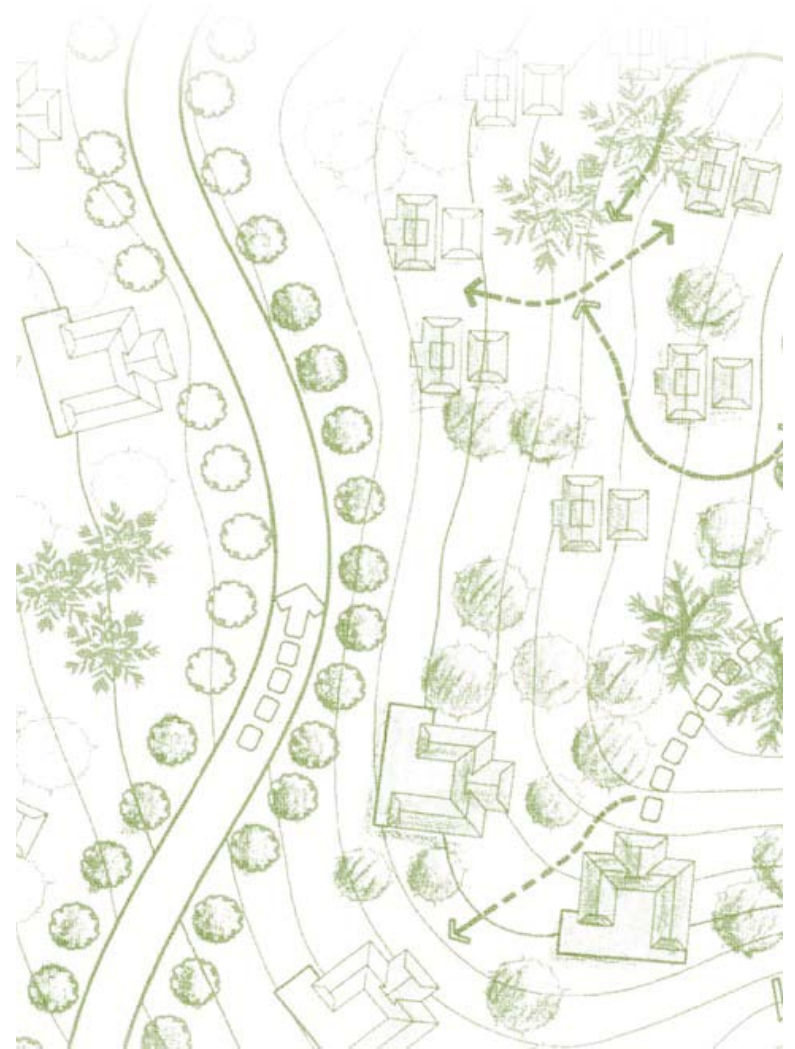


THE EAST MARGARET RIVER DISTRICT STRUCTURE PLAN

Prepared: 2015

Endorsed by WAPC 2017



This structure plan is prepared under the provisions of the Shire of Augusta Margaret River
Local Planning Scheme No. 1.

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

25th October 2017 Date

Signed for and 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

25th October 2017 Date

25th October 2017 Date of Expiry

Executive Summary

It is predicted that by 2031, Margaret River's existing population of 7000 will have increased to approximately 11,000 persons. The Local Planning Strategy 2010 identifies Development Investigation Areas (DIA's), on the periphery of the existing townsite which provide the land needed for development of new residential communities, inclusive of employment, recreation and social infrastructure. The East Margaret River District Structure Plan is the next layer in the planning process, a high level strategic document which has been prepared to guide the future development of more detailed Local Structure Plans within and across each of the DIA areas.

Information gathering to support the EMRDSP began in 2009, at which time a range of technical studies were commissioned to provide planners a comprehensive understanding of the subject land and its attributes. A District Water Management Strategy was prepared as well as an integrated transport plan, an economic study and a servicing report. The Supertown Growth Plan (2010) compiles outcomes from the studies and provides important guidance.

The approach to plan preparation has been directed by the Hamlet Design Guidelines 2010. The document compiles available knowledge about the land in a series of sieve maps, which investigate and report on such factors as elevation, landscape, hydrology, drainage, vegetation, Aboriginal Heritage, education needs, employment, servicing and transport.

The EMRDSP and its five component 'Framework Plans' synthesise the acquired site information and mould this into a responsive urban structure which will cater for growth of the Margaret River population until at least 2031. Its main features are:

- Provision for approximately 2000 new residential lots located within discreet neighbourhoods or hamlets;
- An interconnected road system which provides strong north/south and east/west options;
- The protection of natural assets including over 60ha of native vegetation;
- A focus on non-motorised forms of transport with multiple connections to the Darch and Rail trails which provide strong links to the Margaret River and other nature based recreation facilities;
- Opportunities for local shopping;
- Two primary schools;
- District open space which in the future, will be developed to provide additional active recreation facilities such as playing fields;
- Employment opportunities across a variety of sectors; and
- Best practice water management including treatment and reuse of wastewater for irrigation purposes.

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CHAPTER I IMPLEMENTATION REQUIREMENTS

PART 1 - IMPLEMENTATION

1. Structure Plan Area

This structure plan shall apply to the land contained within the inner edge of the line denoting the structure plan boundary on the structure plan map.

2. Structure Plan Content

This structure plan comprises:

- a) Chapter 1 - Implementation section - This section contains the structure plan map and planning policy provisions and requirements.
- b) Chapter 2 (onwards) –Explanatory section - This section is to be used as a reference, to interpret and justify the implementation of Part 1.

3. Interpretation and relationship with the Scheme

In accordance with clause 6.2.5.6 of LPS1, the Shire has determined that the land requires substantial pre-planning before decisions are made with respect to its use, subdivision or development.

4. Operation

The date this structure plan comes into effect is the date the structure plan is approved by the WAPC.

5. Future Detailed Planning Requirements

Local structure plans are to be prepared; be generally consistent with the EMRDSP and its component framework plans; and address the following planning requirements:

5.1. Urban Framework

5.1.1 Detailed urban design is to respond to the environmental features present on the site (sieve maps 1-6);

5.1.2 Local Water Management Strategies are to be prepared in accordance with the requirements of the Shire and Department of Water;

5.1.3 Developer commitments are to be articulated with regard to areas of environmental enhancement and management;

5.1.4 Subdivision design and public open spaces are to introduce opportunities for urban agriculture in suitable locations;

5.1.5 Fire management planning for future residential development will need to demonstrate acceptably safe responses whilst also ensuring that significant vegetation is not compromised.

5.2. Movement and Transportation

- 5.2.1 Access streets and laneways shall be designed so as to maximise the number of lots with their long axis facing north, so as to provide the best possible opportunity for solar passive house design;
- 5.2.2 An agreement between the owners of DIAM1 and DIAM2 is required to secure the interconnecting road reserves at the earliest opportunity;
- 5.2.3 A road hierarchy and design which minimise vehicle speed and traffic congestion in highly urbanised areas is required, together with safe, shaded walking and cycling options within road reserves;
- 5.2.4 Path networks are to be designed in accordance with the Shire's path plan.
- 5.2.5 Individual local structure plans shall demonstrate coordinated traffic management with neighbouring local structure plan areas.

5.3. Open Space and Recreation:

- 5.3.1 Neighbourhood parks of 3,000-5,000m² are to be provided at a ratio of one (1) per neighbourhood;
- 5.3.2 Local Parks of approximately 3,000m² are to be provided at a ratio of two (2) per neighbourhood;
- 5.3.3 10% of the subdivisible area is to be provided for public open space, not including areas of significant environmental value;
- 5.3.4 District open spaces (playing fields) are to be located in the areas depicted on the Structure Plan.

5.4. Society, Culture and Economy

- 5.4.1 Proponents are required to undertake Aboriginal Heritage consultations and investigations;
- 5.4.2 Exact location/dimensions of school sites are to be negotiated with the Department of Education;
- 5.4.3 Landscape plans are to include public infrastructure/street furniture which promotes community interaction;
- 5.4.4 Design guidelines are to be prepared for civic and retail nodes to ensure a development achieves a local aesthetic;

5.5. Sustainability

- 5.5.1 Local water management strategies are to provide detailed designs for the connection of each local structure plan area to the waste water recycling network;
- 5.5.2 Storm water infrastructure is to detain and treat water prior to releasing it into the natural environment;
- 5.5.3 Street and lot design is to facilitate good solar access to all dwellings;
- 5.5.4 Landscaping plans are to integrate food production into public open space.



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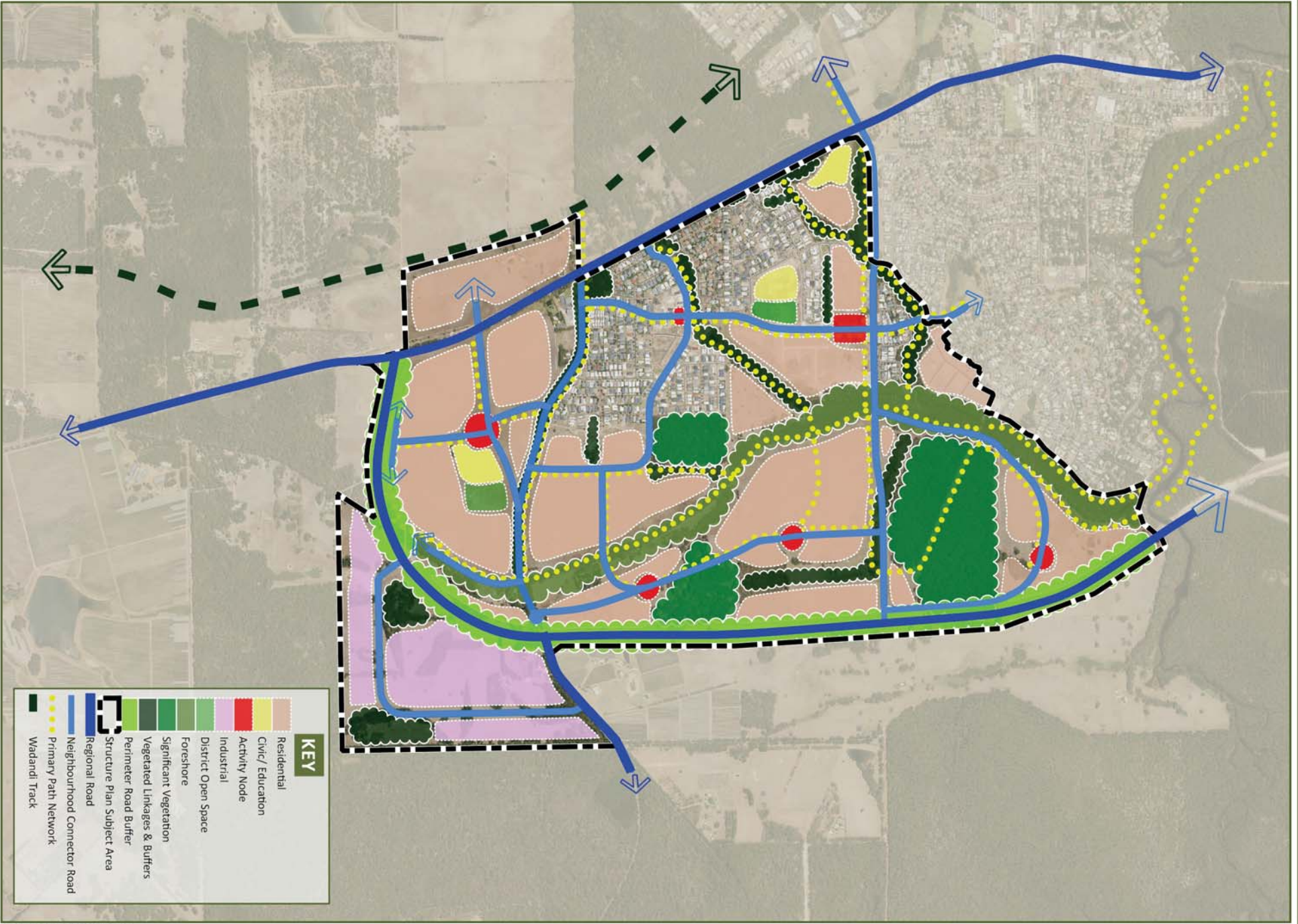
EAST MARGARET RIVER DISTRICT STRUCTURE PLAN

SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE of AUGUSTA
MARGARET RIVER

KEY	
	Residential
	Civic/ Education
	Activity Node
	Industrial
	District Open Space
	Foreshore
	Significant Vegetation
	Vegetated Linkages & Buffers
	Perimeter Road Buffer
	Structure Plan Subject Area
	Regional Road
	Neighbourhood Connector Road
	Primary Path Network
	Wadandi Track

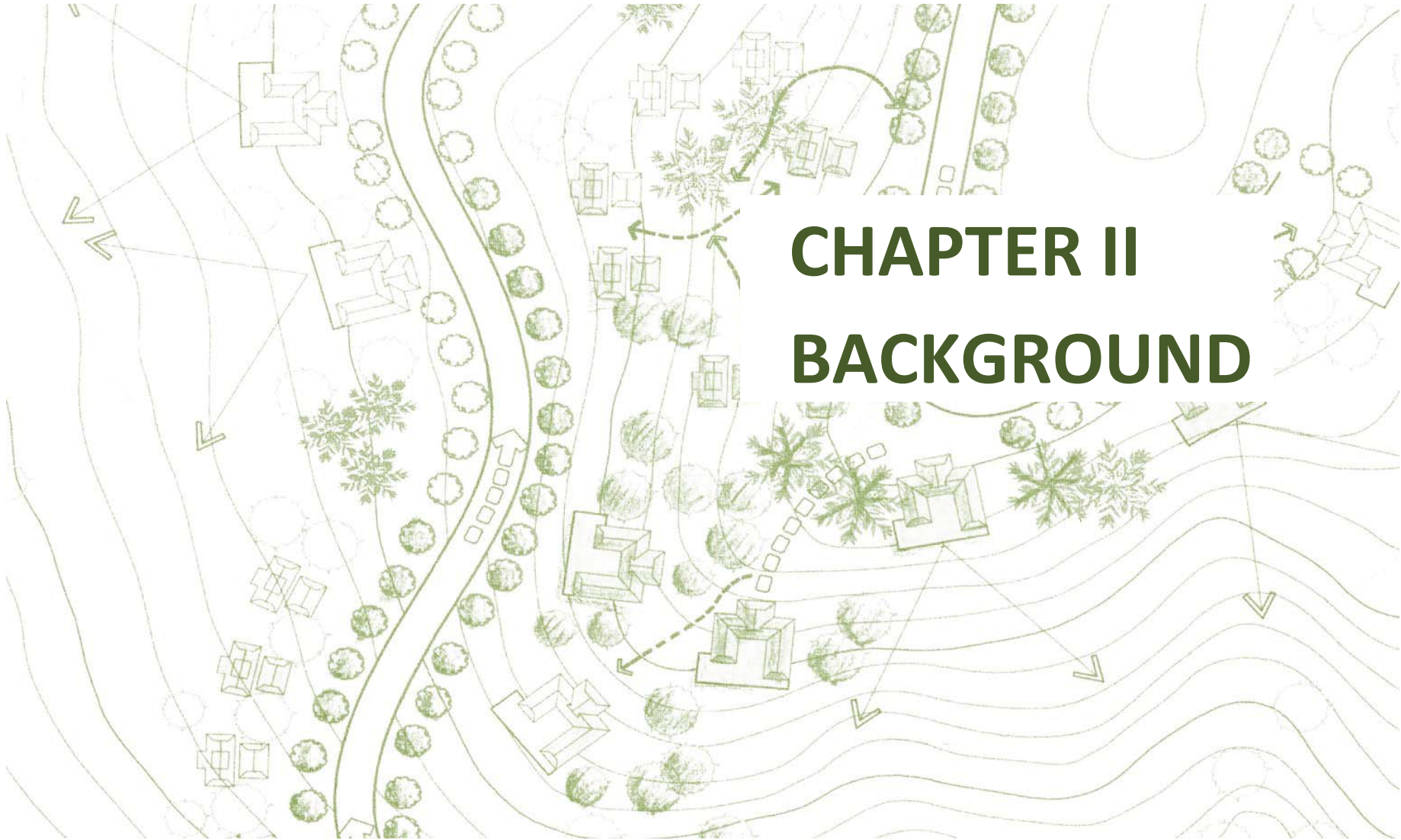


Implementation Schedule

The following table sets out the range of items and processes which are integral to the fulfilment of the subdivision and development outcomes provided for by the EMRDSP 2015.

