



## 1. Application details

### 1.1. Permit application details

Permit application No.: 1172/1  
 Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Landcorp

### 1.3. Property details

Property: NANNUP TOWNSITE LOT 304 (Lot No. 304 WIDDESON NANNUP 6275)  
 NANNUP TOWNSITE LOT 303 (Lot No. 303 WIDDESON NANNUP 6275)  
 NANNUP TOWNSITE LOT 302 (Lot No. 302 WIDDESON NANNUP 6275)  
 NANNUP TOWNSITE LOT 301 (Lot No. 301 WIDDESON NANNUP 6275)  
 NANNUP TOWNSITE LOT 300 (Lot No. 300 WIDDESON NANNUP 6275)

Local Government Area: Shire Of Nannup  
 Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.9		Cutting	Miscellaneous

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard Vegetation Association 3 - Medium forest; jarrah-marri. (Hopkins et al. 2001; Shepherd et al. 2001).	The proposal includes clearing of 0.9ha of a regenerating jarrah-marri forest.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Observed during site visit: The vegetation is considered to vary between Good and Very Good (Keighery 1994). The area has a fairly sharp slope and the abundance of lignotubers (and lack thereof larger mature trees) is indicative this area has been cleared in the past. The area is located in between a primary school and existing residential property, that may explain the abundance of weeds and moderate disturbance in some areas (DEC site visit 2006).
Mattiske Vegetation Complex Wishart (WS2): Tall open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla-Banksia grandis with some Allocasuarina fraseriana on lower escarpment in hyperhumid to humid zones. (Mattiske Consulting 1998).	The vegetation under application is an open forest dominated by Eucalyptus marginata subsp. marginata and Corymbia calophylla, with a dense understorey including Hardenbergia comptoniana and Xanthorrhoea preissii (DEC site visit 2006).		The area has some weed invasion on the edges. There are a very mature trees and moderate amounts of under storey species.
Hedde Vegetation Complex: Bridgetown Complex in Medium to High Rainfall - dominated by open-forest of jarrah-marri with some yarri. (Hedde et al. 1980).			

## 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 proposed clearing of 0.9ha is of good to very good condition, native woodland consisting of limited species in the mid storey and under storey with the over storey, consisting of predominantly Eucalyptus marginata subsp. marginata and Corymbia calophylla (marri). The understorey is dense including Hardenbergia

comptoniana (native wisteria) and Xanthorrhoea preissii (grass tree). The vegetation structure of the area proposed to be cleared has been disrupted due to the proximity to urban and residential development, evident by the weed invasion around the boundary of the premises. The public have open access to the area, and have created small tracks, further degrading the site (DEC 2006).

The vegetation under application is located in an area extensively cleared for agriculture and residential development and is comprised of Beard vegetation association 3 (Hopkins et al. 2001) of which there is over 70% (Shepherd et al. 2001) of the pre-European extent remaining. The vegetation may provide valuable habitat to native fauna, given the area links several other small vegetated areas within a moderately cleared town site.

Several CALM managed lands are located within the vicinity (10km radius) of the proposed clearing, and it is unlikely that the area comprises a higher level of biological diversity than surrounding State Forest. Although the vegetation is considered to be in good condition, the area is unlikely to comprise of a higher level of biological diversity due to the disturbances that have affected the site and its surroundings. Therefore, it is unlikely this proposal is at variance with this Principle.

**Methodology** DEC Site Visit (2006);  
Keighery (1994);  
GIS databases:  
-CALM Managed Lands and Waters - CALM 01/07/05;  
-Busselton 50cm ORTHOMOSAIC - DLI03

**(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 may be at variance to this Principle**

The clearing proposed consists of a small area totalling 0.9ha surrounded by residential development and farming land. The area proposed, however, is a small section of a larger tract of remnant vegetation that has also been earmarked for development.

Although the scale of the proposed clearing is small, the vegetation under application may provide valuable habitat for native fauna, given its condition, the fact it is part of a large remnant, and because it links other areas of vegetation within the moderately cleared townsite, including the vegetation surrounding the Blackwood River, 800m to the west. Therefore, the proposal may be at variance to this principle.

**Methodology** DEC Site Visit (2006);  
GIS Databases:  
-CALM Managed Lands and Waters - CALM 01/07/05;  
-Busselton 50cm ORTHOMOSAIC - DLI03

**(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 no known records of Declared Rare, Priority 1 or Priority 2 Flora species occurring within the local area (10km radius) of the proposed clearing.

Five Priority 3 populations have been recorded within the local area (10km radius), with the closest, *Acacia semitrullata*, located 2.8km north west of the area under application. These populations are not within the same vegetation or soil type as the area under application.

Four Priority 4 populations have been recorded within the local area (10km radius), with the closest, *Caladenia plicata*, located 1.6km north west of the area proposed to be cleared. These populations are also not within the same vegetation type or soil type as the area under application.

Therefore, it is unlikely the area proposed to be cleared is necessary for the existence of rare flora, or at variance to this Principle.

**Methodology** GIS databases:  
- Declared Rare and Priority Flora List - CALM 13/08/03;  
- Busselton 50cm ORTHOMOSAIC - DLI03

**(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 no known occurrences of Threatened Ecological Communities (TEC) or Threatened Plant Communities (TPC) within the local area (10 km radius) of the proposed clearing and no TECs were identified during the field inspection (DEC 2006).

