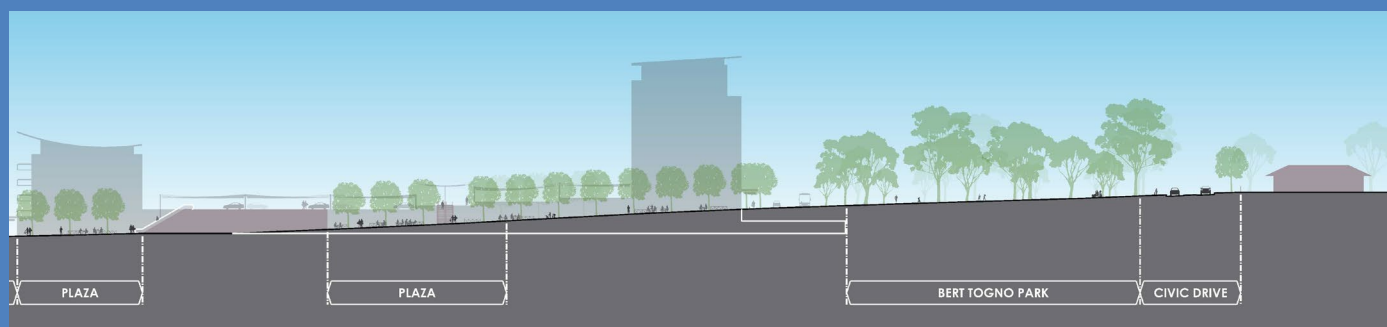


PART 2

EXPLANATORY SECTION



1 PLANNING BACKGROUND

1.1 INTRODUCTION AND PURPOSE

This report has been prepared to provide a technical explanation for the provisions contained in Part 1 - Implementation of the Wanneroo Town Centre (WTC) Activity Centre Plan (ACP) No. 90.

The ACP outlines the development vision for the ultimate development of the WTC (the subject land) and establishes key requirements. The ACP 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, (in consultation with the City of Wanneroo (the City)), relevant Service Authorities and key community and Government stakeholders) include those detailed in **Table .**

TABLE 8: PROJECT TEAM RESPONSIBILITIES

Project Role	Consultant
Taylor Burrell Barnett	Town Planning and Urban Design
Emerge Associates	Environmental
Emerge Associates	Landscape
Emerge Associates	Bushfire
Emerge Associates	Hydrology
Horizon Heritage	Heritage
Pracsys	Economic Feasibility & Retail Needs Analysis
Flyt	Transport Planning
The Civil Group	Civil Engineering
Taylor Robinson Chaney Broderick	Built Form Architecture

1.2 LAND DESCRIPTION

1.2.1 LOCATION

Figure 1 identifies the subject land within its local and district context. The subject land abuts Wanneroo Road to the west and east and includes key strategic sites such as the City of Wanneroo Civic Centre, Wanneroo Central Shopping Centre, St Anthony's School, Wanneroo Primary School and Wanneroo Showgrounds.

The subject land is located approximately 23 kilometres (km) north of the Perth Central Business District (CBD), 9 km east of Joondalup, 1 km east of Lake Joondalup and 27 km south of Yanchep.

The subject land is well connected to regional movement networks such as Wanneroo Road, Mitchell Freeway (4 km east of the subject land) and Joondalup Train Station (3 km east of the subject land).

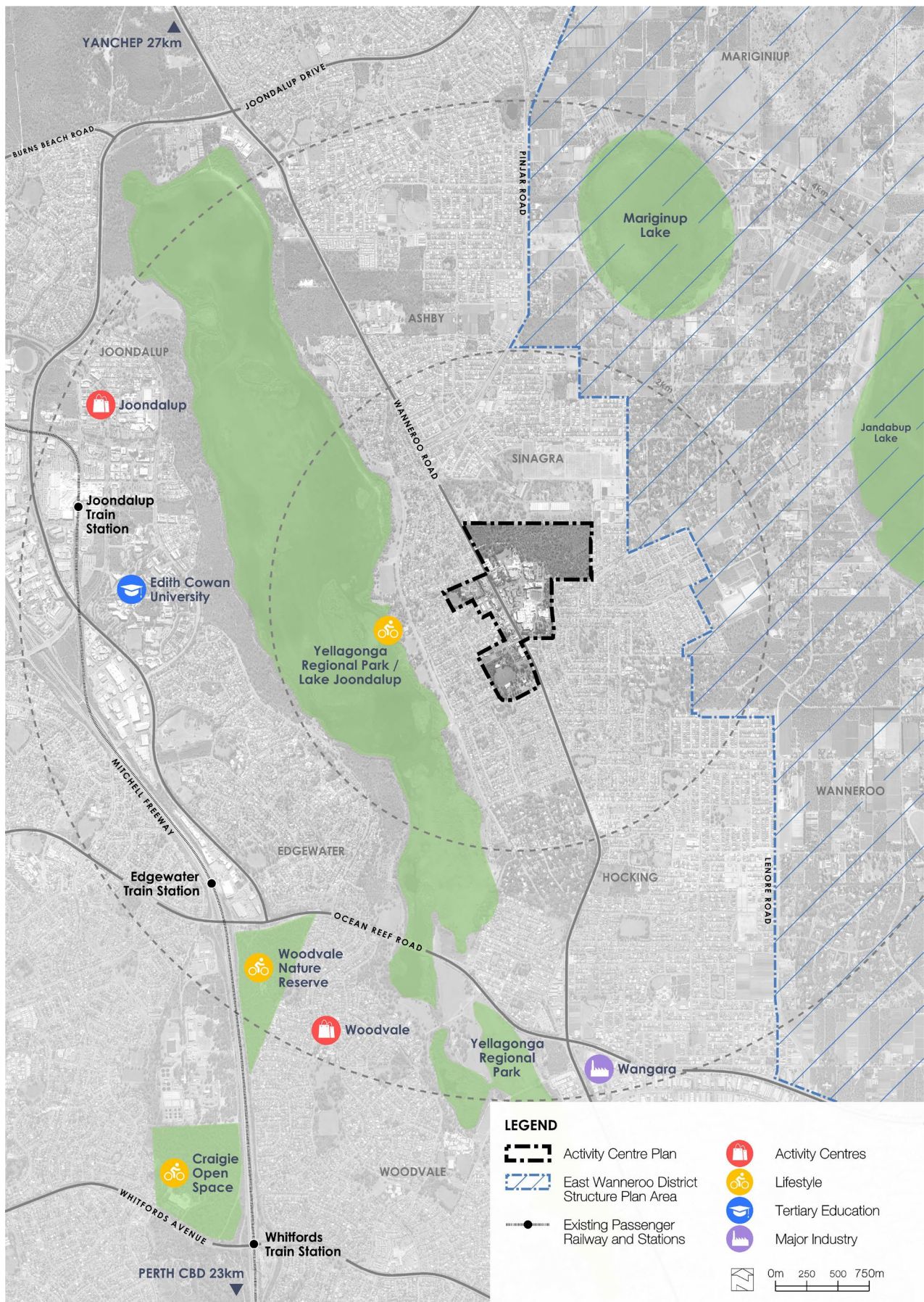


FIGURE 1 – CONTEXT PLAN

1.2.2 LAND USE

The WTC is the historic agricultural and civic heart of the City of Wanneroo and is undergoing a period of growth and revitalisation.

There is a strong civic presence, particularly within the northern portion of the subject land where the Wanneroo Civic Centre, Wanneroo GP Super Clinic, Wanneroo Police and St Anthony's School are located. The ACP area includes Wanneroo's first church - St Anthony's Catholic Church which opened in 1932. Further to the south, the original Civic Centre Precinct constructed in 1971 incorporates the Limelight Theatre, Community Centre and Wanneroo War Memorial.

A large parcel of land (Lot 9000) within the northern portion of the subject land remains undeveloped due to a poultry farm buffer. Mature vegetation exists across this site.

The central portion of the subject land, centred around Rocca Way / Conlan Avenue, has a strong convenience retail focus. Wanneroo Central, a large format shopping centre, is a key attractor and anchor tenant for the WTC. The Shopping Centre has recently undergone expansion as part of Stage 2 redevelopment, providing an additional 2,045m² of floorspace and reconfiguration of the existing car park.

Existing uses fronting Wanneroo Road to the west are predominately retail (largely food and beverage) and commercial uses. A small amount of low density residential development is concentrated to the west of Wanneroo Road. The Wanneroo Showgrounds, located within the south-western corner of the subject land was constructed in 1909 and later hosted the Wanneroo Agricultural Show, which continues to host local sporting events.



FIGURE 2 – SITE PLAN

1.2.3 LEGAL DESCRIPTION AND OWNERSHIP

The subject land is approximately 86.5981 hectares (ha) in area comprising the land identified in **Table 9** and **Figure 3**.

TABLE 9 - LAND TENURE

Lot/Reserve	Landowner	Plan No.	Volume/Folio	Area (ha)
996 Wanneroo Road	McDonald's Properties Australia Pty Ltd	D99814	2188/571	0.2795
997 Wanneroo Road	Pointside Pty Ltd Kelshore Pty Ltd Neweagle Nominees Pty Ltd	P27347	2520/858	0.1637
998 Wanneroo Road	Pointside Pty Ltd Kelshore Pty Ltd Neweagle Nominees Pty Ltd	P27347	2520/859	0.3992
999 Church Street	Minister for Education	P27347	2520/860	0.9327
1 Shaw Road	Housing Authority	P409737	2925/631	0.1934
2 Keane Street	Housing Authority	P409737	2925/632	0.2372
3 Principal Street	Housing Authority	P409737	2925/633	0.1796
4 Hastings Street	Housing Authority	P409737	2925/634	0.1131
5 Hastings Street	Housing Authority	P409737	2925/635	0.1444
6 Principal Street	Housing Authority	P409737	2925/636	0.1794
7 Shaw Road	Housing Authority	P409737	2925/637	0.1062
502 Wanneroo Road	Pointside Pty Ltd Kelshore Pty Ltd Neweagle Nominees Pty Ltd	P55277	2699/155	0.2621
503 Wanneroo Road	Pointside Pty Ltd Kelshore Pty Ltd Neweagle Nominees Pty Ltd	P55277	2699/156	0.3827
504 Wanneroo Road	Pointside Pty Ltd Kelshore Pty Ltd Neweagle Nominees Pty Ltd	P55277	2699/157	0.1986
1 Wanneroo Road	Position Pty Ltd	D38682	1721/796	0.2006
84 Wanneroo Road	Donofrio, Marco Lavant Holdings Pty Ltd Amirthalingam, Rameshwaran Lansden Holdings Pty Ltd	P223193	1029/280	0.1012
85 Wanneroo Road	Name of Strata Scheme: Tarbox House	P223193	SP23090	0.1011
86 Wanneroo Road	Horsman, Stanley James Horsman, Robyn Angela	P223193	1748/806	0.1011
87 Wanneroo Road	Comet Property Aus Pty Ltd	P223193	2746/568	0.1011
88 Wanneroo Road	Dakina Investments Pty Ltd	P223193	2746/569	0.1012
89 Wanneroo Road	Name of Strata Scheme: Wanneroo Professional Centre	P223193	SP17605	0.1012
90 Wanneroo Road	City of Wanneroo	P223193	1095/593	0.1012
91 Wanneroo Road	City of Wanneroo	P223193	1095/593	0.1012
1001 Crisafulli Avenue	Boronia Valley Pty Ltd	P408986	2923/706	0.2208

