



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number: CPS 6857/1
Permit Holder: Road Trains of Australia Pty Ltd
Duration of Permit: 2 April 2016 - 2 April 2021

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

- 1. Purpose for which clearing may be done**
Clearing for the purpose of constructing a turning lane.
- 2. Land on which clearing is to be done**
Great Northern Highway road reserve (PIN: 11727268), Muchea
- 3. Area of Clearing**
The Permit Holder must not clear more than one hectare of native vegetation within the area cross-hatched yellow on attached Plan 6857/1.
- 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.

A handwritten signature in black ink, appearing to read "James Widenbar", written over a horizontal line.

James Widenbar
A/ SENIOR MANAGER
CLEARING REGULATION

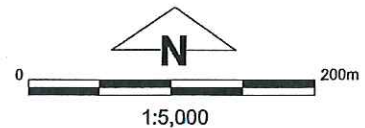
*Officer delegated under Section 20
of the Environmental Protection Act 1986*

3 March 2016

Plan 6857/1



-  Roads
-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority



(Approximate when reproduced at A4)
GDA 94 (Lat/Long)
Geocentric Datum of Australia 1994

James Widenbar Date *3/3/2016*
James Widenbar

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



1. Application details

1.1. Permit application details

Permit application No.: 6857/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Road Trains of Australia Pty Ltd

1.3. Property details

Property: Great Northern Highway road reserve (PIN:11727268), Muchea
Colloquial name:
Local Government Authority: Chittering, Shire Of
DER Region: Greater Swan
DPaW District: Perth Hills and Swan Coastal
LCDC:
Localities: Muchea

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1		Mechanical Removal	Turning lane

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 3 March 2016

Reasons for Decision: The clearing application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the *Environmental Protection Act 1986*, and has concluded that the proposed clearing is not likely to be at variance to any of the clearing principles.

Through assessment it has been determined that the clearing of a relatively small degraded (Keighery, 1994) area is unlikely to have any significant environmental impacts. Relevant State policies and other relevant policies have been taken into consideration in the decision to grant a clearing permit.

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
Beard vegetation association 4 is described as medium woodland; marri & wandoo (Shepherd et al., 2001).	The applicant proposes to clear one hectare of native vegetation within Great Northern Highway road reserve (PIN: 11727268), Muchea, for the purpose of constructing a turning lane.	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 condition and description of the vegetation under application was determined via the review of a site assessment undertaken by Mattiske (2015) and a site inspection undertaken by the Department of Environment Regulation (DER, 2016).

A site assessment undertaken by Mattiske Consulting Pty Ltd recorded marri and wandoo open woodland within the application area (Mattiske, 2015). The application area is separated into northern and southern portions by a drain.

The northern portion supports a mixture of marri and wandoo over weed species *Eragrostis curvula*, *Oxalis pes-caprae* and *Gladiolus caryophyllaceus* and low native shrubs and sedges, including *Allocasuarina humilis*, *Hibbertia hypericoides*, *Banksia armata*,

Mesomelaena tetragona, *Lambertia multiflora* var. *Darlingensis*, *Calothamnus sanguineus*, *Acacia pulchella* and *Acacia applanata* (Mattiske, 2015).

The southern portion supports open areas of marri and wandoo over weed species *Eragrostis curvula* and *Oxalis pes-caprae*, and native low shrubs including *Hibbertia hypericoides* and *Acacia pulchella* (Mattiske, 2015).

3. Assessment of application against clearing principles

Comments The clearing of one hectare of native vegetation within Great Northern Highway road reserve (PIN:11727268), Muchea, is for the purpose of constructing a turning lane. Vegetation within the application area is in good (Keighery, 1994) condition, and represents the mapped Beard vegetation association of marri and wandoo medium woodland (Mattiske, 2015).

A site assessment undertaken by Mattiske (2015) recorded no rare or priority flora, and no threatened or priority ecological communities within the application area.

