

AMENDMENT NO. 4

YANCHEP CITY
AGREED STRUCTURE PLAN NO. 68

February 2019

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AMENDMENT NO. 4

YANCHEP CITY

AGREED STRUCTURE PLAN NO. 68

PART 1 – IMPLEMENTATION SECTION

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3418Rep19
February 2019

Table of amendments

Amendment No.	Description of Amendment	Amendment Type	Finally Endorsed by WAPC
1	Rezone Part Lot 602 Yanchep Beach Road, Yanchep from 'Business R60-R100' to Residential R20-60'.	Major	18 July 2017
2	<p>Minor amendment to include the Residential Medium Density Codes (RMD Codes) in accordance with the City of Wanneroo's '<i>Medium-Density Housing Standards (R-MD) Local Planning Policy (R-MD Codes LPP)</i>'.</p> <p>Updates to Part 1 in accordance with the <i>Planning and Development (Local Planning Schemes) Regulations 2015</i>.</p>	Minor	15 March 2017
3	<ul style="list-style-type: none"> • Include Lot 354 Capilano Avenue, Yanchep in the Structure Plan Area; • Designate 'Residential R20-R60' over Lot 354; and, • Delete Section 5.1: <i>Wastewater Treatment Plant</i> from Part One of the Structure Plan Text and the corresponding annotation on the Structure Plan Map. 	Minor	26 June 2018
4	<p>Reclassification of portions of Lot 9502 Toreopango Avenue from 'Mixed Use' and 'Business' to 'Residential' with a density coding of R20-60.</p> <p>Reclassification of 'District Distributor' roads within Lot 9502 Toreopango Avenue to 'Neighbourhood Connector' roads.</p>	Minor	TBC

YANCHEP CITY AGREED STRUCTURE PLAN 68

AMENDMENT NO. 4

The City of Wanneroo, pursuant to Part 4 of the *Planning and Development (Local Planning Schemes) Regulations 2015*, hereby recommends that the Western Australian Planning Commission approve the aforementioned amendment by:

1. Modifying the Zoning Plan by rezoning a portion of Lot 9502 Toreopango Avenue from 'Mixed Use' and 'Business' to 'Residential' with a density coding of R20-R60.
2. Modifying the Zoning Plan by reclassifying all roads within Lot 9502 that are currently shown as 'District Distributor' roads to 'Neighbourhood Connector' roads.

This amendment to Agreed Structure Plan 68 is prepared under the provisions of Part 4 of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

IT IS CERTIFIED THAT AMENDMENT NO. 1 TO AGREED STRUCTURE PLAN 76 WAS ADOPTED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON

.....

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

..... Date

..... Date of expiry

AMENDMENT NO. 4

YANCHEP CITY

AGREED STRUCTURE PLAN NO. 68

PART 2 – EXPLANATORY REPORT

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February 2019

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1.0 BACKGROUND

1.1 Purpose and Scope

The purpose of this amendment is to modify Agreed Structure Plan No. 68 ('ASP 68') in the following manner:

1. Modify the Zoning Plan by rezoning a portion of Lot 9502 Toreopango Avenue from 'Mixed Use' and 'Business' to 'Residential' with a density coding of R20-R60.
2. Modifying the Zoning Plan by reclassifying all roads within Lot 9502 that are currently shown as 'District Distributor' roads to 'Neighbourhood Connector' roads.

This report should be read in conjunction with Part 1: Implementation Section, as amended, and the original Part 2: Explanatory Report (Taylor Burrell Barnett, August 2012).

1.2 Lot Details

This amendment relates to Lot 9502 (No. 148) Toreopango Avenue, Yanchep ('the amendment area', until recently known as Lot 603 Toreopango Avenue). It appears on Deposited Plan 415221 and Certificate of Title vol. 2959, folio 380 and 381. Our Client, Parcel Property, is in the process of acquiring Lot 9502. The Certificates of Title appear at Appendix 4.

Lot 9502 has a total area of approximately 36.1 hectares, but this amendment relates only to the land identified for 'Business' (2.6ha) and 'Mixed Use' (5.33ha) purposes in ASP 68, and the 'District Distributor' roads.

1.3 Planning Context

The amendment area is zoned 'Urban' under the Metropolitan Region Scheme and 'Urban Development' under the City of Wanneroo ('City') District Planning Scheme No. 2. It is covered by the Yanchep-Two Rocks District Structure Plan ('the DSP', 2010), the provisions of which have largely been superseded by subsequent local structure planning (ASP 68, adopted by the City in 2012 – refer Appendix 5).

The amendment area is located in the north-western corner of ASP 68, north of Toreopango Avenue and west of a planned Neighbourhood Connector linking into the planned Yanchep City Centre. The amendment area is on the fringe of the Yanchep City Centre ('YCC') precinct and is currently identified in ASP 68 for 'Residential', 'Mixed Use' and 'Business' purposes.

ASP 68 was originally adopted by the City in September 2012 and endorsed by the WAPC in June 2013, and it has been amended three times since.

2.0 PROPOSED AMENDMENT

2.1 Background to the Amendment

The proposed amendment is the product of a site-specific review of the land use mix and movement network planned for the amendment area in ASP 68. This has included:

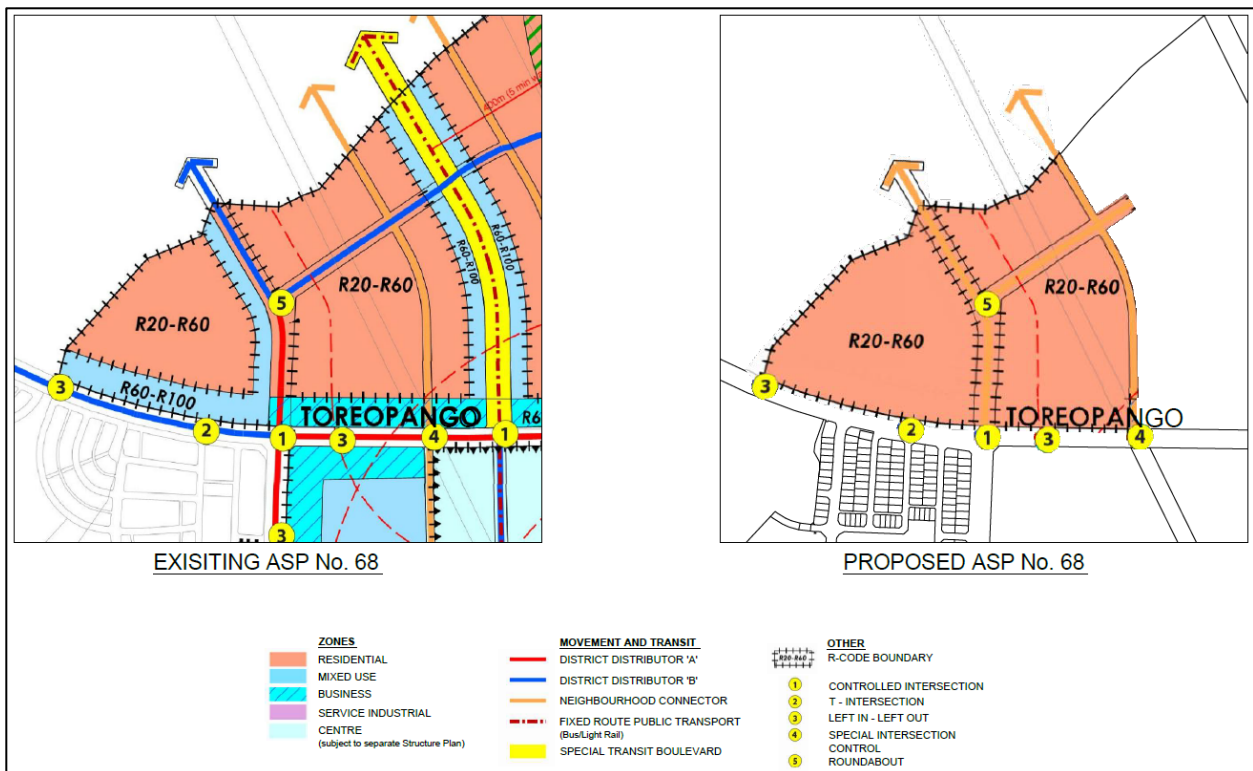
- An Employment Land Use Analysis (Urbis, June 2018); and
- Traffic Advice (DVC, December 2018).

Full detail from these studies is provided in Sections 2.2 and 2.3 below, but the key outcomes are as follows:

- There insufficient forecast unmet demand over the long-term to sustain the 'Business' and 'Mixed Use' zones planned for the subject site in the structure plan, whilst demand for residential land appears to be increasing.
- Strategic transport planning finalised since the structure plan was approved has resulted in forecast traffic volumes for Marmion Avenue being lower than originally anticipated, making a lower-order road more appropriate.

This amendment proposes refinements to ASP 68 in response to these findings and with respect to the geographical characteristics of the amendment area.

Figure 1: Proposed LSP amendment.



2.2 Proposed Residential Zone

This amendment proposes to replace the 'Business' and 'Mixed Use' zones shown to the north of Toreopango Avenue, in the north-western part of the structure plan area, with an extension of the 'Residential' zone that already applies to the majority of that area. This will facilitate residential development along Toreopango Avenue and Marmion Avenue and concentrate non-residential activity within the core of the YCC, which is to the south of the amendment area.

2.2.1 Extent of Employment Land

An Employment Land Use Analysis (Urbis, June 2018; refer Appendix 2) has been prepared to support this proposal. This observes that the employment targets expressed in the overarching Yanchep-Two Rocks District Structure Plan ('the DSP') are unrealistic. In particular:

- The need for retail floorspace was over-estimated, as a consequence of a relatively high real income growth assumption and an under-estimation for the proportion of online sales; and
- The planned non-retail commercial floorspace was extensive on a per-capita basis relative to the Perth metropolitan region as a whole.

As such, the DSP allocated unrealistic areas of commercial floorspace for the YCC and its environs. This was reflected in the LSP through the designation of Mixed Use and Business zones, which appear to be premised on the floorspace targets from the DSP, with no contemporary justification given.

Several geographical constraints to the 'Business' and 'Mixed Use' zones north of Toreopango Drive within the amendment area are readily observable in the LSP and noted in the Employment Land Use Analysis:

- Unlike land within the YCC, both zones are outside the walkable catchment for the planned Yanchep railway station, limiting the extent to which they benefit from rail services;
- Both zones will be disconnected from the YCC by two wide road reserves (Marmion Avenue and Toreopango Avenue), limiting pedestrian accessibility and opportunities for integration;
- The 'Mixed Use' zone would have to develop and survive in the absence of commercial floorspace on the opposite side of the street, limiting opportunities for activation. Residential land is already developed south of Toreopango Avenue and is planned for the land east of Marmion Avenue.

When considered in the context of detailed planning undertaken since the DSP was adopted, the extent and functionality of the 'Business' and 'Mixed Use' zones is clearly in question.

To investigate this over-supply of commercial land further, preparation of the Employment Land Use Analysis included a modelling exercise assessing the demand likely to be generated by 2041 for employment floorspace within the LSP area. This concludes that on the assumption that a regional hospital and tertiary education campus is provided by that time, the employment land uses in the LSP will be only 25% developed by 2041, with the focal point of development to that time being within the YCC. The potential for the 'Business' and 'Mixed Use' zones to be left undeveloped, or under-developed, over this twenty-year period and beyond is therefore clear.

2.2.2 Justification for Proposed Residential Zone

The Employment Land Use Analysis concludes that there is insufficient unmet demand over the long term to sustain the 'Business' and 'Mixed Use' zones envisaged in the LSP, and recommends that residential development be prioritised in their place. Although this will result in the loss of a very small area of commercial land, the net impact on employment outcomes is likely to be positive, as the additional residential land will increase demand for investment in the YCC.