1 Wanneroo Road	Donofrio, Lilliana Jeanete Donofrio, Rovert Lansden Holdings Pty Ltd Flo Super Services Pty Ltd	D46111	1534/684	0.3338
2 Wanneroo Road	Assand Pty Ltd	D53168	1483/767	0.1113
200 Wanneroo Road	Sinnathamby, Amirthalingam Sinnathamby, Savithiri Devi Amirthalingam, Rameshwaran Amirthalingam, Sharmini	D77360	1873/320	0.2165
300 Wanneroo Road	Name of Strata Scheme: 917 Wanneroo Road Wanneroo	D76256	SP20637	0.2226
58 Leach Road	City of Wanneroo	P223193	1160/478	0.0994
60 Leach Road	Name of Strata Scheme: 26 Leach Road Wanneroo	P223193	SP15403	0.1012
61 Leach Road	Name of Strata Scheme: 28 Leach Road Wanneroo	S51274		0.0566
62 Leach Road	Name of Strata Scheme: 30A, 30B Leach Road Wanneroo	P223193	SP12381	0.1012
63 Leach Road	Pabla, Harmanjit Singh Pabla, Amarjit Singh World Phone Card Pty Ltd	P223193	1622/458	0.1012
64 Leach Road	Pabla, Harmanjit Singh Pabla, Amarjit Singh World Phone Card Pty Ltd	P223193	1933/910	0.1012
65 Leach Road	Name of Strata Scheme: 36 Leach Road Wanneroo	P223193	SP57051	0.1012
66 Leach Road	Stampalia, Sharon Leanne Stampalia, John Steven	P223193	1261/850	0.1012
67 Hastings Street	Glenmora Pty Ltd	P223193	1047/564	0.1012
4 Pupil Lane	Name of Strata Scheme: 28 Leach Road Wanneroo	S051274		0.0400
48 Noonan Drive	McPherson, Mark David	P223193	1188/348	0.0993
49 Leach Road	McPherson, Mark David	P223193	1891/271	0.1012
50 Leach Road	Name of Strata Scheme: 6 Leach Road Wanneroo	P223193	SP25601	0.1012
51 Leach Road	Sayed, Farida Sayed, Younus	P223193	1620/408	0.1012
52 Leach Road	Johnson, Beverley Pauline Johnson, Graeme Peter	P223193	1292/64	0.1012
53 Leach Road	Name of Strata Scheme: 12 Leach Road Wanneroo	P223193	SP12236	0.1012
54 Leach Road	Name of Strata Scheme: 14A,B Leach Road Wanneroo	P223193	SP17986	0.1012
55 Leach Road	Name of Strata Scheme: 16 Leach Road Wanneroo	P223193	SP69466	0.1012
56 Leach Road	Name of Strata Scheme: 18 Leach Road Wanneroo	S75683		0.1012
57 Leach Road	Name of Strata Scheme: 4 Crisafulli Avenue Wanneroo	S72242		0.1011
1 Ariti Avenue	City of Wanneroo	D62246	1785/893	0.1383
2 Ariti Avenue	City of Wanneroo	D62246	1785/894	1.1178
9000 Wanneroo Road	Order of the Servants of Mary Inc	P47802	2609/665	31.5016
400 Wanneroo Road	Dovin Pty Ltd	P408980	2955/311	0.2250
401 Wanneroo Road	Dovin Pty Ltd	P408980	2955/312	0.1518

402 Wanneroo Road	Dovin Pty Ltd	P408980	2955/313	0.1888
702 Dundebur Road	Roman Catholic Archbishop of Perth	P52011	2711/538	4.0000
703 Wanneroo Road	Dovin Pty Ltd	P52011	2711/539	0.0882
850 Dundebur Road	City of Wanneroo	P406436	2944/886	0.1034
851 Dundebur Road	City of Wanneroo	P406436	2944/887	1.8966
101 Rocca Way	City of Wanneroo	P66852	2784/44	0.4218
102 Dundebur Road	Edith Cowan University	P66852	2784/45	0.3032
1 Conlan Avenue	Bogoiias, Jamie Christopher Hitchen, Kyle David	D67680	1689/568	0.1350
2 Conlan Avenue	Name of Strata Scheme: 9 Conlan Avenue Wanneroo	D67680	SP12748	0.2460
55 Conlan Avenue	State of WA	D67680	1689/570	0.0005
62 Dundebur Road	Name of Strata Scheme: 18 Dundebur Road Wanneroo	S21521		0.7226
63 Conlan Avenue	Guazzelli, Bruno Guazzelli, Lynette Fraval Pty Ltd	P11072	1502/320	0.1011
64 Conlan Avenue	Bogoiias, Jamie Christopher Hitchen, Kyle David	P11072	1502/319	0.1132
65 Conlan Avenue	Bogoiias, Jamie Christopher Hitchen, Kyle David	P11072	1422/754	0.0299
70 Wanneroo Road	Driveline Holdings Pty Ltd	D59056	2100/560	0.4132
501 Civic Drive	City of Wanneroo	P57944	2733/728	3.0180
520 Wanneroo Road	Bieson Pty Ltd	P55133	2680/225	5.6882
1 Sinagra Street	Name of Strata Scheme: Lake View	D60702	SP11103	0.1874
11 Sinagra Street	Shaikh, Parvez	D84184	1982/676	0.0762
12 Sinagra Street	Hayes, Margaret Rose Hayes, Michael John	D84184	1982/677	0.0569
40 Wanneroo Road	City of Wanneroo	P8591	16/29A	0.1297
46 Sinagra Street	Gray, Gloria Della Gray, Trevor John	P8591	17/299A	0.0918
54 Sinagra Street	Trimboli, Rosemary Anne	D46104	1389/580	0.1395
R6058 (Lot 145 Dundebur Road)	State of WA	P214593	LR3073/251	1.7820
R10845 (Lot 500 Leach Road)	State of WA	P55751	LR3147/365	0.4412
R12990 (Lot 501 Ariti Avenue)	State of WA	P55751	LR3147/366	9.3138
R23049 (Lot 59 Leach Road)	State of WA	P223193	LR3073/190	0.1012
R23161 (Lot 22 Shaw Road)	State of WA	P130090	LR3140/327	3.6237
R27744 (Lot 502 Crisafulli Avenue)	State of WA	P55751	LR3147/367	1.9430
R28489 (Lot 156 Civic Drive)	State of WA	P34741	LR3129/926	0.4162

R47090 (Lot 158 Civic Drive)	State of WA	P34742	LR3129/929	0.6878
R48506 (Lot 51 Dundobar Road)	State of WA	P47802	LR3137/310	0.3503
R52957 (Lot 8 Keane Street)	State of WA	P409737	LR3168/233	0.0690

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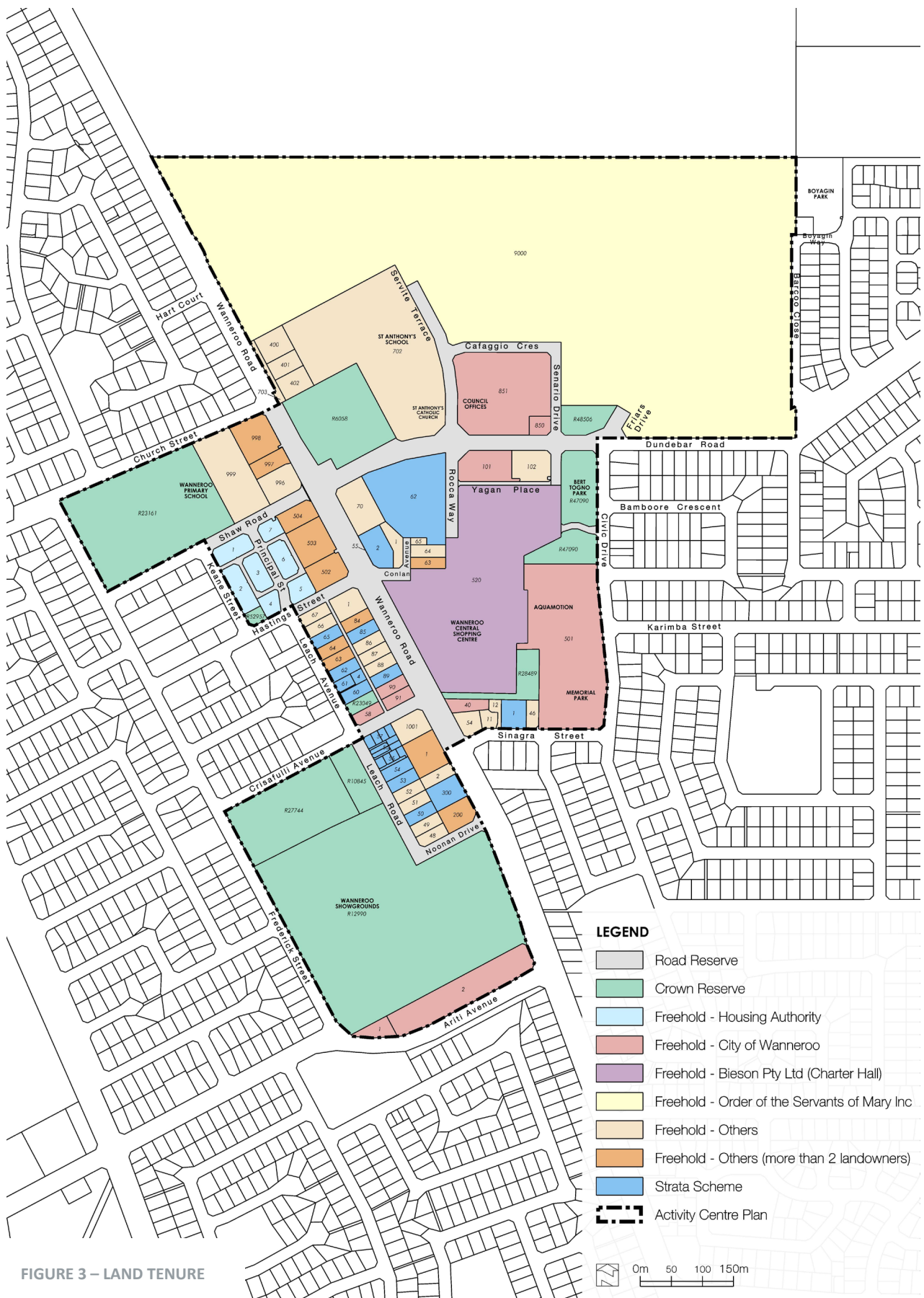


FIGURE 3 – LAND TENURE

1.3 PRE-LODGE MENT CONSULTATION

1.3.1 WANNEROO TOWN CENTRE ACTION PLAN 2016-2019 (WTCAP)

The Wanneroo Town Centre Action Plan 2016-2019 (WTCAP) identifies several actions intended to revitalise the WTC in accordance with Council's current vision. The WTCAP identifies a vision to:

"Create a centre that people engage with and that meets the needs of all community stakeholders".

The WTCAP was endorsed by Council on 19 July 2016 to identify key issues and recommendations relating to:

- **Access & Linkages:** sustainable transport options, poor pedestrian connectivity, more "people-friendly" and improve accessibility.
- **Sociability:** inconsistent branding/marketing, improve sense of place through urban design, public art/cultural activities and increased events, activities and entertainment.
- **Comfort & Image:** lack of uniform landscaping and signage, improve legibility and wayfinding and increase amount of shade.
- **Uses & Activities:** lack of incentives for redevelopment, internalised built form, lack of public event spaces and improve land use diversity.

1.3.2 THE CONSULTATION PROCESS

The Wanneroo Town Centre Advisory Group (WTCAG) has been formed to provide input and involvement in the review of the vision and planning framework for the WTC. A briefing was provided to the WTCAG on 1 March 2018. This briefing guided further engagement with Council at a Special Council Forum Briefing on 10 March 2018.

Consultation for this process also included presentation to Government Stakeholders and WTC residents, landowners and landowner representatives in April 2018.

The following key considerations were identified:

- Explore and identify the most appropriate location for a possible future transport hub within the ACP area.
- Identify appropriate design guidelines in order to achieve a high-quality built form for both existing and undeveloped land in the subject land.
- Facilitate the development of an attractive and vibrant main street.
- Create a well-connected movement network that maximises access to, and within, the study area by walking, cycling and public transport while reducing private car trips.
- Investigate the best location for a public plaza, acting as a public plaza should act as a focal point for the WTC that enables community gathering and functions to take place.
- Review land use permissibility to facilitate the development of a range of land uses appropriate for an established and expanding secondary centre, achieving a vibrant, progressive and prosperous WTC.
- Identify means of developing a night-time economy by creating active after-hour activities, such as cinemas, bars and restaurants.
- Explore ways of increasing the range and quality of employment opportunities in the study area to contribute to the achievement of sub-regional employment self-sufficiency targets set by the State planning agencies.
- Review land uses including consideration of employment-related uses within the undeveloped land in south Sinagra.

2 CENTRE CONTEXT

2.1 REGIONAL CONTEXT

2.1.1 METROPOLITAN REGION SCHEME

The subject land is predominately zoned 'Urban' under the Metropolitan Region Scheme (MRS) (refer **Figure 4**). A strip of land along the eastern side of Wanneroo Road is reserved as 'Primary Regional Roads' to accommodate future widening and has been accommodated within the ACP.

Lots 51 (Reserve 48506), 400, Portion of 401, Portion of 702, Portion of 703, 850, 851 and 9000 within the northern portion of the subject land are zoned 'Urban Deferred' associated with the poultry farm buffer. Prior to the City issuing a use or development approval, or, giving subdivision support to an application within the buffer, justification and design consideration is required by the City / WAPC.

