



# DOCUMENT HISTORY AND STATUS

**Lots 1793-1795 Matison Street,  
Southern River (Sub-Precinct 3C)  
Structure Plan**

**Prepared By:  
Taylor Burrell Barnett  
Town Planning and Design**

Level 7, 160 St Georges Terrace  
PO Box 7130 Cloisters Square  
PERTH WA 6850  
Phone: 9226 4276  
Fax: 9322 7879  
admin@tbbplanning.com.au

**In association with:**  
Pritchard Francis  
KCTT  
360 Environmental  
EPCAD & LD Total  
Eco Logical Australia & RUIC Fire  
Herring Storer Acoustics

Revision	Reviewer	Date Issued
16/073-0	ST	Feb 2017
16/073-1	ST	Mar 2017
16/073-2	ST	April 2017
16/073-3	ST	Aug 2019
16/073-4	LB	Dec 2020
16/073-5	ST	Aug 2021
16/073-6	ST	June 2023

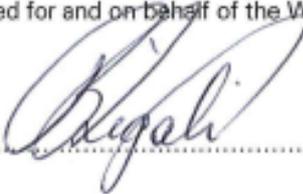
# ENDORSEMENT

This Structure Plan is prepared under the provision of the **City of Gosnells Local Planning Scheme No. 6**

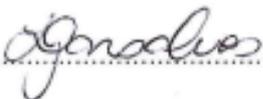
IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS APPROVED BY RESOLUTION OF THE  
WESTERN AUSTRALIAN PLANNING COMMISSION ON:

..... 10 October 2019 ..... 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

..... 10 October 2019 ..... Date

..... 10 October 2029 ..... Date of Expiry

# TABLE OF AMENDMENTS

Amendment No.	Summary of the Amendment	Amendment Type	Date Approved by WAPC
1	<ul style="list-style-type: none"><li>Modification to eastern Conservation Category Wetland buffer from 50m to 30m.</li></ul>	Standard	08 September 2023

# EXECUTIVE SUMMARY

This Structure Plan is prepared to guide the subdivision and development of Lots 1793-1795 Matison Street, Southern River (hereafter referred to as 'subject land'). The subject land is located:

- Within the municipality of the City of Gosnells;
- Approximately 25km from the Perth Central Business District; and
- Approximately 2km north of Tonkin Highway.

The subject land falls within the boundaries of, and is consistent with, the adopted Southern River Precinct 3 Local Structure Plan (LSP). The subject land encompasses predominately cleared lands and forms part of a Resource Enhancement Wetland. The Structure Plan proposes development of land for:

- Residential purposes comprising a mix of low to medium residential densities;
- Public Open Space (POS) including wetland buffer; and
- Access streets.

## Amendment No. 1

Amendment No. 1 was prepared to modify the original endorsed Structure Plan, and was approved by the WAPC on 5<sup>th</sup> April 2022. The purpose of the amendment was to modify the eastern portion of the Conservation Category Wetland (CCW) buffer from 50m to 30m. The following report and associated mapping have been updated to incorporate Amendment No.1.

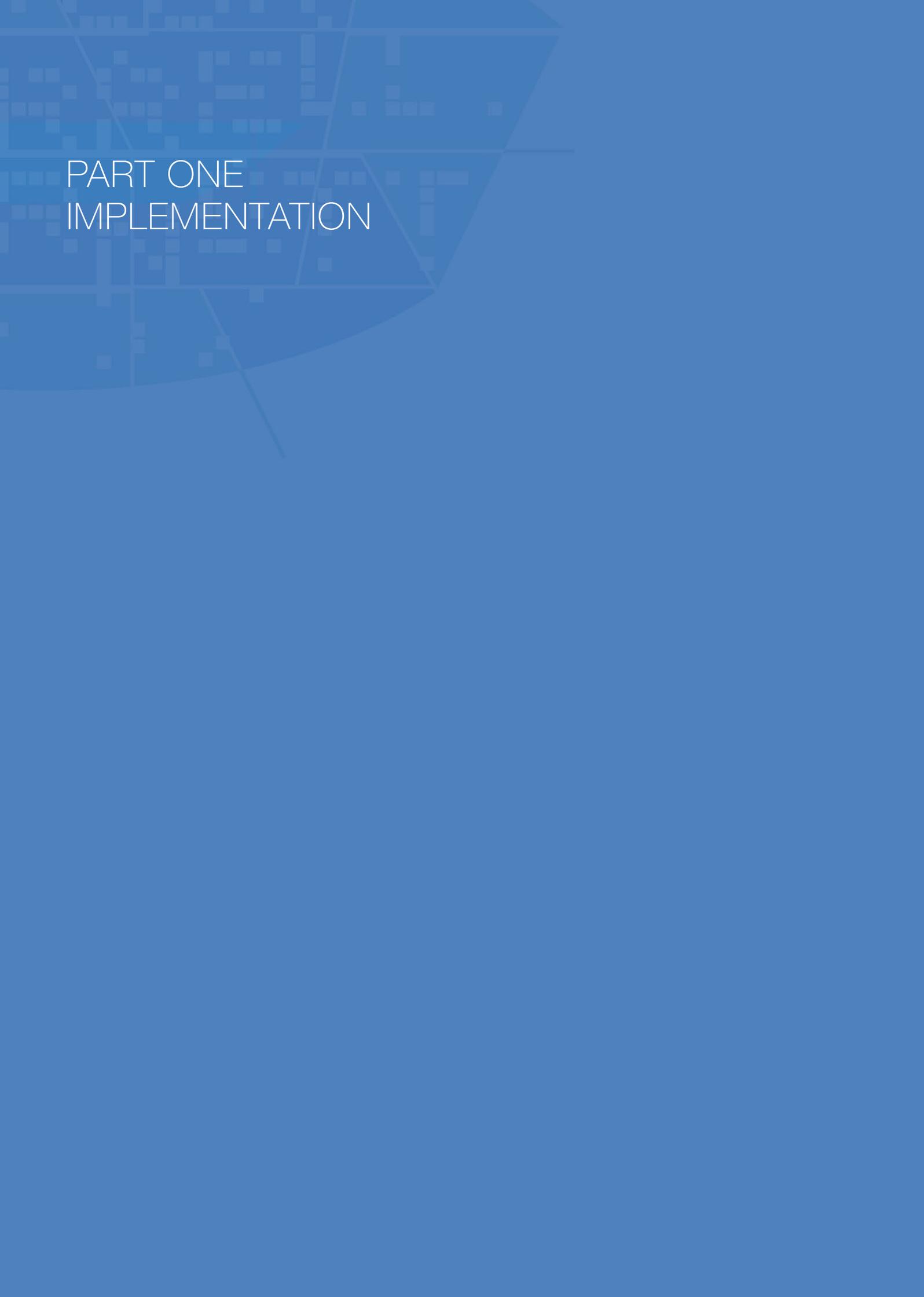
An updated summary of the Structure Plan, incorporating Amendment 1 is provided in the table below.

Item	Data		Structure Plan Ref. (Section No.)
Total area covered by the Structure Plan	12.6060 ha		1.2.3
Area of each land use proposed:	<b>Hectares</b>	<b>Lot Yield</b>	3.3
Zones			
• Residential	4.7963 ha	123 lots	
Reserves			
• Road Reserve	2.6676 ha		
• Public Open Space & Drainage	5.1421 ha		
Total Estimated Lot Yield	Approximately 123 lots		3.3.1
Estimated No. of Dwellings	Approximately 123 dwellings		3.3.1
Estimated Residential Site Density	23.8 dwellings per site/ha		3.3.1
Estimated Population	Approximately 390 people (based on 2.95 persons / dwelling)		3.3.1
No. of High Schools	N/A		3.7
No. of Primary Schools	N/A		3.7
Estimated Commercial Floor Space	N/A		3.8
Estimated area and percentage of Credited Public Open Space given over to:	0.8574 ha	10.3%	3.4.1
• Local Open Space (excluding, Dedicated Drainage Reserve, Bush Forever)			
Estimated percentage of natural area	5.3212 ha	42.2%	3.4.1
• Forrestdale Main Drain, Conservation Category Wetland Buffer, Bush Forever			



# TABLE OF CONTENTS

ENDORSEMENT	III	2.4 ABORIGINAL HERITAGE	35
TABLE OF AMENDMENTS	IV	2.5 EXISTING MOVEMENT NETWORK	35
EXECUTIVE SUMMARY	V	2.5.1 REGIONAL ROADS	35
PART ONE IMPLEMENTATION	1	2.5.2 DISTRICT AND LOCAL ROADS	35
1 STRUCTURE PLAN AREA	2	2.5.3 PEDESTRIAN NETWORK AND CYCLING	35
2 OPERATION	2	2.5.4 PUBLIC TRANSPORT	36
3 STAGING	2	3 STRUCTURE PLAN	37
4 SUBDIVISION AND DEVELOPMENT REQUIREMENTS	2	3.1 DESIGN PRINCIPLES	37
4.1 LAND USE	2	3.1.1 OPPORTUNITIES AND CONSTRAINTS	37
4.1.1 RESIDENTIAL	2	3.2 DEVELOPMENT CONCEPT PLAN	39
4.1.2 LOCAL OPEN SPACE	3	3.3 LAND USE	41
4.1.3 LOCAL ACCESS ROADS	3	3.3.1 RESIDENTIAL	41
4.2 DEVELOPMENT	3	3.3.2 DENSITY TARGETS	41
4.2.1 BUSH FOREVER SITE 464	3	3.4 OPEN SPACE	42
5 LOCAL DEVELOPMENT PLANS	3	3.4.1 PUBLIC OPEN SPACE	42
6 OTHER REQUIREMENTS	5	3.4.2 WETLAND AND BUFFERS	45
6.1 BUSHFIRE MANAGEMENT	5	3.4.3 MANAGEMENT ARRANGEMENTS	45
6.2 ROAD WIDENING	5	3.5 MOVEMENT NETWORK	48
6.3 DEVELOPMENT CONTRIBUTIONS	5	3.5.1 ROAD NETWORK AND TRAFFIC VOLUMES	48
7 ADDITIONAL INFORMATION	6	3.5.2 TRAFFIC MANAGEMENT DEVICES	50
PART TWO EXPLANATORY INFORMATION	8	3.5.3 MATISON AND HOLMES STREETS INTERSECTION REQUIREMENTS / WIDENING	51
1 PLANNING BACKGROUND	9	3.5.4 PEDESTRIAN AND CYCLING NETWORK	51
1.1 INTRODUCTION AND PURPOSE	9	3.5.5 PUBLIC TRANSPORT	51
1.2 LAND DESCRIPTION	10	3.6 WATER MANAGEMENT	51
1.2.1 LOCATION	10	3.6.1 LOCAL WATER MANAGEMENT STRATEGY	51
1.2.2 LAND USE	13	3.7 EDUCATION FACILITIES	52
1.2.3 LEGAL DESCRIPTION AND OWNERSHIP	13	3.8 ACTIVITY CENTRES AND EMPLOYMENT	52
1.3 PLANNING FRAMEWORK	15	3.9 INFRASTRUCTURE COORDINATION, SERVICING AND STAGING	53
1.3.1 ZONING AND RESERVATIONS	15	3.9.1 WATER SUPPLY	53
1.3.2 STRATEGIC PLANNING FRAMEWORK	19	3.9.2 WASTEWATER	53
1.3.3 PLANNING STRATEGIES	23	3.9.3 POWER SUPPLY	53
1.3.4 PLANNING POLICIES	26	3.9.4 TELECOMMUNICATIONS	53
1.3.5 PRE LODGEMENT CONSULTATION	28	3.9.5 GAS SUPPLY	54
2 SITE CONDITIONS AND CONSTRAINTS	32	3.10 DEVELOPER CONTRIBUTION ARRANGEMENTS	54
2.1 ENVIRONMENTAL ASSETS AND CONSTRAINTS	32	APPENDICES	
2.1.1 BUSH FOREVER SITE NO. 464	32	APPENDIX A BUSHFIRE MANAGEMENT PLAN ADDENDUM AND BUSHFIRE MANAGEMENT PLAN	
2.1.2 VEGETATION AND FLORA	32	APPENDIX B BUSH FOREVER AREA 464 - NEGOTIATED PLANNING SOLUTION	
2.1.3 FAUNA	32	APPENDIX C ENVIRONMENTAL ASSESSMENT REPORT	
2.1.4 WETLAND, BUFFERS AND RECLASSIFICATION	32	APPENDIX D TRANSPORT IMPACT ASSESSMENT	
2.2 LANDFORM AND SOILS	33	APPENDIX E LOCAL WATER MANAGEMENT STRATEGY	
2.2.1 LANDSCAPE AND TOPOGRAPHY	33	APPENDIX F ENGINEERING SERVICES REPORT	
2.2.2 ACID SULFATE SOILS	33	APPENDIX G ACOUSTIC ASSESSMENT	
2.2.3 CONTAMINATED SITES	33	APPENDIX H WETLAND AND WETLAND BUFFER MANAGEMENT STRATEGY	
2.3 GROUNDWATER AND SURFACE WATER	33		
2.3.1 GROUNDWATER	33		
2.3.2 SURFACE WATER	34		
2.3.3 FORRESTDALE MAIN DRAIN	34		
2.3.4 BUSHFIRE HAZARD	34		



# PART ONE IMPLEMENTATION

# 1 STRUCTURE PLAN AREA

This Structure Plan shall apply to the Southern River Sub-Precinct 3C (Lots 1793-1795 Matison Street, Southern River), being the land contained within the inner edge of the line denoting the structure plan boundary on the Structure Plan map (**Plan 1**).

# 2 OPERATION

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

# 3 STAGING

Development staging is still to be refined; however, it is likely that the subject land will be developed in 1-3 stages with the first stage of development occurring adjacent Matison Street and either side of the main north-south connector road. The second stage of development is likely to occur adjacent Holmes Street and the final stage to occur within the north-eastern portion of the subject land. The staging and development will be heavily influenced by market forces, connection to infrastructure and changes to the road network.

# 4 SUBDIVISION AND DEVELOPMENT REQUIREMENTS

## 4.1 LAND USE

The Structure Plan Map (**Plan 1**) identifies the following zones and reserves applicable to the Structure Plan area:

- Residential (R25);
- Residential (R40);
- Local Open Space; and
- Local Road Reserves.

Land use permissibility within the Structure Plan area shall accord with the land use permissibility of the corresponding zone/reserve in the City of Gosnells Local Planning Scheme No. 6 (LPS 6).

### 4.1.1 RESIDENTIAL

#### DWELLING TARGET

Objective: To provide for a minimum 22 dwellings per site ha within the Structure Plan area.

- a) Subdivisions are generally to achieve the following:
  - i. 22 dwellings per site ha.

## NOTIFICATION ON TITLE

The Council shall recommend to the WAPC that a condition be imposed on the grant of subdivision approval for a notification to be placed on the Certificate of Title to suitably respond to the following:

- i. Potential for future noise nuisance for properties within the 1km Kennel Zone Buffer, as depicted on **Plan 1**;
- ii. Existence of transport noise where noise levels exceed the outdoor noise criteria as per State Planning Policy 5.4 Road and Rail Noise (draft); and
- iii. The Bushfire Management Plan for lots with a bushfire attack level (BAL) rating of 12.5 or higher.

### 4.1.2 LOCAL OPEN SPACE

POS is to be provided generally in accordance with **Plan 1** and shall be vested in the Crown and managed by the local government.

The POS is to provide for passive recreation uses. A 30m buffer has been provided to the Resource Enhancement (REW), a 30m wetland buffer to the Conservation Category Wetlands (CCW) on Lot 1796 Matison Street and a 50m wetland buffer to the CCW on Lots 1801 – 1803. These buffer areas are to be identified as 'Local Open Space'.

Runoff from roads and small lots will infiltrate via bioretention gardens and swales within the POS and road reserves. Major events will be discharged offsite to the CCW as currently occurring via the swale installed beside the wetland.

### 4.1.3 LOCAL ACCESS ROADS

The introduction of additional roads within the precinct may occur at the subdivision application stage and in accordance with Part 10 of the *Planning & Development Act 2005*. These roads are to be designed to a residential standard in accordance with the requirements of the City of Gosnells.

## 4.2 DEVELOPMENT

Development of land within the Structure Plan area is to be generally in accordance with the standards and requirements of LPS 6. Proposed variations to these standards are to be outlined within a development application and will be considered by the determining authority with due regard to the intent and purpose of the standards.

### 4.2.1 BUSH FOREVER SITE 464

Subdivision and development will not be commenced for land within the former Bush Forever area over Lot 1795 until such a time as the remaining Bush Forever area over Lots 1793 and 1794 has been ceded free of cost to the Crown, and the process to remove the Bush Forever layer in the Metropolitan Region Scheme over Lot 1795 has commenced.

# 5 LOCAL DEVELOPMENT PLANS

Local Development Plans (LDPs) shall be prepared for lots with one or more of the following attributes:

- lots with a bushfire attack level (BAL) of 12.5 or greater;
- lots with an area less than 260m<sup>2</sup> and/or with frontages less than 10.5m;
- lots with access restrictions (particularly adjacent to the roundabout proposed on Matison Street); and
- lots which are affected by SPP 5.4 Road and Rail Noise.

The main issues to be addressed include:

- street and lot boundary setbacks;
- vehicular access arrangements; and
- noise-attenuation requirements.

LDPs shall be prepared in a manner and form in accordance with Part 6, Clause 48(1) of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

# 6 OTHER REQUIREMENTS

## 6.1 BUSHFIRE MANAGEMENT

This Structure Plan is supported by a Bushfire Management Plan (BMP) prepared by RUIC Fire, and two BMP addendums prepared by Eco Logical Australia. The reports are contained at **Appendix A**.

Development will have regard to the BAL Assessment contained in the addendum, and be determined in accordance with Schedule 2, Part 10A of the *Planning and Development (Local Planning Schemes) Regulations 2015* and Section 6.3 of SPP 3.7 Planning in Bushfire Prone Areas.

An LDP is required to be prepared for all lots with a BAL of 12.5 or greater.

The Council shall recommend to the WAPC that a condition be imposed on the grant of subdivision approval for a notification to be placed on the Certificate of Title to suitably respond to the following:

- That a lot with a bushfire attack level BAL rating of 12.5 or higher is subject to a BMP.

## 6.2 ROAD WIDENING

The Structure Plan (**Plan 1**) depicts road widening for Holmes Street and Matison Street in accordance with the 'Other Regional Roads' reservation under the Metropolitan Region Scheme. The land required for road widening shall be set aside at the time of subdivision of adjacent land.