The Yanchep Activity Centre Plan (approved March 2018) makes specific note of the importance of residential land in and around the YCC (including on the amendment area) being developed "at the maximum rate possible", in order to catalyse and support sustainable commercial development. Higher-density residential development will be accommodated south of Toreopango Avenue and east of Marmion Avenue, whilst the planned 'Business' and 'Mixed Use' zones lend themselves to residential development at a scale and density consistent with that planned for abutting land.

The existing 'Business' and 'Mixed Use' zones are both conducive to residential development (limited to multiple dwellings for the former). However, as the applicable density code (R60-R100) is associated with the 'Business' and 'Mixed Use' land uses and the attendant built form, their removal justifies a review of the density code. This is contemplated in the locational criteria for residential densities in Section 5.3 of Part 1 of the LSP, which advocates R60-R100 density codings for 'Business' and 'Mixed Use' zones and within 800 metres of railway stations. The proposed R20-R60 density coding is almost entirely beyond the 800 metre walkable catchment for the Yanchep railway station, which presents challenges for the walkability of not only commercial land uses, as discussed above, but residential development at anything other than medium densities of up to R60.

The proposed R20-R60 coding is beneficial for several reasons, including that it:

- Responds to the site's location outside the 800 metre walkable catchment for the Yanchep railway station, consistent with the locational criteria in the LSP;
- Reflects the site's physical separation from the core of the YCC by two major roads, being Toreopango Avenue and Marmion Avenue;
- Facilitates better management of the interface with the R20-R60 land to the north and west;
- Will ensure that the overall yield target in the LSP (6500 dwellings) can be delivered. Without prioritisation of residential development, there is little prospect of the land being developed over at least the next twenty years;
- Is conducive to the provision of 25 dwellings per site hectare along Neighbourhood Connector roads, as required by Section 5.1(b)(iii) of Part 1 of the LSP.

The LSP objective for an 'urban' built form reflecting the amendment area's location in the catchment of a significant activity centre will be delivered through provision of a range of lot products and house designs in accordance with the WAPC's Planning Bulletin 112: *Medium-density single house development standards – Development Zones*. The R-MD Codes are applicable by virtue of the City's Local Planning Policy 4.19: *Medium-Density Housing Standards* and the reference at Section 6.2 of Part 1 of the LSP.

At the subdivision and development stage, there will be opportunities to consider options for flexible urban design features (such as car-parking at the end of street blocks) and house designs that facilitate adaptation of residential land for commercial purposes should commercial purposes not eventuate from the outset. In this regard, it should be noted that uses such as Consulting Rooms, Corner Stores and Home Businesses are all permissible in the 'Residential' zone, and a future amendment/s to relevant planning documents could expand this further.

2.3 Proposed Road Classifications

With or without the proposed changes to the 'Mixed Use' and 'Business' zones outlined in Section 2.2 above, there is a need to reclassify the 'District Distributor' roads within Lot 9502, as their role in the context of the district and sub-regional transport network has diminished since the DSP and ASP 68 were adopted.

2.3.1 'External' roads

The LSP currently envisages the following road classifications within the amendment area:

- Marmion Avenue extension: District Distributor A, then District Distributor B, catering for traffic volumes of 28,700 and 18,000 vehicles per day respectively.
- 'North East' road off Marmion Avenue: District Distributor B, catering for 15,100 vehicles per day.
- 'North West' road parallel to Marmion Avenue: Neighbourhood Connector, catering for 5,900 vehicles per day.

The modelling that underpins these classifications and forecasts was completed in 2009 in support of the original version of the LSP, and was based on the DSP. A contemporary review of this modelling was completed recently by Donald Veal Consultants (refer Appendix 3: Traffic Advice). This notes the following:

- Current Main Roads modelling does not factor in the planned Mitchell Freeway extension, which will reduce traffic volumes on parallel arterial roads, including Marmion Avenue;
- The *Perth and Peel @ 3.5 million: The Transport Network* report (Department of Transport, March 2018) does not include Marmion Avenue north of Toreopango as a District Distributor. Two Rocks Road, the Special Transit Boulevard shown in the LSP and the Mitchell Freeway extension form the north-south arterial network in the local area.

The aforementioned factors illustrate that Marmion Avenue north of Toreopango will not perform the high-order role envisaged in the DSP and LSP. It will instead function as a Neighbourhood Connector road linking into the YCC. This diminished role will have a knock-on impact on the 'North East' road off Marmion Avenue in terms of volumes and function.

In response to these changes to traffic forecasts, the Traffic Advice recommends the following classifications and road widths:

- Marmion Avenue extension: Neighbourhood Connector A with a reserve width of 24 metres;
- 'North East' road: Neighbourhood Connector B with a reserve width of 18 metres;
- 'North West' road: Neighbourhood Connector B with a reserve width of 20 metres;

Consistent with the existing version of ASP 68, the two types of Neighbourhood Connector roads (A and B) are not distinguished on the map. The recommendations of the Traffic Advice in terms of status and reserve width will be acted upon at the subdivision stage.

2.3.2 Local roads

All other streets are recommended to be at 'Access Street D' standard except two in the western part of the amendment area, which are recommended to be at 'Access Street C' standard (18m wide reserves). None of these streets are shown on the approved or proposed version of the structure plan; the recommendations will be implemented at the subdivision stage.

The lots fronting Toreopango Avenue will be provided with vehicle access from a service road constructed within the Toreopango Avenue reserve. There is sufficient width (45 metres) for this to occur, for the following reasons:

- Liveable Neighbourhoods ('LN') recommends 50.6-52.6 metre reserves for 'District Distributor A' roads, which is the standard recommended for Toreopango Avenue in the structure plan.
- The width recommended by LN assumes service roads on both sides of the reserve.
- A service road will be required on the north side of Toreopango Avenue but not the south side. Land to the south is identified for Service Commercial (specifically, Highway Commercial) purposes in the relevant Activity Centre Plan and will have internal access via car-parks in front of the tenancies, within the lot.
- Lack of a service road on the south side ensures that there is no need for the Toreopango Avenue reserve to be as wide as is recommended in LN; its existing width is sufficient.

Refinement of the precise location and width of all local roads will occur at the subdivision stage in consultation with the City and WAPC, consistent with standard practice.

2.4 Substantiality

With reference to the criteria listed in the Structure Plan Framework, we are of the view that this proposal constitutes a minor structure plan amendment. It does not:

- Materially alter the purpose and intent of the structure plan;
- Change the intended lot/dwelling yield by more than ten per cent;
- Adversely impact upon the amenity of adjoining landowners;
- Restrict the use and development of adjoining land;
- Impact on infrastructure provision or the environment.

In addition, this proposal has a very limited impact on planning for the DSP area as a whole; it does not depart from the intent of that document and responds to contemporary observations about the extent of commercial floorspace and the road network.

Consistent with the *Planning and Development (Local Planning Schemes) Regulations 2015*, minor structure plan amendments need not be advertised.

3.0 CONCLUSION

This amendment proposes to refine the extent of commercial land in the north-western corner of ASP 68 in response to a contemporary review of floorspace in the Yanchep City Centre and a consideration of the geographical characteristics of the site. The proposed changes ensure that a feasible and practical development outcome can be delivered in the short to medium-term, supporting development of the Yanchep City Centre without being prejudicial to a more commercial-focused outcome in the longer term if that proves to be appropriate.

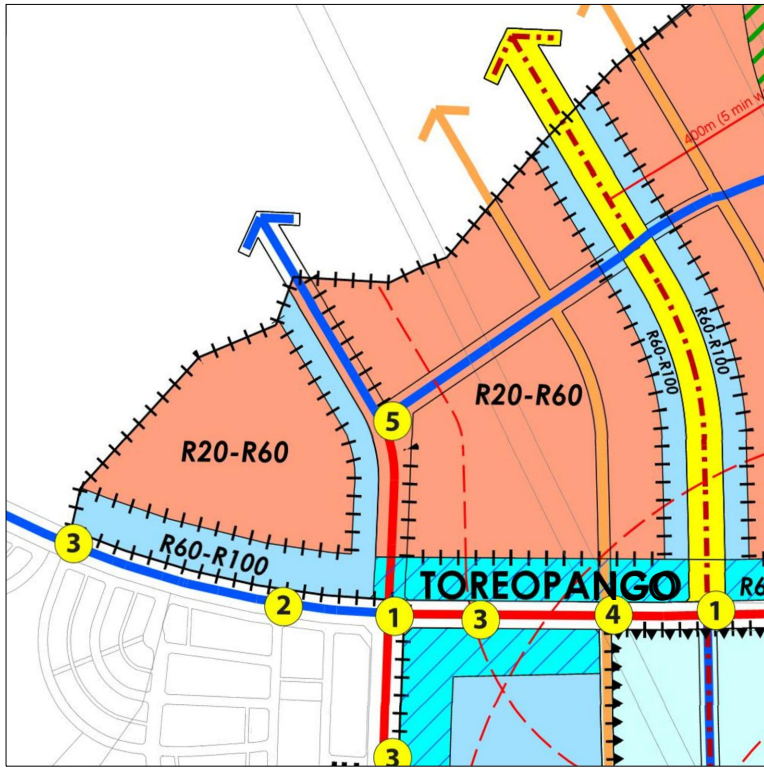
In response to both the proposed changes to the 'Mixed Use' and 'Business' areas and changes to regional transport planning over the past decade, this amendment also proposes to reclassify the 'District Distributor' roads shown in ASP 68 within Lot 9502 to 'Neighbourhood Connector' roads. This change reflects the need to include the planned Mitchell Freeway extension in traffic modelling and the provisions of the *Perth and Peel @ 3.5 million: The Transport Network* report released in 2018, which, unlike the DSP, does not include Marmion Avenue north of Toreopango Avenue (through Lot 9502) as a 'District Distributor'.

This amendment responds to contemporary planning and development conditions and will ensure that ASP 68 provides an appropriate framework for the subdivision and development of Lot 9502, supporting the emergence of the Yanchep City Centre.

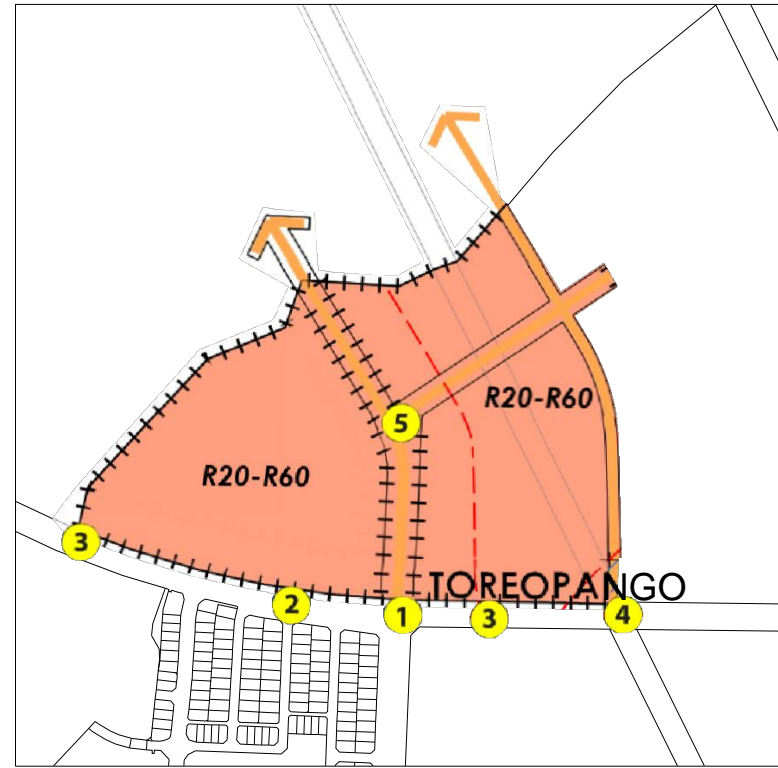
APPENDIX 1

Proposed ASP 68 amendment

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EXISTING ASP No. 68



PROPOSED SP No. 68

ZONES	MOVEMENT AND TRANSIT	OTHER
RESIDENTIAL	DISTRICT DISTRIBUTOR 'A'	R-CODE BOUNDARY
MIXED USE	DISTRICT DISTRIBUTOR 'B'	CONTROLLED INTERSECTION
BUSINESS	NEIGHBOURHOOD CONNECTOR	T - INTERSECTION
SERVICE INDUSTRIAL	FIXED ROUTE PUBLIC TRANSPORT (Bus/Light Rail)	LEFT IN - LEFT OUT
CENTRE (subject to separate Structure Plan)	SPECIAL TRANSIT BOULEVARD	SPECIAL INTERSECTION CONTROL
		ROUNDABOUT

Source: City of Wanneroo ALSP 68

APPENDIX 2

Employment Land Use Analysis (Urbis, January 2019)



LOTS 603 & 903 TOREOPANGO AVENUE, YANCHEP

EMPLOYMENT LAND USE ANALYSIS

JANUARY 2019
PER1025
PREPARED FOR PARCEL PROPERTY



URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	Tim Connoley
Associate Director	Kobus Van Der Vyver
Project Code	PER1025
Report Number	Final

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1. INTRODUCTION

1.1. BACKGROUND AND PURPOSE

Urbis was engaged by Parcel Property as part of its land use planning for the recently acquired site at Lots 603 & 903 Toreopango Avenue, Yanchep (the subject site) to assist with understanding the highest and best uses for non-residential zoned land within the site.

