

Clearing Permit Decision Report

Application details

Permit application details

Permit application No.:

1741/1

Permit type:

Purpose Permit

Proponent details 1.2.

Proponent's name:

Shire of Dumbleyung

1.3. **Property details**

Property:

Local Government Area:

Colloquial name:

Road reserves within the shire of Dumbleyung

Dumbleyung

1.4. Application

Clearing Area (ha)

No. Trees

Method of Clearing

Mechanical Removal

Mechanical Removal Mechanical Removal Mechanical Removal Mechanical Removal Mechanical Removal

Mechanical Removal Mechanical Removal Mechanical Removal Mechanical Removal Mechanical Removal Mechanical Removal

Mechanical Removal Mechanical Removal Mechanical Removal Mechanical Removal Mechanical Removal

Mechanical Removal Mechanical Removal For the purpose of:

Road construction or maintenance Road construction or maintenance

Road construction or maintenance

Road construction or maintenance

Road construction or maintenance

22.5

2. Site Information

Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

There are 9 Beard vegetation associations across 2 IBRA regions represented within the area under application:

131: mosaic: medium woodland; Salmon Gum (Eucalyptus salmonophloia) and Gimlet (Eucalyptus salubris) / shrublands; mallee scrub, Redwood (Eucalyptus

Clearing Description

Vegetation composition within the road reserves varies from site to site. dependent on the condition of the vegetation and the type of soil / position in the landscape. Common species include York Gum, Jam and Salmon Gum dominated woodlands, Mallees, and areas of Proteaceous scrub. All road reserves exhibited

Vegetation Condition

Good: Structure significantly altered by multiple disturbance: retains basic structure/ability to regenerate (Keighery 1994)

Comment

The condition of the vegetation within the road reserves forming the area under application is given as an average of 'good', although some areas would be considered ýdegradedý. The majority of the road reserves show signs of disturbance (weeds, clearing, etc), however most retain structural intactness even though the diversity of species is lower than would be expected in intact vegetation.

transcontinentalis) and Black Marlock (Eucalyptus redunca). Within IBRA region MAL: 5.9% pre-European extent remaining, 1.1% pre-European extent reserved. degrees of disturbance and weed invasion by introduced grasses and agricultural plants.

142: medium woodland; York Gum (Eucalyptus loxophleba) and Salmon Gum. Within IBRA region AW: 10.7% pre-European extent remaining, 0.5% pre-European extent reserved. Within IBRA region MAL: 7.3% pre-European extent remaining, 2.5% pre-European extent reserved.

952: shrublands; Dryandra heath. Within IBRA region AW: 27.1% pre-European extent remaining, 19.1% pre-European extent reserved.

1023: medium woodland; York Gum, Wandoo (Eucalyptus wandoo) and Salmon Gum. Within IBRA region AW: 6.4% pre-European extent remaining, 1.3% of pre-European extent reserved. Within IBRA region MAL: 4.0% pre-European extent remaining, 0.5% pre-European extent reserved.

1075: shrublands; mallee scrub, Tall Sand Mallee (Eucalyptus eremophila) and Black Marlock. Within IBRA region AW: 9.2% pre-European extent remaining, 4.6% of pre-European extent reserved. Within IBRA region MAL: 11.9% pre-European extent remaining, 5.4% pre-European extent remaining, 5.4% pre-European extent reserved.

1092: medium woodland; Wandoo, York Gum and Morrell (Eucalyptus longicornis). Within IBRA region AW: 6.7% pre-European extent remaining, 0.3% of pre-European extent reserved.

1093: succulent steppe with open woodland and thicket; Eucalypts and Swamp Sheoak (Casuarina obesa) over teatree and samphire. Within IBRA region AW: 11.1% pre-European extent remaining, 14.6% of pre-European extent reserved.

1094: mosaic: medium woodland; York Gum and

Salmon Gum / shrublands; mallee scrub Tall Sand Mallee and Black Marlock. Within IBRA region MAL: 5.8% pre-European extent remaining, 0.1% of pre-European extent reserved.