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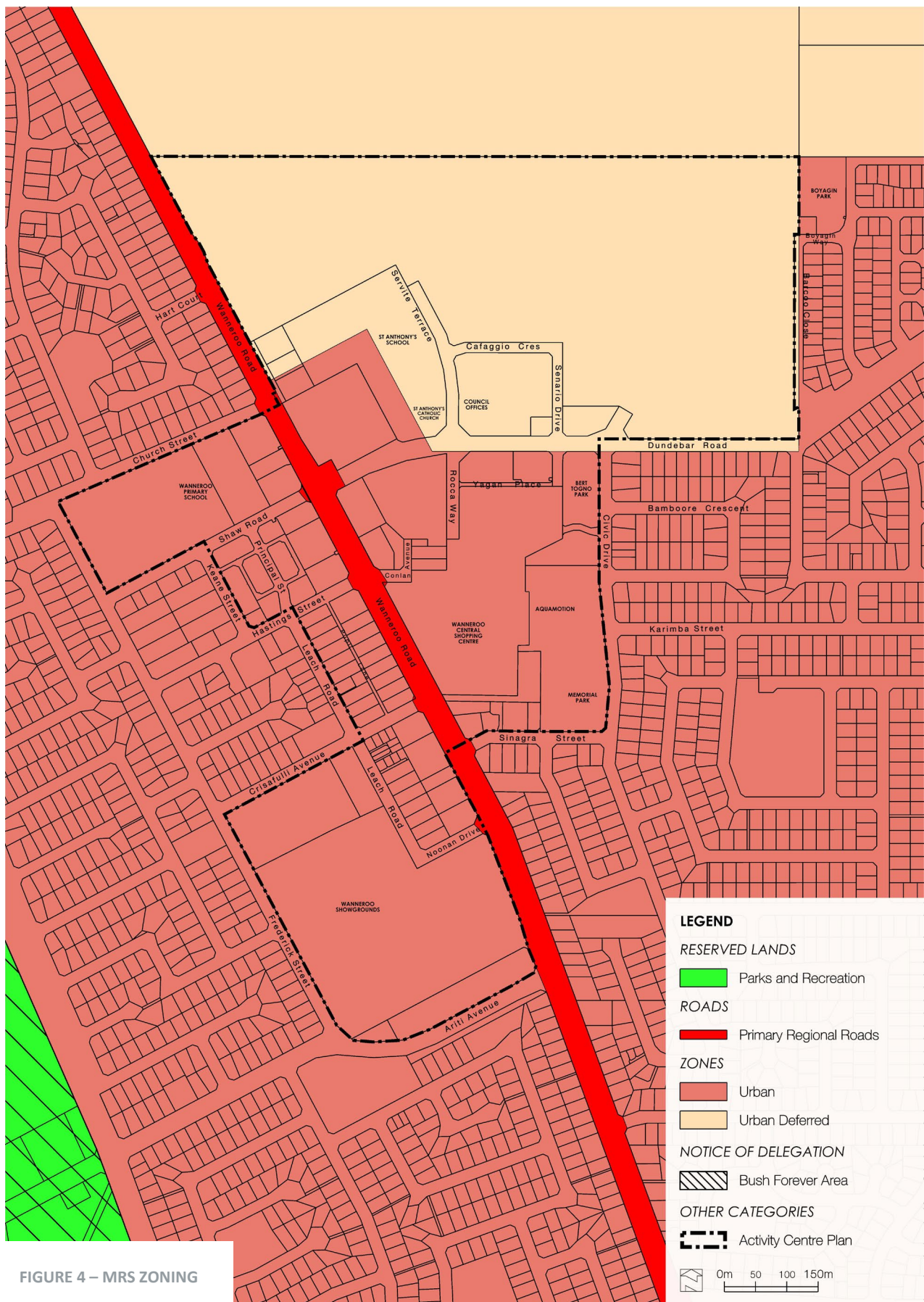


FIGURE 4 – MRS ZONING

2.1.2 REGIONAL PLANNING

Perth and Peel @3.5million

Perth and Peel @3.5million Planning Framework (the Framework) is a strategic suite of documents that guide future land uses through consolidation, integrated infrastructure and development, co-location of services and the strategic location of employment opportunities.

The Framework advocates for the focus on infill within areas with proximity to transit corridors and stations, within activity centres, urban corridors and areas with high-quality open space. The subject land is located in the North-west sub-region of the Framework document and identified as a 'Secondary Centre' (refer **Figure 5**). An urban infill dwelling target of 16,359 dwellings (2031) has been applied to the City of Wanneroo.

Protection of employment land from other competing land uses is emphasised, in addition to increasing the number of people living close to where they work. An employment target of 7,183 new jobs (2031) has been applied to the Wanneroo Secondary Centre.

Other planned urban growth areas identified in the Framework include 'Urban Deferred' land subject to the poultry farm buffer and East Wanneroo Urban Expansion Area predominantly for short-medium term development (2015-2031).

A Transit Priority Route is identified in the Framework connecting Wanneroo and Joondalup centres and the East Wanneroo bypass (primary distributor) will link north-east and central sub-regions.



Transport @3.5million

Transport @3.5million provides a vision for Perth's future transport network, which is designed to maximise the efficiency of movements as the City's population expands. In particular the plan proposes to:

- Optimise the use of the existing network and as it grows;
- Integrate with land use and across the public transport, active transport and road networks;
- Deliver high frequency 'turn up and go' mass transit connected with effective public transport feeder services;
- Provide a safe, connected active transport network of primarily off-road cycleways and walkways; and
- Maintain a free-flowing freeway and arterial road network for the efficient distribution of people and freight.

The East Wanneroo Rail Link identifies a connection between Marshall Road and Joondalup line (by 3.5 million). The City of Wanneroo endorsed a submission at the 11 October 2016 OCM recommending the East Wanneroo Rail Link be aligned through the future East Wanneroo urban area and a rapid transit spur from the Easter Wanneroo Rail Link to the Wanneroo Town Centre (location within northern portion of study area). Two potential transit nodes have been identified on the ACP to facilitate this connection.

2.1.3 STATE PLANNING POLICIES

SPP 3.7 Planning in Bushfire Prone Areas

SPP 3.7 Planning for Bushfire Management (SPP 3.7) forms the foundation for land use planning to address bushfire risk management in Western Australia applies to all land which has been designated as bushfire prone by the Department of Fire and Emergency Services (DFES) and highlighted on the Map of Bush Fire Prone Areas. SPP 3.7 is used to inform and guide decision makers, referral authorities and proponents on achieving acceptable fire protection outcomes on planning proposals in bushfire prone areas.

The Planning for Bushfire Protection Guidelines set out a range of matters that need to be addressed at various stages of the planning process, to provide an appropriate level of protection to life and property from bushfires, and avoid inappropriately located or designed land use, subdivision and development on land where a bushfire risk is identified. The identification of a 'bushfire prone area' triggers the need for proposed development to undergo a Bushfire Attack Level (BAL) assessment prior to commencement. The BAL rating will dictate the applicable bushfire construction standards required under the building permit process.

The area generally north of Dundobar Road is identified as a 'Bush Fire Prone Area'. Further detail is provided in Section 2.3.8 of this Report and the Bushfire Management Plan (BMP) contained at **Appendix 3**.

SPP 4.2 Activity Centres for Perth and Peel

State Planning Policy 4.2 - Activity Centres for Perth and Peel (SPP 4.2) provides the framework for the development of activity centres within the Perth and Peel regions. SPP 4.2 addresses location, distribution, function and land use, and urban design principles relating to centres. A key objective of SPP 4.2 is to facilitate the development of activity centres that support a wide range of retail and commercial uses, increase the density and diversity of housing, increase the range of employment opportunities, meet different levels of community need and support high-frequency public transport.

Wanneroo is identified as a 'secondary' centre under SPP 4.2. Secondary centres should share similar characteristics with strategic metropolitan centres but serve smaller catchments and offer a more limited range of services, facilities and employment opportunities. Within the surrounding context, Joondalup is identified as a 'Strategic Metropolitan Centre' and Whitfords and Clarkson as 'Secondary Centres'.

SPP 4.2 identifies land use mix performance targets and residential density targets for activity centres. Local Planning Policy 3.2 – Activity Centre (LPP 3.2)

SPP 4.2 identifies land use mix performance targets for activity centres. These requirements are also reflected in Local Planning Policy 3.2 – Activity Centre (LPP 3.2). A land use mix of 50% applies to the WTC to provide a range of essential services, facilities and employment opportunities for the catchment. The land use permissibility within the Commercial and Mixed Use zones of the ACP area provides for a mix of office, civic, business, health, community, entertainment cultural uses and showrooms. Based on 145,000m² of non-residential floorspace proposed across the ACP area, 72,500m² of ‘mix of land use’ floorspace is required. Given the existing centre accommodates 68,000m² of non-residential floorspace and the requirement to ensure that the current level of non-residential floorspace is maintained across the centre as a whole, it is expected that the centre will easily accommodate the required land use mix of 72,500m² floorspace (consisting of ENT, HEL, OFF, SHP & Other PLUC floorspace).

A Retail Needs Analysis is also generally required to address the projected population and its socio-economic characteristics, household expenditure and required retail floorspace, changing shopping patterns and trends and the needs of different retail sectors. The ACP will facilitate development consistent with the intent for development of ‘secondary centres’.

SPP 5.4 Road and Rail Transport Noise and Freight Considerations in Land Use Planning (Draft)

State Planning Policy 5.4 – Road and Rail Transport Noise and Freight Considerations in Land Use Planning (SPP 5.4) seeks minimise the effect of traffic noise on residential development and other noise-sensitive land uses and ensure efficient operation of transport corridors are not adversely affected by incompatible noise-sensitive development. SPP 5.4 is applied where the proposal includes:

- A proposed new noise-sensitive development in the vicinity of an existing or future major road, rail or freight handling facility.
- A proposed new major road or rail infrastructure project in the vicinity of existing or future noise sensitive and uses.
- A proposed major redevelopment of existing major road or rail infrastructure in the vicinity of existing or future noise-sensitive land uses.
- A proposed new freight handling facility.

Wanneroo Road is identified as a ‘primary road’ under SPP 5.4. Therefore, for any subdivision or development proposed adjacent to Wanneroo Road, an acoustic assessment should be undertaken and included as part of any application to demonstrate that the proposed design will meet the internal noise level requirements of SPP 5.4.

At present, the other key roads do not reach the traffic threshold of 20,000 vehicles per day (vpd) to warrant consideration under SPP 5.4 and are not predicted to reach this threshold within the planning timeframe horizon. Should the East Wanneroo Link service the subject land in the future, consideration will need to be given to applying the requirements of SPP 5.4.

SPP 7 Design of the Built Environment (Draft)

Draft State Planning Policy – Design of the Built Environment (SPP 7) addresses the design quality of the built environment across all planning and development types, in order to deliver broad economic, environmental, social and cultural benefit. The Apartment Design Guidelines encourage good design outcomes by establishing higher baseline requirements for apartment developments, particularly focusing on:

- Creating greater levels of on-site open space for private and communal use.
- Retention of existing mature trees on-site where possible.
- Designing dwellings to take advantage of passive solar design and natural ventilation.
- Encouraging ‘attached’ dwelling types (boundary to boundary) in higher density areas such as activity centres and corridors.
- Ensuring that internal living spaces are of a sufficient size and have access to natural light and breezes.

Once effective, SPP 7 is intended to replace Part 6 of SPP 3.1.

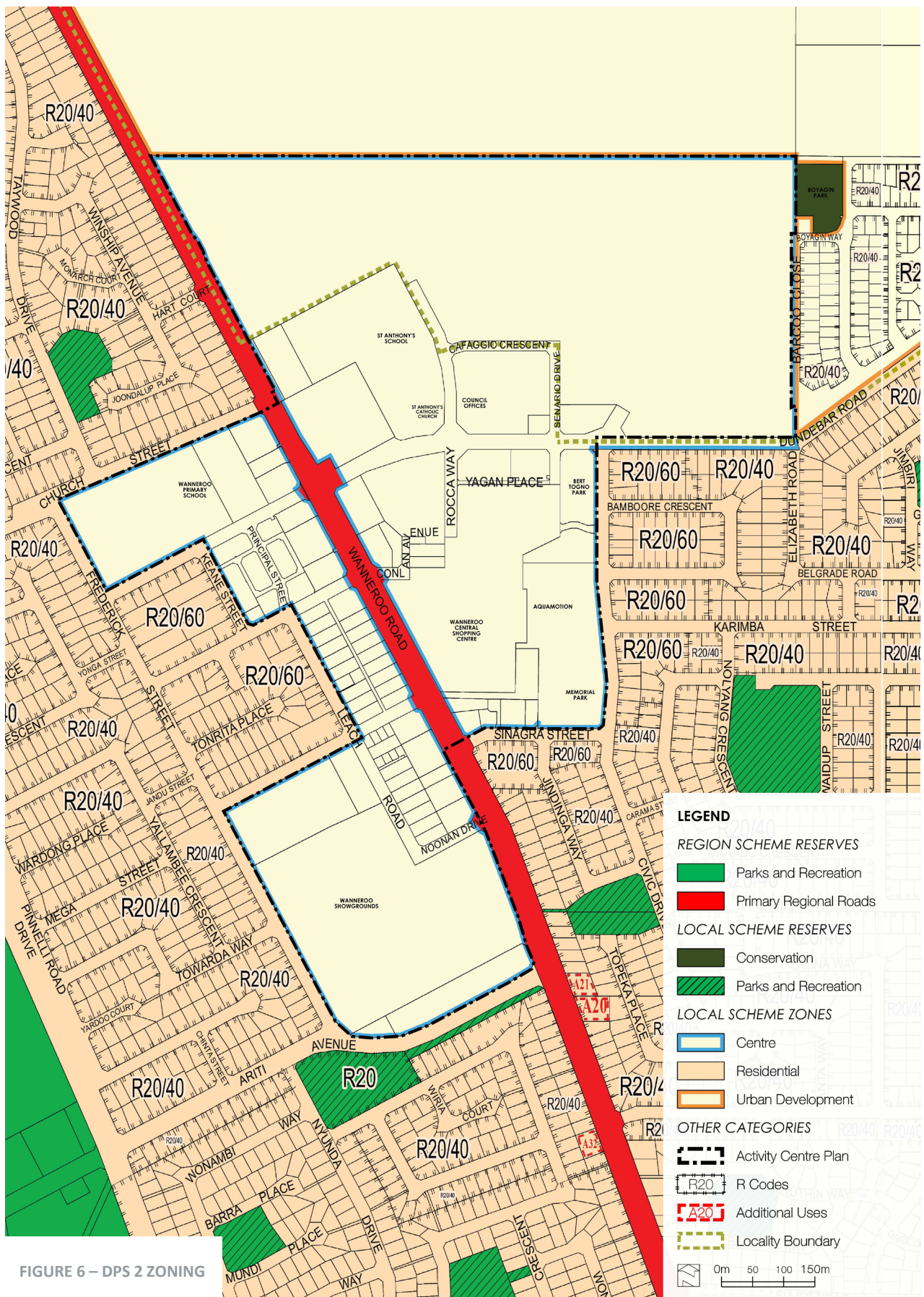
2.2 LOCAL CONTEXT

2.2.1 CITY OF WANNEROO DISTRICT PLANNING SCHEME NO. 2

The subject land is predominately zoned 'Centre' under the City of Wanneroo's District Planning Scheme No. 2 (DPS 2) (refer **Figure 6**). Consistent with the reservation under the MRS, Wanneroo Road is reserved 'Primary Regional Roads'. Surrounding land is predominantly zoned 'Residential' with split density codings of R20/40 and R20/60.