The need for a preliminary land use study was identified to primarily understand how the development of this site can best complement and support the aspirational vision for the Yanchep Strategic Metropolitan Centre. This analysis complements retail and land use analysis undertaken as part of the preparation of the Yanchep City Activity Centre Structure Plan.

In particular, this study involves several high-level assessments that help to inform:

- The need for edge-of-centre / periphery employment zoned land in Yanchep;
- The potential role of employment zoned land within the subject site; and
- The highest and best use of designated employment zoned land within the subject site.

This study affords focus to the mixed use and business zones that were identified as part of the Yanchep City Structure Plan which was prepared in 2010 to 2012.

1.2. DOCUMENT STRUCTURE

This report is comprised of the following sections:

- **Introduction** – overview of purpose of report and study approach;
- **Background Context Review** – review of previously prepared studies and plans of relevance;
- **Land Use Assessment** – assessment of the viability of proposed non-residential land uses in the subject site; and
- **Findings** – summary of the study's findings and recommendations.

2. BACKGROUND CONTEXT REVIEW

Yanchep has been the focus of considerable land use planning over the past three decades. This section reviews the validity and accuracy of employment land use targets and studies underpinning these documents.

2.1. YANCHEP – TWO ROCKS DISTRICT STRUCTURE PLAN

One of the earliest land use studies was the Yanchep Structure Plan which was completed in 1993 and included as an appendix to the North West Corridor Structure Plan. This included lofty aims for population and employment growth with land uses such as a university campus identified in the plan. This plan set the basis for a district structure plan (DSP) which was developed over several years between 2008 and 2010.

This district structure plan responded to State Government and local government policy priorities for employment growth in the corridor (e.g. Network City, SPP 4.2, City of Wanneroo Employment Policy, etc.). As such, considerable employment targets were adopted as part of this plan. Namely, the plan identified land uses for the provision of 55,000 jobs and 67,000 dwellings at build out. This equates to approximately 0.82 jobs per dwelling which is significantly higher than the current rate in the City of Wanneroo (0.66) and equivalent to the rate observed in the City of Joondalup which is home to a major university campus and the largest employing strategic metropolitan centre.

Table 1 – Jobs to Dwellings Ratios¹

Area	Jobs	Dwellings	Job / Dwelling Ratio
Yanchep – Two Rocks DSP	55,000	67,000	0.82
City of Joondalup (2016)	46,047	58,474	0.79
City of Wanneroo (2016)	44,004	67,113	0.66
Greater Perth (2016)	850,156	776,014	1.10

In order to support the level of employment planned for the Yanchep – Two Rocks area, the DSP adopted the following floorspace and land use targets.

Table 2 – Floorspace and Employment Estimates, Yanchep – Two Rocks DSP

Land Use Type	Land Area (ha)	Shop Retail Floorspace (sqm)	Total Floorspace (sqm)	Indicative Jobs
Strategic Metropolitan Centre	220	71,800	458,867	15,001
Other Centres	297	130,500	357,635	11,346
Total Centres	517	202,300	816,502	26,347
Employment / Mixed Use Zone	91	-	-	10,630
Mixed Use Corridors	258	-	-	8,810
Industrial Zones	112	-	378,392	3,920
Education / Health	456	-	185,429	2,610
Home Based Employment	-	-	-	2,680
TOTAL	-	-	-	55,000

¹ ABS (2017) Census of Population and Housing, 2016

Urbis (previously known as UrbisJHD) prepared the retail assessment which underpinned the floorspace assumption for the shop retail floorspace. The *Retail Hierarchy Assessment* determined that approximately 202,300 square metres (sqm) of shop retail floorspace and an additional 78,393sqm of bulky goods retail floorspace. This analysis – whilst appropriate at the time – was based on relatively high real income growth assumptions (i.e. increased income to spend in retail stores) and relatively low online sale proportions. Online shopping forecasts for 2050 for instance are below current observed rates. As such, the analysis likely over-estimated the need for retail floorspace across the Yanchep – Two Rocks area.

A significant level of non-retail floorspace is proposed for the area. In particular, a large degree of business and technology employment was forecast for the area, with this employment expected to be supported by two university campuses and TAFE and other knowledge-based uses. The table below summarises the floorspace targets which underpinned the provision and scale of the mixed use and business zones.

Table 3 – Floorspace by Land Use, Yanchep – Two Rocks DSP

Land Use Type	Floorspace (sqm)
Primary Industry	5,000
Manufacturing / Processing / Fabrication	270,000
Storage / Distribution	215,000
Service Industry	148,000
Shop Retail	210,000
Other Retail	95,000
Office / Business	503,720
Health / Welfare / Community Services	265,000
Entertainment / Recreation / Culture	80,000
Accommodation	107,520
Utilities / Communications	32,000
TOTAL	1,931,240

Urbis reviewed the above targets based on the current provision of floorspace across Greater Perth and the north west corridor. The review revealed that the DSP sets a number of ambitious targets. In particular, the level of office and business floorspace of 500,000+ square metres is equivalent to rates per capita observed across Greater Perth which includes the core CBD and other inner city office markets. This level of office floorspace is assumed to be the driver of the large mixed use and corridors and zones detailed in the DSP. This proposed level of office space is more than what is currently available within the West Perth and Subiaco office markets².

In addition to high office floorspace assumptions, the plan assumes that the DSP area will accommodate more short stay accommodation than the City of Fremantle and a regional hospital larger than Fiona Stanley.

It is important to recognise that the floorspace assumptions were not tested nor informed by analysis of need. They instead reflect desirable outcomes required to achieve a policy-driven employment target.

Table 4 – Floorspace by Land Use Ratios (sqm per capita)³

Land Use Type	DSP Target	City of Wanneroo	Greater Perth
Primary Industry	0.03	0.03	0.02

² DPLH (2017) Land Use and Employment Survey

³ Ibid.

Land Use Type	DSP Target	City of Wanneroo	Greater Perth
Manufacturing / Processing / Fabrication	1.74	1.52	1.97
Storage / Distribution	1.39	3.31	4.12
Service Industry	0.95	1.08	1.40
Shop Retail	1.35	1.03	1.85
Other Retail	0.61	0.56	0.65
Office / Business	3.25	1.37	3.45
Health / Welfare / Community Services	1.71	2.05	3.66
Entertainment / Recreation / Culture	0.52	0.49	1.35
Accommodation	0.69	0.40	1.60
Utilities / Communications	0.21	0.26	1.11
TOTAL	12.46	12.11	21.19

2.2. YANCHEP CITY STRUCTURE PLAN

The Yanchep City Structure Plan (ASP 68) was drafted initially in 2007 and adopted in 2013. This structure plan covers a 612 hectare site which includes the Yanchep Strategic Metropolitan Centre, the subject site and several surrounding lots.

The structure planning area is directly adjacent to the north of the South Yanchep District Centre which currently functions as a convenience neighbourhood centre (anchored by Woolworths).

The structure plan envisages the creation of 22,500 jobs at ultimate development which is equivalent to 45% of the DSP target.

Numerous employment zones are identified within the structure plan area including the following two zones that are noted within the subject site.

- Mixed Use:** A mixed use zoned is allocated adjacent the to the City Centre and along the Special Transit Boulevard, the northern extension of Marmion Avenue and western extension of Toreopango Avenue. The structure plan notes that '[i]t is not possible for the LSP to specify the types of commercial uses that should be established in these mixed use areas.... nor [is it] appropriate to dictate the types of commercial uses, the amount of floorspace and the number of residential units that should be established.' The structure plan notes that allowing the retro-fitting of the ground floor of residential units should be encouraged when there is limited demand for non-residential uses.
- Business Zone:** A business zoning is allocated throughout large areas fronting Marmion Avenue and Toreopango Avenue. A small portion of the zoning extends to the western side of a future distributor road and along the south-eastern boundary of the subject site. The business zoning is a flexible zoning classification which accommodates a variety of business types, from office and retail through to service commercial uses. Residential uses are also proposed as permitted uses.

The degree of non-residential zoned land within the subject site and wider structure planning area appears to be premised on floorspace targets adopted by the Yanchep – Two Rocks DSP. The level of mixed use and business zoned land to the western edge of the city centre is noted as being within a walkable catchment of the future train station which would support its viability. This area is also located with exposure to Marmion Avenue which would further support its viability.

The level of non-residential proposed along Toreopango Avenue is not justified within the structure plan. The lack of destinations or anchor uses to the east or west imply that this road will not cater to significant traffic. The development immediately to the south of the subject site has already developed as traditional residential which further limits activation of this southern frontage.

Based on the job target and DSP floorspace estimates, it appears that approximately 1,000,000sqm of floorspace is assumed for this structure plan area, with approximately 460,000 accommodated within city centre.

2.3. YANCHEP CITY CENTRE ACTIVITY CENTRE STRUCTURE PLAN

In 2015, a draft activity centre plan was published for the central city centre planned in Yanchep. The activity centre plan area covers 106 hectares immediately south-east of the subject site – within the Yanchep City Structure Plan area.

The plan adopts the DSP employment target of 15,000 jobs and floorspace target of 458,867sqm. The plan notes that the city centre ‘...will ultimately be expected to provide approximately double the overall employment generating floor space of [the Joondalup and Fremantle centres] and double the employment.’ The plan notes that the centre’s targets are premised on it having a much more intense employment outcome than other established centres. No rationale is provided as to why the target is considered realistic and achievable.

An employment strategy notes that significant public investment is required to support the achievement of the target job estimates, including provision of a university, TAFE, hospital and train station. Importantly, the employment strategy notes that achievement of the 15,000 jobs ‘...will require development of residential land in and around the centre at the maximum rate possible [and] development of the city centre at the maximum rate possible.’

2.4. INDICATIVE FLOORSPACE DEMAND

Urbis undertook a high level floorspace benchmarking exercise in order to understand the potential scale, timing and mix of uses that the Yanchep City Structure Plan area could accommodate. This benchmarking exercise included the following steps:

- (a) Identify current and projected population levels for Yanchep and Two Rocks;
- (b) Identify floorspace (GFA) per capita benchmarks based on the Department of Planning, Lands and Heritage Land Use and Employment Survey;
- (c) Apply benchmarks to current and future population levels to determine floorspace demand; and
- (d) Apply market shares by land use to determine need within the Yanchep City Structure Plan area.