2048: shrublands; scrubheath in the Mallee region. Within IBRA region AW: 13.8% pre-European extent remaining, 1.3% of pre-European extent reserved. Within IBRA region MAL: 47.8% pre-European extent remaining, 7.1% of pre-European extent reserved.

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 at variance to this Principle

The proposed clearing involves the removal of native vegetation along 23 road reserves in order to undertake road upgrading. Site inspections of most of these road reserves were undertaken in December 2006 and in May 2007 to determine vegetation condition. Originally this application included segments of Brays Road, Candlelight South East Road and Rifle Range Road, plus additional areas along One Twenty Nine Road, Kukerin South Road and Old Lake Grace Road, which have high conservation value and have subsequently been withdrawn by the proponent.

There are 9 Beard vegetation associations represented within the area under application, all have less than 30% of their pre-European extent remaining (more than half have less than 10% left), and only 2 have greater than 10% of their original extent protected within the conservation estate. In 2001 the Shire of Dumbleyung had approximately 9.5% of its original vegetation extent remaining (DAWA 2001).

The Roadside Conservation Committee report (2005) and accompanying Roadside Conservation Value Map (2005) of roadsides in the Shire of Dumbleyung indicates that Halden East Road intersection with Hills Road and the section along Old Lake Grace Road (specifically the southern road reserve, as the northern road reserve has been withdrawn) are considered to have high conservation value (indicating an intact vegetation structure comprising >80% native species with a diversity of >20 native species, with high value as a biological corridor), and potential as Flora Roads (RCC report 2005). The biological diversity of these road reserves was confirmed during a site inspection undertaken on 2 May 2007.

Aerial photography indicates that the vegetation present along road reserves represents a significant portion of the native vegetation remaining in the Shire of Dumbleyung.

Given that the vegetation associations present within the area under application are predominantly extensively cleared and under-represented in the conservation estate, this proposal is considered to be at variance to this principle.

To mitigate loss of biodiversity within the road reserves, a condition has been imposed on the permit to offset the values of the areas to be cleared.

Methodology

DAWA 2001

Beard 1980

Environment Australia 2001

GIS dataset

- Pre-European Vegetation DA 2001
- Interim Biogeographic Regionalisation of Australia 2000
- Dumbleyung Kukerin 1.4m Orthomosaic GA

RCC report 2005

(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

The vegetation within the area under application is predominantly in good condition, with two high quality road reserves. Given the extent of clearing in the landscape it is likely that all of the road reserves provide an ecological function in providing corridors for the movement of animals through the landscape between areas of

remnant vegetation.

There are over 150 recorded occurrences of Threatened and Priority fauna within a 50 kilometre radius of the area under application, approximately half being Threatened species.

The nearest recorded occurrences of Threatened and Priority fauna to the area under application are for Malleefowl (Leipoa ocellata, Threatened), Red-tailed Phascogale (Phascogale calura, Threatened), Peregrine Falcon (Falco peregrinus, Schedule 4), Southern Carpet Python (Morelia spilota imbricata, Schedule 4), Bush Stone-curlew (Burhinus grallarius, Priority 4), Western Brush Wallaby (Macropus irma, Priority 4), White-browed Babbler (Pomatostomas superciliosus ashbyi, Priority 4) and Quenda (Isoodon obesulus fusciventer, Priority 5) which all occur within 450 metres of the road reserves forming the area under application. All records appear to be from adjacent or nearby conservation reserves or lands but not from the area under application. It is recognised that these species would utilise the vegetation within the area under application for moving between areas of remnant vegetation, however it is not expected that these species would depend entirely on these road reserves as their primary habitat.

