



ENVIRONMENTAL IMPACT ASSESSMENT

**GREAT NORTHERN HIGHWAY UPGRADE
DESIGN PACKAGE 3A**

Chittering Roadhouse SLK 50.40 to 52.48

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REVISION NO.

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DATE

20 DECEMBER 2007

QUALITY INFORMATION

Document Environmental Impact Assessment

Ref DP03A

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Reviewed by Troy Collie

Revision History

Revision	Revision Date	Details	Authorised	
			Name/Position	Signature
Draft	18.12.07		Troy Collie	
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1. PROJECT LOCATION

The project proposes widening the Great Northern Highway to the north and the south of the Chittering Roadhouse and improving the access into the roadhouse. The project is located to the north of Bullsbrook between 50.40 – 52.48 SLK which is approximately 7km south of the town of Bindoon (see [Figure 1](#)) and 55km north of Perth.

2. BACKGROUND

In order to gain an understanding of potential environmental impacts associated with the proposed works Preliminary Environmental Impact Assessments (PEIAs) were undertaken in 2003 by KBR and 2004 by SKM. The PEIAs were undertaken as a desktop exercise and identified the need for additional environmental studies, such as field surveys, to be undertaken to further define the potential environmental impacts.

Subsequent to the PEIAs, various environmental studies were undertaken focusing on issues such as drainage and salinity, flora, fauna, potential contaminated sites, vegetation clearing analysis and Aboriginal heritage. The findings of the environmental surveys were compiled into summary reports and recommendations were made regarding the requirements for environmental approvals (SKM, 2004; SKM, 2005).

3. DESCRIPTION OF THE PROJECT

The proposed upgrade works will consist of reconstruction and widening of the existing formation, with improvements to vertical and horizontal geometry (realignment) where necessary to achieve acceptable standards for a National Highway. The principal objective is to improve the level of service and safety for road users along with access to the Chittering Roadhouse. Extra works associated with the widening and realignment activities will include; construction of ancillary drainage works including side drains, enhancement of off-shoot drains and table-drain blocks and installation of pavement marking and signs.

3.1 Summary of Significant Environmental Issues

The Chittering Roadhouse project known as design package 3A (DP3A) has been excised from the works proposed between 37.2 - 52.4 SLK, originally package 4/1. Package 4/1 in its entirety was determined by SKM as requiring referral to the EPA (SKM, GNH EPA Referral Strategy -2005). However package 4/1 as it was originally assessed has been broken into two parts with DP3A between 50.4 – 52.4 SLK of lower environmental significance and, therefore, not required to be referred to the EPA. Note packages DP3B and DP3C were referred to EPA in 2006 and EPA determined those referrals “Not Assessed”.

DP3A has two potentially significant environmental issues:

- clearing of under represented vegetation and
- Carnaby’s Black Cockatoo nesting hollows impacts.

The under-represented vegetation of complex 999 - *Medium woodland; Marri*, of which 13.1% pre European extent remain is in poor to fair condition. Due to this condition level and the fact that less than 500m² is to be cleared, this can justifiably be done using Main Roads vegetation clearing Purpose Permit.

With regard to potential impacts on Carnaby’s nesting hollows, Ron Johnstone, who is the head of the ornithology department at the WA Museum, will erect ten artificial nesting hollows to mitigate the loss of one known and two potential nesting hollows. Separate advice from Dr Johnstone determines the effect and offset will not be a significant impact to Carnaby’s Black Cockatoos.

DP3A, the Chittering Roadhouse project will not be referred to the WA Environmental Protection Authority or the Commonwealth Department of the Environment, Water, Heritage and the Arts (DEWHA).

4. METHODOLOGY

4.1 Aspects & Constraints

A preliminary assessment of the project area and its potential constraints was undertaken by compiling information from the numerous environmental reports which have been completed for this section of Great Northern Highway (see [References](#)).

4.1.1 *Wetlands*

None present within or near the project area.

4.1.2 *Threatened Flora, Fauna & Communities, Reserves and ESAs*

Botanical surveys were conducted during spring 2005 with no threatened flora, Threatened Ecological Communities (TECs) or conservation reserves located that will be impacted by the works. Priority flora was found during the survey to the south of the Chittering Roadhouse and would have been impacted as the original project was anticipated to be 49.0 – 52.4 SLK. The project has since been redesigned and will start at 50.4 SLK which will avoid this population of Priority Flora.