This high-level modelling exercise was based on the following population inputs. The population inputs suggest that the ultimate population may not be achieved for many decades post-2041 (the latest year forecasts are available).

Table 5 – Population Forecasts, Yanchep and Two Rocks⁴

Land Use Type	Yanchep	Two Rocks	TOTAL
2018	10,919	3,784	14,703
2041	45,012	20,879	65,891
Build-Out	-	-	155,000

For the purposes of consistency with the DSP analysis, Urbis adopted benchmarks for Greater Perth. It is important to note that these benchmarks cover industrial areas and CBD office markets therefore overstating the need within the region. Urbis therefore applied benchmarks which recognise demand will be distributed to existing industrial and CBD markets as well as other activity centres. Population services are expected to have the highest market shares with rates of 35% assumed based on built out middle ring areas (with lower

⁴ Forecast.id (2018) & Yanchep – Two Rocks DSP

order centres and CBD / industrial areas accommodating the remainder of demand). Uses which will be accommodated within industrial areas are not assumed to be accommodated within the structure plan area (consistent with the structure plan documentation).

Table 6 – Floorspace Benchmarks and Market Shares⁵

Land Use Type	GFA per capita (sqm)	Market Shares ⁶
Primary Industry	0.02	0%
Manufacturing / Processing / Fabrication	1.97	0%
Storage / Distribution	4.12	0%
Service Industry	1.40	20%
Shop Retail	1.85	35%
Other Retail	0.65	35%
Office / Business	3.45	15%
Health / Welfare / Community Services	3.66	35%
Entertainment / Recreation / Culture	1.35	35%
Accommodation	1.60	10%
Utilities / Communications	1.11	0%

Based on the above assumptions, the modelling exercise revealed that the demand generated and captured by the Yanchep City Structure Plan area by 2041 is expected to accommodate approximately 236,000sqm of employment floorspace. This is premised on the delivery of a regional hospital and tertiary education campus / facility.

Based on the structure planning assumptions, the floorspace estimates suggest that the Yanchep City Structure Plan area employment land uses will only be 25% developed by 2041. At build-out, there is an expected to be an oversupply of employment zoned land, with only half of the assumed floorspace considered supportable.

Table 7 – Floorspace Demand Estimates, Yanchep City Structure Plan Area⁷

Land Use Type	2018	2041	Build-Out
Service Industry	4,117	18,449	43,400
Shop Retail	9,520	42,664	100,363
Other Retail	3,345	14,990	35,263
Office / Business	7,609	34,099	80,213
Health / Welfare / Community Services	18,835	84,406	198,555
Entertainment / Recreation / Culture	6,947	31,133	73,238
Accommodation	2,352	10,543	24,800
TOTAL	52,725	236,285	555,830

⁵ DPLH (2018) Land Use and Employment Survey

* Commercial land use, excluding Perth CBD

⁶ Market shares based on intent noted in Yanchep City Structure Plan

⁷ DPLH (2018) Land Use and Employment Survey

* Commercial land use, excluding Perth CBD

3. LAND USE ASSESSMENT

Urbis reviewed the viability of the business and mixed-use zones within the subject site in this section.

3.1. APPROACH

Urbis interrogated the highest and best of the subject site with a focus afforded to the existing zones of business and mixed use compared to residential. This assessment assessed the potential of these proposed uses against the following criteria.

Table 8 – Highest and Best Use Assessment Criteria

Criterion	Description
Current and Future Demand	The market fundamentals will be premised on the likely demand for a type of land use. This includes consideration of population, visitor, worker and investor demand.
Competitive Positioning	The location and role of current and future competition will influence the likely need and role of a land use in a development. For this assessment, focus is afforded to current and planned land uses in the local area and wider corridor.
Site Attributes / Advantages	Site and location attributes are core factors influencing the desirability of a site for a certain use. This criterion affords focus to accessibility, exposure, amenity and infrastructure attributes.

For this analysis, Urbis assessed the above criteria in order to understand the potential scale, role and timing of these land uses within the subject site.

3.2. RESIDENTIAL ZONE ASSESSMENT

The subject site is predominantly proposed as a residential development. For the purpose of this study, Urbis reviewed the likely need for residential and whether the site is well positioned to accommodate future population growth.

Table 9 – Residential Assessment

Criterion	Description
Current and Future Demand	<p>The north-west corridor is one of Perth’s major growth regions and it is expected to play a major role in accommodating Perth’s growth towards 3.5 million people given the more than 7,300 hectares of undeveloped urban and urban deferred zoned land. The State Government expects the corridor’s population will grow from 323,000 residents in 2011 to 740,000 residents by 2050 – equating to 10,700 residents per annum⁸.</p> <p>Modelling undertaken for the City of Wanneroo illustrates that Yanchep’s population is expected to grow from 10,900 residents in 2018 to 45,000 residents by 2041 – equating to approximately 1,500 residents per annum⁹.</p> <p>Whilst the residential market is currently experiencing low sales volumes, the State Government recently projected increased dwelling investment and population growth as a result of leading indicators pointing towards increased employment and confidence (online job advertisements increased month-on-month over the past 18 months). The State Government’s budget papers forecast population growth to increase from 22,000 per annum to 59,000 per annum by 2021/22¹⁰.</p>
Competitive Positioning	Whilst competition is currently high given market conditions, growth rates of approximately 1,500 residents equates to more than 500 lots per annum. Currently, active estates are limited to the Capricorn Joint Venture, Peet, Frasers and LWP estates.

⁸ DPLH (2018) <https://www.planning.wa.gov.au/dop_pub_pdf/North-West_Sub_Region_March2018.pdf>

⁹ Forecast.id (2018) <<https://forecast.id.com.au/wanneroo/about-forecast-areas?WebID=350>>

¹⁰ Treasury (2018) <<https://www.ourstatebudget.wa.gov.au/>>

Criterion	Description
	<p>Development options in Yanchep range from coastal lots, Golf estate lots to more affordable lots located in southern Yanchep. Currently no residential lot products are available to the north of the future train station.</p> <p>A review of lot supply in the corridor reveals that there are a limited number of entry level options in Yanchep. For instance, the median price per square metre of estates in the area – based on 2017 sales – varied between \$436 (The Reef) and \$545 (Capricorn Beach) compared to price points below \$400 per square metre in Singleton, Mundijong and Bullsbrook. The joint-venture between Parcel and Department of Communities is expected to be able to deliver required affordable and innovative housing products in the subject site.</p>
Site Attributes / Advantages	The site's topography, location within proximity of the future city centre and train station supports future residential demand.

3.3. BUSINESS ZONE ASSESSMENT

The subject site includes a business zone along the south-eastern boundary of the site (along Toreopango Avenue). Urbis reviewed the need for this land use and whether the site is well positioned to accommodate these employment uses. Business zoning as proposed by the DSP is to be viewed as a flexible land use classification, which accommodates a variety of business types, from office and retail through to service, commercial uses and even residential uses. The key land-use activities that will be investigated in this section is business (office) and retail land-uses.

Table 10 – Business Zone Assessment

Criterion	Description
Current and Future Demand	<p>Although household growth is supporting an expansion of the local workforce, demand from businesses and investors for non-residential property is also driven by domestic and international markets, micro- and macro-economic trends and a range of other factors. Demand for non-population driven services such as professional services and other knowledge based industries are particularly impacted by other regional and international factors.</p> <p>Indicatively, demand for uses that may be accommodated within a business zone is expected to increase. However, growth is expected to be moderate and increase to only 50,000 or less than 10 hectares of developable land across the 612 hectare Yanchep City Structure Plan area by 2041 (see Section 2.4). In the short and medium term (5-7 years), demand is expected to average less than 1,500 square metres per annum.</p> <p>It is important to note that presently business zone land use demand is limited, with an insufficient critical mass to lessen the level of investment risk. Optimistic projections indicate a potential sizable market in future, but attached to these is great deal of incubation time and assumptions that government investment in the form of anchor institutions (e.g. hospital, TAFE etc.) will be delivered.</p> <p>When compared to population levels, demand proves to be insufficient to sustain most of the space allowed for non-residential land-uses over the next 50 years.</p>
Competitive Positioning	<p>A range of activity centres are establishing and planned within the corridor. Developments in the region of relevance include the Eglinton District Centre, the Alkimos Secondary Centre and the establishing Butler and Clarkson centres. More broadly, Joondalup is a key competitor which attracts businesses that may be suitable for the business zone in Yanchep.</p> <p>Another key competitor is planned employment floorspace south of the subject site, to the west of the Yanchep city centre and along Marmion Avenue. Moreover, the Yanchep city centre is aiming to accommodate 460,000sqm of employment floorspace.</p> <p>Development of these competing areas will likely take many years and depend on a complex range of factors, including population expansion within the catchment, key infrastructure provision, service demand, strategic priorities, budget and private investment decisions. However, the probability of success is higher than that for the subject site given their superior locations within a walkable catchment of train stations and exposure along Marmion avenue.</p>

Criterion	Description
Site Attributes / Advantages	<p>Demand will flow to areas with the best location advantages. To be competitive a site needs to enjoy exposure, visibility, be practical, have complementary placement and appropriate access to infrastructure.</p> <p>The site will enjoy exposure and visibility from Toreopango Road however the lack of development in this northern area of Yanchep implies that traffic volumes will remain low over the medium term – limiting exposure for tenants. Toreopango Road in particular is also expected to play a largely local role given the lack of destinations to the east to drive traffic.</p> <p>The layout proposed by the DSP indicates a small corridor of business use with residential surrounds. Although not incompatible, the residential surrounds do not hold any business agglomeration advantage. When the option is offered, business tenants would likely choose to consolidate with other complementary industries to enjoy agglomeration benefits achieved within a larger critical mass.</p>

3.4. MIXED USE ZONE ASSESSMENT

The subject site includes a mixed use zone along the south-western boundary of the site (along Toreopango Avenue) and along a proposed distributor road. Urbis reviewed the need for this land use and whether the site is well positioned to accommodate these employment uses.

Table 11 – Mixed Use Zone Assessment

Criterion	Description
Current and Future Demand	<p>Mixed-use, as proposed in the DSP, comprise of small scale retail uses and home businesses. Alternatively, the DSP recommends that mixed use be developed primarily as residential but with the potential for retro-fitting ground floor activation. Given the flexibility of this use for a range of property types, ascertaining demand is not straightforward.</p> <p>Typical tenants for small scale retail could include apparel stores, food retail, catering and personal services. Each of these uses are population driven uses that benefit from accessibility and exposure.</p> <p>According to a detailed break-down of demand modelling in Section 2.4, demand for these shop retail sub-categories is expected to equate to approximately 20,000sqm by 2041 and this demand is likely going to have a preference for the city centre.</p>
Competitive Positioning	<p>Prevailing trends point toward more consolidated and activated centres with greater intensity and concentration of employment. Trip-linking is encouraged through a 'one-stop shop' offering. On the other side of the market spectrum convenience petrol stations are increasingly competing for the convenient purchases market segment.</p> <p>Considering prevailing trends, future demand will likely be accommodated within the core of existing and planned centres in the region. In the short term this includes existing centres in Butler, Alkimos and Yanchep. Over the medium term, post the construction of the rail extension, centres are expected to be developed within Yanchep, Eglinton and Alkimos.</p>
Site Attributes / Advantages	<p>The most important drivers for business success in small scale retail is access and exposure to potential markets. The subject site will enjoy exposure to passing traffic on Toreopango Road. Current traffic forecasts by Mainroads Western Australia¹¹ within Yanchep is on the low side when compared to prominent mixed-use precincts such as Joondalup Gate and Leach Highway Myaree. Current traffic counts along Beach Road (a higher order road than Toreopango Road) indicate passing traffic at about 4,800 vehicles per day. When compared to activated centres of Joondalup Gate and Leach Highway with volumes exceeding 40,000 and 60,000 vehicles per day, a great deal of activation and traffic volume growth is required to sustain mixed-use operation on the proposed site. Due to a lack of destinations or anchor uses located along the road it is likely that the volumes would not increase substantially.</p>

¹¹ Main Roads Western Australia (2018), <https://trafficmap.mainroads.wa.gov.au/map>

4. KEY FINDINGS

This study demonstrated that Yanchep has been the focus of considerable land use planning over the past three decades and as a response to State Government and local government policy priorities for employment the district structure plan adopted considerable employment targets (55,000 new jobs).

