



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 3311/1
Permit Holder:	Oakajee Port and Rail Pty Ltd
Duration of Permit:	22 November 2009 – 22 November 2014

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 hydrogeological investigations and access tracks.

2. Land on which clearing is to be done

LOT 14 ON PLAN 238307 (SOUTH MURCHISON 6635)

LOT 11804 ON PLAN 238483 (NUNIERRA 6630)

LOT 94 ON PLAN 220763 (SOUTH MURCHISON 6635)

LOT 86 ON PLAN 238307 (YALGOO 6635)

3. Area of Clearing

The Permit Holder must not clear more than 2.7 hectares of native vegetation within the area cross hatched blue on attached Plans 3311/1a, 3311/1b, 3311/1c and 3311/1d.

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

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.

9. Fauna management

- (a) Prior to undertaking any clearing authorised under this Permit, the area(s) shall be inspected by a *fauna specialist* for the presence of *Leipoa ocellata* (Malleefowl) mounds, and/or *Egernia stokesii badia* (Western Spiny-tailed Skink) habitat.
- (b) Where *Leipoa ocellata* (Malleefowl) mounds or *Egernia stokesii badia* (Western Spiny-tailed Skink) habitat are identified in relation to condition 9(a) of this Permit, the Permit Holder shall ensure that:
 - (i) all records of *Leipoa ocellata* (Malleefowl) mounds or *Egernia stokesii badia* (Western Spiny-tailed Skink) habitat are submitted to the CEO; and
 - (ii) no clearing occurs within 50 metres of the identified *Leipoa ocellata* (Malleefowl) mounds or *Egernia stokesii badia* (Western Spiny-tailed Skink) habitat, unless approved by the CEO.

PART III - RECORD KEEPING AND REPORTING

10. Records must be kept

- (a) The Permit Holder must maintain the following records for activities done pursuant to this Permit 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 fauna management pursuant to condition 9 of this Permit, the location of each *Leipoa ocellata* (Malleefowl) mound or *Egernia stokesii badia* (Western Spiny-tailed Skink) habitat recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings

11. Reporting

- (a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 10 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 22 August 2014, the Permit Holder must provide to the CEO a written report of records required under condition 10 of this Permit where these records have not already been provided under condition 11(a) of this Permit.

Definitions

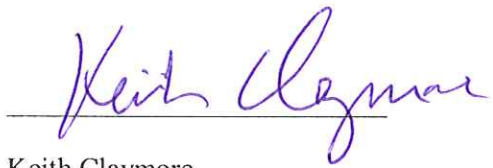
The following meanings are given to terms used in this Permit:

fauna specialist means a person with training and specific work experience in fauna identification or faunal assemblage surveys of Western Australian fauna;

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;

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*.

