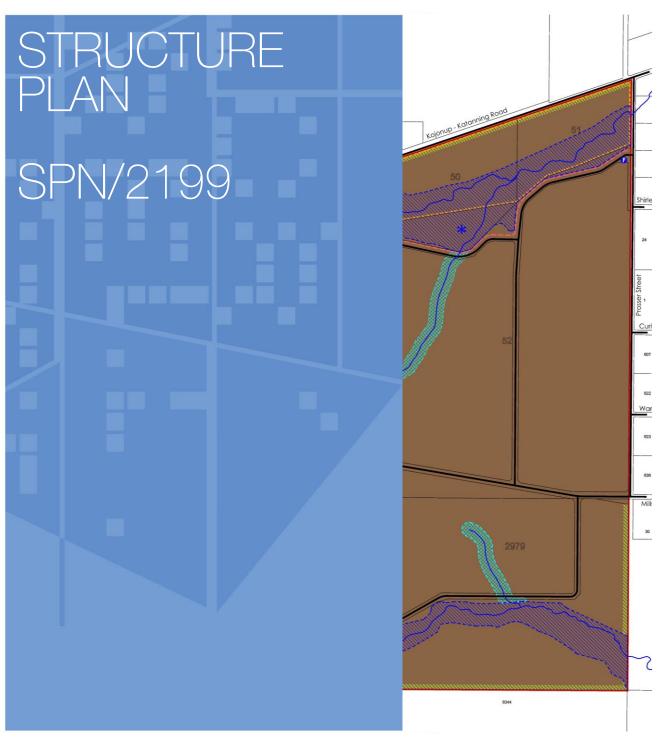


Lots 52 and 2979 Illareen Road and Lots 50 and 51 Kojonup – Katanning Road, Katanning



Prepared for **Elberton Property**Prepared by **Taylor Burrell Barnett** 



# DOCUMENT HISTORY AND STATUS

	Revision	Reviewer	Date Issued
Illareen Road and Kojonup- Katanning Road, Katanning Structure Plan	16-092-0	ST	May 2018
	16-092-1	ST	June 2019
Prepared By:	16-092-2	ST	July 2019
Taylor Burrell Barnett  Town Planning and Design	16-092-3	ST	July 2019
Level 7, 160 St Georges Terrace PO Box 7130 Cloisters Square PERTH WA 6850 Phone: 9226 4276	16-092-4	ST Au	g 2020
Fax: 9322 7879 admin@tbbplanning.com.au			

## **ENDORSEMENT**

This Structure Plan is prepared under the provision of the Shire of Katanning Local Planning Scheme No. 5

IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS APPROVED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON:

12-Nov-2020	Date
Signed for end on behalf	of the Western Australian Planning Commission

an officer of the Commission duly authorised by the Commission pursuant to section 16 of the Planning AND Development Act 2005 for that purpose, in the presence of:

Witness

12-Nov-2020 Date

12-Nov-2030 Date of Expiry

# TABLE OF AMENDMENTS

Each time a Structure Plan is amended, the amendment is to be recorded in the table of amendments at the front of the Structure Plan, including the amendment type (minor or major).

Amendment No.	Summary of The Amendment	Amendment Type	Date Approved by WAPC

## **EXECUTIVE SUMMARY**

This Structure Plan applies to Lots 52 and 2979 Illareen Road, and lots 50 and 51 Kojonup-Katanning Road, Katanning (the 'subject land'). The subject land is located 3 km south-west of the Katanning Town Centre, 175 km north of Albany and 300 km south-west of Perth. The Structure Plan contemplates development in a manner consistent with the objectives of the Rural Residential zone pursuant to the Shire of Katanning Local Planning Scheme No.5.

Development will be for residential purposes. The Structure Plan aims to determine:

- The location of the area the subject of the Structure Plan;
- The land use and development proposed; and
- Whether the Structure Plan overlaps, supersedes or consolidates another approved Structure Plan.

The following Summary Table provides the key statistics and planning outcomes related to this Structure Plan.

Item	Date	Structure Plan Ref. (Section No.)
Total area covered by the Structure Plan	240.6 ha	1.2.3
Area of each land use proposed: Rural Residential	Hectares Lot Yield 240.6 ha 71 lots	3.2
Total Estimated Lot Yield	71 lots	3.3.1
		Development Concept – Figure 8
Estimated No. of Dwellings	71 dwellings	3.3.1 Development Concept – Figure 8
Estimated Residential Site Density	0.3 Dwellings per site / ha	3.3.1
Estimated Population (2.8 persons/dwelling)	199	3.3.1
No. of High Schools	0	n/a
No. of Primary Schools	0	n/a
Estimated Commercial Floor Space	0 m² nett lettable area	n/a
Estimated area and percentage of Public Open Space	0 m <sup>2</sup>	n/a

## TABLE OF CONTENTS

PA	RT ON	IE IMPLEMENTATION	
1	STRU	JCTURE PLAN AREA	6
2	OPER	RATION	6
3	STAG	GING	6
4	SUBI	DIVISION AND DEVELOPMENT REQUIREMENTS	7
	4.1	LAND USE	7
	4.2	RURAL RESIDENTIAL ZONE	7
	4.2.1	RESIDENTIAL DENSITY	7
	4.3	SUBDIVISION & DEVELOPMENT REQUIREMENTS	7
	4.3.1	COMPLIANCE WITH SCHEME	7
		BUILDING SETBACKS CREEK LINE PROTECTION AND REVEGETATION	8
	121	AREAS LAND CAPABILITY	8
		BUSHFIRE MANAGEMENT	9
		LOCAL WATER MANAGEMENT STRATEGY	9
		VEHICLE ACCESS OTHER REQUIREMENTS	9
5		TIONAL INFORMATION	10
_		VO EXPLANATORY INFORMATION	10
		NNING BACKGROUND	13
		INTRODUCTION AND PURPOSE	13
	1.2	LAND DESCRIPTION	13
	1.2.1	LOCATION	13
		AREA AND LAND USE	15
		LEGAL DESCRIPTION AND OWNERSHIP	16
	1.3	PLANNING FRAMEWORK	17
		ZONING AND RESERVATIONS – SHIRE OF KATANNING LOCAL PLANNING SCHEME NO. 5 REGIONAL AND SUB-REGIONAL STRUCTURE	17
	1 2 2	PLANNING POLICIES	24
		PRE-LODGEMENT CONSULTATION	25 26
	1.3.5	POST-LODGEMENT CONSULTATION	27
2	SITE	CONDITIONS AND CONSTRAINTS	28
	2.1	BIODIVERSITY AND NATURAL AREA ASSETS	28
		VEGETATION	28
		SIGNIFICANT FLORA AND FAUNA	28
		LANDFORM AND SOILS	28
		ACID SULFATE SOILS	28
	2.3		29
		GROUNDWATER LEVELS	29 29
		QUALITY	29
		SURFACE WATER	29
		FLOOD LEVELS QUALITY	29 30
		STORMWATER MANAGEMENT	30
	2.3.8	GROUNDWATER MANAGEMENT	30
		GROUNDWATER LEVEL MANAGEMENT	30
		0 GROUNDWATER QUALITY MANAGEMENT 1 PROTECTION FROM RECEIVING	30
		ENVIRONMENTS	31

2.3.1	2 LAND CAPABILITY	31
2.4	BUSHFIRE HAZARD	33
2.4.1	IDENTIFICATION OF BUSHFIRE HAZARDS	33
2.5	HERITAGE	33
2.6	SERVICE INFRASTRUCTURE	33
	WATER RETICULATION	34
	POWER TELECOMUNICATIONS	34 35
	GAS	35
2.7	MOVEMENT NETWORKS	35
2.7.1	REGIONAL ROADS	35
2.7.2	DISTRICT AND LOCAL ROADS	35
STRU	JCTURE PLAN	36
3.1	DESIGN PRINCIPLES	36
3.1.1	STRUCTURE PLAN RESPONSE TO ENVIRONMENT ASSETS AD PHYSICAL CONSTRAINTS	AL 36
3.2	LAND USE	38
3.3	RESIDENTIAL	38
	LOT LAYOUT	38
	CREEKLINE PROTECTION AREAS	38
3.4	PUBLIC OPEN SPACE	38
3.5	WATER MANAGEMENT	38
3.5.1	LOCAL WATER MANAGEMENT STRATEGY	38
3.6	MOVEMENT NETWORKS	39
	EXTERNAL ROAD NETWORK INTERNAL ROAD NETWORK	39
3.7	DEVELOPER CONTRIBUTIONS ARRANGEMENTS	40
IMPL	EMENTATION AND STAGING	41
4.1	MANAGEMENT PLANS	41
4.2	STAGING	41
4.3	SUBDIVISION	41

#### TECHNICAL APPENDICES

APPENDIX A BUSHFIRE MANAGEMENT PLAN
APPENDIX B ENVIRONMENTAL ASSESSMENT AND
MANAGEMENT STRATEGY
APPENDIX C LOCAL WATER MANAGEMENT STRATEGY
APPENDIX D ENGINEERING SERVICING REPORT



# PART ONE IMPLEMENTATION

### INTRODUCTION

This Structure Plan comprises the following components:

#### Part 1 - Implementation

Part 1 contains the structure plan map (**Figure 1**) and outlines the purpose and intent of the Structure Plan, including requirements that will be applied when assessing subdivision and development applications over the land to which the structure plan relates. This structure plan aligns with the Shire of Katanning Local Planning Scheme No. 5 (LPS 5) and the relevant Western Australian Planning Commission (WAPC) policy requirements. This structure plan should be read in conjunction with LPS 5 and polices.