IMPLEMENTATION SCHEDULE				
Supporting Infrastructure	Item	Notes	Responsible Party	When
Roads	Development of DIAM1 and DIAM2 is contingent on the extension of John Archibald Drive	Construction of John Archibald Drive to be prefunded by Main Roads with contributions recouped via a developer contribution scheme embedded in LPS1 (via Amendment 36), over time.	Shire Main Roads Proponents	Upon receipt of funding.
	Development of DIAM1 is contingent on a road connection to John Archibald Drive via DIAM2.	Road reserve to be negotiated with owners of DIAM 2.	Proponents Shire	ASAP
	Timely completion of Stage 2 of the Perimeter Road is essential to avoid significant congestion issues on Bussell Highway	A funding submission awaits cabinet approval	Main Roads	Upon receipt of funding.
Power	Upgrade of the 66kV transmission network to 132kV between Busselton and Margaret River is required in order to cater for future load growth. Implementation of a community wind farm may obviate transmission line upgrade dependant on feasibility and size.	Western Power are currently developing a 25-year supply strategy, to inform need/timing of transmission line upgrade. The potential for a community wind farm should be introduced to this process to determine its capacity to provide an alternative power source to cater for future growth in Margaret River.	Western Power Shire	Ongoing
Sewer	Pressure/gravity sewer line extending south from treatment plant to industrial estate.	If development proceeds sequentially commencing with DIAM1, infrastructure can be extended accordingly. Otherwise, requires substantial prefunding by southern DIA's.	Proponents Water Corporation	As required.
Water (potable and non potable)	Extension of distribution system as required servicing each Neighbourhood.	Requires implementation of potable and non-potable supply.	Proponents Water Corporation	As required.

IMPLEMENTATION SCHEDULE				
Planning Processes.	Item	Notes	Responsible Party	When
Rezoning	<p>Rezoning of the land to 'Future Development' is required for each DIA.</p> <p>Rezoning documentation is to be prepared together with supporting technical documents to demonstrate the lands suitability for its intended purpose.</p> <p>Rezoning amendments are to be informed by a Development Framework - Preliminary Local Structure Plan in accordance with the Hamlet Design Guidelines or a Local Structure Plan in accordance with the WAPC Guidelines.</p>	<p>The Local Planning Strategy sets out a sequential staging regime for residential development commencing with DIAM1.</p> <p>Alternative staging outcomes can be considered subject to meeting the criteria set out in the LPS e.g Council has conditionally supported early commencement of an amendment to rezone DIA4.</p>	Proponents Shire WAPC	As initiated proponent.
Local Structure Planning	<p>Local Structure Plans are to inform rezoning amendments.</p> <p>Local Structure Plans should be developed by following the Hamlet Design Guidelines approach including sieve mapping to determine land use capacity, and to inform the necessary 'frameworks'.</p> <p>Local Structure Plans are to generally accord with the framework provided by the EMRDSP 2015.</p>	<p>The format of each Local Structure Plan is to accord with the WAPC's Structure Plan Framework. However, the 'background' supporting information is to demonstrate that neighbourhood design adequately addresses site characteristics to arrive at a design response which responds sensitively to the site.</p>	Proponents Shire WAPC	Together with rezoning amendment.
Subdivision	<p>Subdivision applications to be lodged, and implemented in accordance with conditions imposed.</p>		Proponents Shire / WAPC	As required
Local Development Plans / Activity Centre Plans	<p>Further detailed planning may be required for identified precincts such as commercial/civic areas or medium-high density precincts</p>		Proponents Shire	As required
Development	<p>In accordance with approvals/permits as may be required.</p>		Proponents Shire	Following lot creation.



CHAPTER II BACKGROUND

Introduction

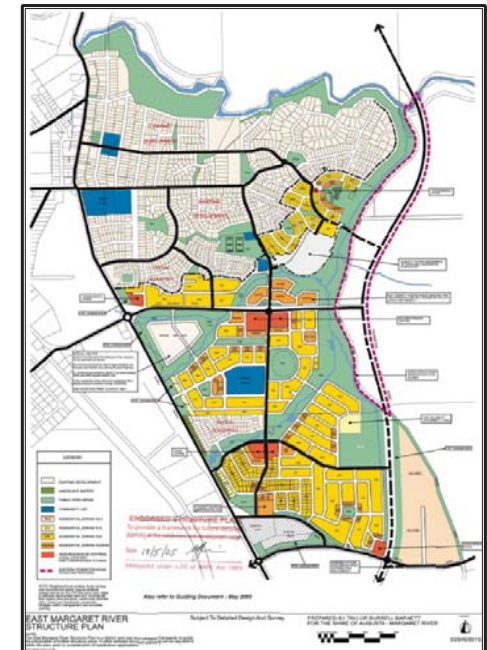
The East Margaret River Structure Plan 2005 is a district level structure plan which has served to guide the preparation of more detailed structure plans and subsequent subdivision and development of East Margaret River over the past 10 years. It was prepared in close consultation with the community via an 'Enquiry by Design' workshop process commenced in 2002.

In order to continue to provide sufficient land availability for urban purposes to 2031, the Local Planning Strategy 2010 identified additional Development Investigation Areas (DIA's) contiguous with the existing East Margaret River Structure Plan Area. These DIA's are under varied ownership and require coordination to ensure connectivity and cohesiveness both internally and with the existing Margaret River urban environment.

The revised East Margaret River District Structure Plan 2015 (EMRDSP) has been prepared in accordance with the direction provided by Liveable Neighbourhoods and the WAPC's Structure Plan Preparation Guidelines. It takes account of previous work undertaken by way of the Supertowns Growth Plan (2013) and draws significantly on the content and process set out by the Hamlet Design Guidelines (2009).

This plan has been guided by, and should be read in conjunction with the following technical documents:

- Margaret River Townsite District Water Management Strategy 2012, ENV Australia
- Margaret River Servicing Report 2012, GHD
- Integrated Transport Strategy 2012, GHD
- Margaret River Supertown Townsite Growth Plan 2012, RPS
- Margaret River Supertown Economic Development Plan 2012, AEC group
- Bushfire Management Plan 2016, BPP



East Margaret River Structure Plan 2005

Sieve Map 1 delineates the Subject Land and identifies the DIA's



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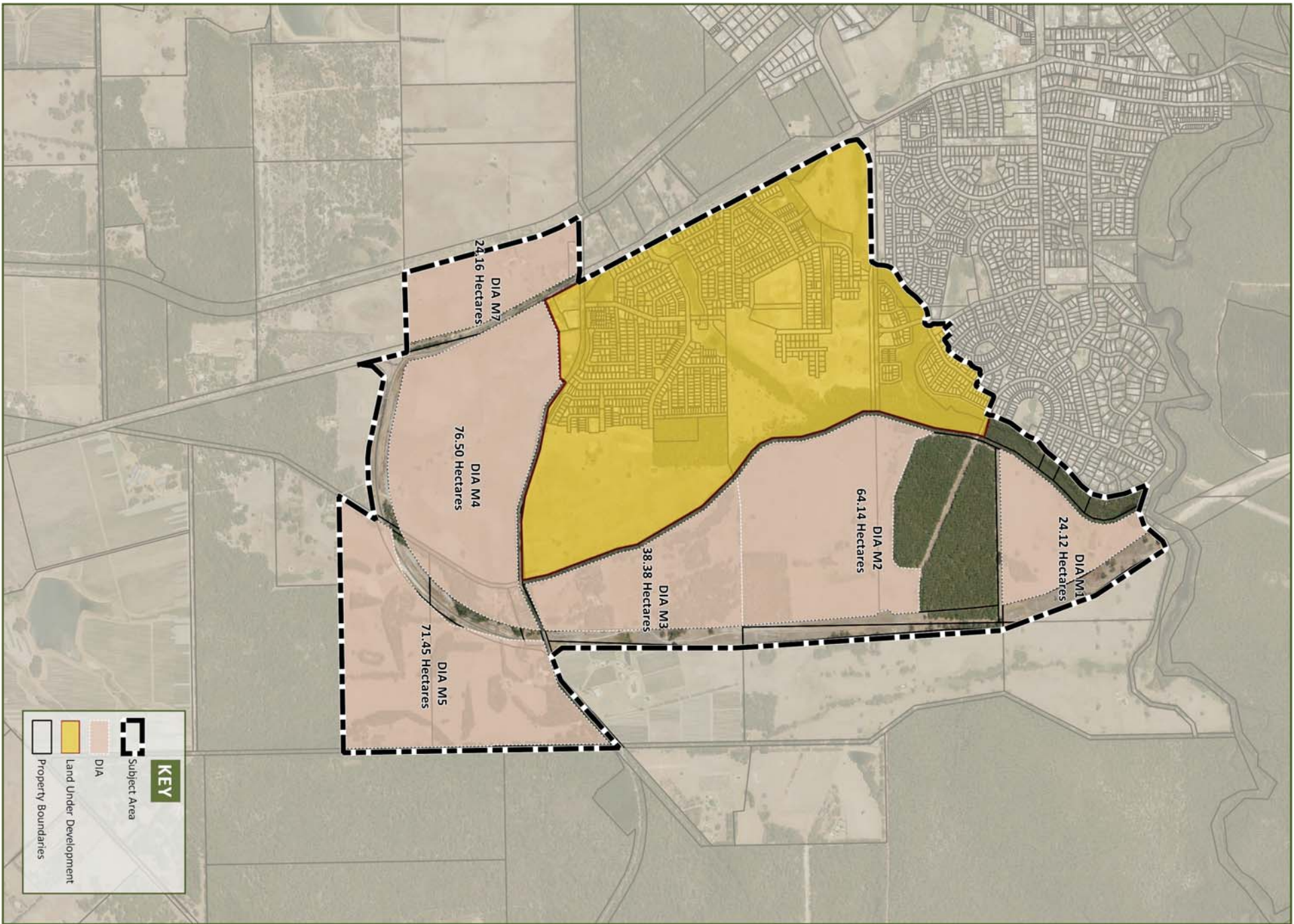
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SEIVE MAP 1: SUBJECT LAND AND DEVELOPMENT INVESTIGATION AREAS (DIA)

SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE of AUGUSTA
MARGARET RIVER



KEY

- Subject Area
- Land Under Development
- DIA
- Property Boundaries

A Sustainable Growth Model for Margaret River

The preparation of this District Structure Plan has been predicated upon a new model for urban growth as articulated by the Hamlet Design Guidelines.

The overarching intent of this sustainable growth model is to achieve a form of residential development which differs from greenfield development experienced elsewhere in the State.

The EMRDSP sets in place a framework for future development which will exhibit the sustainability and urban design principles explained herein.

The plan cements certain critical structural elements identified as being essential to achievement of the sustainable growth model, whilst also providing substantial scope for landowners and proponents to bring their own innovation and perspective to the design of their land parcels.

*What is a hamlet?
A hamlet is a small village. The conventional (and more urban) terminology for such is “neighbourhood” and the terms are used interchangeably herein*



SUSTAINABILITY PRINCIPLES

- A SUSTAINABLE POPULATION BASE
- PEDESTRIAN ORIENTATED DEVELOPMENT
- SUSTAINABLE INFRASTRUCTURE
- DIVERSE LIFESTYLES
- PRODUCTIVE LANDSCAPES
- BIODIVERSITY AND ECOLOGICAL RESTORATION
- A VIBRANT ECOMONY



URBAN DESIGN PRINCIPLES

- CONTEXT
- PERMEABILITY
- CONCENTRATION
- INNOVATION
- INTEGRATION
- CHARACTER
- EXTENSIVE GREEN SPACES

Process

Sound planning can only be undertaken after arriving at a thorough understanding of the subject land and its attributes. Following the principles of the Hamlet Design Guidelines, the development of this District Structure Plan has been preceded by the preparation of a series of 'sieve maps', which detail the findings of available studies and on ground investigations, each of which provides a layer of information which goes towards an overall appreciation for the land. Future Local Structure Plans will also follow this process.

The sieve mapping process culminates in the preparation of five key plans or 'frameworks' which are explained below. The District Structure Plan itself is an amalgam of these five plans. Future Local Structure Plans will provide even further detail, based on more specific technical investigations for each DIA. The five framework plans are:

Productive, Ecological and Restorative Framework

Where should productive agriculture be carried out?

What natural features should be protected?

Open Space and Recreation Framework

Meeting the future communities' demands for recreational facilities.

Ensuring areas of open space are connected and in reasonable proximity to all residents.