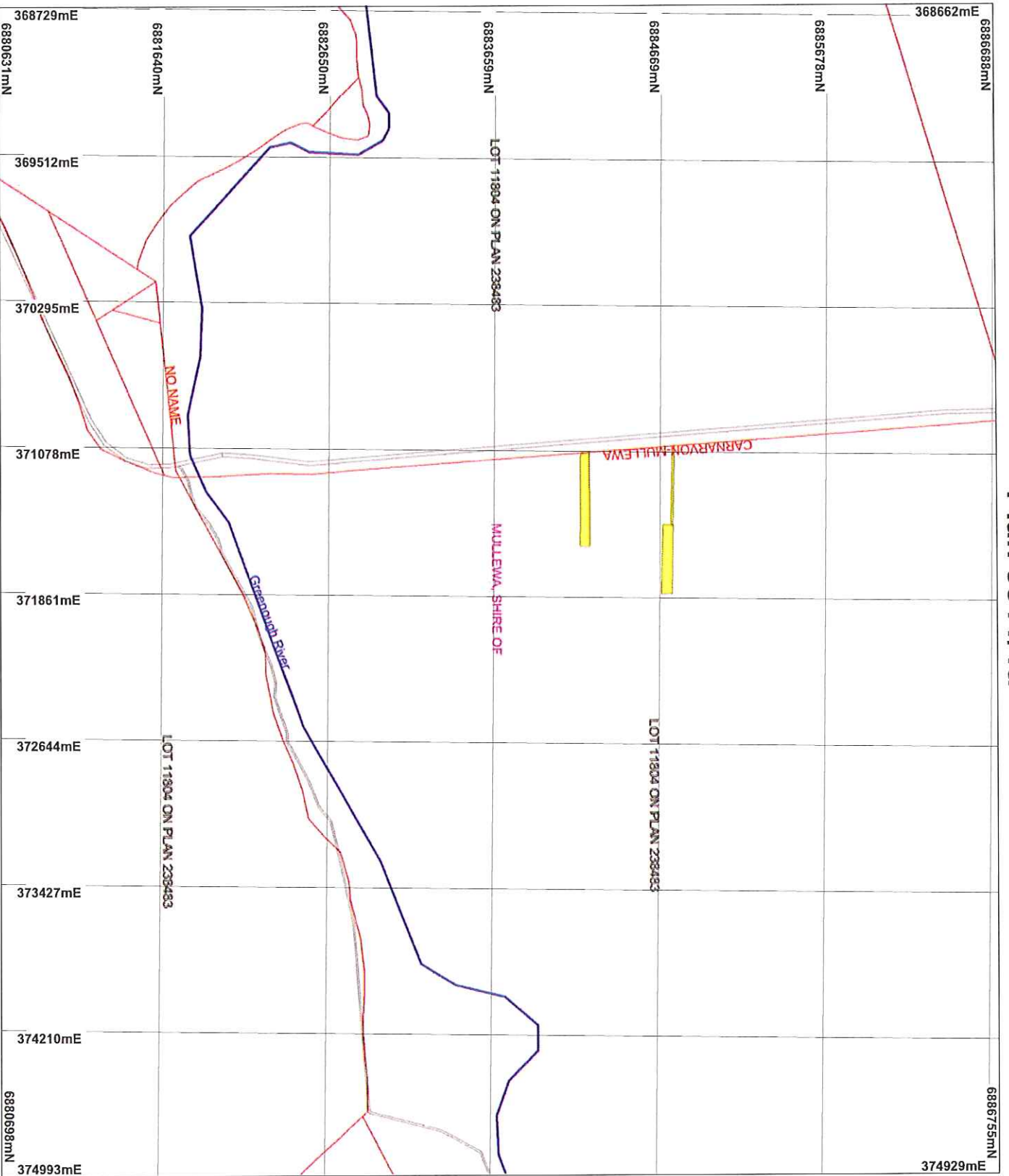


Keith Claymore
A/ ASSISTANT DIRECTOR
NATURE CONSERVATION DIVISION

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

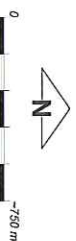
22 October 2009

Plan 3311/1a



LEGEND

- Clearing Instrument
- Road Centrelines
- Cadastre for Labelled
- Local Government
- Hydrography, linear
- Coastal Boundary
- Esplanade
- Infrastructure
- Significant Tidal
- Interim Area
- Boundary
- Major Road
- Major Tidal
- Minor Road
- Minor Tidal
- Power Discharge Line
- Significant Stream



Scale 1:29685
(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 misalignment inaccuracies.

K. Chapman Date 22/10/09
K. Chapman
Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

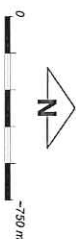
Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



The map displays a section of land with various parcels and boundaries. The following details are visible:

- Coordinates:**
 - Northing: 6898202mN, 6899211mN, 6900221mN, 6901230mN, 6902240mN, 6903249mN, 6904258mN
 - Easting: 377235mE, 378081mE, 378865mE, 379649mE, 380433mE, 381218mE, 382002mE, 382786mE, 383511mE
- Land Parcels:**
 - LOT 11804 ON PLAN 236483 (highlighted in yellow)
 - LOT 11802 ON PLAN 26343 (highlighted in yellow)
- Roads and Boundaries:**
 - NO NAME (road segment)
 - MURCHISON SHIRE OF (boundary line)
- Water Features:**
 - Green River (blue line)

- ✓ Clearing Instruments
- ✓ Road Centrelines
- ✓ Candidate for Inhabited
- Local Government, Hydrographic, limonite
- ✓ Central Waterways
- ✓ Estuaries
- ✓ Inhabited Areas
- ✓ Inhabited Tidal
- ✓ Inhabited Area
- ✓ Abandoned
- ✓ River Power
- ✓ River Tidal
- ✓ River Power
- ✓ River Tidal
- ✓ River-Damming Line
- ✓ Significant System



Scale 1:29708

(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.

