>Acacia translucens</i> over soft spinifex. (Shepherd, 2009) Beard Vegetation Association 676: Succulent steppe; samphire - (only small amounts within applied area) Shepherd et al (2001)	The application is to clear for the purpose of geotechnical, hydrological investigation and access tracks to assist in the design and engineering for the Port Hedland to Roy Hill Rail Line to provide information into the Roy Hill 1 Iron Ore Project bankable feasibility study. The clearing will consist of investigation sites and access tracks to sites. The proposed works are to occur over the length of the application area, which is over 180 kilometres long and crosses multiple land systems.	Pristine: No obvious signs of disturbance (Keighery 1994)	The condition of the vegetation ranges from degraded to pristine (Keighery, 1994), with some areas showing signs of disturbance such as grazing and weed invasion, while other areas remain undisturbed (RHIO, 2010).  Vegetation condition and description was determined using Roy Hill Infrastructure Pty Ltd application and supporting information (RHIO, 2010) and EPA Report 1342 (EPA, 2009).



### 3. Assessment of application against clearing principles

The permit has been amended to allow for the increase clearing of 25.51 hectares of native vegetation to construct and widen an access track to the Boodarie Station Homestead.

The mapped vegetation type within the proposed additional clearing area is consistent with the immediate, surrounding vegetation assessed previously and is not considered to represent a high level of biodiversity (RHI, 2013a).

The assessment against the clearing principles have not changed. The findings from previous assessments are still relevant and can be found in the Clearing Permit Decision Reports CPS 3870/3, CPS 3794/1 and CPS 3794/6.

**Methodology** Reference  
-RHI (2013a)

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

##### Comments

Roy Hill Infrastructure Pty Ltd are required to construct and widen an access track within Boodarie Pastoral Station between the Station's homestead and Roy Hill's rail corridor network. This requirement has come about as Roy Hill did not have access rights to this area of the lease, however these access rights have now been granted (RHI, 2013a).

An application has been made to the Department of Lands for a new s91 Licence to cover the amended application area and is awaiting finalisation (RHI, 2013b).

**Methodology** Reference  
No submissions have been received.  
- RHI (2013a)  
- RHI (2013b)

### 4. References

- EPA (2009), Roy Hill 1 Iron Ore Mining Project Stage 1 - Report and recommendations of the Environmental Protection Authority, Perth, Western Australia, Report 1342, November 2009
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- RHI (2010) Roy Hill Infrastructure Pty Ltd, Clearing permit application - supporting information. DEC Ref: A310334
- RHI (2013a) Roy Hill Infrastructure Pty Ltd, amendment to clearing permit application - supporting information. (DEC Ref: A618924)
- RHI (2013b) Roy Hill Infrastructure Pty Ltd, amendment to clearing permit application - supporting information. (DEC Ref: A631248)
- 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)