It is also proposed that the intersection of Holmes Street (future Garden Street) and Matison Street is ultimately modified, by others to provide a four-way intersection at 2018 and roundabout at 2028.

## 6.3 DEVELOPMENT CONTRIBUTIONS

The City of Gosnells is seeking to establish a Development Contribution Plan (DCP) within LPS 6, inclusive of the Structure Plan area through Amendment No. 110 to LPS 6.

The timing for the completion of this Plan is not known at this stage. In the interim, it is understood a Developer Contribution Agreement will be negotiated between the developer and the City of Gosnells. The infrastructure items proposed to be funded under this DCP will be developed in accordance with State Planning Policy 3.6 Development Contributions for Infrastructure (SPP 3.6).

## 7 ADDITIONAL INFORMATION

The table below outlines additional information that will be required at future approval stages. Additional information requirements may not be limited to those listed; the City or WAPC may require other information in relation to particular proposals.

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

Additional information	Approval stage	Approving Authority
<b>Water Management</b>		
Local Water Management Strategy	Documented in Structure Plan and to be considered as part of Structure Plan process. Implementation as part of UWMP	WAPC, City, DoW
Urban Water Management Plan (UWMP)	Condition of subdivision	WAPC, City, DoW
<b>Environment</b>		
Environmental Assessment Report	Documented in Structure Plan Implementation via Subdivision	WAPC, City, OEPA,
Bushfire Management Plan	Documented in Structure Plan Implemented via subdivision and development	WAPC, City
Foreshore Management Plan	Condition of Subdivision	WAPC, City, DPaW
Landscape Management Plan	Condition of subdivision	City
Acoustic Assessment	Documented in Structure Plan Implemented through LDP's	City
Mosquito Management Plan	Condition of Subdivision	WAPC, City, DPaW
<b>Engineering</b>		
Servicing Report	Documented in Structure Plan Condition of Subdivision	City, Water Corp, Western Power, ATCO Gas
Acid Sulphate Soils	Condition of Subdivision	City
Geotechnical	Condition of Subdivision	City
<b>Other</b>		
Local Development Plan(s)	Condition of subdivision if deemed necessary by City	City

**LEGEND**

**REGION SCHEME RESERVES**

Other Regional Roads

**LOCAL SCHEME RESERVES**

Local Open Space

**LOCAL SCHEME ZONES**

Residential (R25)

Residential (R40)

**OTHER CATEGORIES**

Amendment Area

Approved Structure Plan Boundary

Key Access Street

Resource Enhancement Wetland and 30m Buffer

Forrestdale Main Drain Reserve (20m wide)

Bush Forever Area

CCW

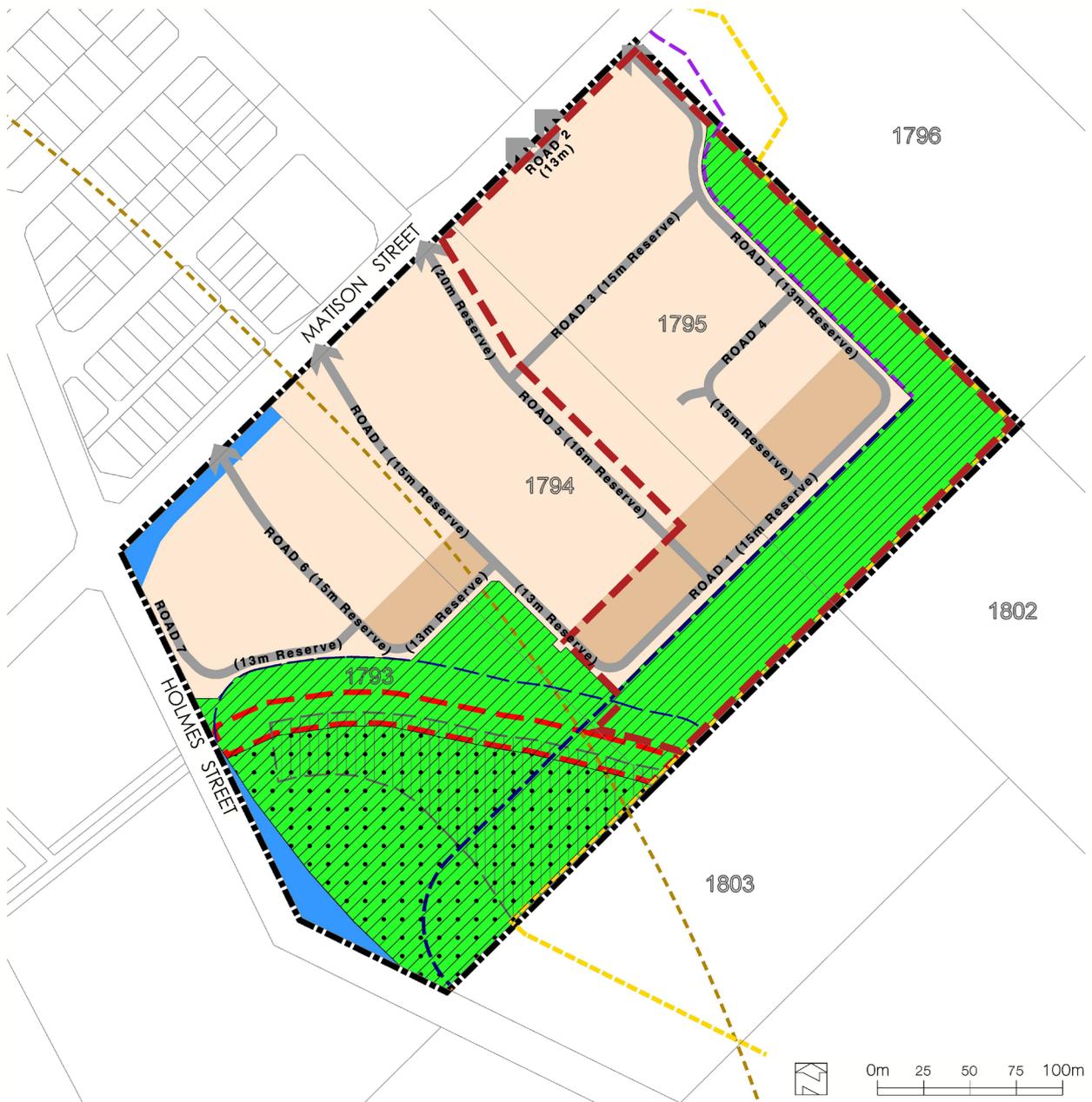
CCW 30m Buffer

CCW 50m Buffer

1km Kennel Zone Buffer

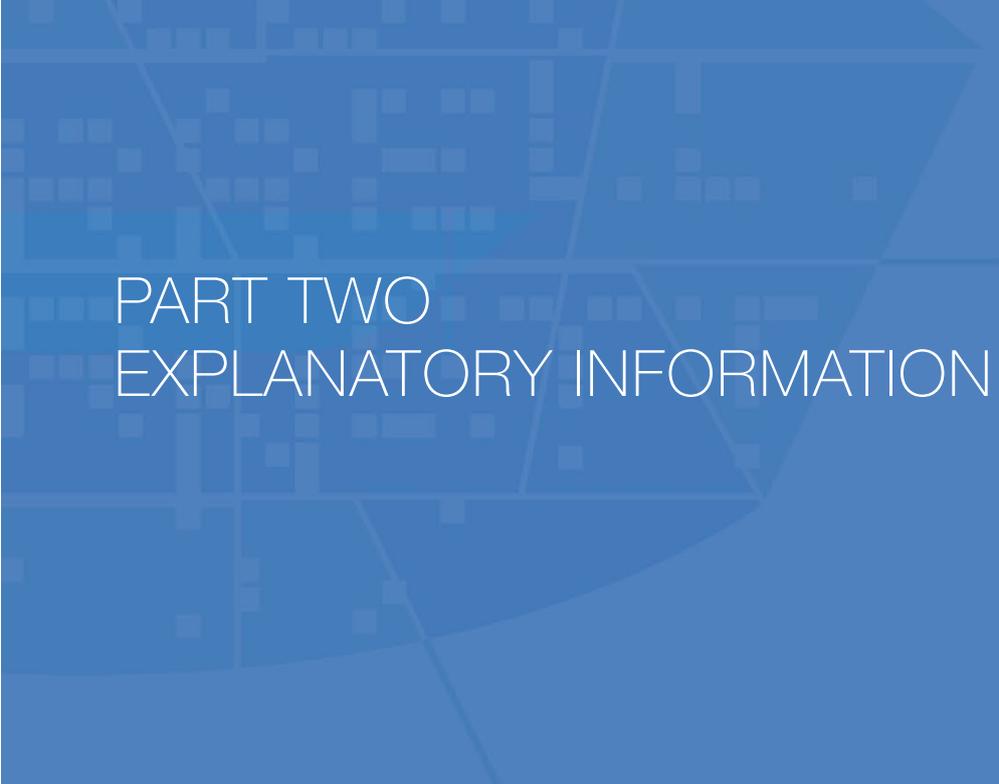
**NOTE**

The existing Bush Forever Site 464 is subject to further planning to remove the site extent over Lot 1795 from the Metropolitan Region Scheme.



Lots 1793 - 1795 Matison Street, Southern River

Plan 1 – Structure Plan Map



PART TWO  
EXPLANATORY INFORMATION

# 1 PLANNING BACKGROUND

## 1.1 INTRODUCTION AND PURPOSE

The 'Southern River Sub-Precinct 3C (South)' Structure Plan has been prepared as a prerequisite to subdivision for land zoned 'Residential Development' under the City of Gosnells Local Planning Scheme No. 6. The geographic area the subject of this report, comprises Lots 1793-1795 Matison Street, Southern River (hereafter referred to as the 'subject land').

The Structure Plan was originally endorsed by the Western Australian Planning Commission (WAPC) on 10 October 2019. The Structure Plan was approved with a generic 50m buffer to the Conservation Category Wetland (CCW). Since the endorsement of the Structure Plan, an amendment to the Structure Plan (Amendment No. 1) has been endorsed by the WAPC to modify the width of the buffer to the eastern boundary of the CCW from 50m to 30m, based on site-specific analysis that adequately demonstrate the suitability of the reduced buffer. The following report and associated mapping have been updated to incorporate Amendment No.1.

The Structure Plan outlines the vision for the ultimate development of the subject land and establishes key requirements. The Structure Plan also includes 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 the information contained within this report is detailed in **Table 1**.

**TABLE 1: PROJECT TEAM AND RESPONSIBILITIES**

Project Role	Consultant
Town Planning and Urban Design	Taylor Burrell Barnett
Civil Engineering	Pritchard Francis
Environmental Management and Hydrology	360 Environmental & Emerge Associates
Traffic and Transport	KCTT
Landscape	LD Total and EPCAD
Bush Fire Management	RUIC Fire & Eco Logical Australia

## 1.2 LAND DESCRIPTION

### 1.2.1 LOCATION

The subject land is located in the South-East Corridor of the Perth Metropolitan Region and falls within the municipal boundaries of the City of Gosnells, approximately 25km from the Perth Central Business District.

The subject land is situated within the suburb of Southern River as shown in **Figure 1** and is bounded by Matison Street (a future Neighbourhood Connector road linking with Ranford Road) to the north-west, Holmes Street (a future District Distributor/Other Important Regional Road linking to Tonkin Highway) to the south-west, Lot 1796 to the north-east and Lots 1802 & 1803 to the south-east (comprising a Bush Forever Site including a large conservation category (mapped) wetland) that both extend into the landholding along its north-east and south-eastern boundaries.

The subject land is well connected to the regional movement network, being approximately 2km north of Tonkin Highway, 3km north-east of the Ranford Road and Southern River intersection and 4.5km west of the Tonkin Highway and Albany Highway interchange.

Within the wider district context as shown in **Figure 2**, the subject land is well positioned to capitalise on existing employment opportunities associated with the Canning Vale, Maddington, Kelmscott and Forrestdale Industrial Areas.

Both The Vale & Southern River Neighbourhood Centres are located within 2km of the property, with the Livingstone & Gosnells District Level Shopping Centres some 6km.

Armadale is the nearest Strategic Regional Centre; however, a broader range of shopping and services are offered at the slightly more distant Cannington Strategic Regional and Cockburn Central Secondary Centres.

It also benefits from its proximity to both the Champion Lakes Regional Recreational (2km) and Sutherlands Park District Sporting Facilities (1km).

**LEGEND**

-  Amendment Area
  -  Approved Structure Plan Boundary
  -  Precinct Boundary
-  0m 200 400 600 800m

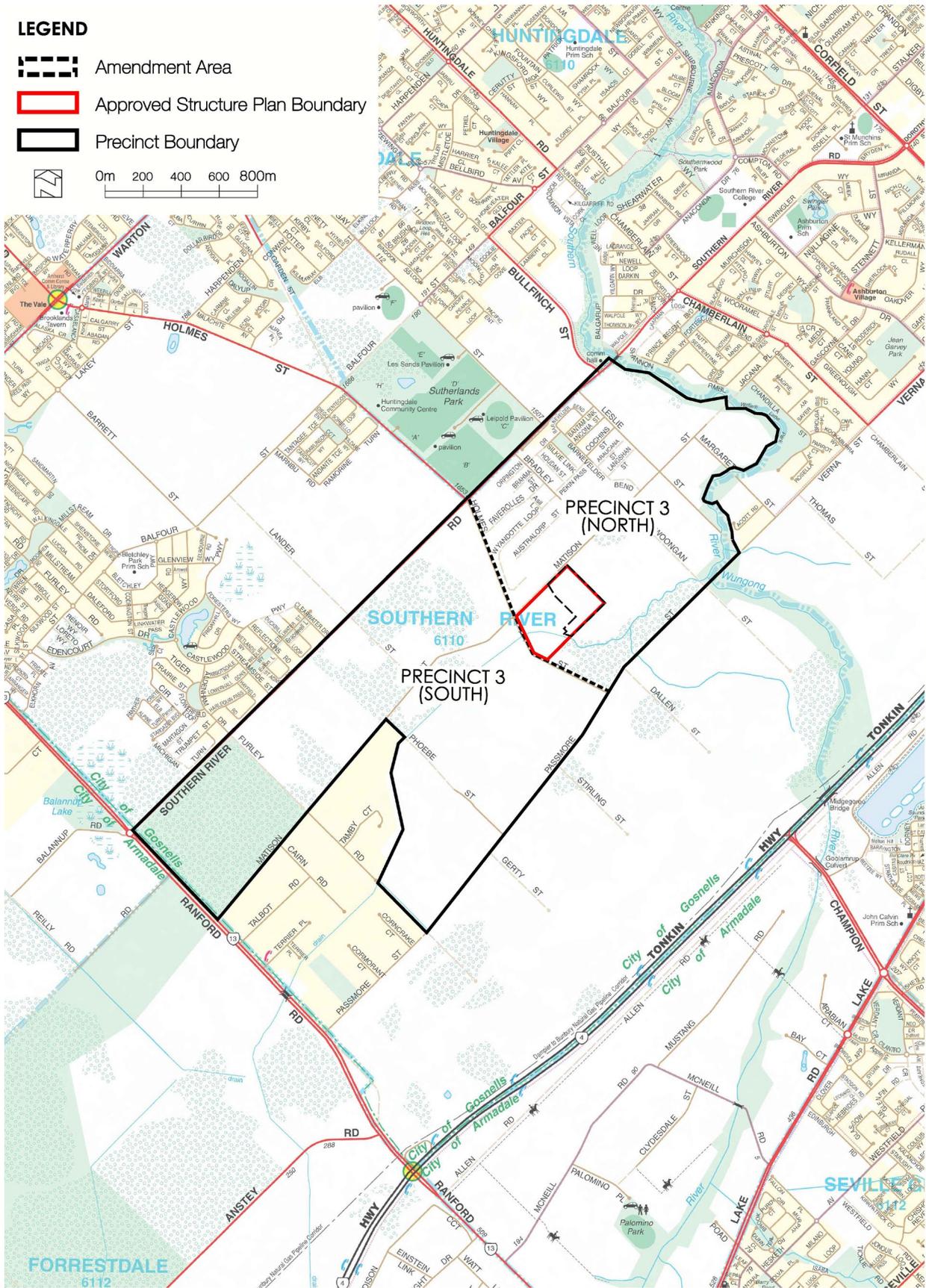


Figure 1 - Location Plan

**LEGEND**



Amendment Area



Approved Structure Plan Boundary



0m 400 800 1200 1600m

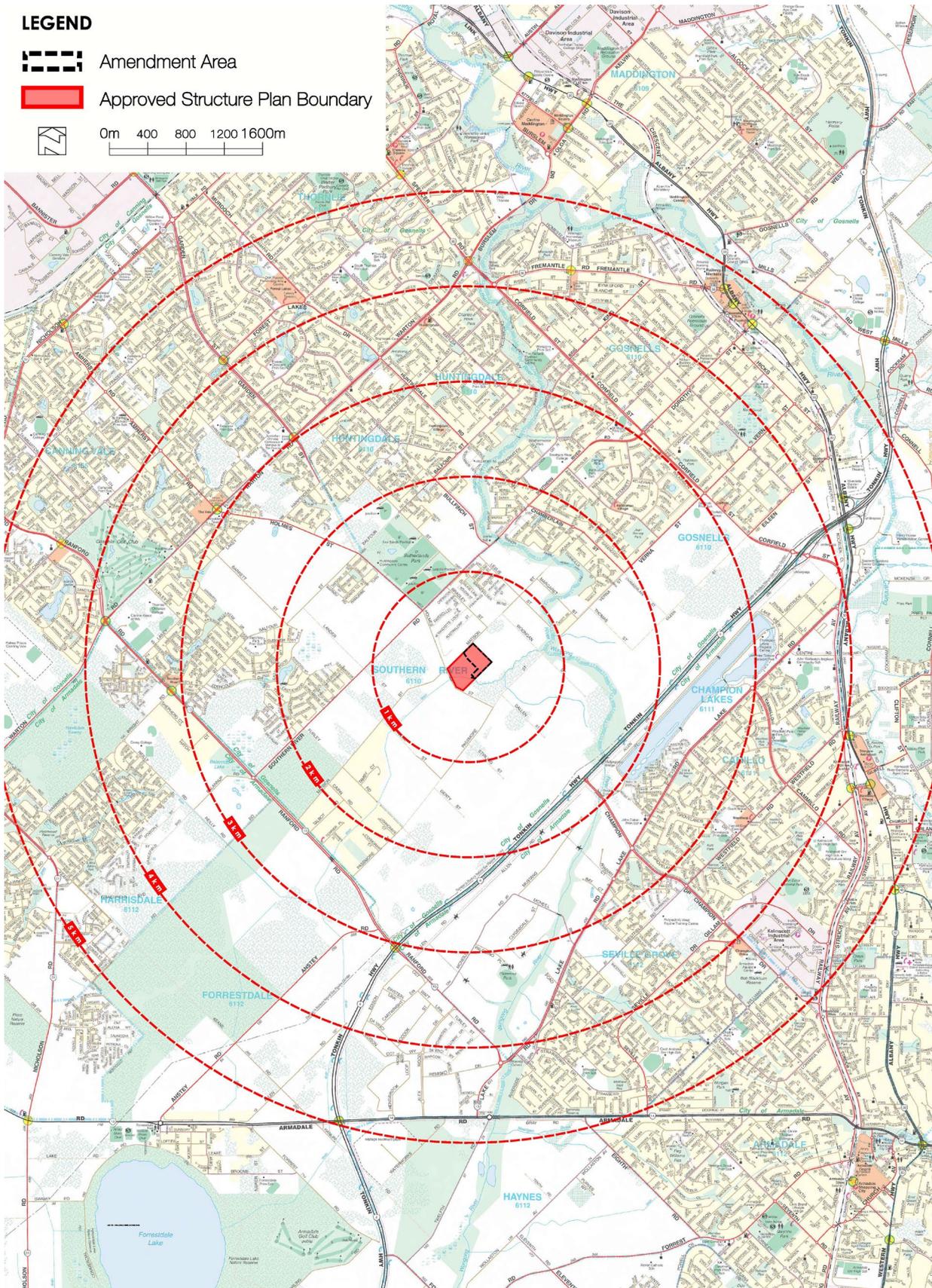


Figure 2 – District Context Plan

## 1.2.2 LAND USE

The subject land is devoid of any infrastructure other than an existing open drain that runs through the southern portion of Lot 1793 as shown in **Figure 3**. The drain is lined by mature trees and forms a logical boundary to the Resource Enhancement Wetland (REW) / Bush Forever environment. Remnant vegetation is limited to the southern and eastern corners of the subject land, with the northern corner showing recent signs of degradation as a result of sand extraction.