A total of seven threatened, one migratory and four priority fauna have been recorded within 10 kilometres of the application area (Parks and Wildlife, 2007-), of which two threatened and three priority fauna may utilise habitat within the application area. The application area contains 11 mature wandoo trees that are either of a size suitable as to provide hollows in the future, or contain hollows suitable for nesting by Carnaby's cockatoo (*Calyptorhynchus latirostris*; rare or likely to become extinct under the *Wildlife Conservation Act 1950* [WC Act]). Suitable foraging habitat comprising *Banksia* sp. and marri trees was observed within and adjacent to the application area thus indicating that the vegetation proposed to be cleared provides viable nesting habitat for Carnaby's cockatoo, however no evidence of hollow use by Carnaby's cockatoo was observed during a site inspection (DER, 2016). The applicant has advised that eight to nine of the mature wandoo trees will not be impacted by the proposed clearing (Road Trains of Australia, 2016).

Understorey and midstorey vegetation within the application area is degraded (DER, 2015), and is therefore unlikely to provide a significant ecological linkage between remnants for ground-dwelling fauna. However, other fauna species, such as small bird species with limited dispersal ability, may utilise the application area for movement between remnant vegetation.

Approximately 19 per cent of Beard vegetation association 4 remains within the Swan Coastal Plain bioregion. The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). Approximately 30 per cent of pre-European vegetation remains within a 10 kilometre radius of the application area. Based on the vegetation condition and limited size of the area proposed to be cleared, the vegetation under application is not likely to be a significant remnant within a highly cleared area.

The nearest conservation area is Bush Forever site 81, which is located approximately one kilometre south-east of the application area on the opposite (eastern) side of the Great Northern Highway. This Bush Forever site is 3.1 hectares in size, is part of the Ellen Brook palusplain wetland, and contains plant communities that are representative of the eastern Swan Coastal Plain. While the proposed clearing may impede the movement of select fauna species between the Bush Forever site and remnants north of the site connected to the Great Northern Highway, there are alternate linkages to remnant vegetation in the area and the proposed clearing is not likely to have a significant impact on the environmental values of this or any other conservation area.

The soil type within the application area is mapped as areas of both hard and sandy soils over a dissected lateritic plateau. Based on the linear shape and size of the application area, the proposed clearing is not likely to cause appreciable land degradation via soil erosion, waterlogging or salinity.

The application area does not occur within a watercourse or wetland. The nearest wetland is the Ellen Brook floodplain, which is located approximately 300 metres south and 650 metres west of the application area. The proposed clearing of one hectare within the Great Northern Highway road reserve is not likely to impact the quality of surface water or groundwater on a local or regional scale.

Given the presence of sandy soils that are likely to be permeable to rainfall, the relatively small size of the application area and distance from the nearest wetland, the proposed clearing is not likely to cause or exacerbate flooding.

Based on the above, the proposed clearing is not likely to be at variance to any of the clearing Principles.

Methodology References:
Commonwealth of Australia (2001)
DER (2016)
Keighery (1994)
Mattiske (2015)
Parks and Wildlife (2007-)
Road Trains of Australia (2016)

GIS Database:
- Bush Forever
- Geomorphic wetlands (classification), Swan Coastal Plain
- Remnant vegetation

Planning instruments and other relevant matters.

Comments Road Trains of Australia Pty Ltd has obtained approval from Main Roads Western Australia to construct the turning lane within Great Northern Highway road reserve.

Planning approval for the proposed works and related activities was granted by the Shire of Chittering on 25 February 2015. Condition 26 of the approval states that if the development is not substantially commenced within a period of two years, or such other period as specified in the approval after the date of the determination, the approval shall lapse and be of no further effect.

The clearing permit application was advertised on 18 January 2016 by the Department of Environment Regulation inviting submissions from the public. One submission was received, and raised the following concerns (Submission, 2016):

- the proposed clearing may cause flooding
- the application area forms an ecological linkage;
- the removal of mature wandoo and marri trees; and
- adherence to Shire approval conditions.

These concerns have been addressed in the above assessment.

Methodology References:
Submission (2016)

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DER (2016) CPS 6857/1 site inspection report. Department of Environment Regulation, Perth. DER REF: A1050010.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske (2015) Flora and vegetation site assessment of Great Northern Highway road reserve (PIN: 11727268) undertaken by Mattiske Consulting Pty Ltd for Commercial Properties Group. DER REF: A1012534.
- Parks and Wildlife (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed February 2016.
- Road Trains of Australia (2016) Further information provided to the assessing officer on 15 February 2016 by Road Trains of Australia Pty Ltd. DER REF: A1050024.
- 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.
- Submission (2016) Submission received in relation to CPS 6857/1. DER REF: A1039876.