



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 6214/1
Permit Holder:	Main Roads Western Australia
Duration of Permit:	13 December 2014 – 13 December 2029

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 constructing bridges, borrow pits and access tracks.
- 2. Land on which clearing is to be done**
Lot 167 on Deposited Plan 238194, Exmouth Gulf
Lot 170 on Deposited Plan 220393, Yannarie
Lot 293 on Deposited Plan 30483, Yannarie
Lot 186 on Deposited Plan 220379, Nanutarra
North West Coastal Highway road reserve (PIN 11728402, PIN 11728404), Yannarie and Nanutarra
Burkett Highway road reserve (PIN 11241781), Exmouth Gulf
Unnamed road reserve (PIN 11730984), Nanutarra
- 3. Area of Clearing**
The Permit Holder must not clear more than 60 hectares of native vegetation within the combined areas hatched yellow on attached Plan 6214/1a, Plan 6214/1b and Plan 6214/1c.
- 4. Period in which clearing is authorised**
The Permit Holder shall not clear any native vegetation after 13 December 2019.
- 5. 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.
- 6. Type of clearing authorised**
This Permit authorises the Permit Holder to clear native vegetation for the project activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Main Roads Act 1930* or any other written law.

PART II – MANAGEMENT CONDITIONS

- 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*:
 - (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (b) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - (c) 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) at an *optimal time* 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 Permit 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 8(a) on the cleared area(s).
- (c) within 18 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 8(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 8(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 8(c)(ii) of this permit, the Permit Holder shall repeat condition 8(c)(i) and 8(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 8(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 8(c)(ii), the CEO may require the Permit Holder to undertake additional *planting* and *direct seeding* in accordance with the requirements under condition 8(c)(ii).

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:

- (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 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;
 - (ii) a description of the *revegetation* and *rehabilitation* activities undertaken;
 - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares);
 - (iv) the species composition, structure and density of *revegetation* and *rehabilitation*, and
 - (v) a copy of the environmental specialist's report.

10. 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 9 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
- (c) Prior to 13 September 2029, 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:

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 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, or who is approved by the CEO as a suitable environmental specialist;

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

local provenance means native vegetation seeds and propagating material from natural sources within 100 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregions of the areas 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;

optimal time means the period from November to December for undertaking *direct seeding*;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) 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 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 -

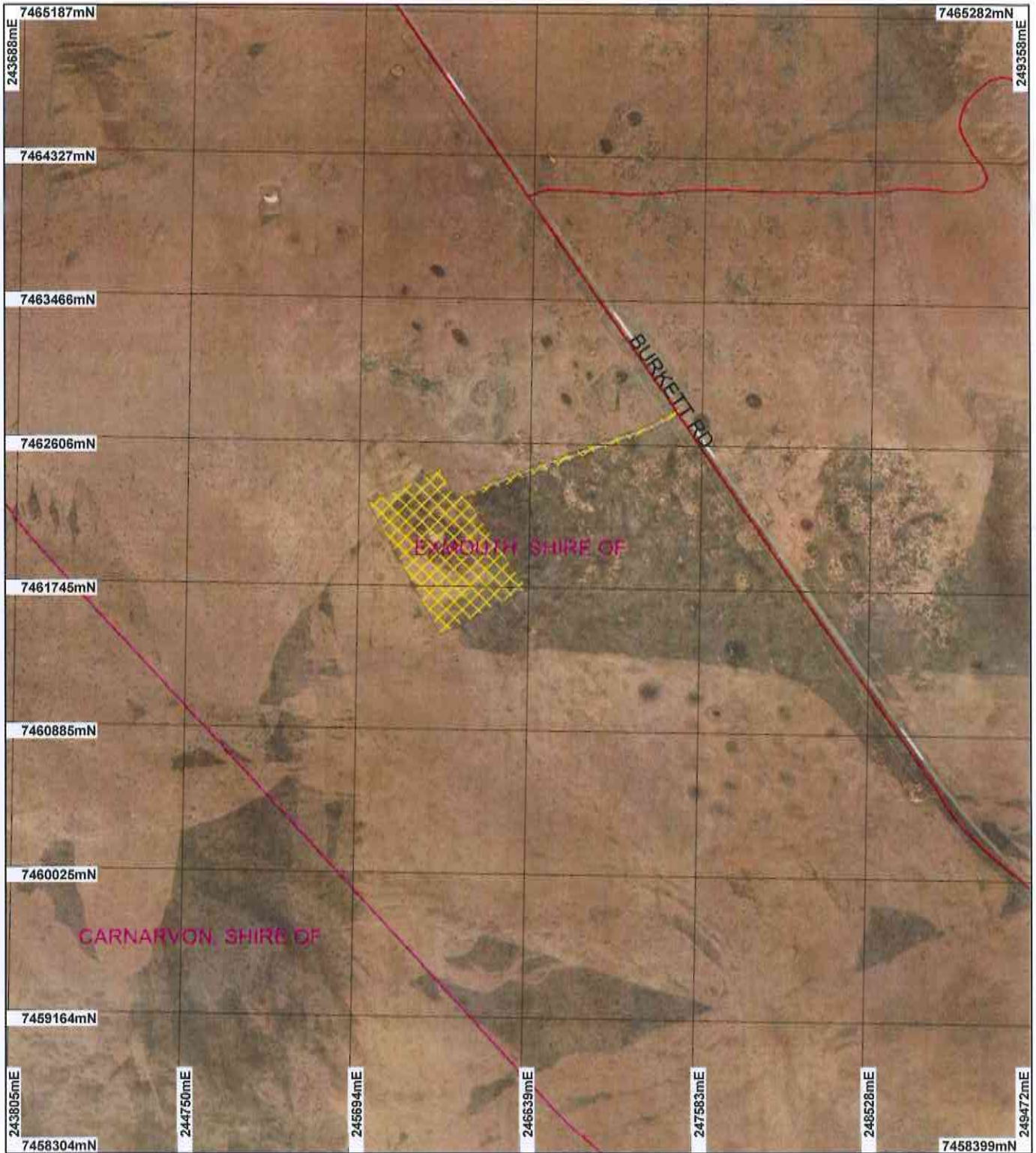
- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