Aerial photography indicates that the vegetation along these road reserves represents a significant portion of the native vegetation remaining in the Shire of Dumbleyung, and a site inspection undertaken by the assessing officer on 2 May 2007 confirmed the extensively cleared landscape and value of these road reserves in providing some vegetation cover for fauna movement. However, given that the majority of the road reserves within the area under application are narrow and show signs of disturbance, it is unlikely that this vegetation comprises significant habitat for fauna. This proposal is not likely to be at variance to this principle.

Methodology

GIS dataset

Dumbleyung Kukerin 1.4m Orthomosaic DLI 2002

SAC Bio dataset

- Fauna 29/03/07

(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

There are over 150 recorded occurrences of Declared Rare and Priority Flora within a 50 kilometre radius of the area under application, approximately a third of these comprising Declared Rare Flora. Many of these records occur within the same vegetation associations and on similar soil / geomorphology types as those found within the area under application.

The nearest occurrence of Declared Rare Flora is Calectasia pignattiana, located approximately 4.6 kilometres north of the Old Lake Grace Road section (specifically the southern road reserve, as the northern road reserve has been withdrawn) of the area under application. This species occurs on similar soil / geomorphology types as those found within the area under application, however given the proximity of the record to the area under application it is unlikely that this species extends into the area under application.

Records of Dryandra erythrocephala var. inopinata (Priority 2), Dryandra fasciculata (Priority 3), Calothamnus affinis (Priority 4) and Wurmbea drummondii (Priority 4) all occur within 450 metres of the area under application. These species occur on similar soil / geomorphology types as those found within the area under application, and given their proximity to the area under application there is a possibility that these extend into the area under application particularly where road reserves contain vegetation that is of good quality.

Given that the majority of the road reserves within the area under application are narrow and show signs of disturbance, it is unlikely that this vegetation comprises significant habitat for rare flora. Thus this proposal is not likely to be at variance to this principle.

Methodology

GIS dataset

- Soils Statewide DAWA 1999

SAC Bio dataset

- DeFi 17/04/07

FloraBase

RCC report 2005

(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

There are six known occurrences of Threatened Ecological Communities within a 50 kilometre radius of the area under application. The nearest occurrence is approximately 30 kilometres from the Dongolocking Road section of the area under application. The proposed clearing is not likely to impact on this Threatened Ecological Community.

Methodology

SAC Bio dataset

- TEC 05/01/07

(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 P

Proposal is at variance to this Principle

There are 9 Beard vegetation associations represented within the area under application. These have less than 30% of their pre-European extent remaining (with the exception of type 2048), and have less than 10% of their original extent protected in DEC-managed reserves (with the exception of type1093).

land	Pre-European (ha)	Current extent R (ha)	temaining (%)	Conservation status **	Pre-European % in reserve/DEC
IBRA Bioregions: #	0 570 005	1 536 296	16.0	Vulnerable	
- Avon Wheatbelt ***	9 578 995			Least Concern	
- Maliee	7 404 398	4 081 089	55.1	Least Concern	
Shire of Dumbleyung #	253 816	24 003	9.5	Endangered	
Beard vegetation assoc: *					
- type 131	181 157	9 810	5.4	Endangered	0.8
- type 142	711 281	188 532	26.5	Vulnerable	1.2
- type 952	58 932	9 269	15.7	Vulnerable	6.5
- type 1023	1 601 636	103 064	6.4	Endangered	1.2
- type 1075	527 028	62 579	11.9	Vulnerable	5.4
- type 1092	77 953	5 191	6.7	Endangered	0.3
- type 1093	8 259	782	9.5	Endangered	12.2
- type 1094	70 341	4 057	5.8	Endangered	0.1
- type 2048	322 222	155 960	48.4	Depleted	7.0

statistics from Shepherd et al 2001 (Technical Report 249)

The Roadside Conservation Committee report (2005) and accompanying Roadside Conservation Values map of roadsides in the Shire of Dumbleyung indicates that Halden East Road intersection with Hills Road and the section along Old Lake Grace Road (specifically the southern road reserve, as the northern road reserve has been withdrawn) are considered to have high conservation value, therefore providing high quality representation of extensively cleared vegetation associations.