Surrounding land is semi-rural properties slowly transitioning to urban use, inclusive of predominantly low-medium density residential development to the north (Precinct 3A - Riverbank Estate).

## 1.2.3 LEGAL DESCRIPTION AND OWNERSHIP

The subject land is approximately 12.606 hectares (ha) in area comprising Lots 1793, 1794 & 1795 Matison Street, Southern River (refer **Figure 3** and **Table 2**). Amendment No. 1 applies to 5.4794 ha of the subject land (refer **Figure 3**). The subject land may be described as follows:

**TABLE 2 - LAND TENURE**

Lot	Landowner	Plan Number	Volume/Folio	Area (ha)
1793	Polkamp Pty Ltd	P3315	1507/214	4.5072
1794	Polkamp Pty Ltd	P3315	1507/215	4.0498
1795	Polkamp Pty Ltd	P3315	150/216	4.0490
<b>Total</b>				<b>12.6060</b>

**LEGEND**

-  Amendment Area
-  Approved Structure Plan Boundary

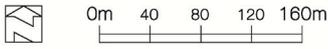


Figure 3 – Site Plan

## 1.3 PLANNING FRAMEWORK

### 1.3.1 ZONING AND RESERVATIONS

#### METROPOLITAN REGION SCHEME

The subject land is predominately zoned 'Urban' under the Metropolitan Region Scheme (MRS) as shown in **Figure 4**. Land reserved for 'Other Regional Roads' is located along the north-western and south-western boundaries of the subject land associated with Matison Street and Holmes Street Road widening respectively. The subject land is also affected by a Notice of Delegation in relation to Bush Forever Area (BFA) 465 identified over the southern corner of the subject land, with this area zoned 'Urban Deferred'.

The 'Urban' zoned portion of the site was subject to MRS Amendment 1349/27, which was gazetted on 30 November 2018 and transferred the land from the 'Urban Deferred' zone. The land was concurrently rezoned under the corresponding Local Planning Scheme, as detailed below. In addition, the Department of Planning, Lands and Heritage (DPLH) have prepared a Negotiated Planning Solution (NPS) document, and will undertake a MRS Amendment to amend the boundary of BFA 465, involving the removal of Bush Forever from Lot 1795 in exchange for the BFA within Lot 1793 (and small portion of Lot 1794) to remain and be ceded free of cost to the Crown as per correspondence from the Department of Planning dated 18 October 2016, refer **Appendix B**.

The majority of the surrounding area is zoned 'Urban' and 'Urban Deferred'.

**LEGEND**

**METROPOLITAN REGION SCHEME**

**RESERVED ROADS**

Other Regional Roads

**ZONES**

Urban Deferred

Urban

**NOTICE OF DELEGATION**

Bush Forever Area No. 464

**OTHER**

Amendment Area

Approved Structure Plan Boundary

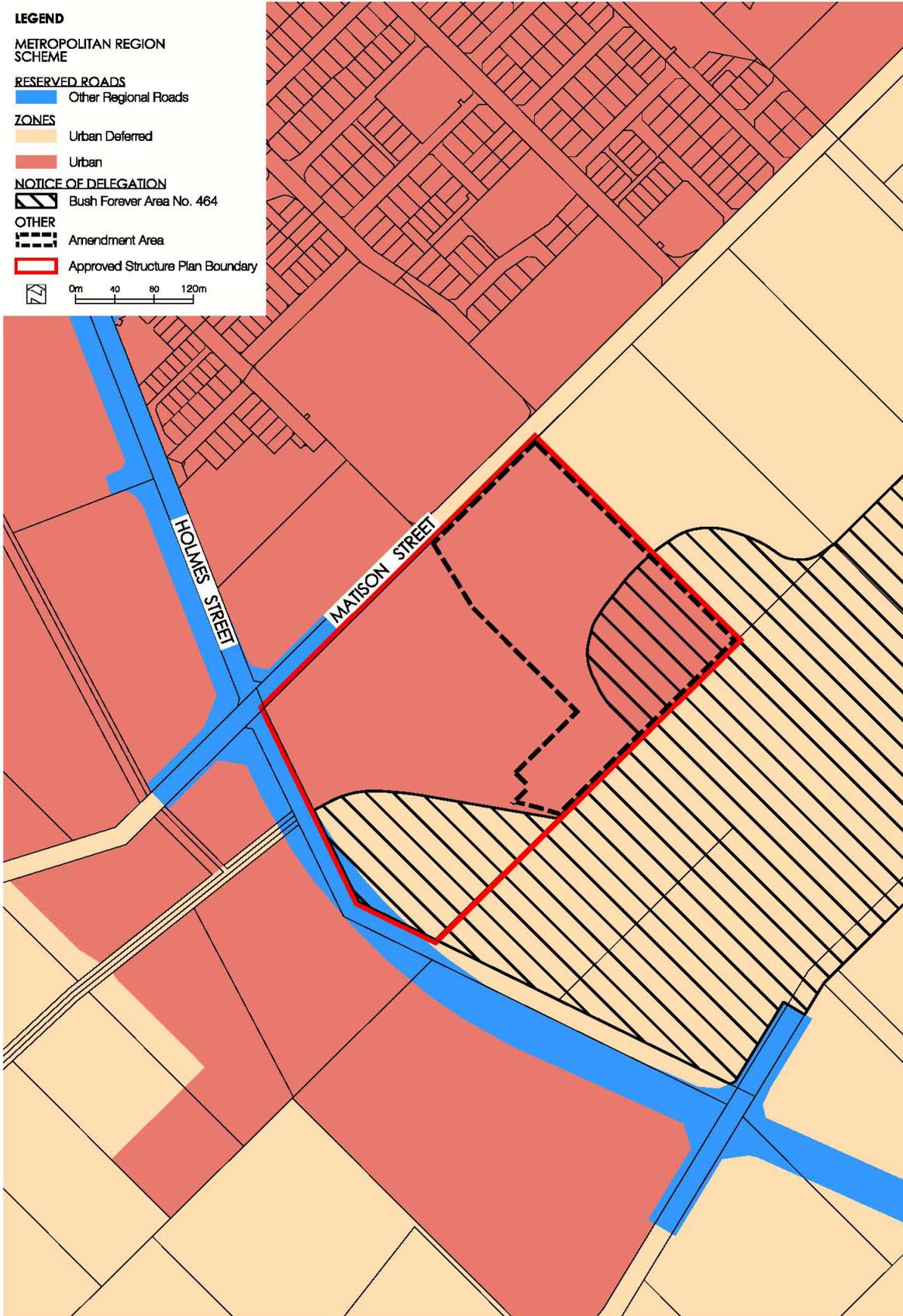
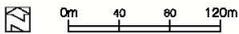


Figure 4 - MRS Zoning

## CITY OF GOSNELLS LOCAL PLANNING SCHEME NO. 6

The subject land is predominately zoned 'Residential Development' under the City of Gosnells Local Planning Scheme No. 6 (LPS 6) as shown in **Figure 5**. Consistent with the reservation under the MRS, the subject land is also affected by the Other Regional Roads Reservation. The BFA within Lot 1793 and portion of Lot 1794 is zoned General Rural. A Special Control Area is also identified over the subject land to accommodate future Development Contribution Areas. This is being formalised as part of Amendment No. 110.

The rezoning of the land under LPS6 was progressed concurrently with MRS Amendment 1349/29, with the land subject to the Urban MRS zoning being transferred from its former zoning of 'General Rural' and 'No Zone' to the 'Residential Development' zone under LPS6. The 'Residential Development' zoning of the land requires subdivision and development to be preceded by the preparation and approval of a structure plan.

**LEGEND**

- REGION SCHEME RESERVES**
-  Other Regional Roads
- LOCAL PLANNING SCHEME No. 6**
- LOCAL SCHEME RESERVES**
-  Water Courses
- ZONES**
-  General Rural
-  Residential Development
- OTHER**
-  Amendment Area
-  Approved Structure Plan Boundary
-  No Zone
-  SCA - Development Contribution Areas

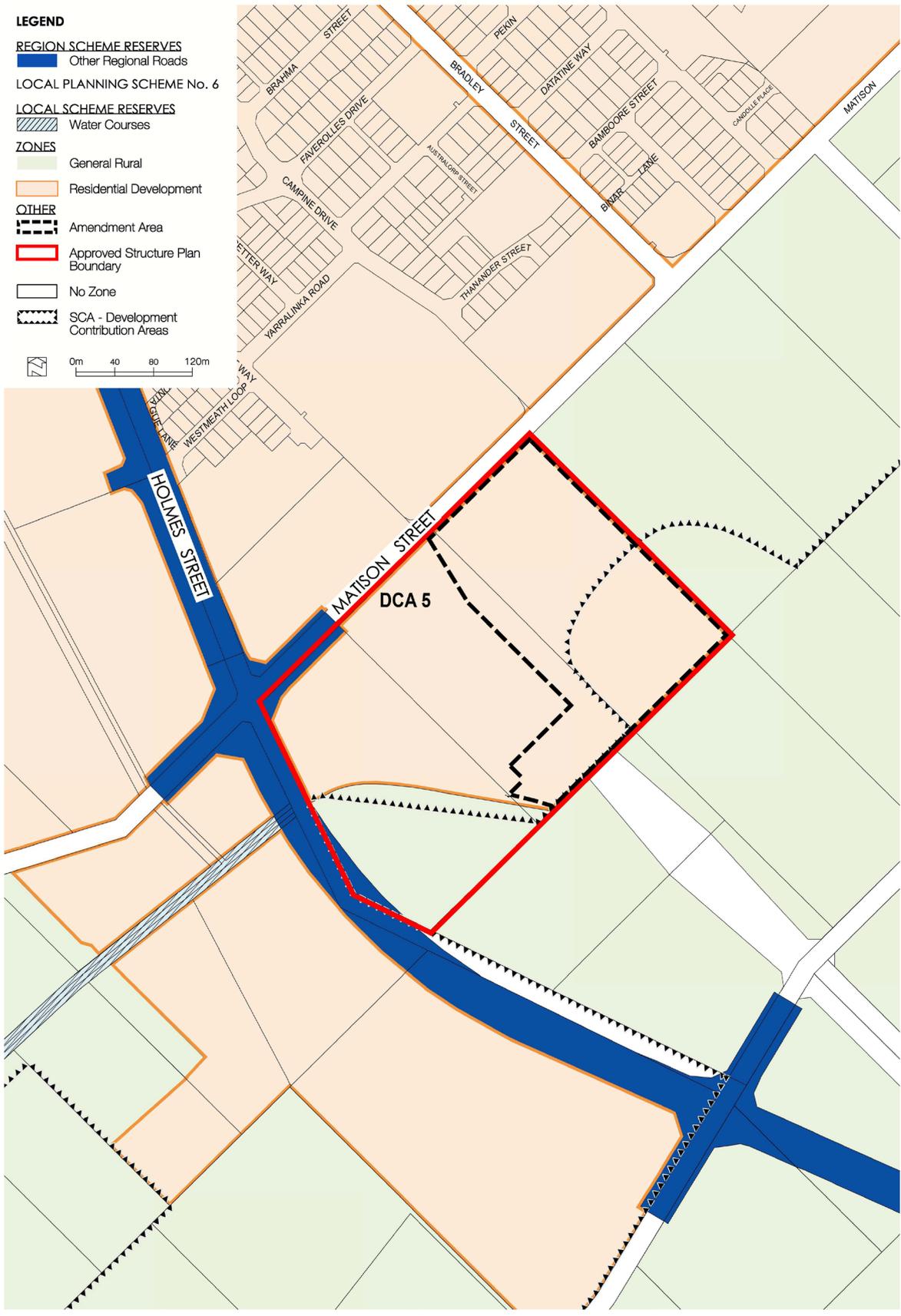
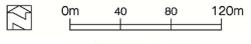


Figure 5 – LPS 6 Zoning

## 1.3.2 STRATEGIC PLANNING FRAMEWORK

### SOUTHERN RIVER/FORRESTDALE/BROOKDALE/WUNGONG DISTRICT STRUCTURE PLAN

The Southern River/Forrestdale/Brookdale/Wungong District Structure Plan (DSP) was finalised in January 2001. The DSP is a strategic planning instrument to guide ongoing development in the district. Key features of the DSP include the following:

- Bush Forever sites are shown as regional open space (Parks and Recreation Reserve).
- Open space links connect Bush Forever sites and potentially function as drainage corridors.
- A primary school site is shown on Matison Street.
- A village centre is shown on Southern River Road midway between Holmes and Lander Streets.
- Three neighbourhood centres are shown within Sub-Precinct 3A(1).
- A bus route extends along Southern River Road and connects with Leslie Street.
- Mixed business development is shown along Southern River Road in the vicinity of Furley Road and Lander Street.

**Figure 6** shows the subject land in the context of the Southern River/Forrestdale/Brookdale/Wungong DSP.

It should be noted that many of the land use elements of the DSP (i.e. the location of school sites) have now been somewhat superseded by further detailed planning and investigations associated with the preparation of various Structure Plans within Precinct 3.