Movement and Transportation Framework

Connections internal and external to the subject land

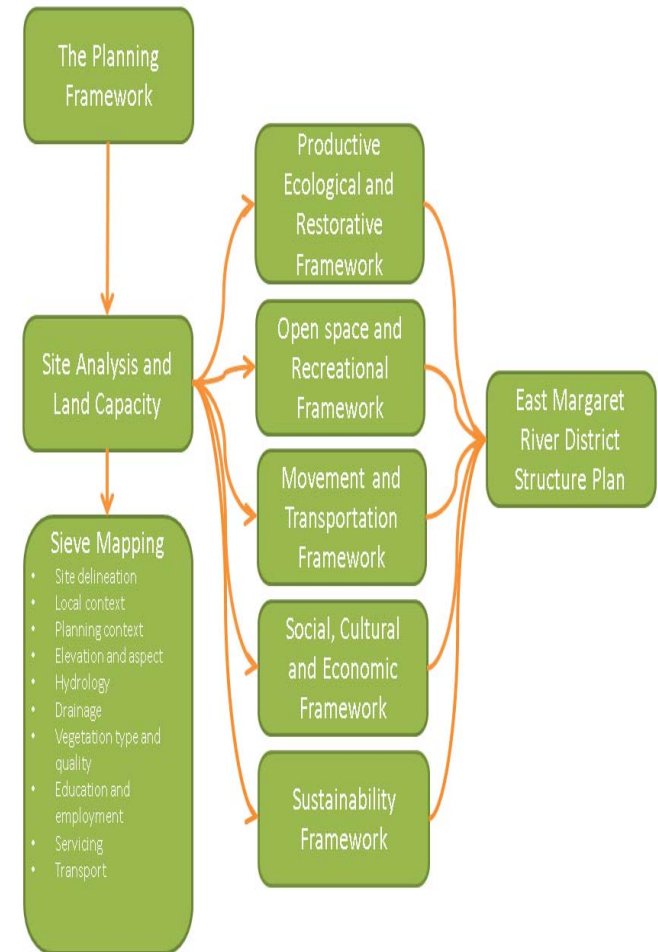
How can non-motorised forms of transit be encouraged?

Social Cultural and Economic Framework

Providing opportunities for a cohesive and prosperous community.

Sustainability Framework

What measures can be taken to reduce the ecological impact of future development?



Process for developing a Structure Plan

Planning Context

Leeuwin Naturalise Ridge Statement of Planning Policy 1998

The LNRSP identifies Margaret River as a 'Principle Centre' capable of growing to a population of 20,000. All of the land the subject of this Structure Plan is identified by the LNRSP as being within a Development Investigation Area, suitable for urban development subject to "detailed investigation prior to subdivision and development, including form, function and design."

Local Planning Strategy 2010

The land the subject of this structure plan is identified as being within Development Investigation Areas Numbered 1-7, by the LPS. All DIA's are identified for 'hamlet style' residential purposes with the exception of DIAM5 which is identified for rural smallholding purposes and DIAM6 which is identified for industrial development.

Supertown Growth Plan 2013

The Supertown Growth Plan reaffirms DIAs 1-5 as being suitable for residential and rural residential development. With a Hamlet style of development yielding 6 lots per hectare, the growth plan identifies the potential for 1050 residential and 11 rural small holding lots.

Local Planning Scheme No.1 2010

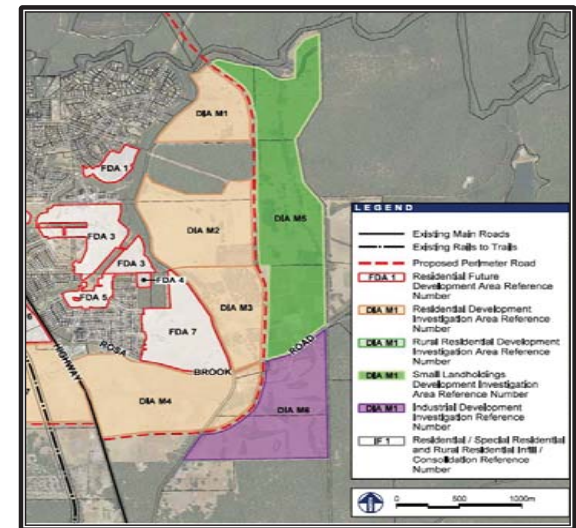
All of the land the subject of this structure plan is currently zoned 'General Agriculture' by LPS1. This Structure Plan will provide a framework for future rezoning and detailed structure planning as will be necessary prior to subdivision.

East Margaret River Structure Plan 2005

The EMRSP set a framework for more detailed structure planning and progressive subdivision and development to the west of the subject land.

Local Structure Plans

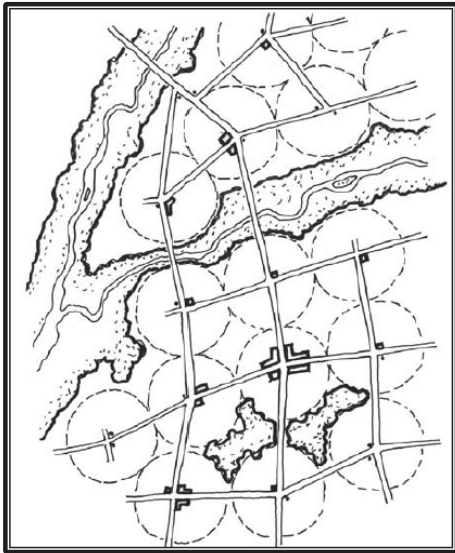
Site specific structure plans have been developed for Brookfield, Rapids Landing and their associated commercial centres.



Excerpt from Supertown Growth Plan

Hamlet Design Guidelines (2009)

In 2008 Council commissioned a set of design guidelines (referred to as the Hamlet Design Guidelines) with the specific intent that they be applied to future urban development on DIA’s M1-M5. The objective was to ensure that future urban development in Margaret River would exhibit a unique style, different to that experienced within similar sized greenfield estates in the Perth Metropolitan Region. At the core of the Hamlet Design philosophy is a simple equation, 30% of a development site is used for development, 30% for ecological restoration/open space and 40% for agricultural production.



Liveable Neighbourhoods design schematic

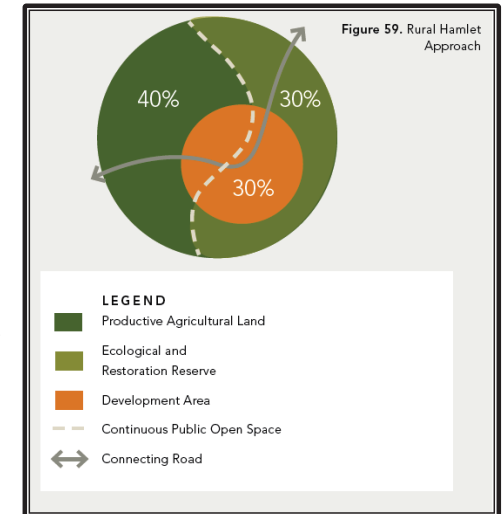
Liveable Neighbourhoods

Liveable Neighbourhoods is a performance based code for the design of urban environments. It is the contemporary planning guide which informs the design of all structure plans in Western Australia.

The Liveable Neighbourhoods design philosophy is that of interconnected neighbourhoods each having a focal activity node located so as to be within walking and cycling distance from all dwellings within that Neighbourhood. Arterial roads provide strong connections between neighbourhoods. Existing development within the subject area has generally been designed in accordance with Liveable Neighbourhoods.

POS Strategy (2014)

The Shire’s POS Strategy identifies the large area of bushland central to DIA’s M1 and M2 as being ‘Future POS’. In respect to planning for additional areas of POS to service development of East Margaret River, the Strategy makes the following recommendation which is relevant to the district level of structure planning and has informed development of the plan: *Provide open space that is designed as a linked network incorporating sporting fields, neighbourhood parks, drainage reserves and landscaped streets.*



The Rural Hamlet design philosophy

Sieve Map 2 depicts the subject area in context with existing structure plan



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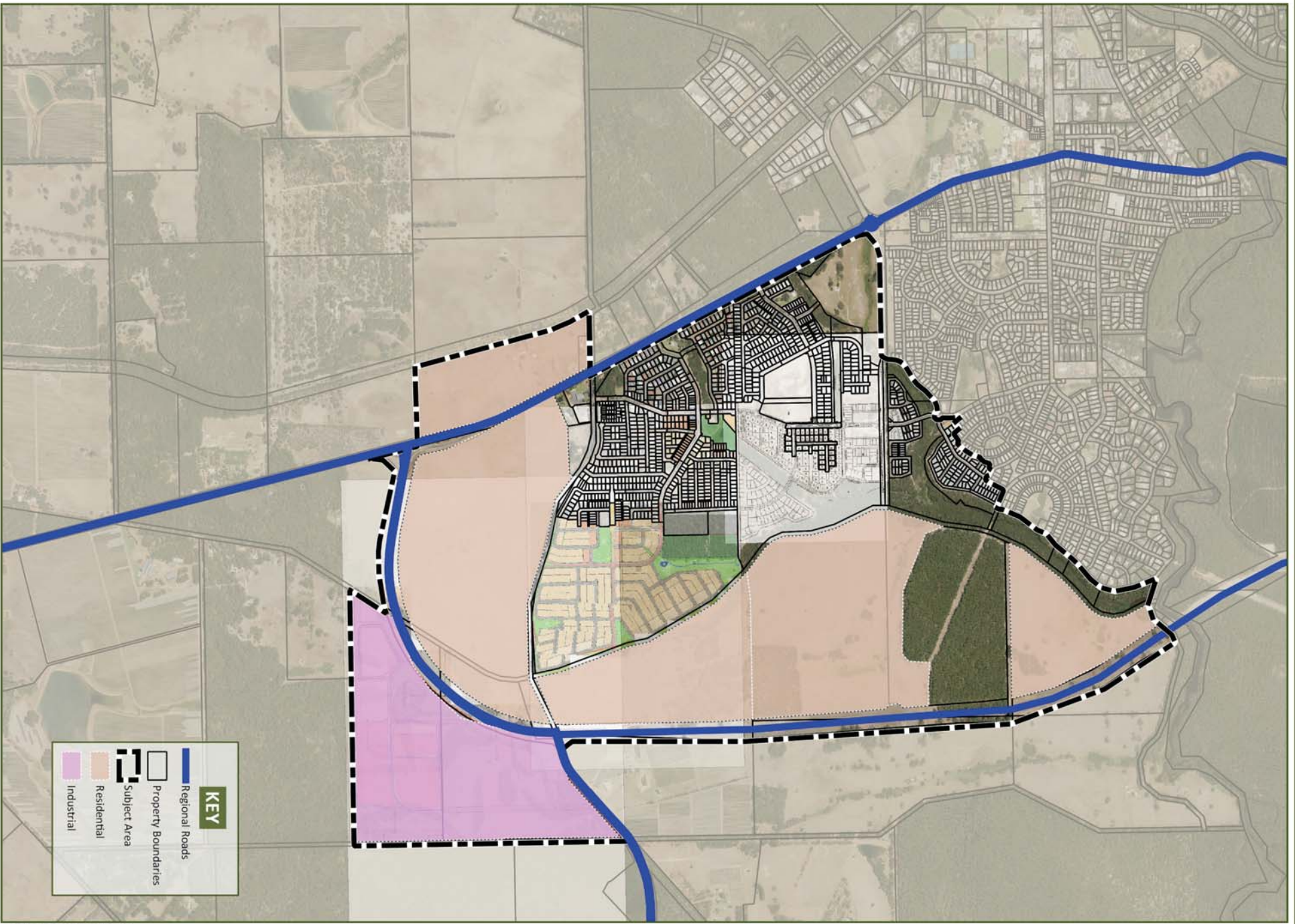
SEIVE MAP 2: PLANNING CONTEXT

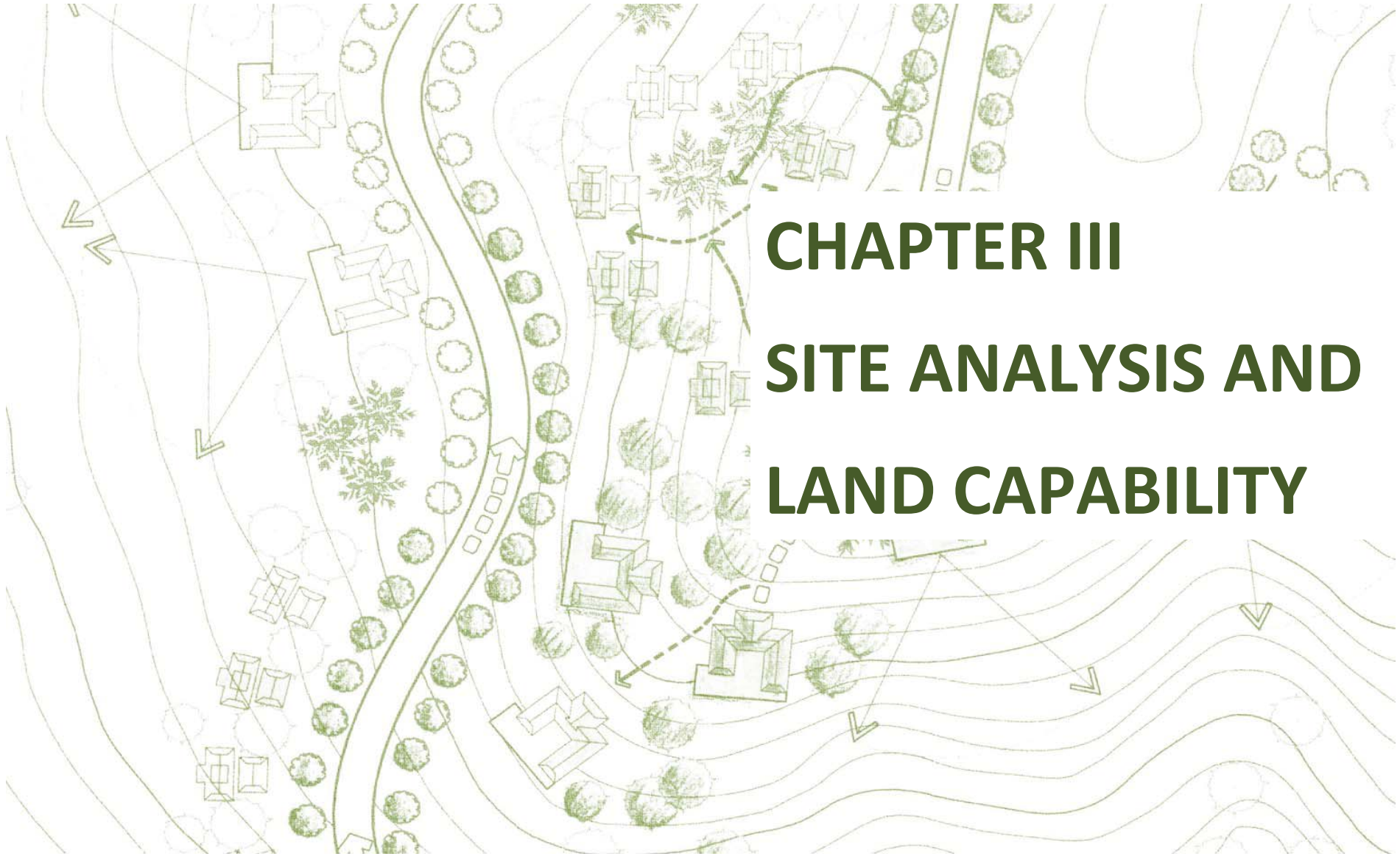
SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE OF AUGUSTA
MARGARET RIVER

KEY	
	Regional Roads
	Property Boundaries
	Subject Area
	Industrial
	Residential





CHAPTER III
SITE ANALYSIS AND
LAND CAPABILITY

Site Analysis and Land Capacity

The existing East Margaret River Structure Plan covers an area of approximately 453.3ha. The area can generally be described as being east of Bussell Highway, South of the Margaret River, west of Darch Brook and north of Rosa Brook Road. A large portion of the Structure Plan area is fully developed. Undeveloped areas include land in the eastern portions of “Rapids Landing” and “Brookfield”.

