GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 7613/1
Permit Holder:	Atlas Iron Limited
Duration of Permit:	From 16 September 2017 to 16 September 2027

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 road upgrades.

2. **Land on which clearing is to be done**
   Limestone - Marble-Bar Road (PIN 11997584), Marble Bar
   Lot 148 on Deposited Plan 93594 (Crown Reserve 2906), Marble Bar
   Lots 153 and 182 on Deposited Plan 195179, Marble Bar
   Lot 152 on Deposited Plan 221151, Marble Bar

3. **Area of Clearing**
   The Permit Holder must not clear more than 3.4 hectares of native vegetation within the area cross-hatched yellow on attached Plan 7613/1.

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**
   The Permit Holder shall not clear any native vegetation after 16 September 2022.

PART II – MANAGEMENT CONDITIONS

6. **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.

7. **Weed control**
   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.

8. 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) by 16 September 2022, *revegetate* and *rehabilitate* the areas that are no longer required for the purpose for which they were cleared under this Permit by:
  (i) ripping the ground on the contour to remove soil compaction; and
  (ii) laying the vegetative material and topsoil retained under condition 8(a) on the area cross-hatched yellow on attached Plan 7613/1.

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 revegetation and rehabilitation of areas pursuant to condition 8 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;
  (i) a description of the revegetation and rehabilitation activities undertaken; and
  (i) the size of the area revegetated and rehabilitated (in hectares).

10. Reporting
Prior to 16 June 2027, the Permit Holder must provide to the CEO a written report of records required under condition 9 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;

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 natural regeneration, direct seeding and/or planting, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area;

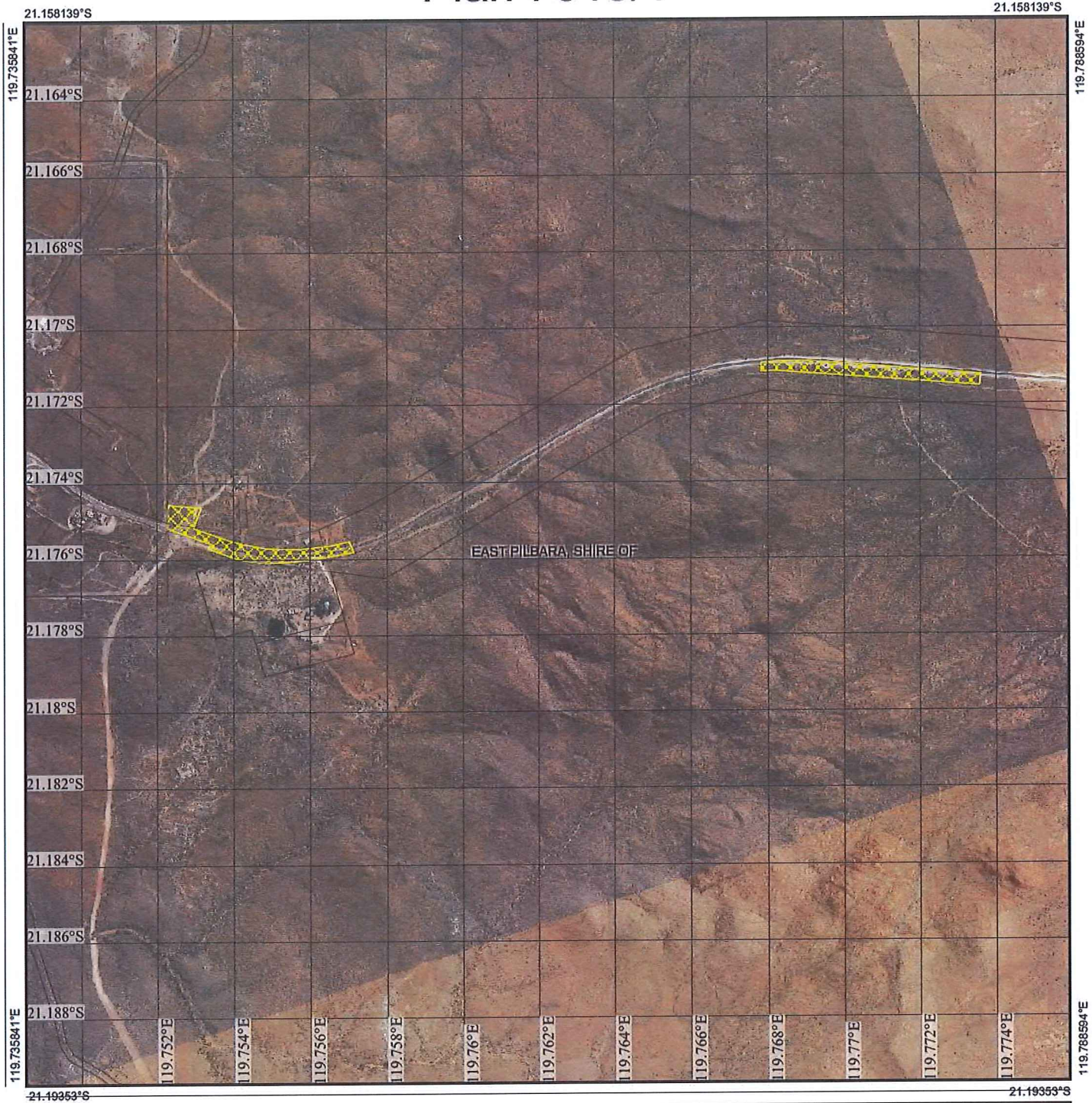
weed/s means any plant -
(a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
(b) published in a Department of Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
(c) not indigenous to the area concerned.