#### Part 2 – Explanatory Section and Technical Appendices

Part 2 supports the Structure Plan in Part 1 by providing the background and explanatory information used to prepare the structure plan. Part 2 also includes the following technical reports prepared to inform the structure plan in Part 1:

- Bushfire Management Plan;
- Environment Assessment and Management Strategy;
- Engineering Services Report; and
- Local Water Management Strategy.

## 1 STRUCTURE PLAN AREA

This Structure Plan applies to the land contained within the inner edge of the line denoting the Structure Plan boundary on the **Figure 1**.

### 2 OPERATION

This Structure Plan commences operation on the date it is approved by the Western Australian Planning Commission.

### 3 STAGING

Stage 1 is likely to proceed adjacent to the existing intersection at Prosser Street. Stages will then be released depending on the market conditions at the time, with market demand the key determinant of stage release, the number of lots to be included and key infrastructure to be developed.

Overall it is estimated that the project will have a 15+ year timeframe.

# 4 SUBDIVISION AND DEVELOPMENT REQUIREMENTS

#### 4.1 LAND USE

The Structure Plan (Figure 1) outlines the following land use, zones and reserves applicable within the Structure Plan area:

Rural Residential zone.

#### 4.2 RURAL RESIDENTIAL ZONE

Objective: to provide for approximately 71 dwellings within the 'Rural Residential' zone.

#### 4.2.1 RESIDENTIAL DENSITY

- a) **Figure 1** notes that the minimum lot size shall be 1 hectare as specified in Schedule 1 of LPS 5 for Rural Residential 3: and
- b) Lot sizes and numbers will depend on results from further land capability testing.

#### 4.3 SUBDIVISION & DEVELOPMENT REQUIREMENTS

#### 4.3.1 COMPLIANCE WITH SCHEME

- a) In considering development and subdivision of the land, the requirements of the LPS 5 for the 'Rural Residential' Zone and special provisions included within Schedule 1 for RR3 shall apply as follows:
  - i. Planning Approval is required for all development within the Structure Plan, including a single house;
  - ii. Consideration of dwelling/outbuilding placement water tank location and bush fire management plan requirements;
  - iii. Compliance with building heights as per the R-Codes;
  - iv. Vegetation protection;
  - v. Fencing;
  - vi. Keeping of Animals;
  - vii. Effluent disposal;
  - viii. Water Supply; and
  - ix. Land Use.

unless otherwise provided for within this Structure Plan.

#### 4.3.2 BUILDING SETBACKS

- a) The minimum building setbacks listed in Clause 3.1.3 of LPS 5 shall apply, unless otherwise specified;
- b) The following minimum building setbacks shall apply to lots adjacent Rural zoned land:
  - o 50m from the boundary abutting Illareen Road;
  - o 40m from the boundary abutting Kojonup-Katanning Road; and
  - o 40m from any other boundaries abutting Rural zoned land.
- c) The Local Government may permit variations to the building setback, as defined in Clause 3.1.3 of LPS 5.

#### 4.3.3 CREEK LINE PROTECTION AND REVEGETATION AREAS

- a) Implement a line of trees to buffer Rural and Rural Residential land uses as a condition of subdivision in the areas shown on the Structure Plan Map (**Figure 1**);
- b) Development is to be located outside of the Creek line Protection Areas and the Creek line Tributaries Protection Areas;
- c) Existing vegetation is to be retained within the Creek line Protection Areas and the Creek line Tributaries Protection Areas;
- d) Creek like Protection areas are to be fenced as a condition of subdivision to the specification of the Local Government;
- e) Creek lines are to be revegetated with appropriate native species as recommended in the Environmental Assessment and Management Strategy (**Appendix B**), to the satisfaction of the Shire of Katanning; and
- f) Asset Protection Zones are to be located outside of the Creek line Protection Areas and the Creek line Tributaries Protection Areas.

#### 4.3.4 LAND CAPABILITY

This Structure Plan is supported by a Land Capability Assessment included in the Environmental Assessment and Management Strategy, prepared by Land Assessment Pty Ltd and is contained in **Appendix B.** 

Development and sewage management systems are required to have regard to the Land Capability Assessment, including:

- Building and on-site effluent disposal systems shall not be located within areas identified as having Very Low capability;
- Onsite effluent disposal shall require approval by the Department of Health, and be in accordance with the Government Sewerage Policy;
- Areas identified as having Fair capability require the use of partially inverted leach drains for on-site effluent disposal;
- Areas identified as having Low and Fair to Low capability requires either inverted leach drains or Alternative Treatment
  Unit effluent disposal systems. The use of Alternative Treatment Unit effluent disposal systems may be required in
  the following situations:
  - a) Where soil conditions are not conductive to the retention of nutrients;
  - b) In low lying areas; and

- c) In areas where the is a known high groundwater level.
- Further investigation of groundwater levels and soil conditions is required at subdivision to determine suitability for onsite effluent disposal in areas identified as having Low and Fair Low capability;
- On-site ATUs are to be setback a minimum of 30m from existing creek lines; and
- Leach drains for conventional septic tanks are to be setback a minimum of 100m from existing creek lines.

#### 4.3.5 BUSHFIRE MANAGEMENT

This Structure Plan is supported by a Bushfire Management Plan (BMP) prepared by Bushfire Prone Planning and is contained in **Appendix A**.

Buildings are to be designed in accordance with AS 3959 – Construction of Buildings in Bushfire Prone Areas or any document superseding it, as specified in Development Requirement (7) relating to the Rural Residential zone in Table 3 of LPS 5.

In the absence of reticulated water supply, a 150,000-litre storage water tank is required, of which 10,000 litres shall be kept in reserve for fire-fighting purposes.

#### 4.3.6 LOCAL WATER MANAGEMENT STRATEGY

A Local Water Management Strategy has been prepared. The Local Water Management Strategy is to be implemented as a requirement of subdivision/development.

#### 4.3.7 VEHICLE ACCESS

Approval from the relevant approval authority is required for the construction of a vehicle access / egress point onto Kojonup-Katanning Road.

#### 4.3.8 OTHER REQUIREMENTS

Notification on title applied as a condition of subdivision alerting purchasers of Rural Residential zoned lots located adjacent to Rural zoned lots of the potential impacts of being in proximity to rural land uses.

## 5 ADDITIONAL INFORMATION

Prior to any subdivision or development of the land being supported, the following management plans, reports and strategies are to be prepared, as applicable, to the satisfaction of the relevant authority and provided at the relevant stage nominated in **Table 1**.

**TABLE 1 - MANAGEMENT PLANS, REPORTS AND STRATEGIES** 

	Additional Information	Approval Stage	Consultation Required
a)	Local Water Management Strategy. Approval from the Department of Water required.	Structure Plan	Shire of Katanning Department of Water and Environmental Regulation WAPC
b)	Environmental Assessment and Management Strategy	Structure Plan	Shire of Katanning
c)	Urban Water Management Plan including Detailed Flood Modelling	Condition of subdivision	Shire of Katanning Department of Water and Environmental Regulation WAPC
d)	Bushfire Management Plan	Structure Plan	Shire of Katanning
e)	Bushfire Attack Level Contour Map	Prior to lodgement of subdivision application.	Shire of Katanning
f)	Establish the Asset Protection Zone (APZ) in each Lot to the dimensions and standards stated in the BMP	Prior to sale of Lots	Shire of Katanning
g)	Develop and maintain the APZ to the dimensions and standard stated in the BMP	Prior to occupancy	Shire of Katanning
h)	Connection of lots to scheme water through additional mains connection.	Prior to occupancy	Shire of Katanning

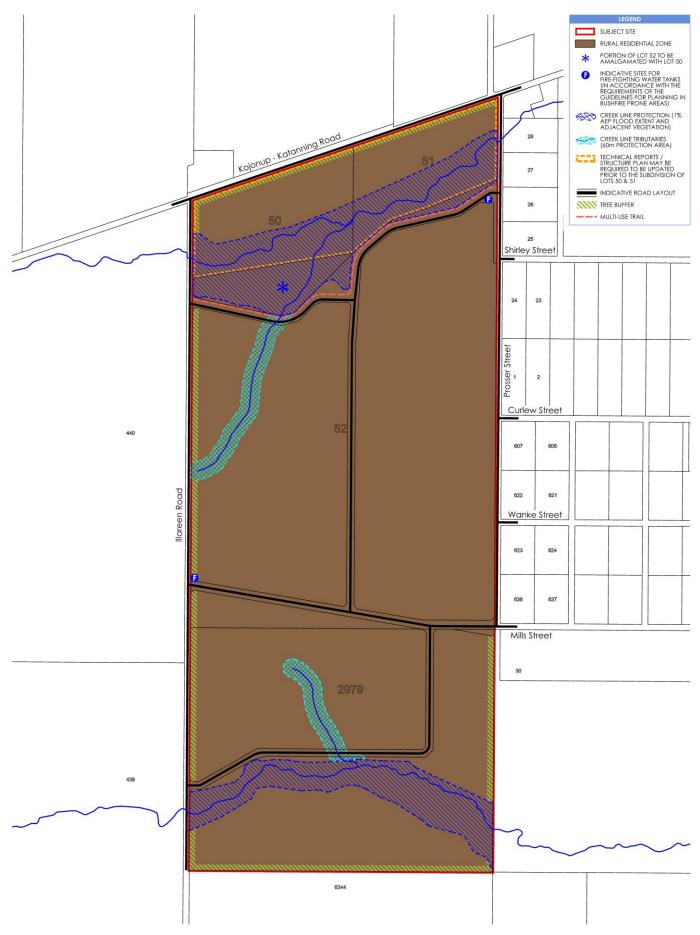


Figure 1 Structure Plan

# PART TWO EXPLANATORY INFORMATION

## 1 PLANNING BACKGROUND

#### 1.1 INTRODUCTION AND PURPOSE

This documentation has been prepared by Taylor Burrell Barnett and the project team, on behalf of Elberton Property, to facilitate the assessment and approval of a Structure Plan for Lots 52 and 2979 Illareen Road and lots 50 and 51 Kojonup-Katanning Road, Katanning (the 'subject land').