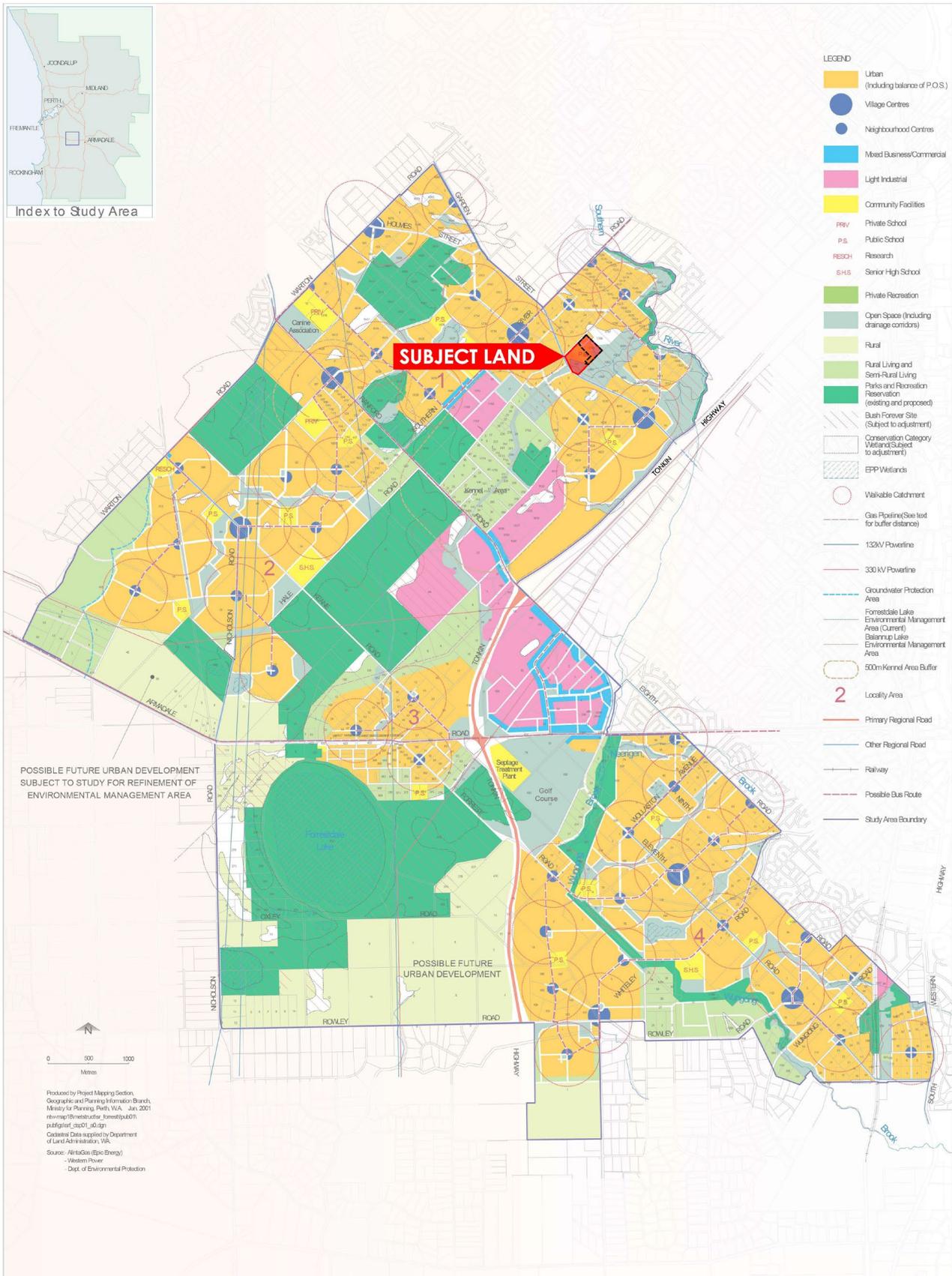


Figure 6 – Southern River/Forrestdale/Brookdale/Wungong DSP

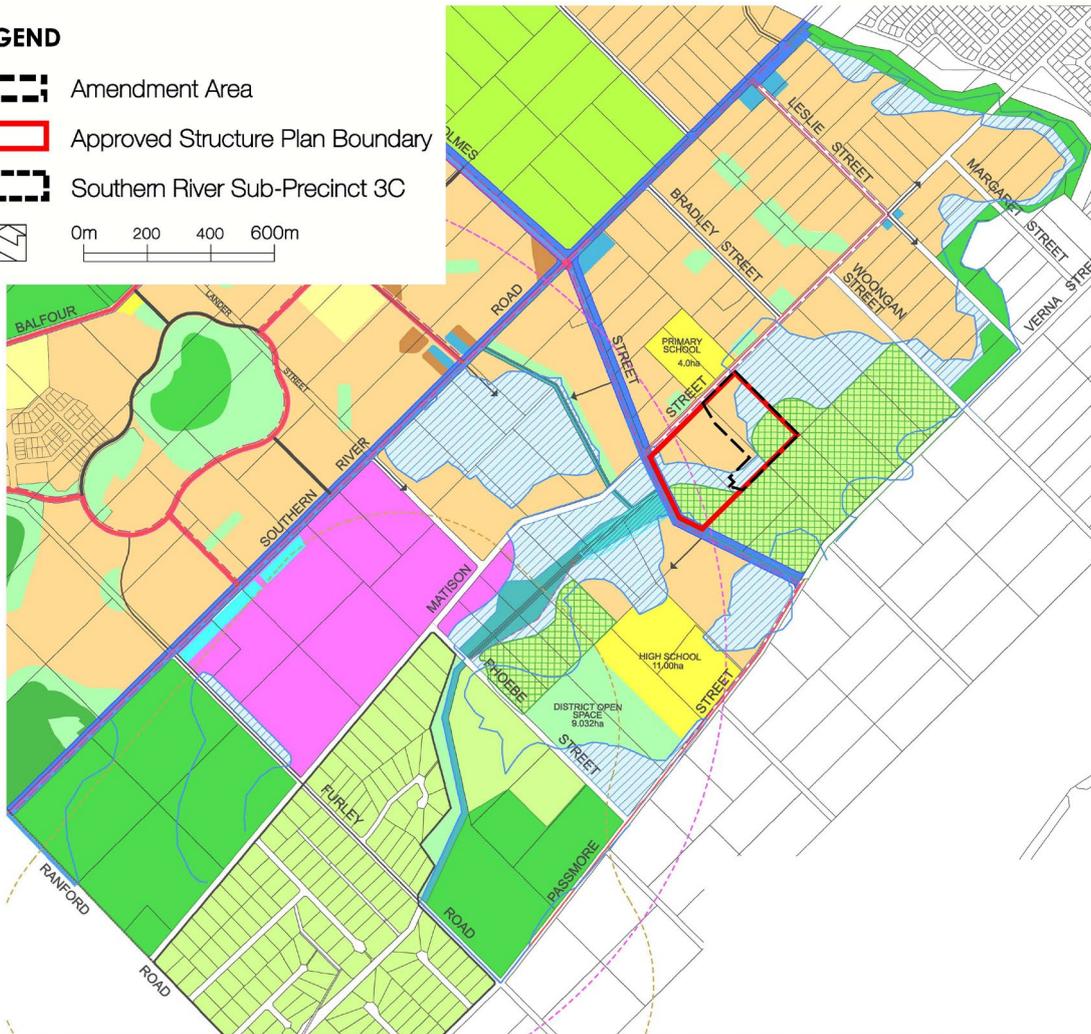
## SOUTHERN RIVER PRECINCT 3 LOCAL STRUCTURE PLAN

Evolving from the Southern River/Forrestdale/Brookdale/Wungong DSP, the Southern River Precinct 3 LSP (LSP 3) reflects strategic planning for this locality. LSP 3 proposes a variety of land uses including Light Industrial, Residential, Local Centre, Mixed Business and Community Purpose. Precinct 3 in its entirety also contains a substantial amount of wetlands and remnant vegetation which will largely be protected within proposed 'Parks and Recreation' reserves and local open space.

In addition to identifying a proposed realignment of the Regional Road, the plan identifies the subject land for 'Residential' purposes, where demonstrated as not being constrained by environmental factors as shown in **Figure 7**. A note on LSP 3 further identifies the need to upgrade the Forrestdale Main Drain to a living stream standard. The proposed Structure Plan is consistent with the land use designations as proposed by LSP 3.

**LEGEND**

-  Amendment Area
  -  Approved Structure Plan Boundary
  -  Southern River Sub-Precinct 3C
-  0m 200 400 600m



**LEGEND**

-  Residential
-  Local Centre
-  Mixed Business
-  Light Industry
-  Community Purpose (as marked)
-  General Rural
-  Bush Forever Protection Area
-  Local Open Space
-  Parks and Recreation Reservation
-  Widening Required For Forrestdale Main Drain
-  Forrestdale Main Drain / Balannup Lake Drain
-  500m Kennel Buffer (Subject to further acoustic study)
-  1500m Liquid Waste Site Buffer
-  Other Regional Road
-  Neighbourhood Connector
-  Local Connector
-  Traffic Signals
-  Wetland (including Buffers) denotes as follows:  
EPP - Environmental Protection Policy Wetland    CCW - Conservation Category Wetland  
REW - Resource Enhancement Wetland
-  Proposed Bus Route
-  Overland Flow Path
-  1:100 Event Extent (50m - 100m)
-  Shared Paths
-  Precinct 3 Boundary

**NOTES**

- Further Local Open Space to be provided in accordance with Council and Drainage requirements.
- Extent of wetlands required for conservation to be determined through further environmental review and detailed planning.
- Medium residential densities to be provided in accordance with City of Gosnells Local Housing Strategy criteria.
- A Place of Worship is constructed on Lot 16 Southern River Road. Additional development of the site will be subject to resolution of wetland and other environmentally sensitive area protection requirements.
- Planning of the Light Industrial Area will be subject to resolution of wetland and other environmentally sensitive area protection requirements.
- A review of the existing road network will need to be considered as part of further detailed planning. This review will need to consider those roads to be retained, local intersection treatments and road upgrades required.
- The primary function of the Forrestdale Main Drain is to convey the 1:100 year flood path. The intention is for the drain to be widened and operate as a living stream. The widening of the drain will also assist in wetland protection. The interface between development and the Forrestdale Main Drain will need to be carefully considered as part of future detailed planning.

Figure 7 – Southern River Precinct 3 LSP

## AMENDMENT TO SOUTHERN RIVER PRECINCT 3 LSP BOUNDARY

The subject land represents a 12ha area parcel of land located within Sub-Precinct 3C of the Southern River Precinct 3 LSP. In order to guide the preparation of localised structure plans the LSP 3 area, Local Planning Policy 3.3 (LPP 3.3) establishes a framework for the development of Precinct 3 on a precinct-based approach. Clause 2.5 of LPP 3.3 states that the City will not support proposals for any area geographically smaller than the five sub-precincts identified.

This Structure Plan area relates to the southern portion of Sub-Precinct 3C, referred to as Sub-Precinct 3C (South). Approval for the modified precinct boundary was sought via the endorsement of the original Southern River Sub-Precinct 3C (South) Structure Plan (refer **Figure 8**).

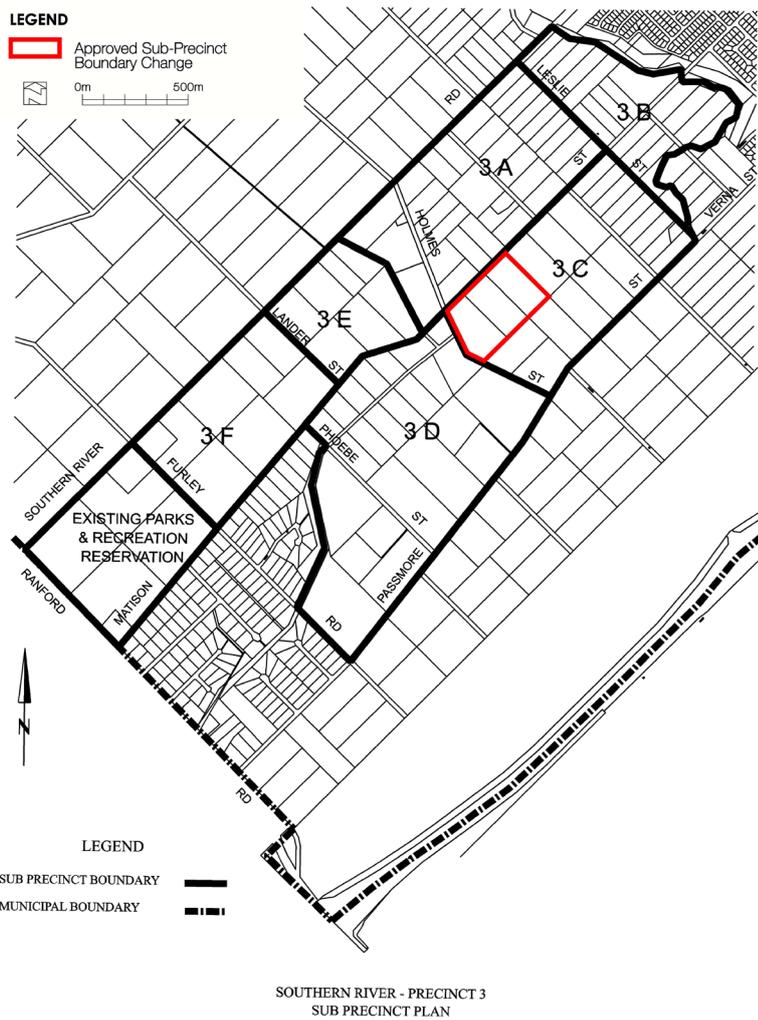


Figure 8 – Southern River Precinct 3 LSP Approved Sub-Precinct Modification

### 1.3.3 PLANNING STRATEGIES

#### DIRECTIONS 2031 AND BEYOND

*Directions 2031 and Beyond* is Western Australia’s high-level spatial framework and strategic plan. The document provides a vision for future growth of the metropolitan Perth and Peel region, with the aim of achieving a pattern of growth which promotes a better balance between greenfield and infill development.

The subject land is located within the south-east sub-region as identified by Directions 2031, where it is noted that an additional 35,000 dwellings are required in order to accommodate a projected population of 228,000 in the region by 2031. This growth is to be achieved through a combination of infill and greenfield development and presumes that all 'Urban Deferred' zoned land within the south-east sub-region is made available to accommodate this objective.

## PERTH AND PEEL@3.5MILLION AND SUB-REGIONAL PLANNING FRAMEWORK

Perth and Peel @ 3.5Million is a suite of documents released by the WAPC in 2015 for the Perth and Peel metropolitan regions to identify:

- where future homes and jobs should be located;
- how to protect important environmental assets;
- how to best utilise existing and proposed infrastructure; and
- appropriate areas for greater infill development and residential density.

As part of this documentation, sub-regional planning frameworks have been prepared to guide future development. These will then become sub-regional structure plans to guide future development and supporting infrastructure. The subject land is included within the South Metropolitan Peel Sub-regional Planning Framework (Sub-regional Planning Framework). The Sub-regional Planning Framework identifies the subject land within a pocket of 'Urban Deferred' land (based on the previous zoning of the land) as shown in **Figure 9**.

The minimum urban infill dwelling targets identified for the City of Gosnells are 1,616 dwellings in 2016-21 and 2,008 dwellings from 2021-26. The recently finalised MRS Amendment to transfer the land to the 'Urban' zone and associated structure planning will assist in achieving the infill dwelling targets for the City of Gosnells.

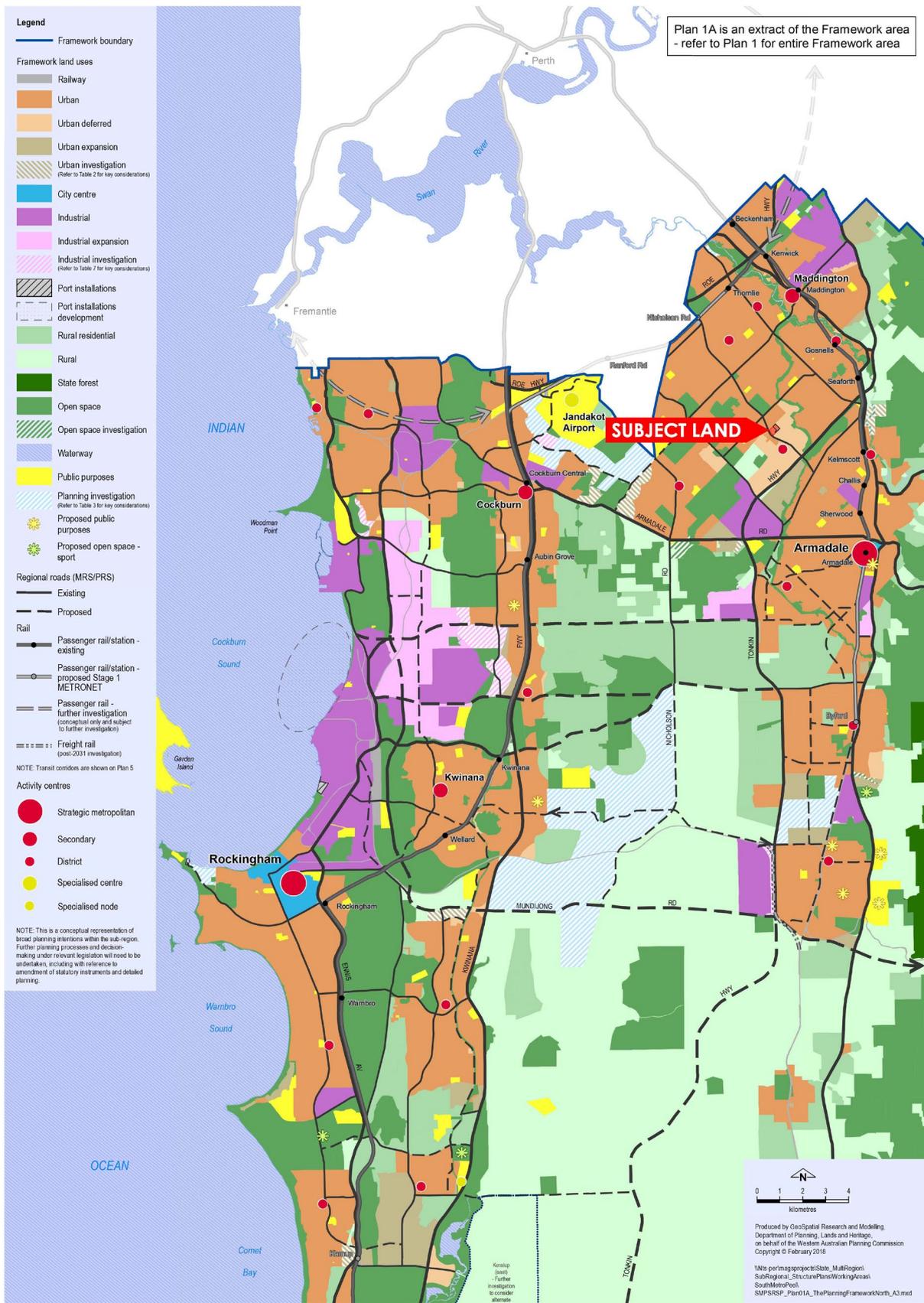


Figure 9 – South Metropolitan Peel Sub-regional Planning Framework

## 1.3.4 PLANNING POLICIES

### STATE PLANNING POLICIES

#### SPP 2.8 BUSHLAND POLICY FOR THE PERTH METROPOLITAN REGION

State Planning Policy 2.8 – Bushland Policy for the Perth Metropolitan Region (SPP 2.8) sets out the policy and implementation framework to ensure bushland protection and management issues in the Perth Metropolitan Region are managed through land use planning and decision making, in order to secure long-term protection of biodiversity and associated environmental values. The policy measures of SPP 2.8 apply to any proposal that is likely to have an adverse impact on regionally significant bushland within a Bush Forever area.

In accordance with the SPP 2.8 provisions, a Negotiated Planning Solution was progressed by the DPLH, which amended the boundary of BFA 465, involving the removal of Bush Forever from Lot 1795 in exchange for the BFA within Lot 1793 and a small portion of Lot 1794. The remaining BFA will be ceded free of cost to the Crown to ensure its ongoing protection and management. The Structure Plan identifies the BFA as a Local Open Space reserve under the City's LPS6, and supports the general presumption against clearing of regionally significant bushland, in accordance with the policy provisions of SPP 2.8.

#### SPP 2.9 WATER RESOURCES

State Planning Policy 2.9 – Water Resources provides guidance to planning decision-makers for consideration of water resources in land use planning, and directly relates to the overarching State Planning Policy 2 – Environment and Natural Resources. The policy applies where development is proposed on or abutting water resources, or potentially impacting on water resources.

In the case of this Structure Plan, the majority of the subject land is mapped as Multiple Use Wetland, with a portion of Lot 1793 mapped as Resource Enhancement Wetland along the Forrestdale Main Drain. The surrounding land is mapped as Conservation Category Wetland. Through the structure planning process, the REW and CCW will be protected through the implementation of appropriate buffers to minimise the impact of future urban development within the remainder of the subject land. The REW, REW buffer and CCW buffer are identified as Local Open Space reserve on the Structure Plan map, and the protection of the wetlands (and their buffers) is addressed in both the LWMS (**Appendix E**) and the Wetland and Wetland Buffer Management Plan (**Appendix H**). The Structure Plan therefore addresses the relevant policy measures of SPP 2.9.