Given the above, this proposal is at variance to this principle.

To mitigate any potential impacts of the clearing on remnant vegetation, while acknowledging the need to maintain and upgrade roads, the proposed clearing will be carried out in accordance with a condition imposed on the permit requiring that clearing of vegetation be avoided, and where this is not possible, minimised. In addition, a condition has been imposed to offset the values of the area to be cleared to address the loss of vegetation within a highly cleared landscape.

Methodology

Beard 1980

DAWA 2001

EPA Position Statement No. 2 Environment Australia 2001

GIS dataset

- Pre-European Vegetation DA 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 not likely to be at variance to this Principle

The proposed clearing involves 23 road reserves, some of which cross minor watercourses and two of which cross major watercourses. However, as these road reserves appear to have been previously cleared and (where necessary) drains and culverts installed to manage the flow of water, the proposed clearing is not likely to be at variance to this principle.

Methodology

GIS dataset

- Topographic Contours Statewide DOLA 2002
- Dumbleyung Kukerin 1.4m Orthomosaic DLI 2002
- Rivers 250K GA
- Lakes 250K GA

^{*} statistics from AGWA 2005 (Shepherd et al)

^{**} Department of Natural Resources and Environment 2002

^{***} Within the Intensive Landuse Zone

(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

Salinity mapping and salinity risk indicate that the valley floor is saline and at risk of spreading. It is possible that roads with inadequate culvert drainage traversing the valley floor contribute to waterlogging. It is likely that the clearing and subsequent drainage will assist in mitigating current issues with waterlogging and salinity in this area.

The soil and geomorphology of the area under application falls within 5 main groups, described as gently undulating to rolling terrain with some ridges and uneven slopes with hard alkaline yellow mottled soils and hard alkaline red soils; broad flat valleys with small clay pans and salt-lake remnants in some localities with hard alkaline yellow soils underlain by acid lateritic clays; saline valleys and salt lakes with gypseous soils and saline loams underlain by clayey or sandy strata; gently undulating or level plains with sandy soils and loamy yellow earths underlain laterite and duplex soils in drainage lines; and dissected plateau at low elevation with hard neutral yellow mottled soils containing ironstone gravels. The soils present within the area under application have predominantly a low to medium potential for water and wind erosion (DAWA 2002).

The Department of Agriculture and Food Western Australia (DAFWA) did not undertake a comprehensive assessment of the land degradation risks associated with the proposed clearing. However advice provided in relation to Clearing Permit 643/1 (which is for adjacent and nearby road reserves) indicated that the proposal is not likely to cause land degradation, and recommended that a management plan be prepared to cover any surface water runoff implications of the proposed works (DAFWA 2005).

In the short-term the clearing may have an impact on localised flooding and soil erosion during works, and structures such as culverts and spoon drains should be installed to minimise / mitigate these impacts. Revegetation following completion of works will minimise long-term land degradation associated with the clearing. It is unlikely that in the long-term the clearing will result in increased wind or water erosion, waterlogging or salinity, thus this proposal is not likely to be at variance to this principle.

Methodology

DAWA 2001

Schoknecht 2002

GIS dataset

- Salinity Mapping LM (25m) DOLA 2000
- Salinity Risk LM (25m) DOLA 2000
- Topographic Contours Statewide DOLA 2002