Mathew Gannaway
MANAGER
CLEARING REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

15 August 2017

Plan 7613/1



Legend

- Imagery
- Clearing Instruments Activities
- Local Government Authority

N

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1:15,000

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

..... Date 15/05/2017

Mathew Gennaway

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

GOVERNMENT OF WESTERN AUSTRALIA

Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.:	7613/1
Permit type:	Purpose Permit

1.2. Applicant details

Applicant's name:	Atlas Iron Limited

1.3. Property details

Property:	Limestone - Marble-Bar Road (PIN 11997584) Lot 148 on Deposited Plan 93594 (Crown Reserve 2906) Lots 153 and 182 on Deposited Plan 195179 Lot 152 on Deposited Plan 221151
Local Government Authority:	Shire of East Pilbara
DER Region:	North West
LCDC:	De Grey
Localities:	Marble Bar

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3.4		Mechanical Removal	Road upgrades

1.5. Decision on application

Decision on Permit Application:	Grant
Decision Date:	15 August 2017
Reasons for Decision:	The clearing permit application is to clear 3.4 hectares of native vegetation for the purpose of road upgrades, and was received on 24 May 2017. The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*, and it has been concluded that the proposed clearing is not at variance to any of the clearing Principles. The Delegated Officer has granted the clearing permit subject to conditions requiring weed management and the revegetation of temporarily cleared areas. In determining to grant a clearing permit, subject to conditions, the Delegated Officer determined that the proposed clearing is unlikely to have any significant environmental impacts.

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
Two Beard vegetation associations are mapped within the application area (Shepherd et al., 2001): Beard vegetation association 82 is mapped as hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*; and Beard vegetation association 93 is mapped as hummock grasslands, shrub steppe; kanji over soft spinifex.	The applicant has proposed to clear 3.4 hectares of native vegetation within Limestone - Marble-Bar Road (PIN 11997584), Lot 148 on Deposited Plan 93594 (Crown Reserve 2906), Lots 153 and 182 on Deposited Plan 195179 and Lot 152 on Deposited Plan 221151, Marble Bar, for the purpose of road upgrades.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994); To: Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).	The application area comprises two separate areas along Limestone-Marble Bar Road. Vegetation condition was determined by a flora survey conducted within the application area (Woodman, 2017).

Vegetation Description (continued)
A flora survey was conducted by Woodman in April 2017 (Woodman, 2017). Six vegetation types were recorded within the application area, as follows (Woodman, 2017):

VT5 is described as Low isolated trees of *Corymbia hamersleyana* over tall sparse shrubland dominated by *Acacia inaequilatera* and often *Grevillea pyramidalis* subsp. *leucadendron* over low sparse shrubland dominated by *Corchorus parviflorus*, *Indigofera monophylla* and *Senna glutinosa* subsp. *glutinosa* over low hummock grassland dominated by *Triodia wiseana* and/or *Triodia epactia* on red to brown clay loam often with dolerite or occasionally quartz or metamorphosed granite outcropping, on low hills, ridges and occasionally undulating plains.

VT6 is described as Mid isolated clumps of shrubs of *Grevillea wickhamii* subsp. *hispidula* over low hummock grassland of *Triodia epactia* over low sparse grassland of *Sporobolus australasicus* on red sandy loam on stony low rises.

VT7 is described as Tall sparse shrubland of *Acacia eriopoda* over low isolated clumps of shrubs of **Aerva javanica* and *Boerhavia coccinea* over low closed grassland of **Cenchrus ciliaris* on red clay in drainage lines.