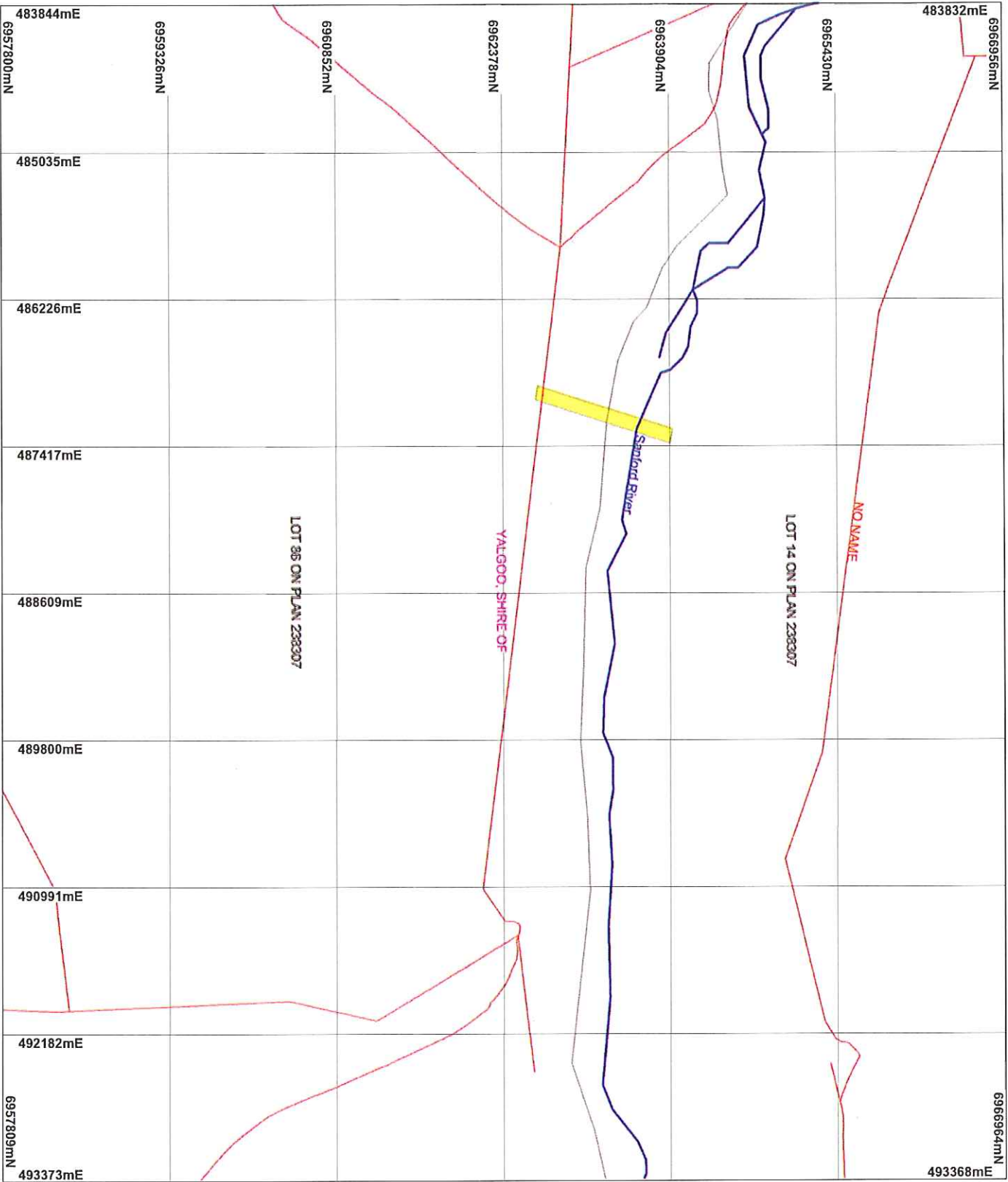
Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

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



Department of
Environmental and Conservation
Our environment, our future
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Plan 3311/1c