The Structure Plan outlines the vision for the ultimate development of the subject land and establishes key requirements. The Structure Plan also included information regarding the development of the public realm and assesses the proposed development in context with the surrounding physical and natural environment.

The Project Team responsible for preparing information contained in this report is detailed in Table 1.

**TABLE 1 - PROJECT TEAM** 

Project Role	Consultant
Town Planning and Urban Design	Taylor Burrell Barnett
<b>Environmental Assessment and Management</b>	Land Assessment Pty Ltd
Bushfire Consultant	Bushfire Prone Planning
Engineering Services Consultant	Peritas Group Pty Ltd
Hydrological Consultant	360 Environmental

#### 1.2 LAND DESCRIPTION

#### 1.2.1 LOCATION

The subject site is located within the Great Southern region of Western Australia and falls within the municipal boundaries of the Shire of Katanning. The subject site is approximately 3 km south-west of the Katanning Town Centre, 175 km north of Albany and 300 km south-west of the Perth Central Business District (refer to **Figure 2** – **Location/Context Plan**).

The subject site is bounded by Illareen Road to the west, Prosser Street to the east, Kojonup-Katanning Road to the north and semi-rural properties to the south.

The subject site is well connected to the regional movement network, being approximately 850 metres south-east of the Great Southern Highway.

Within the wider district the subject site is well positioned to capitalise on existing employment opportunities within the Katanning region. The Katanning Hospital and the Katanning High School are located approximately 3 km north-east of the subject site, and the Western Australian Meat Marketing Co-operative Limited (WAMMCO) is located approximately 3.5 km north of the subject site.

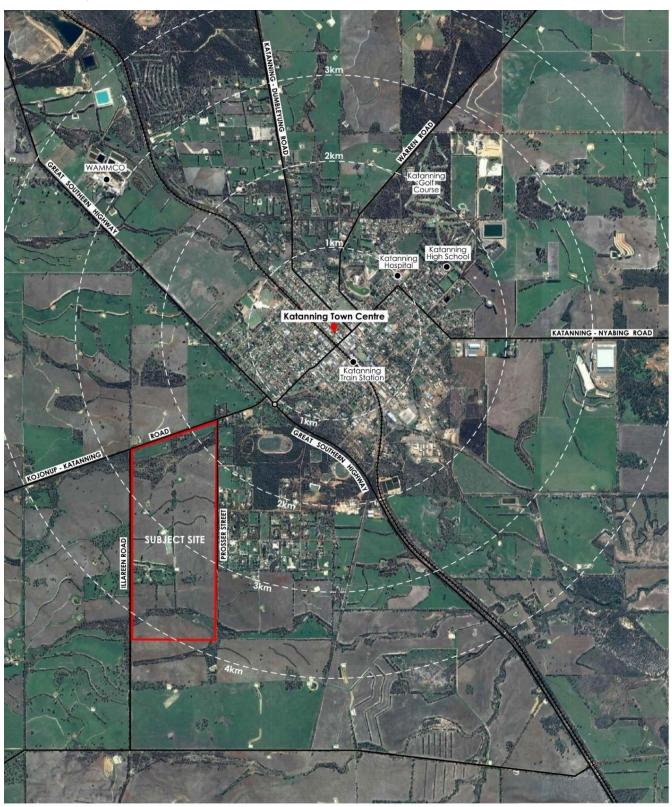


Figure 2 Location / Context Plan

#### 1.2.2 AREA AND LAND USE

The majority of the site is currently being used for agricultural purposes, with a number of residential dwellings and accompanying storage sheds located in the southern portion of site adjacent to Illareen Road, and along the northern boundary of the site.

The subject site contains seven damns which are spread across the site to provide water for agricultural purposes, with several drainage channels connecting to them (refer to **Figure 3 – Subject Site** and **Figure 4 – Aerial Photograph**).

The Illareen Creek line is situated in the southern portion of the subject site, connecting from the western boundary to the eastern boundary (refer **Figure 5**), and an unnamed creek flows through the northern portion of the site

There is some existing native vegetation on the site, predominantly located within and around the drainage channels, and within and around the creek lines.

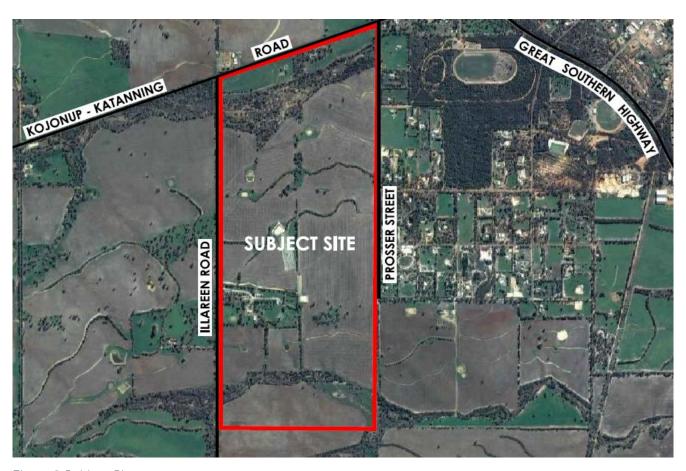


Figure 3 Subject Site



Figure 4 Aerial Photograph of Subject Site Looking North towards Kojonup-Katanning Road



Figure 5 Photograph of Southern Creek Line

#### 1.2.3 LEGAL DESCRIPTION AND OWNERSHIP

The legal description and ownership of the subject site is identified below in Table 2.

**TABLE 2 - LOT DETAILS** 

Street Address	Area	Certificate of Title	Registered Proprietor
Lot 52 (No. 133) Illareen Road, Katanning	129.8 ha	Volume: 2593 Folio: 674	Cordite Investments Pty Ltd
Lot 2979 Illareen Road, Katanning	80.9 ha	Volume: 2593 Folio: 675	Cordite Investments Pty Ltd
Lot 50 (No. 3469) Kojonup  – Katanning Road, Katanning	16.1 ha	Volume: 2887 Fol: 757	Kowald, Howard David
Lot 51 (No. 3802) Kojonup  – Katanning Road, Katanning	13.8 ha	Volume: 2593 Fol: 673	Thomas, June Elizabeth
TOTAL AREA:		240.6 ha	

#### 1.3 PLANNING FRAMEWORK

# 1.3.1 ZONING AND RESERVATIONS – SHIRE OF KATANNING LOCAL PLANNING SCHEME NO. 5

#### 1.3.1.1 EXISTING ZONING

The subject site is zoned Rural Residential under the Shire of Katanning Local Planning Scheme No. 5 (LPS 5 or the Scheme) (refer to **Figure 6**), the objectives of the Rural Residential zone, identified in Table 2 of the Scheme are:

- To provide for lot sizes in the range of 1 ha to 4 ha;
- To provide opportunities for a range of limited rural and related ancillary pursuits on rural-residential lots where those
  activities will be consistent with the amenity of the locality and the conservation and landscape attributes of the land
  and avoid off-site impacts such as nutrient loss, drainage and/or potential conflicts with adjoining land uses;
- To set aside areas for the retention of vegetation and landform or other features which distinguish the land; and
- To provide for a suitable level of physical and community infrastructure.

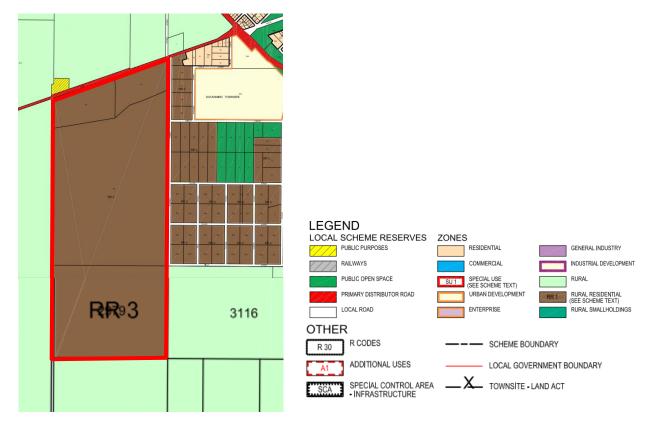


Figure 6 Shire of Katanning Local Planning Scheme No. 5

#### 1.3.1.2 SCHEME PROVISIONS

Table 3 of LPS 5 includes general provisions which shall apply to all development with the Rural Residential zone. **Table 3** included below details these requirements, and identifies how the Structure plan proposes to respond.

