

# Attachment 1: Desktop assessment and site inspection, Rosa Glen Road upgrade



**File reference:** RDS/0044

## Background

It is proposed to widen a 0.8km section of Rosa Glen Road, as shown in the accompanying maps. The road is currently 3 to 4 metres wide, which is insufficient for two vehicles to pass safely, particularly given the volume and size/type of vehicles that use the road. It is proposed to widen the sealed road to 6.5 metres, with 1 metre unsealed edges on either side, and associated drainage works including construction of culverts.

It is proposed to remove up to 0.39 hectares of native roadside vegetation as part of the road widening works, which involves clearing between 1-2 metres on either side of the road.

A desktop assessment, followed by site inspections by environment and landcare officers, have been undertaken of the road reserve. The vegetation in the road reserve is in degraded to completely degraded condition, with small isolated stands of native vegetation, interspersed with weeds.

Roadside trees predominantly comprise isolated stands of marri (*Corymbia calophylla*), blackbutt (*Eucalyptus patens*) and jarrah (*Eucalyptus marginata*). Introduced tree species are interspersed along the road, and include pines, swamp mahogany, and garden species. There is some native understory scattered along the road verge, however weeds are dominant throughout the site. Many of the marri trees along the road verge are affected by canker fungus. Photographs taken along the alignment are included as a shapefile, and a list of photos and descriptions are included at Attachment 2.

Road widening works will result in the removal of approximately 32 native trees within the clearing footprint, mostly comprising marri and jarrah. Trees range in size from 10cm DBH to 80cm DBH. Understorey that will be cleared due to the road widening works is largely dominated by bracken fern (*Pteridium esculentum*), and weed species.

Tree canopies were inspected and no visible hollows of suitable size to support nesting black cockatoos were observed. Four larger trees (greater than 60cm DBH) occur in the clearing area (3 x marri and 1 x jarrah – photos included in Attachment 2), but are unlikely to be of size to contain nesting hollows. No evidence of threatened fauna species (animal sightings, scats, possum dreys) within the road reserve on the days of the site inspection.

As the roadworks involve clearing less than 2 metres of vegetation on either side of the road, there will be adequate roadside vegetation, including large habitat trees, remaining within the 20 metre wide road reserve.

Freehold land adjoins both sides of the road reserve, which has been cleared for farming and viticulture. The road runs parallel to the Upper Chapman Brook, but is separated from the waterway by cleared land to the west. Vegetation in the road reserve provides minimal linkages to existing areas of remnant vegetation in the region. At the regional scale, extensive areas of

native vegetation within Unallocated Crown Land (UCL), State Forest and National Park occur to the west, east and north of the road reserve, however there are no linkages between these areas and the roadside vegetation on this section of Rosa Glen Road.

The road reserve falls in the Treeton (T) and Blackwood (BK) vegetation complexes, which are well represented with 46.67% and 92.70% of the pre European extents remaining respectively.

There are no known occurrences of threatened flora, fauna or ecological communities within or in close proximity to the road reserve. Two known occurrences of the western mud minnow (*Galaxiella munda*), listed as Vulnerable under the *Biodiversity Conservation Act 2016*, occur more than one kilometre to the north of the northern extent of the clearing area within the Chapman Brook. Two known occurrences of the Critically Endangered white-bellied frog (*Geocrinia alba*) occur on private property over one kilometre to the west of the clearing area.

Measures will be taken to avoid the removal of native trees wherever possible. The road widening has been designed to avoid a number of large marri, blackbutt and jarrah trees. Branches will be pruned as an alternative to tree removal where possible in instances where trees pose a safety hazard.

### **Conclusion and management recommendations**

Given the small amount of clearing (0.39 ha), and the degraded condition of the native vegetation, it is not considered that the proposal will be at variance with the native vegetation clearing principles.

The following mitigation strategies will be implemented by the Shire of Augusta Margaret River to minimise impacts of the proposed clearing.

- Clearing of native vegetation will be minimised wherever possible. The road widening has been designed to avoid any unnecessary disturbance to vegetation, particularly large habitat trees.
- Retrenchment pruning of large branches will be undertaken as an alternative to tree removal where branches pose a safety hazard.
- There will be no changes to existing surface drainage patterns.
- Dieback and weed hygiene measures will be implemented during operations.

## Comments on the proposed clearing against the clearing principles

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

It is not anticipated that the proposed clearing will have an impact on vegetation that is of a high level of biodiversity. The roadside vegetation is in degraded to completely degraded condition, with a high presence of weeds. It is surrounded by cleared freehold land for farming and viticulture, and does not provide a significant link to any areas of nearby remnant vegetation.

The road reserve falls in the Treeton (T) and Blackwood (BK) vegetation complexes, which are well represented with 46.67% and 92.70% of the pre European extents remaining respectively. There are no known occurrences of threatened flora, fauna or threatened ecological communities in the road reserve.

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

There are no known occurrences of threatened fauna within the road reserve. Two known occurrences of the Vulnerable western mud minnow (*Galaxiella munda*) occur in the Chapman Brook approximately 1.2km and 1.7km metres to the north respectively, and two occurrences of the Critically Endangered white-bellied frog (*Geocrinia alba*) occur in freehold land over 1km to the west. It is not anticipated that road widening works will have an impact on these areas.