DAFWA 2005 TRIM ref. IN23624

(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

There are more than 50 DEC-managed land parcels within a 50 kilometre radius of the area under application. The nearest of these are Dongolocking Nature Reserve adjacent to the Dongolocking Road section, Tarin Rock Nature Reserve 5.1 kilometres from the Old Lake Grace Road section, North Tarin Rock Nature Reserve 3.2 kilometres from Halden East Road intersection with Hills Road, and Dumbleyung Lake Nature Reserve 3.9 kilometres from the Nippering Road section of the area under application. In addition, the area under application is adjacent to Mount Pleasant Nature Reserve (the White Well Road section), an un-named Nature Reserve (the Tincurrin Road section), Hurdle Creek Nature Reserve and an un-named Nature Reserve (the Dongolocking Road section), an un-named Nature Reserve (the Wishbone Road section), and an un-named Nature Reserve (the One Twenty Nine Road section). Some road reserves are adjacent to areas of remnant vegetation occurring on private property (although not necessarily managed for conservation). Some of the vegetation communities within the area under application are under-represented within these conservation reserves.

Aerial photography indicates that the vegetation occurring on road reserves provides corridor linkage between conservation reserves, particularly where vegetation is of good condition. The function of road reserves in providing connectivity between areas of remnant vegetation was confirmed during a site inspection undertaken on 2 May 2007. The proposed clearing will impact on a significant portion of the vegetation within the road reserves forming the area under application, in some cases reducing it to approximately one metre of remaining vegetation. The proposed clearing is also adjacent to areas managed for conservation, and therefore this proposal may be at variance to this principle.

To mitigate any potential impacts of the clearing on the environmental values of any adjacent or nearby conservation areas the proposed clearing will be carried out in accordance with a condition imposed on the permit requiring that clearing of vegetation be avoided, and where this is not possible, minimised. Additional conditions relating to the management of dieback and weeds have also imposed.

Methodology

GIS database

- CALM Managed Lands and Waters CALM 2005

- Register of National Estate EA 2003
- Clearing Regulations Environmentally Sensitive Areas DOE 2005
- Dumbleyung Kukerin 1.4m Orthomosaic DLI 2002
- Pre-European Vegetation DA 2001

RCC report 2005

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 area under application is located on road reserves, and this proposal will involve clearing to enable the widening of the existing road formation. This may increase the amount of surface water runoff and short-term sedimentation during construction, however these issues should be minimised through putting in place appropriate roadside infrastructure such as table drains and culverts.

It is unlikely that this clearing will have a significant (long term) impact on the quality of the surface flow or groundwater. Thus it is unlikely that this proposal is at variance to this principle.

Methodology

GIS dataset

- Salinity Mapping LM (25m) DOLA 2000
- Salinity Risk LM (25m) DOLA 2000
- Topographic Contours Statewide (DOLA 2002)

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 area under application is subject to moderately low rainfall (approximately 350 - 400mm/annum) and matching evaporation rate (approximately 400mm/annum). The clearing is linear and will occur parallel and adjacent to the existing road surface, and is unlikely to have a significant impact on rainfall evens.

It is unlikely that this clearing will result in increased duration or peak flooding, thus it is unlikely that this proposal is at variance to this principle.

Methodology

GIS dataset

- Evapotranspiration Area Actual BOM 2001
- Mean Annual Rainfall Isohyets BOM 2001
- Topographic Contours Statewide DOLA 2002

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

Comments

The area under application occurs within the 'Agricultural Area' defined in EPA Position Statement No. 2. This document aims to limit the amount of clearing in an extensively cleared landscape, and defines threshold limits for vegetation communities.

Part of the area under application is located within a Native Title Claim area. The majority of the applied area is contained within existing road reserves that are vested in the Shire of Dumbleyung. There is one Native Title Claim over the area under application. The Department of Environment and Conservation's advertising of the application in the West Australian newspaper constitutes legal notification of the native title representative body for the purpose of the future act procedures under the Native Title Act 1993. No response was received from the representative body. There is at least one Aboriginal Site of Significance listed within the area under application, the permit holder will be notified of their obligations in the cover letter to this permit.