**TABLE 3 - SCHEME PROVISIONS** 

Scheme Requirement	Structure Plan Response
<ol> <li>Planning Approval         Notwithstanding any other requirement of the Scheme for any lot within the Rur         Residential Zone, planning approval is required for all development including a             Single House.     </li> </ol>	Requirement included within Part 1, <b>section 4.3.1</b> .
<ul> <li>a) Building Setback, Design, Materials and Colours</li> <li>a) The following minimum building setbacks apply: <ul> <li>Front Boundary: 15m</li> <li>Side Boundary: 10m</li> <li>Rear Boundary: 10m</li> </ul> </li> <li>b) The Local Government may permit variations to the building setback, where it is satisfied that the modification: <ul> <li>a. Is consistent with the objectives for the zone;</li> <li>b. Preserves areas of remnant vegetation, creek lines and other are of environmental significance;</li> </ul> </li> </ul>	Requirement included within Part 1, section 4.3.2.  The minimum building setbacks for development in Rural Residential zoned land specified in LPS 3 apply, with the expectation of setbacks of lots adjacent to Rural zoned land  The following minimum building setbacks apply to lot adjacent to Rural zoned land:  • 50m from the boundary abutting Illareen Road

	Scheme Requirement	Structure Plan Response
	<ul> <li>Provides sufficient area for the development of any low fuel zone and/or hazard separation area on the lot;</li> </ul>	40m from the boundary abutting Kojonup-
	d. Is required due to the topography or shape of the lot; and	Katanning Road
	e. Will have no adverse impact on the amenity of existing residences on adjoining lots.	<ul> <li>40m from any other boundaries abutting Rural zoned land</li> </ul>
3)	A single house shall not exceed the maximum building heights set out in Category B of the R-Codes.	Requirement to comply with R Codes included within Part 1, section 4.3.1
4)	All dwellings, outbuildings and other structures (such as patios, pergolas, gazebos etc) shall be designed and constructed of non-reflective material (with the exception of glazed areas) and shall comprise either timber, stone, rammed earth, brick or steel construction and shall use natural earth tones and textures which allow them to blend into the surrounding landscape.	Requirement to comply with the requirements of the Scheme included within Part 1, section 4.3.1
5)	Wall and roof colours that are highly-visible or reflective such as unpainted zincalume or off-white colours are not permitted	
6)	Water tanks shall be located behind or to the side of the dwelling and coloured to match the dwelling/outbuilding.	
7)	Where deemed necessary by the Local Government due to fire hazards and/or threat in a particular area, all buildings are to be designed in accordance with AS 3959 – Construction of Buildings in Bushfire Prone Areas or any document superseding it.	
8)	Vegetation Protection and Landscaping No clearing of remnant vegetation is permitted unless it forms part of the construction of an approved dwelling or other structure, fencing, fire protection or access/servicing requirements. Clearing of remnant vegetation for any other purpose requires the planning approval of the Local Government and as a condition of granting approval, the Local Government may require the applicant, plant and maintain for a period of at least 3 years endemic native trees of species and in locations approved by the Local Government.	
9)	Dams  Dams developed in connection with fire protection requirements, any approved rural pursuit or similar activity are permitted.	
10	Fencing Where boundary fencing is permitted by the Local Government, it shall be of rural construction comprising non-electrified stock proof wire or ring lock fencing to a maximum height of 1.2m above the natural surface of the land, with posts being split jarrah or treated pine posts.	
11	Keeping of Animals	

	Scheme Requirement	Structure Plan Response
a.	The keeping of livestock, animals or any rural pursuit activity is confined to existing cleared areas on a lot and fencing is required to be erected to contain livestock and protect remnant vegetation.	
b.	Where, in the opinion of the Local Government, the continued presence of any animal(s) on any portion of land is likely to cause or is causing adverse environmental impacts such as damage to natural vegetation; pollution (such as noise, dust, water); offensive odours; soil erosion; or any other form of land degradation, the Local Government may take action to abate the adverse impacts and any costs incurred by the Local Government shall be recoverable from the landowner.	
On-s	ent Disposal iteration ite	
Аро	er Supply table water supply is required to each dwelling and shall be the responsibility e landowner in accordance with the requirements set out in <b>Table 8</b> .	

#### **Zoning Table**

The Zoning Table specifies the following use and permissibility within the Rural Residential zone:

TABLE 4 – ZONING TABLE – RURAL RESIDENTIAL ZONE

Land Use	Rural Residential
Ancillary Tourist Use	T.
Bed and Breakfast	D
Family Day Care	D
Garden Centre	D
Holiday Accommodation	Α
Home Business	Α
Home Occupation	P
Home Office	P
Industry – Cottage	D
Industry – Primary Production	А
Public Utility	D
Recreation – Private	А
Rural Home Business	А
Rural Pursuit	D
Second-Hand Dwelling	D
Single House	P
Veterinary Centre	А

Council may consider other uses not specifically referred to in the zoning table in accordance with the requirements of the Scheme.

#### Schedule 1 - Rural Residential Zone

In addition to the general requirements for land within the rural residential zone, Schedule 1 includes special provisions and requirements for areas within the Rural Residential Zone. The subject land is identified as RR3, where the following special provisions shall apply:

- 1. Subdivision of RR3 shall generally be in accordance with the relevant approved Structure Plan; and
- 2. The minimum lot size of land within RR3 shall be 1 hectare.

The Structure Plan satisfies the requirement of 1. above, and the minimum lot size requirement has been reflected within Part 1.

Additional requirements that apply to land in the Scheme area under Clause 32 (1), Table 8 of the Scheme, which are of relevance to the subject site are identified in **Table 5** below:

**TABLE 5 - ADDITIONAL REQUIREMENTS APPLICABLE TO SUBJECT SITE** 

#### No. 1 Water Management and Integration Local Water Management Strategy and Environmental The local government may approve the use of fit-for-purpose water Assessment and Management (wastewater recycling and reuse) and its availability of water for public open Strategy prepared to support the space management. Structure Plan. The local government may condition development approvals to include a 2. Refer Section 2.3 for further requirement for groundwater hydrology studies, particularly seasonal depths, detail. and the relationship of groundwater to stormwater management. Structure Plan reflects 3. In determining an application for planning approval, the local government may requirements for: consider the groundwater characteristics of the site on which development is proposed, and of the surrounding area, including maximum seasonal Creek line protection area; groundwater levels, and water quality, particularly acidity and salinity. and Where the local government considers it would help mitigate against land Creek line tributaries degradation (e.g. salinity), protect a waterway and its riparian buffer, or protection areas. improve the visual appearance of a development, the local government may impose conditions on any development approval requiring the retention and protection of existing vegetation (e.g. through fencing) and/or the planting of additional vegetation. No. 2 Land Subject to Flooding and/or Inundation: Structure Plan reflects requirement for: 1. Development in the 100 year ARI floodway is prohibited. 100 year ARI floodway as 2. In areas subject to periodic inundation or flooding, all development shall be development exclusion area; undertaken to: and Prevent disruption to the natural drainage system; a. Creek line protection area. b. Ensure that developments do not increase the flood levels that would Additional flood modelling is to be be experienced within the catchment; completed at subdivision stage to Limit the potential for damage to buildings caused by flooding and/or C. confirm 100 year ARI floodway. inundation by ensuring buildings are constructed above known flood Requirement to comply with levels; and Scheme included within Part 1.

Scheme Requirement	Structure Plan Response
<ul> <li>Maintain the natural ecological and drainage function of areas to store and convey stormwater within the watercourse, drainage system or floodplain.</li> </ul>	
<ol> <li>No. 3 Vehicle Access:</li> <li>Approval from the relevant road control authority is required for the construction of a vehicle access/egress point onto a Primary Distributor Road shown on the Scheme Map.</li> </ol>	Requirement to obtain approval to gain access onto Kojonup- Katanning Road included within Part 1.
<ol> <li>No. 7 Deep Sewerage and On-site Effluent Disposal:</li> <li>Any development that is required to dispose of liquid domestic effluent shall be connected to the reticulated sewerage system or where not able to be connected to the sewerage system provided with an approved on-site effluent disposal system. No dwelling shall be occupied without the prior approval and installation of such a disposal system.</li> <li>a. The Local Government may require the use of alternative treatment unit effluent disposal systems, in the following situations;</li> <li>b. Where soil conditions are not conducive to the retention of nutrients;</li> <li>c. In low lying areas;</li> <li>d. In areas where there is a known high groundwater level; and</li> <li>e. In accordance with the Government Sewerage Policy.</li> </ol>	Environmental Assessment and Management Strategy prepared to support the Structure Plan.  Land Capability assessment supports provision of approved on-site sewage treatment and effluent disposal systems dependent upon capability requirements. Refer Section 2.3 for further detail.  Requirement to comply with the Scheme and Land Capability Assessment included within Part 1.
<ol> <li>No. 8 Potable Water Supplies:</li> <li>No dwelling shall be constructed and occupied unless it is connected to the reticulated water supply network or connected to an alternative supply of potable water approved by the Local Government with on-site storage having a capacity of 135,000 litres or greater as deemed necessary by the Local Government.</li> <li>Each landowner shall ensure that all water tanks are designed with the bottom one quarter of the tank set aside for firefighting purposes and fitted with a suitable dual tap or coupling system.</li> </ol>	Environmental Assessment and Management Strategy prepared to support the Structure Plan. Refer <b>Section 2.6.1</b> for further detail.  Lots are required to be connected to scheme water through an additional mains connection.  It is noted that where lots are connected to scheme water, a rainwater tank is not required.  Use of rainwater for non-potable water is encouraged.  Requirement to comply with the Scheme and Land Capability

#### 1.3.2 REGIONAL AND SUB-REGIONAL STRUCTURE PLAN

#### 1.3.2.1 PLANNING STRATEGIES

#### **Great Southern Regional Planning and Infrastructure Framework**

The Great Southern Regional Planning and Infrastructure Framework (2015) defines a strategic direction for the future development of the Great Southern Region over the next 20 years. It highlights the opportunities for economic development and infrastructure priorities for the region and addresses a land use planning response to future growth and development pressures.

