



## 1. Application details

### 1.1. Permit application details

Permit application No.: 864/1

Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Shire of Capel

### 1.3. Property details

Property:

Local Government Area: Shire Of Busselton & Shire Of Capel

Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
		Mechanical Removal	Road construction or maintenance
		Mechanical Removal	Road construction or maintenance
		Mechanical Removal	Road construction or maintenance
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		Mechanical Removal	Road construction or maintenance

## 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
<p>LUDLOW RD NTH -</p> <p>Hedde : Yoongarillup complex : Woodland to tall woodland of E. gomphocephala with Agonis flexuosa in the second storey. Less consistently an open forest of E. gomphocephala - E. marginata - E. calophylla.</p> <p>Mattiske: Ludlow veg complex: Open woodland of Melaleuca raphiophylla and sedgelands of Cyperaceae-Restionaceae spp. on broad depressions in the subhumid zone.</p> <p>Beard: 6: Medium woodland; tuart &amp; jarrah.</p> <p>2: Tall woodland; tuart (Eucalyptus gomphocephala).</p>	<p>The vegetation is completely degraded with no understory or middle story species present. There is also extensive weed invasion from neighbouring pasture paddocks.</p>	<p>Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)</p>	<p>Site visit photos taken on 28 Aug 2006 show the roadside vegetation under application.</p>
<p>GAVINS RD -</p> <p>Hedde: Southern River Complex: Open woodland of E. calophylla - E. marginata - Banksia species with fringing woodland of E. rudis - M. raphiophylla along creek beds.</p>	<p>The vegetation is completely degraded with no understory or middle story species present. There is also extensive weed invasion from neighbouring pasture paddocks.</p>	<p>Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)</p>	<p>Site visit photos taken on 28 Aug 2006 show the roadside vegetation under application.</p>

Abba Complex: A mixture of open forest of *E. calophylla* y *E. marginata* y *Banksia* spp. and woodland of *E. calophylla* with minor occurrences of *E. haematoxylon*.

Woodland of *E. rudis* y *Melaleuca* spp. along creeks and on flood plains.

Beard: 1000: Mosaic: Medium forest; jarrah-marri / Low woodland; banksia / Low forest; teatree (*Melaleuca* spp.).

1136: Medium woodland; marri with some jarrah, wandoo, river gum and casuarina.

#### LOWRIE RD -

Hedde: Gilford Complex: A mixture of open forest to tall open forest of *E. calophylla* - *E. wandoo* - *E. marginata* and woodland of *E. wandoo* (with rare occurrences of *E. lane-poolei*). Minor components include *E. rudis* - *M. raphiophylla*.

Beard: 1136: Medium woodland; marri with some jarrah, wandoo, river gum and casuarina.

968: Medium woodland; jarrah, marri & wandoo.

#### HASTIES RD -

Hedde: Bassendean Central and Southern Complex: Vegetation ranges from woodland of *E. marginata* - *C. fraseriana* - *Banksia* spp. to low woodland of *Melaleuca* species, and sedgelands on the moister sites. This area includes the transition of *E. marginata* to *E. todtiana* in the vicinity of Perth.

Beard: 1000: Mosaic: Medium forest; jarrah-marri / Low woodland; banksia / Low forest; teatree (*Melaleuca* spp.).

#### LILLYDALE RD -

Hedde: Southern River Complex: Open woodland of *E. calophylla* - *E. marginata* - *Banksia* species with fringing woodland of *E. rudis* - *M. raphiophylla* along creek beds.

Bassendean Central and Southern Complex: Vegetation ranges from woodland of *E. marginata* - *C. fraseriana* - *Banksia* spp. to low woodland of *Melaleuca* species, and sedgelands on the moister sites. This area includes the transition of *E. marginata* to *E. todtiana* in the vicinity of Perth.

Beard: 1000: Mosaic: Medium forest; jarrah-marri

A 1km stretch within this road reserve is in very good condition the remaining 2.3 km of the road reserve is completely degraded with no understory or middle story species present. There is also extensive weed invasion from neighbouring pasture paddocks. Therefore a vegetation condition of Good has been selected to represent this road reserve.