LEGEND

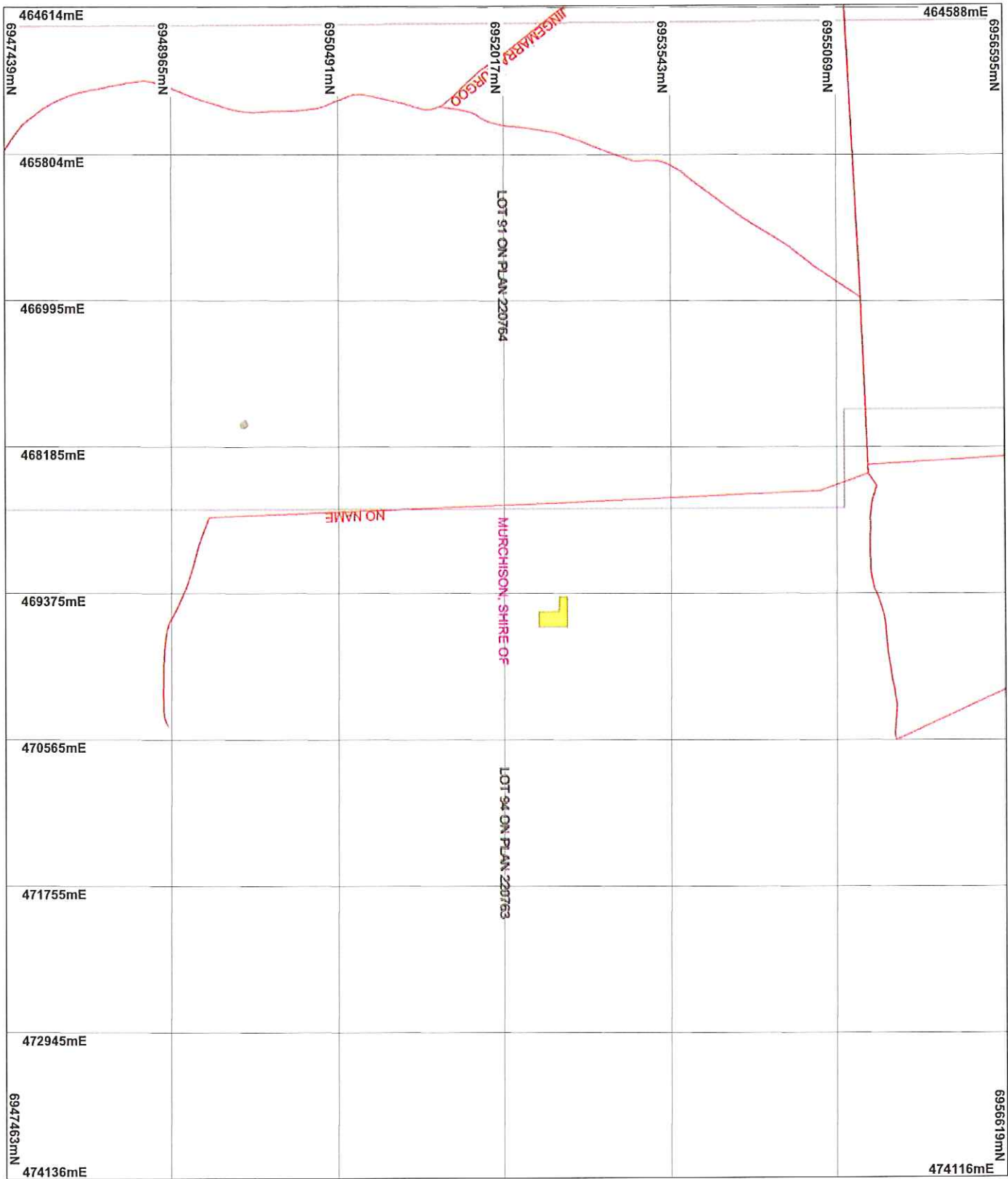
- Clearing Instrument
- Road Centrelines
- Coastline for Labelled
- Local Government
- Hydrography, linear
- Coastal Boundary
- Islands
- Infrastructure
- Intergovernmental
- International
- Marine
- Major Power
- Major Road
- Major Tidal
- Minor Road
- Minor Tidal
- Power Distribution Line
- Power Line
- Significant System



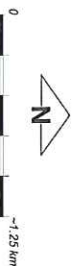
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(Approximate when reproduced at A4)
Geocentric Datum Australia 1994
Note: the data in this map have not been projected. This may result in geometric distortion or misalignment inaccuracies.

K. Claymore
K. Claymore
23/1/14/03

Plan 3311/1d



- LEGEND**
- Clearing Instrument
 - Road Centrelines
 - Cadastre for Indicator
 - Local Government



Scale 1:45013

(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.

Ken Claybridge Date *22/10/19*
K Claybridge

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.