A significant level of non-retail floorspace was previously proposed for the area. In particular, a large degree of business and technology employment was forecast for the area, with this employment expected to be supported by two university campuses and TAFE and other knowledge-based uses.

The level of assumed office floorspace is considered particularly unrealistic, with the DSP assuming a higher level of office floorspace than what is available within the West Perth and Subiaco office markets. This has significant implications for the mixed use and business zones given the identification of these was partly premised on delivery of office-based employment.

Furthermore, Urbis prepared the retail assessment which underpinned the floorspace assumption for the shop retail floorspace however – whilst appropriate at the time – this was based on relatively high real income growth assumptions (i.e. increased income to spend in retail stores) and relatively low online sale proportions. Online shopping forecasts for 2050 for instance are below current observed rates. As such, the analysis likely over-estimated the need for retail floorspace across the Yanchep – Two Rocks area.

Planning for the Yanchep City Structure Plan, which encompasses the subject site, appears to have adopted the DSP assumptions which were not interrogated nor informed by analysis of need. When relating the job target and DSP floorspace estimates, approximately 1,000,000sqm of floorspace is assumed for this structure plan area, with approximately 460,000sqm accommodated within the Yanchep City Centre. The viability of these floorspace estimates are however not justified.

A review of aspirational but achievable floorspace targets as part of this study revealed that demand at build-out will likely support approximately half of this expected floorspace level. This implies that there is a significant oversupply of employment-zoned land, in particular mixed use and business zoned land.

This investigation sought to identify the highest and best use of designated employment zoned land within the subject site and how development of this site can best complement and support the aspirational vision for the Yanchep Strategic Metropolitan Centre.

Three land-uses were investigated including; residential, business and mixed-use. The key findings are summarised below.

Residential Land-Use

- The north-west corridor is one of Perth's major growth regions which is expected to play a major role in accommodating Perth's growth through residential development.
- Although the area is currently experiencing low residential sales volumes, the State Government projected an increase in dwelling investment and population growth due to increased employment and confidence.
- The supply analysis reveals that although residential development is evident, it is the result of a few active suppliers with a limited choice available.
- A possible opportunity is the provision of entry level product options which are currently in short supply within Yanchep based on projected demand for 1,500 dwellings per annum.
- Enabling factors such as good topography and future access via the train supports future residential demand.
- Increased residential development in Yanchep will support the viability of a more consolidated employment outcome in the city centre.
- The joint venture between Parcel and Department of Communities is expected to support the delivery of affordable and innovative housing options in the subject site.

Business Land-Use

- Although household growth is supporting an expansion of the local workforce, demand from business zone uses is primarily driven by domestic and international markets, micro- and macro-economic trends and a range of other factors.
- Indicatively, demand for uses that may be accommodated within a business zone is expected to increase however growth is expected to be moderate and increase to only 50,000 sq.m or less than 10 hectares of developable land across the 612 hectare Yanchep City Structure Plan area by 2041.
- In the short and medium term (5-7 years), demand is expected to average less than 1,500 sq.m per annum.
- Another key competitor is planned employment floorspace south of the subject site, to the west of the Yanchep city centre and along Marmion Avenue. Moreover, the Yanchep city centre is aiming to accommodate 460,000 sq.m of employment floorspace
- Competition factors will likely show demand to flow and consolidate in city centres.
- The site will enjoy exposure and visibility from Toreopango Road however the lack of development in this northern area of Yanchep implies that traffic volumes will remain low over the medium and long term.

Mixed-Use

- According to a detailed break-down of demand modelling in Section 2.4, demand for these shop retail sub-categories is expected to equate to approximately 20,000sqm by 2041 and this demand is likely going to have a preference for the city centre.
- Prevailing trends point toward more consolidated and activated centres with greater intensity and concentration of employment. Trip-linking is encouraged through a 'one-stop shop' offering. On the other side of the market spectrum convenience petrol stations are increasingly competing for the convenient purchases market segment.
- Considering prevailing trends, future demand will likely be accommodated within the core of existing and planned centres in the region.

In summary, the analysis suggests that there is insufficient unmet demand over the long term to sustain the current business and mixed zoned land uses within the subject site. In contrast, residential demand appears to be increasing.

Based on this analysis, residential development should be prioritised as it will help address anticipated gaps in the entry level market segment and will support the earlier viability of the city centre.

The re-zoning of the subject site's business and mixed-use zones is expected to have a negligible impact on employment outcomes. In particular, employment uses are not likely to be viable on these land holdings at build-out of the wider area.

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APPENDIX 3

Traffic Advice (Donald Veal Consultants, December 2018)

December 2018
Rev 2 Final

Traffic Advice for Lot 603 Toreopango Avenue,
Yanchep

Prepared For:
Parcel Property



Traffic Advice Report



DOCUMENT ISSUE AUTHORISATION

Issue	Rev	Date	Description	Prepared By	Checked By	Approved By
0	0	27/08/2018	Draft Report	CHS	DNV	DNV
0	1	16/10/2018	Rev1 Draft Report	CHS	DNV	DNV
1	0	25/10/2018	Rev 1 Final Report	CHS	DNV	DNV
1	2	13/12/2018	Rev 2 Final Report Minor Edits	CHS	GTT	CHS

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Donald Veal Consultants Pty Ltd

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1. INTRODUCTION

1.1 BACKGROUND

Parcel Property has prepared a Concept Subdivision Plan for its site known as Lot 603 Toreopango Avenue (Lot 603) in Yanchep. This plan contains proposed road reserve widths within the subdivision. Lot 603 lies adjacent to or straddles three major roads which are included in the Yanchep City Structure Plan (Yanchep City - ASP68, in the City of Wanneroo). DVC was commissioned to review the road reserve widths in the Concept Subdivision Plan in light of the Yanchep City Structure Plan and current planning information.

1.2 SCOPE OF THIS REPORT

The scope of this traffic advice is broadly in accordance with Volume 2 (Planning schemes, structure plans and activity centre plans) of the Western Australian Planning Commission's (WAPC) Transport Impact Assessment Guidelines (2016). It focusses more however on the applicability of the road cross sections, rather than on the impact of generated traffic on the surrounding road network as is typical of a greenfield site in an undeveloped precinct.

2. EXISTING SITE CONDITIONS

2.1 LOCATION

Lot 603 is located to the north of the proposed intersection of Marmion Avenue and Toreopango Avenue. The location is shown as an aerial photograph in **Figure 2.1** which also shows the extent of surrounding development and the road network. **Figure 2.2** shows the location of Lot 603 in relation to the Yanchep City Structure Plan (ASP68).



Figure 2.1: General Locality Plan

Source: Near Maps 16th June 2018

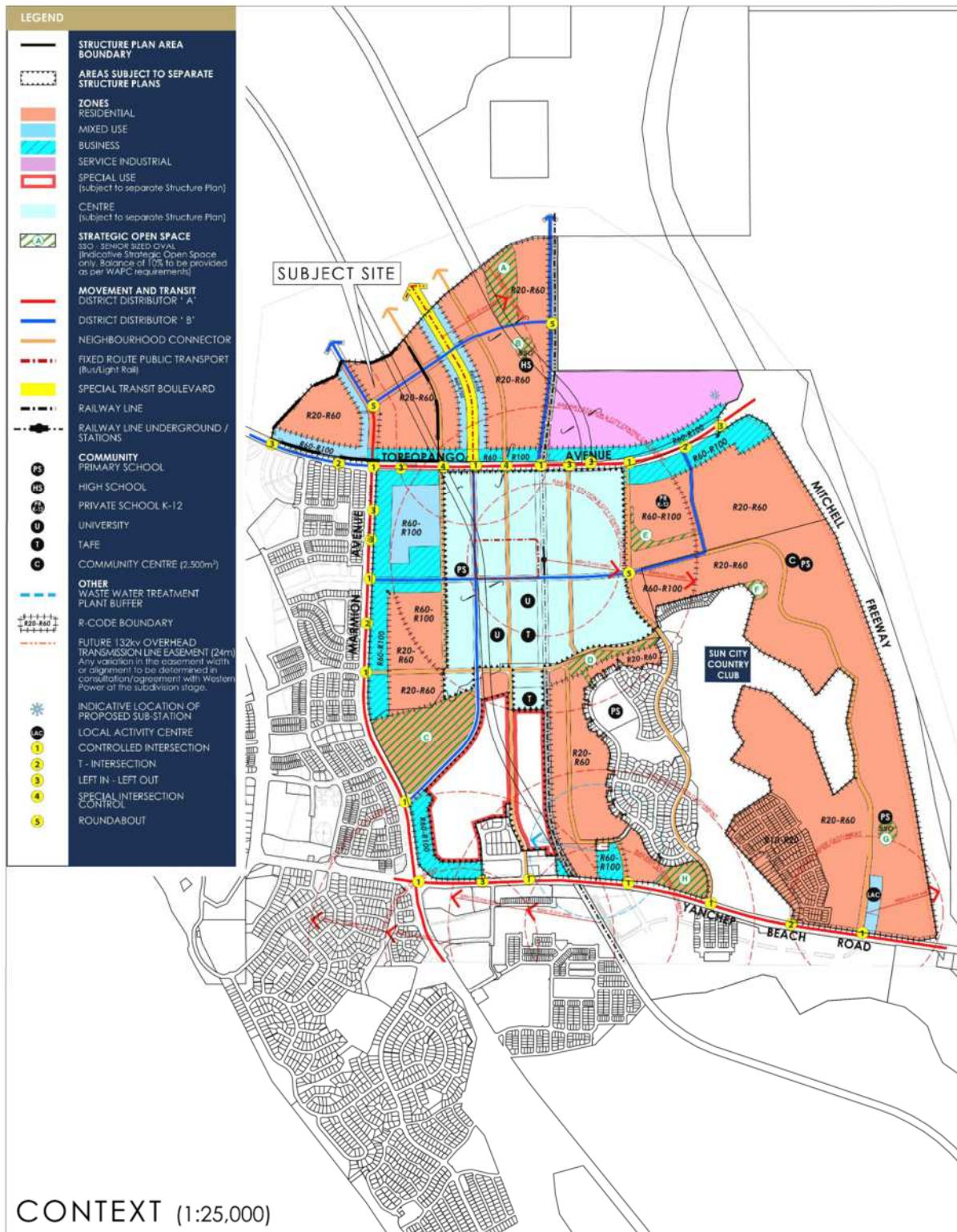


Figure 2.2: Site Location

Source: CLE Town Planning and Design

3. PROPOSAL

3.1 PROPOSED DEVELOPMENT

The Lot 603 Toreopango Avenue Subdivision Concept is shown in **Figure 3.1**. The plan consists of a total site area of 36.04 ha yielding a total of 533 dwellings.