The vegetation is completely degraded with no understory or middle story species present. There is also extensive weed invasion from neighbouring pasture paddocks.

The vegetation is completely degraded with no understory or middle story species present. There is also extensive weed invasion from neighbouring pasture paddocks.

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

Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)

Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)

Site visit photos taken on 28 Aug 2006 show the roadside vegetation under application.

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### 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 total proposed clearing is 0.77 hectares. The extent of clearing into the road reserves will not exceed 2.5 m either side of the existing road, all roads excepting a 1km stretch in Lowrie Rd will involve the clearing of large mature trees only.

Based on the photographs of the vegetation proposed for clearing the condition of the vegetation varies between completely degraded and very good. One road was rated as having a condition rating of very good, being Lowrie Rd. This road may contain some biodiversity values, however given the small area proposed for clearing, removing the vegetation within the road reserves is unlikely to impact the overall biodiversity value of the local area.

To mitigate any loss of biodiversity within the road reserves and surrounding areas, the proposed clearing will be carried out in accordance with dieback and weed control conditions which will be placed on the permit.

**Methodology**      Site visit photos (2006)

#### (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 Shire is proposing to widen five existing roads, therefore the vegetation under application is within road reserves only.

The vegetation's condition varies from completely degraded to very good (Keighery, BJ 1994). All of the vegetation excepting a 1km stretch on Lowrie Rd is completely degraded with no under or middle story present and extensive weed invasion from neighbouring pasture paddocks has occurred.

Given the degraded condition of much of the roadside vegetation it is unlikely the proposed clearing will have a significant impact on fauna species within the local area.

**Methodology**      Site Visit (2006)

#### (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**

The closest mapped species (*Verticordia densiflora* var. *pendunculata*) of Declared Rare Flora (DRF) is 1.3km from the proposed clearing. This species is a shrub to 0.6m. The vegetation type within Lowrie Road differs from the vegetation complex in which this DRF species is mapped.

All of the vegetation excepting a 1km stretch on Lowrie Rd is completely degraded with no understory or middle story species present and extensive weed invasion from neighbouring pasture paddocks. It is therefore unlikely the proposed clearing will impact on DRF in the local area.

**Methodology**      Site Visit (2006)  
GIS Database: Declared Rare and Priority Flora List - CALM 01/07/05

#### (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**

6 Threatened Ecological Communities (TEC) exist within the Shire of Capel. The closest occurrence of a TEC to an area under application is 2.5 km north of Lillydale Rd within the Bunbury Shire.

It is unlikely that this clearing proposal will effect TEC's in the local area.

**Methodology**      Site Visit (2006)  
GIS Database: - Threatened Ecological Communities - CALM 15/7/03

**(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**

The proposed clearing is located across the shire of Capel and within the Swan Coastal Plain Bioregion. The extend of native vegetation within these areas is 35.9% and 41.8% respectively.

Mapped vegetation complexes with a conservation status of Vulnerable\*\* (10 - 30% of pre-European extent remaining) occur within proposed clearing sites along Lillydale Rd, Hasties Rd, and a section of Gavins Rd.

Mapped vegetation complexes with a conservation status of Endangered\*\*(<10% of pre-European extent remaining) occur within Lowrie Rd and sections of Gavins Rd.

Although a 1km stretch of Lowrie road represents very good vegetation condition the clearing of this vegetation will be minimal. A condition will be placed on the permit to avoid and minimise vegetation cleared.

The vegetation under application does not represent the complexes mapped within the area due to the degraded condition of the vegetation. It is therefore unlikely the proposed clearing will be at variance to this principle.

**Methodology** Site Visit (2006)  
Department of Natural Resources and Environment (2002)  
Havel (2002)  
Heddle et al. (1980)  
Hopkins et al. (2001)  
Shepherd et al. (2001)

GIS databases:  
- Mattiske Vegetation - CALM 24/3/98  
- Heddle Vegetation Complexes - DEP 21/06/95  
- Interim Biogeographic Regionalisation of Australia - EM 18/10/00  
- Local Government Authorities y DLI 8/07/04  
- Pre European Vegetation - DA 01/01

**(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**

All of the areas under application are within road reserves that already exist. All watercourses have previously been diverted through culverts or under bridges (in some cases upgrades of these diversions are planned as part of the road widening).