#### SPP 3.6 DEVELOPMENT CONTRIBUTIONS FOR INFRASTRUCTURE

State Planning Policy 3.6 – Development Contributions for Infrastructure (SPP 3.6) sets out the principles and considerations that apply to development contributions for the provision of infrastructure in new and established urban areas, and the form, content and process to be followed.

A development contribution plan does not have effect until it is incorporated into a local planning scheme. Whilst the subject land is identified in LPS 6 as forming part of Development Contribution Area No.5 (DCA 5), the detail of this DCA area and the associated Development Contribution Plan has been subject of Amendment No. 110 to LPS 6 which was originally initiated by Council in March 2011, and is currently being re-advertised prior to finalisation.

This process is ongoing, and upon gazettal, will ensure development contributions for infrastructure within Southern River Precinct 3 are appropriately dealt with in accordance with SPP3.6. In the interim, it is understood a Developer Contribution Agreement will be negotiated between the developer and the City of Gosnells. The infrastructure items proposed to be funded under this DCP will be developed in accordance with SPP 3.6.

## SPP 3.7 PLANNING FOR BUSHFIRE MANAGEMENT AND GUIDELINES – PLANNING FOR BUSHFIRE PROTECTION

State Planning Policy 3.7 - Planning for Bushfire Management and Guidelines – Planning for Bushfire Protection (SPP 3.7) assists in reducing the risk of bushfire to people, property, and infrastructure by encouraging a conservative approach to strategic planning, subdivision, development, and other planning decisions proposed in bushfire-prone areas.

SPP 3.7 applies to all land which has been designated as bushfire prone by the Fire and Emergency Services (FES) Commissioner as identified on the Map of Bush Fire Prone Areas. The subject land is identified as bushfire prone on the Map of Bush Fire Prone Areas (2019).

Accordingly, a Bushfire Management Plan (BMP) and associated addenda have been prepared for the subject land, addressing the requirements of SPP 3.7 and has informed the structure plan design. A copy of the Bushfire Management Plan and Bushfire Management Plan addenda is included at **Appendix B**, and are discussed in more detail at Section 2.3.4.

## DRAFT SPP 5.4 ROAD AND RAIL NOISE

The key objective of State Planning Policy 5.4 – Road and Rail Noise (SPP 5.4) is to minimise the impact of road and rail noise on noise-sensitive land uses, and protect the State’s key transport corridors. In accordance with SPP 5.4, future residential development is considered a noise-sensitive land use. Accordingly, consideration needs to be given to the proximity of Holmes Street, identified as a Secondary Road (being Other Regional Roads and District Distributor A roads), with a trigger distance of 200m. Currently, Holmes Street is a minor road with less than 6,000 vpd. Future development has targeted Holmes Street as a major upgrade which will join Garden Street, providing access through to Tonkin Highway, and will therefore be considered a major road in the future.

An Acoustic Assessment has been undertaken by Herring Storer Acoustics (refer **Appendix G**) to determine the level of noise received within the Structure Plan area. The noise modelling indicates that noise received within the subject land from vehicles travelling along Holmes Street in the future (at the ground floor of the residence) would be within the noise margin (i.e. between the Noise Targets and Noise Limits), with the inclusion of a 2.2m high wall. Therefore, to comply with SPP 5.4, it is recommended that “Quiet House” design be implemented for residences, as well as the inclusion of a wall or barrier along the Holmes Street façade and a Notification on the Certificates of Title of the affected lots. These recommendations are intended to be included on a future LDP for the affected lots.

## LOCAL PLANNING POLICIES

### LOCAL PLANNING POLICY 3.3 SOUTHERN RIVER PRECINCT 3 PLANNING FRAMEWORK

For development of the Southern River Precinct 3 to occur in an orderly and proper manner, the City of Gosnells adopted Local Planning Policy (LPP) 3.3 which establishes a framework to appropriately address various planning requirements based on a precinct-based approach.

Of the five precincts identified, the property makes up approximately a quarter of the Precinct 3C area. Of particular note is Clause 2.5 of LPP 3.3, which states that the City will not support proposals for any area geographically smaller than the five sub-precincts identified. As outlined in Section 1.3.3, approval has been obtained to advance the subject land separately from the balance of Precinct 3C due to the developable area being physically separated from the balance of the precinct by virtue of environmental constraints.

LPP 3.3 goes on to identify the planning information that is required and tasks that must be completed at various stages of the planning process, of which have been satisfied in the preparation of this Structure Plan.

## 1.3.5 PRE LODGEMENT CONSULTATION

### SURROUNDING LANDOWNERS

Various discussions have been held with surrounding developers, particularly Riverbank Estate with regards to servicing infrastructure.

### CITY OF GOSNELLS

A series of meetings have been held with the City of Gosnells, as outlined below:

A meeting with the City of Gosnells Planning Department was held on 26 October 2016, to discuss the City's requirements in relation to:

- Lifting of the Urban Deferred Status - include indicative concept Plan, justification for the reduced Structure Plan area approach;
- A concurrent Amendment to LPS No. 6 - Supported by City of Gosnells in accordance with S126 (3) of the *Planning and Development Act 2005*;
- A Structure Plan for the subject land only - justification for the reduced Structure Plan area approach;
- An update on the Wetland Reclassification;
- An update on the Bush Forever negotiated outcomes; and
- An update on the latest Developer Contribution Requirement as per Amendment No. 110 was provided by the City.

A meeting with the City of Gosnells Planning, Engineering, Parks and Environment Departments was subsequently held on 5 December 2016 to table the concept plan design prior to lodgement. Key advice from the City included:

- Civil and stormwater solutions for the site:  
  
That the first flush should be free draining such that treatment of the first flush can occur.  
Rain gardens located progressively through the development will be acceptable, although not preferred.  
Flush kerbing is not desirable; barrier kerbs with side entry pits are required.  
All stormwater infrastructure needs to be provided outside of the wetland buffers.
- Bushfire Management  
  
Bushfire egress to Holmes Road should be provided from the proposed cul-de-sac.
- Concept Plan  
  
A review of lot access opposite the primary school may need to be undertaken.  
  
Provide text provision for Local Development Plans would be required (in particular, for small lots and around the roundabout).
- Landscape Concept Plan  
  
Work with the City regarding a preferred concept.  
Show the areas of useable open space.  
The City accepts a fully revegetated 30m CCW buffer in lieu of a non-revegetated 50m CCW buffer.

## DEPARTMENT OF PLANNING

A meeting with the Department of Planning occurred on the 11th November 2016 to discuss the Department's requirements in relation to:

- Lifting of the Urban Deferred Status- - include indicative concept Plan, justification for the reduced Structure Plan area approach
- A concurrent Amendment to LPS No. 6 - outlined the City's support to this approach
- A Structure Plan for the subject land only - justification for the reduced Structure Plan area approach
- An update on the latest Developer Contribution Requirement as per Amendment No. 110 was provided by the Department.

## DEPARTMENT OF WATER

360 Environmental met with the Department of Water (DoW) on 23 November 2016 to discuss the draft Local Water Management Strategy (LWMS) for the subject land. Matters such as groundwater management, stormwater management, Forrestdale Main Drain and wetland considerations were discussed and the outcomes of this meeting are contained within the LWMS report.

## DEPARTMENT OF PARKS AND WILDLIFE

360 Environmental has been in contact with the Department of Parks and Wildlife (DPaW) to request a review of the wetland mapping within the Geomorphic Wetlands Swan Coastal Plain dataset for wetland UFI 7720. Refer outcomes of Wetland Reclassification Section 2.1.4.

## WATER CORPORATION

Pritchard Francis has also liaised with Kevin Purcher, senior development planner of the Water Corporation in December 2016 to determine the required width of the reserve acting over the Forrestdale Main Drive. The Water Corporation has advised the following:

*December 2016:* In regards to all your drainage requirements please refer to the Forrestdale Main Drain Arterial Drainage Scheme Technical Report. It is a Department of Water document and you should approach them for a copy. From the information we have available it has been determined that the basic width of the easement should be 10 meters both sides of the drain from the centre. When more detail is provided (such as the LWMS) the Water Corporation will be able confirm the requirements.

Pritchard Francis have also liaised with Kevin Purcher, senior development planner of the Water Corporation in July 2015, November 2016 and ultimately in December 2016 to determine if there are any additional factors which may impact the proposed development. The Water Corporation has advised the following:

*July 2015:* Reticulated sewerage is not immediately available to serve the subject area. Current planning indicates that the subject area falls within three catchments. The northern portion of the subject area should gravitate north to the existing Barnevelder Bend WWPS. The most southern portion of the subject area should gravitate to the proposed Balannup 'E' WWPS to the east. But that land appears to be Bush Forever. The remaining land, the south western portion of the subject area should gravitate west to the existing Balfour St WWPS.

*November 2016:* The original plans that you provide and that I commented on showed the land south of the Forrestdale Main Drain would be developed. It may be now the case that that will not occur. But as requested in the last email a Structure Plan accompanied with a Local Water Management Plan should be undertaken first before servicing is considered as the site levels may be set by the drainage requirements. The Water Corporation will not be able to elaborate on the service situation until the Structure Plan and Local Water Management Plan has been undertaken and approved.

*December 2016:* If the contours permit then your development will be permitted to gravitate to the Barnevelder Bend WWPS.

Pritchard Francis has also liaised with Kevin Purcher, senior development planner of the Water Corporation in July 2015, November 2016 and ultimately in December 2016 to determine if there are any additional factors which may impact the proposed development. The Water Corporation has advised the following:

*July 2015:* Reticulated water of a sufficient capacity to serve the proposal is currently not available. The proposed new development will require headworks size water mains to be constructed. The headworks mains may be required to be constructed as part of the subdivision process of this or other proposed developments in the surrounding area. A route for the headworks mains which includes a DN500 will also be required, up to 20 metres wide. The route should be in the form of a road reserve (possibly Holmes Road). The attached two plans provide detail information regards water mains and the current timing of their construction. But it should be noted that these details and the year they are proposed to be constructed can change.

*November 2016:* The original plans that you provide and that I commented on showed the land south of the Forrestdale Main Drain would be developed. It may be now the case that that will not occur. But as requested in the last email a Structure Plan accompanied with a Local Water Management Plan should be undertaken first before servicing is considered as the site levels may be set by the drainage requirements. The Water Corporation will not be able to elaborate on the service situation until the Structure Plan and Local Water Management Plan has been undertaken and approved.

*December 2016:* At this stage there is no need to extend the DN500. But as further development takes place in the surrounding areas there may be a need to extend it in the future. Please note the attached planning for your information.

Pritchard Francis has liaised with Chris Pemberton of ATCO Gas to establish the nearest available connection and whether adequate supply would be available. Chris has advised that a 160PE mains extension from the northern development by DEC to Lot 1793-1795 would be required, however this is subject to the progress of the adjacent development which is likely to bring the gas main much closer to the development site as part of the Matison Street upgrade (by DEC). Should the mains extension be undertaken by the development of Lots 1793-1795, then a headworks charge may be applicable given that there will be a 350 metre length of ATCO gas installation which would not be servicing any lots for the majority of Matison Street. Sufficient capacity is available within the network to service at least 205 lots within Lot 1793-1795.

## **PUBLIC TRANSPORT AUTHORITY**

Email correspondence between KCTT and the Public Transport Authority (PTA) advised of changes to existing bus route 517 and proposed routes 233 and 235.

## **AMENDMENT NO. 1 PRE-LOGGEMENT CONSULTATION**

A series of meetings have been held with the various authorities to consider Amendment No.1, as outlined below:

### **CITY OF GOSNELLS**

A meeting with the City of Gosnells Planning Department was held on 15 October 2020, to discuss the City's requirements in relation to the amendment. The City advised they would accept a revegetated 30m CCW buffer in lieu of a generic 50m CCW buffer, however notes the City does not have authority to make a decision on buffer distances and the responsible authority is vested in Department of Biodiversity, Conservation and Attractions (DBCA) / Department of Water and Environmental Regulation (DWER).

## **DEPARTMENT OF BIODIVERSITY, CONSERVATION AND ATTRACTIONS**

360 Environmental has been in contact with the DBCA, who advised DWER (EPA Services) and the DPLH should provide advice regarding the CCW buffer, and the buffer should be dealt with through the planning process.

## 2 SITE CONDITIONS AND CONSTRAINTS

An Environmental Assessment Report has been prepared by 360 Environmental to support the Structure Plan. This report is included at **Appendix C**.

### 2.1 ENVIRONMENTAL ASSETS AND CONSTRAINTS

#### 2.1.1 BUSH FOREVER SITE NO. 464

Bush Forever is a State Government Policy and programme that identifies 51,200 ha of regionally significant vegetation for protection, covering 26 vegetation complexes. One Bush Forever Site occurs in the Survey Area - BFA 464 – Matison Street Bushland, Southern River. As discussed at **Section 1.3.1**, the boundary of BFA 464 will be modified through the removal of Bush Forever from Lot 1795 in exchange for the BFA within Lot 1793 (and small portion of Lot 1794) to remain.

#### 2.1.2 VEGETATION AND FLORA

The majority of the original vegetation within the subject land has at some point been disturbed and cleared. Vegetation condition within the subject land ranges from 'Completely Degraded' to 'Good - Degraded'. The vegetation in the site is extremely fragmented and the majority of the vegetation consists of scattered native species, young regrowth and weeds.

Two Priority species were recorded within the Survey Area; *Jacksonia gracillima* (P3) and *Meeboldina decipiens* subsp. *decipiens* (P3). *Jacksonia gracillima* was found at nine recorded locations. *Meeboldina decipiens* subsp. *decipiens* was found in an isolated pocket of vegetation in Lot 1795.

No Threatened species listed under the EPBC Act or gazetted as Declared Rare Flora (Threatened) pursuant to the Wildlife Conservation Act 1950 (WC Act) were recorded in the Survey Area.

No Threatened Ecological Communities (TEC) were identified as occurring in the Survey Area. One TEC, Muehea limestone – Shrublands and Woodlands on Muehea limestone, is known to occur in close proximity to the Survey Area with its buffer overlapping with the Survey Area. The Banksia woodland in the Survey Area can be considered to be Priority 3 and of conservation significance.

The Survey Area is mapped as an Environmentally Sensitive Area (ESA), most likely due to the Survey Area being within the buffer of a TEC and a portion of the Survey Area being mapped as a CCW. However, as no TEC's were recorded, the classification as an ESA could be regarded as incorrect.

#### 2.1.3 FAUNA

The fauna assessment found that three conservation significant species are considered likely to occur within the subject land and five species may occur within the subject land associated with the REW, the drain and Bush Forever in the south-western portion of the subject land. This area will not be cleared as part of the proposed development.

#### 2.1.4 WETLAND, BUFFERS AND RECLASSIFICATION

The Department of Parks and Wildlife (DPaW) Geomorphic Wetlands Dataset (2015) identified two wetlands as occurring within the subject land - one CCW located within Lots 1793 & 1794 and one REW located within Lot 1795.

An application requesting DPaW review the wetland mapping with regards to wetland UFI 7720 was made by 360 Environmental in November 2015. The request proposed to modify the management category within the subject land to 'Multiple Use'.

DPaW reviewed the information submitted and resolved on 7 December 2015 to categorise the area of wetland UFI 7720 within Lot 1793 (and small portion within Lot 1794) to REW as a result of partial clearing and localised disturbance (refer Appendix A of **Appendix C**). The boundary of the wetland was also modified to be commensurate with the Bush Forever Area. A sliver of land north of the Bush Forever boundary has been designated as Multiple Use and extending into Lot 1794. The REW located within Lot 1795 has been downgraded to Multiple Use. A CCW is also located immediately to the south of the subject land, with the buffer to this CCW falling within the southern and eastern portions of the subject land.

Amendment No. 1 modified the buffer to the CCW from 50m to 30m on the eastern boundary, and maintained the 50m buffer to the south. The buffer is proposed to be rehabilitated and enhanced to improve the conservation values of the wetland. A Wetland and Wetland Buffer Management Plan has been prepared to reflect the 30m - 50m CCW wetland buffer (**Appendix H**). The management plan addresses (but is not limited to) revegetation of the buffer area, control of pedestrian and vehicle access, and management of fire, weeds and dieback.

## 2.2 LANDFORM AND SOILS

### 2.2.1 LANDSCAPE AND TOPOGRAPHY

The subject land is generally flat and fluctuates between RL 20.50 to RL 21.50 for the majority of the subject land. Holmes Street along the southern boundary varies from as high as RL 24 at the intersection with Matison Street, down to RL 21.50 at the west-east open drain crossing, and then rising once more towards the eastern boundary in the vicinity of RL 23.00.

The surface geology is described broadly as consisting of consists of sand which can be described as white to pale grey at the surface, yellow at depth, fine to medium grained and on occasions over sandy clay to clayey sand of the Guildford Formation in the vicinity of the existing watercourse.

### 2.2.2 ACID SULFATE SOILS

Acid Sulfate Soil (ASS) mapping indicates that the subject land falls within a class 2 (moderate to low) ASS risk area. The nearest area of high to moderate ASS risk is within 300m south of the subject land. This mapping applies to depths of 3m below the natural surface.

An ASS self-assessment form will be completed for the subject land once detailed engineering design has been undertaken. This will determine the risk of ASS and whether an investigation will be required.

### 2.2.3 CONTAMINATED SITES

A search of the Department of Environment Regulation (DER) Contaminated Sites Database identified no record of the subject land having a contaminated site classification.

A 1.5 km groundwater protection buffer associated with a former contaminated site on Lot 1768 extends into a large portion of the subject land. A contamination investigation will be undertaken to confirm whether any restrictions on the use of groundwater will apply to the future residential development (i.e. prohibiting the installation and use of private bores due to contamination), otherwise restrictions may be placed on land titles due to the groundwater protection buffer extending into the subject land.

## 2.3 GROUNDWATER AND SURFACE WATER

### 2.3.1 GROUNDWATER

The Perth Groundwater Atlas depicts the maximum groundwater levels to be in vicinity of RL 20.0 to RL 21.0 AHD, which is approximately 1m to 3m below the natural surface. Groundwater flows generally to the east toward the Forrestdale Main Drain.

Four groundwater monitoring wells installed across the subject land observed groundwater levels ranging from 1.25m to 4.3m depth from natural surface.

### 2.3.2 SURFACE WATER

The subject land is located within the Forrestdale Main Drain sub-catchment of the Southern River, which flows approximately 800m to the east. Southern River is part of the wider Swan Avon-Canning Catchment.