The revised East Margaret River Structure Plan will include DIA’s M1-M5 (and portion of DIA 7) which have been identified for future development by the Local Planning Strategy 2010, together with portions of the established east Margaret River urban area which continue to be progressively developed. It will also include DIAM6 identified for industrial development. The new East Margaret River District Structure Plan boundary takes in an area of approximately 768ha.

Elevation and landscape

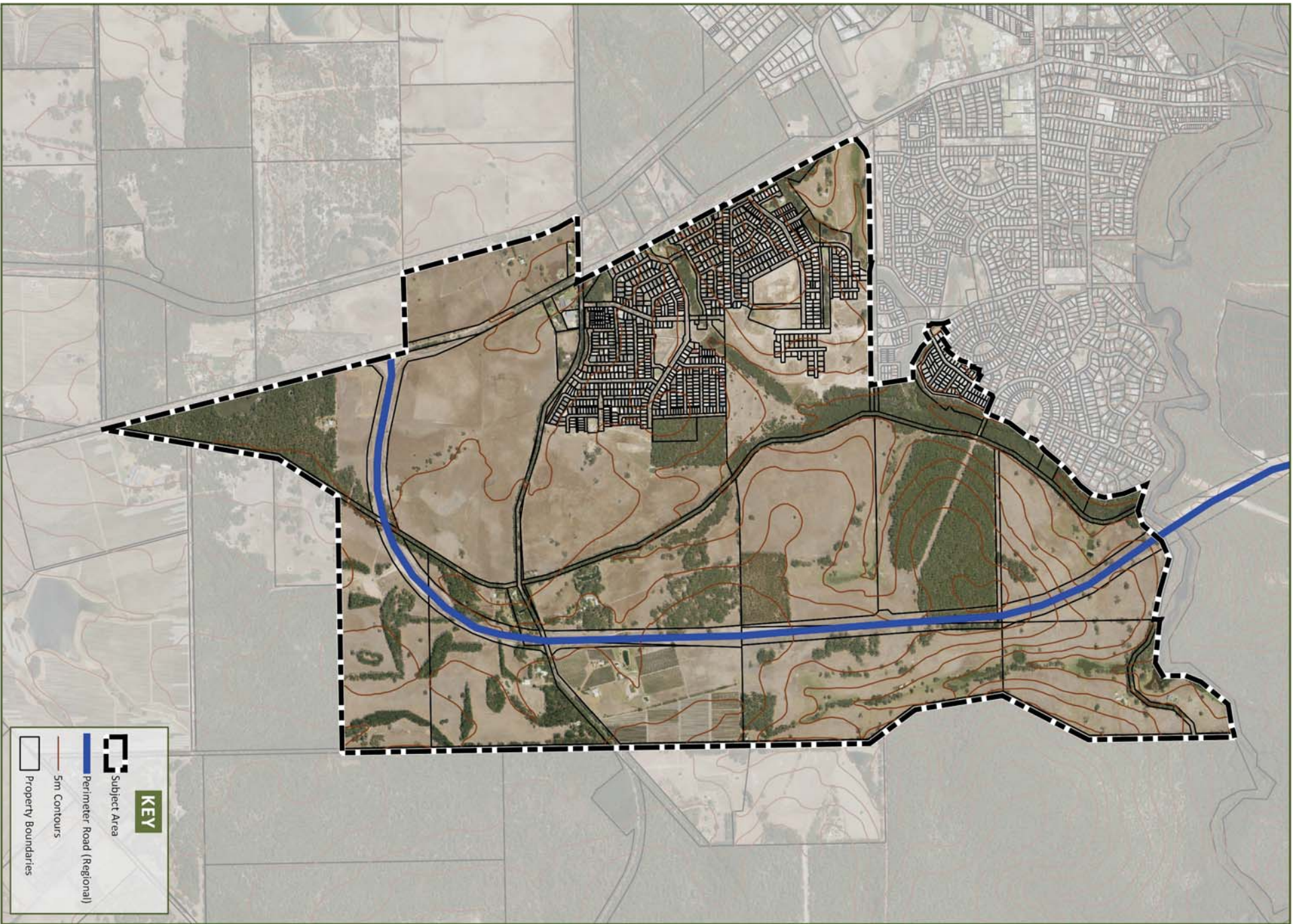
The site ranges from between 65m and 95m above sea level. The land is generally flat with the only moderate slopes being located in DIAM1 which rises from low lying swamp to a plateau in the South eastern part of the site.



The tall vegetation which fringes the Darch Brook ‘envelopes’ the development site and screens direct views of the progressive subdivision to the west. This is the case even in DIAM1 where views of ‘Riverslea’ are filtered despite existing dwellings being only 200m away. A finger of vegetation which extends to the west of the plateau screens existing development from this the highest point of the site. All sites have excellent solar access from the north, except in areas on the southern side of significant vegetation.

An important consideration in future detailed planning will be the need to screen views of and from the future perimeter road.

Sieve Map 3 depicts the site contours



Scale - 1:22,000 @A4

SEIVE MAP 3: SITE ANALYSIS AND LAND CAPABILITY - SITE CONTOURS

SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE of AUGUSTA
MARGARET RIVER

KEY

-  Subject Area
-  Perimeter Road (Regional)
-  5m Contours
-  Property Boundaries

Site Analysis and Land Capacity

Hydrology and Drainage

The Structure Plan area contains two major creeks which flow into the Margaret River, the more significant of which is the Darch Brook. Drainage lines traverse the subject land laterally carrying stormwater from the subject area which is discharged at the brook as is shown at **sieve map 4**.

A principle which will guide future local water management strategies is to maintain post development flows at predevelopment levels. In severe weather events, it will be necessary to detain water in constructed basins. The estimated size of detention basins and the volumes of discharge for each catchment are set out in the Urban Water Management Plan and the discharge points detailed by **sieve map 5**.



Acid Sulfate Soil mapping indicates that there is a 'low to moderate risk of Acid Sulfate Soils' across much of the site. However, the majority of areas have been identified as having 'no known risk' to a depth of 3m. Depending on future development proposals and design specifications, site specific investigations for actual or potential Acid Sulfate Soils may be required.

Threat of Bushfire

The Shire commissioned a bushfire threat assessment and management plan, which is appended to this document. The assessment finds that there are areas where there is a moderate level of bushfire hazard which occurs in cleared areas that are in close proximity to existing stands of vegetation. Beyond these are large areas where there is low levels of bushfire threat. The study finds that threats can be managed so that future residential lots achieve a Bushfire Attack Level (BAL) of no greater than BAL29 which is regarded as being satisfactory.

Advice received from the Department of Fire and Emergency Services (DFES) is that intensification of land use within DIAM5 is not supported due to its proximity to an extreme bushfire hazard.

Sieve Map 4 shows the location of waterways and drainage lines

Sieve Map 5 shows drainage catchments and flow paths



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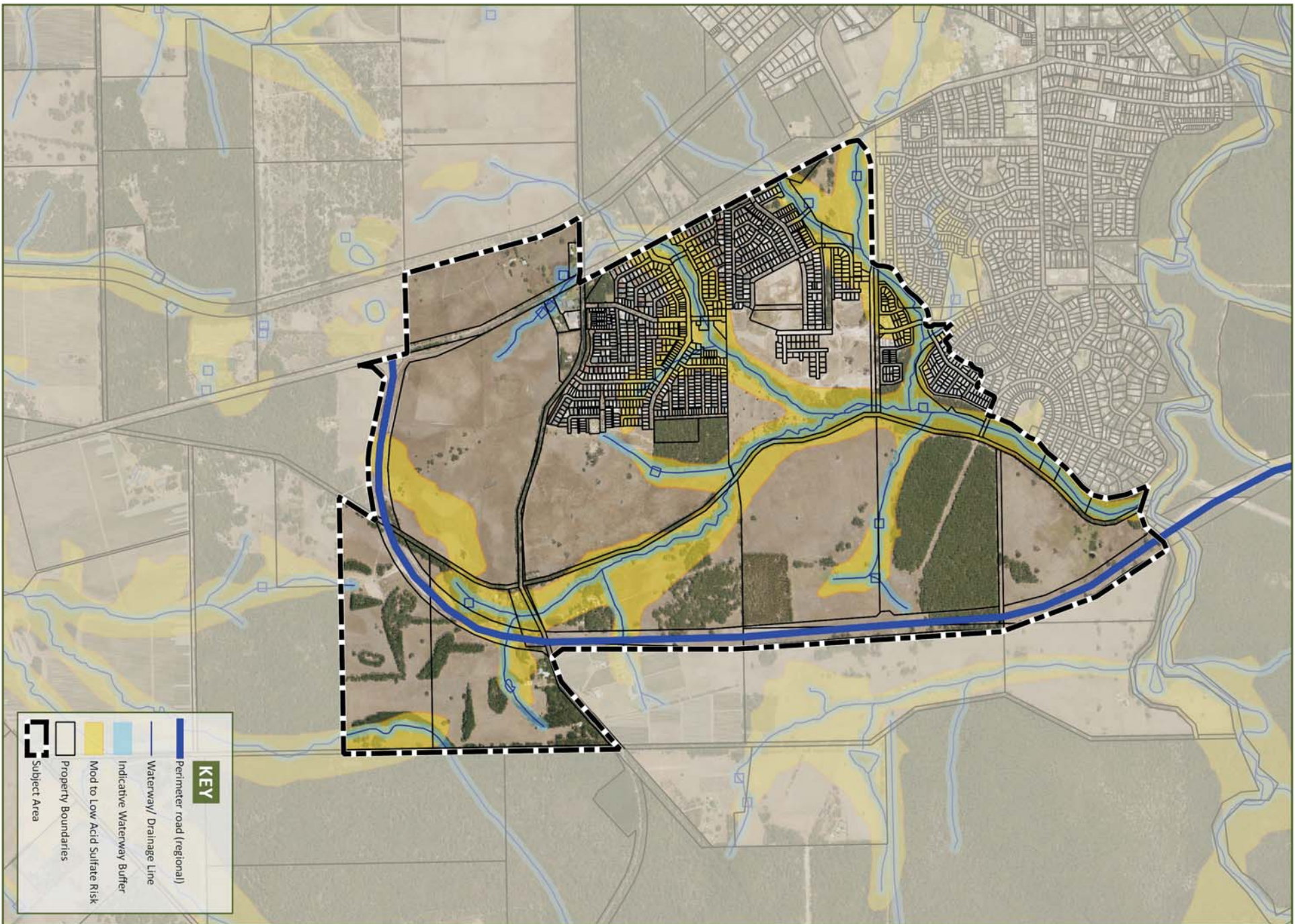
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SEIVE MAP 4: SITE ANALYSIS AND LAND CAPABILITY - HYDROLOGY

SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE of AUGUSTA
MARGARET RIVER





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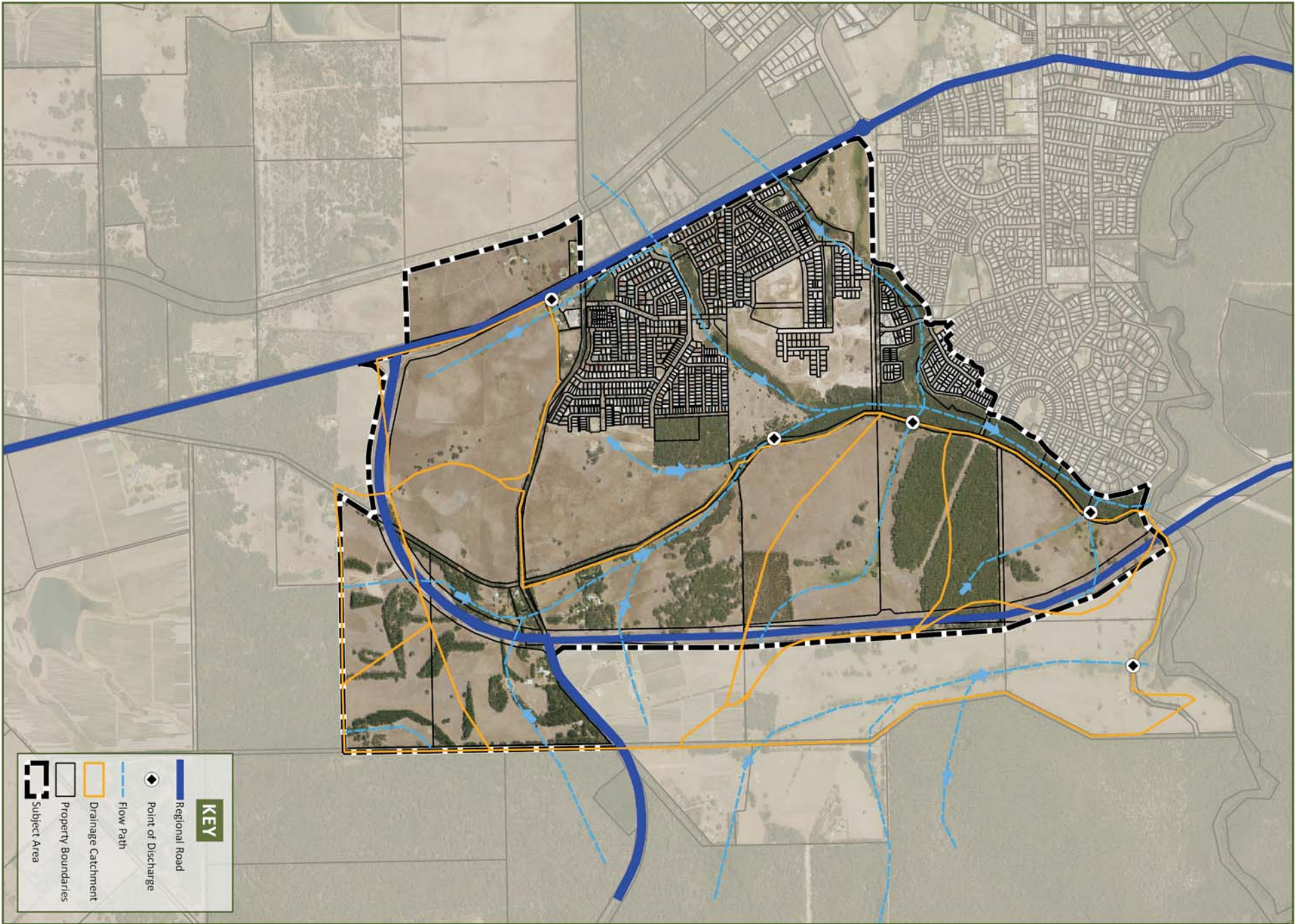
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SEIVE MAP 5: SITE ANALYSIS AND LAND CAPABILITY - DRAINAGE

SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE of AUGUSTA
MARGARET RIVER



KEY	
	Regional Road
	Point of Discharge
	Flow Path
	Drainage Catchment
	Property Boundaries
	Subject Area

Site Analysis and Land Capacity

Vegetation type and quality

The Structure Plan area contains stands of poorly represented C1 and Cw1 vegetation complexes as surveyed by the South West Biodiversity Project 2007. A contiguous area of vegetation of approximately 30ha exists in the northern portion of the subject site, and contains poorly represented and other vegetation, which given its size, and likely habitat and amenity value, should be retained in full. Similarly a 23 ha stand of poorly represented vegetation frames the subject area at its southern extent and should also be protected. No environmentally sensitive areas (ESA) have been identified in the Structure Plan area.