Threatened fauna was found when Ron Johnstone surveyed the area for Carnaby's Black Cockatoos. Ron found one confirmed Carnaby's Black Cockatoo nesting hollow located on the western side of the road at 51.5 SLK and five potential nesting hollows between SLK 49.0 and 52.4. Of these hollows the one confirmed and two of the five potentials will be removed by the road works.

4.1.3 *Air Quality*

The need for a local air quality assessment was determined not necessary using the criteria outlined in the MRWA environmental guideline, Air Quality.

4.1.4 *Heritage*

No sites present within or near the project area.

4.1.5 *Aboriginal Heritage*

Aboriginal heritage field surveys were undertaken towards the end of 2004 along Great Northern Highway. No sites were identified within the proposed works.

4.1.6 *Sensitive Water Resources*

None present within or near the project area.

4.1.7 *Contaminated Sites*

The work is within the road reserve, which has not been used in the past for any activity by Main Roads that may have caused contamination. No previous land use is suspected of causing site contamination.

4.1.8 *Acid Sulfate Soils*

No further investigations are necessary as there is no dewatering or excavation near or below the water table.

4.1.9 *Weeds*

Numerous common weed species occur throughout the proposed works areas however no declared plants are present in the project area.

4.1.10 Dieback

As the project area receives >400 mm of average annual rainfall and dieback sensitive flora species are present within the works areas, the area should be treated as dieback free and managed accordingly.

4.2 Commonwealth Referral

The decision whether to refer (with possible assessment of) the project to the DEWHA was based upon whether the project would impact upon matters of national environmental significance.

The proposed works would impact on one confirmed Carnaby's Black Cockatoo nesting hollow and two potential hollows, with Carnaby's listed as a threatened species under the EPBC Act. This impact is, however, categorised by world-leading Carnaby's Black Cockatoo expert, Ron Johnstone, as 'not significant' and the loss mitigated through Main Roads installation of ten artificial nesting hollows in the immediate area.

The loss of nesting hollows does not represent a significant impact relative to thresholds set in DEWHA Significant Impact Guidelines.

The proposed action does not have a significant impact on Carnaby's Black Cockatoo's and therefore will not be referred to the DEWHA.

4.3 Site Inspection

A site visit to examine the area was carried out by Project Managers Paul Kerle and David Clarkson and Environment Officers Dinky Goble-Garratt and Nigel Rowe on 14/11/2006.

Site photos were taken and are included in [Appendix A](#).

5. EXISTING ENVIRONMENT

5.1 Description

There were two vegetation types present on a regional scale in the immediate area (Shepherd et al. 2002):

- 3 - Medium forest: Jarrah and Marri and
- 4 - Medium woodland: Marri and Wandoo.

The local scale mapping in the field identified five vegetation types, this vegetation has been grouped under one broad habitat type - Eucalyptus woodland (as listed in Australian Native Vegetation Assessment 2001).

The five vegetation types located within DP3A identified by the botanist are:

- 3 - Medium forest; jarrah-marri
- 950 - Medium woodland; Casuarina obesa
- 999 - Medium woodland; marri
- 1027 - Mosaic: Medium open woodland; jarrah & marri, with low woodland; banksia / Medium sparse woodland; jarrah & marri
- 1034 - Medium woodland; marri, wandoo & powderbark

These vegetation complexes have been recorded by SLK and GPS coordinates for DP3A along with the condition of the vegetation, see [Table 1](#) on the following page.