The 'Centre' zone provides the opportunity for the coordinated and comprehensive planning and development of centres through a Structure Plan process. However, the existing zoning arrangement within the ACP area does not currently reflect the proposed zoning as outlined within **Plan 1**. Consequently, a Scheme Amendment will be required to address this inconsistency during the implementation of the ACP.

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East Wanneroo Cell 2 – ASP 4 Developer Contribution Plan

The northern portion of the subject land (north of Dundobar Road) is contained within the East Wanneroo Cell 2 Developer Contribution Plan (DCP). Land developers within East Wanneroo Cell 2 are required to make contributions towards General Cell Works and Cell 2 specific works (detailed in Schedule 9 of DPS 2).

The City will establish an appropriate funding strategy for the provision of any new infrastructure items and / or infrastructure upgrades within the balance of the ACP area, which may involve modification to the existing East Wanneroo Cell 2 DCP or establishment of a new Development Contribution Area (DCA) and DCP. Modifications to the existing DCP would need to be facilitated through an amendment to DPS 2.

Infrastructure items that would be eligible to be funded under a DCP should be in accordance with SPP 3.6.

Wanneroo Town Centre ASP 23

The Wanneroo Town Centre – Agreed Structure Plan No. 23 (ASP 23) was adopted in 2001 to guide development within the WTC. The ASP 23 area comprises four precincts as follows, with specific development provisions relating to each:

- Wanneroo Square Precinct
- Residential Precinct
- Wanneroo Road West Precinct
- Showgrounds Precinct

The land use classifications within the ASP 23 area include Residential, Commercial, Civic and Cultural, Parks and Recreation and Public Purpose. A key component of ASP 23 is the identification of a public plaza to act as a focal point for the WTC which enables community gathering and functions to take place. A maximum retail floorspace limit of 30,000 sqm also applies.

Consistent with the requirements of this ACP, prior to the City issuing a use or development approval, or, giving subdivision support to an application within the 'buffer precinct', justification and design consideration is required by the City / WAPC, including mapping of the location of the proposed sensitive use/s and identification of amelioration methods to be employed.

The northern portion of ASP 23 is also subject to the East Wanneroo Cell 2 Development Contribution Plan (DCP). Implications for the effective operation, scope and relevance of the DCP provisions will need to be considered further in the implementation of this ACP.

As ASP 23 was prepared in 2001, 11 years prior to the preparation of LPP 5.2. It is considered that the provisions within ASP 23 do not adequately assist in achieving the long-term vision identified within LPP 5.2 nor does it include provisions which encourage development to be constructed in accordance with the indicative concept plans and perspectives that are intended for specific areas within the WTC and included within LPP 5.2.

ASP 23 preceded SPP 4.2 and the Western Australian Planning Commission's (WAPC) Structure Plan Framework, and as a result, the document, in its current form, does not comply with the respective requirements. As such, this ACP supersedes ASP 23. In accordance with Clause 44, Schedule 2, Part 5 of the Planning and Development (Local Planning Scheme) Regulations 2015 ASP 23 will be revoked.

LPP 3.1 Local Housing Strategy

Local Planning Policy 3.1 – Local Housing Strategy (LPP 3.1) identifies six 'housing precincts' to accommodate increased residential density. Land outside of the subject land is identified for R60 residential development based on a number of locational criteria. For areas outside of the identified 'housing precincts' (i.e. ACP area), LPP outlines two options for increasing density:

- Creation of new Housing Precincts; or
- Recoding of small land parcels.

LPP states that any Structure Plan should satisfy the criteria of Table 3 of LPP 3.1 and support the objectives and recommendations of LPP 3.1 as follows:

Easy Access / Close proximity to Activity Centres

- **R60** within 400m from an edge of an Activity Centre excluding Local Centres.
- **R40** between 401m and 800m from an edge of Activity Centre excluding Local Centres.

Easy Access / Close proximity to public transport with priority towards rail nodes and bus interchanges

- **R80** within 250m from the entry of a rail station and **R60** between 401m and 800m from the entry of a rail station.
- **R60** within 250m of a high frequency bus route designated stops ('High Frequency Bus Routes' are defined as having a minimum of 2 services per hour during peak periods).

LPP 3.2 Activity Centres

LPP 3.2 provides guidance on the planning and development within activity centres to produce quality urban design and facilitate the long term evolution and sustainability of centres. Consistent with SPP 4.2, the subject land is identified as a 'Secondary' centre under LPP 3.2.

Section 3 of Table 3 contains acceptable standards required for centre structure plans.

Furthermore, LPP 3.2 states that centre structure plans should demonstrate that the activity centre is capable of contributing to achieving a sub-regional employment self sufficiency of a minimum of 60% (as set out in Directions 2031 and Beyond). Further detail is provided in Section 3.5.3 of this Report and the Economic, Retail and Employment Strategy (refer **Appendix 4**).

LPP 3.6 Employment Policy

Local Planning Policy 3.6 – Employment Policy (LPP 3.6) establishes a framework to encourage and retain local employment within the City of Wanneroo, with a strong emphasis on the north-west corridor. The initiatives of LPP 3.6 primarily relate to large-scale residential development where low rates of employment self sufficiency can be evident, however key outcomes applicable to the subject land's function as a secondary centre include:

- Ensure that the highest realistic level of employment self-sufficiency is achieved for the City of Wanneroo.
- Maximise the level of self-containment of employment opportunities created within the City of Wanneroo.
- Increase the capacity of the local workforce and local communities to contribute to and benefit from economic growth.
- Facilitate the start-up of new ventures.

Further detail is provided in Section 3.5.3 of this Report and the Economic, Retail and Employment Strategy (refer **Appendix 4**).

LPP 4.3 Public Open Space

Local Planning Policy 4.3 – Public Open Space (LPP 4.3) outlines requirements relating to the planning, provision, location, design, development and interim maintenance of public open space (POS) to be considered in the preparation of this ACP.

The objectives of LPP 4.3 relevant to this ACP include:

- A diversity of recreational uses and options for the community.
- Nature spaces protecting local natural assets whilst providing the community with managed access.
- Incorporation of water sensitive urban design (WSUD) principles.
- High levels of amenity.
- Affordability (including consideration of future maintenance costs).

- Environmental sustainability.

The ACP has been prepared in accordance with the provisions as outline in LPP 4.3.

LPP 4.12 Heritage Places

Local Planning Policy 4.12 - Heritage Places (LPP 4.12) aims to ensure the appropriate level of protection for heritage places identified on the Local Heritage Survey.

With respect to the ACP area, eight heritage places have been identified in LPP 4.12 as outlined in **Table 10**. Further detail regarding the intended protection and management of these heritage places is provided in Section 2.3.9 of this Report and the Ethnographic and Aboriginal Heritage Assessment Report (refer **Appendix 5**).

LPP 5.2 Wanneroo Town Centre

Following the adoption of ASP 23, in 2012, Local Planning Policy 5.2 – Wanneroo Town Centre (LPP 5.2) was prepared to expand and elaborate on the existing ASP 23 provisions by applying greater control and influence over development outcomes and the quality of built form in the WTC. LPP 5.2 guides the planning and decision making for applications within the WTC and outlines the development standards intended to create an active and function Town Centre.

LPP 5.2 is made up of two parts. Part 1 of LPP 5.2: Policy Operation, defines the boundary of the Wanneroo Town Centre Policy area, and sets out the purpose and objectives of the draft Policy. Part 2 of LPP 5.2, Policy provisions, establishes a clear and consistent framework for the assessment and determination of development and subdivision applications within the Town Centre, where no such framework currently exists.

The framework sets out positions relating to various design elements and prescribes acceptable and not preferred standards that applications for planning approval will be assessed against. LPP 5.2 provides additional guidance to applications that fall within three precincts, being the Department of Biodiversity, Conservation and Attractions (DBCA) site on the corner of Dundobar Road and Wanneroo Road, Department of Education site on Shaw Road, and the lots enclosed by Dundobar Road, Conlan Avenue and Rocca Way.

However, LPP 5.2 applies to a smaller geographic area than identified in ASP 23. LPP 5.2 excludes the northern portion of the subject land (subject to the poultry farm buffer) and the Wanneroo Primary School and Wanneroo Showgrounds to the east as they are already established.

Through the preparation of this ACP, a detailed review of the LPP 5.2 was undertaken to consider its role in the statutory framework for the subject land. It is believed that through the incorporation of built form detail and guidance within this ACP consistent with the original vision, objectives and intent of LPP 5.2, the desired vision can be achieved for the WTC. Therefore, it is necessary to revoke LPP 5.2 in accordance with Clause 6, Schedule 2, Part 2 of the Planning and Development (Local Planning Scheme) Regulations 2015.

2.2.2 EAST WANNEROO DISTRICT STRUCTURE PLAN (DRAFT)

The East Wanneroo Structure Plan Area MRS Amendment 1308/41 was presented to and approved by the Governor in October 2018 and will now be tabled in both Houses of Parliament. The Amendment proposes the rezoning of the majority of the draft District Structure Plan (DSP) area to 'Urban Deferred'.

A draft DSP for the East Wanneroo area has been progressed by the City of Wanneroo and DPLH. The draft DSP provides strategic guidance on future land use, employment, density targets, the coordination of major infrastructure, activity centre, regional open space, environmental assets and buffers. A community reference group was recently established to guide the DSP, and it is anticipated a copy of the draft DSP will be available for public comment in early 2019.

The proposed amendment and DSP will facilitate future residential development, schools, commercial centres, POS / conservation areas (amongst other uses), consistent with urban expansion plans for the north-west corridor, as identified in Perth and Peel@3.5 million.

2.3 SITE CONDITIONS

An Environmental Assessment and Management Strategy (EAMS) has been prepared by Emerge to support the ACP (refer **Appendix 5**). The objective of the EAMS is to describe the relevant environmental characteristics of the subject land and present management and mitigation strategies in response to potential environmental impacts.

A Reconnaissance Flora and Vegetation Survey of the subject land was completed by Emerge on 23 March 2018. The methods and results of this survey are documented in this EAMS. In addition, a Level 2 Flora and Vegetation Survey of Lot 9000 (which incorporates the large area of remnant vegetation in the northern extent of the subject land) was completed by Strategen in 2017, on behalf of the landowner.

2.3.1 VEGETATION

Native vegetation was observed to be generally limited to the northern extent of the subject land (Lot 9000). Some fragmented native vegetation also remains in parkland areas; however, these exist in a cleared setting, whereby native understorey has been cleared and some large trees and occasional shrubs have been retained and/or planted.

The composition of vegetation within Lot 9000 can be split into two plant communities, being *Eucalyptus marginate* and *Corymbia calophylla*. It was concluded that vegetation within Lot 9000 had the highest similarity to FCT28: Spearwood *Banksia attenuata* or *Banksia attenuata* - *Eucalyptus* woodlands.

Intact native vegetation (i.e. vegetation in 'good' or better condition) was observed to be limited to Lot 9000. Areas of parkland cleared vegetation scattered across the remainder of the subject land do not comprise intact native vegetation communities and were observed to be in 'degraded' or 'completely degraded' condition. Within Lot 9000, the condition of vegetation was observed to generally be highest in the north-east corner of the land parcel, consistent with the proposed Conservation area as identified on **Plan 1**.