Existing runoff from the subject land follows natural drainage lines and discharges to the Forrestdale Main Drain and to the CCW to the south of the subject land. Floodplain mapping prepared by the DoW demonstrates that the site is not located within the Southern River 100-year ARI floodplain.

### 2.3.3 FORRESTDALE MAIN DRAIN

An existing Water Corporation drain known as the Forrestdale Main Drive traverses the southern portion of the subject land, grading from east to west connecting to the Southern River. The Water Corporation is unlikely to permit any direct stormwater connections to this drain. It is intended that the Forrestdale Main Drain will be converted to a living stream. Any works undertaken to the drain will need be completed in accordance with the Water Corporation standard DS66 – Urban Main Drainage Standard and with the formal approval of the Water Corporation.

A 20m wide drainage reserve is indicated on the Structure Plan map for the Forrestdale Main Drain.

### 2.3.4 BUSHFIRE HAZARD

In support of the Structure Plan, a BMP has been prepared by RUIC Fire and two subsequent BMP addendums have been prepared by Eco Logical Australia, with the later addendum prepared to address Amendment No. 1 (refer **Appendix B**). 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:

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

It is expected that bushfire hazard will be further refined as part of future subdivision or development stages in order to accurately assess the bushfire risk posed by surrounding classified vegetation and determine specific radiant heat exposure levels (and associated Bushfire Attack Levels (BAL)) for future lots created within the subject land. Temporary bushfire hazard within the subject land can be managed as part of development through either the clearing or management of vegetation to a low threat standard within 100m of each development stage.

### BUSHFIRE ATTACK LEVEL ASSESSMENT

As depicted on the BAL map contained within the BMP addendum, subject to management some lots will be affected by the BAL-12.5 contour and above, and will consequently development will be subject to AS3959. Several lots are identified as BAL-LOW, and are not considered to be subject to a bushfire hazard risk. The lots identified as being subject to the worst-case BAL – BAL-29 are all located opposite the REW and CCW buffers.

Bushfire risk management measures associated with the relevant BAL rating will be addressed in an LDP as outlined in Part 1. The preparation of an LDP will be required as condition of subdivision approval.

## 2.4 ABORIGINAL HERITAGE

A search of the Department of Aboriginal Affairs (DAA) Aboriginal Heritage Inquiry System indicates that the majority of the subject land (excluding the north-western corner) is located within the Southern River Mythological Aboriginal Registered Site (DAA, 2016). However, it must be noted that the Southern River does not pass through the subject land and residential development has been occurring across the registered site since the listing date.

The developer will liaise with the DAA prior to development to determine their responsibilities under the Aboriginal Heritage Act 1972.

## 2.5 EXISTING MOVEMENT NETWORK

### 2.5.1 REGIONAL ROADS

The subject land is connected to the regional road network (Tonkin Highway) via Matison Street which connects into Ranford Road. Tonkin Highway provides a major connection with Perth and other regional roads such as Roe Highway and Albany Highway.

### 2.5.2 DISTRICT AND LOCAL ROADS

#### HOLMES STREET

The subject land fronts existing Holmes Street to the southwest. Holmes Street is a single carriageway, local access street with a road reservation width of approximately 20m and road pavement width of 6m.

Based on the traffic count information sourced, Holmes Street (south of Southern River Road) carried approximately 791 vehicles per day (vpd) in October 2012. The traffic that the proposed high school within Precinct 3D will generate will increase traffic on Holmes Street, particularly between Matison Street and Passmore Street.

The widening of Holmes Street in accordance with the reservation under the MRS has been taken into account in the design process.

#### MATISON STREET

The subject land fronts existing, and proposed extension of, Matison Street. Existing Matison Street is a single carriageway, local access street with a road reservation width of approximately 20m and road pavement width of 6m.

Based on the traffic count information sourced, Matison Street (north of Furley Road) carried approximately 630 vpd in March 2014 with an approximate 4.1% heavy vehicle component.

The widening of Holmes Street in accordance with the reservation under the MRS has been taken into account in the design process.

### 2.5.3 PEDESTRIAN NETWORK AND CYCLING

There are presently no formal pedestrian paths within the subject land which is consistent with the existing land use.

Shared paths within 400m of the subject land are located along Bradley Street (between Wyandotte Street and Faverolles Drive), Wyandotte Street, Asil Lane and Australorp Street. Unclassified paths are also located along Bamboore Street, Datatine Way, Pekin Pass and Greenie Chase.

Cyclist's access to the subject land is available via the bicycle lanes/sealed shoulders of Southern River Road.

#### **2.5.4 PUBLIC TRANSPORT**

The subject land is served by one bus service located within 800m (Service No. 517) which provides a service between Murdoch and Thornlie Train Stations via Southern River. Bus frequency during peak times is approximately 15 minutes and off-peak approximately 60 minutes.

Gosnells, Seaforth and Kelmscott Train Stations are located within 5km of the subject land providing a connection between Perth and Armadale.

# 3 STRUCTURE PLAN

## 3.1 DESIGN PRINCIPLES

There are a number of fundamental design principles that underpin the Structure Plan, as summarised below:

- Provision of a variety of residential densities, enabling the construction of a diverse range of housing types to accommodate different housing demands;
- Integration of the surrounding existing natural environmental into the development with appropriate interface to the REW and CCW wetlands and Bush Forever site; and
- Provision of attractive, safe and convenient pedestrian and cyclist connections and informal recreation spaces.

### 3.1.1 OPPORTUNITIES AND CONSTRAINTS

An analysis has been undertaken of the existing site conditions and the potential opportunities and constraints that require consideration in the planning and development of the subject land. The key elements of this analysis are noted in **Figure 10** and described below:

#### 1. Land Use

- Provide diverse lifestyle and living typologies;
- Locate higher density housing in locations of high amenity; and
- Consolidate open space and maximise orientation and passive surveillance.

#### 2. Built form

- Encourage homes to overlook the proposed Primary School north of Matison Street;
- Built form to respond to noise implications from Holmes Street; and
- Consider interface/frontage to Holmes and Matison Streets and the adjoining CCW to the north-east and south-east of the subject land.

#### 3. Environmental/Landscape/Open Space

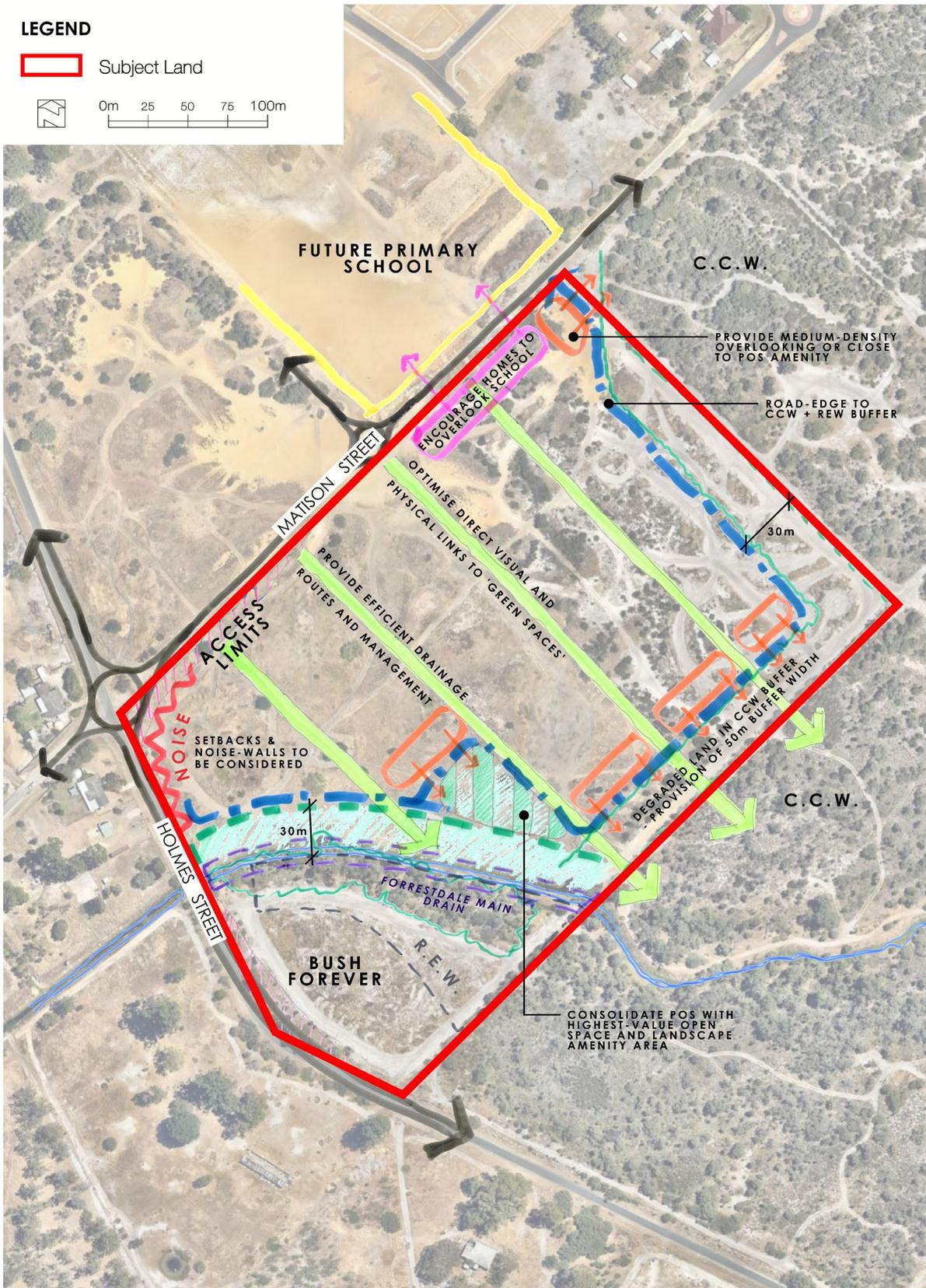
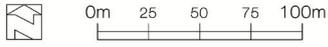
- Ensure protection of Bush Forever, REW and associated buffers and buffers to the adjoining CCW;
- Consider opportunity to consolidate open space and drainage links for efficient land use, functionality and conservation; and
- Consider noise implications from Holmes Street.

#### 4. Movement

- Orient local access streets to provide for efficient drainage routes;
- Accommodate road widenings to Matison and Holmes Streets;
- Provide pedestrian activity via key linkages integrating open space with the movement network and providing connectivity to the future Primary School; and
- Respect access limitations to Holmes Street and Matison Street where it intersects with Holmes Street.

**LEGEND**

 Subject Land



Lots 1793 - 1795 Matison Street, Southern River

Figure 10 – Opportunities and Constraints

## 3.2 DEVELOPMENT CONCEPT PLAN

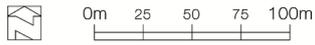
In addition to the Structure Plan Map included within Part 1 – Implementation (**Plan 1**), a Development Concept Plan (**Figure 11**) has been prepared to provide an illustration of the development intent. This graphical representation is indicative only; however, it indicates how the public spaces will be developed and the relationship of the public/private interface between the public spaces and residential development.

The Development Concept Plan has been prepared based on the following key design considerations:

- **Road Structure** - The existing road reserves of Matison and Holmes Street have defined the structure of the Concept Plan. Access to Holmes Street is not permitted. The proposed access streets all link and return to Matison Street via a traditional grid pattern to maximise permeability and legibility.
- **Public Parkland** - Comprises a variety of creditable and non creditable open space areas including Bush Forever, a REW and buffer, buffers to the adjacent CCW, Forrestdale Main Drain and passive recreation.
- **Residential Development** - A diverse range of lot sizes and housing types is achievable based on the proposed street block structure through the use of different lot depths on street block ends and frontages. Higher density development is proposed adjacent high amenity areas such as POS.
- **Integration** - The Development Concept Plan demonstrates how the development integrates with the adjacent development north of Matison Street. Most notably, the Development Concept Plan demonstrates there is limited opportunity for the concept plan to interact with any other frontage than Matison Street due to the CCW wetland to the north east and south east.

**LEGEND**

-  Amendment Area
-  Approved Structure Plan Boundary
-  Resource Enhancement Wetland
-  1 Public Parkland - Representing a combination of wetland buffers, bush forever and passive recreation areas comprising pedestrian access ways and drainage swales
-  2 Forrestdale Main Drain (Living Stream)
-  3 Road widenings to Matison and Holmes Streets
-  4 Opportunities for housing and lot diversity adjacent high amenity areas
-  5 Drainage Swale (Outside Wetland Buffers)



Lots 1793 - 1795 Matison Street, Southern River

Figure 11 – Development Concept Plan

### 3.3 LAND USE

The primary land use within the Structure Plan area is 'Residential', supplemented by Open Space, consistent with the recommendations of the Southern River Precinct 3 LSP. A summary of the land uses and areas is provided in **Table 3**:

**TABLE 3 – LAND USE**

Zone / Reserve	Area (Ha)
Residential	5.5458
Roads	2.6676
Local Open Space and Drainage	0.8574

#### 3.3.1 RESIDENTIAL

The LSP provides for a variety of housing choices through the designation of a mix of medium density R-Codes (R25 and R40).

The density code designation is outlined on the Structure Plan, and has been allocated in accordance with the following criteria:

1. The R25 density code applies as the base code to all lots, with the exception of land subject to 2) below.
2. The R40 density code applies to land adjacent to areas of high amenity, including public open space (POS).

The density codes and indicative yield is detailed in **Table 4**. It is intended that when the WAPC has addressed its statutory planning framework relating to the Residential Design Codes' RMD Codes that these will be applied to the subject land.

**TABLE 4 – ESTIMATED DWELLING YIELD**

Density Coding	Yield
R25 (350m <sup>2</sup> average)	118
R40 (220m <sup>2</sup> average)	14
<b>TOTAL</b>	<b>132</b>

#### 3.3.2 DENSITY TARGETS

The Development Concept Plan suggests a potential yield of at approximately 132 lots. This could accommodate a total population of 390 based on 2.95 people per household based on the assumptions made within the South Metropolitan Peel Sub-regional Planning Framework for the south-eastern sector.

Directions 2031 and Beyond sets a target of '15 dwellings per gross urban zoned hectare' of land in new development areas within the Perth and Peel Metropolitan Regions. Element 1 of Liveable Neighbourhoods equates the measurement to '22 dwellings per site hectare' (encompassing land purely zoned for residential purposes) and requires that this be measured as a means of determining whether the residential densities proposed in a structure plan will deliver the dwelling aspirations outlined in Directions 2031 and Beyond. In addition to this, the recently released Perth and Peel @ 3.5million recommends a Residential Site Density of 26 dwellings per residential site hectare.

The density achieved under the Structure Plan as measured in accordance with Directions 2031 and Beyond; Liveable Neighbourhoods; and Perth and Peel @3.5million is 14.70 lots per gross Urban zoned hectare (excluding Bush Forever, CCW buffer and Other Regional Roads reserves) and 23.8 lots per net site hectare; based on 132 lots. The Structure Plan therefore exceeds the density target set out in Liveable Neighbourhoods, but falls short of the target set out in Directions 2031 and Beyond by 0.3 dwellings per gross hectare, and Perth and Peel @ 3.5 million by 2.2 dwellings per net site hectare.

These shortfalls equate to 2.7 dwellings and 12.2 dwellings respectively, which is minor in the overall context of the Structure Plan, and may be realised as detailed design and subdivision of the land progresses. Notwithstanding, the minor shortfalls to the density targets are considered to be acceptable in this instance, due to the highly constrained nature of the site. In addition to the 30m – 50m CCW buffer, Bush Forever reserve and Other Regional Roads reserves, the site is impacted by the Forrestdale Main Drain and a 30m REW buffer. There is also a need to ensure the bushfire hazard from vegetation within these retained natural areas is sufficiently separated from residential lots, in the form of additional roads around the perimeter of the site. These factors influence the overall design of the site and the ability to achieve the density targets. Furthermore, the density calculations are based on the assumption of all lots being developed with single houses, however there is potential for some grouped dwelling sites to be achieved, thus lifting the overall density achieved across the site. Based on this, the residential density achieved by the Structure Plan is suitable when considered in the broader context of the site.

## 3.4 OPEN SPACE

### 3.4.1 PUBLIC OPEN SPACE

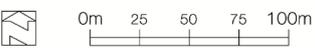
The location and purpose of each area of POS has addressed site constraints generally associated with the wetlands on the southern edge of the subject land, Bush Forever Area and Forrestdale Main Drain. These POS areas are located within the walkable catchments of each residence; providing only a short walking distance for all residents to passive recreation areas. The POS will be linked by the permeable road, shared path and footpath networks.