Roadside trees have the potential to provide habitat for native fauna. Stands of jarrah and marri occur in isolated stands along the road. However given the degraded nature of the vegetation, and its lack of connectivity with extensive areas of remnant vegetation to the west and east, it is unlikely that the road reserve provides significant habitat for native fauna.

It is unlikely that the site contains significant habitat for western ringtail possum. Peppermint trees were absent from the site, and the area was assessed with no evidence of scats or dreys present. Given the largely parkland cleared nature of the site, scats would have been easily spotted if western ringtail possums were utilising the site. As such, no night time surveys have been undertaken.

A number of the species including marri and jarrah can provide foraging, roosting and nesting habitat for Black Cockatoo species. No trees with adequately sized hollows were observed, however 3-4 marri trees to be removed contained branches that could potentially support nesting hollows for black cockatoos.

The removal of a portion of the vegetation within the road reserve is not considered to have potential for significant impact on Black Cockatoo foraging given the presence of very extensive tracts of native vegetation in Unallocated Crown Land less than 2km to the west and State Forest and National park 2km to the east. The Shire will implement measures to minimise the removal of trees. Road widening has been designed to avoid clearing a number of large marri and jarrah trees, and retrenchment pruning of trees with overhanging branches will be undertaken as an alternative to tree removal.

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

There are no known occurrences of rare flora within the road reserve, or within the local vicinity of the road reserve.

*Principle (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*

There are no known priority or threatened ecological communities within the road reserve, or within the local vicinity of the road reserve.

*Principle (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.*

The native vegetation in the road reserve is unlikely to be significant as a remnant of native vegetation. The vegetation that is remaining is in degraded to completely degraded condition, with isolated stands of remnant vegetation, and weeds throughout the reserve. The road reserve falls in the Treeton (T) and Blackwood (BK) vegetation complexes, which are well represented with 46.67% and 92.70% of the pre European extents remaining respectively. Extensive vegetation exists as National Park, State Forest, and UCL to the west and east of the site.

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

The section of the Rosa Glen road reserve is not associated a watercourse or wetland. The Chapman Brook runs adjacent to the road to the west, and is separated by cleared agricultural or viticultural land. The road reserve varies in distance from the Chapman Brook watercourse from 70m to over 200m. Drainage will be managed to ensure there is no erosion or runoff of sediment into the Chapman Brook.

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

The proposed clearing is unlikely to cause appreciable land degradation. The road widening and associated drainage will be designed to ensure there is no erosion or runoff of sediment into the environment.

*Principle (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*

While there are conservation reserves in close proximity to the proposed road upgrade (Blackwood River National Park) they will not be affected this project.

*Principle (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*

The proposed clearing is not likely to cause deterioration in the quality of surface or underground water. The road widening and associated drainage will be designed to ensure there is no erosion or runoff of sediment into the environment. Underground water is unlikely to be intercepted.

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

The proposed clearing is not likely to cause, or exacerbate, the incidence of flooding. The road widening and associated drainage will be designed to ensure that there is no flooding of water within the road reserve or surrounding environment.

## Attachment 2 – List of photos and descriptions

Photo # (in shapefile)	Description	Side of road
105929	View of road alignment looking north towards Noakes Road intersection	
110200 110215	Weeds growing in road verge	East
110210 110414 110658	Site of culvert replacement – tea tree, bracken fern and weeds will be removed.	East
110327 110401 110647	2-stem large marri to remain. Small marri in front to be removed.	West
110619	Understorey (and weeds) to be removed. Tree in background is remaining.	West
110757	View of road looking south.	East
110957	2 x marri trees to be removed	East
111001 111003	View of verge	West
111010 111013 111022	2 x jarrah trees to be removed.	East
112029	Marri tree to be removed.	East
112035 112058	Marri tree to be removed. Large marri in background is remaining.	East
112123 112134 112243 112336	Stand of 4 trees (jarrah ~60cm DBH, and 3 x marri ~40-50cm DBH) to be removed. Large tree canopy on right is remaining.	East
113128	Marri tree to be removed	West
113159	View of road looking south	West
113206	View of road looking south (tree to remain)	East
113221	Marri tree to be removed	West
113230 113240	3 x small, 1 x large marri tree to be removed	East
113259	2 x marri trees to be removed	East
113310	2 x jarrah trees to be removed	East
113337 113338	Large marri tree (~60cm DBH) to be removed.	East
113349 113350	Dead jarrah tree to be removed	East
113509	View of road looking north. Grass trees to be removed.	East
113516	View of road looking north.	West
113622	View of road looking south. Grass trees to be removed.	East
113703 113920	Understorey to be removed, including introduced species.	East
113811	View of verge – pink ribbon indicates width of clearing extent	East
133952	Marri tree to be removed	West
114341 144343	Large marri tree (~60cm DBH) to be removed	East

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114349		
114359	View of section of road that is void of native vegetation, therefore not including in clearing permit application.	West
114412	Introduced garden species to be removed.	West
114741 114743 114904	Verge dominated by bracken fern to be removed. Pink tape shows width of clearing extent	East and west
115526 115528	Marri tree to be removed	West
115534 115536	Marri and blackbutt(?) trees to be removed	West
115542 115544 115551	Large marri tree (~80cm DBH) to be removed	West
115642 115921	View of road looking south	East
115655	View of road looking north	West
115702	View of verge looking south. 3 x marri trees to be removed.	West