5.2 Site Investigation

5.2.1 Native Vegetation

Site Investigation	Description/Comment
Total area (ha) of <u>native vegetation to be cleared</u>	0.78ha (footprint of new works 2.2ha)
Total area (ha) of other vegetation, including regrowth, landscape areas, to be cleared	1.1ha (pine trees)
Weeds present	Yes (no declared weeds)
Drainage areas or wetlands present	No
Adjacent land uses	Pine plantation and farming

TABLE 1 – Vegetation Type and Condition for Chittering Roadhouse Area

SLK	Easting	Northing	Vegetation Type	Condition	% Pre European Remaining
49.25	409445	6516478	3	poor	70.0
49.30	409491	6516510	1034	good	63.7
49.53	409527	6516745	1034	good	63.7
49.57	409505	6516781	3	fair	70.0
49.58	409512	6516799	1034	good	63.7
49.70	409508	6516921	3	good	70.0
49.98	409432	6517188	3	fair	70.0
50.03	409413	6517235	3	fair	70.0
50.04	409449	6517250	950	fair	38.3
50.07	409407	6517285	0	Pine Trees	N/A
50.12	409472	6517326	1034	fair	63.7
50.15	409428	6517364	999	fair	13.1
50.38	409537	6517575	999	poor	13.1
50.38	409535	6517578	1003	good	41.5
50.39	409553	6517576	1027	good	55.5
50.46	409594	6517637	3	good	70.0
50.49	409569	6517677	3	excellent	70.0
50.52	409620	6517684	1003	good	41.5
50.54	409596	6517721	1027	good	55.5
50.60	409626	6517772	3	excellent	70.0
50.70	409705	6517847	999	fair	13.1
51.04	409867	6518150	1034	good	63.7
51.13	409910	6518222	1034	fair	63.7
51.15	409904	6518251	3	good	70.0
51.17	409927	6518261	1034	good	63.7
51.26	409972	6518334	3	good	70.0
51.35	410024	6518419	3	fair	70.0
51.54	410109	6518583	3	poor	70.0
51.69	410184	6518716	3	good	70.0
51.90	410262	6518907	0	Weeds only	N/A
52.17	410444	6519103	1034	good	63.7
52.31	410556	6519191	3	fair	70.0
52.35	410583	6519215	3	poor	70.0

5.2.2 Non-native Vegetation

Main Roads has widened the western road reserve by 10m to accommodate the road project. As a result 1.1ha of plantation pine trees will be removed over a distance of 1.4km primarily to reinstate the plantation's fire break. Compensation has been paid to the landowners for the pine tree removal.

6. CLEARING OF NATIVE VEGETATION

Native vegetation describes all indigenous aquatic and terrestrial vegetation (living or dead). The term does not include vegetation that was intentionally sown, planted or propagated unless it was required under a statutory condition.

Apart from activities that are exempt under the clearing regulations typically all Main Roads clearing will be undertaken using its Statewide Project Purpose Permit.

6.1 Assessment against Clearing Principles

In assessing whether the project is likely to have a significant impact on the environment, the project has been assessed against the DEC's 10 principles of clearing, refer to [Appendix B](#).

The project is determined not at variance with the DEC's 10 clearing principles and is, therefore, able to be conducted and delivered using Main Roads' clearing permit CPS 818/4.

6.2 Environmentally Sensitive Area (ESA)

Clearing within an Environmentally Sensitive Area (ESA)	Yes/No	Comments
Does the area to be cleared occur within an ESA where the vegetation is in good or better condition?	No	

7. DECISION TO REFER

Given the scale of the project and the environmental management measures proposed, the project does not require referral to the WA Environmental Protection Authority nor the Commonwealth Department of the Environment, Water, Heritage and the Arts.

8. STAKEHOLDER CONSULTATION

Name	Agency	Date	Comments
Rosanna Hindmarsh	Chittering Landcare Group	Jan 2007	None

9. ASSESSMENT OF ASPECTS AND IMPACTS

Table 2: Aspects and Impacts – *Chittering Roadhouse Upgrade 50.40 – 52.48 SLK*

Aspect	Evaluation of Potential Impacts
Aboriginal heritage	A search of DIA's database identified no known sites of Aboriginal heritage significance within the vicinity of the project area. Aboriginal heritage field surveys were also undertaken towards the end of 2004 along Great Northern Highway with no sites identified within the proposed works.
Acid Sulfate Soils	This project requires no dewatering or excavation below the water table.
Air quality	Not relevant to the proposed works.
Contamination	Given the relatively superficial nature of the required earthworks, there appears to be a low risk of any significant contamination issues.
Dust	Likely to be a minor issue during earthworks. No major sensitive receivers adjacent to the proposed works, but excessive dust could impact vegetation. Activities will need to be subject to dust suppression to control short-term dust generation. Likely to be easily managed by standard construction dust management techniques. The Shire of Chittering should be consulted regarding the proposed dust control measures.