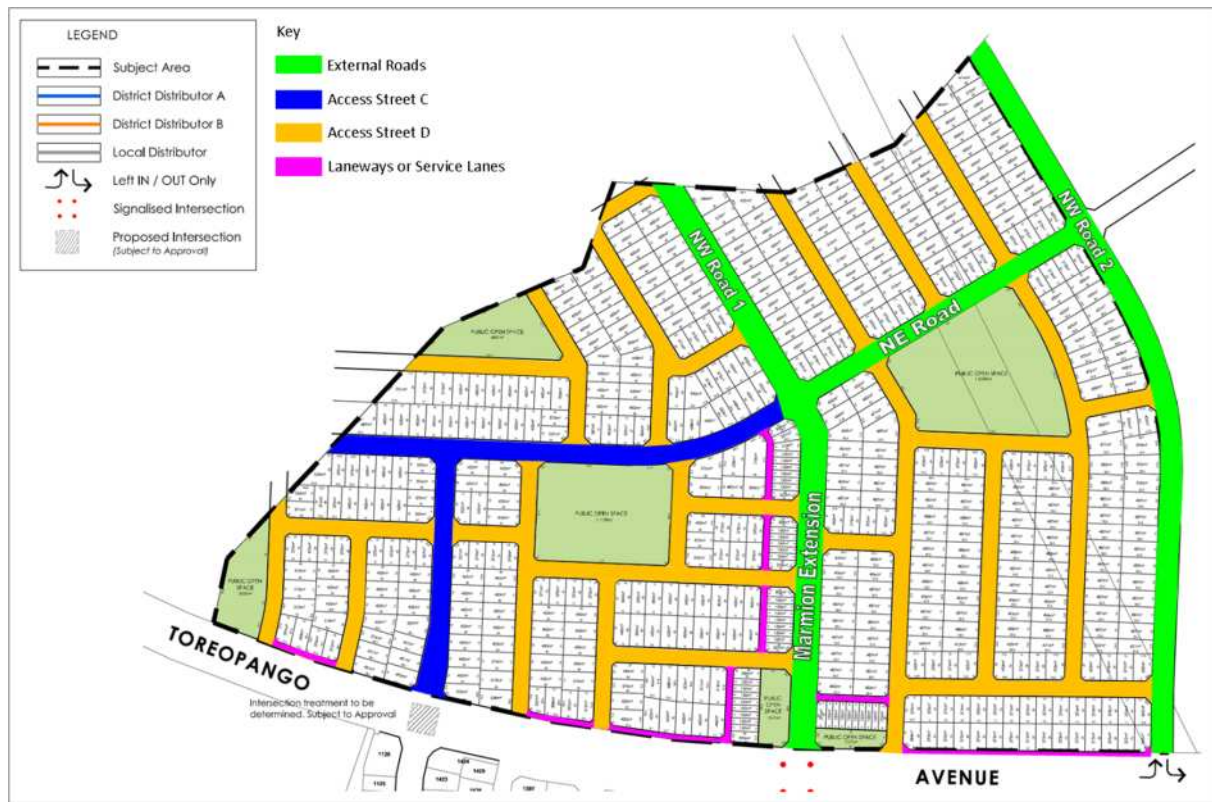


Figure 3.1: Subdivision Concept Plan

Source: CLE Town Planning and Design

3.2 TRAFFIC GENERATION

The AM peak hour trip generation rates for this development have been taken from Table 1 of the WAPC Transport Impact Assessment Guidelines Volume 2. The daily trip generation rate was sourced from the Guide to Traffic Generating Developments Version 2.2, October 2002 –Roads and Traffic Authority NSW.

Using these guidelines, each dwelling will generate 9 trips per day (vpd) on average and 0.8 trips in the peak hour. For the 533 dwellings proposed this would result in a total of 4,797 trips per day or 426 trips in the AM Peak Hour.

3.3 INTERNAL ROAD NETWORK

As can be seen in **Figure 3.1**, the concept plan shows a number of internal road links providing access the properties. If Lot 603 is treated as a stand-alone development then all of the internal roads would carry low traffic volumes, typically below 300 vpd. However a number of the internal roads will link into surrounding suburbs in the future and can therefore be expected to carry more traffic. Movement networks are therefore generally planned to protect the form and function of the roads, in this case residential access roads. That being the case, DVC considers that most of the residential access roads in Lot 603 will typically carry less than 1,000 vpd.

The WAPC’s Liveable Neighbourhoods (2009) provides advice on the road reserve widths and typical cross-sections for internal roads. Given the low traffic volumes expected, all internal roads can be classified as Access Streets or Laneways. The exceptions to this are the roads shown in green in **Figure 3.1** and labelled Marmion Avenue Extension, NW Road 1, NW Road 2 and NE Road. These are discussed separately in the section on External Roads.

The majority of the roads in the Subdivision Concept Plan are proposed as 15m road reserves. These would be classified as Access Street D in the WAPC Liveable Neighbourhoods Guidelines and coded yellow in **Figure 3.1**. Access Streets D typically carry less than 1,000vpd with a typical cross section as shown in **Figure 3.2**.

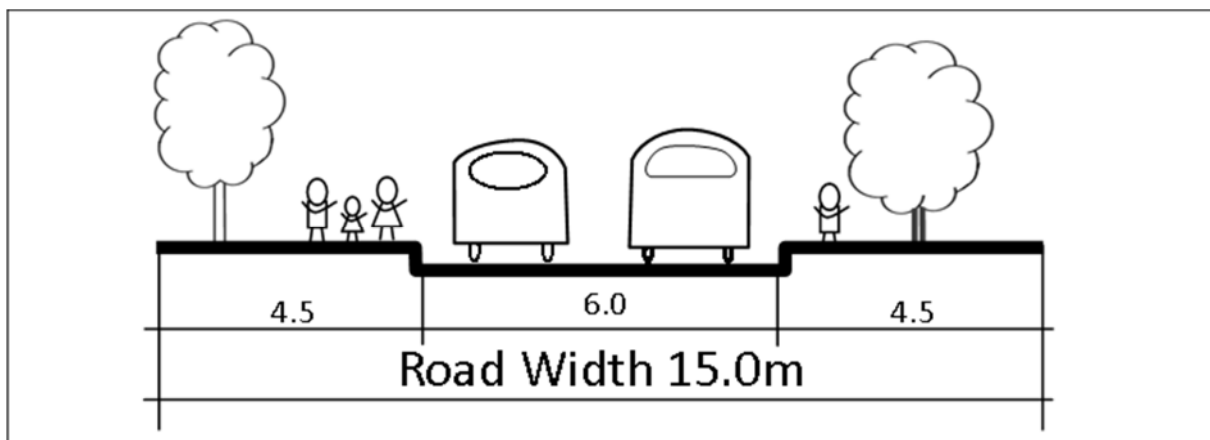


Figure 3.2: Sample Road Cross Section, Access Street D - Narrow Yield Access Street, <1,000vpd

The blue roads shown in **Figure 3.1** are expected to attract somewhat higher volumes than 1,000vpd. The east-west road may attract some neighbourhood through-movement traffic to/from the east and west of Lot 603. Similarly, as the north-south road is connected to Toreopango Avenue, it will provide additional access to the site and beyond. For these reasons it is recommended that both are classified as Access Streets C (18m road reserve) which can carry up to 3,000vpd with a typical cross section as shown in **Figure 3.3**.

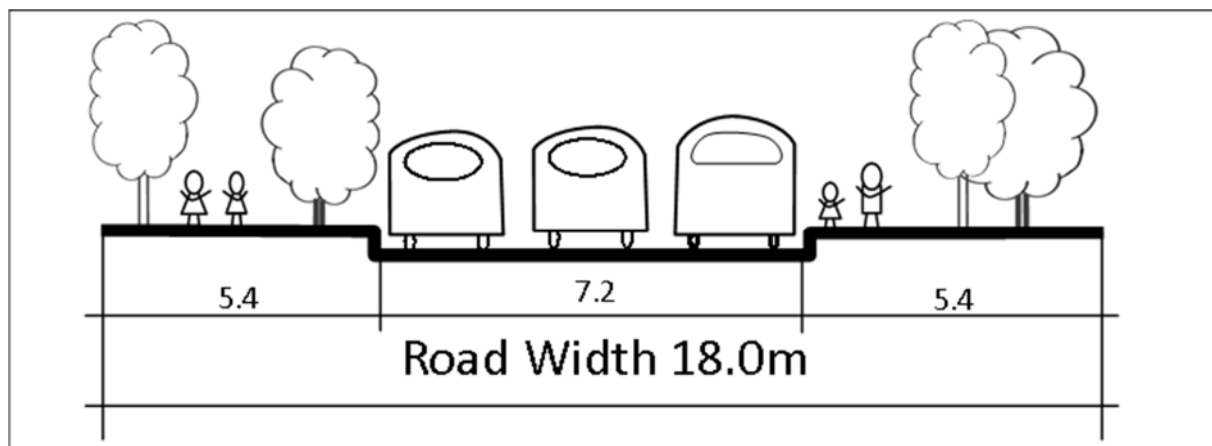


Figure 3.3: Sample Road Cross Section, Access Street C - Yield Access Street, <3,000vpd

There are a number of laneways proposed which provide rear access to the lots. These are all recommended as 6m widths. A left-in left-out service road is proposed for those lots fronting Toreopango Avenue to the east of Marmion Avenue.

3.4 EXTERNAL ROAD NETWORK

There are four roads which are part of Lot 603 which potentially carry higher through-traffic volumes and are therefore considered as external roads in this context. The roads are labelled as Marmion Extension (Ext), NW Road 1, NW Road2 and NE Road in **Figure 3.1**. These roads are also identified in the Yanchep City Structure Plan - Plan 1 (see **Figure 2.2**), which was adopted by the Wanneroo City Council in September 2012 and by the WAPC in June 2013.

In the Yanchep City Structure Plan (ASP68) the following road classifications were adopted:

- Marmion Ext – District Distributor A (28,700vpd);
- NW Road 1 – District Distributor B (18,000 vpd);
- NE Road - District Distributor B (15,100 vpd); and
- NW Road 2 – Neighbourhood Connector (5,900vpd).

The daily traffic forecast modelling (shown above in brackets) for the structure plan was undertaken in 2008/2009 (Traffic and Movement Network Report: Yanchep City Local Structure Plan, Bruce Aulabaugh). This was based on the land use forecasts at the time and from the Main Roads WA traffic modelling work undertaken as part of the Yanchep-Two Rocks District Structure Plan studies.

Subsequent traffic forecasting undertaken as part of the Yanchep Activity Centre Structure Plan (Jacobs, 2015) used the MRWA ROM model traffic projections for the ‘beyond 2060 scenario’. For Marmion Avenue south of Toreopango Avenue and Toreopango Avenue itself, Jacobs notes that the traffic volumes are significantly lower than the earlier forecasts (9100vpd on Marmion Avenue south of Toreopango Avenue). Despite this Jacobs recommends that 20,000 -25,000vpd be allowed for strategic planning purposes on Marmion Avenue (north and south of Toreopango Avenue).

The current MRWA ROM24 model for 2031, forecasts about 28,400vpd on Marmion Avenue (south of Toreopango Avenue) although the Mitchell Freeway extension is not included in the network. Marmion Avenue north of Toreopango Avenue is also not included in the network at 2031. It can be expected that at the ‘ultimate development scenario’ when the Mitchell Freeway is constructed, that the traffic forecast on Marmion Avenue would reduce significantly.

In March 2018 the State Government released the Perth and Peel @3.5million: The Transport Network report. This is a collaborative effort by the WAPC, the Department of Transport, MRWA and the PTA to provide a long term strategy (2050) for the transport infrastructure in Perth. In this report, available on the DoT website, the key elements of the 2050 road network are shown, including those already in the Metropolitan Region Scheme (MRS) and those proposed. The network includes both primary distributor and integrator arterial roads (formerly referred to as District Distributor roads). The section of Marmion Avenue north of Toreopango Avenue is not included as part of the integrator arterial network.

An extract of the road network as included in the Perth and Peel @3.5million report is shown in **Figure 3.4**. It is apparent from this figure why Marmion Avenue north of Toreopango Avenue is not included as an integrator arterial: north-south movements are well catered for by 3 major roads including the northern extension of the Mitchell Freeway and two integrator arterials. In addition the structure plan provides for a Special Transit Boulevard running north-south from Yanchep City to Two Rocks. The role of the Marmion Avenue Ext in this vicinity would therefore be reduced to connecting local neighbourhoods and providing local access to Yanchep City.