Aboriginal Heritage

Prior to European settlement, the south west of Western Australia, including the subject area, was inhabited by the Nyungar or Bibbulmun Aboriginal people. There are 33 registered sites and another 55 other places of heritage interest in the Augusta-Margaret River Shire. The sites range in their status and type. The sites located within the Margaret River townsite expansion areas are generally related to the Margaret River (known as Wooditchup by the Nyungar people) which is a mythological site being home to the *Waugal* or snake like spirit of waters. Previous detailed ethnographic surveys conducted preceding existing development in the East Margaret River Area have revealed that the “*Darch Brook and its associated ephemeral creeks and wetlands were considered by the Aboriginal community to be of the same spiritual essence (the Waugal) as the Margaret River and therefore as the same site*”. The Margaret River Lore Ground is a ceremonial site located in the south of the subject area however its exact location is not a matter of public record.



Detailed ethnographic and archaeological surveys will be required for new growth areas to evaluate and determine an appropriate response to areas of Aboriginal heritage significance. Broadly, any activity which is likely to inhibit water flows through the site or diminish water quality should be avoided.

Sieve Map 6 shows the location of native vegetation and its importance.



0 150 300 450 600 750 m

Scale - 1:22,000 @A4

SEIVE MAP 6: SITE ANALYSIS AND LAND CAPABILITY - NATIVE VEGETATION

SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE of AUGUSTA
MARGARET RIVER



KEY

-  Cowaramup Vegetation Complex (C1)
-  Cowaramup Vegetation Complex (Cw1)
-  Other Existing Remnant Vegetation
-  Perimeter road (regional)
-  Property Boundaries
-  Subject Area

Site Analysis and Land Capacity

Education

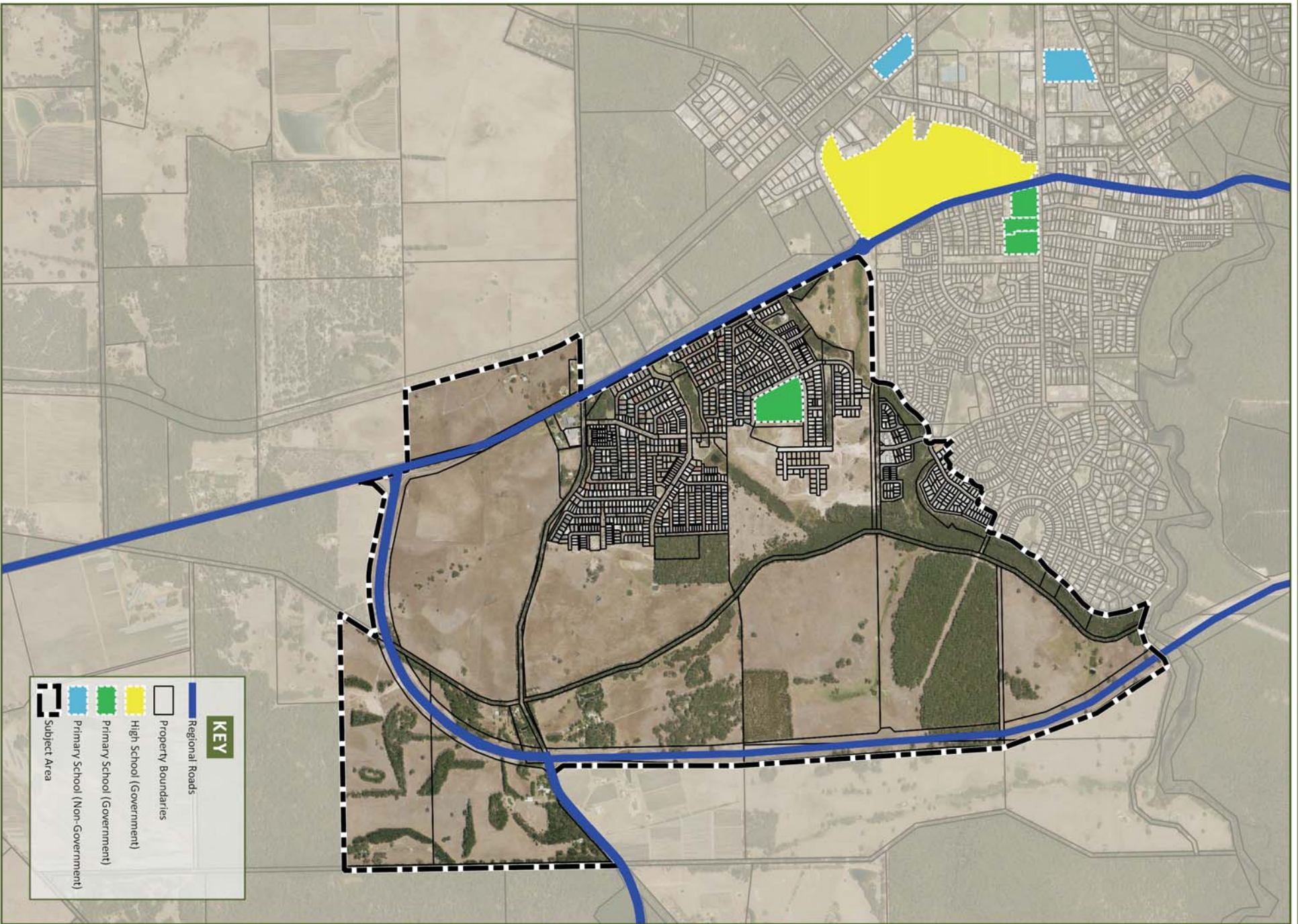
There is currently one existing and one planned government primary school site (Rapids Landing) in Margaret River. There are two non-government primary schools within the townsite being the Saint Thomas More, and Montessori schools. An independent school is located just outside Margaret River. One government secondary school which is located in Margaret River services the whole Shire.

Liveable Neighbourhoods sets out the ratio at which schools should be provided (see table). In respect to primary schools, there will be a need for one additional school site within the subject area given that it will contribute over 1500 residential lots. Those landholding which have not made a financial or land contribution to the Rapids Landing primary school, but will contribute to the need for a further (third) Government primary school, are identified by sieve map 7.

The proposal does not generate the need for an additional secondary school and it has been identified that the existing high school site has capacity to accommodate further infrastructure growth and student numbers (RPS 2012).

	Primary Schools	Secondary Schools
Government	One site per 1500 housing units	One site per 6500 – 7000 lots
Non-government	One non-government site to three government primary schools	One non-government site to two government secondary schools

Sieve Map 7 shows the location of existing and proposed schools



0 150 300 450 600 750 m

Scale - 1:22,000 @A4

SEIVE MAP 7: SITE ANALYSIS AND LAND CAPABILITY - SCHOOLS

SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE OF AUGUSTA
MARGARET RIVER

KEY	
	Regional Roads
	Property Boundaries
	High School (Government)
	Primary School (Government)
	Primary School (Non-Government)
	Subject Area

Site Analysis and Land Capacity

Employment

The accommodation and food services, construction, retail trade and agricultural sectors employ the bulk of the workforce (47%) within the Shire of Augusta-Margaret River. In particular, the accommodation and food services sector employs almost 14% of the local workforce. In 2010-11, The Augusta-Margaret River Shire had an estimated Gross Regional Product (GRP) of \$691.4 million. This reflects an annual growth of 8.4% since 2006-07 (AEC Group 2012).

Retail and Commercial - There is a total of 35,465m² of retail and commercial space in Margaret River. The majority of this space (81% or 23,920m²) is occupied by retail activities while 11% (3,270m²) is office space. The vacancy rate for the combined retail and commercial premises in Margaret River is 8%. Net demand for retail and commercial space (i.e. current and future demand in relation to existing supply) is presented in the table below.

The figures suggest that to 2016 there will continue to be an undersupply of commercial space and an oversupply of retail space in Augusta-Margaret River. Given that retail and commercial activities can occupy similar spaces; these figures suggest that the existing oversupply of retail space is insufficient to absorb the existing shortage of commercial facilities.

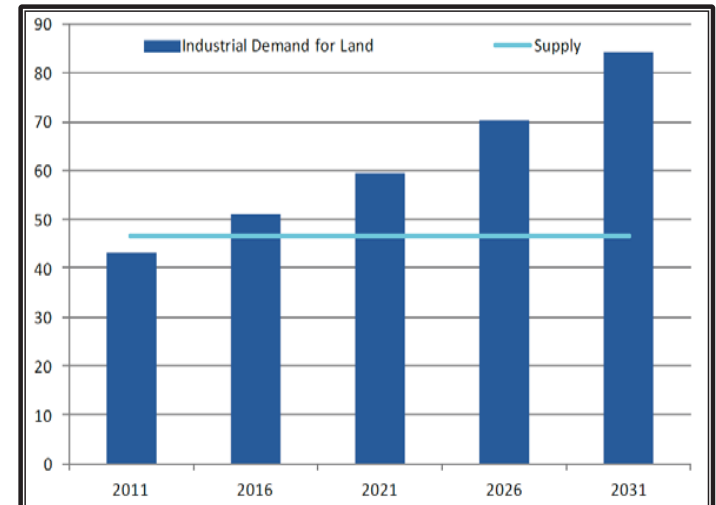
	2016	2031
Commercial Office	-7,592	-23,779
Government Office	-1,966	-3,226
Total Office	-9,558	-27,006
Groceries and specialty food	262	-1,719
Food and liquor catering	-3,584	-6,272
Clothing and accessories	1,220	-52
Furniture housewares and appliances	2,852	-2,180
Recreation and entertainment equipment	1,522	-557
Garden and hardware goods	1,310	-698
Other goods, personal services	1,325	-506
Total retail	4,907	-8,630
Overall Total	256	-35,636

Floorspace variance from required over time (m²) – source AEC Group

Over time, the deficit of floorspace will increase for both retail and commercial facilities culminating in an overall requirement for 35,636m² of additional floorspace by 2031.

Relevant to the EMRDSP, future floorspace requirements can be accommodated as follows:
 The future Rapids Landing Neighbourhood Centre south east of the town centre 2,995m² of retail and 2,485m² of office;
 A further Neighbourhood Centre in the order of 1,500m² of retail and 1,000m² of office; and
 The balance of retail (4,135m²) and office (23,050m²) can be accommodated in the existing town centre.

Industrial - The South West Region Industrial Lands Study (SWRILS) (Draft 2011) notes that the Augusta-Margaret River Shire contains 52ha of developable zoned industrial land. Of this, 32ha of land zoned for industrial development is located in Margaret River which comprises 100 lots in an area south west of the town that is currently unsewered. The majority of the balance land is located within Cowaramup. SWRILS advises that Margaret River is in need of additional light and general industrial land over the next 20 years.



Industrial Land Supply and Demand (ha) Augusta Margaret River (AECGroup)

It is expected that expanded economic activity in Augusta-Margaret River will result in increased industrial land demand, to 84ha by 2031. Current supply industrial land is estimated to be insufficient to meet the needs and requirements of future industry and excess demand is estimated to take effect before 2016. Identifying new industrial land precincts to meet future demand is required to ensure the region has adequate industrial land to support and attract future economic activity.

There is 65ha of land within the EMRDSP study area, which has been zoned to accommodate industrial development. If its development progresses in the near future, it will provide for Margaret River’s future needs beyond 2031 and provide a local employment option to future inhabitants of the structure plan area.