Katanning is recognised in the Framework as a Sub-regional centre, and SuperTown, that offers services and facilities which provide for the needs of the local community and the rural population.

In terms of economic development, the gold mine near Katanning is identified as a potential employer and contributor to population growth in Katanning. Growth in the retail and service sector will benefit from job creation in the mining sector, and more generally from population growth.

The Framework identifies there will be a need to provide a high level of infrastructure and services such as retail, health, education, community and entertainment facilities in Katanning, and it is hoped through the higher level of accessibility and services will increase the attractiveness of the town in retaining and growing population.

The Framework encourages facilitating future growth opportunities in the sub-regional centre of Katanning, and future-growth opportunities should be facilitated.

The preparation of this Structure Plan is supported by the strategic direction of the Framework which is to plan for population growth in Albany and the sub-regional centres, including facilitating future growth opportunities in the sub-regional centre of Katanning in line with the SuperTown initiative.

#### **Shire of Katanning Local Planning Strategy**

The Shire of Katanning's Local Planning Strategy (the Strategy) provides a strategic planning framework and long-term vision to plan, guide and accommodate future growth for the next 10 to 15 years and beyond.

Katanning is recognised as a 'SuperTown' which is a Town identified by the State Government aims to at enhancing and stimulating growth, to create attractive community's alternative to living in the metropolitan area for Western Australia's growing population growth to 2050. SuperTowns have a target growth rate of 3.4 per cent per annum.

The Strategy identifies the subject site within Development Investigation Area (DIA) 10. The purpose of DIA 10 is to consolidate and redevelop existing rural residential areas.

The Strategy recognises opportunities for more efficient utilisation and consolidation of land already zoned and/or developed for rural residential development to provide for greater lifestyle choices.

#### 1.3.3 PLANNING POLICIES

#### 1.3.3.1 STATE PLANNING POLICIES

#### State Planning Policy No. 3.0 - Urban Growth and Settlement

SPP 3 guides the planning of urban settlements that require additional guidance through growth strategies and subsequently Local Planning Strategies. The Structure Plan meets the objectives of the policy which are:

- To promote a sustainable and well-planned pattern of settlement across the State, with sufficient and suitable land to provide for a wide variety of housing, employment, recreation facilities and open space;
- To build on existing communities with established local and regional economies, concentrate investment in the improvement of services and infrastructure and enhance the quality of life in those communities;
- To manage the growth and development of urban areas in response to the social and economic needs of the community and in recognition of relevant climatic, environmental, heritage and community values and constraints;
- To promote the development of a sustainable and liveable neighbourhood form which reduces energy, water and travel demand whilst ensuring safe and convenient access to employment and services by all modes, provides choice and affordability of housing and creates an identifiable sense of place for each community; and
- To coordinate new development with the efficient, economic and timely provision of infrastructure and services.

#### State Planning Policy 3.7 Planning in Bushfire Prone Areas - Bushfire Policy Framework

State Planning Policy 3.7 Planning in Bushfire Prone Areas (SPP 3.7) forms the foundation for land use planning to address bushfire risk management in Western Australia. SPP 3.7 is used to inform and guide decision makers, referral authorities and proponents on achieving acceptable fire protection outcomes on planning proposals in bushfire prone areas.

In support of SPP 3.7 and pursuant to 'State Planning Policy 3.4 – Natural Hazards and Disasters', the Guidelines for Planning in Bushfire Prone Areas sets out a range of matters that need to be addressed at various stages of the planning process, to provide an appropriate level of protection to life and property from bushfires, and avoid inappropriately located or designed land use, subdivision and development on land where a bushfire risk is identified.

Bushfire considerations form an integral part of the Structure Plan design, as outlined in **Section 2.4** of this report and the Bush Fire Hazard Assessment and Management Plan attached at **Appendix A**.

#### State Planning Policy 2.5 - Rural Planning

State Planning Policy 2.5 is the basis for planning and decision making for rural and rural living land across Western Australia. The Policy seeks to protect and preserve rural land for rural purposes, and the creation of new rural lots should be consistent with the objectives of the policy. The Structure Plan is consistent with the objectives of the Policy and the policy measures applicable to rural living proposals, in that it promotes sustainable settlement adjacent to existing rural residential areas in proximity to the Katanning town centre. The subject site has access to services, facilities and amenities, and does not conflict with any primary production of nearby land.

The Land Capability assessment undertaken demonstrates the land is capable of supporting the development of dwellings and associated infrastructure, and development will not occur in the floodways (refer **Appendix B**).

Additionally, the Structure Plan protects the existing landscape and water resource assets, as illustrated on the Indicative Development Concept Plan (**Figure 8**).

#### **Draft Government Sewerage Policy**

The Draft Government Sewerage Policy (2016) stipulates that structure plans proposing on-site sewage disposal should provide supporting information to demonstrate that future development is capable of accommodating on-site sewage disposal in accordance with Section 6.2 and 6.4 of the policy, including:

- Identification of any land within a public drinking water source area or a sewage sensitive area;
- Landform and soils:
- Setbacks from waterways, wetlands, dams, drains, bores and marine reserves;
- Identification of land subject to flooding; and
- Proximity to reticulated sewerage (established and planned).

The Environment Assessment and Management Strategy (**Appendix B**) demonstrates the proposed development is in accordance with the requirements of the Draft Government Sewerage Policy.

#### 1.3.3.2 LOCAL PLANNING POLICIES

#### Shire of Katanning - Local Planning Policy No. 1: Outbuildings

The objectives of the Shire of Katanning Local Planning Policy No.1 (LPP 1) are:

- Protect the amenity of the locality in which the outbuilding is proposed;
- To recognise that larger residential lots in regional areas differ from that of Metropolitan areas and that a larger cumulative area is appropriate for storage of boats, 4x4 vehicles and other cumbersome machinery; for storage out of the elements and security; and
- To set standards in respect to size (height and cumulative area), boundary setbacks and use of outbuildings.

All proposed outbuildings within the Structure Plan area are to be developed in accordance with LPP 1.

#### 1.3.4 PRE-LODGEMENT CONSULTATION

#### **Shire of Katanning**

A series of meetings have been held with the Shire of Katanning, as outlined below:

A meeting with the Shire of Katanning Planning Department was held on 28 March 2017 to discuss the City's requirements in relation to:

- The Shire's preference for the creek line in the southern portion of the site to remain in individual lots so the Shire does not have to maintain it;
- The Shire's preference for larger lots on Lot 2979 and smaller lots on Lot 52; and

• The Shire's requirements for all roads to be sealed.

A meeting with the Shire of Katanning Planning and Fire Safety officers was held on 29 November 2017 in relation to:

- Water supply for firefighting purposes;
- Firebreaks and the Shire's preferred re-alignment of the proposed road on the northern boundary of Lot 52;
- The re-design of the lots as a result of the proposed road re-alignment;
- The existing water courses and protection of the existing vegetation by way of a buffer zone;
- Future buildings and building envelopes it was discussed that there would be no requirement for designated building envelopes under LPS5;
- Likely staging of the proposed subdivision; and
- General road layout.

#### **Department of Planning, Lands and Heritage**

Liaison with the Department of Planning, Lands and Heritage occurred between 3 July 2017 and 10 July 2017 to discuss the Department's requirements in relation to:

- Recommendation to include Lots 50 and 51 in Structure Plan area:
- Public access to the creek line in southern portion of subject site, however given the Shire's preference for the creek
  to remain in private ownership, the lots have been designed to minimise fragmentation and included in the
  development exclusion zone to ensure protection;
- Requirement to demonstrate reliability of water self-supply (potable and firefighting purposes);
- Requirement to address bushfire requirements; and
- Requirement to address urban water management.

#### **Department of Water**

Liaison with the Department of Water occurred November 2017 who advised a hydrologist will have to determine how urban water management should be addressed for the subject site.

#### 1.3.5 POST-LODGEMENT CONSULTATION

#### **Shire of Katanning**

A meeting with the Shire of Katanning Planning and Engineering Departments was held on site on 27 March 2019 to discuss the proposed bushfire emergency accessway, road layout changes and multi-use trail.

## 2 SITE CONDITIONS AND CONSTRAINTS

Land Assessment Pty Ltd has been engaged by Elberton Property to address environmental matters associated with the subject land. The report prepared can be found in **Appendix B** and is summarised below.

#### 2.1 BIODIVERSITY AND NATURAL AREA ASSETS

The subject site is situated on the Carrolup 2 subsystem (Ca2). This is described as lower to upper slopes and hillcrests with mainly grey deep sandy duplex soils and lesser areas of grey shallow sandy duplex soils, red shallow loamy and sandy duplex soils.

There is a broad east-west aligned crest in the centre of the property, with a gently slope to the north and south of this.