M Warnock
SENIOR MANAGER
CLEARING REGULATION

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

Plan 6214/1a



LEGEND

Clearing Instruments

- Areas Approved to Clear
- Road Centrelines
- Cadastre
- Towns

Barradale 1.4m Orthomosaic - Landgate 2003

- Local Government Authorities



Scale 1:31505

(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 Warnock 13/11/14 Date

M Warnock

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.

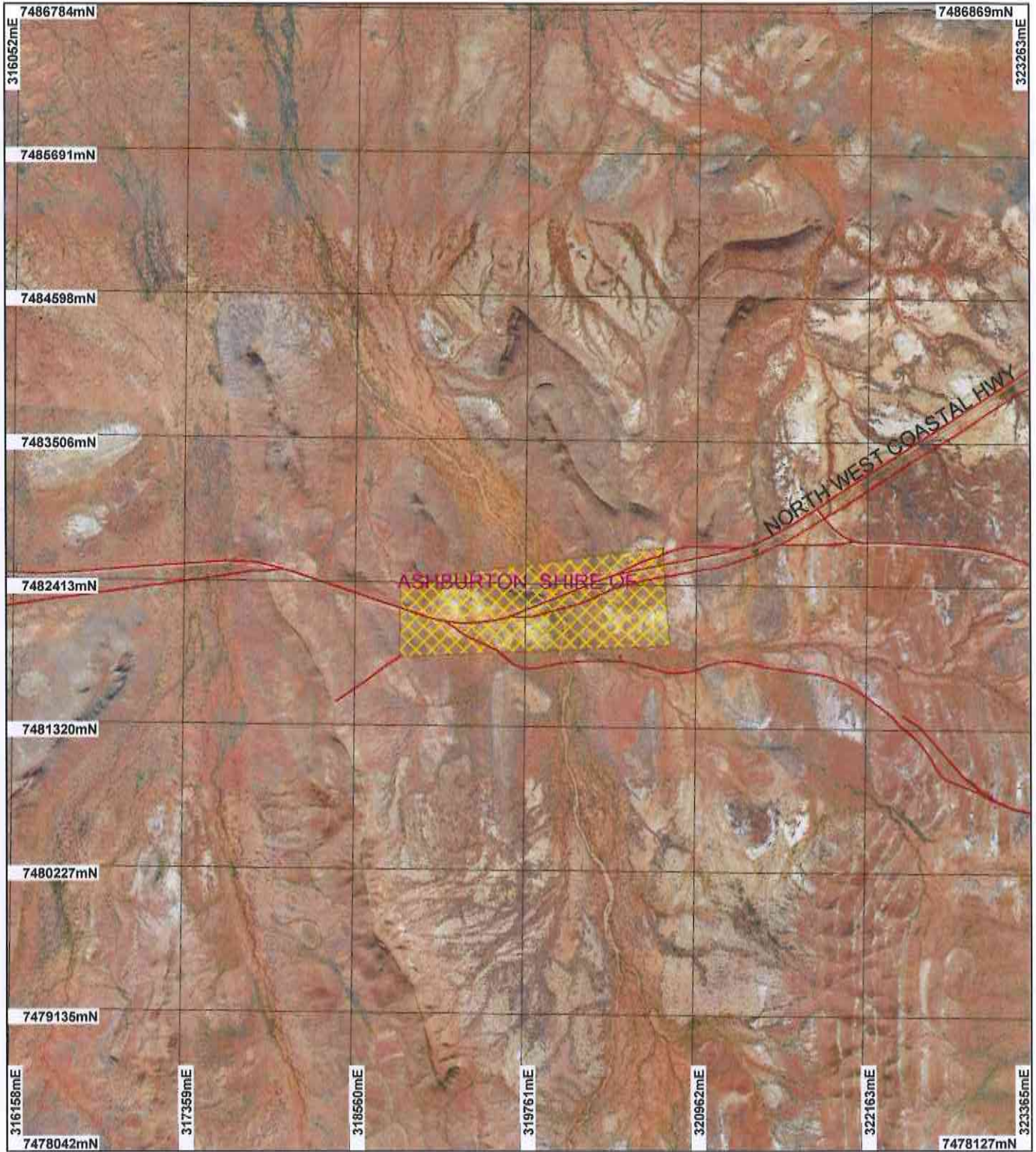


Government of Western Australia
Department of Environment Regulation

WA Crown Copyright 2002

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

Plan 6214/1b



LEGEND

- | | |
|-----------------------------|---|
| Clearing Instruments | <input type="checkbox"/> Local Government Authorities |
| Areas Approved to Clear | Jarroo 50cm Orthomosaic - Landgate 2005 |
| Road Centrelines | |
| Cadastre | |
| Towns | |



Scale 1:40049
(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 Warnock Date 13/11/14

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.