Table 2: Aspects and Impacts – Chittering Roadhouse Upgrade 50.40 – 52.48 SLK

Aspect	Evaluation of Potential Impacts
Fauna	The works do impact on one confirmed Carnaby's Black Cockatoo nesting hollow and two potential hollows. This loss will be mitigated through the installation of ten artificial nesting hollows in the immediate area. No other significant fauna issues are associated with any of the proposed upgrade works.
Groundwater	No dewatering or drainage modifications are required, hence no change to groundwater level or quality.
Hazardous substances	Not relevant to the proposed works.
Heritage (non-indigenous)	There are no registered European Heritage sites within or adjacent to the work site. No Matters of National Environmental Significance will be impacted.
Noise and vibration	No major sensitive local receivers. Construction isn't expected to significantly contribute to noise levels at the nearest sensitive receivers, provided works are limited to normal working hours. The requirements of the Shire of Chittering must be met in respect of noise management and construction working hours.
Vegetation – clearing	<ul style="list-style-type: none"> • 0.78 ha of native vegetation will be cleared. • The project will involve no temporary clearing. • The condition of the native vegetation to be cleared ranges from poor to good. • All native vegetation proposed to be cleared is well represented regionally, except for vegetation association 999 which has less than 30% of its pre-European extent. • Vegetation association 999 is typically poor to fair condition and comprises an area to be cleared less than 0.05ha. • The native vegetation to be cleared <i>does not</i> occur within an ESA. • The native vegetation can be cleared using Main Roads' purpose permit.
Vegetation – dieback	Dieback sensitive flora species are present within the works areas. The area should be treated as dieback free.
Vegetation – TECs/DRF	None present in the work zone, areas outside the project area must not be disturbed as part of the proposed works.
Vegetation – weeds	Numerous common weed species occur throughout the proposed works areas however no declared plants are present in the project area. Although these common species are likely to be widespread within the general area the risk of spreading these weeds species as part of the proposed work should be minimised. Standard weed hygiene measures should be applied for all earthworks in the area, including ensuring that plant and equipment brought on to the site are clean of soil.
Public safety and risk	Provided traffic management and signage to Main Roads standards is employed, none of the proposed works present any significant hazards to public safety. The proposed works will serve to enhance public safety by improving the GNH and access into the Chittering Roadhouse.
Reserves / Conservation areas	There are no conservation areas or reserves adjacent to the project area.
Salinity	There were no visual signs of salinity observed in the project area.
Statutory Land Use Planning	The proposed works are entirely within the existing road reserve and the adjoining land is zoned as an Intensive Land Use Zone. No further amendments would be required to the Local Government Planning Scheme or Region Scheme.
Surface water/drainage	No water courses occur within the site. The proposed works will not disturb or interrupt any natural drainage and surface run-off patterns.
Visual amenity	The proposed works will result in minor and short-term visual impacts. Revegetation will occur post construction.
Wetlands	No wetlands occur within the proposed works site

10. REFERENCES

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

ATA Environmental (2006) Carnaby's Black Cockatoo Assessment, Great Northern Highway. Prepared for Sinclair Knight Merz, January 2006.

Biota Environmental Sciences (2005) Assessment of Roadside Vegetation as Breeding and Feeding Habitats of Carnaby's Cockatoo: Bindoon – Walebing. January 2005.

Department of the Environment and Water Resources (2000) EPBC Act Administrative guidelines on significance. Environment Australia, Australia.

Environmental Protection Authority (2000) Position Statement 2 Environmental Protection of Native Vegetation in Western Australia

Kellogs, Brown and Root Pty Ltd (2005) Preliminary Environmental Impact Assessment, Great Northern Highway Muchea (SLK 36) to Wubin (SLK 253)

O'Connor R. and E.O (2005a) Report on an Ethnographic Survey of Proposed Road Widening and Passing Lane Areas between SLK 41.57 and SLK 145.50. Prepared for Sinclair Knight Merz, January 2005.