#### 2.1.1 VEGETATION

Broad-scale mapping by Beard (1980) shows the original native vegetation of the property as being part of the Broomehill vegetation system within a botanical subdivision of the Avon Botanical District. Broomehill system is described as:

- Located within an almost entirely cleared area of flat to gently undulating plain with winter-wet soils;
- Dominated by blue mallet (E gardneri) and Wandoo (E wandoo) but also with some Brown mallet (E astringens) on lateritic areas, and York gum (E loxophleba) in more dissected areas; and
- Occasionally including Yate (E occidentalis) and Red Morrel (E longicornis).

On the subject site, vegetation regrowth has occurred in and around the drainage lines. Outside of these, the scattered areas of natural remnants are in generally poor condition resulting from understorey grazing. Significant plantings have occurred in association with the establishment of grade banks for surface water control, and also along paddock boundary fences for windbreaks and landcare purposes.

#### 2.1.2 SIGNIFICANT FLORA AND FAUNA

A search of the Department of Parks and Wildlife data-base indicates there are no Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) within the subject site.

There are records of four flora species, eight birds, and two other fauna species of conservation significance occurring within a 5km radius of the subject site. The likelihood of their habitat (if present) being significantly affected by subdivision and development of the land is considered remote, since the largest vegetated areas are associated with drainage lines that are already fenced and will be retained. Other vegetated areas are either fenced or unlikely to provide habitat due to understorey grazing.

#### 2.2 LANDFORM AND SOILS

#### 2.2.1 ACID SULFATE SOILS

The CSIRO mapping classifies the subject site has having a low probability/ high confidence of Acid Sulfate soils (ASS).

Land developmental projects involving dewatering, dredging or excavation have the potential to expose ASS to oxidation locally. Not forsaking the low probability of risk, the proposed development on the subject site should not involve any dewatering, and very minimal excavation (associated with road construction, house foundations, and installation of septic tank leach drains). If ASS is to be disrupted on the subject site, a suitability qualified environmental consultant will be engaged to conduct an investigation of the area and if necessary prepare an ASS Management Plan. The ASS Management Plan will detail the actions to minimise and mitigate potential adverse environmental effects during the subdivision works.

#### 2.3 GROUNDWATER AND SURFACE WATER

Groundwater and surface water levels have been considered in the Local Water Management Strategy prepared by 360 Environmental, which is included in **Appendix C – LWMS**.

#### 2.3.1 GROUNDWATER

The site is located within the Karri subarea of the Karri Area. Groundwater resources below this region feature four aquatic systems, which have a total of 1.474 ML of allocated volume. The resources do not have an abstraction limit and applications are currently being considered on a case by case basis.

The subject site does not occur within a proclaimed or proposed groundwater protection area and there are no records for groundwater bores within the property.

#### **2.3.2 LEVELS**

The groundwater level for the site is identified to be between 2 metres below ground level (mbgl) and 5 mbgl in the year 2000. No recent data was available in the water information reporting tool by DWER. The site visit and aerial images did not show any signs of water logging outside the creek lines to indicate that groundwater level might be a significant issue.

#### **2.3.3 QUALITY**

Department of Water mapping indicates the site is located in an area with saline groundwater, ranging between 7,000mg/L and 14,000 mg/L. No other data was found.

#### 2.3.4 SURFACE WATER

The surface water on the site consists of two creek lines and seven dams. Grade banks intercept and direct the surface water into the dams.

Illareen Creek flows through the southern portion of the site and an unnamed creek flows through the north of the site. Both of the creeks are ephemeral.

#### 2.3.5 FLOOD LEVELS

Illareen Creek was estimated to be 0.5m to 1.0m deep with a channel width that fluctuates between 1m and 3.5m. Illareen Creek is at risk of flooding during a 1% Average Exceedance Probability (AEP) storm event. The projected surface area of the flood was estimated to be 7.5 ha, which is noted to be contained within the denser vegetation around the creek.

The unnamed creek to the north of the site is also at risk of flooding during the 1% AEP storm event, with a surface area estimated to be over 13.5 ha, again contained with the native vegetation along the creek line.

#### **2.3.6 QUALITY**

There is no recent surface water quality data availability within close proximity to the site.

#### 2.3.7 STORMWATER MANAGEMENT

360 Environmental have prepared a LWMS in accordance with Better Urban Water Management (WAPC, 2008) to support the development of the subject site. The key principles of integrated urban water management are:

- Minimise total water use in the development area;
- Protect infrastructure and assets from inundation and flooding;
- Management of groundwater levels to protect infrastructure and assets; and
- Protect environmental values of receiving water bodies.

The overall drainage strategy for the site is to detain and infiltrate the 1% AEP stormwater runoff as close to the source as possible. 1% AEP is retained and infiltrated within individual lots and for the internal roads within roadside swales.

The stormwater runoff from roofs is proposed to be discharged by downpipes for dispersion and infiltration across the lots. The runoff volume will cover a surface area of 8.22m², assuming that the water depth is 0.05m.

Swales are proposed to manage stormwater runoff from the road reserves. The UWMP will provide details on design of the swales.

#### 2.3.8 GROUNDWATER MANAGEMENT

The objective for groundwater management is to maintain the groundwater level and quality in the post development environment.

#### 2.3.9 GROUNDWATER LEVEL MANAGEMENT

Indicative groundwater levels for the site show that groundwater is located between approximately 2 and 5 mbgl. The groundwater closer to the surface is expected to be at areas of lower natural surface elevation within catchments, where the creeks are located.

It is proposed that the UWMP provide a more detailed assessment on the likely impact the development may have on groundwater levels, once earthwork plans have been produced for the site.

#### 2.3.10 GROUNDWATER QUALITY MANAGEMENT

Redevelopment of the site to rural residential has the potential to cause a deterioration of groundwater quality if not appropriately managed. The development is limited to residential and agricultural purposes and the wastewater is proposed to be treated by ATU tanks. The principle contamination risks to the site are limited to:

- Fertilisers and pesticides applications;
- Animal waste; and
- Accidental fuel spills.

Due to the change of land use from agricultural to rural residential, it is anticipated that the use of fertiliser will be reduced post development to current application rates. The size of the proposed lots will limit animal numbers to volumes which are unlikely to cause significant impact on groundwater quality. The type of residential development proposed is low density and will therefore have low density traffic. Road designs will ensure the likelihood of a road traffic accident resulting in fuel spillage will be very unlikely. In the event a fuel spillage does occur, all stormwater is directed through a longitudinal swale. The swale is planted to act as a bio-retention system which will minimise any hydrocarbons or nutrient loads from getting into the groundwater.

#### 2.3.11 PROTECTION FROM RECEIVING ENVIRONMENTS

The proposed water management systems are designed to treat stormwater or any contaminants prior to releasing it back to the environment.

Structural controls for the site will be implemented to retain and infiltrate the AEP events close to source. This involves implementing and using bio-retention systems.

Non-structural controls that may also be implemented include:

- Planning: residential lot density and basin location;
- Construction: erosion and dust control; and
- Maintenance: street sweeping, stormwater infrastructure maintenance.

The proposed development for the site is anticipated to have minimal impact on site discharge and groundwater levels and quality due to the low structural density of the development. Incorporating a roadside swale should be sufficient to manage the stormwater from roads and stormwater within lots is expected to infiltrate within the open space of the lots.

#### 2.3.12 LAND CAPABILITY

A Land Capability Assessment was undertaken to determine the capability of the subject site for accommodating rural-residential land uses, and is included in the Environmental Assessment and Management Strategy (**Appendix B**). The Land Capability Assessment identified that approximately 72% of the subject site is land of Fair or better capability to support unsewered rural residential development (refer **Figure 7**).

Low-lying portions of land in the northern and southern ends of the site have been identified as having Fair-Low and Low capability, due to the water runoff and soil permeability. Further investigation of the soil conditions and winter depth to groundwater is required in these locations prior to development to address evolving policy requirements for on-site effluent disposal. As such, further investigations will be undertaken as part of Urban Water Management Plan(s).

A portion of land surrounding the southern creek line is identified as having Very Low capability, and as such buildings and sewage management systems cannot be accommodated on this land due to the risk of localised flooding, pollution, and conservation values associated with flora / fauna habitat and landscape aesthetics.

Overall, the subject site is physically well suited to such development subject to subdivision design taking into account the smaller portions of lesser capability.

