

## **SHIRE OF NANNUP LOCAL PLANNING SCHEME NO.3**

### **AMENDMENT NO.9**



**PREPARED FOR MR B HENRY  
FEBRUARY 2010**



**PLANNING AND DEVELOPMENT ACT 2005**  
**RESOLUTION DECIDING TO AMEND A LOCAL PLANNING SCHEME**  
**SHIRE OF NANNUP**

**LOCAL PLANNING SCHEME NO. 3**

**AMENDMENT NO. 9**

RESOLVED that the Council, in pursuance of Section 75 of the Planning and Development Act 2005, amends the above local planning scheme by:

1. Rezoning Lot 8271 Brockman Highway, Nannup (as depicted on the Scheme Amendment Map) from the 'Agriculture' zone to the 'Special Rural' zone.
2. Amending the Scheme Text Schedule 12 (Schedule of Special Rural Zones) by including Lot 8271 Brockman Highway, Nannup together with reference to a Development Guide Plan and special provisions referring to the subject land.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 201\_\_\_\_ .

\_\_\_\_\_  
CHIEF EXECUTIVE OFFICER

## MINISTER FOR PLANNING

### PROPOSAL TO AMEND A TOWN PLANNING SCHEME

LOCAL AUTHORITY:	SHIRE OF NANNUP
DESCRIPTION OF TOWN PLANNING SCHEME:	LOCAL PLANNING SCHEME NO.3
TYPE OF SCHEME:	LOCAL PLANNING SCHEME
SERIAL NO. OF AMENDMENT:	AMENDMENT NO. 9
ASSET NO:	A105
PROPOSAL:	REZONE NELSON LOCATION 8271 BROCKMAN HIGHWAY FROM AGRICULTURE ZONE TO SPECIAL RURAL ZONE AND INCLUDE THE LAND WITHIN AREA SR12.

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## SCHEME AMENDMENT REPORT

### 1.0 INTRODUCTION

#### 1.1 Purpose and Objectives

The purpose of this amendment to Shire of Nannup Local Planning Scheme No.3 is to rezone Nelson Location 8271 from the *Agriculture Zone* to the *Special Rural Zone* and include the land within Special Rural Area No.12 of the Scheme.

The key objectives of the rezoning are to:

- Provide for rural living opportunities within close proximity to the Nannup town site on land identified by the Shire of Nannup Local Planning Scheme No.3 for this use;
- Allow a small number of rural residential lots in an area that is already characterised by this land use; and
- Allow the subdivision of land capable for rural residential use.

The purpose of this report is to outline the Amendment and identify the strategic and statutory environment affecting it.

### 2.0 SITE DETAILS

#### 2.1 Location

The site is located approximately 3 km via Brockman and Vasse Highways from the Nannup town centre (see Figure 2.1).

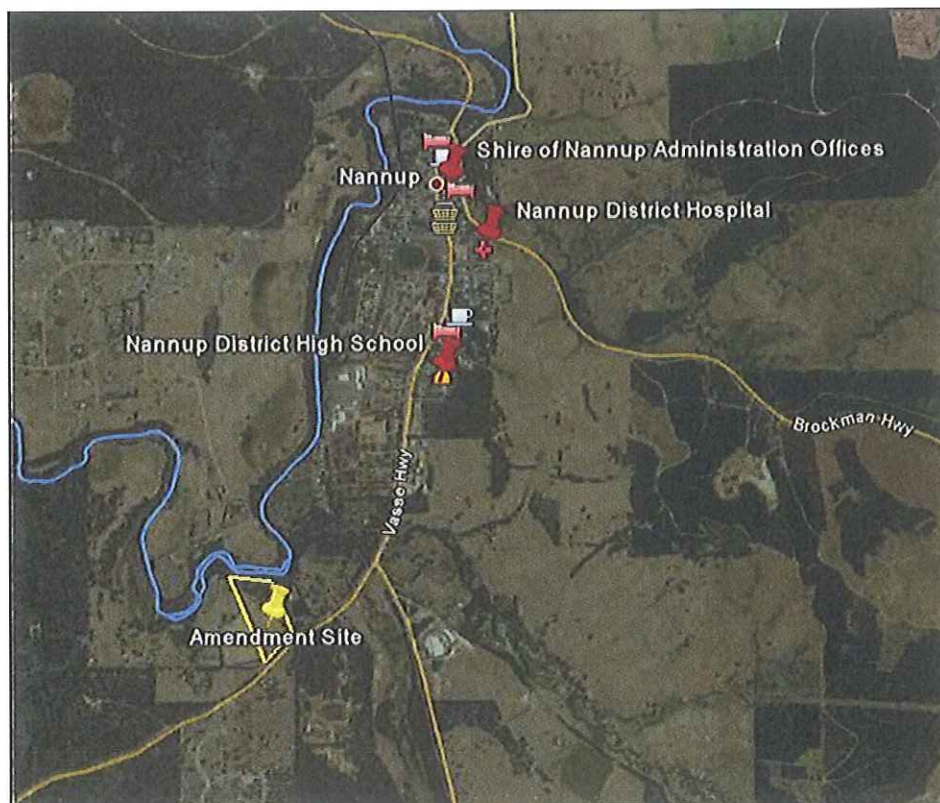


Figure 2.1: Location Plan

For a view of surrounding land uses, refer to **Figure 2.2** below.

The site is well located in close proximity to the Nannup town site, with the Nannup District High School being located approximately 1.8 km away.

The site is well located for rural residential land uses, given the close location of the nearby Nannup town site and the similar nature of surrounding rural residential development. This rezoning will complement land uses existing and proposed on surrounding properties.

## **2.2 Title and Ownership Details**

The amendment site is shown as Lot 8271 on Deposited Plan 201619. The registered proprietors of the amendment site are Benjamin Rodger Henry, Carl Carisbrook Henry and Miriama Paki. A copy of the current Certificate of Title is included in **Appendix A**.

## **2.3 Land Area**

The Amendment Site comprises a total of 10.7 ha. A site plan including aerial photography is shown overleaf.

## **2.4 Current Land Use of Site**

The Amendment Site is essentially a large hobby farm. Given its relative small lot area and proximity to the town site and surrounding residential areas, it is not suitable for most forms of agriculture. There are a number of sheds and one dwelling on the property (Plates 1 and 2).



*Plate 1: House and shed currently in use on the subject site. These will be located on proposed Lot 5.*





Plate 2: Group of sheds located on proposed Lot 5. Part of the shed complex was the original house.

## 2.5 Surrounding Zoning and Land Use

The current town planning scheme zonings surrounding the site are shown on the rezoning map.

Directly to the north of the Amendment Site is land reserved for *Water Course* being the Blackwood River. This includes a riparian vegetation reserve and the actual water course. Land to the north of this river is predominantly *Special Rural* zoned.

Directly to the south of the Amendment Site is land zoned *Special Rural*. This area is being developed for rural residential land uses with lot sizes generally varying from 1-2 ha.

Directly to the east of the Amendment Site is land zoned *Rural*. Important to note is that this area still has relatively small lot sizes, significantly smaller than the Amendment site. There is also an area reserved for *Parks and Recreation*.

Directly to the west of the Amendment Site is land zoned *Special Rural*. Other reserved land in the vicinity of the Amendment Site generally indicates remnant vegetation to be conserved for *State Forest*.

A mitigation zone between the new *Special Rural* zone and neighbouring agricultural pursuits is not necessary in this instance given that the only activities coded 'P' by the zoning table in the Scheme text are 'agriculture-extensive', 'single dwelling', 'home office' and 'rural pursuit', none of which realistically will have an adverse impact on nearby agricultural pursuits. Any other activities will require Council's consideration, giving them the opportunity to decide on a case-by-case basis whether a mitigation zone is necessary. It should also be noted that land to the south and west is also zoned *Special Rural* and land to the north, while zoned *Rural*, is separated from the subject site by the Preston River reserve.

## 2.6 Vehicular Access

Access to the Amendment Site is from Brockman Highway. This road is of good quality and is sealed from the Amendment Site to Nannup.

In order to consolidate vehicle movements from the land, it is proposed to provide an access road into the amendment site. This is likely to consist of a 20 m wide road reserve, containing within it a 6 m wide sealed road with 1.2 m gravel shoulders. This would be approximately 250 m in length. Individual lot access to Brockman Highway, except for emergency purposes, is to be restricted.

The point at which this new road accesses Brockman Highway is 200m east of the nearest intersection (Rinns Road) and 750m west of the important Vasse Highway intersection. The stretch of highway onto which the subject site has frontage is almost straight, with no significant curves. Mains Roads Western Australia has indicated that it has no objection to the location of the proposed road intersection on Brockman Highway at this point in time. However, it reserves its final approval until detailed intersection design work is undertaken at the subdivision stage.

Given the size of proposed lots, it is not proposed to provide a separate pedestrian access, as it is expected traffic volumes would be sufficiently low on this access road to accommodate pedestrian traffic. However, so that access is maintained to the Blackwood River a 3m wide easement for access is present on the Development Guide Plan from the end of the cul-de-sac.

It has been suggested that provision for a future access road to adjoining Lot 2 (to the east) be investigated as part of this application. This reflects the possibility of Lot 2 being similarly rezoned in future. As the preference of the Shire of Nannup is for lots with a minimum size of 2ha in this zone, without connection to reticulated sewerage, it is unlikely that subdivision potential for Lot 2 exists, as it is only 3ha in area. We do not believe that Lot 2 has future subdivision potential, hence have not provided for a through road in the Development Guide Plan.

## **2.7 Services**

### **2.7.1 On-site Effluent Disposal**

The use of on-site effluent disposal on the amendment site has occurred for some time. As proven in the land capability section later in this report, the amendment site is capable of supporting on-site effluent disposal. Soils are permeable and groundwater is not close to the surface of the amendment site. All lot sizes proposed exceed the minimum for lots not connected to a reticulated sewerage system (2000m<sup>2</sup>, as specified by the Draft Country Sewerage Policy). It should also be noted that the subject site is not located in a Public Drinking Water Source Area (PDWSA), where this minimum lot size becomes 2ha.

It is expected that the appropriate location of an on-site effluent disposal system will be identified in collaboration with the Shire's Environmental Health Officer at the housing development stage.

A new special provision for area SR12 prohibiting effluent disposal systems within 100m of the Blackwood River is proposed.