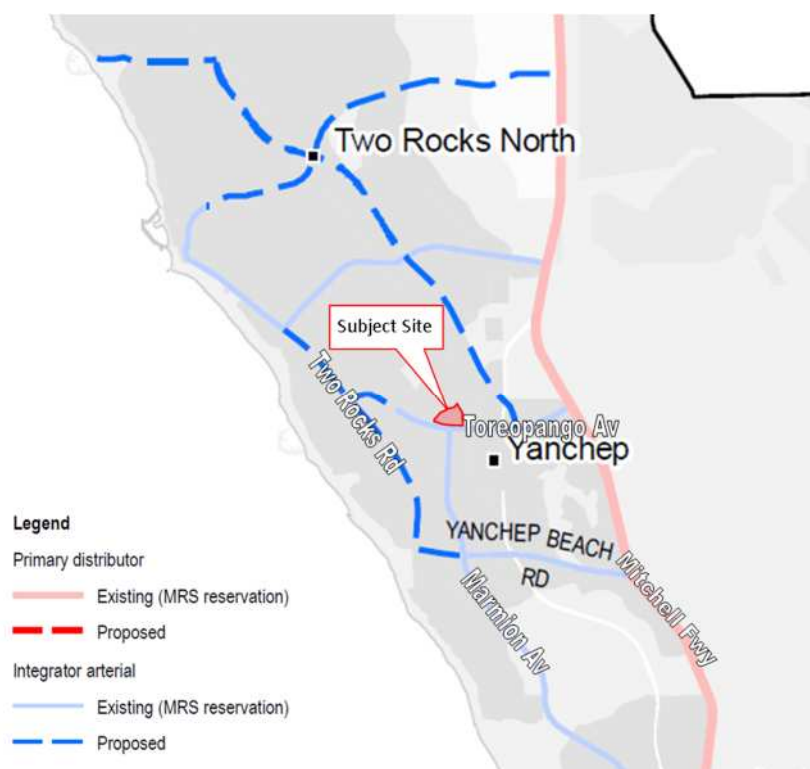


Figure 3.4: Extract of Road Network from Perth and Peel @3.5million: The Transport Network

Source: DoT Website (with additional annotation by DVC)

The preceding paragraphs serve to highlight that forecast traffic volumes on Marmion Ext (and subsequently on NW Road1 and NE Road) in Lot 603 have decreased significantly since the original structure plan was adopted in 2013. The reasons for this reduction include more refined transport modelling and revised land use forecasts for the north-west sub region. The reduced forecast traffic for these roads therefore dictates a lower requirement for traffic capacity and hence road reserve widths.

The original ASP68 for Marmion Ext proposed a District Distributor A Road capable of carrying the forecast daily volume of 28,700vpd. Similarly, NW Road 1 and NE Road were proposed as District Distributor B roads carrying 16,000vpd and 18,000vpd, respectively. That none of these roads is included in the Perth and Peel @3.5million report as an integrator arterial road is strong evidence that forecast traffic volumes are now lower than originally expected and hence the original road reserve widths are no longer applicable. According to the Liveable Neighbourhoods guide, Integrator Arterials can carry between 7,000 and 35,000vpd. That Marmion Ext is not included in the Perth and Peel @3.5 million network suggests that it would carry significantly less traffic and would therefore be classed as a Neighbourhood Connector.

In the Parcel Property Subdivision Concept Plan (**Figure 3.1**), Marmion Ext road reserve width is shown as 24m. Given the lack of clarity from current traffic modelling, DVC considers that this is adequate and that a Neighbourhood Connector A would suffice. The long term traffic forecasts presented in the Jacobs report indicate that Marmion Avenue south of Toreopango Avenue will carry around 9,000vpd. Given the proposed north-south network in the area, Marmion Avenue north of Toreopango Avenue can be expected to carry significantly less than that. A Neighbourhood Connector A can carry up to 7,000vpd which DVC considers would be adequate to cater for future demands. The following road reserve widths are proposed:

Marmion Extension

In the Lot 603 Subdivision Concept plan shown in **Figure 3.1** Marmion Ext is proposed as a 24m road reserve width. On the western side of Marmion Ext high density housing is proposed with vehicle access provided by rear laneways. On the eastern side access to the properties will front and gain access from Marmion Ext. Driveway management on the eastern side should be consider to allow vehicles to exit the properties in a forward gear. As noted DVC considers that a 24m road reserve width is adequate as shown in **Figure 3.5**.

In the Liveable Neighbourhoods Guidelines a Neighbourhood Connector A is capable of carrying up to 7,000vpd with bike lanes and parking in both directions. Bus lanes are not required here as a major north-south transit boulevard is planned to the east of Lot 603. Local widening at the intersection with Toreopango Avenue may be required depending on the intersection control adopted (i.e. signals vs. roundabout).

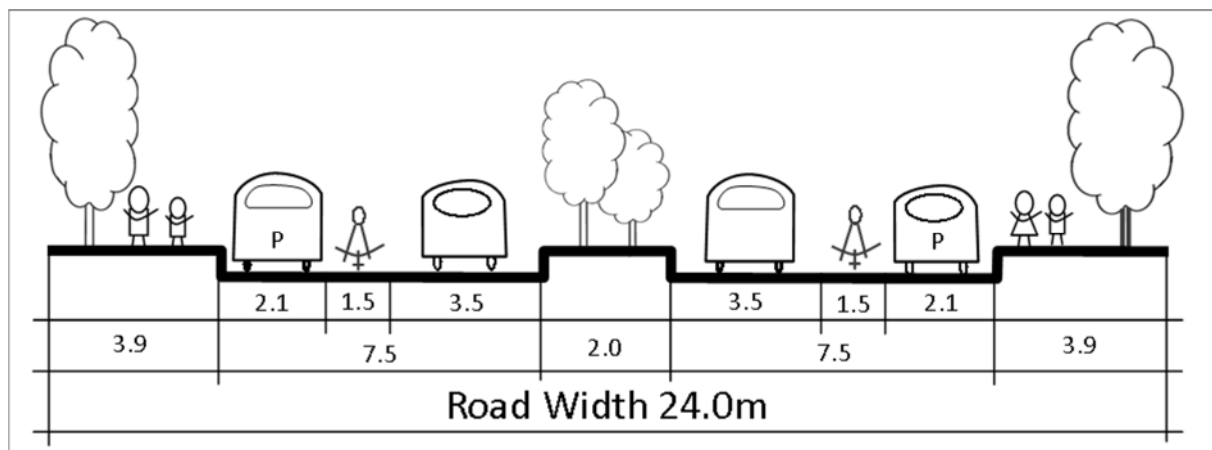


Figure 3.5: Proposed Road Cross Section, Neighbourhood Connector A, up to 7,000vpd

NW Road 1 and NE Road

The current subdivision concept as shown in **Figure 3.1** identifies NW Road 1 as a 24m road reserve with dwellings on both sides having direct access to the street. NE Road is shown as an 18m road reserve width.

NW Road 1 is logically the northern extension of the Neighbourhood Connector identified for Marmion Ext. The road reserve and cross-section is the same as shown in **Figure 3.5**. An 18m road reserve width is recommended for NE Road with a cross-section as shown in **Figure 3.6**. NW Road 1 would be classified as a Neighbourhood Connector A, providing higher capacity to service neighbourhood trips to areas to the northwest of the subject site and retaining the option of on-street cycle lanes from Marmion Ext. NE Road would be classified as a Neighbourhood Connector B.

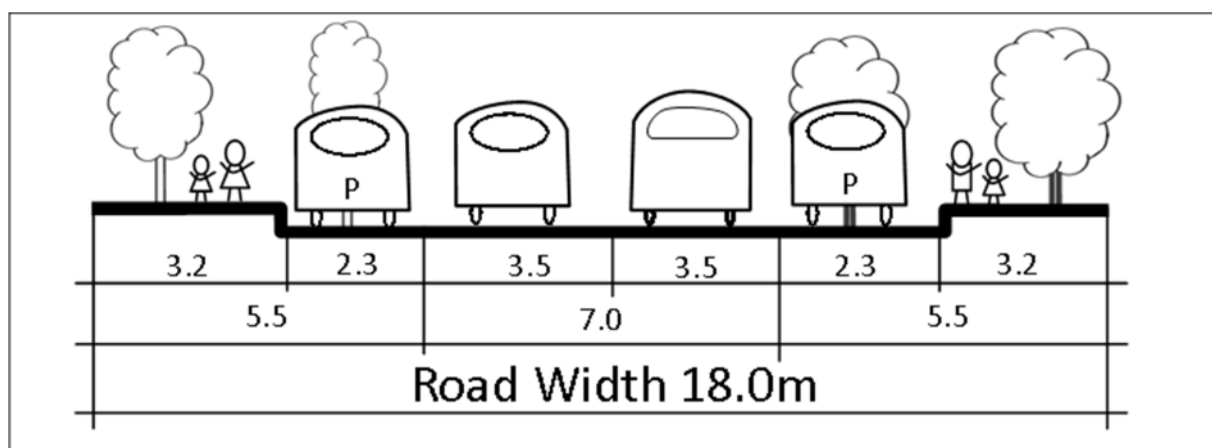


Figure 3.6: Proposed Road Cross Section Neighbourhood Connector B- up to 3,000vpd

NW Road 2

NW Road 2 is proposed as a Neighbourhood Connector in ASP68. The Subdivision Concept in **Figure 3.1** shows this road having a 20m road reserve width. The Liveable Neighbourhoods Guide indicates

that a Neighbourhood Connector B carrying up to 3,000vpd would have a cross section as shown in **Figure 3.7** with a 20m road reserve.

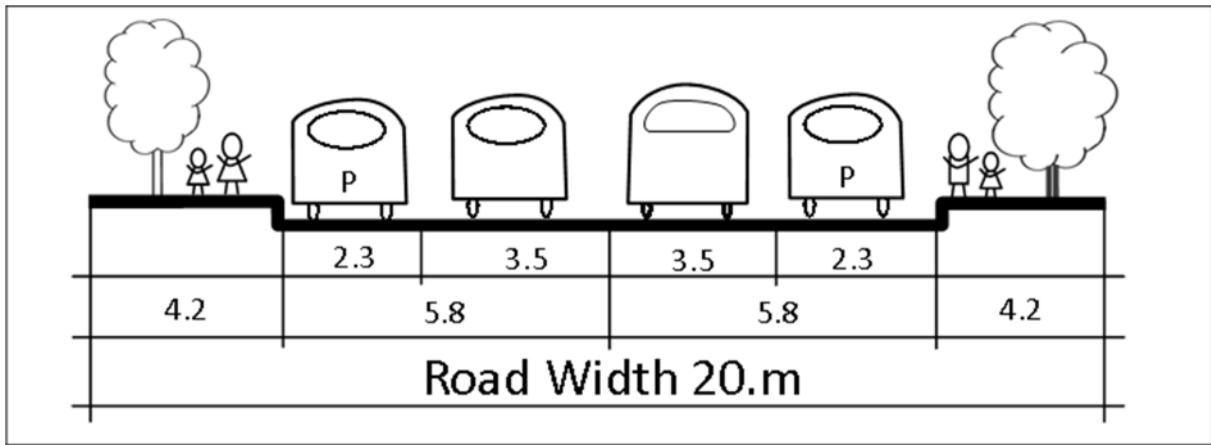


Figure 3.7: Proposed Road Cross Section Neighbourhood Connector B- up to 3,000vpd

4. SUMMARY AND RECOMMENDATIONS

4.1 SUMMARY

Parcel Property requested DVC to review the road reserve widths of a proposed subdivision at Lot 603 Toreopango Avenue in Yanchep. The Yanchep City Structure Plan (Yanchep City - ASP68, in the City of Wanneroo) was adopted in 2013, despite traffic modelling showing that forecast traffic volumes (especially on Marmion Avenue) will not be as high as originally predicted.