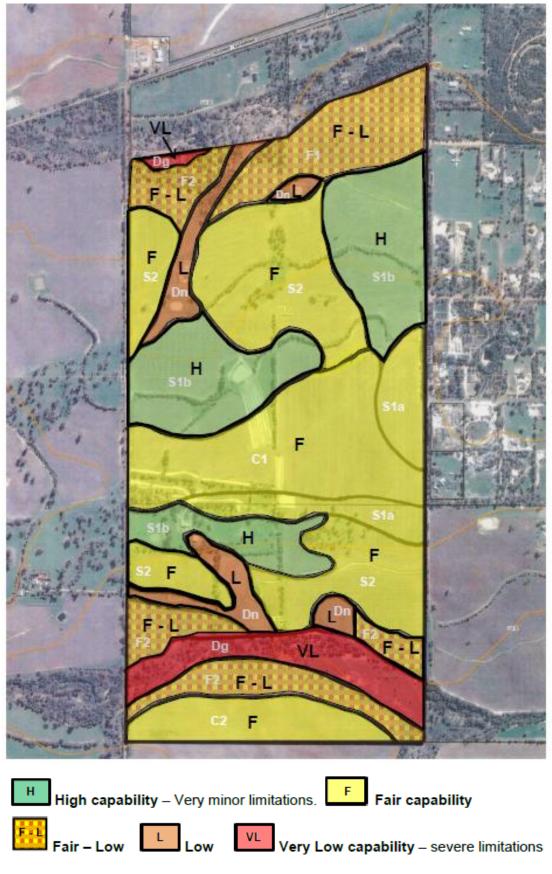


Figure 7 Land Capability

#### 2.4 BUSHFIRE HAZARD

The majority of the subject site is designated as bushfire prone on the WA Map of Bush Fire Prone Areas (DFES 2017). A Bushfire Management Plan (BMP) has been prepared by Bushfire Prone Planning in support of the Structure Plan (refer **Appendix A**). The BMP is a strategic level plan which identifies the bushfire protection measures to be applied to development on the subject site to accommodate compliance with:

- State Planning Policy 3.7 Planning in Bushfire Prone Areas (SPP 3.7);
- Guidelines for Planning in Bushfire Prone Areas; and
- Australian Standard for the construction of buildings in bushfire-prone areas (AS3959-2009).

The purpose of the BMP is to:

- Provide guidance on how to plan for and manage the bushfire risk to future life and property assets of the project area through implementation of a range of bushfire management measures;
- Outline how future on-site assets can be protected during the summer months when the threat from bushfire is at its peak; and
- Achieve consistency with the objectives and requirements of the current bushfire risk management planning regulations, policy and guidelines.

#### 2.4.1 IDENTIFICATION OF BUSHFIRE HAZARDS

The proposed development will have access to Illareen Road to the west and Prosser Street to the east, both of which are part of a public road network which will provide safe access and egress to two different destinations.

As depicted on the Bushfire Attack Level map contained within the BMP, development within the first stage of the proposed structure plan has capacity to be located within areas of Bushfire Attack Level (BAL) -29 or lower.

Future buildings within 100 metres of classified vegetation will be constructed to standards which correspond to the determine BAL's, as required by *AS3959-2009 Construction of buildings in bushfire prone areas*. There may be a requirement to determine the BAL ratings for individual building works during later stages of development.

#### 2.5 HERITAGE

The subject site does not contain any Registered Sites on it under the Aboriginal Heritage Act 1972, or any sites on the State Heritage List, or the Municipal Heritage List.

#### 2.6 SERVICE INFRASTRUCTURE

An Engineering Services Report has been prepared by Peritas Group in support of the Structure Plan (refer **Appendix D**). The objective of the servicing report is to identify the matters to be addressed as part of the subdivision stage and to confirm that the land is capable of being developed for rural residential purposes. The Engineering Services Report suggests that there are no constraints which will significantly impact the development of the site.

#### 2.6.1 WATER RETICULATION

#### 2.6.1.1 GROUNDWATER

There are no known groundwater resources of significance within the area, as such if groundwater is considered to be adopted for water sources, site drilling will need to be undertaken to determine yield and water quality.

#### 2.6.1.2 SCHEME WATER

Katanning township water supply is serviced by the Water Corporation from Harris Dam as part of the Great Southern Towns Water Supply Scheme (GSTWWS). Rural Residential lots east of Prosser Street are currently serviced via a DN100 water main.

The Water Corporation has advised there is current capacity in the existing network to service the first stage of development via the DN100 main along Prosser Street.

For the remaining stages of development, water mains will have to be constructed from the existing main located on Arbour Street in the Katanning townsite, which would run along Arbour street, Moojebing Road, Kojonup-Katanning Road and Prosser Street, at the cost of the developer.

#### 2.6.1.3 RAINWATER TANKS

Table 8 (No. 8) of the Shire of Katanning LPS 5 stipulates if on-site storage is used as the source of potable water supplies, they must have a capacity of 135,000 litres. The Engineering Services Report suggests the roof area required to achieve this capacity is not realistic unless the tanks were supplemented by other sources such as bore water, and therefore rainwater tanks are suited only as a supplementary water source for potable water application. As such, the lots will be connected to the mains water. The use of rainwater tanks for non-potable water is still encouraged.

#### 2.6.1.4 SEWERAGE

The Water Corporation do not have a gravity wastewater system in the vicinity of the site, and in-situ wastewater management is required to service the proposed development.

Table 8 (Item No.7) of LPS 5 includes provisions for in-situ wastewater management, which includes the requirement to provide an approved on-site effluent disposal system in accordance with the Government Sewerage Policy. Approved wastewater management approaches include a range of approaches including septic tanks, Aerobic Treatment Units (ATUs) and Alternative Treatment Systems (ATS).

The Land Capability Assessment included in the Environmental Assessment and Management Strategy (**Appendix B**) identifies the majority of the soil will be capable of accommodating septic tanks and leach drains. In areas where the water table is high – (depending on outcome of water level testing) ATUs may be required. This will be determined as part of the Urban Water Management Plan(s).

#### **2.6.2 POWER**

The proposed development is currently surrounded by overhead High Voltage (HV) infrastructure ranging from a 3 phase distribution line to a 66kB transmission line located north of Kojonup-Katanning Road. According to Western Power's Network Capacity Mapping Tool, there is currently 5 to 10 MVA of spare capacity within this network.

Based on the proposed development and Western Power Standards, it is anticipated the power requirements for the subject site is approximately 477kVA. It is predicted there is adequate capacity in the network for the development. An application will be lodged with Western Power to confirm this.

It is anticipated underground power will be provided to service the proposed development in accordance with Western Power requirements.

#### 2.6.3 TELECOMUNICATIONS

Telstra services are available surrounding the subject site. The provider will install telecommunication facilities to the proposed subdivision, subject to the developer providing at his cost, trenching for cable laying.

Alternatively, where cable routes match Western Power underground power supply routes, the communications provider will wherever possible use the Western Power trenches in lieu of the developer providing additional trenching.

#### 2.6.4 GAS

It is unlikely there is existing gas reticulation available to the subject site, and future lot owners will have to procure gas bottles from Katanning.

#### 2.7 MOVEMENT NETWORKS

#### 2.7.1 REGIONAL ROADS

The subject site is bound by Kojonup-Katanning Road to the north, which a Main Roads Western Australia (MRWA) road and is classified as a Primary Distributor Road under MRWA's Functional Road Hierarchy. Kojonup-Katanning Road is constructed as a single carriageway and has a speed limit of 110 km/hour and is designed to allow inter regional movements. Kojonup-Katanning Road carries a traffic volume of 460 vehicles per day (vpd), which is considered very low.

#### 2.7.2 DISTRICT AND LOCAL ROADS

#### 2.7.2.1 PROSSER STREET

Prosser Street is located along the eastern boundary of the subject site. Prosser Street is a Shire of Katanning's access road. Prosser Street is currently sealed, making it the most suitable entry point to the development during the early stages.

#### 2.7.2.2 ILLAREEN ROAD

Illareen Road is located along the western boundary of the subject site, and is currently a gravel, unsealed road. Illareen Road is a Shire of Katanning's access road.

## 3 STRUCTURE PLAN

The Structure Plan provides for a range of Rural Residential lots ranging from 1ha to 16ha. The Structure Plan also includes a road network which will accommodate drainage within roadside swales. An indicative Development Concept Plan has been prepared to guide the formulation of the Structure Plan and illustrate the development intent (**Figure 8**). This graphical representation is indicative only; however, it gives an indication of how the development may occur, taking into account the environmental and physical constraints including bushfire management requirements and land capability.

#### 3.1 DESIGN PRINCIPLES

# 3.1.1 STRUCTURE PLAN RESPONSE TO ENVIRONMENTAL ASSETS AND PHYSICAL CONSTRAINTS

#### 3.1.1.1 SITE ANALYSIS

An Opportunities and Constraints exercise was undertaken in preparation for design considerations over the site. As detailed in **Section 2** of this report, the subject is relatively free of significant environmental and physical constraints. The principle considerations and the design responses are included in **Table 6**.

**TABLE 6 - OPPORTUNITIES AND CONSTRAINTS** 

Analysis Item	Response
Existing Landform	Create a development pattern that responds to and utilises the existing landform.  The development pattern utilises existing vegetation, with the vegetation offering landscape amenity to the precinct, as well as providing the opportunity to screen developments.  The proposal retains dams within individual lots where possible for use by property owners.  The existing creeks have been retained in private property to ensure maintenance occurs.  Larger lots have been designed around the existing creek line to the south to minimise the number of individual crossings over the creek, to preserve the environmental value of the creek and associated vegetation.
Surrounding Development	The proposed development provides an appropriate interface with adjacent rural land and adjacent special rural land, reflecting lot sizes and land use. Furthermore, smaller lots are located to the north of the subject site, where they are in proximity to the town centre and existing services.
Existing Road Connections	Provide connections to existing local road connections including Prosser Street and Illareen Road.
View Corridors	Orientate lots to allow high points to benefit from expansive views of site features in the distance landscape.
Drainage	Integration of drainage areas into roadside swales.
Bushfire Management	Create a road layout that provides appropriate bushfire access.
Existing Dwelling	The structure plan allows for the existing dwelling and surrounding structures to be retained and incorporated into the design.
Land Capability	The structure plan takes into consideration the land capability of the site, understanding development has to be located outside of areas with very low capability.