O'Connor R. and E.O (2005b) Report on an Ethnographic Survey of Proposed Road Widening and Passing Lane Areas between SLK 37.20 and SLK 146. Prepared for Sinclair Knight Merz, October 2005.

Shepherd D.P, Beeston G.R and Hopkins A.J.M (2002) Native Vegetation in Western Australia – Extent, Type and Status

Sinclair Knight Merz (2005) Great Northern Highway Road Widening and Passing Lane Construction, Muchea to Walebing – SLK 41.57 to 146.2

Sinclair Knight Merz (2005a) Great Northern Highway EPA Referral Strategy. Prepared for Works Infrastructure Maintenance and Main Roads WA, September 2005.

Sinclair Knight Merz (2005b) Great Northern Highway Road Widening and Passing Lane Construction Muchea to Walebing (SLK 41.57 – 146.2), Summary of Environmental Surveys. Prepared for Works Infrastructure Maintenance and Main Roads WA, May 2005.

Sinclair Knight Merz (2005c) Soil Assessment of Road Reserve near Tony's Place, Great Northern Highway (SLK 44) Chittering, Western Australia. November 2005.

Sinclair Knight Merz (2006) Great Northern Highway Minor Improvement Works, Summary of Environmental Studies – Areas of Low Significance, August 2006.

Sinclair Knight Merz (2006) Great Northern Highway Minor Improvement Works, Summary of Environmental Studies – Areas of Moderate to High Significance, August 2006.

Western Botanical (2004) Flora Survey for Proposed Disturbances on Great Northern Highway for Road Widening and Establishment of Passing Lanes. Prepared for Sinclair Knight Merz, December 2004.

Western Botanical (2006) Flora Survey for Extension of Proposed Disturbances on Great Northern Highway. Prepared for Sinclair Knight Merz, April 2006.

Quartermaine Consultants (2005a) Report on Further Archaeological Investigations for Aboriginal Sites, Great Northern Highway H006, Muchea to Walebing Road Widening Programme. Prepared for Sinclair Knight Merz, August 2005.