In March 2018 the State Government released the Perth and Peel @3.5million: The Transport Network report. This was a collaborative effort by the WAPC, the Department of Transport, MRWA and the PTA to provide a long term strategy (2050) for the transport infrastructure in Perth. In this report, the road network included both primary distributor and integrator arterial roads. The section of Marmion Avenue north of Toreopango Avenue that passes through Lot 603 was not included as part of the integrator arterial network, which indicates it is expected to carry significantly less traffic than previously forecast in ASP68.

Marmion Avenue south of Toreopango Avenue is forecast to carry only about 9,000vpd. Given that the proposed arterial road network in the vicinity of the subject site is comprehensive (with 3 major north-south arterial roads including the extension of the Mitchell Freeway), it can be expected that Marmion Ext (i.e. north of Toreopango Avenue) will carry significantly less traffic than 9,000vpd. Marmion Ext will carry mainly neighbourhood traffic from within the subject site and to and from any new subdivisions immediately north of the subject site.

The road reserves to the north and west of the square of public open space on the western side of the proposed subdivision are expected to carry less than 3,000vpd, whereas all other roads are likely to carry less than 1,000vpd with laneways typically carrying in the order of 300vpd.

4.2 RECOMMENDATIONS

Parcel Property has prepared a Subdivision Concept Plan that DVC has reviewed. DVC recommends that the road reserve widths proposed in that plan be adopted and classified as follows:

- Marmion Ext (refer **Figure 3.1**) be classified as a Neighbourhood Connector A with a road reserve width of 24m;
- NW Road1 be classified as a Neighbourhood Connector A with a road reserve width of 24m;
- NE Road be classified as a Neighbourhood Connector B with a road reserve width of 18m;
- NW Road 2 (refer **Figure 3.1**) on the eastern extremity of the subdivision be classified as a Neighbourhood Connector B with a road reserve width of 20m;

- The road reserves to the north of the square of public open space on the western side of the proposed subdivision be classified as Access Streets C with road reserve widths of 18m. This also applies to the north-south link to Toreopango Road;
- All other internal roads (other than laneways) be classified as Access Street D with road reserve widths of 15m and
- Rear laneways or service roads to be a minimum of 6m wide.

APPENDIX 4

Certificates of Title



REGISTER NUMBER N/A	
DUPLICATE EDITION 1	DATE DUPLICATE ISSUED 13/12/2018

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

VOLUME **2959** FOLIO **380**

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



REGISTRAR OF TITLES

THIS IS A SHARE TITLE

LAND DESCRIPTION:

1/2 UNDIVIDED SHARES OF
LOT 9502 ON DEPOSITED PLAN 415221

**REGISTERED PROPRIETOR:
(FIRST SCHEDULE)**

ST ANDREWS PRIVATE ESTATE PTY LTD OF LEVEL 4, 225 ST GEORGES TERRACE PERTH WA 6000
AS SOLE PROPRIETOR OF THE SHARE SHOWN IN THE LAND DESCRIPTION
(AF 0039024) REGISTERED 13/12/2018

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

- EXCEPT AND RESERVING METALS, MINERALS, GEMS AND MINERAL OIL SPECIFIED IN TRANSFER 1466/1928.
- *G407785 MEMORIAL. TOWN PLANNING AND DEVELOPMENT ACT 1928. REGISTERED 27/2/1997.
- *O039025 NOTIFICATION SECTION 165 PLANNING & DEVELOPMENT ACT 2005 LODGED 13/12/2018.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

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

STATEMENTS:

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

SKETCH OF LAND: DP415221
PREVIOUS TITLE: 2959-377
PROPERTY STREET ADDRESS: 148 TOREOPANGO AV, YANCHEP.
LOCAL GOVERNMENT AUTHORITY: CITY OF WANNEROO

NOTE 1: I197180 SECTION 138D TLA APPLIES TO CAVEAT H659592 - AS TO THE PORTION OF THE WITHIN LAND FORMERLY COMPRISED IN VOLUME 2587 FOLIO 252 ONLY.

WESTERN



AUSTRALIA

REGISTER NUMBER N/A	
DUPLICATE EDITION 1	DATE DUPLICATE ISSUED 13/12/2018

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

VOLUME **2959** FOLIO **381**

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



REGISTRAR OF TITLES

THIS IS A SHARE TITLE

LAND DESCRIPTION:

1/2 UNDIVIDED SHARES OF
LOT 9502 ON DEPOSITED PLAN 415221

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

NEW ORION INVESTMENTS PTY LTD OF LEVEL 4, 225 ST GEORGES TERRACE PERTH WA 6000
AS SOLE PROPRIETOR OF THE SHARE SHOWN IN THE LAND DESCRIPTION
(AF 0039024) REGISTERED 13/12/2018

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

- EXCEPT AND RESERVING METALS, MINERALS, GEMS AND MINERAL OIL SPECIFIED IN TRANSFER 1466/1928.
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-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

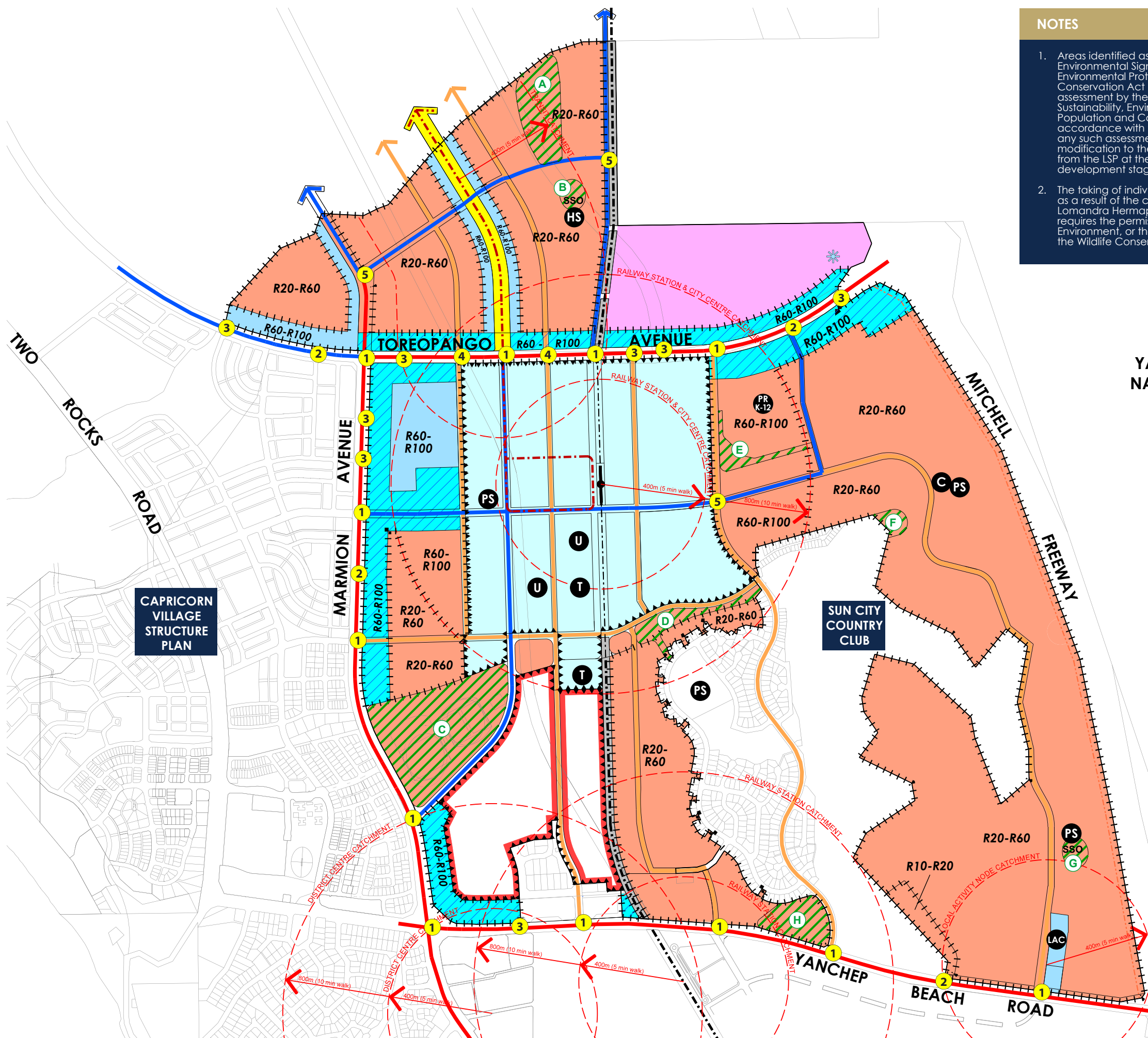
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APPENDIX 5

Existing ASP 68 map



NOTES

1. Areas identified as being of National Environmental Significance under the Environmental Protection and Biodiversity Conservation Act 1999 may be subject to assessment by the Federal Department of Sustainability, Environment, Water, Population and Communities, in accordance with this Act. The outcome of any such assessment may require either a modification to the LSP or minor variations from the LSP at the subdivision or development stage.
2. The taking of individual Graceful Sun Moths, as a result of the clearing of habitat such as Lomandra Hermaphrodita and Maritima, requires the permission of the Minister for Environment, or their delegate, pursuant to the Wildlife Conservation Act 1950.

LEGEND

- STRUCTURE PLAN AREA BOUNDARY**
- AREAS SUBJECT TO SEPARATE STRUCTURE PLANS**
- ZONES**
 - RESIDENTIAL
 - MIXED USE
 - BUSINESS
 - SERVICE INDUSTRIAL
 - SPECIAL USE (subject to separate Structure Plan)
 - CENTRE (subject to separate Structure Plan)
- STRATEGIC OPEN SPACE**
 - SSO - SENIOR SIZED OVAL (Indicative Strategic Open Space only. Balance of 10% to be provided as per WAPC requirements)
- MOVEMENT AND TRANSIT**
 - DISTRICT DISTRIBUTOR 'A'
 - DISTRICT DISTRIBUTOR 'B'
 - NEIGHBOURHOOD CONNECTOR
 - FIXED ROUTE PUBLIC TRANSPORT (Bus/Light Rail)
 - SPECIAL TRANSIT BOULEVARD
 - RAILWAY LINE
 - RAILWAY LINE UNDERGROUND / STATIONS
- COMMUNITY**
 - PS - PRIMARY SCHOOL
 - HS - HIGH SCHOOL
 - PR K-12 - PRIVATE SCHOOL K-12
 - U - UNIVERSITY
 - T - TAFF
 - C - COMMUNITY CENTRE (2,500m²)
- R-CODE BOUNDARY**
- FUTURE 132kv OVERHEAD TRANSMISSION LINE EASEMENT (24m)** Any variation in the easement width or alignment to be determined in consultation/agreement with Western Power at the subdivision stage.
- INDICATIVE LOCATION OF PROPOSED SUB-STATION**
- LOCAL ACTIVITY CENTRE**
- CONTROLLED INTERSECTION**
- T - INTERSECTION**
- LEFT IN - LEFT OUT**
- SPECIAL INTERSECTION CONTROL**
- ROUNDBOUNT**

**YANCHEP CITY STRUCTURE PLAN
PLAN 1 - STRUCTURE PLAN MAP**

client - Yanchep Beach Joint Venture
 date - 26 June 2018
 plan - 07/004/G0231 - Amendments No.1 & 3
 0m 200 400 600m

* Includes Amendment No.1 - SPN/0102M-01 Amendment No.3 - SPN/0102M-03