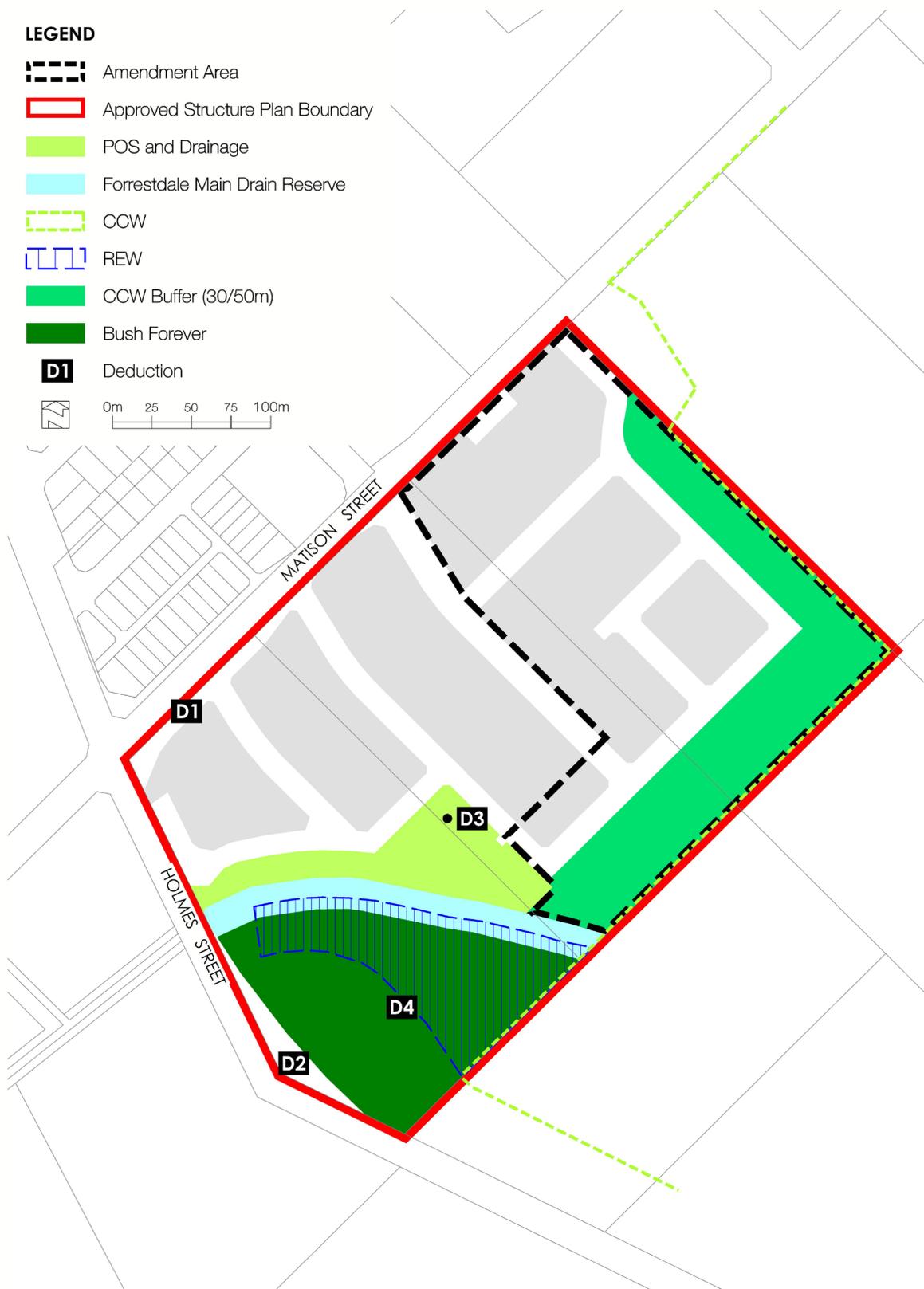
A POS calculation has been prepared in accordance with Liveable Neighbourhoods, incorporating the revised POS design as a result of Amendment No. 1 (refer **Table 5**). A total of 5.1421ha of Open Space is provided on the Structure Plan of differing forms and functions including Passive Open Space, Bush Forever, Forrestdale Main Drain and Wetland Buffer as detailed on **Figure 12**. A total POS provision of 10.3% is provided, in accordance with the minimum 10% requirement under State Government planning policy. The total POS provided will be refined at the subdivision stage with the developer to meet its obligations. The POS to be provided in accordance with the Structure Plan and the POS Schedule will be landscaped by the developer to a standard commensurate to, or above, LN requirements and to the satisfaction of the City of Gosnells.

**TABLE 5 - PUBLIC OPEN SPACE SCHEDULE**

PUBLIC OPEN SPACE		
<b>Gross Site Area (Lots 1793, 1794 &amp; 1795)</b>		<b>12.6060</b>
<b>DEDUCTIONS</b>		
D1 - Matison Street – Widening Requirement	0.1362	
D2 - Holmes Street – Widening Requirement	0.1338	
D3 - Dedicated Drainage Swale (1:1)	0.0232	
D4 - Bush Forever (includes REW)	2.0576	
Surplus Restricted Public Open Space	1.9338	
<b>Total Deductions</b>	<b>4.2847</b>	
	<b>Gross Subdivisible Area</b>	<b>8.3213</b>
	<b>Public Open Space Required @ 10%</b>	<b>0.8321</b>
<b>PUBLIC OPEN SPACE PROVISION</b>		
May comprise:		
- Min. 80% unrestricted POS	0.6657	
- Max. 20% restricted POS	0.1664	
<b>Unrestricted Public Open Space</b>		
POS (including REW buffer)	0.6910	
	<b>Total Unrestricted Public Open Space</b>	<b>0.6910</b>
<b>Restricted Public Open Space</b>		
CCW Buffer (excludes FMD Living Stream)	1.8581	
FMD Living Stream (excluding Bush Forever and REW)	0.2421	
	<b>Total Restricted Public Open Space</b>	<b>2.1002</b>
	<b>Total Credited Restricted Public Open Space</b>	<b>0.1664</b>
	<b>TOTAL PUBLIC OPEN SPACE PROVISION</b>	<b>0.8574</b>
	<b>PERCENTAGE OF PUBLIC OPEN SPACE PROVIDED</b>	<b>10.3%</b>

**LEGEND**

-  Amendment Area
-  Approved Structure Plan Boundary
-  POS and Drainage
-  Forrestdale Main Drain Reserve
-  CCW
-  REW
-  CCW Buffer (30/50m)
-  Bush Forever
-  Deduction
- 



Lots 1793 - 1795 Matison Street, Southern River

Figure 12 - Public Open Space

The total POS provision is suitable to the proposed development and composition of land uses. The Landscape Masterplan (**Figure 13** and **14**) provides a graphical representation of the public realm vision for the ultimate development of the subject land. The POS areas will provide the opportunity for varied and easily accessible passive recreational opportunities consisting of integrated path systems and turfed passive recreation spaces. The Wetland and Bush Forever areas and their natural vegetation will provide a backdrop to the POS and increase the sense of openness and proximity to natural vegetation.

A revised Wetland and Wetland Buffer Management Plan has been prepared for the subject land, and addresses (but is not limited to) revegetation of the buffer area, control of pedestrian and vehicle access, and management of fire, weeds and dieback.

Although it is not credited as POS, the Bush Forever Area will provide considerable passive recreation value to future residents.

### 3.4.2 WETLAND AND BUFFERS

A 50m buffer to the CCW is required along the south-eastern boundary of the subject land, and a 30m buffer to the CCW is required along the majority of the north-eastern boundary of the subject land and (as approved under Amendment 1). A 30m buffer is also required to the REW. The wetland buffers will provide an extension of Local POS and the Bush Forever Area. The CCW buffer will consist of native revegetation shrub planting, to be non-irrigated. A dual use footpath will be located adjacent to the verge within the CCW Buffer. Paths and roads will be used as 'hard edges' to the wetland buffer to provide a physical boundary and delineate the wetland buffer. The use of road reserves along the edge of the buffer provides a minimum 13m separation from lot boundaries in order to not create a fire hazard. Plant species are detailed in **Appendix H**.

### 3.4.3 MANAGEMENT ARRANGEMENTS

Final management of the wetland buffer within the subject land is to be determined by the DPLH. It is understood, at this stage, that the wetland buffer is likely to be managed by the City of Gosnells as part of its standard responsibilities for local parks.



Figure 13 - Landscape Masterplan



Figure 14 - Landscape POS Plan

## 3.5 MOVEMENT NETWORK

KCTT has undertaken an analysis of the existing movement networks in the vicinity of the subject land and assessed the impact of the proposed development on these existing networks. The Transport Impact Assessment is included at **Appendix D**.

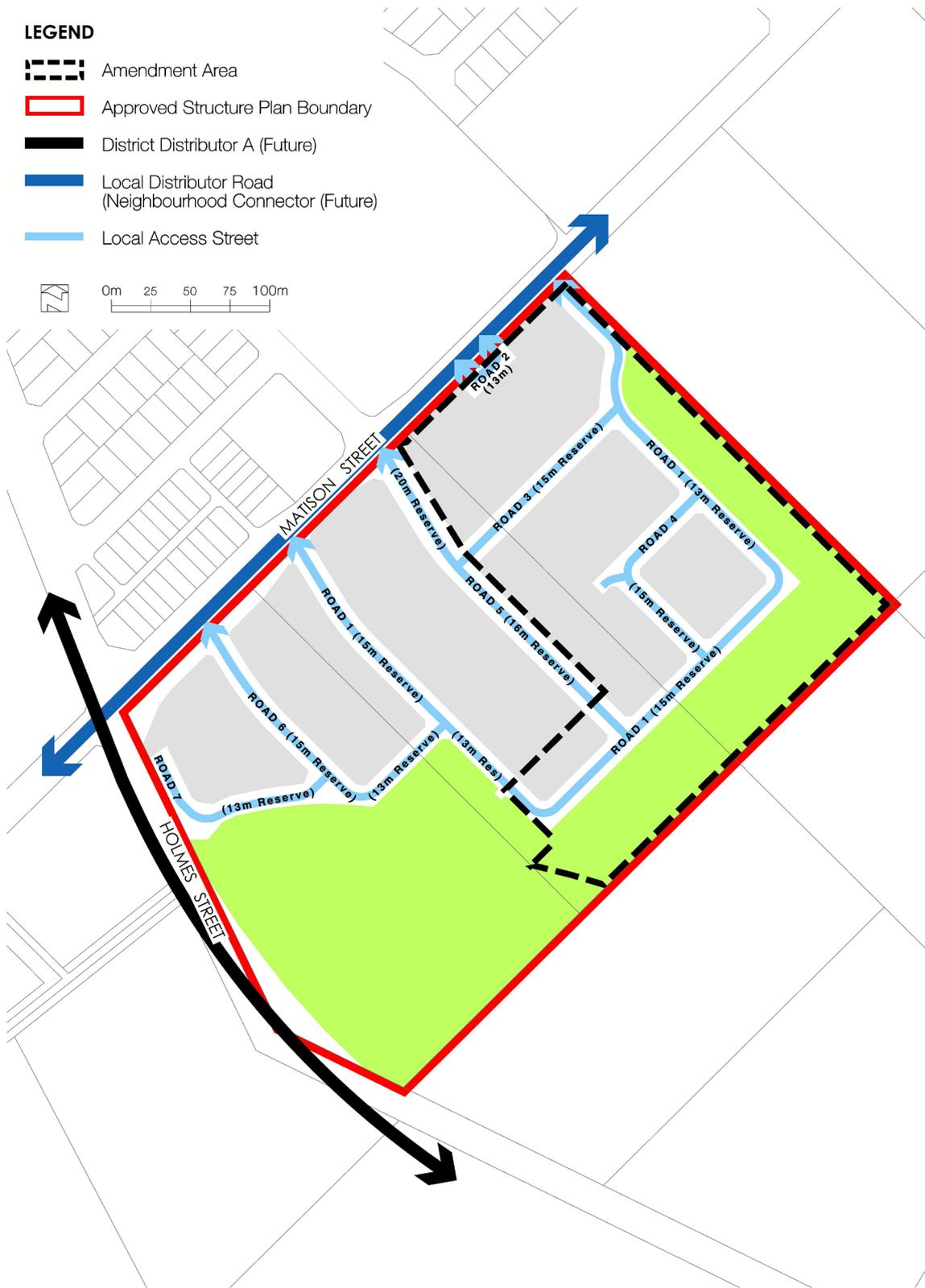
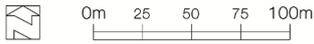
### 3.5.1 ROAD NETWORK AND TRAFFIC VOLUMES

The Structure Plan proposes a highly permeable grid movement network influenced by the existing road network. Based on the indicative maximum dwelling yield of 135, it is expected that the proposed development will generate up to 875 vehicles per day (VPD) including 108 vehicles per hour (VPH) for the AM and PM peaks.

**Figure 15** shows the suggested road hierarchy for the Structure Plan characterised by Local Access Streets.

**LEGEND**

-  Amendment Area
-  Approved Structure Plan Boundary
-  District Distributor A (Future)
-  Local Distributor Road (Neighbourhood Connector (Future))
-  Local Access Street



Lots 1793 - 1795 Matison Street, Southern River

Figure 15 – Movement Network Plan

## EXTERNAL ROAD NETWORK

Of specific relevant to the subject land, proposed changes to the external road network include:

- Proposed extension of Matison Street will provide connectivity between the subject land and Holmes Street to the south.
- Proposed extension of Passmore Street to the northeast to Verna Street south of the subject land.
- Matison Street and Holmes Street will accommodate road widening in the sections fronting the subject land consistent with the reservations identified on the MRS. This has been taken into account in the design process.
- Consistent with the reservations identified on the MRS, extension of Garden Street from Harpenden Street to Balfour Street and further southeast to Tonkin Highway providing connection between Roe Highway and Tonkin Highway. The section of future Garden Street between Balfour Street and Passmore Street will be within the existing road reserve of Holmes Street.

Based on the detailed analysis of available data, the following traffic can be expected on Holmes Street (future Garden Street) near the intersection with Matison Street:

- 2018 - approximately **4,000 vpd** (Matison Street extension completed, surrounding structure plans 50% completed, Matison Street / Holmes Street intersection - four-way intersection, connection between future Garden Street and Tonkin Highway not completed)
- 2028 - approximately **12,000 vpd** (Matison Street extension completed, surrounding structure plans 100% completed, Matison Street / Holmes Street intersection - roundabout, Passmore Street extension completed, connection between future Garden Street and Tonkin Highway not completed)
- 2028 - approximately **20,000 vpd** (Matison Street extension completed, surrounding structure plans 100% completed, Matison Street / Holmes Street intersection - roundabout, Passmore Street extension completed, connection between future Garden Street and Tonkin Highway completed)

## LOCAL ACCESS STREETS

All roads within the subject land are classified as local access streets on the basis they are expected to carry volumes below 1,000 vpd. The typical road reserve for an 'Access Street D' includes a road reserve width ranging from 13-16m, with a 6m road pavement width.

A portion of Local Access Road, connecting with Bradley Street to the north, is proposed as a 20m road reservation given that this intersection with Matison Street is proposed to be configured as a roundabout.

### 3.5.2 TRAFFIC MANAGEMENT DEVICES

The Holmes Street / Matison Street intersection has been analysed as a four-way intersection – stop controlled in 2018 and as a roundabout in 2028. The Matison Street / Local Access Road (connecting with Bradley Street to the north of the subject land) has been analysed as a roundabout in both 2018 and 2028.

Traffic analysed included the existing road network, plus the expected traffic impact from the proposed development. The years 2018 and 2028 were taken as assessment years. Two scenarios were completed for 2028 - with and without the connection of Holmes Street (future Garden Street) with Tonkin Highway.

SIDRA Analysis results have shown that the intersections of Holmes Street / Matison Street and Matison Street / Local Access Street are expected to operate at LOS 'A' for both 2018 and 2028 with and without the future Garden Street extension to Tonkin Highway, therefore performing to a satisfactory level.

No other road sections require the introduction of traffic management to control traffic movements other than left-in / left-out restriction at the western-most Local Access Street at Matison Street.

### 3.5.3 MATISON AND HOLMES STREETS INTERSECTION REQUIREMENTS / WIDENING

The widening of Matison and Holmes Streets in accordance with the reservation under the MRS has been taken into account in the design process. The intersection of Holmes Street and Matison Street is proposed to be upgraded to a four-way intersection once the Matison Street extension is completed to predominately cater for the increased traffic volumes generated by the Precinct 3E Structure Plan proposing residential, local centre and light industrial uses. This intersection is ultimately planned to be a roundabout.

### 3.5.4 PEDESTRIAN AND CYCLING NETWORK

A highly interconnected, permeable path network is proposed, inclusive of paths on one side of the road where traffic volumes do not exceed 1,000 vpd. The proposed network will focus on providing linkages to the broader pedestrian/cyclist network and key attractions such as schools and POS areas.

The exact location and the provision of footpaths will be determined at the detailed design stage, to the satisfaction of the City of Gosnells.

### 3.5.5 PUBLIC TRANSPORT

Extension and new transport routes are expected via Verna Street and Passmore Street and potentially Holmes Street between Southern River Road and Passmore Street as a result of planned residential development within the Precinct 3 area.

Based on discussions with the Public Transport Authority (PTA), the following changes to the bus services are anticipated:

- Existing Route 517 is likely to operate from Murdoch along its current alignment to Castlewood Parkway and would continue via Balfour Street to Thornlie Station. This route is not likely to operate along Southern River Road and is temporary until future routes are implemented.
- Future Route 233 is likely to operate via Southern River Road directly to Gosnells Station.
- Future Route 235 is expected to operate along Passmore Street to Gosnells Station. The exact route is unknown at this stage.
- The ultimate configuration shows routes 233, 234 and 235 serving the area between Southern River Road and Tonkin Highway. Their exact routes will depend on the ultimate road network, however all three services are likely to operate between Gosnells and potentially extend to Cockburn, Murdoch and Armadale. Route 234 could potentially operate along Matison Street depending on the ultimate road network.

## 3.6 WATER MANAGEMENT

### 3.6.1 LOCAL WATER MANAGEMENT STRATEGY

A Local Water Management Strategy (LWMS) has been prepared by 360 Environmental in support of the Structure Plan and is included at **Appendix E**. The LWMS has been developed to establish the concepts and broad level design measures for flood mitigation and stormwater management for the subject land. 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 Structure Plan has responded to the recommendations of the LWMS and drainage strategy. Key elements of the stormwater management conceptual design are:

- Adopt a treatment train approach to water quality management and protection of receiving environments, including infiltration of frequent events close to source in streetscape bio-retention areas to strip nutrients.
- Frequent events (first 15 mm of rainfall) infiltrate within the lots greater than 300m<sup>2</sup> through the use of soakwells. Runoff from roads and smaller lots infiltrate via bioretention systems within raingardens and swales within the road reserves. Pritchard Francis has developed a concept drainage plan to meet the drainage criteria as detailed in discussions with the City of Gosnells. Indicative raingarden and swale cross-sections are provided at Appendix Four of **Appendix F**.
- Major events will be discharged offsite to the Bradley Street CCW.
- Consistent with the Forrestdale Main Drain Arterial Drainage Strategy (DoW, 2009b), urban development at the subject land will not discharge to the Forrestdale Main Drain. The Forrestdale Main Drain will be converted to a living stream.
- Importation of fill to ensure sufficient clearance between lots and maximum groundwater levels will be achieved.

Amendment No. 1 necessitates little, if any modifications to the drainage strategy, however any modifications will be addressed through the Urban Water Management Plan.

### 3.7 EDUCATION FACILITIES

Existing education facilities located within close proximity to the subject land include the following:

- Ashburton Primary School is located approximately 2km to the north-east
- Bletchley Park Primary School is located approximately 2km to the west
- Southern River College is located approximately 2km to the north-east

A future Primary School site (3.94ha) is proposed immediately north of the subject land along Matison Street within the Precinct 3A ODP area consistent with the Southern River Precinct 3 LSP. A 11ha High School site is also identified along Passmore Street south of the subject land within the Precinct 3D ODP area.

Residents within the Structure Plan area will be able to utilise this school as the closest in the locality. The developer will be required to pay a per lot contribution to the Department of Education at the subdivision stage.