Sieve Map 8 shows the location of existing and proposed activity centres



0 150 300 450 600 750 m

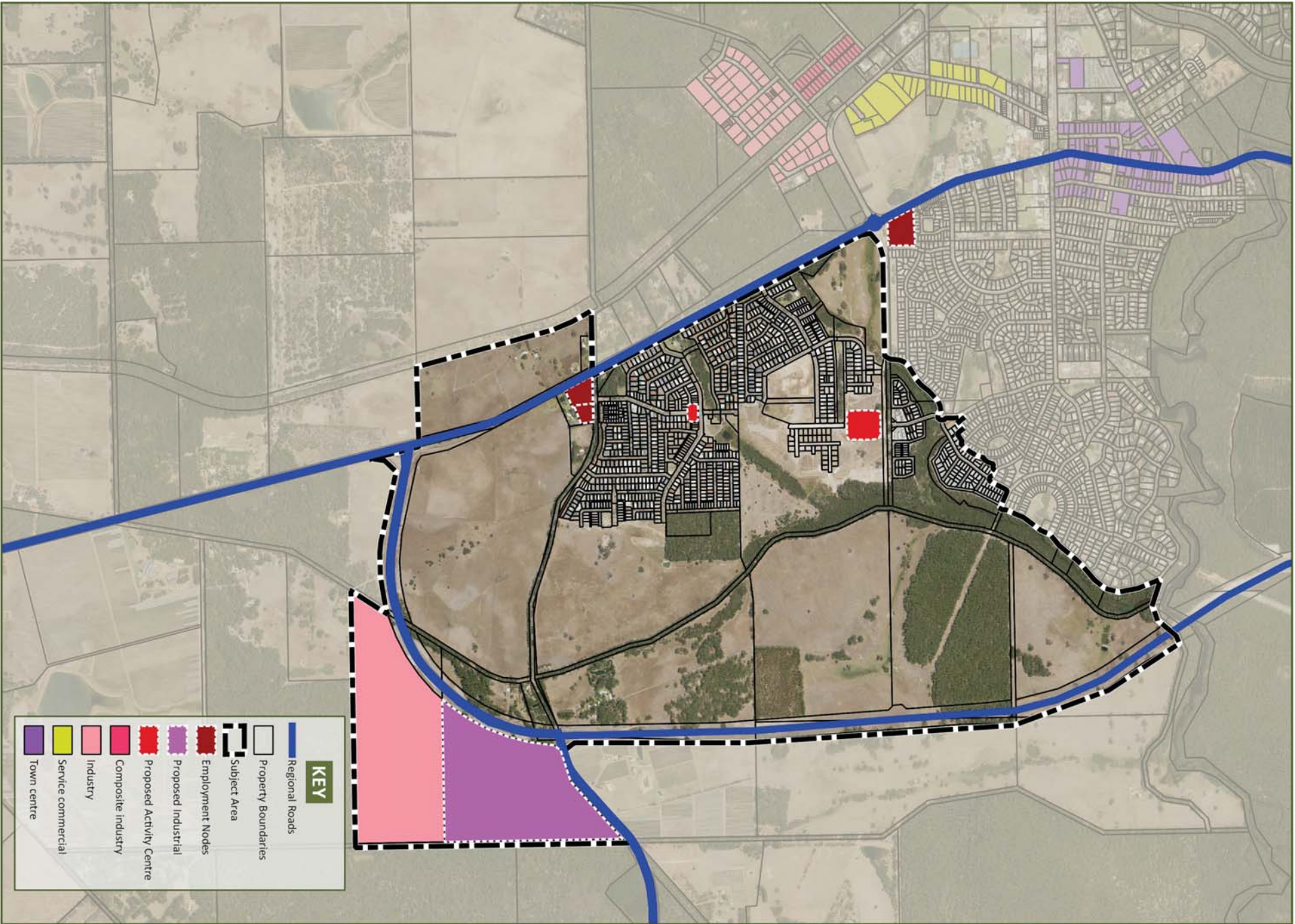
Scale - 1:22,000 @A4

SEIVE MAP 8: SITE ANALYSIS AND LAND CAPABILITY - EMPLOYMENT

SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE of AUGUSTA
MARGARET RIVER



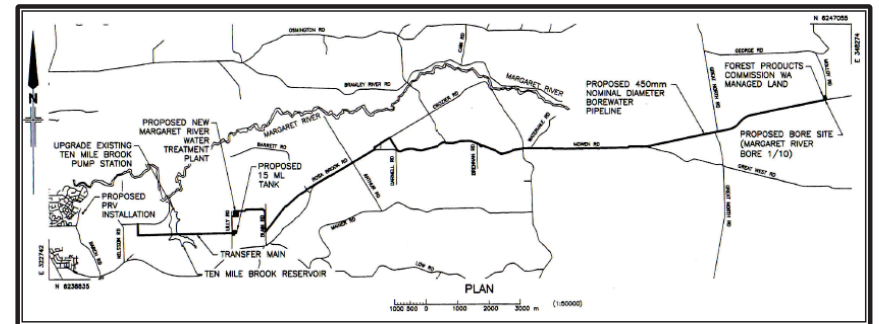
KEY	
	Regional Roads
	Property Boundaries
	Subject Area
	Employment Nodes
	Proposed Industrial
	Proposed Activity Centre
	Composite industry
	Industry
	Service commercial
	Town centre

Site Analysis and Land Capacity

Servicing

Water - Margaret River’s water supply needs are sourced from the 10 Mile Brook Dam which has a capacity of 1 million KL and a bore to the Yaragadee aquifer which can provide 1.6 million KL of dam ‘top up’. Capacity has been the subject of recent upgrades which are now sufficient to meet the residential growth provided for by this Structure Plan.

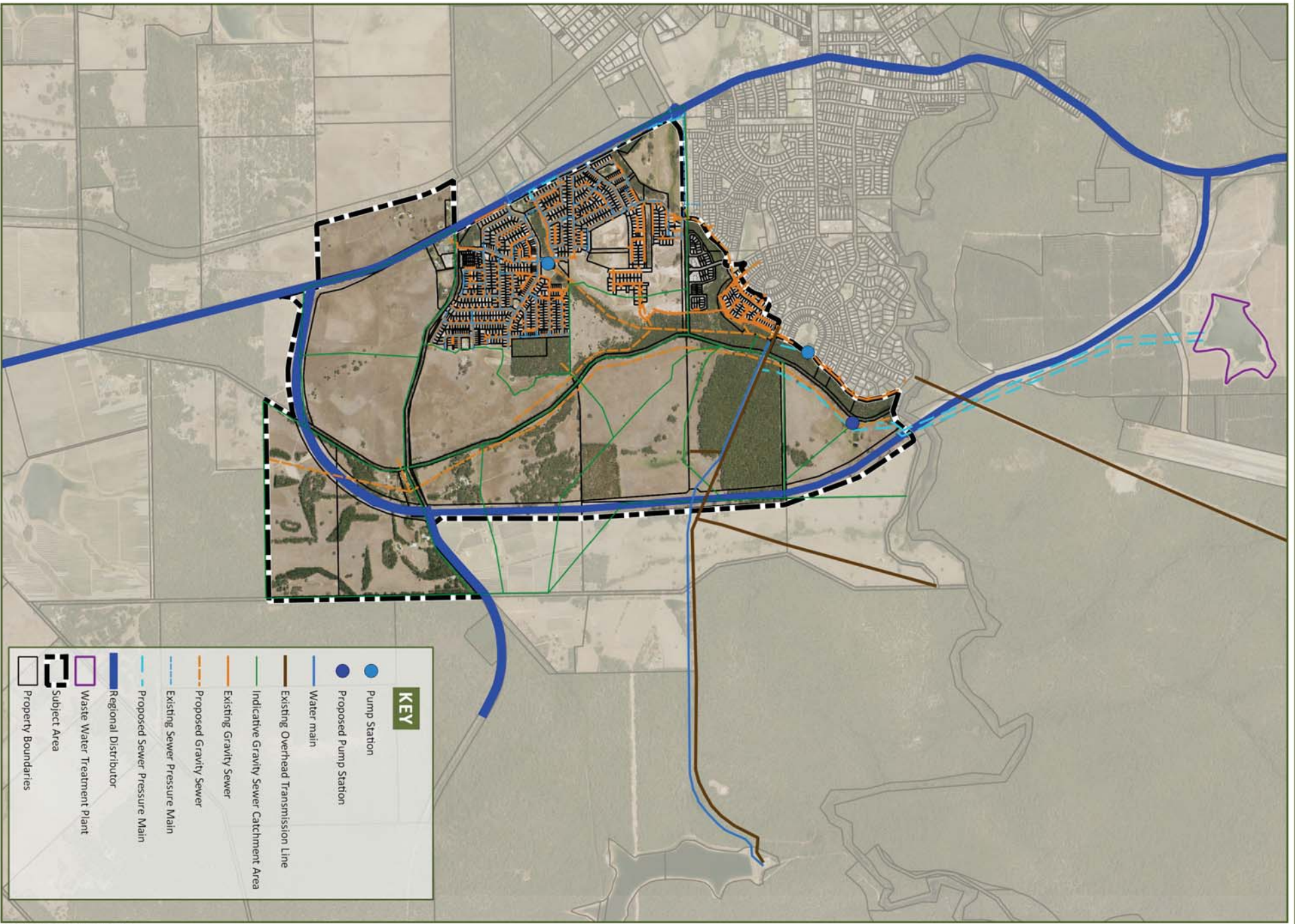
Wastewater - A Wastewater Treatment Plant (WWTP) located north of the Margaret River townsite has a licensed treatment capacity of 1,500 kL/day. It is currently operating at 73% of its capacity and can support another 456 connections. Planned upgrade of the WWTP to 3,000 kL/d Margaret River (WWTP) will increase its capacity to enable it to serve an additional 2700 premises.



Treated Wastewater - Waste water is currently treated, stored in a 450ML dam and returned as needed for use as irrigation on the Margaret River golf course and large areas of open space throughout Margaret River. Surplus water is dispersed on irrigated pine plantations. The applicable District Water Management Strategy recommends that future dwellings be provided by treated waste water via a third pipe system, for non-potable use in the home such as toilet flushing and garden irrigation. The existing storage dam has sufficient capacity to meet predicted POS and household water demands of 474ML per annum. Installation of pipework is to be at the developers cost, and purchase of the treated water will be charged to the householder.

Electricity - Margaret River is supplied via a single 66kV transmission line which extends from the Busselton Zone Substation. The overhead 66kV transmission line terminates at the edge of the town boundary opposite Riverslea Drive and from there an underground 66kV cable extends into the Margaret River Zone Substation located along Forrest Road. The capacity of the existing line is limited to approximately 1000 new dwellings. In order to provide for full development of the structure plan area the line will need to be upgraded to 132kV. Western Power plan to undertake the upgrade in 2023. In the intervening period, the Shire intends to investigate the feasibility of a community based wind farm, and development of such may obviate the need for the transmission line upgrade. New 22kV feeders will be required to transfer power from the zone substation to the new residential areas.

Sieve Map 9 shows the location of existing services



KEY	
	Pump Station
	Proposed Pump Station
	Water main
	Existing Overhead Transmission Line
	Indicative Gravity Sewer Catchment Area
	Existing Gravity Sewer
	Proposed Gravity Sewer
	Existing Sewer Pressure Main
	Proposed Sewer Pressure Main
	Regional Distributor
	Waste Water Treatment Plant
	Subject Area
	Property Boundaries

0 150 300 450 600 750 m

Scale - 1:28,000 @A4

SEIVE MAP 9: SITE ANALYSIS AND LAND CAPABILITY - SERVICING

SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE of AUGUSTA
MARGARET RIVER

Site Analysis and Land Capacity

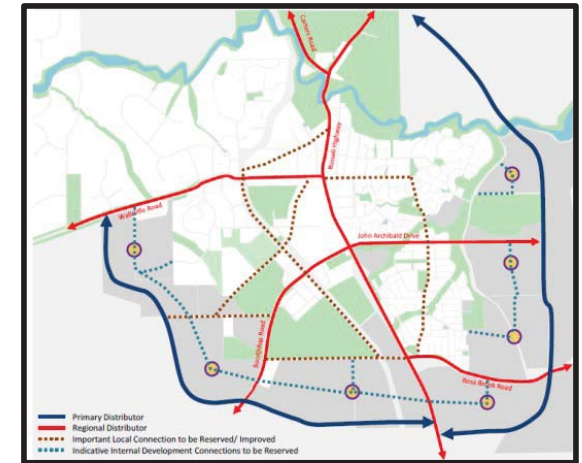
Transport

Roads - The most significant piece of transport infrastructure proposed for the Study Area is the Perimeter Road. The road, once constructed, will allow traffic to bypass the Margaret River town centre, removing heavy vehicles from the centre altogether and allowing streetscape and improvements to occur on Bussell Highway. It is predicted, that without completion of the bypass, traffic on Bussell highway through the centre of Margaret River will grow from approximately 10,000 (2012) to 21,500 (2035) vehicles per day.

In order to maintain the intended function of the perimeter road as a high speed, free flowing major transport route, only a very limited number of intersections to it are proposed, being at the termination of John Archibald Drive, Rosabrook Road (east), at the entrance to the proposed Industrial estate and access to the Margaret River airport.

Completion of the perimeter road will see it become the primary distributor road in the locality with Bussell Highway being redefined as a regional distributor together with John Archibald Drive and Rosabrook Road. Road planning for the subject land will need to provide adequate opportunities to connect new neighbourhoods together and to facilities located within the Margaret river town centre. Of particular importance is the establishment of a road connection to DIA1, which would otherwise be without legal access at such time as Darch Road is closed.

Pedestrian and Cycle Paths- The primary focus of cycle and pedestrian paths within the subject area will be the Darch Trail which will form the major north-south path corridor. Once access to the Darch corridor has been established there are multiple opportunities along its length to travel west where existing shops, parks and schools can be accessed. Not only is the Darch trail an important conduit for non-motorised travel but its natural beauty makes it a destination in its own right. This could be further enhanced by better linking the trail with the 'rail trail' via the river in the north and Rosabrook Road in the south to create a pedestrian and cycle loop, which takes in a range of landscapes. With particular reference to cycling, there is potential to link the proposed industrial estate with the 'town to coast' cycle link along Wallcliffe Road.



Sieve Map 10 depicts the existing road and path network



0 150 300 450 600 750 m

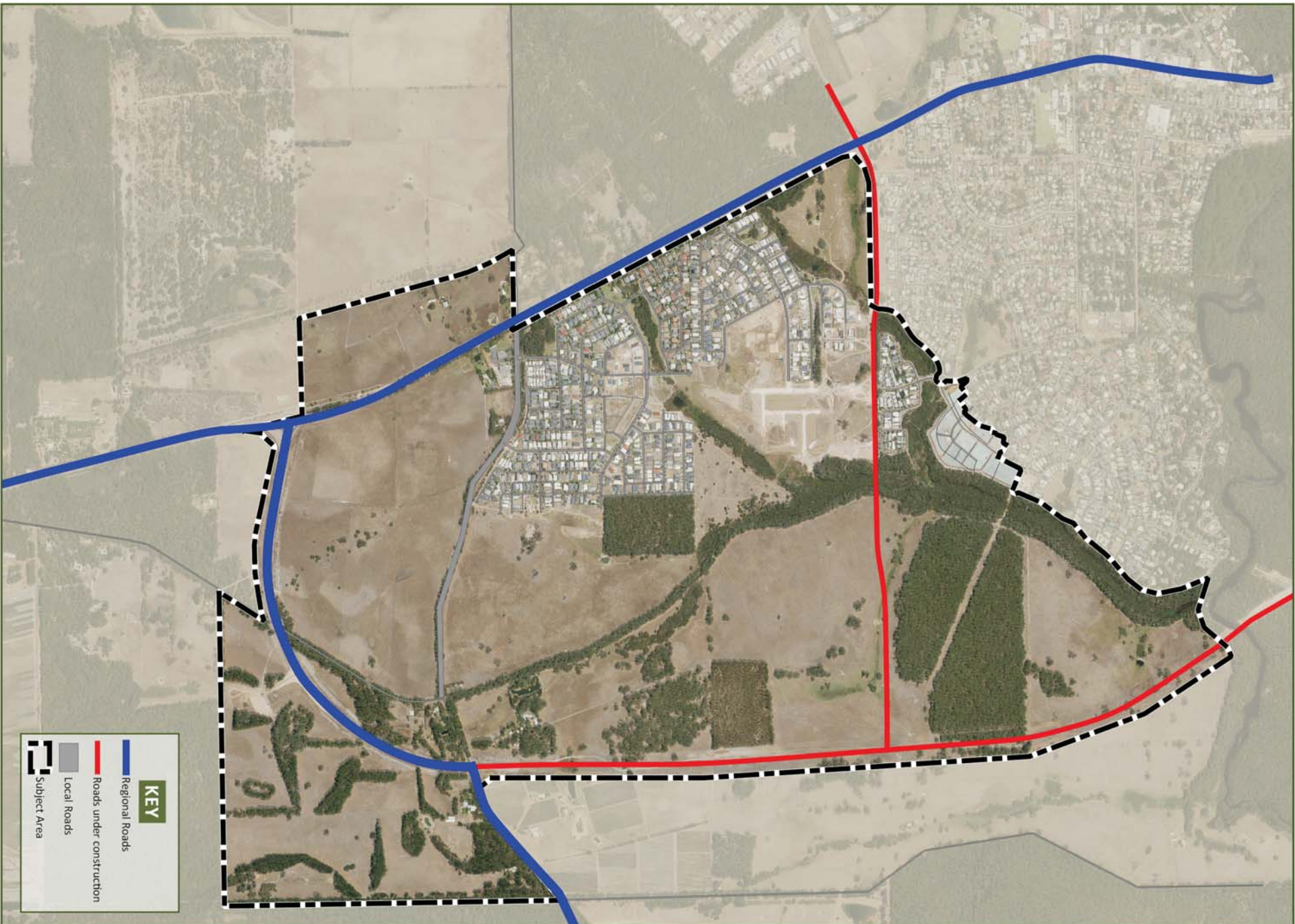
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SIEVE MAP 10: SITE ANALYSIS AND LAND CAPABILITY -
EXISTING ROAD AND PATH NETWORK