Identification of a conservation POS area in the north-east corner of the site, aligning with areas of intact native vegetation and associated terrestrial fauna habitat.

2.3.2 THREATENED AND PRIORITY ECOLOGICAL COMMUNITIES

Based on the outcomes of the Reconnaissance Flora and Vegetation Survey, it is likely that the intact vegetation within Lot 9000 represents the *Banksia Woodlands* of the SCP Threatened Ecological Community (TEC) listed as 'endangered' under the EPBC Act. Intact native vegetation within Lot 9000 is considered likely to also be representative of the potential *Tuart Woodlands* TEC listing. An outcome regarding the potential listing of this community pursuant to the EPBC Act is yet to be reached and a decision is expected during 2018.

Any action likely to have a significant impact on a 'critically endangered' or 'endangered' TEC listed under the EPBC Act requires approval from the Federal Minister for the Environment.

2.3.3 FLORA

No Threatened Flora (TF) species were observed within Lot 9000 or the wider subject land, however two Priority 4 flora (PF) species were observed based on preliminary identifications.

Based on known occurrences of TF and PF species in the region, the landform characteristics and given the intact condition of the vegetation, a number of additional TF and PF species are considered to have the potential to occur within Lot 9000.

2.3.4 FAUNA

Based on the outcomes of the Reconnaissance Flora and Vegetation Survey, three general fauna habitat types within the subject land include:

- Areas of upland *Banksia* woodland vegetation, comprising an intact vegetation structure of native understorey, midstorey and overstorey flora species (limited to within Lot 9000).
- Parkland cleared areas with mixed native and exotic overstorey species.
- Urban canopy and street trees.

Whilst site specific fauna investigations were not undertaken as part of the EAMS, a separate black cockatoo habitat assessment has been completed for Lot 9000 by Strategen on behalf of the associated landowner. The results of this survey indicate:

- Intact native vegetation within Lot 9000 represents high quality black cockatoo foraging habitat (approximately 27.6 ha).
- Lot 9000 contains approximately 117 potential black cockatoo habitat trees (native species with a diameter at breast height of at least 500 mm). This includes 59 marri trees, 41 jarrah trees and 17 tuart trees.

Scattered mature trees across the remainder of the subject land may also provide some potential black cockatoo habitat, however of a comparatively lower quality.

2.3.5 ENVIRONMENTAL REFERRAL

Where Matters of National Environmental Significance (MNES) values (such as black cockatoo habitat or vegetation representative of the *Banksia Woodland* TEC) are proposed to be impacted to facilitate development, individual proponents should consider their obligations for potential referral under the EP Act and EPBC Act. The extent of vegetation proposed to be cleared, as well as any impact avoidance, mitigation or offset commitments are to be determined by individual proponents to support this approvals process.

The proponent of the future subdivision of Lot 9000 will likely be responsible for implementation of the proposed conservation POS area identified on **Plan 1** in the north-east of the subject land. It is anticipated that a requirement for the preparation and implementation of a Reserve Management Plan (or similar) and Fauna Relocation Plan (or similar) will be included as a condition of any future subdivision approval incorporating this land. The Reserve Management Plan should guide the establishment of the proposed conservation POS area and the ongoing management of fauna habitat, flora and vegetation values within it. The aim of the Fauna Relocation Plan should be to appropriately manage the fauna habitat clearing process such that direct impacts to fauna species are avoided.

2.3.6 LANDFORM AND SOILS

The subject land generally slopes east to west at an average grade of approximately 4-5%. The maximum elevation of the subject land is 76m Australian Height Datum (mAHD) in its north-eastern extent, while the minimum elevation of the site is 29m AHD in its southern-most extent. Whilst this average slope is quite steep, existing development has levelled many of the lots within the subject land.

The subject land is located within the Spearwood Dune System in the central portion of the Swan Coastal Plain (SCP). The Spearwood Dune system typically consists of siliceous sands over limestone, with hilly to undulating terrain.

Regional soil landscape mapping published by the Department of Primary Industries and Regional Development (DPIRD) indicates the subject land comprises sands and limestone substrates, consistent with the Spearwood Dune system. The majority of the subject land comprises the Karrakatta sand yellow phase.

2.3.7 GROUNDWATER AND SURFACE WATER

Groundwater across the subject land is generally very deep (i.e. more than 10m below the ground surface, ranging between 0m and 36m). Groundwater clearance is generally shallower along the western boundary, particularly towards the southernmost boundary of the subject land, and highest along the north-eastern boundary. It is, however, shallower within the Wanneroo Showgrounds, where the maximum known groundwater level is within 2m of the surface (Perth Groundwater Atlas, DWER). Depth to groundwater will only need to be considered for the Wanneroo Showground, however does not impose as an impediment to development elsewhere within the ACP area.

The subject land does not contain any surface water or waterway features. Surface water exists within Nyunda Park, which is located to the south-west of the subject land, outside of the ACP area.

2.3.8 BUSHFIRE HAZARD

A Bushfire Management Plan (BMP) has been prepared by Emerge to support the ACP (refer **Appendix 3**).

The northern portion of the subject land (Lot 9000) is currently identified as being within a 'bushfire prone area' under the state-wide Map of Bush Fire Prone Areas consisting of woodland (Class B) vegetation, with woodland vegetation located adjacent to the north-east boundary of the subject land. Woodland and grassland (Class G) vegetation has also been identified within a private landholding to the north of the subject land.

A small portion of vegetation in the north-eastern corner of the subject land has been identified for retention as a conservation area, otherwise all other vegetation within the subject land assumes a post development scenario whereby the vegetation is either removed or managed in a 'low threat' standard. Vegetation outside the subject land will remain the same as the pre-development assessment.

As part of the BMP, a Bushfire Attack Level (BAL) Contour Map has been prepared which identifies the worse case BAL in relation to the subject land. The BAL assessment indicates that a BAL rating of BAL-29 or less can be achieved at future habitable buildings based on the indicated spatial layout of the ACP and proposed public roads.

The BAL Contour Map identifies a BAL of 'Low' across the majority of the subject land. A small portion of temporary bushfire hazard affects the subject land along the northern boundary, however the classified vegetation has been assumed as a temporary hazard only until such time as the 'urban deferred' zoning is lifted and development occurs within the landholding to the north of the subject land. Provision of appropriate separation distance from permanent bushfire hazards within the Conservation area in the north-eastern corner of the subject land ensure a BAL rating of BAL-29 or less can be achieved.

It is expected that bushfire hazard assessment will be further refined as part of future subdivision or development stages in order to accurately assess the bushfire risk posed by surrounding vegetation and determined the associated BAL for future lots created within the ACP area in support of any future planning and development approval processes.

2.3.9 HERITAGE

An Ethnographic and Aboriginal Heritage Assessment Report has been prepared by Horizon Heritage Management to support the ACP (refer **Appendix 5**).

Aboriginal Heritage

No Registered Aboriginal Sites are known to occur within the subject land. **Table 10** outlines three Other Heritage Places are mapped within the subject land but do not meet the definition of a Registered Aboriginal Site for the purpose of the Aboriginal Heritage Act 1972, and as such are not afforded statutory protection under the Act.

However, northern areas of the subject land supporting remnant vegetation could potentially contain Aboriginal heritage values such as modified trees or surface expressions of cultural material, given there has been limited disturbance to the natural environment and given significant Aboriginal heritage values are known to occur in the wider locality. As such, one of the recommendations of the desktop assessment is to consider commissioning an Aboriginal heritage archaeological survey of these native bushland areas.

TABLE 10 - OTHER HERITAGE PLACES

DPLH ID	Name	Status	Description
16058	Shaw Road, Wanneroo	Stored data / not a site	Modified / scar tree
20054	Wanneroo Primary School Scarred Tree #1	Stored data / not a site	Modified / scar tree
20055	Wanneroo Primary School Scarred Tree #2	Stored data / not a site	Modified / scar tree

Non-indigenous Heritage

Eight places are listed in the City of Wanneroo Local Heritage Survey (2016) occur within the subject land as outlined in **Table 11** below. Three of these listed places (Wanneroo Showgrounds, War Memorial and former Shire Offices) are also listed on the City of Wanneroo Scheme Heritage List (Category 2), and as such, are afforded statutory protection under the Heritage of Western Australia Act 1990 and the Deemed Provisions of DPS 2.

The ACP proposes the continuation of existing land uses including the Wanneroo Showground and War Memorial identified for non-indigenous heritage values. Proponents of future subdivision and/or development proposals which may impact upon identified heritage places may be required to undertake heritage assessments at discretion of the City. In addition, such proposals would also require planning approval (for heritage considerations), in addition to referral to the Heritage Council of WA (DPLH) and public consultation.

There are no State Registered Places located within the subject land. Notwithstanding this, involvement or consultation with State Government agencies may still be required for Category 2 places.

TABLE 11 - LOCAL HERITAGE SURVEY PLACES

Place No.	InHerit ID	Name	Category	Description and current status
41	17938	St Anthony's Priory (fmr)	3	Existing single building which was formerly used as a priest residence constructed in c1953.
52	9500	Wanneroo Showgrounds*	2	Existing urban open space area which first hosted Wanneroo Agricultural show in 1909.
53	9516	Wanneroo Civic Precinct	3	Existing multiple buildings and open space areas constructed onward from c1960s.
54	13045	Wanneroo War Memorial*	2	Existing single monument constructed in 1921 and relocated multiple times.
55	17525	Forestry House (fmr)	3	Existing single building constructed in 1960 for use by the Forestry Department.
56	17526	Wanneroo School Classroom (fmr) and site	3	Existing single building constructed c1910 for use as a primary school building.
64	9499	Wanneroo Shire Offices (fmr)*	2	Existing single building which was the original Shire office constructed in 1960.
65	9498	St Anthony's Church (site)	4	Site of a former Catholic church opened in 1932. Building demolished in 2009.

**Also included on the Scheme Heritage List (Category 2).*

Category 2 'Consideration Significance': Very important to the heritage of the locality. High degree of integrity/authenticity. Conservation of the place is highly desirable. Any alterations or extensions should reinforce the significance of the place.

Category 3 'Some/Moderate Significance': Contributes to the heritage of the locality. Has some altered or modified elements, not necessarily detracting from the overall significance of the item. Conservation of the place is desirable. Any alterations or extensions should reinforce the significance of the place, and original fabric should be retained wherever feasible.

Category 4 'Little significance or Historic Site': Contributes to the understanding of the history of the City of Wanneroo. Photographically record prior to major development or demolition. Recognise and interpret the site if possible.

DRAFT

3 ACTIVITY CENTRE PLAN

3.1 INTRODUCTION

The Concept Plan's urban planning and design proposals are a culmination of inputs from Council, stakeholders and the community, and are grounded in respect and recognition of the community-based ideas and input that the City has fostered in recent years through numerous engagement and implementation initiatives.

This includes the 2015 Community engagement and Placemaking findings, with the top five ideas from that process (listed below) having:

1. Introduce markets;
2. Introduce more and diverse restaurants and cafes;
3. Host more events and activities;
4. Make the Wanneroo Town Centre pedestrian and people-friendly; and
5. Increase the presence of trees, vegetations and gardens.

The ACP has also been produced to support the Wanneroo Town Centre Action Plan 2016-2019 (the Action Plan) and respond to the relevant Project Team Issues, Community Engagement and Placemaking Results, and Audit Results. Additionally, the design and planning proposals inherent in the Concept Plan and Development Requirements seek to support the following Action Plan implementation items:

TABLE 12 – ACTION PLAN IMPLEMENTATION ITEMS

KEY CATEGORIES	ACTION
Access and linkages	Negotiate with the PTA to improve transit options for the WTC.
	Prepare a preferred concept plan for a connection between Rocca Way and Conlan Avenue to prioritise pedestrian and cyclist movement.
	Prepare and implement a Pedestrian/Cyclist Movement plan, including pedestrian crossings, to maximise pedestrian access to the town centre from adjacent medium density housing precincts and within.
	Engage with Main Roads to advocate for the alteration of traffic signals at intersections along Wanneroo Road within the town centre to improve pedestrian crossing times and to identify other options for improving pedestrian safety and providing connections across Wanneroo Road.
	Engage with Main Roads to advocate for a reduction in the speed limit along Rocca Way and other low speed roads.
Sociability	Implement initiatives in the key areas of Social Inclusion, Sense of Place, Economic Wellbeing, and Environmental Integrity.
Comfort and image	Improve the provision of shade using street trees, building orientation and built form.
	Review the provision of wayfinding in the WTC and investigate options for further improvements.
Uses and activities	Investigate the viability of a community market in Rocca Way.

The research and engagement that has been undertaken for this ACP has clearly demonstrated the pride and ambitions Wanneroo people have for their Town Centre, and the care they have for their place and the people who live, work, visit, contribute and invest here.

Accordingly, the rationale for the planning and design of the ACP is based on themes that focus on aspects of human connection to place: Belong; Live; Prosper; and, Play. The principles and objectives for each of the themes help to support the proposals that are either inherent in the ACP or provide direction for future considerations associated with implementing the ACP.