### **2.7.2 Potable Water Supply**

Reticulated water is not currently connected to the Amendment Site. Potable water is supplied from a well located near the shed complex (Plate 2). This water is regularly tested and is suitable for drinking water.







**Plate 3:** Bore site that provides potable water for the property.

In accordance with the existing Clause 5.8.3 of the Scheme, it is proposed that each dwelling will be required to construct and connect a rainwater tank of not less than 135,000 litres prior to the approval of the dwelling for human occupation. This is to be to the satisfaction of the Shire of Nannup and the Health Department of Western Australia, whose requirements are based on those in the Australian Drinking Water Guidelines.

The suitability of the land for the use of on-site rainwater capture and storage is evidenced by:

- An average annual rainfall of 934 mm recorded at the nearby station of Jarrahwood; and
- Sufficient statutory power of the Council to require installation and operation of water tanks for households prior to occupation as contained in Clause 5.8.3 of the Scheme.

WAPC DC 3.4 states that

*"When approving lots for rural-residential development (1-4ha) the WAPC will generally require connection to a reticulated water supply where it is practical and reasonable to do so. Where it is not practical or reasonable for lots to connect to a reticulated water supply the WAPC may consider an alternative water supply. In determining whether provision of a reticulated water supply is reasonable, the WAPC may consider the cost differential between a reticulated and alternative water supply, and the reliability of an alternative water supply. The reliability of alternative water supplies in different localities needs to be confirmed by available models."*

Connection to reticulated water is not a viable solution for this lot, given the nearest potable water supply is located in the Nannup town site. Therefore, it is believed that it is fair and reasonable to have a potable water supply provided on-site.

Additional water for non-potable uses is available from the existing dam / soak located on proposed Lot 5 (Plate 4).





*Plate 4: Soak dam located on proposed Lot 5.*

#### **2.7.3 Stormwater**

Currently, stormwater is disposed of on-site due to the favourable soil conditions in the area. Given that the land uses provided for by this rezoning and subdivision are similar to the existing uses, additional stormwater management measures are not required. Runoff from the access road will be disposed of via a roadside drain connected to that along Brockman Highway.

#### **2.7.4 Electricity**

Power is supplied via aerial lines (Plate 5), which cross the site from the east before heading south along the western boundary to service the special rural area to the south. The current landowner has previously purchased a 35kV(A) transformer, which is located on the amendment site (Plate 6).



*Plate 5: Existing aerial power lines that cross the amendment site. This photo is taken at the transformer pole site and is looking east towards Lot 2 and Brockman Highway.*





*Plate 6: The 35kV transformer installed by the landowner located on the western boundary of the amendment site, approximately 315m from Brockman Highway.*

The future subdivision will be serviced by Western Power approved underground mains.

#### 2.7.5 Telecommunications

Telecommunications are connected to the current dwelling on the amendment site. It is expected that services are of sufficient capacity to service the proposed Amendment and should be easily extended into the Amendment Site.

#### 2.7.6 Reticulated Gas

Reticulated LP Gas is not currently available from in the Nannup area. Should household appliances require reticulated gas, this would be delivered using gas bottles.



### 3.0 ENVIRONMENTAL CONSIDERATIONS

#### 3.1 Topography

The Amendment Site can be described as flat to gently undulating. The highest point on the site is located on the western boundary, with an approximate height of 85 m AHD.

The site slopes down to its middle and then towards the north. The lowest point of the Amendment Site is located in its northern portion, adjoining the Blackwood River reserve and has a height of approximately 59 m AHD. No watercourses are located on the amendment site.

#### 3.2 Vegetation

The site contains a variety of vegetation such as Marri and Jarrah, with associated understorey. The majority of this vegetation is located adjacent to the Blackwood River.

The proposed Amendment does not seek to modify the majority of this vegetation. However, a relatively small area of clearing will be required to establish a building envelope on proposed Lot 4 of the Development Guide Plan. The purpose of this clearing is for location of a future dwelling as well as fire protection and management on this lot, given the close proximity to remnant vegetation.

Liaison has occurred with FESA, which has indicated that it will require the establishment of 20m wide Building Protection Zones around all dwellings. This will be an extension of the existing cleared area demonstrated below in **Plate 7** for the development of a house and outbuildings. The implementation of fire protection measures is outlined in the Fire Management Plan appended to this Amendment.



*Plate 7: The cleared area on proposed Lot 4 formerly used for horticulture (berry farming).*

#### 3.3 Land Capability

Nelson Location 8271 has been classified by Agricultural Western Australia's Land Resource Series No.10 as being within the Blackwood Plateau Soil Landscape System.

The Blackwood Plateau System can be further broken down into several subsystems and phases. The Amendment Site contains the Blackwood Subsystem and in particular the BK2 and BK3 phases.



BK2 – Blackwood Gentle Slopes have a relief of 10-30 m and gradients of 3-10 %. BK3 – Blackwood Low Slopes have a relief of 20-50 m and gradients of 5-20 %.

The Amendment Site also contains the Kingia Subsystem, which does not have any phases identified.

The boundary between BK2 and BK3 can generally be described as the interface between the lower area adjacent to the Blackwood River and the higher area near the existing house. The Land Resources Report describes the land capability for the Blackwood Subsystem as

*"Most land is well drained. The sandy gravels and sand have poor to moderate moisture retention. There is a moderately high risk of soil erosion under cultivation where slope gradients exceed 10%."*

The Land Resources Report describes the land capability for the Kingia Subsystem as

*"Most land is well drained. Some areas of shallow gravels and ironstone duricrust have limited agricultural use."*

The following table identifies the limitations associated with Rural Residential Development within the identified soil types:

**Table 1: Soil Limitations Table**

Map Unit	Degree of Limitation	Housing and Roads		Septic Tanks	
		% area	Limitations	% area	Limitations
BK2	Minor	60%		80%	
	Moderate	35%	Xewi	15%	P
	Major	5 %	xec	5%	Ax
BK3	Minor	50%		85%	
	Moderate	40%	Exw	10%	P
	Major	10%	exb	5%	Xa
KI	Minor	65%		65%	
	Moderate	20%	X	20%	Pa
	Major	15%	x	15%	Xa

**Limitations Key**

a – soil absorption, b – land instability hazard, e – water erosion hazard, l – site drainage, w – wind erosion hazard, x – ease of excavation.

As shown by the above table, the degree of limitation on Housing and Roads and Septic Tanks are Minor in most circumstances. All of the proposed building envelopes are located within the BK3 and Kingia sub-systems, which have an 85% and 65% area subject to Minor limitations that would impact the effective use of septic tanks. It is anticipated that all building envelopes have an area suitable for the disposal of effluent. It is likely that septic or effluent disposal placement will be assessed by Shire of Nannup at the time of development, determining whether a septic effluent disposal unit would operate effectively for the proposed development or require the use of a phosphate-retention ATU. However, at this stage, it is not anticipated that issues with effluent disposal would impact the five (5) proposed rural residential lots.



As evidenced by soils classing and surrounding 'Special Rural' development, it is considered that the Amendment Site will be generally capable of supporting rural residential land uses. However, further site investigation will be required at the development stage to identify the type and location of effluent disposal system in the normal manner for development in this locality.

### **3.4 Foreshore Reserve**

Discussions with the Shire of Nannup and Department of Water have revealed that there is a need to widen the foreshore reserve adjoining the Blackwood River. This is due to the impact the area of flood risk may have on adjoining properties. The Department of Water has indicated that it will require all of the land within the Flood Risk Special Control Area identified in LPS 3 to be included in the Foreshore Reserve. It has also indicated that it will require all land within 30m of the river to be included if this falls outside of the flood risk area. The foreshore reserve is depicted on the Development Guide Plan and will be ceded to the Crown at the time of subdivision.





## 4.0 STATUTORY AND STRATEGIC PLANNING CONSIDERATIONS

### 4.1 Warren Blackwood Rural Strategy (2004)

The Strategy guides the subdivision and development of rural and rural residential land in the Warren-Blackwood catchment, being the Shires of Nannup, Bridgetown-Greenbushes, Manjimup and Boyup Brook. It addresses the broad rural planning issues and provides a framework for the continued use of rural land in the Strategy area. In relation to rural residential development, the strategy states that:

*"Rural-residential or rural smallholdings subdivisions will not be supported unless the land is designated for that purpose in the local planning strategy or rural strategy and until the land has been rezoned for that purpose."*

The proposed rezoning to *Special Rural* will appropriately identify the land for rural residential purposes, of which further subdivision and development will follow, in accordance with the Strategy. This land has been identified through the Nannup Townsite Strategy, Shire of Nannup Local Planning Strategy and Shire of Nannup Local Planning Scheme No.3 as appropriate for being used for rural residential purposes, as it is within the *Special Rural* Policy Area of LPS 3.

The proposed rezoning is deemed to comply with the Warren Blackwood Rural Strategy.

### 4.2 WAPC Development Control Policy 3.4 – Subdivision of Rural Land

WAPC Development Control Policy 3.4 and its parent State Planning Policy No.2.5 provide guidance on the subdivision of rural land. The Policy outlines a general presumption against rural subdivision, due to the impact it has on farm management, efficiency and overall productivity of agriculture. However, it does outline exceptions to this presumption.

One of these exceptions is that the land is appropriately planned for closer subdivision and development through a Scheme Amendment or Local Planning Strategy. The proposed rezoning of the amendment site is properly planned and has been identified by the Local Planning Strategy as being suitable for *Special Rural* rezoning. This is also evidenced by the abundance of rural residential land uses immediate adjacent to and in the vicinity of the Amendment Site.

The proposed rezoning is deemed to comply with the requirements of WAPC DC 3.4 *Subdivision of Rural Land*.

### 4.3 Nannup Local Planning Strategy (2007)

The Nannup Local Planning Strategy was developed during the preparation of Shire of Nannup Local Planning Scheme No.3 and is a comprehensive review of the Council's planning documents and policies. It seeks to provide strategic guidance for the growth and development of the Shire of Nannup for the preceding 10 to 15 years.

The Local Planning Strategy identifies Rural Planning Precincts, of which the Amendment Site is included in NR5. One of the defining features of the NR5 Rural Planning Precinct is that it is a

*"Central western portion of the Shire centred on the Lower Blackwood catchment and encompassing the main areas of Special Rural zones around the Darradup and Jalbarragup localities and to the west of Nannup townsite."*

NR5 is described as lying to the southwest of the Nannup town.