### 3.8 ACTIVITY CENTRES AND EMPLOYMENT

Given the close proximity of The Vale and Southern River Neighbourhood Centres (within 2km) and Armadale (categorised as a 'Strategic Regional Centre'), there is no requirement for retail or commercial uses to be provided for within the subject land.

As identified on the Southern River Precinct 3 LSP, two local centres are located along Southern River Road and a smaller local centre at the intersection of Matison Street and Leslie Street. A Centre Plan covering the Local Centre at the intersection of Southern River Road and Holmes Street is required as identified on the Precinct 3A ODP.

Daily convenience and comparison shopping needs will be met by the approved network of surrounding centres within the Southern River Precinct 3 LSP area and surrounding suburbs such as Thornlie, Gosnells Canning Vale.

Given the subject land's strategic location to existing employment opportunities associated with the Armadale, Canning Vale, Maddington, Kelmscott and Forrestdale Industrial Areas, additional employment generated land uses are not considered necessary.

## 3.9 INFRASTRUCTURE COORDINATION, SERVICING AND STAGING

The project's civil engineering consultant, Pritchard Francis, has prepared a comprehensive engineering services report outlining the existing utility infrastructure and the proposed upgrades to this infrastructure to service the subject land. This report is included as **Appendix F**, and a summary of the utility infrastructure advice is outlined as follows:

### 3.9.1 WATER SUPPLY

Water main infrastructure will be provided as part of the adjacent Riverbank Estate proposing a dia 250P-12 water main on the northern boundary of Matison Street. Two dia 150P-12 water mains will cross Matison Street to the subject land to align with two of the proposed road reserves, however two additional connections will need to be provided across Matison Street to provide a continuous water main network.

All streets will contain a dia 100 PVC water reticulation pipe and there is no requirement for this development to undertake the DN500 distribution main.

### 3.9.2 WASTEWATER

Existing sewer mains have been installed as part of the adjacent Riverbank Estate and will be extended along Matison Road by the adjacent developer, grading to the existing network via gravity at the northern end of Matison Street. The invert levels of sewer mains and level of the lots will be of sufficient depth to service the development of the subject land. All sewer reticulation will grade to the north towards the Barnevelder Bend Waste Water Pump Station (WWPS).

### 3.9.3 POWER SUPPLY

The existing Western Power distribution infrastructure in the vicinity of the subject land comprises of a 22kV three phase aerial High Voltage (HV) and three phase aerial Low Voltage (LV) network located on the western side of Holmes Street and north of Matison Street intersection. Single phase aerial HV continues from the Matison Street intersection and runs south servicing a 10kVA pole top transformer on Passmore Street. A fused 3 phase aerial HV network also exists on the northern side of Matison Street which currently supplies a 50kVA pole top transformer directly opposite the northern corner of Lot 1795.

The existing network within Matison Street is located to the north and does not adjoin the development, and therefore an extension of the HV and LV via the adjoining development will be required, and is likely to proceed prior to the development of the subject land.

The zone substation that appears to supply the HV network adjacent to the subject land is the. Currently there is in excess of 10-15MVA capacity in the Southern River zone substation, which is located approximately 1.3km southwest of the subject land, indicating low risk for capacity constraints.

The proposed development will require new Western Power infrastructure to be installed as the existing adjacent LV network will not have the capacity to service the estimated load. The requirement for a second transformer is subject to the timing of adjacent developments and the capacity remaining in the LV network within those developments.

The requirement to underground nearby overhead aerials will be subject to the Matison Street and Holmes Street intersection design. Western Power had advised that the entire length of aerials adjacent to the lot will need to be undergrounded as part of this development unless a written confirmation from the City of Gosnells could be obtained

### 3.9.4 TELECOMMUNICATIONS

Telstra and NBN Co have assets in the vicinity, or proposed to be installed within the vicinity, of the subject land. Riverbank Stage 9 provides for the installation of NBN Co pit, pipe and fibre along Matison Street adjacent to about 60% of the proposed development. There is no foreseeable reason as to why the proposed development could not proceed nor could excessive communications development costs render it uneconomical.

### **3.9.5 GAS SUPPLY**

The area surrounding the subject land is currently serviced by a 150 steel High Pressure 1920kPa gas main within Matison Street and Holmes Street, whilst the progression of development to the north comprises of the typical 100PE and 160PE mains located within residential road reserves.

ATCO Gas has advised that a 160PE mains extension from the adjacent Riverbank Estate development to the north would be required, however this is subject to the progression of the adjacent development which is likely to bring the gas main much closer to the subject land as part of the Matison Street upgrade (by others). Sufficient capacity is available within the network to service the subject land.

### **3.10 DEVELOPER CONTRIBUTION ARRANGEMENTS**

The subject land is identified in LPS 6 as forming part of Development Contribution Area No.5 (DCA 5). The detail of this DCA area has formed the subject of Amendment No.110 to LPS 6 and associated draft Development Contribution Plan (DCP) process for a period exceeding 4 years.

The final outcome of this Amendment is unknown with negotiations continuing between the WAPC and City of Gosnells as to how both the LPS Amendment and DCP should be modified to best respond to the extensive submissions received during formal advertising. Where development has proceeded in advance of its finalisation within the Precinct 3A area, the developer has been required to pay the City sums to cover all eventualities in order to secure the release of Titles.

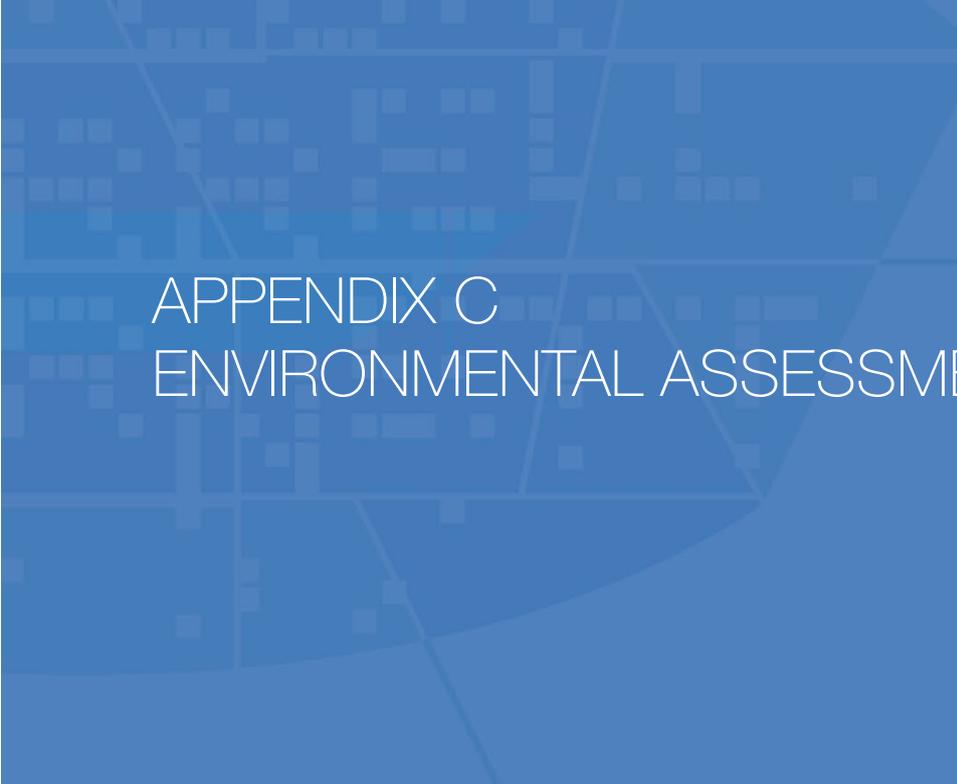
However, once this amendment is approved and gazetted, landowners will become liable for payment of development contributions upon subdivision or development of their land in accordance with the provisions of clause 6.4.13 of LPS 6.

APPENDIX A  
BUSHFIRE MANAGEMENT PLAN ADDENDUM  
AND BUSHFIRE MANAGEMENT PLAN



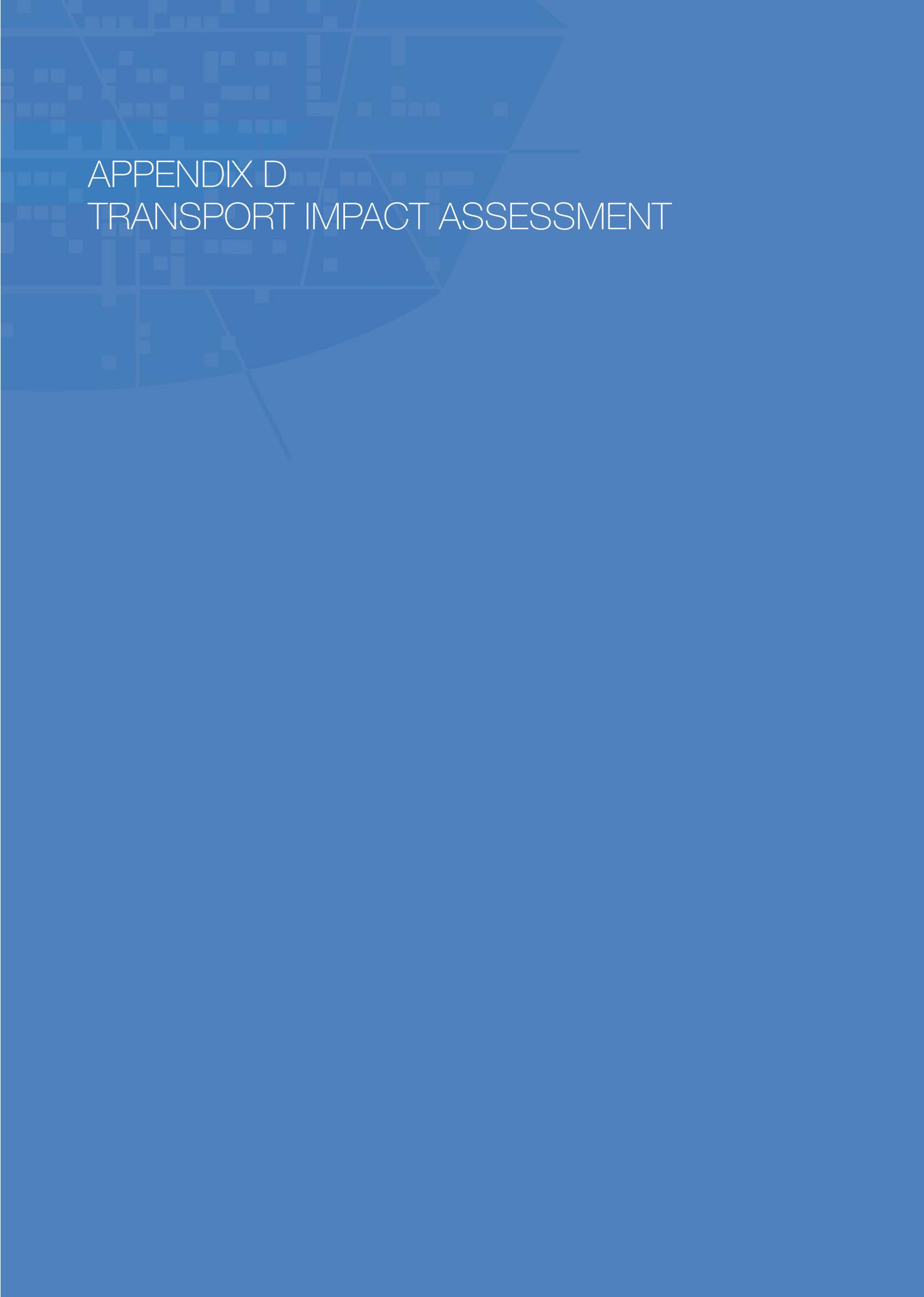
APPENDIX B  
BUSH FOREVER AREA 464 - NEGOTIATED  
PLANNING SOLUTION





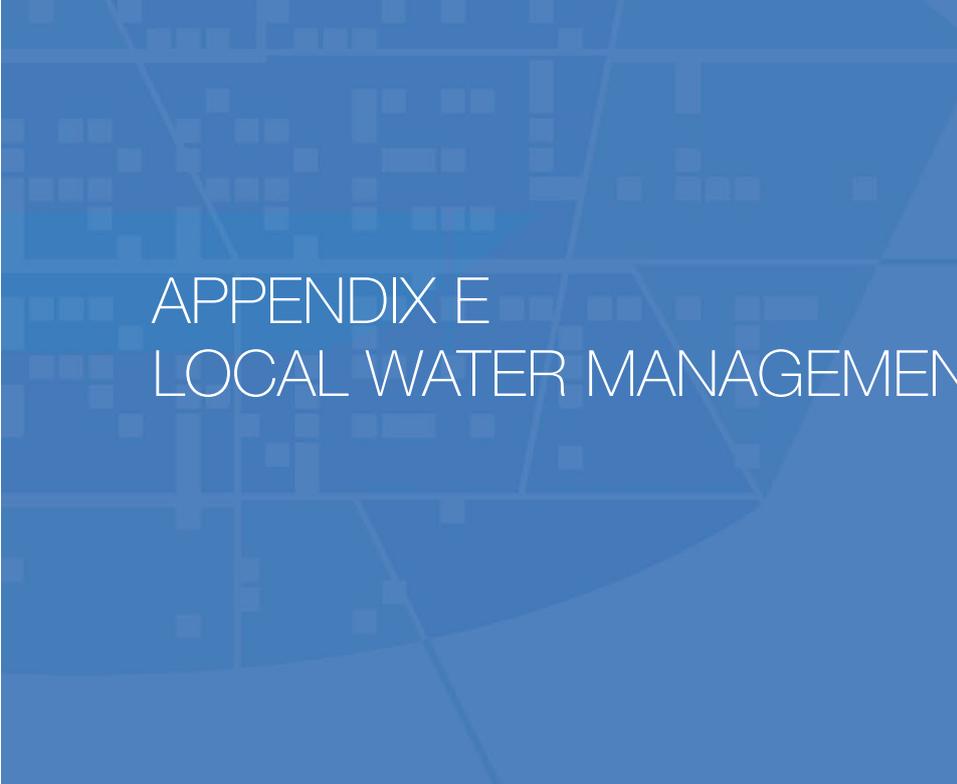
APPENDIX C  
ENVIRONMENTAL ASSESSMENT REPORT



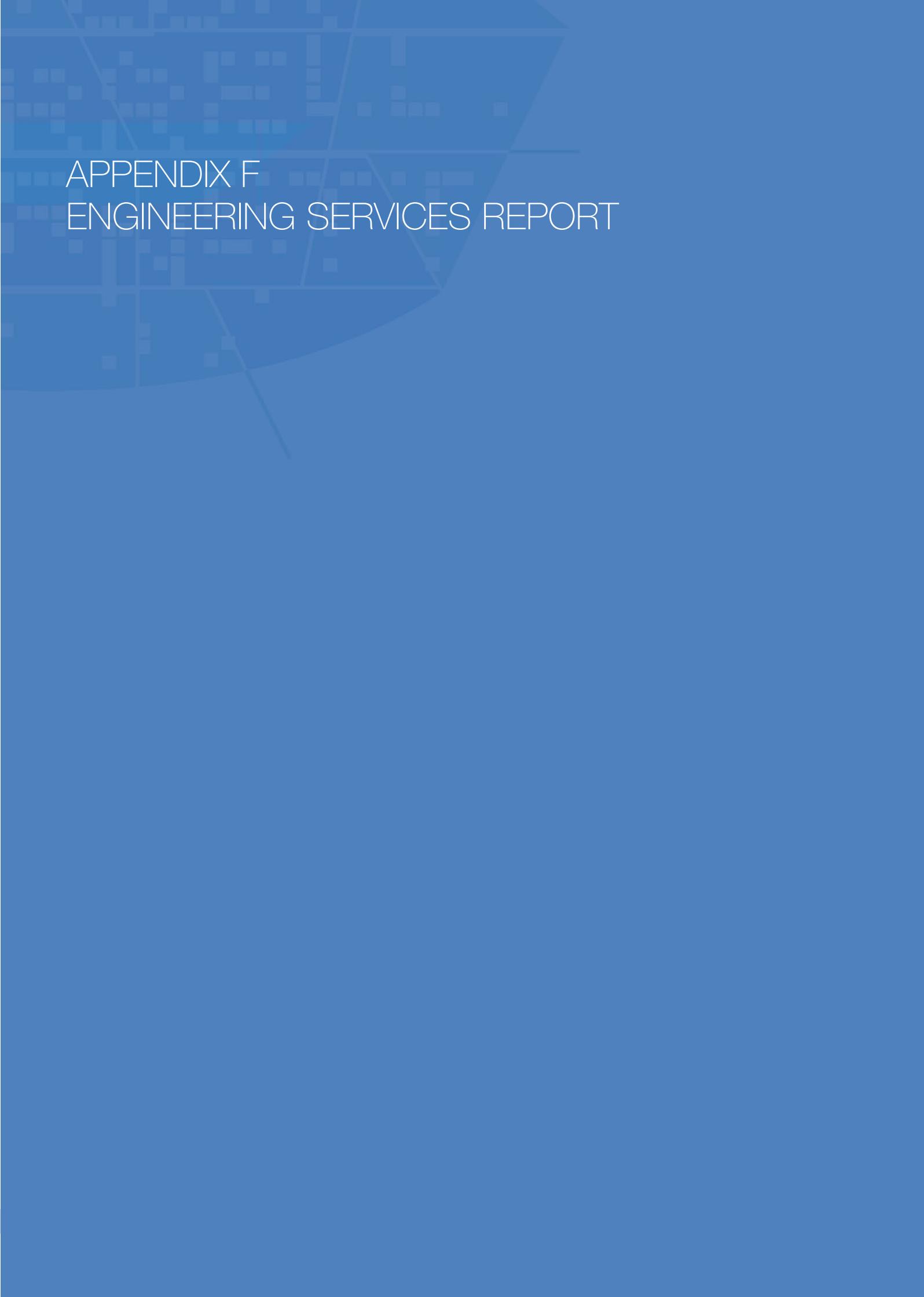


# APPENDIX D TRANSPORT IMPACT ASSESSMENT





APPENDIX E  
LOCAL WATER MANAGEMENT STRATEGY



# APPENDIX F ENGINEERING SERVICES REPORT



APPENDIX G  
ACOUSTIC ASSESSMENT



APPENDIX H  
WETLAND AND WETLAND BUFFER  
MANAGEMENT STRATEGY