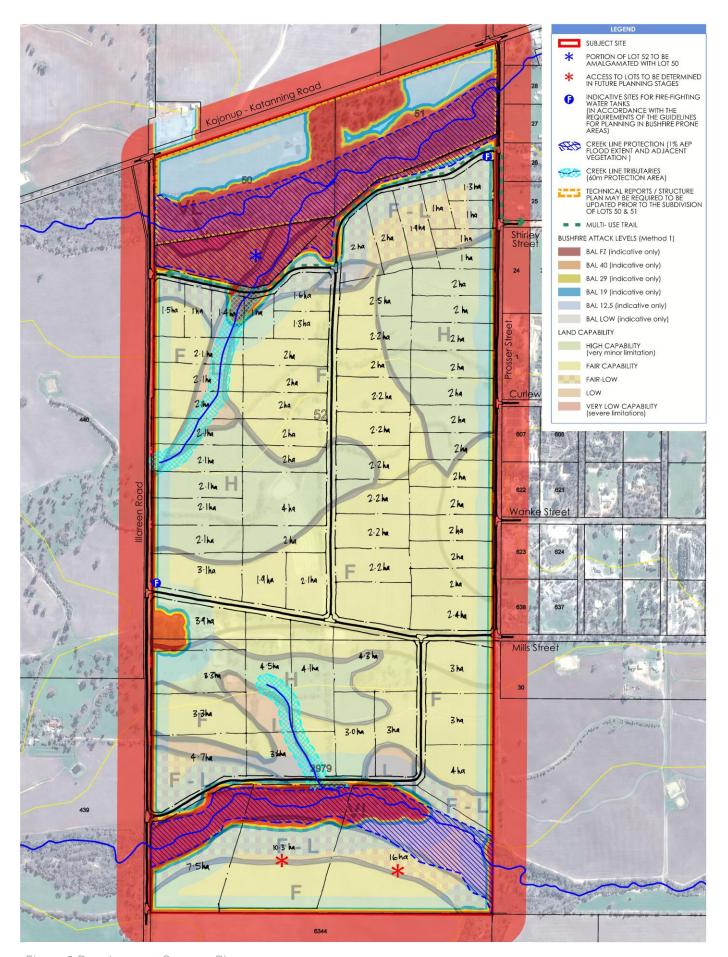


Figure 8 Development Concept Plan

#### 3.2 LAND USE

The proposed design concept has been formulated for Rural Residential development.

#### 3.3 RESIDENTIAL

#### 3.3.1 LOT LAYOUT

The proposed structure plan has the potential to create 71 lots, ranging from 1ha to 16ha in size. Smaller lots between 1ha and 4ha are proposed on the northern portion of the subject site, with larger lots from 3ha to 16ha located within the southern portion of the site.

The average lot size across the Structure Plan is 2.66ha.

The existing dwelling and some outbuildings on Lot 52 can be retained with the proposed lots within the subdivision layout.

#### 3.3.2 CREEKLINE PROTECTION AREAS

Creek line and Vegetation Protection Areas have been identified on the Structure Plan Map to ensure:

- No development occurs within the 1:100 year flood area;
- Existing vegetation is retained, where possible;
- Creek lines to be revegetated; and
- No development is to occur within 30 metres from the centreline of the tributaries.

#### 3.4 PUBLIC OPEN SPACE

The Shire of Katanning advised there is no requirement to provide Public Open Space (POS) due to the site's proximity to an extensive existing POS network. Surrounding POS includes Lions Park which is less than 1m to the east and features BBQ and picnic facilities, skate park, playground and a BMX track, O'Callaghan Park, located approximately 300m east of the site offering dog exercise areas, and Prosser Park, Piesse Park, Thomson Park which are located to the east of the site in the Katanning town centre, which offer a range of activities including basketball courts, picnic tables, amphitheatre, dog exercise areas and outdoor gyms.

#### 3.5 WATER MANAGEMENT

#### 3.5.1 LOCAL WATER MANAGEMENT STRATEGY

As detailed under **Section 2.3** a LWMS has been prepared by 360 Environmental in support of the Structure Plan (refer **Appendix C**). The LWMS has been developed to establish the concepts and broad level design measures for flood mitigation and stormwater management for the site in accordance with Water Sensitive Urban Design (WSUD). The intention of the LWMS is to guide the general stormwater management principles and to guide the preparation of the Urban Water Management Plan (UWMP) that will be prepared at the subdivision stage.

The LWMS has been prepared to:

- Provide the conceptual stormwater management framework for urban development;
- Describe the proposed design measure and Best Management Practices to be incorporated in the stormwater management system;
- Minimise the development construction costs and ongoing operation and maintenance costs for landowners and the Shire of Katanning; and
- To obtain the Department of Water and Shire of Katanning's support for the stormwater strategy.

The Structure Plan has responded to the recommendations of the LWMS by:

- Incorporating drainage swales in the road reserves; and
- Capture stormwater runoff from roofs within individual lots.

It is noted that additional flood modelling will be required prior to development.

#### 3.6 MOVEMENT NETWORKS

The Engineering Services Report prepared based on the Development Concept Plan (**Appendix D**). The Structure Plan and supporting Development Concept Plan have been designed based on the recommendations of LN relating to the movement network.

#### 3.6.1 EXTERNAL ROAD NETWORK

The Structure Plan will accommodate a highly permeable movement network influenced by the existing road network as depicted on the Development Concept Plan. Based on the indicative dwelling yield for the subject site, it is expected the proposed development has the potential to increase the traffic volume on Kojonup-Katanning Road, however as there is a large degree of spare capacity on this road, development is unlikely to be an issue. MRWA will continue to be responsible for the Kojonup-Katanning Road.

Illareen Road is required to be upgraded to a sealed road with a rural profile – unkerbed and roadside swales to accommodate the proposed development. The intersection from Kojonup-Katanning Road to Illareen Road is currently sealed, however the surfacing has deteriorated and this intersection will be re-surfaced.

Some further upgraded to existing roads might be requested by the Shire during subdivision process that may include resealing, or construction of kerbs in the locations of the intersections.

#### 3.6.2 INTERNAL ROAD NETWORK

The primary road access to the subject site is planned via a new intersection with Prosser Street. The road will be located adjacent to the existing vegetation and will provide a connection into Illareen Road to the west. The road has been positioned to accommodate the requirements as per the Bushfire Management Plan, providing a link to the existing fire trails to the east.

An additional east-west road will be located providing a connection from Prosser Street to Illareen Road on the southern portion of the subject site, aligned with the existing Western Power transmission lines.

Access to the southern portion of the site will be provided via a road connecting to the southern east-west road, situated to the north of the Illareen Creek.

The internal roads facilitate a high degree of connectivity and have a meandering road design where appropriate to limit vehicle speed. All roads extend either north-south or east-west, promoting good solar access opportunities in housing construction. The proposed road network also provides appropriate access in the case of a bushfire, in accordance with the Bushfire Management Plan. The proposed roads within the design ranging from 20 metres to 40 metres in width and are proposed to be sealed. The logical road grid is supportive of emergency service movement.

It is proposed that the developer will construct the subdivisional roads within the subject site for handover to the local government.

#### 3.6.2.1 MULTI-USE TRAIL

A multi-use trail will be provided on the site to connect to the existing multi-use trail to the east of the subject site on Shirley Street. The multi-use trail will be located within the road reserve on the northern east-west road, adjacent to existing vegetation, providing recreational opportunities for horse-riding, cycling and walking (refer **Figure 9**).

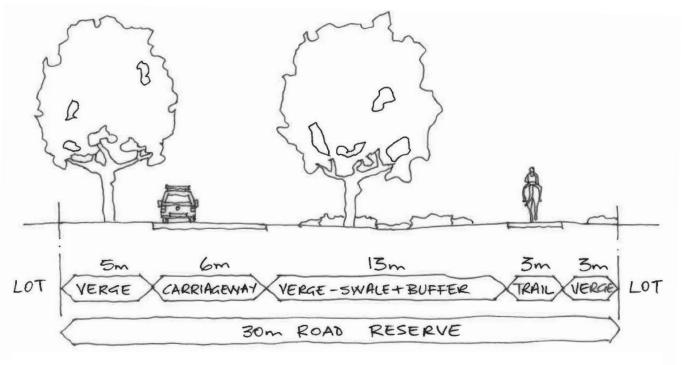


Figure 9 Proposed Northern East-West Road Typical Cross Section

#### 3.7 DEVELOPER CONTRIBUTIONS ARRANGEMENTS

No development contribution arrangements are required for the Structure Plan area.

## 4 IMPLEMENTATION AND STAGING

#### 4.1 MANAGEMENT PLANS

Amongst others, the following key management plans will be prepared at the subdivision stage, as detailed in Part 1:

- Urban Water
- Acid Sulfate Soils (if required)

#### 4.2 STAGING

Stage 1 is likely to proceed adjacent to the existing intersection at Prosser Street. Stages will be released depending on the market conditions at the time, with market demand the key determinant of stage release, the number of lots to be included and key infrastructure to be developed.

Overall it is estimated that the project will have a 15 year+ timeframe.

#### 4.3 SUBDIVISION

As depicted on the Development Concept Plan, the north-western vegetated portion of Lot 52 will be subdivided and amalgamated with Lot 50 to the north. There is no further subdivision anticipated for Lots 50 and 51 at this stage.

Subdivision applications will be sought for development within the subject site.