This precinct has objectives to:

*"Discourage additional rural-residential subdivision at Darradup and Jalbarragup due to remoteness from services. Allow for rural-residential subdivision in areas close to town where permitted under the Townsite Strategy."*

*Provide for the sustainable use of land within the agricultural zones, and outside the Townsite Strategy Area, for a range of rural pursuits."*

The amendment site is located close to the Nannup town site and should be considered appropriate for a *Special Rural* rezoning, as it is included in the Nannup Townsite Strategy.

The following guidelines of the Local Planning Strategy relate to settlement within the NR5 Rural Planning Precinct.

*"Support investigations of precincts identified in the Townsite Strategy as being provisionally suitable for various forms of rural settlement.*

*Refer proposals for subdivision and development within Townsite areas affected by designated flood risk SCA, or other possible flood risk areas downstream, to the Water and Rivers Commission for specific advice.*

*Incorporate water sensitive urban design principles where possible for drainage management within relevant portion of Nannup townsite and associated rural-residential developments."*

The Amendment Site is identified as suitable for rural settlement by Shire of Nannup Local Planning Scheme No.3. Should it be required, we welcome the referral of the proposed rezoning to the Waters and River Commission, as the flood affected area of the Amendment Site is located at its rear, in an area that is not able to be developed due to remnant vegetation. It is expected that this rezoning will not have any impact on flood impacted land.

On-site drainage capture and dispersal will be a key consideration of this rezoning proposal. All on-site drainage will be captured and dispersed on-site.

#### **4.4 Nannup Townsite Strategy (2000)**

The Amendment Site is located within Policy Area 6 – Nannup South of the Nannup Townsite Strategy.

The Strategy identifies that primary Land Uses for the Policy Area are:

- Single Dwelling
- Agriculture
- Intensive Agriculture
- Rural-Residential

In addition the Strategy has a Policy Statement as follows:

*"Notwithstanding the existence of smaller 'Rural Living' lots within the policy area, Council will not support 'urban' style development of subdivision within the policy area.*

*Subject to detailed assessment and rezoning, Council may permit rural-residential development."*

Based on the primary uses above, the Policy Statement for Area 6 and the adoption of this Amendment completes the transformation of the site to accommodate rural residential land uses in accordance with the Nannup Townsite Strategy.

#### **4.5 Shire of Nannup Local Planning Scheme No.3 (LPS 3)**

The amendment site is currently zoned *Agriculture* by Shire of Nannup Local Planning Scheme No.3 and included within the *Special Rural Policy Area* of LPS 3. It is proposed that the amendment site be rezoned to *Special Rural* in accordance with the objectives of the Scheme and the Nannup Local Planning Strategy and Nannup Townsite Strategy.





Shire of Nannup LPS 3 has the following specific objectives in relation to the 'Special Rural' zone:

- a) *"To select land within the Scheme Area wherein closer subdivision may be permitted to provide for rural-residential retreats and hobby farms on land which is suitable for such purpose and does not result in the removal of prime agricultural land or impact upon the continuation of established or potential agricultural use;*
- b) *To provide for a range of land uses compatible with the residential occupation of the land while providing for agricultural production on smaller lots where such production does not interfere with the amenity or rural residential character of the area;*
- c) *To provide for a range of housing choice and hence, lifestyle opportunities, within relatively close proximity to the town centre or main transport connections to the town centre;*
- d) *To encourage alternative rural-residential settlement patterns, including cluster subdivision patterns that provide opportunities for agricultural production, landscape protection and conservation; and*
- e) *To establish minimum development standards to ensure development is consistent with, and does not detract from, the rural character or landscape qualities."*

The proposed rezoning of the amendment site will meet all of the above criteria of LPS 3, as evidenced by the following:

- The land is identified by LPS 3 as being within the Special Rural Policy Area, identifying the land as being suitable for 'Special Rural' rezoning. The Amendment Site is located in close proximity to the Nannup town site and is not removing prime agricultural land, as it is not identified for these uses by LPS 3;
- The proposed rezoning will enable the creation of rural residential lots with a lot size of 2 ha and above. These are of sufficient size to warrant small hobby farming activities which will complement the desired lifestyle on the lots;
- The proposed rezoning provides for a range of housing choice in close proximity to the Nannup town site; and
- Minimum development standards for the lots are contained on the Development Guide Plan and within Schedule 12 – Special Rural Zones, in particular those provisions relating to Special Rural Area No.12.

LPS 3 also identifies the minimum requirements for rezoning to 'Special Rural', which are:

- a) *"Special Rural Zones shall be restricted to land within the Special Rural Policy Area shown on the Scheme Map.*
- b) *Before making provision for a Special Rural Zone the local government will prepare, or require the owner(s) of the land to prepare a submission supporting the creation of the Special Rural zone and such submission shall include:*
  - (i) *A statement as to the purpose or intent for which the zone is being created.*
  - (ii) *The reasons for selecting the particular area the subject of the proposed zone with particular reference as to how this relates to the local government's Local Planning Strategy and the Nannup Townsite Strategy, and the capability of the land for such use.*
  - (iii) *Information regarding the method whereby it is proposed to provide a potable water supply to each lot.*
  - (iv) *Information regarding the methods of wild fire protection proposed to be implemented for the subdivision.*



- (v) Any matters listed in Clause 6.2.3; and
  - (vi) Any other information which the local government considers relevant to the land.
- c) For each Special Rural Zone the proponent shall prepare, or have prepared, a Subdivision Guide Plan containing the information set out in Schedule 14."

The proposed rezoning complies with the rezoning requirements outlined in LPS 3, as evidenced by the following:

- The land is included within the 'Special Rural Policy Area of LPS 3;
- The intent and justification for the rezoning are clearly outlined by this Amendment. The land has been justified as capable of supporting 'Special Rural' land uses;
- Potable water supply has been addressed in Section 2.7.2;
- Wild fire protection is outlined in Section 4.6 Planning for Bushfire Protection;
- Matters in Clause 6.2.3 have been addressed; and
- The Development Guide Plan has been developed in compliance with Schedule 14 of LPS 3.

The proposed rezoning of the amendment site to *Special Rural* complies fully with the Shire of Nannup Local Planning Scheme No.3.

#### 4.6 Planning for Bush Fire Protection

'Planning for Bushfire Protection' is an adopted policy of the Western Australian Planning Commission (WAPC) and the Fire and Emergency Services Authority (FESA). This document forms the basis for fire risk management within Western Australia for land development. It provides performance criteria and acceptable solutions to minimise the impact of fire on communities. A Fire Management Plan (FMP) addressing the requirements of 'Planning for Bush Fire Protection' and AS 3959-1999 has been provided with this Amendment and is attached at **Appendix D**.

It provides a number of minimum criteria for development in fire prone areas. These include:

- Safe access and egress for residents on the amendment site;
- A maximum cul-de-sac length of 200 metres in locations that are prone to fire; and
- A quick travel time from the nearest local Fire Station.

For the purposes of this Amendment, the following information is provided:

- The Nannup Fire and Rescue Service is located in Adam Street; and
- It is likely that the vegetation on the Amendment Site would have a 'High' or 'Extreme' Bush Fire Hazard Rating.

To combat fire risk on the Amendment Site, the following measures are provided:

- A 20 metre Building Protection Zone (BPZ) to buildings should be provided to all lots. In this area bush fire fuels will have to be maintained below 10cm in height, trees and branches which could fall onto buildings must be removed and lower branches of existing trees must be trimmed. The size of the BPZ has been confirmed with FESA;
- Easy access and egress to the amendment site via the access cul-de-sac. Although this slightly exceeds the desired maximum 200 metre length (it is approximately 250 metres), it is believed that safe access and egress can be achieved from the Amendment Site. The fire source and risk both originate on the Amendment Site and it is believed that a severe bush



fire would not eventuate from this risk. Cul-de-sac length has been kept to the minimum possible, given it is not likely that dual access and egress could be achieved on this site;

- Access to the amendment site will meet the constructed requirements of Planning for Bush Fire Protection;
- The Nannup Fire and Rescue Service is located approximately 3.5 kilometres from the end of the proposed access cul-de-sac. A travel time of less than 5 minutes is achievable to the furthest part of the subdivision; and
- A suitable water supply for firefighting is provided in the Nannup town site.

The measures outlined in this section are included on the Fire Management Plan, which is attached at **Appendix D** of this report. It is believed that the Amendment Site complies with the relevant Planning for Bush Fire Protection criterion.

#### 4.7 Visual Landscape Planning in Western Australia 2007

The landscape that the subject land is located in has been identified as a *rural riverine and estuarine setting* as defined by the *Visual Landscape Planning in Western Australia* manual. Consequently, we have assessed the proposal against the considerations listed in the manual.

The factors to be considered in rural river settings are:

- setback
- remnant vegetation, including the retention of trees and flood fringes
- roads and bridges
- public infrastructure
- flood levees
- intensity of agricultural use
- subdivision
- land clearing and fencing
- billabongs and oxbows
- wetlands and confluence areas
- environmental flow (impact of agricultural dams)
- stocking rates.

The amendment site slopes steeply from the Blackwood River before flattening out. The combination of steep slope and vegetation allocated in the floodplain and slope areas effectively screens the site from the river. It is noted that this part of the river is not readily accessible for recreation, thereby reducing the visual impact as no major public areas are affected.

All development of the amendment site will be located on the flat areas away from the river. Therefore, the greatest visual impact will be from Brockman Highway, which is a major tourist route. Existing verge and boundary vegetation will remain unaffected by the amendment and future subdivision. This effectively screens the majority of the site from prominent view.

Given the large areas of cleared land on the amendment site, the rezoning and subdivision into smaller rural residential lots will provide an impetus for revegetation and a general improvement in the visual presentation of the site. A Landscape Protection Plan will be prepared prior to the subdivision of the land proceeding.

## 5.0 DEVELOPMENT GUIDE PLAN

A Development Guide Plan (DGP) is included as part of the proposed rezoning. Correspondence with Shire of Nannup officers has indicated that a preferred minimum lot size of 2 ha is established by the DGP. The DGP also takes into account the requirements outlined in Schedule 14 of the Shire of Nannup Local Planning Scheme No.3. Please find the DGP attached at **Appendix B** of this report.