Methodology

GIS dataset

- Aboriginal Sites of Significance DIA
- RIWI Act. Ground Water Areas DOW
- RIWI Act. Surface Water Areas DOW

EPA Position Statement No. 2

Assessor's comments

Purpose Method Applied

Comment

Mechanical Road

Slant Road

construction oRemoval

maintenance

Mechanical Road construction oRemoval

Smiths Road

maintenance

Road

Mechanical

area (ha)/ trees

Springhurst Road

construction oRemoval maintenance

Road Mechanical construction oRemoval maintenance

Road Mechanical construction oRemoval

maintenance
Road Mechanical
construction oRemoval
maintenance

Road Mechanical construction oRemoval maintenance

Road Mechanical 22.5 construction oRemoval maintenance

Road Mechanical construction oRemoval maintenance Tincurrin Road

White Well Road

Wishbone Road

Rifle Range Road. Portion of area under application on both sides of the road between One Twenty Five Road and Candlelight South East Road is considered to have high conservation value, and between Candlelight South East Road and Kukerin Road is considered to have medium high to high conservation value. The reason for this portion of the clearing is to accommodate occasional passing of heavy haulage traffic. The assessing officer recommends that this portion is not approved for clearing and alternate roads be identified to accommodate heavy haulage traffic. If this clearing is approved then the assessing officer recommends that is on a modified basis, that consideration be given instead to the construction of passing bays at intervals, and that clearing should be restricted to one side of the road (east or west, consistent with Brays Road) only to allow the function of this high quality vegetation as a (narrow) corridor continuing on from Brays Road and connecting with Rifle Range Reserve. NOTE - WHOLE SEGMENT WITHDRAWN BY SHIRE OF DUMBLEYUNG 06/06/07.

Brays Road. Portion of area under application on both sides of the road between One Twenty Five Road south to approximately 500 metres north of the boundary of Shire of Dumbleyung is considered to have high conservation value. The reason for this portion of the clearing is to accommodate occasional passing of heavy haulage traffic. The assessing officer recommends that this portion is not approved for clearing and alternate roads be identified to accommodate heavy haulage traffic. If this clearing is approved then the assessing officer recommends that it is on a modified basis, that consideration be given instead to the construction of passing bays at intervals, and that clearing should be restricted to one side of the road (east or west, consistent with Rifle Range Road) only to allow the function of this high quality vegetation as a (narrow) corridor continuing on from Rifle Range Road and linking areas of remnant vegetation. NOTE - WHOLE SEGMENT WITHDRAWN BY SHIRE OF DUMBLEYUNG 06/06/07.

Candlelight Road

Candlelight South East Road. Portion of area under application on both sides of the road approximately 2km either side of the Rifle Range Road intersection is considered to have medium high to high conservation value. The reason for this portion of the clearing is to widen the (unsealed) trafficable surface. The assessing officer recommends that this portion, particularly that section east of the Rifle Range Road intersection, is not approved for clearing. If this clearing is approved then the assessing officer recommends that clearing should be restricted to one side if the road (north or south) only to allow the function of this high quality vegetation as a (narrow) corridor linking areas of remnant vegetation. NOTE - WHOLE SEGMENT WITHDRAWN BY SHIRE OF DUMBLEYUNG 06/06/07. Carwardine Road

Flats / Mutters Road intersection with Coomelberrup Road

Dongolocking Road

Fairclough Road between Kelly Road and Pepall Road (approx 300m)

Halden East Road intersection with Hills Road. Portion of area under application at intersection with Hills Road, extending approximately 1km east and west of the intersection, is considered to have high conservation value. The assessing officer recognises that the current extent of the vegetation poses visibility risk to vehicles leaving Hills Road to travel on Halden East Road, and recommends that clearing be restricted to the south side of Halden East Road immediately adjacent to either side of Hills Road and then only to the extent necessary to improve visibility, to allow the function of this high quality vegetation as a (narrow) corridor linking areas of remnant vegetation.