3.2 THEMES AND OBJECTIVES

3.2.1 BELONG

A Place of Distinct Character

- Support a country town essence reflecting Wanneroo's social, cultural and built heritage and sense of the past.
- Retention of existing landmark 'sentinel' trees, and the planting of new landmark trees in key locations.
- Increase the number and diversity of green spaces.
- Foster the civic presence of key facilities, and their active interface with public spaces and streets.
- Provide building setbacks and street spaces that continue the best existing qualities and support an improved place experience.

A Friendly Place

- Provide safe streets, pathways and spaces.
- Provide the ground space at the front of buildings more for pedestrians than for parked cars.
- Connect the places and spaces together with a great pedestrian/cyclist path network.
- Make the spaces and connections comfortable – providing shade and shelter, cool spots and warm spots.
- Respect the amenity of neighbours around the edge of the Town Centre by optimising compatibility and minimising impacts.

A Welcoming Place

- Make the Town Centre easy to get to for pedestrians, cyclists and transit users, and easy to get to parking areas.
- Make it easy to move about the Town Centre, with improvements to the amount and directness of pedestrian linkages.
- Remove barriers to movement and the enjoyment of spaces, such as fences around open spaces, difficult streets to cross, high walls and large street blocks to walk around.
- Provide a quality Town Centre environment, with detailed attention to the design of buildings and the public realm and how they work together along edges and in nodes.

A Place that Fosters Togetherness

- Providing and linking a range of community facilities that support an interactive community life.
- Creating and managing spaces and nodes of activity for socialising.
- Support a democratic Town Centre, with features and facilities that cater for everyone.
- Provide choices of spaces, settings and uses.

3.2.2 LIVE

A Place of Housing Choices

- Support the mix of residential dwellings north of Dundobar Road to include houses on medium, small and very small lot sizes.
- Provide places for apartments in residential streets, mixed-use streets and close to parks.
- Enable opportunities for housing associated with aged care, age-related and/or managed accommodation.
- Support short-stay accommodation, particularly along and south of Dundobar Road.

A Place of Quality Amenity

- Optimise retention of existing trees in future development areas, particularly in parks and street verges.
- Ensure small-lot housing and apartment developments are designed to help make attractive streetscapes.
- Create appealing settings in the Commercial and Mixed Use zones that attract progressive development and sustain inner city residents.
- Ensure the architecture of all new buildings contributes to the creation of a high-quality urban environment, and do not settle for mediocre outcomes.

An Enlivened Place

- Integrate residential in the Commercial and Mixed Use zones to increase the amount of people supporting Town Centre businesses and activating the public realm during the day and night.
- Ensure that the blend of residential dwellings near uses that attract people and generate noise (from servicing and activity) doesn't adversely compromise the operation or amenity of the residential and non-residential uses.
- Optimise the distribution and orientation of dwellings throughout the Town Centre to enhance the sense of safety for people in the streets and spaces, and in their homes.

3.2.3 PROSPER

A Business and Jobs Attractor

- Ensure that land containing existing non-residential floorspace maintains a similar amount whenever redevelopment occurs.
- Provide appropriate land use zones, land use permissibility and development requirements that supports the growth of non-residential uses and associated employment.
- Facilitate the intensified growth of Town Centre employment uses in appropriate locations within the Town Centre.
- Connect students and entrepreneurs with educational, employment and lifestyle opportunities and facilities in the Town Centre.

A Place of Cultural and Social Well-being

- Enhance the image of Wanneroo as a top cultural destination, with new and enhanced facilities and programs that attract culture sector workers and entrepreneurs, and visitors, to the Town Centre.
- Use the Town Centre revitalisation as a flagship for a more beautiful, liveable, and healthy city.
- Locate and connect public spaces and facilities to support and raise the awareness of cultural initiatives and community diversity.
- Ensure the design of the public realm and facilities expresses and celebrates the community's identity, shared histories, values, beliefs and traditions.

A Place of Synergies

- Support the growth of entertainment and hospitality uses around the Rocca Way-Conlan Avenue 'Main Street', with close proximity to key retail and civic/cultural facilities.
- Accommodate non-residential uses north of Dundobar Road that support employment growth without adversely affecting the sustainability of existing businesses.
- Enable appropriate non-residential uses in and/or around the Wanneroo Showgrounds, Memorial Park, Bert Togno Park and other spaces that add value to people's use and enjoyment of those spaces.
- Locate consolidated parking stations so pedestrian traffic optimises people's exposure to retail and hospitality businesses.

A Place to Invest

- Provide a framework that gives clarity, certainty and confidence for the City of Wanneroo, landowners and developers.
- Enable desired Town Centre outcomes to be staged as private redevelopment and public works occur over time.
- Provide development requirements that will lead to a high quality urban environment whilst cost-efficient approvals and construction.
- Champion a Town Centre vision and implementation strategy with collaboration between public and private stakeholders.

3.2.4 PLAY

A Place to Socialise

- Create the Rocca Way-Conlan Avenue 'Main Street', and the accompanying Public Plaza and urban spaces, as the socialising hub for cafes, restaurants and bars in the Town Centre.
- Foster the 'evening economy' with a diversity of entertainment, leisure and hospitality drawcards, particularly between Dundobar Road and Conlan Avenue.
- Make more of the amenity offered in Bert Togno Park, with possible family-focussed amenities such as a café-in-the park, nature play, water play.
- Provide urban spaces for informal socialising and curated events, including enhanced utilisation of Jacaranda Court.

A Place for Active Recreation and Leisure

- Enhance the integration of the Wanneroo Showgrounds parkland into Town Centre life, with additional features, alternative security/safety measure(s) than the high fence, and easier crossing of Wanneroo Road.
- Improve the pedestrian and cycle links to the lakeside parkland.
- Provide well-defined walking trails through streets and spaces that connect to parks, playgrounds and other destinations within the Town Centre and nearby.
- Utilise Aquamotion and its environs as an opportunity to create complimentary new leisure activities and increase visitation to the Town Centre.

A Place for Passive Recreation and Leisure

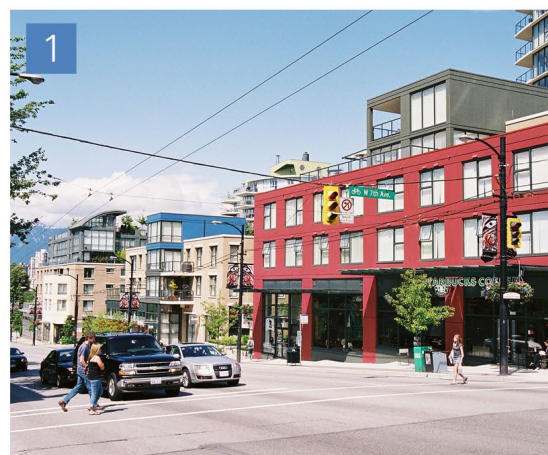
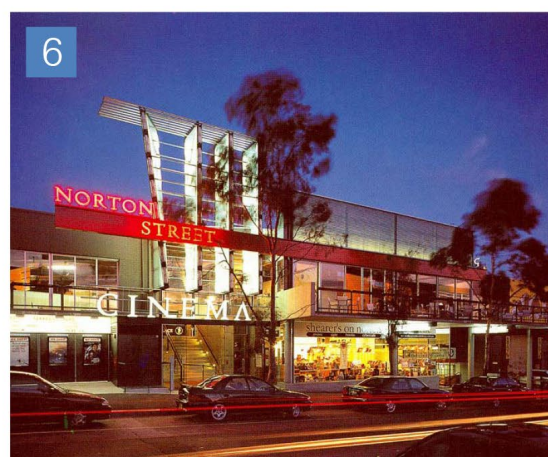
- Retain the cultural importance of Memorial Park and enhance the park's use with complementary new features.
- Enlarge Boyagin Park and enhance the appreciation of its conservation qualities.
- Accommodate new community facilities that provide a diversity of leisure activities.
- Use spaces as a combined system for singular events, particularly the Public Plaza, eastern urban space and Bert Togno Park.

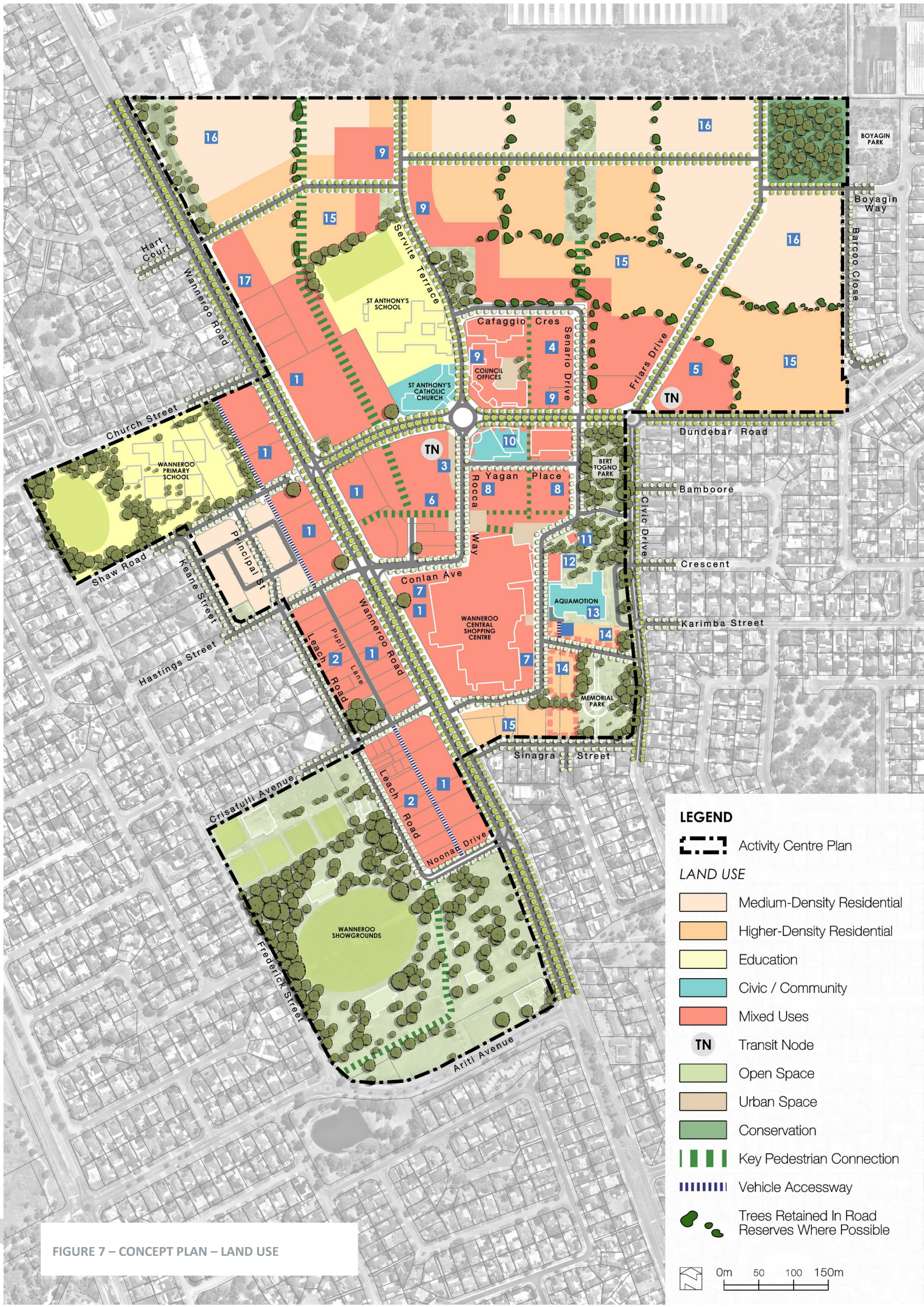
3.4 KEY PROPOSALS

The key planning and design proposals for the ACP area are provided in the tables below.

3.4.1 LAND USE

NOTE REF:	DESCRIPTION
1	Create Wanneroo Road as an Activity Corridor with a mix of employment land uses and the opportunity for upper-level residential use.
2	Properties fronting Leach Road able to accommodate mixed-use development.
3	Land around the possible 'Transit Node' on Dundobar Road / Rocca Way to accommodate mixed-use development.
4	Land around the Council Offices able to accommodate mixed-use development.
5	Land around the possible 'Transit Node' on Dundobar Road to accommodate mixed-use development.
6	Land between Rocca Way and Wanneroo Road to accommodate mixed-use development, with a focus on the provision of entertainment-related uses.
7	Supporting the Wanneroo Central Shopping Centre site to accommodate a mix of uses that contribute to day and night activity.
8	Supporting the Wanneroo Central Shopping Centre site to accommodate mixed-use development, including upper-level residential overlooking Rocca Way and open spaces.
9	Retail and commercial uses supported along Dundobar Road and Servite Terrace.
10	Consolidate civic and community uses along Dundobar Road, and in close proximity to retail and entertainment uses.
11	Opportunity for café/restaurant activity south of Windan Way in Bert Tognio Park.
12	Retail, commercial and community-purpose land use edges along the new north-south street.
13	Retain Aquamotion facility and enhance with supporting land use and public space relationships.
14	Provide higher-density residential (short-stay and/or permanent) with active commercial/community-purpose ground-floor uses around Memorial Park, the new street and pedestrian links.
15	Provide higher-density residential close to Town Centre services, facilities and amenities.
16	Provide medium-density residential as a transition to the existing and future low-medium density residential.
17	Restrain the extent of non-residential uses from being developed northward along Wanneroo Road.