1. Application details

1.1. Permit application details

Permit application No.: 3311/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Oakajee Port and Rail Pty Ltd

1.3. Property details

Property: LOT 14 ON PLAN 238307 (SOUTH MURCHISON 6635)
LOT 11804 ON PLAN 238483 (NUNIERRA 6630)
LOT 94 ON PLAN 220763 (SOUTH MURCHISON 6635)
LOT 86 ON PLAN 238307 (YALGOO 6635)

Local Government Area:

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.7		Mechanical Removal	Miscellaneous

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
Mapped Beard vegetation associations:			
29: Sparse low woodland; mulga, discontinuous in scattered groups	The application is for the clearing of 2.7 ha within sites across the midwest region for hydrogeological investigations and associated tracks. The vegetation condition ranges from excellent to degraded (Keighery 1994), with an average condition of good (Keighery, 1994).	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The vegetation condition and description was determined from vegetation and flora surveys supplied by the proponent (OPR 2009).
40: Shrublands; acacia scrub, various species			
326: Low woodland over scrub; mulga over bowgada & minnieritchie scrub			
1125: Succulent steppe with scrub; Acacia victoriae & snakewood over saltbush & bluebush			
2081: Shrublands; bowgada and associated spp. Scrub (Shepherd, 2007)			
As Above	As Above	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	As Above
As Above	As Above	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	As Above
As Above	As Above	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	As Above

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 for the clearing of 2.7 ha of native vegetation, within a 150km long corridor, for hydrogeological investigations and associated access tracks. The vegetation ranges from excellent to degraded (Keighery 1994) condition, disturbance caused by grazing and weeds is apparent in many areas throughout the

application area.

The local area retains nearly 100% of its pre-European vegetation, and the vegetation associations under application within the Yalgoo and Murchison IBRA Bioregions are all highly vegetated (Shepherd, 2007).

Two of the areas under application fall within the buffer of the Talling Peak priority one ecological community.

Given the vegetation remaining within the local area and the small (2.7 ha) size of the proposed clearing area, this proposal is not likely to have a locally significant level of biological diversity, and the clearing as proposed is not likely to be at variance to this principle.

Methodology Shepherd (2007)
Keighery (1994)

GIS database:

- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 27 July 09
- Declared Rare and Priority Flora List - CALM 13/08/03
- Pre European Vegetation - DA 01/01
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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 may be at variance to this Principle

The vegetation types under application are well represented within the Yalgoo and Murchison bioregions, with close to 100% of the pre-European extent remaining (Shepherd 2007). The condition of the vegetation under application ranges from excellent to degraded (Keighery, 1994).

A survey (OPR, 2009) conducted by the applicant identified Western Spiny-tailed Skink (*Egernia stokesii badia*) and Malleefowl habitat within the surveyed corridor.

Given the potential for the vegetation under application to contain habitat for the Western Spiny-tailed Skink and Malleefowl, the clearing as proposed may be at variance to this principle.

Fauna management conditions will be placed on the permit to mitigate the potential for clearing to impact on significant habitat for these conservation significant fauna.

Methodology OPR (2009)
Shepherd (2007)

GIS database:

- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 3 September 09
- Hydrography linear - DOW 13/7/06
- Hydrography linear (hierarchy) - DoW 13/7/06

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

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

No rare flora has been recorded within a 30 km radius of the area under application. Additionally, no rare flora species were identified during flora surveys conducted throughout the proposed clearing areas (OPR 2009). The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology OPR (2009)

GIS database:

- Declared Rare and Priority Flora List - CALM 13/08/03
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 3 September 09
- Soils, Statewide DA 11/99

(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 likely to be at variance to this Principle

No known threatened ecological communities have been recorded within the immediate proximity of the area

under application. The clearing as proposed is therefore not likely to be at variance to this principle.

- Methodology** GIS Database:
- SAC Biodatasets - accessed 3 September 09
 - Pre European Vegetation - DA 01/01
 - Soils, Statewide DA 11/99

(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 likely to be at variance to this Principle**
All of the Beard vegetation associations mapped within the application area are well represented in the Murchison bioregion, with close to 100% of the pre-European extent remaining (Shepherd, 2007).

The clearing as proposed is therefore not likely to be at variance to this principle.