Rivers that cross some of the roads under application, or are located in close proximity to, are Gynudup Brook and the Capel River. Although the proposed section of clearing on Ludlow Rd (between Forrest Beach Rd and Ludlow Hithergreen Rd) lies within 200m of an ANCA wetland and approximately 1.0 km from a RAMSAR wetland, works are not expected to compromise the status of either.

Due to the vegetation under application being contained in road reserves where existing roads exist and given the distance from EPP Lakes, Conservation Category and Resource Enhancement wetlands, this proposal is not likely to be at variance to this principle.

**Methodology** Site Visit (2006)  
GIS Database:  
- Hydrography Linear (hierarchy) - DoE 13/4/05  
- ANCA, Wetlands - CALM 08/01  
- RAMSAR, Wetlands - CALM 14/02/03

**(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 proposed clearing within the five road reserves may cause some short term land degradation issues in terms of localised flooding and soil erosion during works.

These issues however should be minimised as works on the existing roads and intersections have in place roadside infrastructure to prevent land degradation associated with roads ie. table drains and culverts.

Given the above the proposed clearing is not likely to be at variance to this 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.**

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

The Ludlow Nth Road reserve borders Tuart Forest National Park for a length on 1.7km and Ludlow State Forest for a length of 2km. All other areas under application are not associated with conservation areas.

Due to the condition of the vegetation under application it is unlikely the proposed clearing will be at variance to this 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.**

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

The proposed clearing within road reserves may cause some short term water quality issues in terms of localised surface water sedimentation during works. However these issues should be minimised as works on the existing roads and intersections have in place roadside infrastructure to prevent water quality issues associated with roads ie. table drains and culverts.

Due to the small and isolated areas proposed to be cleared for the associated roads works, it is unlikely the areas under application will cause salinity issues or increase water levels within the shire boundary

**(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**

Due to the scale and the nature of the proposed clearing it is unlikely to exacerbate flooding in the local area.

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

**Comments**

There are three Native Title Claims 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.

Gavins and Lowrie Rd are within mapped Aboriginal Sites of Significance the DEC will advise the proponent of their responsibilities under the Aboriginal Heritage Act 1972. This advise will be placed in the cover letter to this permit.

There are no other statutory approvals that are required to undertake the clearing

**4. Assessor's recommendations**

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Road construction or maintenance	Mechanical Removal			Ludlow North Road (1.2 SLK to Forrest Beach Road)
Road construction or maintenance	Mechanical Removal			Mallokup Road (Bridge Approaches)
Road construction or maintenance	Mechanical Removal			Lowrie Road (Boundary / Clarke)
Road construction or maintenance	Mechanical Removal			Ludlow Road (Ludlow Town to SLK 1.2)
Road construction or maintenance	Mechanical Removal			Ludlow North Road (Peppermint Grove Rd to Mallokup Rd)

Road construction or maintenance	Mechanical Removal	Gavins Road (Elgin Road to Cain Road)
Road construction or maintenance	Mechanical Removal	Lillydale Road (Queelup Rd to Lot 346)
Road construction or maintenance	Mechanical Removal	Lillydale Road (Lot 346 to Allenville Rd)
Road construction or maintenance	Mechanical Removal	Gavins Road (Washers Rd to Elgin Rd)
Road construction or maintenance	Mechanical Removal	Hasties Road (Jules Rd to Jules Rd)
Road construction or maintenance	Mechanical Removal	It is recommended the areas proposed to be cleared are granted.
Road construction or maintenance	Mechanical Removal	All principles are not likely to be at variance to the principles.

## 5. References

- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
- 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 Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.
- 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.
- Site Visit, 2006, Department of Environment and Conservation (DEC), Western Australia. TRIM ref DOC3723, DOC3707, DOC3700, DOC3696, DOC3694, DOC3683.

## 6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
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 DoE)