LEGEND

Activity Centre Plan

LAND USE

Medium-Density Residential

Higher-Density Residential

Education

Civic / Community

Mixed Uses

Transit Node

Open Space

Urban Space

Conservation

Key Pedestrian Connection

Vehicle Accessway

Trees Retained In Road Reserves Where Possible

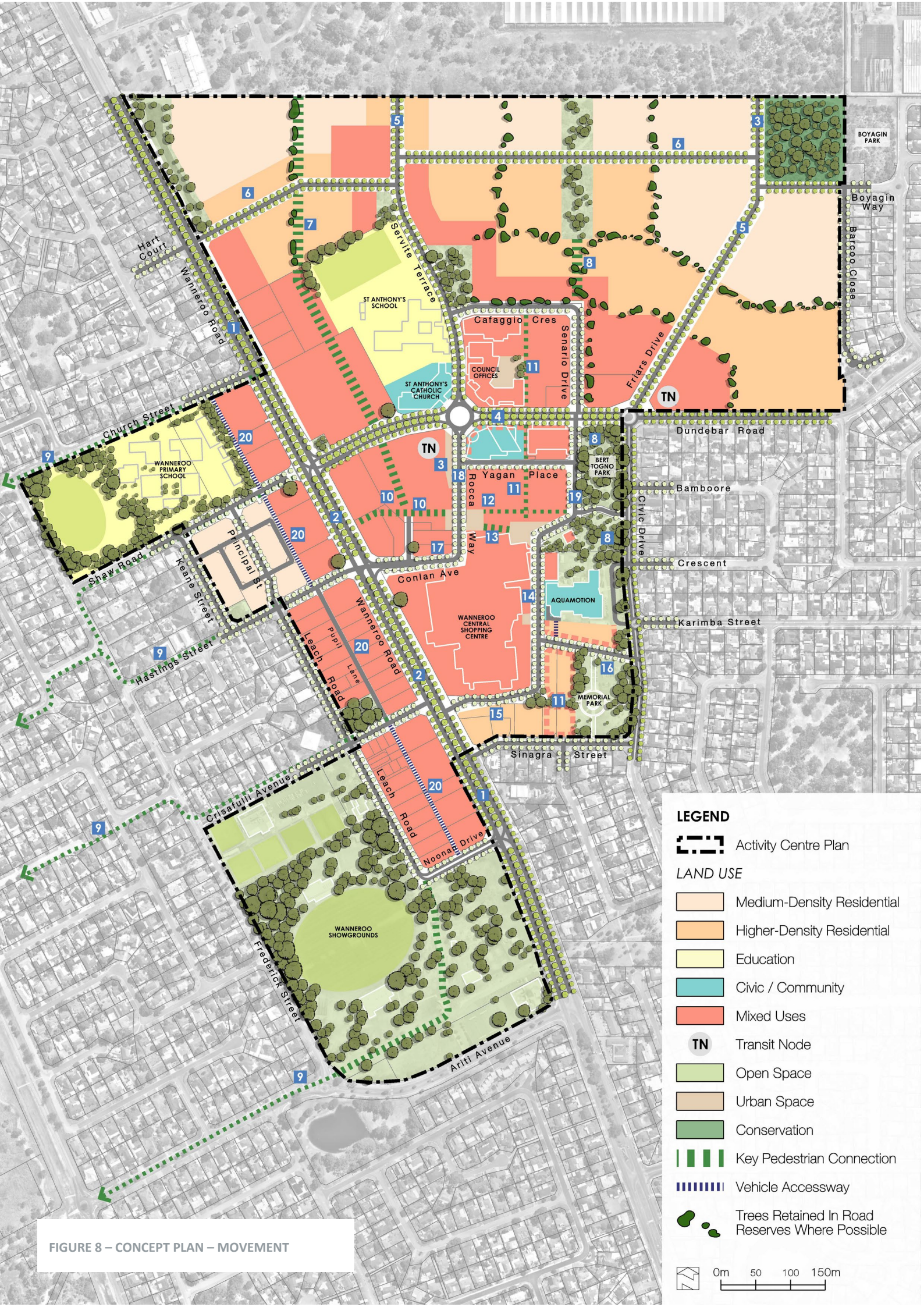
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FIGURE 7 – CONCEPT PLAN – LAND USE

3.4.2 MOVEMENT

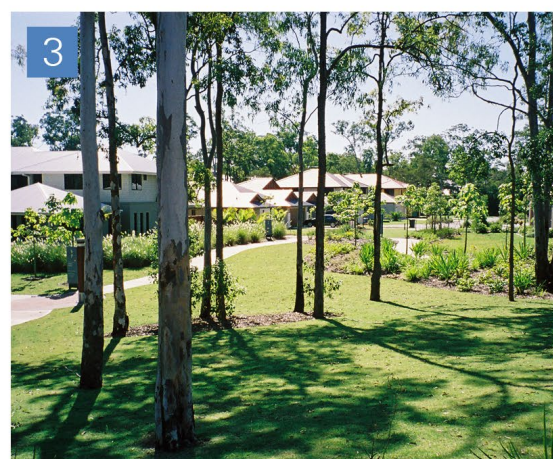
NOTE REF:	DESCRIPTION
1	Change the role and traffic speed of Wanneroo Road, between Hart Close and Ariti Avenue, to a pedestrian-friendly Activity Corridor Boulevard.
2	Improve pedestrian-crossing opportunities at intersections and mid-block locations along Wanneroo Road.
3	Plan for the provision of a longer-term transit station, either adjacent to Rocca Way and Dundebur Road or adjacent to Dundebur Road and Friars Drive.
4	Refine the role and change the traffic speed of Dundebur Road to a pedestrian-friendly Town Centre Boulevard.
5	Provide a 'Neighbourhood Connector' type of street extending north from both Servite Terrace and Friars Drive.
6	Provide east-west street connectivity between Wanneroo Road and Boyagin Way for local traffic.
7	Provide street links that incorporate dedicated space and infrastructure for cyclists and pedestrians.
8	Enhance the cyclist and pedestrian link along the Civic Drive park network and continue north of Dundebur Road through open space and a Senario Drive extension that incorporates dedicated space and infrastructure for cyclists and pedestrians.
9	Enhance key cyclist and pedestrian links and infrastructure between the eastern side of Wanneroo Road and Lake Joondalup.
10	Provide east-west and north-south public pedestrian links through the street block west of Rocca Way.
11	Provide a contiguous north-south public pedestrian link from Cafaggio Crescent and Jacaranda Court through to Memorial Park.
12	Provide an east-west public pedestrian link between Civic Drive and Wanneroo Road that accommodates level changes.
13	Provide an east-west pedestrian link between public spaces, through any future shopping centre building expansion.
14	Provide an improved north-south street link located between Aquamotion and Wanneroo Central Shopping Centre.
15	Provide a new street between Wanneroo Road and the new north-south street, including improved interface along the southern side of Wanneroo Central Shopping Centre.
16	Improve the design and alignment of east-west street link along the northern side of Memorial Park, between Civic Drive and the new north-south street.
17	Widen the northern verge of Conlan Avenue as redevelopment occurs.
18	Retain the 'shared-surface' nature of Rocca Way, but change the design and function to have more amenity and pedestrian priority.
19	Extend Senario Drive to Windan Way.
20	Plan for continuous two-way vehicle links at the rear of lots fronting Wanneroo Road, achieved through redevelopment, either through widening of public laneways or creation of reciprocal access easements.





3.4.3 PUBLIC REALM

NOTE REF:	DESCRIPTION
1	Provide a POS area to be consolidated with Boyagin Park, primarily for vegetation conservation.
2	Provide a POS area(s) in line with the central north-south pedestrian link and Civic Drive open space network, to be combined with POS on the neighbouring property.
3	Development of the northern portion of the subject land to include a focus on tree retention integrated into streets and spaces.
4	Provide small green spaces incorporating retained trees, particularly at key viewline locations throughout the Town Centre.
5	Retain and enhance the portion of Bert Togno Park south of Windan Way as an urbane green-space.
6	Consider 'Aquamation Court' as a public green-space with water-play features edged by a café(s) and other activity-generating uses.
7	Enhance the pedestrian/cyclist experience along the Civic Drive park network.
8	Retain the War Memorial and improve the Memorial Park experience through the relocation of the parking area and the reconfiguration of the park space.
9	Provide a safe, attractive link between Wanneroo Road and Memorial Park.
10	Formalise and enhance the Crisafulli Avenue park area to improve its use and amenity.
11	Improve the shade, shelter and landscaping of the verges and central median along Wanneroo Road.
12	Provide a central public plaza on Rocca Way as a key 'celebration' space.
13	Rocca Way and Conlan Avenue combined as a continuous "Main Street", with an urban space at the northern end of Rocca Way.
14	Provide a public plaza on the eastern side of the shopping centre site, for town centre activities and to support the main east-west pedestrian route.
15	Connect a series of diverse urban spaces along the main north-south pedestrian link – incorporating Jacaranda Court, plaza, Bert Togno urban green-space, 'Aquamation Court', and the Memorial Park green-link.
16	Provide a 'shared-space' street design and function for Servite Terrace-Rocca Way-Conlan Avenue, between Cafaggio Crescent and Wanneroo Road.
17	Provide a 'shared-space' street design and function for the continuous U-link provided by Windan Way, the new north-south street and the new street north of Memorial Park.
18	Improve the design and function of Yagan Place to include a wide footpath, street trees and create an urban street environment for mixed uses to interface with.
19	Retain key existing trees as landmark features throughout the Town Centre.