The DGP has been kept deliberately simple, to allow for ease of use in the future. Its key aspects include:

- A minimum lot size of 1.8ha with the subdivision of the Amendment Site into 5 lots;
- Retention and fencing of remnant vegetation;
- A single point of access to and from the Amendment Site from the access cul-de-sac;
- A 3m easement for access to the Blackwood River over Lot 4 for benefit of Lots 1, 2 and 3. Please note that the Department of Water has advised that a Foreshore Reserve is likely to be required;
- A 20m Foreshore Reserve to be ceded at the time of subdivision;
- Exclusion of development from the Flood Risk Special Control Area identified in LPS 3; and
- A practical design that takes into account the opportunities and constraints of the Amendment Site.

We have provided building envelopes as per the requirements of the Shire of Nannup. The envelopes have been selected such that areas with remnant vegetation, high fire risk and/or steep slopes are avoided. The relative locations of Brockman Highway and the Brockman River have also been considered. A building envelope has not been allocated for Lot 5 as it contains existing buildings distributed across the lot that are unable to be contained within a reasonably sized building envelope.

With the exception of Lot 4, no envelope is less than 20m from any boundary. This envelope has been placed close to the boundary to minimise the clearing of remnant vegetation required to establish a building envelope and Building Protection Zone. Building envelopes are not provided within 50m of Brockman Highway to provide an adequate setback from this arterial road. This also provides at least a 50m setback from any State forest, a requirement imposed on other *Special Rural* developments in the Shire.





## 6.0 JUSTIFICATION

The proposed rezoning is justified by the following:

1. *The proposal allows rural residential land uses in an ideal location.*

The Amendment Site is in an area that is characterised by *Special Rural* zone land. This includes land directly to the south and west of the proposed Amendment. The Amendment Site is conveniently located only 2 kilometres south of the Nannup town site, hence provides a rural lifestyle in close proximity to a service centre.

2. *The Amendment Site has demonstrated that the land is capable and suffers from few site constraints.*

The majority of the Amendment Site is contained within the Blackwood Plateau System. This system generally has a high capability of supporting rural residential development. Other site constraints, such as remnant vegetation, fire hazard and flooding have been identified and addressed through the Development Guide Plan and Scheme Provisions for Special Rural Area No.12.

3. *The Amendment Site is identified by various documents and strategies for this use.*

The Amendment Site is identified by the Shire of Nannup Local Planning Scheme No.3, Local Planning Strategy and Nannup Townsite Strategy for the subdivision and development of rural residential land uses. The rezoning of the Amendment Site simply facilitates this.

4. *The proposal will rezone existing under-utilised land within the agricultural area in close proximity to Nannup.*

The area of the Amendment Site is approximately 10.7ha, which is not a size that is conducive of efficient or viable agricultural production. Also, given the presence of remnant vegetation, it can be argued that the actual productive area of the land would be less. The proposed Amendment will give the land a higher and better use.

5. *The proposal will create further housing choice in Nannup.*

The proposed Amendment will improve housing choice in Nannup and the Shire by providing a lifestyle option of existing and future residents.



## 7.0 CONCLUSION

This report has demonstrated that the proposal to rezone Nelson Location 8271 from *Agriculture* to *Special Rural* is consistent with adopted planning strategies and principles. The rezoning will allow the development of rural residential land uses in close proximity to the Nannup town site.

The proposed Amendment will:

- Provide for rural residential land uses in an area already characterised by these land uses;
- Utilise land that is not efficient for agricultural for the provision of rural residential lots;
- Provide housing choice for existing and proposed residents of Nannup;
- Make land uses consistent in this area, reducing the possibility of land use conflict; and
- Providing for the expansion and growth of the Nannup town site and supporting its role.

It is respectfully requested that Council and the Western Australian Planning Commission support the proposed Amendment, rezoning Nelson Location 8271 from *Agriculture* to *Special Rural* in Shire of Nannup Local Planning Scheme No.3.



**PLANNING AND DEVELOPMENT ACT 2005  
SHIRE OF NANNUP**

**LOCAL PLANNING SCHEME No.3**

**AMENDMENT No.9 (LPS 3)**

RESOLVED that the Council, pursuant to Section 75 of the Planning and Development Act 2005 (as amended), amends the above local planning scheme by:

1. Rezoning Lot 8271 Brockman Highway, Nannup (as depicted on the Scheme Amendment Map) from the 'Agriculture' zone to the 'Special Rural' zone.
2. Amending the Scheme Text Schedule XX (Schedule of Special Rural Zones) by including Lot 8271 Brockman Highway, Nannup together with reference to a Development Guide Plan and special provisions referring to the subject land as follows:

NO.	DESCRIPTION OF LAND	CONDITIONS
SR 15	Lot 8271 Brockman Highway, Nannup	<ol style="list-style-type: none"> <li>1. Subdivision and development of the site shall be generally in accordance with the Development Guide Plan adopted by the Local Government and endorsed by the Chief Executive Officer.</li> <li>2. Subdivision and development may be considered by the Shire as a variation from the Development Guide Plan provided that, in the opinion of the Shire, such development would not compromise the intent of the Development Guide Plan.</li> <li>3. Any variation to the endorsed Development Guide Plan not within the general intent of the Development Guide Plan will require consideration and endorsement of a new Development Guide Plan in accordance with Schedule 14.</li> <li>4. Subdivision and development shall generally be in accordance with the Development Guide Plan adopted by the Local Government for the zone under Local Planning Scheme No. 3.</li> <li>5. Prior to subdivision or development, the following will be prepared and/or undertaken to the satisfaction of the Local Government: <ul style="list-style-type: none"> <li>• A foreshore management plan for the riparian zone adjacent to the Blackwood River shall be prepared to the requirement of the DoW and DEC.</li> <li>• A Landscape Protection Plan.</li> <li>• Fire Management Plan.</li> </ul> </li> <li>6. A 30 metre foreshore reserve along the northern boundary of the subject land as depicted on the Development Guide Plan is to be ceded free of cost to the Shire of Nannup or other relevant agency at the time of subdivision.</li> <li>7. All new buildings and structures shall be contained within the building envelope areas as depicted on the Development Guide Plan.</li> <li>8. Notwithstanding Clause 5.8.3 of the Scheme, each dwelling shall be provided with a water supply with a minimum capacity of 135,000 litres, and adequate roof catchment to supply the water tank, or alternative source of water approved by the Council. This may be supplied from the Water Corporation licensed underground water supplies or rainwater storage systems to the satisfaction of Council and the Health Department of Western Australia.</li> <li>9. All dwellings shall be designed and constructed in accordance with the requirements of Standards Australia AS3959-1999 "Construction of Buildings in Bush Fire Prone Areas" (Level 2) construction standards.</li> <li>10. On-site effluent disposal systems will be provided to the satisfaction of the Department of Health and Council standards and shall be setback 100m from the Blackwood River in accordance with the Department of Water's Water Quality Protection Note for Wastewater Treatment – On Site Domestic Systems.</li> <li>11. All stormwater shall be disposed of on-site to the satisfaction of the Local Government.</li> <li>12. No lot shall have direct access to Brockman Highway.</li> </ol>

PLANNING AND DEVELOPMENT ACT 2005

SHIRE OF NANNUP

LOCAL PLANNING SCHEME No. 3

AMENDMENT No.9

ADOPTION:

Adopted by resolution of the Council of the Shire of Nannup at the meeting of the Council held on the \_\_\_\_\_ day of \_\_\_\_\_ 201\_\_:

\_\_\_\_\_  
Shire President

\_\_\_\_\_  
Chief Executive Officer

FINAL APPROVAL:

Adopted for final approval by resolution of the Shire of Nannup at the meeting of the Council held on the \_\_\_\_\_ day of \_\_\_\_\_ 201\_\_ and the Common Seal of the municipality was pursuant to that resolution hereunto affixed in the presence of:

\_\_\_\_\_  
Shire President

\_\_\_\_\_  
Chief Executive Officer

RECOMMENDED / SUBMITTED FOR FINAL APPROVAL:

\_\_\_\_\_  
Delegated under s.16  
of the PD Act 2005

\_\_\_\_\_  
Date

FINAL APPROVAL GRANTED:

\_\_\_\_\_  
Minister for Planning

\_\_\_\_\_  
Date

## APPENDIX A

### Certificate of Title





WESTERN



AUSTRALIA

REGISTER NUMBER	
8271/DP201619	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
N/A	N/A

**RECORD OF CERTIFICATE OF TITLE**  
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME  
1047FOLIO  
353

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 8271 ON DEPOSITED PLAN 201619

**REGISTERED PROPRIETOR:**  
(FIRST SCHEDULE)

BENJAMIN RODGER HENRY  
IN 50/200 SHARE  
CARL CARISBROOK HENRY  
IN 75/200 SHARE  
MIRIAMA PAKI  
IN 75/200 SHARE  
ALL OF UNIT 7/21 STORTHESE STREET, MOUNT LAWLEY  
AS TENANTS IN COMMON

(T J795166 ) REGISTERED 21 JUNE 2006

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
(SECOND SCHEDULE)

1. \*J795167 MORTGAGE TO BANK OF WESTERN AUSTRALIA LTD REGISTERED 21.6.2006.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.

\* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.  
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 1047-353 (8271/DP201619).  
PREVIOUS TITLE: This Title.  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AREA: SHIRE OF NANNUP.

NOTE 1: A000001A LAND PARCEL IDENTIFIER OF NELSON LOCATION 8271 (OR THE PART THEREOF) ON SUPERSEDED PAPER CERTIFICATE OF TITLE CHANGED TO LOT 8271 ON DEPOSITED PLAN 201619 ON 24-MAY-02 TO ENABLE ISSUE OF A DIGITAL CERTIFICATE OF TITLE.