Harrison Road

Kukerin North Road

Kukerin South Road. Portion of area under application on north-east side of the road from Adams Road to approximately 2km south-east is considered to have medium high to high conservation value. The reason for this portion of the clearing is to widen the extent of sealed trafficable surface and reform the hard shoulders and table drains. The assessing officer recognises that this will be a continuation of road widening from the north-west, and recommends a restriction on the extent of clearing to a maximum of 1m each side of the current formation in this portion to allow the function of this high quality vegetation as a (narrow) corridor linking areas of remnant vegetation. NOTE - PORTION OF APPROX 2.8KM BOTH SIDES OF ROAD STARTING APPROX 500M SE ADAMS ROAD EXTENDING SE PAST LARGE REMNANT WITHDRAWN BY SHIRE OF DUMBLEYUNG 06/06/07.

Merilup Road

Road Mechanical construction oRemoval

maintenance Road Mechanical

construction oRemoval maintenance

Road Mechanical construction oRemoval maintenance

Road construction oRemoval

Mechanical maintenance

Road Mechanical construction oRemoval maintenance

Road Mechanical construction oRemoval maintenance

Road Mechanical construction oRemoval maintenance

Mechanical Road construction oRemoval maintenance

Moulyinning South Road

Mount Pleasant Road

Nippering North Road

Old Lake Grace Road. Portion of area under application on both sides of the road between Willcock Road and the Shire of Dumbleyung boundary is considered to have predominantly high conservation value. The reason for this portion of clearing is to widen the (unsealed) trafficable surface to better facilitate the school bus route. The assessing officer recognises that this will be a continuation of road widening from the west, and address potential safety concerns. The assessing officer recommends that clearing should be restricted to the south side of the road (due to presence of large areas of remnant vegetation linking to the north side) only to allow the function of this high quality vegetation as a (narrow) corridor linking areas of remnant vegetation. NOTE - NORTHERN PORTION WITHDRAWN BY SHIRE OF DUMBLEYUNG 06/06/07.

One Twenty Five Road

One Twenty Nine Road. Portion of area under application on the northern side of the road adjacent to, and approximately 1km either side of, Nairibin Rock is considered to have high conservation value. The reason for this portion of the clearing is to widen the (sealed) trafficable surface. The assessing officer recommends that this portion is not approved for clearing. If this clearing is approved then the assessing officer recommends a restriction on the extent of clearing in this portion to a maximum of 1m beyond the current formation to allow the function of this high quality vegetation as a (narrow) corridor between Nairibin Rock and nearby remnant vegetation. NOTE - PORTION OF APPROX 3.5KM ON NORTH SIDE OF ROAD STARTING APPROX 1KM E OF JAY ROAD EXTENDING E TO RABBIT PROOF FENCE ROAD WITHDRAWN BY SHIRE OF DUMBLEYUNG 06/06/07.

Pepall Road

Kukerin South Road. AMENDED 06/06/07.

5. References

Beard, J.S. (1980) Vegetation Survey of Western Australia, the Vegetation of the Dumbleyung area Western Australia. Vegmap Publications, Perth.

Bramwell, E. And Wilson, C. (2007) Site Inspection ý Shire of Dumbleyung. Unpublished report by the Department of Environment and Conservation.

Environment Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005. Environment Australia, Canberra, Australia.

EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority. Roadside Conservation Committee (July 2005) Roadside Vegetation and Conservation Values in the Shire of Dumbleyung.

Schoknecht N. (2002) Soil Groups of Western Australia. A simple guide to the main soils of Western Australia. Resource Management Technical Report 246. Edition 3

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.

6. Glossary

Term

BCS **Biodiversity Coordination Section of DEC**

Department of Conservation and Land Management (now BCS) CALM

DAFWA Department of Agriculture and Food

DEC Department of Environment and Conservation Department of Environmental Protection (now DEC) DEP

DoE Department of Environment

Department of Industry and Resources DoIR

DRF Declared Rare Flora

EPP Environmental Protection Policy Geographical Information System GIS Hectare (10,000 square metres) ha TEC Threatened Ecological Community

Water and Rivers Commission (now DEC) WRC