VT8 is described as Low isolated clumps of trees of *Corymbia hamersleyana* over tall open shrubland of *Acacia bivenosa*, *A. eriopoda* and *A. trachycarpa* over low closed grassland of **Cenchrus ciliaris* on red clay on lowerslopes.

VT 9 is described as Low isolated clumps of shrubs of **Aerva javanica* over low isolated clumps of hummock grasses of *Triodia epactia* over sparse grassland of **Cenchrus ciliaris*, *Enneapogon caerulescens* and *Sporobolus australasicus* on red sandy loam on midslopes.

VT10 is described as Tall open shrubland of mixed species dominated by *Acacia ancistrocarpa* and *A. inaequilatera* over mid to low isolated clumps of hummock grasses of mixed species dominated by *Triodia angusta* and *T. epactia* over low closed grassland of **Cenchrus ciliaris* on red clay on lowerslopes.

3. Assessment of application against clearing principles

Comments

That applicant proposes to clear up to 3.4 hectares of native vegetation across two sections of Limestone-Marble Bar Road for the purpose of road upgrades.

The application footprint is 4.22 hectares in size, of which 2.34 hectares has been previously cleared (Woodman, 2017).

With the exclusion of the Marble Bar townsite, the surrounding area is highly vegetated. The application area does not occur within an extensively cleared area.

The vegetation within the application area is in good to degraded (Keighery, 1994) condition. A flora survey conducted within the application area did not record any rare flora, priority flora, threatened ecological communities or priority ecological communities (Woodman, 2017).

Weed species **Cenchrus ciliaris* and **Aerva javanica* were recorded within one of the two application areas during a flora survey (Woodman, 2017). Mechanical clearing increases the risk of spreading weeds into native vegetation adjacent to the application area. Weeds can decrease the biodiversity value of an area as they out-compete native vegetation for available resources, contribute to land degradation and increase the frequency and intensity of fires (Department of Environment and Conservation, 2011). Potential impacts to biodiversity outside the application area as a result of the proposed clearing may be minimised by the implementation of weed management practices.

A fauna survey recorded calcrete and stony rises fauna habitat types within the application area, with the majority of the application area comprising stony rises (MWH Australia Pty Ltd [MWH], 2017). The fauna survey determined that the proposed clearing is not likely to impact on any conservation significant fauna species (MWH, 2017).

There are no wetlands or watercourses within the application area. There are no conservation areas within ten kilometres of the application area.

Given the restricted size of the application area and the condition of vegetation, the proposed clearing is not likely to cause appreciable land degradation, impact the environmental values of a conservation area, impact the quality of groundwater or increase or exacerbate the incidence or intensity of flooding.

Environmental impacts will be further minimised by ensuring areas temporarily cleared for the proposed road upgrades are revegetated once they are no longer required.

Given the above, the proposed clearing is not at variance to any of the clearing Principles.

Methodology

References:
Department of Environment and Conservation (2011)
Keighery (1994)
MWH (2017)
Woodman (2017)

GIS Database:
DBCA tenure
Hydrography, linear

Planning instruments and other relevant matters.

Comments

The applicant has obtained authority from the Department of Planning, Lands and Heritage to access and clear within Lots 153 and 182 on Deposited Plan 195179, and Lot 152 on Deposited Plan 221151, Marble Bar (Atlas Iron Limited, 2017a).

The applicant has also obtained access authority from the Shire of East Pilbara, who holds a management order over Lot 148 on Deposited Plan 93594 (Crown Reserve 2906) (Atlas Iron Limited, 2017b).

According to available databases, there are no Aboriginal Sites of Significance within the application area.

Methodology

References:
Atlas Iron Limited (2017a)
Atlas Iron Limited (2017b)

GIS Database:
Aboriginal Sites of Significance

4. References

Atlas Iron Limited (2017a) Further information provided by the applicant on 5 July 2017 (DWER REF: A1500448).

Atlas Iron Limited (2017b) Application for clearing permit CPS 7613/1 (DWER REF: A1438136).

Department of Environment and Conservation (2011) Invasive Plant Prioritisation, Department of Environment and Conversation, Perth.

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

MWH Australia Pty Ltd (MWH) (2017) Unpublished report outlining fauna desktop assessment to support clearing permit application CPS 7613/1 (DWER REF: A1438136).

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Woodman Environmental Consulting Pty Ltd (Woodman) (2017) Corunna Downs Intersection Works Flora and Vegetation Assessment. Unpublished report prepared for Atlas Iron Limited, May 2017 (DWER REF: A1438136).