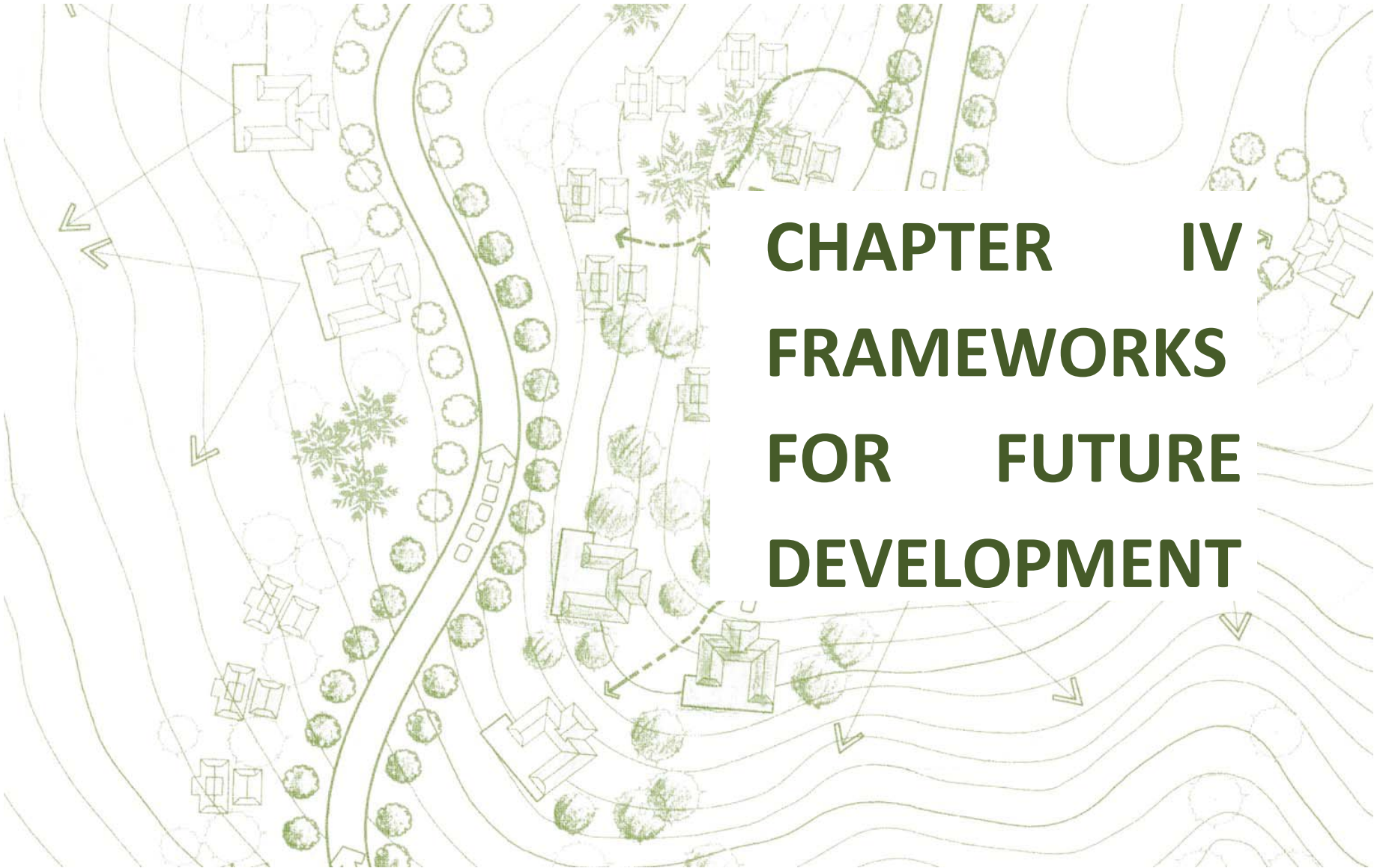
SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE of AUGUSTA
MARGARET RIVER



KEY	
	Regional Roads
	Roads under construction
	Local Roads
	Subject Area



CHAPTER IV
FRAMEWORKS
FOR FUTURE
DEVELOPMENT

Productive, Restorative and Ecological Framework

This Framework is guided by the known environmental and hydrological features of the land. The integration of productive agriculture with the urban environment as intended by the Hamlet Design Guidelines requires investigation of practical issues of implementation at the time of detailed structure planning. Key considerations will be the resultant management burden of reserved land and costs to the wider community and the potential for distributing lot sizes to enable urban agriculture including community focussed initiatives such as community gardens.

Objectives

- Maintenance and protection of significant indigenous landscape habitats.
- Effective management of stormwater by means which have additional benefits for ecology and biodiversity.
- Identification of suitable land for small scale productive agricultural uses.
- Facilitation of human interaction with the natural environment in mutually beneficial ways.

Outcomes

- Existing areas of vegetation are protected and enhanced.
- Natural areas dictate the location of future urban development.
- Creation of vegetation and ecological corridors that connect existing pockets of native bush and wetlands to form part of the open space network.
- A treatment train approach to stormwater which maintains natural drainage lines and improves water quality.
- A diversity of lot sizes including lots which are capable of small scale agricultural use.
- Fire management planning has regard to the protection of vegetation.
- Incorporation of opportunities for community based 'urban agriculture'.



Darch Trail

Framework Plan 1 depicts the productive, restorative and ecological framework.



KEY

- Grazing
- Foreshore
- Significant Vegetation
- Vegetated Linkages & Buffers
- Structure Plan Subject Area



Scale - 1:22,000 @A4

EAST MARGARET RIVER DISTRICT STRUCTURE PLAN
 PRODUCTIVE, ECOLOGICAL & RESTORATIVE FRAMEWORK

SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE of AUGUSTA
 MARGARET RIVER

Movement and Transportation Framework

The Shire's Integrated Transport Strategy (ITS, 2012) provides detailed analysis of future traffic and transport implications and encourages modal shift over time to non-motorised forms of transport. It includes a suite of actions and a hierarchy of roads and pathways which have been included in this Framework. Both the Perimeter Road and John Archibald Drive are essential transport infrastructure items necessary to ensure continued functioning of the transport network and must be realised to facilitate future development. The Shire's Path Plan (2015) sets out an integrated network of pedestrian and cycle ways.

Objectives

- A legible and interconnected road hierarchy and network.
- A path network that encourages walking and cycling as an alternative to motorised transit.

Outcomes

- John Archibald Drive links Bussell Highway with the Perimeter Road allowing strong east/west access including access to a future neighbourhood centre and the Margaret River town centre.
- A Neighbourhood connector links together the proposed neighbourhoods and provides strong north-south access. Care has been taken to locate the road so as to avoid clearing of vegetation.
- The neighbourhood connector traverses un-developed areas creating natural breaks between each neighbourhood.
- An iconic pedestrian and cycle loop on the periphery of the existing Margaret River urban area, is created by linking the 'Rail Trail', river foreshore and Darch trails.
- Multiple connections with existing trails.
- Permeable and safe transport network implementing the objectives of the ITS.



John Archibald Drive

Framework Plan 2 depicts the movement and transportation framework



0 150 300 450 600 750 m

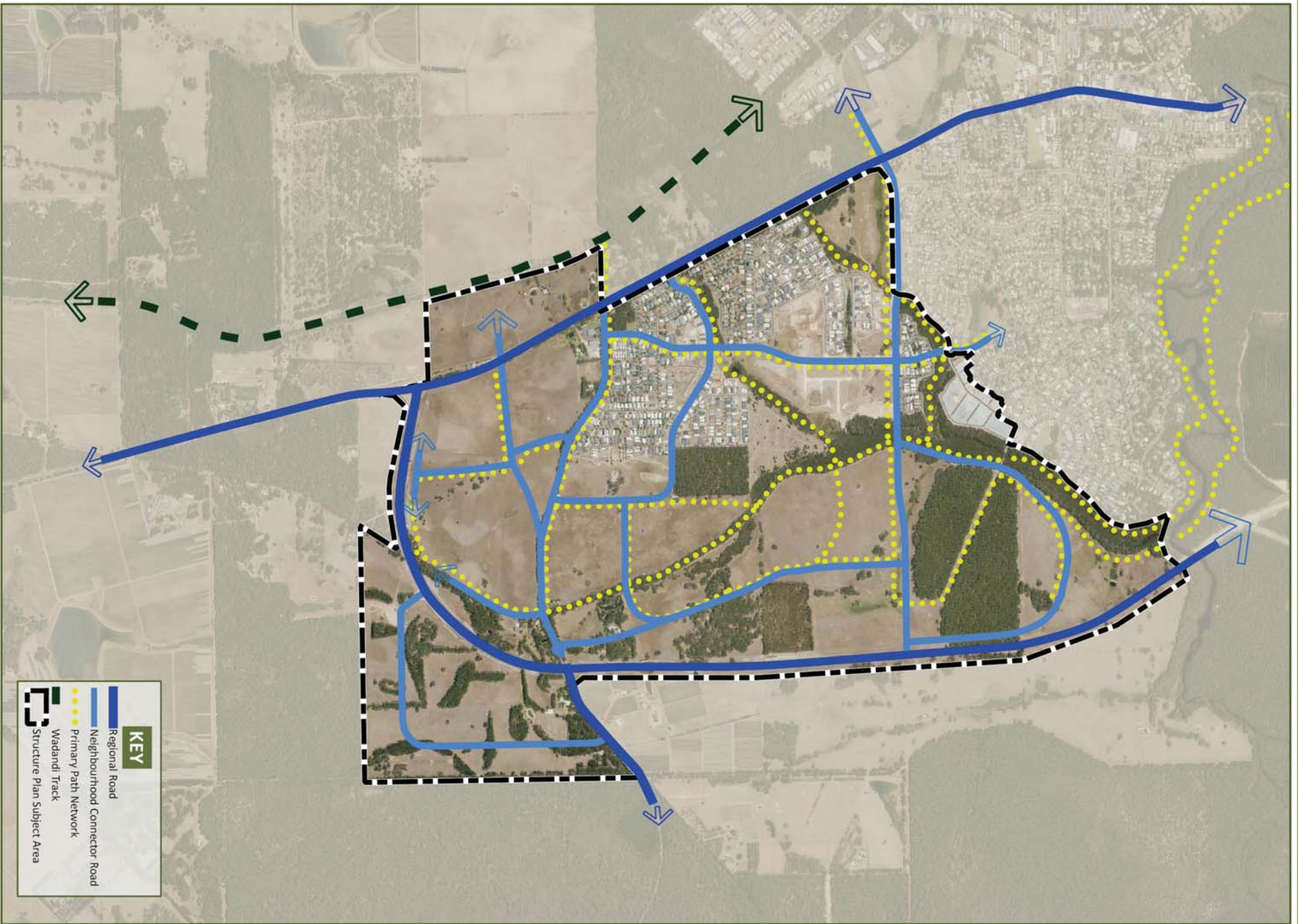
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EAST MARGARET RIVER DISTRICT STRUCTURE PLAN MOVEMENT & TRANSPORT FRAMEWORK

SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE of AUGUSTA
MARGARET RIVER



KEY	
	Regional Road
	Neighbourhood Connector Road
	Primary Path Network
	Wadandi Track
	Structure Plan Subject Area

Open Space and Recreational Framework

The provision of open space is influenced in part by environmental considerations leading to the collocation of significant environmental features and areas of passive open space. The Hamlet Design Guidelines and Shire's Public Open Space Strategy (2014) provide essential background to the preparation of the Framework and future detailed structure planning. Assessment of sub-district open space requirements shows that two additional full size active recreation areas will be required, with one shared facility at Rapids Landing primary school site and a further facility within DIAM4.

Objectives

- A healthy and active community.
- Provision for a range of user groups, ages and activities both passive and active.
- Integration of food production/reserve management as a form of active recreation
- Easy access for all residents to an integrated network of public open space experiences.
- Increase exercise and public health by encouraging walking, cycling and riding.
- Nature is dominant in the landscape and defines the character of future development.