- Methodology** Shepherd (2007)
- GIS Databases:
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
 - Local Government Authorities - DLI 8/07/04
 - Pre European Vegetation - DA 01/01
 - SAC Biodatasets - accessed 3 September 09
 - NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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**
The application intersects a major non-perennial significant stream (Sanford River). The proposed clearing is therefore considered to contain vegetation growing in association with a watercourse and is considered to be at variance to this principle.

However, given the clearing size at this site is approximately 0.25 ha (OPR 2009), the likely impact to the riparian vegetation is small. A permit to obstruct or interfere with bed and banks has been granted by the Department of Water for this site.

- Methodology** OPR (2009)
- GIS Databases:
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
 - Hydrography linear - DOW 13/7/06
 - Hydrography linear (hierarchy) - DoW 13/7/06

(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 application area is in close proximity to a number of DEC managed unallocated crown land proposed for conservation. Additionally, areas under application occur near Urawa Nature Reserve and Wandana Nature Reserve.

Given the size (2.7 ha) of the proposed clearing along a 150km corridor within a highly vegetated area the clearing as proposed is not likely to impact on nearby conservation areas.

- Methodology** GIS database:
- Average Annual Rainfall Isohyets - WRC 29/09/98
 - Annual Evaporation Contours (Isopleths) - WRC 29/09/98
 - Hydrogeology, statewide - DOW 13/07/06
 - Hydrography, linear - DOW 13/7/06
 - Salinity Risk LM 25m - DOLA 00
 - Soils, Statewide DA 11/99
 - Topographic contours statewide - DOLA and ARMY 12/09/02
 - Hydrogeology, Statewide 05 Feb 2002

(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 is not likely to be at variance to this Principle

The application area is in close proximity to a number of DEC managed unallocated crown land proposed for conservation. Additionally, areas under application occur near Urawa Nature Reserve and Wandana Nature Reserve.

Given the size (2.7 ha) of the proposed clearing within a highly vegetated area the clearing as proposed is not likely to impact on nearby conservation areas.

Methodology GIS Databases:

- CALM Managed Lands and Waters - CALM 01/06/05
- Hydrography, linear - DOW 13/7/06
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02
- System 1 to 5 and 7 to 12 areas - DEC 11/7/06

(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

The clearing of 2.7 ha of native vegetation from sites located over a 150km corridor within a highly vegetated landscape is not likely to have a significant impact on surface or ground water quality. The clearing as proposed is not likely to be at variance to this principle.

Methodology GIS database:

- Evapotranspiration Isopleths - WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Salinity Risk LM 25m - DOLA 00
- Topographic Contours, Statewide - DOLA 12/09/02

(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

The clearing of 2.7 ha of native vegetation from sites located over a 150km corridor within a highly vegetated landscape is not likely to have a significant impact on water runoff or flooding. The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology GIS database:

- Evaporation Isopleths - WRC 29/09/98
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DoW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The applicant is accessing the land via authority issued by the Public Transport Authority under Section 182 of the Land Administration Act (1997).

A submission was received from the Shire of Yalgoo objecting to the proposal on the basis that alternative routes had not been shown to have been given adequate consideration (TRIM Ref: DOC100518).

The Department of Water has issued a Permit to Obstruct or Interfere the Greenough River. (TRIM ref DOC100924.)

The area under application lies within the Amangu People, Mullewa Wadjari community and Wajarri Yamatji Native Title Claim areas. The Mullewa Wadjari People raised an objection to this proposal outlining a number of potential impacts on their registered native title rights and interests. These include, but are not limited to; direct interference with the community life of persons who are the holders of native title in relation to the land concerned; disturbance of lands and the creation of a right, where exercised, will result in the disturbance of these lands; substantial interference with claimant people's community presence or activity on the land concerned as a result of physical activities constituting the future act; major disturbance of the land concerned

resulting from the proposed future act; protection of the land concerned to avoid outcomes offending the traditions and beliefs held by the claimant people; and interference with the spiritual aspects of the community life of the claimant people (TRIM Ref: DOC101094).

Methodology

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing is at variance to Principle (f), may be at variance with Principles (b) and is not likely to be at variance to the remaining clearing Principles.

5. References

- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Oakajee Port and Rail Pty Ltd (2009). OPR Rail Development - Vegetation Clearing Permit Supporting Document - Engineering Feasibility Works, Mt Wittenoom to Wandina Station. TRIM ref DOC92695 and DOC97038.
- Shepherd, D.P. (2007). 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. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

6. 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)