END OF PAGE 1 - CONTINUED OVER

RECORD OF CERTIFICATE OF TITLE

REGISTER NUMBER: 8271/DP201619

VOLUME/FOLIO: 1047-353

PAGE 2

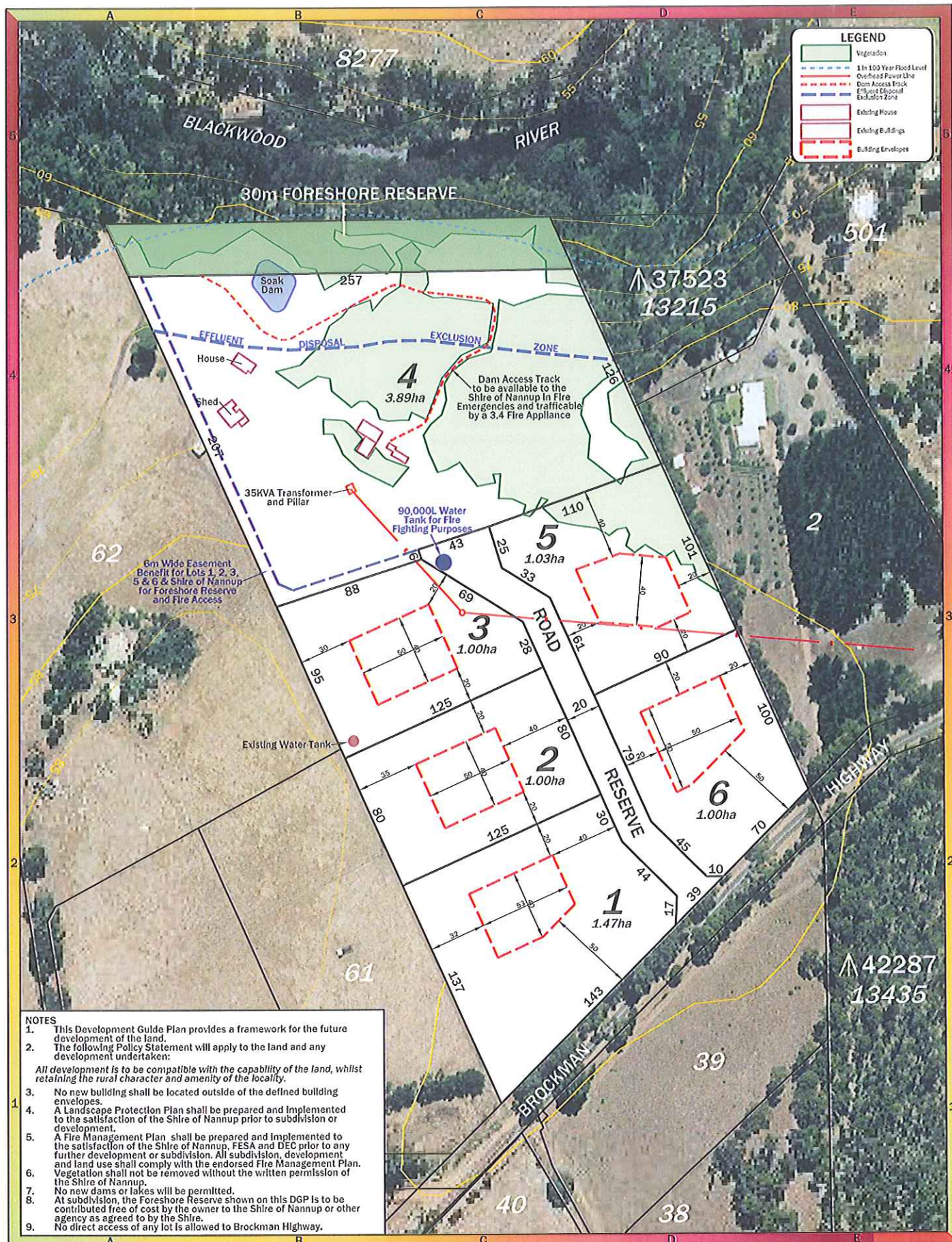
NOTE 2: THE ABOVE NOTE MAY NOT BE SHOWN ON THE SUPERSEDED PAPER CERTIFICATE  
OF TITLE OR ON THE CURRENT EDITION OF DUPLICATE CERTIFICATE OF TITLE.  
NOTE 3: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING  
J795167

## APPENDIX B

### Development Guide Plan







**DEVELOPMENT GUIDE PLAN**  
LOT 8271 NO DP 201619  
BROCKMAN HIGHWAY  
NANNUP

This Development Guide Plan has been adopted by Council and signed by the Chief Executive Officer for the Shire of Nannup

Chief Executive Officer \_\_\_\_\_ Date \_\_\_\_\_



Drawn  
SOP 2502-11



Approved  
SOP 2502-11



8 Falkenberg Road, Burswood WA 6280  
T: 08 9752 4400 F: 08 9754 1678  
E: h.harley@shireofnannup.wa.gov.au

HSG Ref 15369-03E.dgn



**APPENDIX C**  
**EPA Checklist**



# Attachment A3-2

## Referral of a Scheme to the EPA and Environmental Checklist

### REFERRAL OF A SCHEME



Environmental Protection Authority

### Referral of a Scheme to the

### Environmental Protection Authority

#### PURPOSE OF THIS GUIDE

Referral requirements are set out in the planning legislation relevant to the scheme\*, and include a requirement that the EPA is given such written information about the scheme as is sufficient to enable the EPA to comply with section 48A of the *Environmental Protection Act 1986* i.e. to decide whether or not to assess the scheme.

The purpose of this guide is to help clarify referral requirements.

Whilst the EPA has some general information for each municipality, it often does not have local or site specific information. Under the relevant planning legislation, it is the role of the authority responsible for the scheme to provide sufficient information. The information that is likely to be sufficient in most instances is indicated in this guide. The EPA will advise if further information is required. Upon receiving sufficient information, the EPA must make a decision within 28 days on whether or not to assess the scheme.

A referral must contain:

- A copy of council's resolution to prepare or adopt the scheme. Referral upon adoption is preferred as more information is usually available at that time.
- Scheme documentation - a hard copy of the referral of the scheme (as defined under the *Environmental Protection Act 1986*), text and map/s, **together with** an electronic copy of the documentation (see Spatial Data for Environmental Impact Assessment attached), as follows:
  - ❑ a compact disc version of the scheme, or scheme amendment, in PDF (Portable Document Format) file format, contained in a soft clear plastic adhesive-backed envelope;
  - ❑ spatial data (GIS or CAD) on CD, depicting the scheme/amendment extent, geo-referenced and conforming to the following parameters:
    - Datum: GDA94;
    - Projection: Geographic (latitude/longitude) or Map Grid of Australia (MGA);
    - Format: Arcview shapefile, Arcinfo coverages, Microstation or AutoCAD.
- Sufficient information for the EPA to decide whether or not to assess the scheme. This will usually be a completed **Environmental Checklist** (see over), and, in cases where the scheme may have environmental implications, the following:
  - ❑ clear identification on a map of the location of the land to which the scheme applies
  - ❑ an outline development plan or subdivision guide plan, where appropriate
  - ❑ information on relevant items in the environmental checklist (see over)
  - ❑ when electronic documentation is not available, additional copies of the scheme documentation for the EPA Service Unit to forward to the Department of Environment and Conservation and other agencies for technical advice.

If the information submitted to the EPA is not sufficient for the EPA to decide whether or not to assess the scheme, the EPA may request additional information.

The EPA Service Unit's Planning and Infrastructure Branch can advise on referral requirements and issues of environmental significance. Liaison with the EPA Service Unit may be particularly helpful in the following instances - schemes raising potentially significant environmental issues, and whole-of-municipality town planning schemes. The Planning and Infrastructure Branch can be contacted by ringing 6364 6500 and asking for an environmental officer who deals with the region.

\* In this form, the term **scheme** has the same meaning as in *Environmental Protection Act 1986*, and includes town planning schemes, regional planning schemes and their amendments.

## Referral of a scheme to the Environmental Protection Authority

### ENVIRONMENTAL CHECKLIST

**Title of scheme\*:** Shire of Nannup Local Planning Scheme No.3 (Amd 9)

This checklist is intended to assist authorities responsible for schemes to identify potential environmental issues, and to supply the information that the EPA requires to decide whether or not to assess a scheme.

Please tick the appropriate box and supply the information indicated at Section D below to the EPA. For clarification of any terms or descriptions used, please refer to EPA Guidance No. 33 'Environmental Guidance for Planning and Development' or the Planning and Infrastructure Assessments Branch of the EPA Service Unit.

#### A. Biophysical factors

Yes      No      Unsure

1. Does the area to which the scheme applies contain or adjoin any of the following?

- |   |                                     |                                     |                          |
|---|-------------------------------------|-------------------------------------|--------------------------|
| a) bushland. If yes, identify   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| b) a wetland (includes seasonally damp land),<br>watercourse or river - If yes, identify      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| c) an estuary or inlet. If yes, identify  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) coastal area or near-shore marine area. If yes, identify                                   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) a public water supply area. If yes, identify   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f) a landform of special interest, for example, karst,<br>beach ridge plain. If yes, identify | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

2. Is any area to which the scheme applies in a catchment that is of particular environmental concern or interest?

☐      ☒      ☐

If yes, identify the catchment:

- |  |                          |
|--|--------------------------|
| Lake Clifton catchment   | <input type="checkbox"/> |
| Swan Coastal Plain catchment of the Peel-Harvey Estuary                | <input type="checkbox"/> |
| Swan and Canning Rivers catchment (other than<br>Ellenbrook catchment) | <input type="checkbox"/> |
| Ellenbrook catchment   | <input type="checkbox"/> |
| Other catchment (please name)  | <input type="checkbox"/> |

3. Is the land to which the scheme applies the subject of any significant or potentially

significant soil or land degradation issues, for example,  
salinity, waterlogging, erosion,

acid sulphate soil? ☐      ☒      ☐

If yes, identify issue/s: \_\_\_\_\_

#### B. Pollution management

4. Does the scheme allow for a land use that will or could discharge a significant quantity of a potential pollutant to the air, surface water, soil or groundwater?

☐      ☒      ☐

If yes, please identify the land use/s, and associated pollutants:

\_\_\_\_\_

**NOTE:** In this form, the term 'scheme' has the same meaning as in *Environmental Protection Act 1986*, and includes regional and town planning schemes and their amendments.