Outcomes

- Most dwellings to have access to a park within 400 metres.
- A civic/recreation precinct which has the capacity for to accommodate district level recreation grounds/facilities which are easily accessible to future residents.
- Neighbourhood parks are located towards the edge of Neighbourhoods to service 600-800 dwellings.
- Local parks are within 150 to 300 metres of most dwellings.
- Natural areas form part of an interconnected path network.
- District level playing fields (2)



Neighbourhood Park – East Margaret River

Framework Plan 3 depicts the open space and recreational framework



0 150 300 450 600 750 m

Scale - 1:22,000 @A4

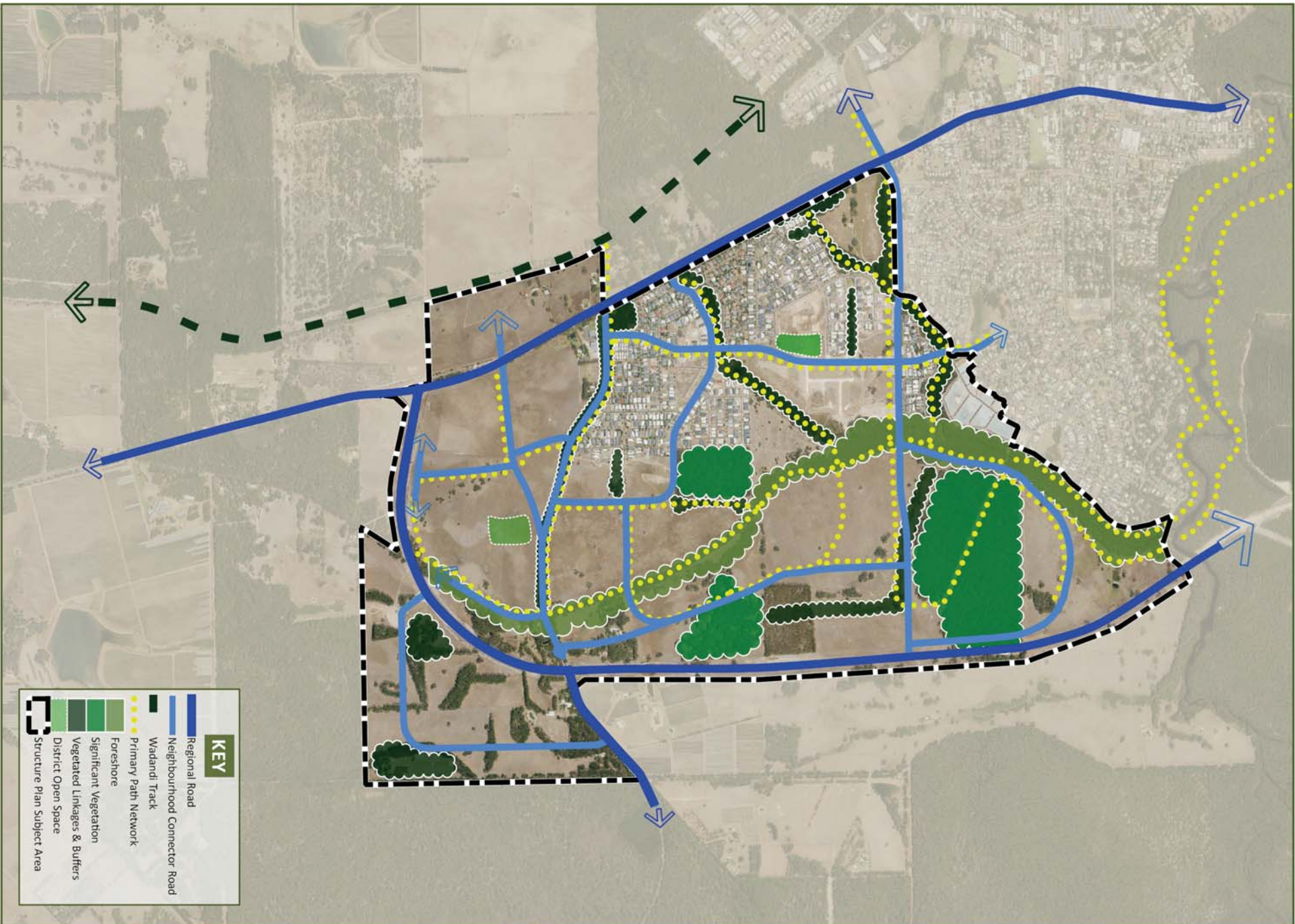
EAST MARGARET RIVER DISTRICT STRUCTURE PLAN

OPEN SPACE & RECREATIONAL FRAMEWORK

SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE of AUGUSTA
MARGARET RIVER



KEY	
	Regional Road
	Neighbourhood Connector Road
	Wadandi Track
	Primary Path Network
	Forest
	Significant Vegetation
	Vegetated Linkages & Buffers
	District Open Space
	Structure Plan Subject Area

Social, Cultural and Economic Framework

Community facility requirements have been identified and detailed in the Shire's Scheme Amendment No. 35: Development Contributions and are reflected in the Framework. Development in the study area will be inclusive of contributions towards capacity improvements in significant community facilities in the townsite.

The evaluation of future employment and retail/commercial needs identifies a need for limited distribution of smaller local focal points consisting of retail, commercial and civic opportunities which will need to be provided within each hamlet. Significant future industrial development in DIAM6 provides a significant employment opportunity. Opportunities to work from home will be encouraged.

The size and distribution of school sites has been guided by Liveable Neighbourhoods design policy.

Objectives

- A mixed economy with a high degree of resilience.
- Affordable options for start-up businesses.
- Safe, pleasant and local opportunities for social interaction.
- Community design which fosters an inclusive and respectful community spirit.
- Landuses are organised to allow residents to live, work, study and recreate within the local area.
- Approx. 2000 new dwellings, which in addition to existing dwellings will accommodate a future population of over 11,000 people.

Outcomes

- A civic/education precinct sufficient in size to provide for a primary school site of 4ha.
- A hierarchy of activity nodes. The larger being the Neighbourhood Centres, are located at Rapids Landing and in Hamlet 4. Smaller local centres are identified centrally within Hamlets 1-3.
- Activity nodes which take the form of a neighbourhood park or community garden, perhaps together with co-located child care or café facilities in instances where the hamlet population is not large enough to sustain neighbourhood shopping centres.
- Activity nodes and civic spaces which display a local 'Margaret River' style.
- Job opportunities in the retail, commercial, educational, industrial and agricultural sectors within close proximity of residential areas.



Framework Plan 4 depicts the social, cultural and economic framework



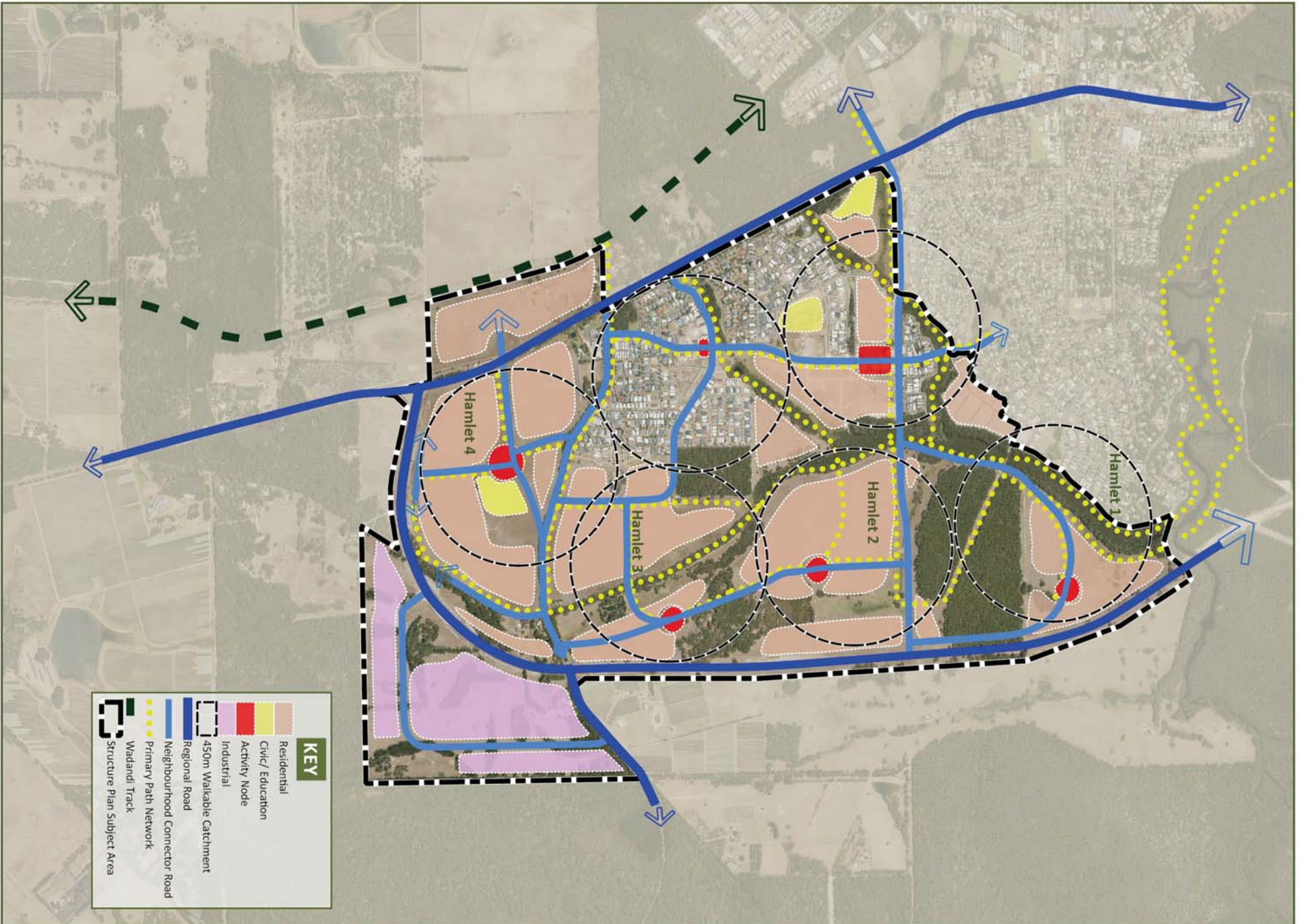
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EAST MARGARET RIVER DISTRICT STRUCTURE PLAN
SOCIAL, CULTURAL & ECONOMIC FRAMEWORK

SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE of AUGUSTA
MARGARET RIVER



KEY	
	Residential
	Civic/ Education
	Activity Node
	Industrial
	450m Walkable Catchment
	Regional Road
	Neighbourhood Connector Road
	Primary Path Network
	Wadandi Track
	Structure Plan Subject Area

Sustainability Framework

The Shire has a number of sustainability initiatives that will be coordinated and augmented through the preparation of an Environmental and Sustainability Strategy. Directions such as reduced energy consumption and pursuit of environmental improvements are embodied within the Local Energy Action Plan, Local Planning Strategy and Corporate Plan.

The principles of the DWMS, ITS and hence this Framework, build on these objectives.

Objectives

- A reduced ecological footprint
- A reduced carbon footprint
- Waste is minimised
- Water use is reduced through recycling
- Trips by motor vehicle are reduced
- Food is produced locally
- Resilience

Outcomes

- Implementation of the District Water Management Strategy predicated upon water use per person per year at 30% below the State Water Plan targets.
- Potential conversion of 304 ML/yr of sewerage per annum into 80ML/yr of non-potable water for irrigation and toilet flushing purposes returned to dwellings via a 'third pipe' system.
- Shady, attractive and direct pathway options which incentivise the use of walking and cycling as modes of transport.
- Significant areas of vegetation and natural waterways are protected and enhanced.
- Opportunities for local food production are provided at varying scales on and off site.
- The promotion of best practice urban development initiatives such as re-use of recycled water, whilst remaining flexible so as to accommodate new and emerging sustainable design elements.
- A strong sense of community fostered by thoughtful design of public and private places.



The East Margaret River District Structure Plan

The EMRDSP provides a framework for future urban development which will cater for growth of the Margaret River population until at least 2031. Its main features are:

- Provision for approximately 2000 new residential lots located within discreet neighbourhoods or hamlets;
- An alternative form of urban development recognising the principles of the Hamlet Design Guidelines in detailed planning;
- An interconnected road system which provides strong north/south and east/west options;
- The protection of natural assets including over 60ha of native vegetation;
- A focus on non-motorised forms of transport with multiple connections to the Darch and Rail trails which provide strong links to the Margaret River and other nature based recreation facilities;
- Opportunities for local shopping;
- A primary school;
- District open space which in the future, will be developed to provide additional active recreation facilities such as playing fields;
- Provision for a range of lot types and sizes;
- Employment opportunities across a variety of sectors; and
- Best practice water management including treatment and reuse of wastewater for irrigation purposes.



Hypothetical subdivision design. Source: Duany Plater-Zyberk & Co, 2009

As depicted upon the plan, the existing and growing neighbourhoods of Rapids Landing and Brookfield will be complimented by 4 residential DIA areas forming in whole or in part, 4 discreet hamlets or neighbourhoods, which are defined by 400m-450m walkable catchments, and constitute areas of 50-63ha. For each hamlet to be functional and sustainable in its own right, it is necessary for residential development to be focussed around a central node (which may consist of commercial and retail elements), the location of which is indicatively shown on the plan.

In a broad sense, the vision for each hamlet is set out as follows:

Hamlet 1 (north of John Archibald Drive) - The undeveloped portion of this hamlet is separated from existing low density residential development by the Darch Brook and from other future hamlets by a large area of native vegetation. It is also constrained by its shape and the perimeter road from accommodating sufficient density to achieve a self-sustaining neighbourhood. It would suit development at a density akin to that on the western side of the brook which would yield approximately 200 additional lots. Road access is currently an issue, however the EMRDSP provides for a connection from John Archibald Drive located so as to accord with a break in the vegetation adjacent to the brook.

Hamlet 2 (south of John Archibald Drive) - Neighbourhood of up to 750 dwellings with a focus on the highest and flat land near its centre which provides expansive views to the bushland to the north and the Darch Brook, which will screen the existing residential development beyond. John Archibald Drive will be extended providing access to and from the perimeter road and a direct route to the Margaret River town centre.

Hamlet 3 (straddles Darch Brook) - Local Structure Planning is underway which will provide for approximately 270 proposed dwellings on the western side of the brook. Development outcomes are somewhat constrained by the desire to retain as much of the native vegetation present on the land as possible, but could accommodate a further 270 lots. A Neighbourhood connector road will link Hamlets 1 to 3 with development on the western side of the Brook. A sufficiently wide break in the vegetation allows the road to transition centrally between Hamlet's 2 and 3.

Hamlet 4 (south of Rosa Brook Road) - Consists of high and predominantly dry and cleared land to the west of Darch Road, and a small area of wetter and vegetated land to the east. Capable of sustaining a neighbourhood of up to 750 dwellings with a lower density eastern fringe. Future residential development west of Bussell Hwy can be designed to form its own distinct hamlet.



Hamlet 1 – design example.



0 150 300 450 600 750 m

Scale - 1:22,000 @A4

EAST MARGARET RIVER DISTRICT STRUCTURE PLAN

SHIRE OF AUGUSTA-MARGARET RIVER



SHIRE of AUGUSTA
MARGARET RIVER

KEY	
	Residential
	Civic/ Education
	Activity Node
	Industrial
	District Open Space
	Foreshore
	Significant Vegetation
	Vegetated Linkages & Buffers
	Perimeter Road Buffer
	Structure Plan Subject Area
	Regional Road
	Neighbourhood Connector Road
	Primary Path Network
	Wadandi Track