Figure 1: Location of DP3A

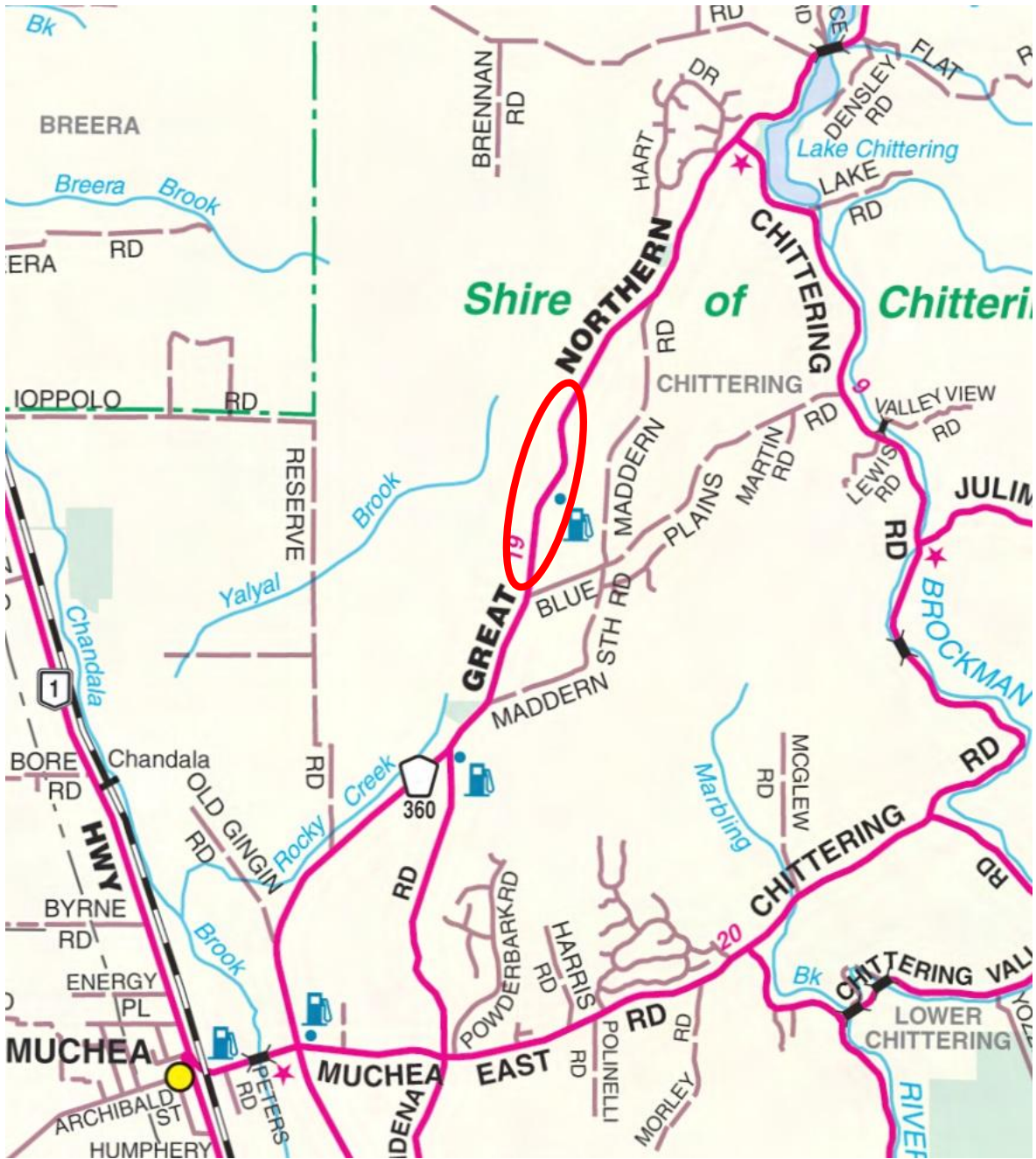


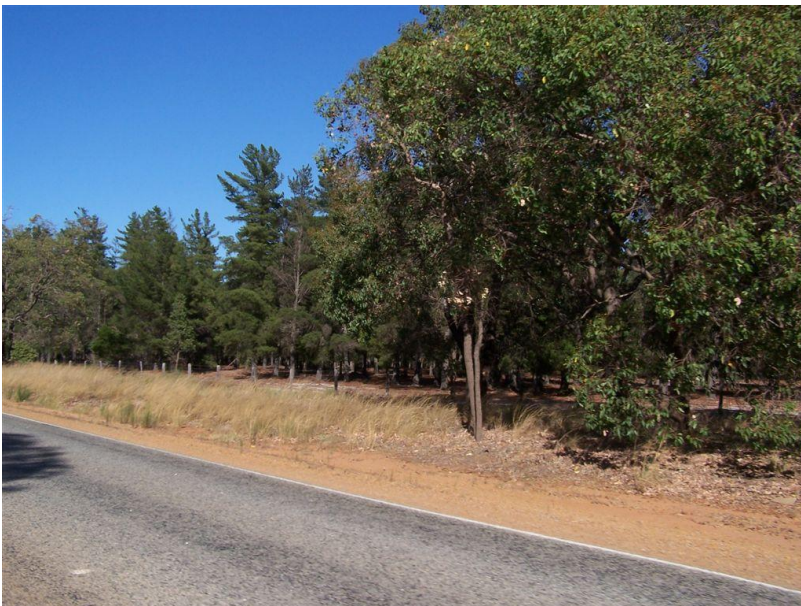
Figure 2: Aerial Photo with overlay of DP3A design



APPENDIX A - SITE PHOTOS



GNH - 51.4 SLK facing north,
Chittering Roadhouse on right.



GNH ~ 51.0 SLK facing west, pine
plantation adjacent to road
reserve.



GNH ~ 50.7 SLK facing north.

APPENDIX B - MRWA VEGETATION CLEARING ASSESSMENT REPORT

This report has been prepared to assist MRWA in addressing Condition 7 "Assessment of Clearing Impacts" under Clearing Permit CPS 818/3.

For guidance on how to complete the form, refer to DEC completed reports (http://203.20.251.100/cps_reports/).