	Yes	No	Unsure
5. Does the scheme allow for a land use that could require a buffer over adjoining land? that is, does it allow for uses that may affect adjoining land (including land that may be used for future residential use) due to gases, noise, vibration, odours, light?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If yes, please identify land use/s, and off-site areas that may be affected:			
What is the distance to the nearest residences?			
6. Would the scheme allow a residential area or sensitive land use (e.g. school) to be located in an area likely to be affected by emissions (e.g. gases, noise, odour) from industry, agriculture or infrastructure (e.g. landfill site)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If yes, please identify:			
7. Does the scheme apply to a site that has been used for a past land use which may have contaminated the soil or groundwater, for example, market garden, industrial use, fill?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If yes, please identify:			
8. Does the scheme apply to any land with a high watertable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>C. Social surroundings</b>			
9. Does the scheme raise any issues known to be of concern to the public?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If yes, is the concern to the public related to an environmental issue?			
Please specify the environmental issue(s) of concern			
10. Is the scheme likely to raise heritage or cultural issues due to impacts on the biophysical environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If yes, please identify			
11. Does the scheme apply to areas of land where there are existing or potential land uses associated with high levels of risk, for example, a high pressure gas pipe line, heavy industry	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If yes, please identify:			
<b>D. Additional information</b>			
<ul style="list-style-type: none"> <li>• If all answers to the questions above are 'no', no other environmental information is required to accompany this checklist.</li> <li>• If answers include 'yes' or 'unsure', please provide information for those items on: <ul style="list-style-type: none"> <li>o the existing environment</li> <li>o potential environmental impacts and their magnitude/significance</li> <li>o how the impacts will be managed to ensure a good environmental outcome.</li> </ul> </li> </ul>			
The EPA will review the checklist and information submitted and if not sufficient for the EPA to decide whether or not to assess the scheme, the EPA may request additional information.			
Name of person completing form: <u>Roy Winslow</u> Date: <u>30/06/2009</u>			
Position: <u>Planning Consultant</u> Contact: _____ Phone/Email: <u>9792 6000</u>			

## APPENDIX D

### Fire Management Plan



**FIRE MANAGEMENT PLAN**  
**LOT 8271 BROCKMAN HIGHWAY, NANNUP**



**PREPARED FOR MR B HENRY**  
**FEBRUARY 2010**

## 1.0 INTRODUCTION

This Fire Management Plan has been prepared in conjunction with the proposed rezoning and subdivision of Lot 8271 on Deposited Plan 201619 Brockman Highway, Nannup. The purpose of this plan is to identify the fire risk for the subdivision and to implement practices to mitigate and manage this risk.

## 2.0 STATUTORY CONDITIONS

This Fire Management Plan has been prepared to address the Shire of Nannup's requirements and is aligned to *Planning for Bush Fire Protection* and Australian Standard 3959-1999 *Construction of Buildings in Bushfire-Prone Areas*.

Australian Standard 3959-2009 was published recently. However, AS 3959-1999 has been used in this instance because the Fire and Emergency Services Authority (FESA) has advised that there are a number of unresolved issues with the new standards and they are yet to be adopted by FESA.

## 3.0 SITE DETAILS

The subject site is Lot 8271 on Deposited Plan 201619 Brockman Highway, Nannup. It is located approximately 2.5km south-south-west of the Nannup Townsite.

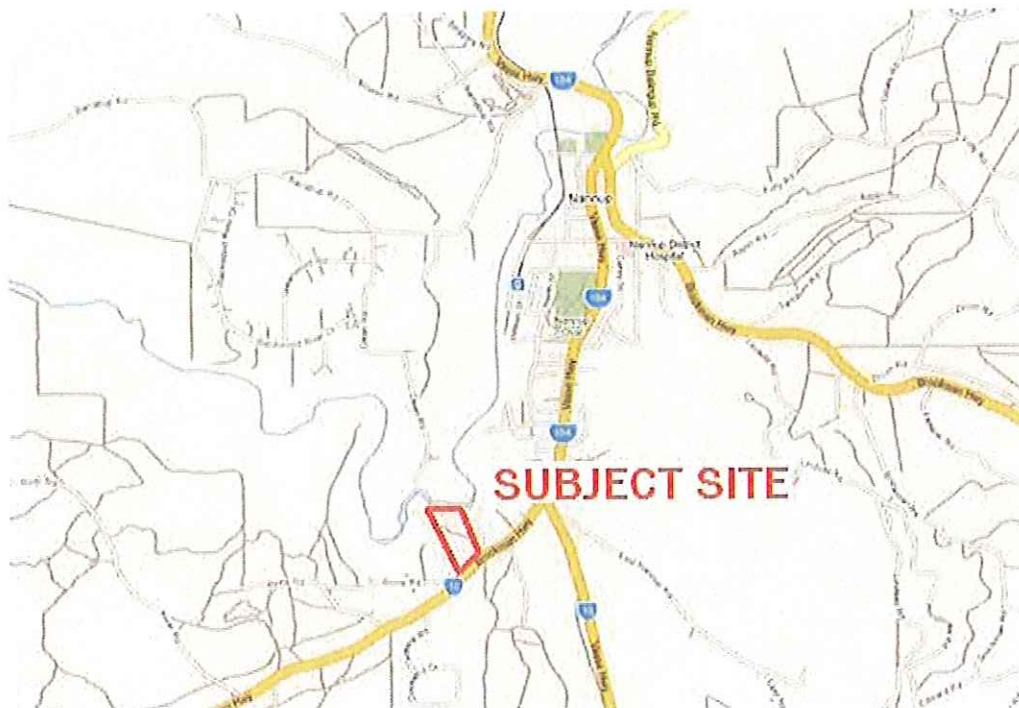


Figure 1: Location Plan.

The subject site is 10.7334ha in area. Approximately one-third of the site remains under native vegetation, whose coverage includes the Blackwood River and its floodplain. The remainder of the site is under pasture, with linear occurrences of mature trees along the driveway linking dwellings and outbuildings on the site to Brockman Highway.

The land is currently subject to rezoning and a subdivision application. This Fire Management Plan is being prepared to satisfy the requirements of the Shire of Nannup in considering these proposals.



#### 4.0 SURROUNDING LAND USE AND VEGETATION

The subject site is abutted to the north by the Blackwood River and its associated floodplain, both of which are Unallocated Crown Land (UCL). This area contains mature native trees, including jarrah and marri, and associated undergrowth. Much of this undergrowth has been damaged by grazing livestock and for the horticultural activity previously conducted on the site.

Brockman Highway forms the southern boundary of the subject site. Over the highway, Lot 39 is cleared and under pasture in a similar fashion to the majority of the subject site. A reserve (Reserve 42280 on Plan 190666) is located to the south-east and is under undisturbed native vegetation.

Adjacent land to the east is predominantly cleared and in use for horticulture. A small (9,840m<sup>2</sup>) reserve (Reserve 37523 on Diagram 61201) is located abutting the Blackwood River UCL and carries good quality native vegetation, similar to part of the subject site and along the Blackwood River

Land to the west of the subject site is cleared and under pasture, currently for horses.

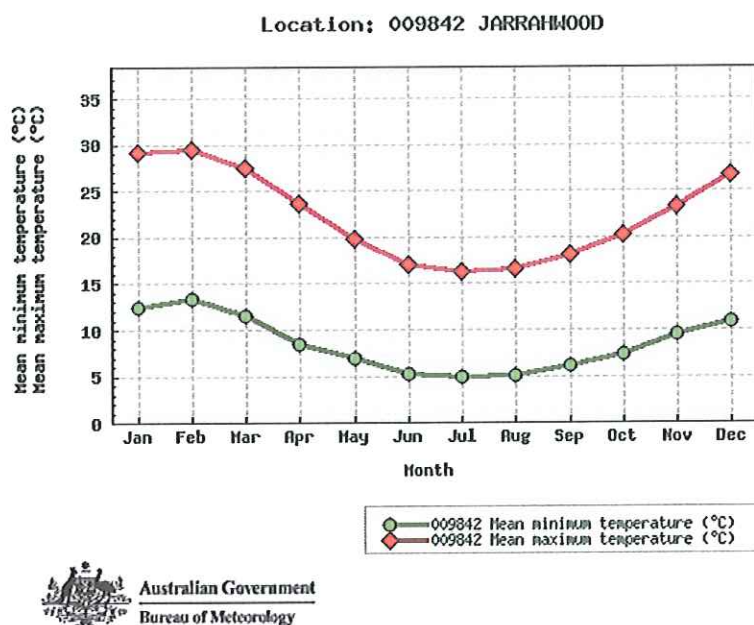


*Figure 2: Aerial photograph of the subject site and its surrounding land.*

## 5.0 CLIMATE

The Nannup district is characterised by a mild Mediterranean climate characterised by cool wet winters and warm dry summers. Jarrahwood is the nearest Bureau of Meteorology weather station, located approximately twenty kilometres to the north of the subject site and opened in 1975.

- The warmest month is January, with an average maximum temperature of 29.5°C and an average minimum temperature of 13.4°C;
- The coolest month is July, with an average maximum temperature of 16.3°C and an average minimum temperature of 5.0°C.



Created on Fri 3 Jul 2009 13:40 PM EST

**Figure 3:** Mean monthly temperatures for Jarrahwood, 1975-2000. Source Bureau of Meteorology, 2009

An annual mean rainfall of 933mm falls in Jarrahwood. Fifty-four per cent of this precipitation falls during the winter months (June, July and August). July is the wettest month, receiving 179.0mm of rain and January is the driest, with 12.7mm. Figure 4 below shows annual rainfall patterns by month for Jarrahwood.



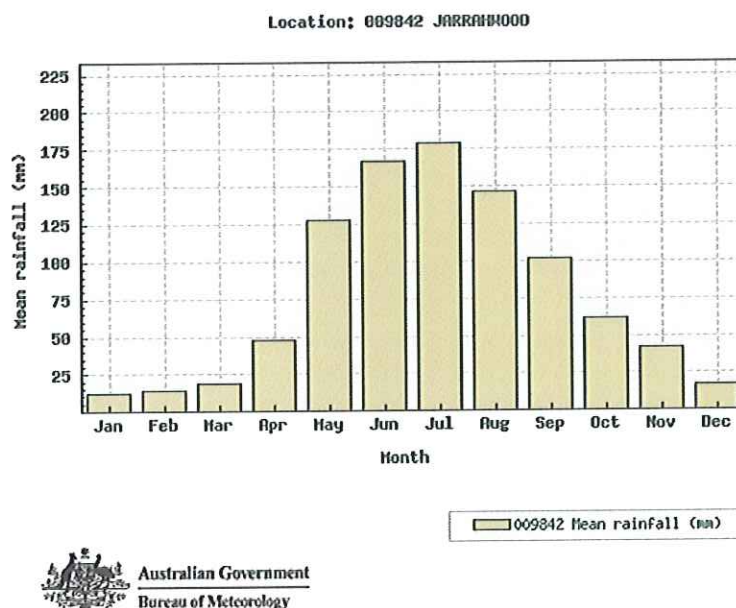


Figure 4: Mean monthly rainfall totals for Jarrahdale, 1975-2000. Source Bureau of Meteorology, 2009

The fire season in Western Australia generally occurs from early December until late March when conditions are hot and dry. Wind, in conjunction with hot, dry weather is a serious fire hazard because it has the potential to fan flames and transport burning embers from the fire front. Information on prevailing winds is therefore essential to effective fire planning. 'Wind roses' are published by the Bureau of Meteorology to show the direction and strength of winds at weather stations around the country for given periods of time. Wind roses for 9am and 3pm in January and February for the period 1975-2008 ('the time') at the Jarrahdale weather station are shown at Figures 5 and 6 respectively.