Therefore, it is unlikely that the proposed clearing is at variance to this Principle.

- Methodology** DEC Site Visit (2006);  
GIS databases:  
- Threatened Ecological Communities - CALM 15/7/03;  
- Threatened Plant Communities - DEP 06/95

**(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 application is located in the Jarrah Forest Bioregion in the Shire of Nannup. The extent of native vegetation in these areas is 58.3% and 94.0% respectively (Shepherd et al. 2001).

The vegetation of the area applied to clear is a component of Beard Unit 3 (Hopkins et al. 2001) of which there is 72.1% (Shepherd et al. 2001) of the pre-European extent remaining, and therefore of 'least concern' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

The vegetation of the area applied to clear is a component of Heddle Bridgetown Complex in Medium to High Rainfall (Heddle et al. 1980) of which there is an unknown percentage of the pre-European extent remaining (Shepherd et al. 2001)

The vegetation of the area applied to clear is a component of Mattiske Wishart (WS2) (Havel 2002) of which there is 82.6% (Shepherd et al. 2001) of the pre-European extent remaining and therefore of a 'least concern' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

Due to the high percentage of represented vegetation types remaining, the area proposed to be cleared is not considered to be a significant remnant within an extensively cleared area, and therefore not likely to be at variance to this Principle.

- Methodology** 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 - 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 at variance to this Principle**

There are no EPP areas, EPP lakes, RAMSAR wetlands or ANCA wetlands within the local area (10km radius) of the proposed clearing.

The Blackwood River is located 0.8km west of the area proposed to be cleared. The proposed clearing is unlikely to affect this watercourse due to the distance between the river and the proposed clearing.

Given the lack of close vegetation links, the area under application is not considered to be growing in an environment associated with a watercourse or wetland, and it is unlikely the proposed clearing would impact on local watercourses and wetlands.

- Methodology** GIS databases:  
- ANCA, Wetlands - CALM 08/01  
- EPP Areas - DEP 06/95  
- EPP Lakes - DEP 28/07/03  
- Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04  
- Hydrography Linear - DoE 1/2/04  
- RAMSAR, Wetlands - CALM 21/10/02  
- Busselton 50cm ORTHOMOSAIC - DLI03

**(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 area proposed to be cleared has no known Acid Sulphate Soils risk, a low salinity risk and a groundwater salinity level of 500-1000 mg/L.

Due to the scale of the proposed clearing, it is unlikely appreciable land degradation will occur.

**Methodology GIS databases:**

- Acid Sulfate Soil Risk Map, SCP - DoE 01/02/04
- Salinity Risk LM 25m - DOLA 00.
- Groundwater Salinity, Statewide - 22/02/00

**(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**

No Registered National Estates or System 6 Conservation Reserves have been identified within the local area (10km radius) of the proposed clearing.

The Jarrahwood State Forest is located 1.4km northwest of the area proposed to be cleared and the Millbrook and Milyeannup State Forests are also located approximately 2km southwest of the area, however no corridors or linkages exists between them and the property.

Therefore, the proposed clearing is unlikely to impact on environmental values of any adjacent or nearby conservation areas.

**Methodology GIS database:**

- CALM Managed Lands and Waters - CALM 1/06/04
- Register of National Estate - EA 28/01/03
- System 6 Conservation Reserves - DEP 06/95
- Donnybrook\_SE 50cm Orthomosaic - DOLA 5/01

**(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 area under application is within the Hardy Estuary-Blackwood River Hydrographic Catchment Area and is not within a RIWI groundwater or RIWI surface water area.

Due to the scale of the proposed clearing, it is unlikely it will cause deterioration of local water quality.

**Methodology GIS databases:**

- Hydrographic Catchments, Catchments - DoE 3/4/03
- RIWI Act, Groundwater Areas - WRC 13/06/00
- RIWI Act, Surface Water Areas - WRC 18/10/02

**(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 of the proposed clearing, flooding impacts are unlikely to occur.

**Methodology GIS databases:**

- Topographic Contours, Statewide - DOLA 12/09/02

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

**Comments**

The area under application is zoned urban under the Nannup Town Planning Scheme No.1.

The Shire of Nannup has no objections to the proposed clearing and have recently granted road construction approval for the proposal.

**Methodology GIS database:**

- Town Planning Scheme Zones - MFP 8/98

**4. Assessor's comments**

Purpose	Method	Applied area (ha)/ trees	Comment
Miscellaneous	Cutting	0.9	<p>Assessable criteria have been addressed and the proposal may be at variance to Principle (b).</p> <p>Principle (b): Although the clearing is within an area surrounded by residential development, the vegetation may provide important and valuable habitat and links between other areas of vegetation for native fauna within the local area.</p> <p>As this is a proposal for residential development, the assessing officer therefore recommends that the permit should be granted with nil conditions.</p>

## 5. References

- DEC Site visit (2006), Department of Environment and Conservation, Bunbury. TRIM ref SWO30046.
- 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.
- Havel, J.J. and Mattiske Consulting Pty Ltd (2002) Review of management options for poorly represented vegetation complexes, Conservation Commission.
- Heddle, 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.

## 6. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
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 DEC)