AREA UNDER ASSESSMENT DETAILS

Proponent details

Proponent's name:

MRWA

Contacts:

Name: Nigel Rowe

Phone: 9622-4740

Fax: 9622-3767

Email: nigel.rowe@mainroads.wa.gov.au or nigel.rowe@accessalliance.com.au

Property details

Property:

Great Northern Highway 50.4-52.4 SLK

Colloquial name:

Chittering Roadhouse

Area under assessment

Clearing Area (ha)

No. Trees

Method of Clearing

For the purpose of:

Site Plan Attached

2km by 10m =

Machine

Road Improvements

Yes No

Avoidance/Minimise clearing

How have the clearing impacts been minimised? Works have been reduced in size and designed to avoid large trees where possible

BACKGROUND

Existing environment and information

Description of the native vegetation under application

(suggestion: To determine Vegetation Condition use - Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.)

Site Visit Undertaken	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Fauna / Flora Survey Undertaken	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Site Report Attached	<input type="checkbox"/> Yes <input type="checkbox"/> No	Fauna / Flora Survey Report Attached	<input type="checkbox"/> Yes <input type="checkbox"/> No
Site Photos Attached	<input type="checkbox"/> Yes <input type="checkbox"/> No	Other Relevant References Attached	<input type="checkbox"/> Yes <input type="checkbox"/> No

Vegetation Complex
3, 950, 999, 1027 & 1034

Clearing Description
Machine clearing for road improvements

Vegetation Condition
Poor to good

Comment
Complex 999 of note. Only 13.1% pre European extent remaining

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 at variance to this Principle**

Methodology The biological survey found vegetation complex 3 in good to excellent condition within the work area. The extent of clearing from this complex is very minor and there is 70.0% pre European extent remaining from this complex, resulting in the clearing proposal being not at variance with this principle.

(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 at variance to this Principle**

Methodology Fauna survey has located Carnaby's Black Cockatoo nesting hollows in the work area (1 known and 2 potential). Ten artificial nesting hollows will be installed to mitigate this loss. Given the mitigation, the proposed works are not at variance to this principle.

(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

Methodology Biological survey found no rare flora in the work area.

(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

Methodology Biological survey found no TEC's in the work area.

(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

Methodology The proposal clears less than 500m² of vegetation complex 999 of which there is 13.1% of the pre European extent remaining. Vegetation complex 999 within the site is rated as "poor to fair" condition and degraded with a weed understorey. There is currently 15,161ha of vegetation complex 999 remaining, of which 2,127ha or 14.0% is located within the DEC estate. Due to the degraded nature of the complex 999 vegetation in the proposed work area and small amount of clearing of this complex, the proposal is determined to be not at variance as it is not a significant remnant of this native vegetation type.

(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 not at variance to this Principle

Methodology No watercourses or wetlands are located within the work area.

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

Comments Proposal is not at variance to this Principle

Methodology Only a thin strip (10m) of vegetation is to be cleared with revegetation to follow at the completion of the works.

(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 at variance to this Principle

Methodology The work area is not close enough to any conservation areas to have an impact on their values.

(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 at variance to this Principle

Methodology Works will not impact any surface water areas and as there is no dewatering underground water won't be effected.

(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 at variance to this Principle

Methodology Area is in a low flood risk area well away from any watercourses with only a small amount of vegetation to be cleared.

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments

Methodology

SUBMISSIONS

If required have submissions been requested and addressed

Submission Requested from	Request Sent (Date)	Submission Received (Date)	Issues Raised / Comments Made
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ASSESSOR'S RECOMMENDATIONS

List of Principles seriously at variance, at variance or maybe at variance

Principles 2 & 5, however variance has been mitigated through the installation of nesting hollows, minimising the extent of disturbance (0.78ha all vegetation) and revegetating.

Recommendation (does this clearing require a Revegetation Management Plan / Offset Proposal / Environmental Management Plan / Management Strategy/New Application, under CPS 818/2)

Conclusions - Not at variance; a Construction EMP will be adopted to incorporate all requirements for vegetation management, site based measures. A Revegetation Plan will be adopted for the works

References

OFFICER PREPARING REPORT

Position: Nigel Rowe – Environment Officer
Wheatbelt North Regional Office
MRWA
9622-4740

14 February 2007