At 9am on days in January, prevailing winds at Jarrahdale are south-easterlies between 0 and 10km/h (occurring 30% of the time). Southerlies and south-westerlies of similar velocity are each predominant for approximately 18% of the time. In the afternoon, the well-known West Australian sea breeze is dominant. South-westerly winds occur 35% of the time, and for half this time they exceed 10km/h.

February morning conditions are broadly similar to those in January, with a slight increase in the incidence of north-easterly winds being the only notable difference. At 3pm, the main change is a decrease in the dominance of the sea breeze. South-westerlies occur some 28% of the time, with a more common incidence of south-easterly winds. Air conditions are calm for less than one per cent of the time for both months.

Overall, southerly winds prevail in January and February in the Jarrahdale district. This wind direction is not conducive to the movement of fire from the forested land along the Blackwood River and on Reserve 37523; it is much more likely to fan it towards the cleared land further north during the peak of the fire season. However, these southerly winds have the potential to spread a fire toward the subject site from Reserve 42287, a well vegetated reserve to the south-east of the subject site on the other side of Brockman Highway.

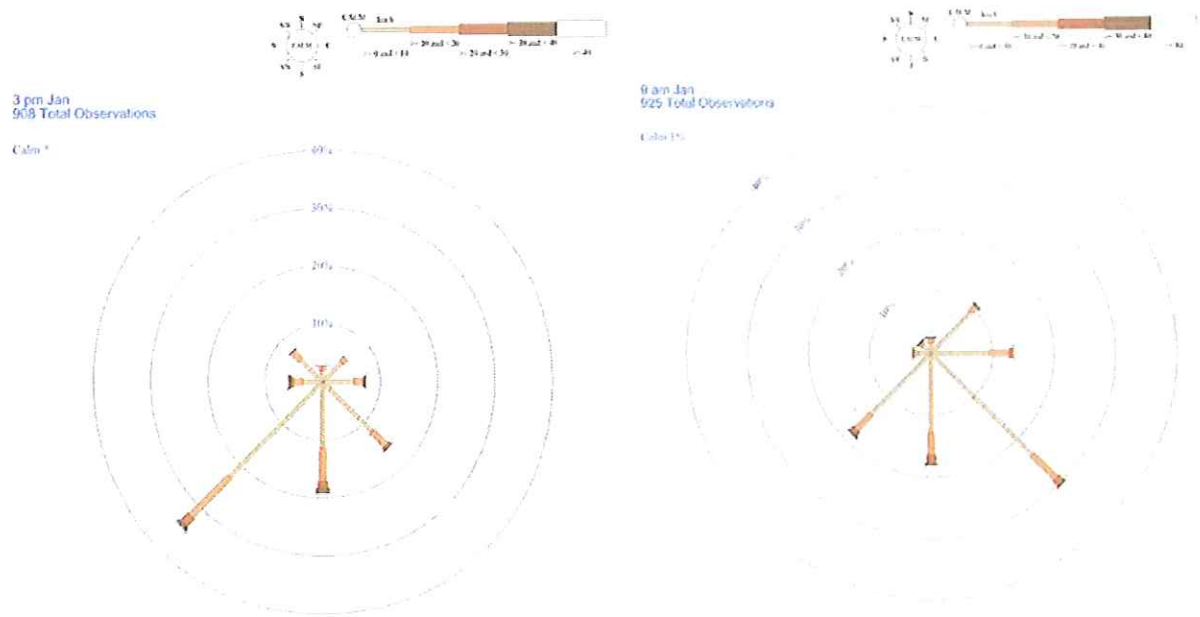


Figure 5: Wind rose for Jarrahwood at 9am (left) and 3pm (right) for January in the period 1975-2008.  
Source: Bureau of Meteorology, 2008

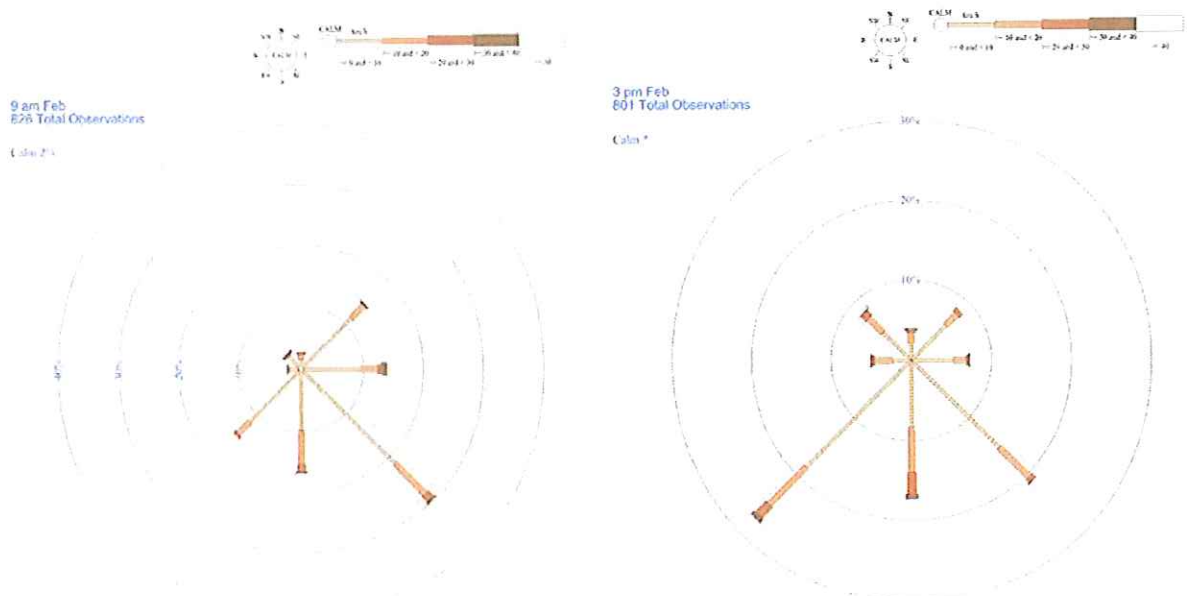


Figure 6: Wind rose for Jarrahwood at 9am (left) and 3pm (right) for February in the period 1975-2008.  
Source: Bureau of Meteorology, 2008



## 6.0 PREVAILING FIRE WEATHER

As mentioned previously, fire season in the south-west of Western Australia is in summer and autumn when conditions are generally hot and dry. Rainfall is minimal, humidity low and average daily temperatures are in the vicinity of 25-30°C, leading to dry bushland and pastures providing ample fuel for bushfires. Persistent wind (conditions are listed as 'calm' less than one per cent of the time at Jarrahwod in January and February) poses a danger in fanning flames and spreading fire fronts, including through movement of burning embers.

Fire weather in this region is prompted by mid-level disturbances across the south-west of the State, bringing unstable atmospheric conditions (thunder and lightning) from the north and north-west. Risk of lightning strikes, spark ignition, arson and other causes of fire give rise to bushfires under these unstable, hot and dry conditions.

Given the subject site is located in an area with a variety of land uses – residential (in the Nannup Townsite), agriculture and bushland, it may be susceptible to fires started by lightning strike, spark ignition and arson.

## 7.0 BUSHFIRE HAZARD ASSESSMENT

Because FESA has advised that AS 3959-2009 is not to be used as yet, *Planning for Bush Fire Protection* forms the basis of the bushfire risk assessment for the subject site.



*Figure 7 (left), showing the cleared area with a 'Low' fire hazard, and Figure 8 (right), showing the remnant vegetation located in the north-east third of the site ('Extreme' fire hazard). Source: author*

With respect to *Planning for Bush Fire Protection*, the subject site can be divided into two physically distinct sections (see Figures 7 and 8 above for details):

- Section A: a south-western majority portion characterised by a gentle south-west to north-east slope of approximately 1:32, or 2°; and
- Section B: one-third of the property in the north-eastern corner that is predominantly covered by remnant native vegetation, including an intact understorey, on a slope of 1:7, or 15%.

Approximately two-thirds of Section B lies within proposed lot 4, with the balance falling in proposed lots 3 and 5. Lots 1 and 2, along with the remainder of lots 3 and 5 lie within Section A, which includes the existing sheds and dwelling.

*Planning for Bush Fire Protection* specifies a number of criteria by which land is classified, according to its susceptibility to fire.

**Section A** is a 'Low' fire hazard, being an area with slopes less than 10° and "devoid of standing vegetation", which also describes land beyond the western boundary and south of Brockman Highway.

**Section B** is an 'Extreme' fire hazard, reflecting its character as a "forested area with dense understorey" and an "area of woodland where a hazard reduction program is not in place or implemented" and having a slope exceeding 10°.

**Possible sources of external fire risk** are the vegetated areas along the Blackwood River (including Reserve 37523) and to the south-east (R 42287).

The Blackwood River reserve and Reserve 37523 abut Section B, which is on a 1:7 slope and considered an 'Extreme' fire risk. However, the linear nature of the Blackwood River vegetation and associated Reserve 37523 limits the spread of a potential bushfire to the immediate vicinity of the river, provided that adjoining land (including pasture) is kept at 'Low' levels. Furthermore, prevailing southerly, south-westerly and south-easterly winds at the peak of the fire season could be expected to fan flames away from the subject site.

Reserve 42287 is more of a concern to the subject site given the prevalence of southerly winds. This reserve represents a 'High' fire risk and there is potential for it to be a source of burning embers and (in extreme conditions) direct spread of flames, should southerly or south-easterly winds coincide with a fire event on the land. The presence of Brockman Highway (which acts like a firebreak) and cleared land on the nearest parts of the subject site to the reserve help mitigate this risk at present.