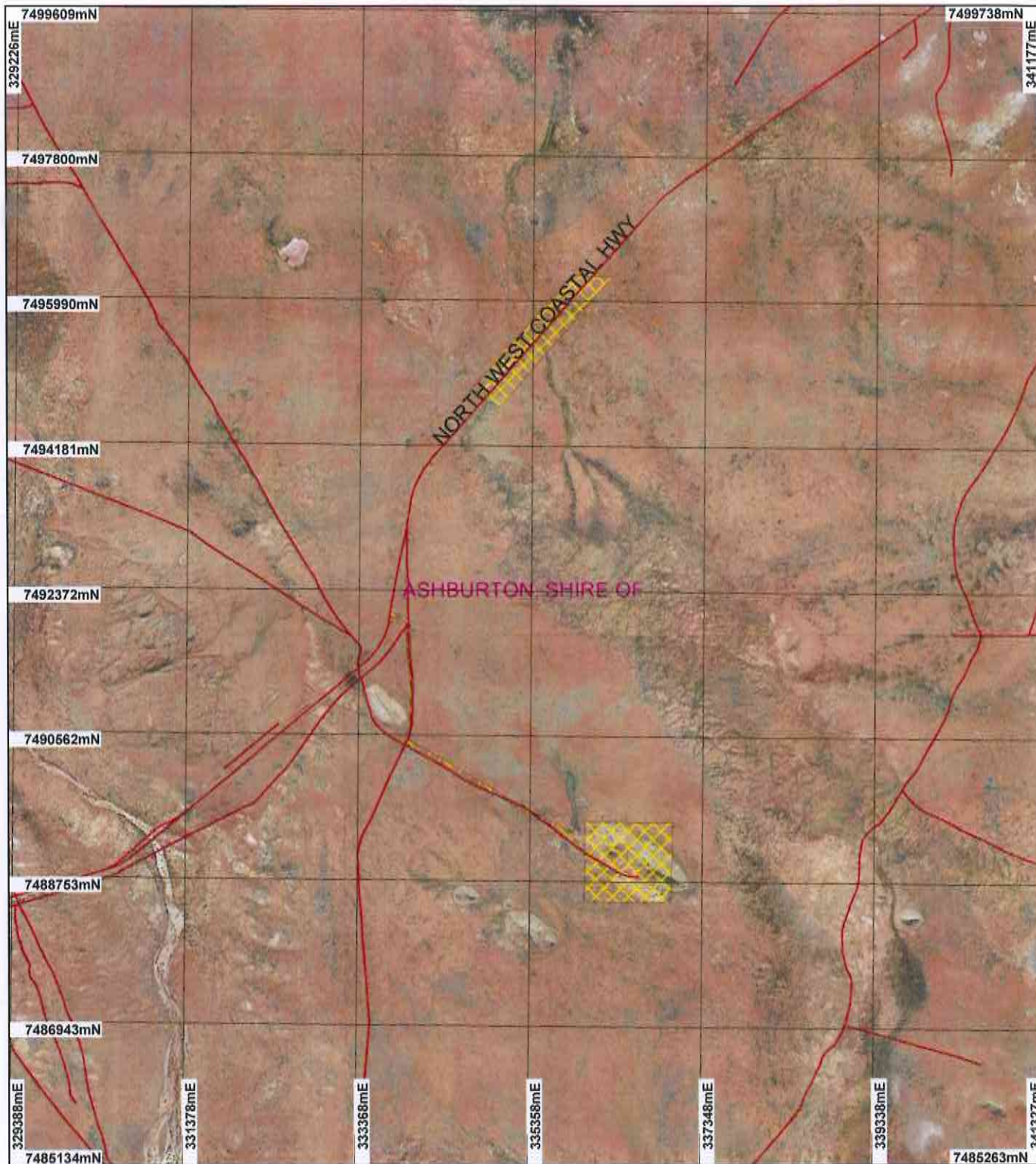


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Department of Environment Regulation

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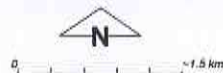
* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.

Plan 6214/1c



LEGEND

- | | |
|-----------------------------|---|
| Clearing Instruments | <input type="checkbox"/> Local Government Authorities |
| Areas Approved to Clear | Uaroo 50cm Orthomosaic - Landgate 2005 |
| Road Centrelines | |
| Cadastre | |
| Towns | |



Scale 1:66336
(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 Warnock Date 13/11/14
M Warnock

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.: 6214/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Main Roads Western Australia

1.3. Property details

Property: LOT 167 ON PLAN 238194 (Lot No. 167 BURKETT EXMOUTH GULF 6707)
ROAD RESERVE (EXMOUTH GULF 6707)
ROAD RESERVE (YANNARIE 6710)
LOT 293 ON PLAN 30483 (YANNARIE 6710)
LOT 170 ON PLAN 220393 (YANNARIE 6710)
LOT 186 ON PLAN 220379 (Lot No. 186 NORTH WEST COASTAL NANUTARRA 6751)
ROAD RESERVE (NANUTARRA 6751)
Shire of Exmouth, Shire of Ashburton,

Local Government Area:
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
60		Mechanical Removal	Building or Structure

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 13 November 2014

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 vegetation under application is mapped as Beard vegetation associations (Shepherd et al, 2001): - 95. Hummock grasslands, shrub steppe; acacia and grevillea over <i>Triodia basedowii</i> .	The application is to clear up to 60 hectares of native vegetation within various road reserves and adjoining pastoral leases for the purpose of construction of bridges, borrow pits and access tracks.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994) To Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	A targeted flora and fauna survey identified 22 vegetation units comprising of 147 flora species with the condition of the vegetation ranging from very good to completely degraded (GHD, 2008). The survey (project area) was conducted over an area comprising of approximately 526 hectares. The survey area included the 60 hectares under application. The condition of the vegetation under application was determined via biological surveys conducted by GHD in 2008 (GHD, 2008).

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments **Proposal is not likely to be at variance to this Principle**
The application is to clear up to 60 hectares within various road reserves and adjoining pastoral leases for the purpose of construction of bridges, borrow pits and access tracks.

The vegetation under application is in a very good to completely degraded (Keighery, 1994) condition (GHD, 2008).