Discussion with FESA indicates that they expect all buildings on the site to be constructed to Level 2 standard. According to AS 3959-1999 *Construction of Buildings in Bushfire-Prone Areas*, this standard is "for the category of high bushfire attack". FESA's decision to apply Level 2 rather than Level 3 ("for areas of extreme bushfire attack") reflects the following:

- Although in themselves representing an 'Extreme' fire risk, the aforementioned 'Section B' hazard areas are isolated and surrounded by cleared land under pasture, which represents a 'Low' fire risk;
- The relatively small size of the fire hazards ensure that regular prescribed burning is practical, to ensure that fuel for fires is minimised;
- Detection of a bushfire is likely to be prompt given the number and proximity of dwellings in the immediate area;
- The subject site is within five minutes' travelling time from the Nannup Bush Fire Brigade station, ensuring a rapid response time (especially given that a major road provides access); and
- The main 'Extreme' fire hazard is located downwind of prevailing summer winds thereby reducing the likelihood of bushfire attack.





## 8.0 FIRE MANAGEMENT PLAN

### 8.1 Australian Standard 3959-1999: Construction of Buildings in Bushfire-Prone Areas

As noted in Section 7.1 above, the building standards, as prescribed by Australian Standard 3959-1999: *Construction of Buildings in Bushfire-Prone Areas* must be adhered to. On FESA's advice, all buildings on the site must be constructed to Level 2 standard, which relates to "the category of high bushfire attack". Its application in this instance is a realistic reflection of the predominantly 'Low' bush fire risk on the site combined with the undeniable risk posed by the remnant vegetation in the north-eastern corner of the lot (see Section 7 above).

### 8.2 Planning for Bush Fire Protection

As part of the subject site has been deemed to have an 'Extreme' fire risk, all six Performance Criteria listed in *Planning for Bush Fire Protection* are relevant to this Plan.

#### PC 3.1: Fire Protection Information Requirements

PC 3.1.1 requires that "rezoning, subdivision and development proposals [are] to adequately address fire protection issues." This Fire Management Plan is designed to address this criterion, namely its requirements to include information on:

- Bush fire hazard and land suitability assessment;
- Subdivision and development design in terms of access, hazard separation and building protection;
- Water supply;
- Building siting;
- Maps and plans of fire protection measures.

#### PC 3.2: Fire Suppression Response

The proposed subdivision is less than three kilometres by road from the Nannup Bush Fire Brigade base. As such, travel time to the subject site will not exceed five minutes. Although in a rural area, local tracts of bushland are in close proximity to a number of dwellings, ensuring that any fire can be promptly detected and managed.

#### PC 3.3: Subdivision and Development Design

Only one point of access/egress for fire crews and local residents is provided in the subdivision plan. This is sufficient because it is located at a point on the property well away from the predominant fire risk (bushland along the Blackwood River and on Reserve 37523) and opens onto a sealed highway (Brockman Highway). This provides a safe and fast escape route from areas where fire risk is highest. A secondary fire risk to the subject site exists in the form of Reserve 42287 to the south-east of the property. Although close to the proposed point of access/egress, Brockman Highway provides an escape route from the subdivision to the south-west in the event of a fire.

#### PC 3.4: Access

The Policy requires that two access/egress options be provided to the developing area to ensure that should one become blocked by fire, the other remains useable. One point of access/egress is provided to the subject site which in this case is acceptable because it is distant from the predominant fire hazard and opens onto a major road, providing a safe and rapid thoroughfare for escaping traffic.

Design limitations make it impossible for a public road to surround the area of 'Extreme' fire hazard on the site. It is envisaged that Hazard Separation Zones, Building Protection Zones and firebreaks will provide adequate protection.

Fire service access will be provided by the proposed public road and private driveways, all of which will be constructed to a standard suitable to accommodate '3.4' appliances, as described





in the Guidelines. General access will be designed and constructed to the minimum standards specified by Section PC 3.4 of the Guidelines.

The proposed cul-de-sac exceeds the maximum desirable length by some fifty metres (250m, as opposed to a maximum desirable length of 200m). However, FESA has advised that it is not concerned about this variation. Other standards include:

- Minimum trafficable surface (width): 6m;
- Minimum horizontal clearance: 6m;
- Maximum grade: 1:8;
- Maximum grade over <50m: 1:7;
- Minimum weight capacity: 15 tonnes;
- Maximum crossfall: 1:33;
- Curves minimum inner radius: 12m;
- Minimum cul-de-sac diameter: 21m.

Given the layout of the proposed subdivision, an alternative emergency access route is not practicable because only one boundary is formed by an existing road (Brockman Highway) and this is already utilised by the primary road reserve for the subdivision.

With regard to driveways, Table 8 of *Planning for Bush Fire Protection* notes that “constructed driveways are required where house sites are more than 50m from a public road”, which may be the case for some lots depending on the wishes of future landowners. The following standards are specified for such accesses:

- Minimum trafficable surface: 4m;
- Horizontal clearance: 6m;
- Maximum grade: 1:8;
- Maximum grade over <50m: 1:5;
- Maximum average grade: 1:7;
- Minimum weight capacity: 15 tonnes;
- Maximum crossfall: 1:33;
- Curves minimum inner radius: 12m;
- Turn around areas (suitable for a ‘3.4’ appliance): within 50m of a house.

All gates on the site must be of sufficient width (minimum 3.6m) to accommodate a ‘3.4’ appliance and will be appropriately signposted.

No battleaxe accesses, other emergency access-ways or passing bays are considered necessary or proposed for this subdivision.

#### PC 3.5: Water Supply

The subject site is not connected to reticulated scheme water, the nearest mains being located approximately 1km away. As such, there will be no hydrants.

The Guidelines stipulate that a 50,000 litre water tank per 25 lots is the minimum requirement for water supply for fire fighting purposes. Alternatively, a dam containing 200m<sup>3</sup> of water per 25 lots all year round is also an acceptable measure.

The proposed Amendment is committed to good fire planning outcomes. Therefore, we propose the existing 90,000L concrete tank located on the western boundary of proposed Lot 1 can be used as a source of water for fire fighting purposes. For the use of this water tank for fire fighting purposes to eventuate, it is likely that the following upgrades or installations will be required:

- Easement benefit for access for Shire of Nannup and FESA over proposed Lot 1;
- Constructed access to be established from Brockman Highway to the requirements of the Shire of Nannup and FESA;
- Standpipe to be installed, capable of a flow rate of 50L/min;



- Gate restricting access to the water tank; and
- Relining of the tank to prevent leaking.

This tank is to be kept full of water at all times to ensure a reliable supply in case of fire, in accordance with AS 3.5.3. The advantages of locating access to this water tank on Brockman Highway include:

- It is easily accessible to the proposed Amendment Site; and
- It can be accessed for sites surrounding, or in close proximity to the Amendment Site.

The use and upgrade of the existing substantial concrete water tank on the Amendment Site should be sufficient for fire fighting measures on the site and in the surrounding vicinity.

#### PC 3.6: Siting of Buildings

PC 3.6.1 specifies that a Hazard Separation Zone (HSZ) of 100m is to separate 'Extreme' bush fire hazards from buildings, otherwise houses are to be constructed to bush fire prone requirements of AS 3959-1999.

A Building Protection Zone (BPZ) of at least 20m (dependent on slope) is to be provided to all buildings and must be maintained in accordance with PC 3.6.2 as follows:

- Bush fire fuels must be maintained below 10cm in height – following consultation with the Shire of Nannup this requirement will be 5cm in this case;
- Trees and branches which may fall onto a house must be removed;
- Lower branches of the remaining trees (all those less than 2m from ground level) must be trimmed.

As shown on the Development Guide Plan, building envelopes have been allocated to each of the proposed lots. All buildings will be provided with a minimum 20m Building Protection Zone.

## **9.0 SUMMARY AND REQUIREMENTS**

In summary, there are fire risks in vicinity of the subject site, in the form of UCL along the Blackwood River, Reserve 37523 and Reserve 42287. The hazard posed by these areas of remnant vegetation and the hot, dry fire season experienced in this area between December and March must be addressed.

In addition to the fire management measures incorporated in the plan of subdivision, the following actions must be taken by the subdivider and subsequent landowners to further mitigate the bushfire hazard.

#### **Subdivider Requirements:**

The following requirements are the onus of the subdivider and are to be addressed as part of the subdivision works. It is anticipated that the Western Australian Planning Commission will incorporate appropriate conditions on any future subdivision approval for the benefit of the Shire of Nannup and / or FESA.

1. The cul-de-sac must be constructed in accordance with the specifications of Table 8 of *Planning for Bush Fire Protection* listed in Section 8.2 above, with the exception that a length of 250m will be permitted.
2. Refurbishment of the 90,000L concrete water tank located on proposed Lot 2 to provide fire fighting water supply to the specifications of section 3.5 of *Planning for Bush Fire Protection*, including the installation of a standpipe.
3. Provision of 4m wide gravel access roads within a 6m wide easement along the western boundary of proposed Lots 1 and 2 and the southern boundary of proposed Lot 2 to link the fire fighting water tank supply to Brockman Highway and the internal cul-de-sac road.





The access, including turning circle around the tank site to comply with section 3.4 of Planning for Bush Fire Protection.

4. Ensure that all prospective purchasers of the lots are provided with a copy of this Fire Management Plan, including ensuring each is aware of their obligations under the Plan.

**Owner / House Construction Requirements:**

The following requirements are the onus of the purchaser / owner of each proposed lot and are to be either met during construction of housing on the property or during ongoing maintenance.

1. All housing to be constructed to Level 2 standard, as specified by FESA. Australian Standard 3959-1999 stipulates the requirements associated with the Level 2 standard;
2. Private driveways shall be maintained in a condition suitable for safe traversing by emergency vehicles. Their construction must be in accordance with Table 8 of *Planning for Bush Fire Protection*, whose provisions are listed in Section 8.2 of this Fire management Plan;
3. Gates must be no narrower than 3.6m and be of a design approved by the Shire of Nannup. Fire service access gates may only be locked if a common key available to local fire services is used;
4. Building Protection Zones (BPZ) are to be maintained around all building envelopes as follows:
  - Minimum of **20m** in depth around the house and any attached outbuildings (garages, carports, patios, etc);
  - Bush fire fuels must be maintained below **5cm** in height within the BPZ;
  - Trees and branches which may fall onto a house must be removed;
  - Lower branches (<2m above ground level) of the remaining trees must be trimmed.
5. Compliance with the Shire of Nannup's Annual Firebreak Notice.