There have been three priority flora species recorded within 20 kilometres of the areas under application. A targeted flora and fauna survey recorded 147 flora species, none of which are rare or priority flora species (GHD, 2008).

Several fauna species are known to occur within 20 kilometres of the areas under application (DEC 2007-). A targeted flora and fauna survey did not record any fauna species of conservation significance in the application area (GHD, 2008).

The landscape surrounding the application area is highly vegetated retaining approximately 99 per cent native vegetation. Two Beard Vegetation Associations have been mapped within the application areas. Both of the vegetation associations are well represented within the bioregions of which the application falls.

Given the above, the application is not likely to be at variance to this clearing principle.

Methodology References:
DEC (2007-)
GHD (2008)
Keighery (1994)

GIS Datasets:
- SacBiodataSets - accessed October 2014

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

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

A targeted flora and fauna survey, based on the habitats present, determined that 30 mammals, 86 reptiles, 22 bird species and six amphibians are known to occur across the project area (GHD, 2008). The survey did not record any fauna species of conservation significance within the project area (GHD, 2008).

The vegetation under application may provide suitable habitat for fauna of conservation significance. However the local area is highly vegetated and similar habitat exists in the vegetation adjacent to the proposed clearing areas (GHD, 2008).

Given the above, the application is not likely to be at variance to this clearing principle.

Methodology References:
GHD (2008)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments Proposal is not at variance to this Principle

The closest record of rare flora occurs over 200 kilometres from the application area. A flora survey of the application area undertaken by GHD in 2013 did not reveal the presence of rare flora (GHD, 2008).

Given the above, the application is not at variance to this principle.

Methodology Reference:
GHD (2008)

GIS Databases:
- SAC Biodatsets - accessed October 2014

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments Proposal is not at variance to this Principle

The closest recorded threatened ecological community (TEC) occurs over 100 kilometres from the application area. A flora survey of the application area undertaken by GHD in 2013 did not record vegetation consistent with a TEC (GHD, 2008).

Given the above, the application is not at variance to this principle.

Methodology Reference:
GHD (2008)

GIS Databases:
 - SAC Biodatasets - accessed October 2014

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments **Proposal is not at variance to this Principle**
 The area under application is located within the Carnarvon, Pilbara and Gascoyne Interim Biogeographic Regionalisation of Australia (IBRA) bioregions. These IBRA bioregions retain approximately 99 per cent of their pre-European vegetation extents (Government of Western Australia, 2013).

The vegetation under application is mapped as Beard vegetation associations 98 and 1162. Both vegetation associations retain approximately 99 per cent of their pre-European extent remaining within the Carnarvon, Pilbara and Gascoyne bioregions (Government of Western Australia, 2013).

The area under application is located within the Shire of Exmouth and Ashburton which both retain greater than 97 per cent pre-European vegetation (Government of Western Australia, 2013).

The local area (20 kilometre radius) is highly vegetated with approximately 99 per cent vegetation remaining. Given the above, the proposed clearing is not at variance to this principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DPaW Managed Lands (%)
IBRA Bioregion*				
Carnarvon	8,382,890	8,360,803	99	12
Gascoyne	18,075,219	18,067,441	99	10
Pilbara	17,808,657	17,733,583	99	8
Shire				
Shire of Exmouth	649,315	635,565	97	44
Shire of Ashburton	10,086,657	10,059,961	99	16
Beard Vegetation Association				
98	309,629	309,605	99	18
1162	71,617	71,598	99	0
*Government of Western Australia (2013)				

Methodology References:
 Government of Western Australia (2013)

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments **Proposal is at variance to this Principle**
 Rouse Creek is located approximately three kilometres from the proposed clearing areas. Numerous unnamed minor non-perennial watercourses intersect with the areas under application. A flora survey of the application area identified that creek line vegetation will be impacted upon (GHD, 2008)

The proposed clearing will impact vegetation growing in association to a watercourse. However, the watercourses have not been identified as having significant environmental values (GHD, 2008). Considering this and given that the local area is highly vegetated it is unlikely any significant impacts will occur to the watercourses from the proposed clearing.

The application is at variance to this principle.

Methodology Reference:
 GHD (2008)

GIS Datasets:
 - Hydrography linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments **Proposal is not likely to be at variance to this Principle**
 The landscape surrounding the application area is highly vegetated retaining approximately 99 per cent native vegetation.

Given the local area surrounding the proposed clearing is highly vegetated and as temporarily cleared areas will be revegetated, removing the vegetation under application is not likely to cause wind erosion, salinity or eutrophication.

The application does not intersect with a major watercourse or wetland. A flora survey of the application area identified that creek line vegetation will be impacted upon (GHD, 2008). Minimal clearing is required within the identified creek line. Considering this and that a road already exists in the location of the creek line, it is unlikely any land degradation will occur from water erosion.

Given this, the application is not likely to be at variance to this principle.

Methodology Reference:
GHD (2008)

GIS Datasets:
- Hydrography linear

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments Proposal may be at variance to this Principle

A section of the proposed clearing area falls within the ex-Giralia pastoral station which is proposed to become a conservation reserve. Parks and Wildlife (2014) has advised that the land is currently classified as unallocated Crown land of which they currently manage for fire, weeds and pest animals. The land has been identified as containing conservation values and any disturbance to the land should be avoided or minimised as much as possible (Parks and Wildlife, 2014).

Given that some of the proposed clearing falls within a proposed conservation reserve there is an increased risk of weeds spreading into the proposed reserve. Weed management practices are likely to limit the above.

Given the above, the application may be at variance to this principle.

Methodology References:
Parks and Wildlife (2014)

GIS Datasets:
- DEC Tenure

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

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

Rouse Creek is located approximately three kilometres from the proposed clearing areas. Numerous unnamed minor non-perennial watercourses intersect with the areas under application. During the works, the proposed clearing may cause short term water quality issues, such as localised surface water sedimentation. However, these issues are likely to be minimal and only likely to occur during the wet season.

The groundwater salinity within the application area is mapped as 1000 - 14000 mg/L of Total Dissolved Solids. Some areas of the application are considered to be highly saline. However, given highly vegetated local area it is unlikely the proposed clearing will increase groundwater salinity.

Given the above, the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Databases:
- Groundwater salinity, statewide
- Hydrography linear

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

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

Numerous unnamed minor non-perennial watercourses intersect with the areas under application.

Given that the local area is highly vegetated and as temporarily cleared areas will be revegetated; removing the vegetation under application is not likely to cause or exacerbate flooding and is not likely to be at variance to this clearing principle.

Methodology GIS Databases:

- Hydrography linear

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

Comments

The Shire of Exmouth (2014) has advised that they have no objections to the proposed clearing.

Parks and Wildlife (2014) recommends that any disturbance within the ex-Giralia pastoral station, proposed to become a conservation reserve, is managed using the best practice environmental management, this includes rehabilitating the cleared areas as soon as possible once the area is no longer needed. Parks and Wildlife (2014) also recommend that a revegetation plan be prepared in consultation with them.

The areas under application falls within the Gascoyne Groundwater, Pilbara Groundwater and Pilbara Surface Water Area, which are areas proclaimed under the Rights in Water and Irrigation Act 1914.

The Department of Water (2014) has advised should the applicant interfere with the bed and banks of a watercourse or abstract groundwater for the project, the following licences are required (DoW, 2014):

- A permit to interfere with the bed and banks of a watercourse.
- A licence to take groundwater.

The areas under application fall within a registered native title claim. Both the claimants and their representing body have been notified of the application. To date no response has been received.

An Aboriginal Site of Significance is mapped within the application area. The applicant is advised to contact the Department of Aboriginal Affairs in relation to their responsibilities under the Native Title Act, 1994.

Methodology

References:

DoW (2014)

Parks and Wildlife (2014)

Shire of Exmouth (2014)

4. References

- DoW (2014) Advice received for Clearing Permit Application CPS 6214/1, Main Roads Western Australia. Department of Water, Western Australia (DER ref: A809977).
- GHD (2008) Information supplied in support of clearing permit application CPS 6214/1, Bridges/Culvert Upgrades North West Coastal Highway, Prepared for Main Roads WA (DER Ref: A789073).
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, 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.
- Parks and Wildlife (2014) Advice received for Clearing Permit Application CPS 6214/1, Main Roads Western Australia. Department of Parks and Wildlife, Western Australia (DER ref: A828219).
- 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.
- Shire of Exmouth (2014) Information received in relation to Clearing Permit Application CPS 6214/1, Main Roads Western Australia (DER Ref:A828220).