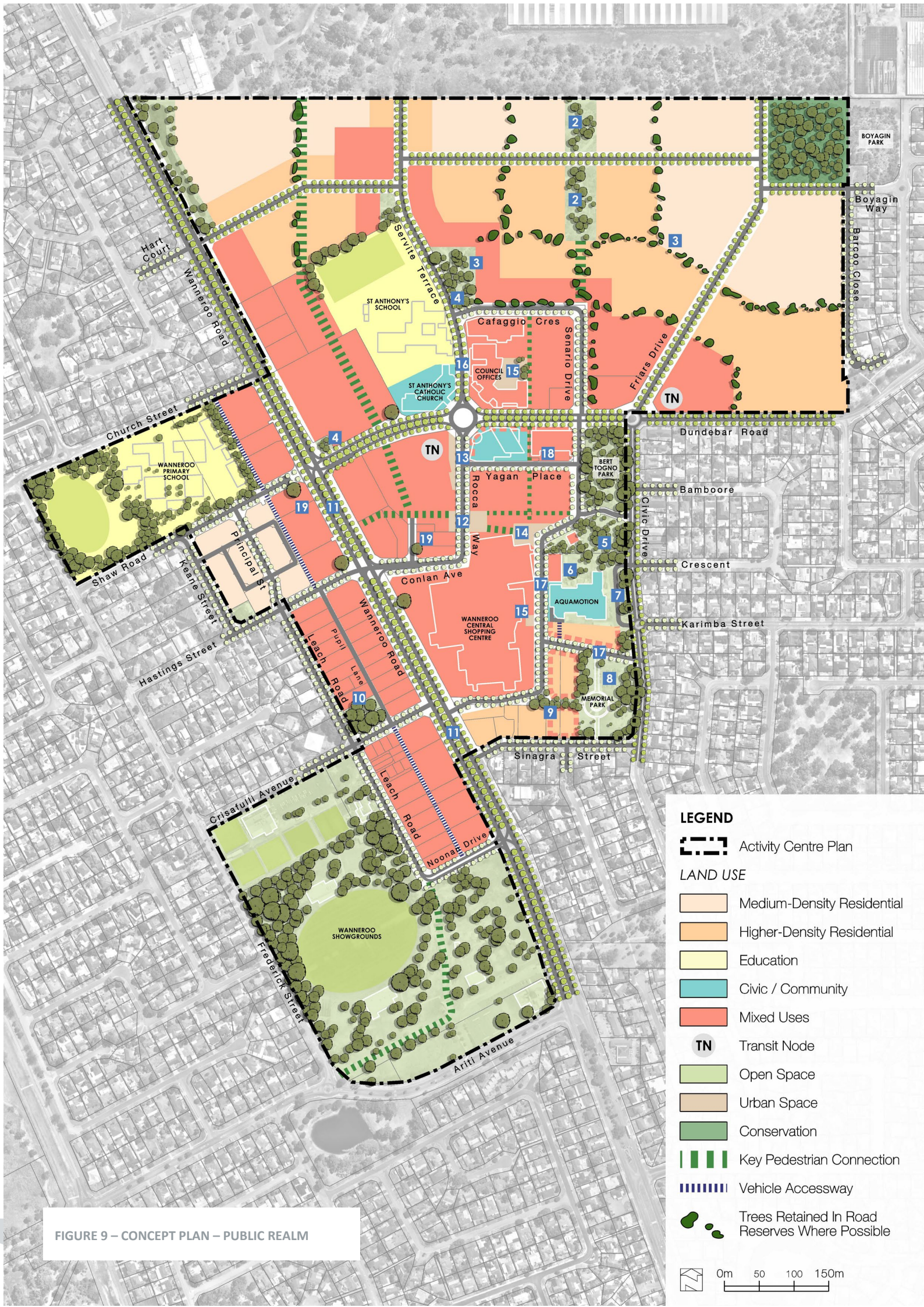
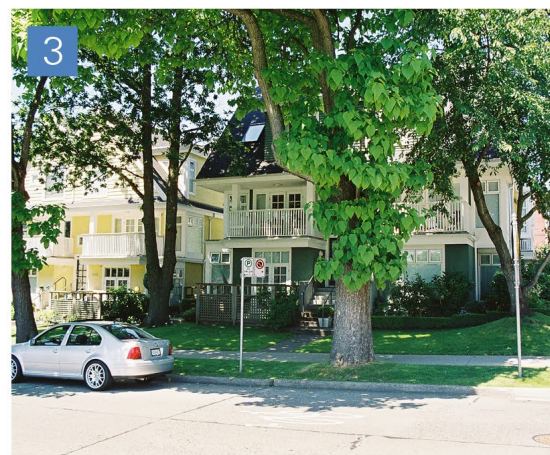
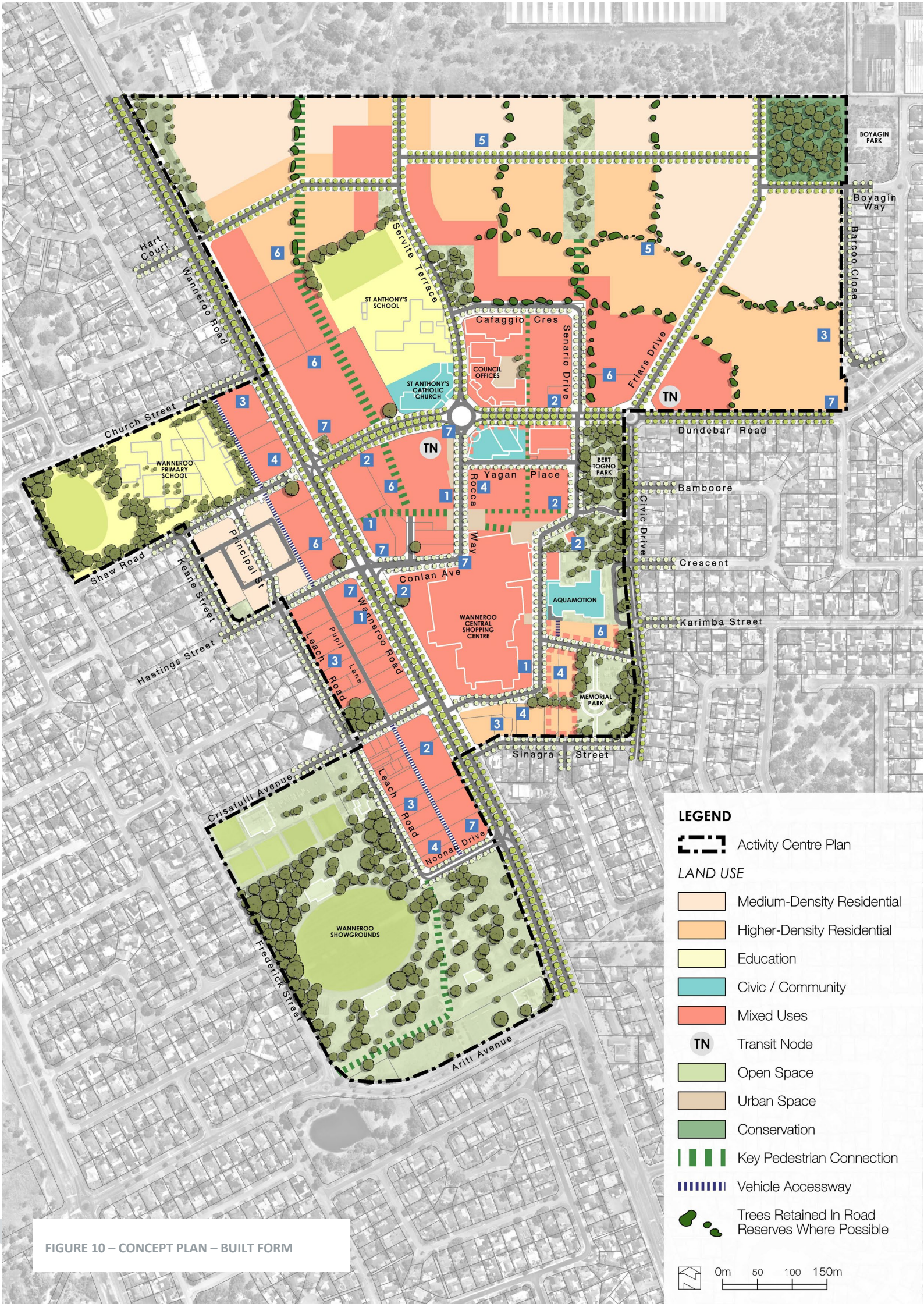


FIGURE 9 – CONCEPT PLAN – PUBLIC REALM

3.4.4 BUILT FORM

NOTE REF:	DESCRIPTION
1	Restrain the provision of on-site parking in front of buildings along street and public space edges and provide buildings at, or close to, public realm edges.
2	Building scale and articulation at the edges of streets and spaces needs to create an interesting and comfortable experience for people. New buildings should respond to and expand on the qualities and points of difference that make the town centre distinctly Wanneroo.
3	Building scale and articulation at the edges of streets and spaces in the Town Centre transitional areas needs to be appropriate for the interface with existing low-intensity residential areas.
4	Redevelopment of Town Centre properties needs to ensure a better presentation to, and overlooking of, the public realm.
5	Align residential streets and lots in higher-density residential areas to maximise passive solar access into apartment buildings.
6	Support innovative built-form and development outcomes that create high-quality experiences for public and private users and increase the value of the Town Centre.
7	Focus on high-quality design and street-presence qualities for buildings in key locations at Town Centre gateways, nodes and view-line end points.





3.4.5 COMMERCIAL / MIXED USE ELEMENTS

NOTE REF:	DESCRIPTION
1	Retain the 'shared-surface' nature of Rocca Way, but change the design and function to have more amenity and pedestrian priority.
2	Provide a central public plaza on Rocca Way as a key 'celebration' space.
3	Supporting the Wanneroo Central Shopping Centre site to accommodate a mix of uses that contribute to day and night activity.
4	Provide higher-density residential (short-stay and/or permanent) with active commercial/community-purpose ground-floor uses around Memorial Park, the new street and pedestrian links.
5	Rocca Way and Conlan Avenue combined as a continuous "Main Street", with an urban space at the northern end of Rocca Way.
6	Retain the War Memorial and improve the Memorial Park experience through the relocation of the parking area and the reconfiguration of the park space.
7	Provide an east-west pedestrian link between public spaces, through any future shopping centre building expansion.
8	Provide a public plaza on the eastern side of the shopping centre site, for town centre activities and to support the main east-west pedestrian route.
9	Retain and enhance the portion of Bert Togno Park south of Windan Way as an urbane green-space.
10	Opportunity for café/restaurant activity south of Windan Way in Bert Togno Park.





FIGURE 11 – CONCEPT PLAN – CENTRAL PORTION

3.5 LAND USE

In accordance with SPP 4.2, this ACP will provide a diverse range of land uses that are consistent with the centre's classification as a secondary centre. The proposed land uses will include residential, commercial, retail, entertainment and community/civic uses, supplemented by open space. A summary of the land uses and areas is provided in **Table 13**.

TABLE 13 – LAND USE

Zone / Reserve	Area (ha)
Residential	25.5961
Mixed Use	8.1619
Commercial	20.2349
Civic and Cultural	1.9262
Private Clubs / Recreation	2.8770
Public Use: Primary Schools	4.5546
Open Space	16.8896

3.5.1 RESIDENTIAL DEVELOPMENT

The ACP provides for a variety of housing choices through the designation of a range of medium to high density R-Codes ranging between R60 to R-AC1. In relation to residential and mixed-use development, the standards or requirements of the relevant R-Code (as shown on **Plan 1**) and the provisions, standards or requirements of this ACP and DPS 2 apply. For land zoned Residential, a dwelling target equivalent to R60 applies.

The Residential, Mixed Use and Commercial zones of the ACP are intended to offer a variety in living opportunities in a form and density appropriate to the activity centre context. Medium density is proposed for development on the periphery of the subject land and to ensure an appropriate interface with existing residential development of a lower density. It is envisaged that the central portion of the ACP area will provide multiple dwellings to contribute to the desired scale and density of the centre and will help to achieve the desired dwelling and population targets identified for the WTC and sub-region.

The ACP area directly interfaces with existing residential development at locations along the eastern, southern and western boundaries. Where development of a higher density abuts lower-density residential development (i.e. interface with Barcoo Close and Sinagra Street) the interface shall be respected to ensure a high standard of visual amenity is maintained. The design and function of Barcoo Close will be improved to include a wider road reserve on the western side to accommodate on-street parking and create an urban street environment for mixed uses to interface with. Moderate building height and density to the interfaces of the ACP area with Sinagra Street will provide an appropriate transition to existing development.

Single houses and grouped dwellings are identified as 'not acceptable' uses in the Commercial zone of the ACP and 'acceptable' uses within the Mixed Use zone. These uses have been identified as not acceptable uses as they are considered to be inconsistent with the vision of the ACP and objectives of the Commercial and Mixed Use zones, and approval of such uses would compromise the urban fabric envisaged for the area.

Housing Diversity and Yield

Diversity of housing product is to be provided. LPP 3.1 places emphasis on increasing housing choice within close proximity to retail and employment centres in a form consistent with the form of residential developed envisaged within the Commercial, Mixed Use and Residential zones of this ACP. However, as noted above, single houses and grouped dwellings are identified as 'not acceptable' uses in the Commercial zone of the ACP and 'acceptable' uses within the Mixed Use zone.

Diversity may be achieved via a variety of elements including dwelling size, design, cost or ownership structure to accommodate different household types and composition. Diversity may also be distributed within the subject land in a number of ways, for example, mixing different products within buildings or designation of a particular zone, development site or a building within a site for a particular residential typology. The diversity of dwelling types throughout the ACP area is to be addressed further through development applications. Illustrations of possible building typologies are provided at **Part 1, Appendix 1** and provide an example of ways in which housing diversity can be achieved.

SPP 4.2 and LPP 3.2 identifies residential density targets for activity centres. In accordance with the targets set for secondary centres, at ultimate development a minimum residential density of 25 dwellings per gross hectare and desirable residential density of 35 dwellings per gross hectare within a 400m walkable catchment of the centre is required. Based on a gross urban area (excluding the Wanneroo Showgrounds and Primary Schools) of 66.2141 ha a minimum dwelling target of 1,655 dwellings and desirable dwelling target of 2,317 dwellings applies to the ACP area. As demonstrated in **Table 14** below the ACP satisfies this requirement by achieving approximately 38 dwellings per gross urban hectare (excluding the Wanneroo Showgrounds and Primary Schools). This calculation has been prepared across the whole ACP area, as opposed to within a 400m walkable catchment and including some non-residential land uses.

Table 14 below outlines one of the possible residential development scenarios for the ultimate development of the ACP area. The estimated yield is indicative only, based on the build-out potential under the ACP. The ultimate yield will be determined by the type of development pursued by proponents and will be subject to the market conditions at the time. The ACP provides for a potential yield of 2,000 – 3,000 dwellings. This could accommodate a total population of up to 4,400 – 6,600 people assuming a household size of 2.2 people per dwelling as per North-West Sub-regional Planning Framework.

TABLE 14 - DWELLING PRODUCT TYPE, MIX & YIELD

Dwelling Type	Indicative Dwelling Yield		
	Low Scenario (-20%)	Base Scenario	High Scenario (+20%)
Single Residential	217	271	325
Multiple Dwellings (Residential)	809	1,012	1,215
Multiple Dwellings (Mixed Use Development)	953	1,191	1,429
TOTAL	1,979	2,474	2,969

Yields are indicative only and subject to change at detailed design stage.

3.5.2 NON-RESIDENTIAL DEVELOPMENT

The Mixed Use and Commercial zones of the ACP are intended to accommodate a mix of commercial, office, retail and entertainment uses that contribute to the vibrancy, activation and economic development of the centre. Non-residential development will be concentrated within the central portion / 'civic heart' of the ACP area, along key transit corridors of Wanneroo Road, around possible future transit nodes and fronting the 'Main Street'. The connection of Conlan Avenue and Rocca Way as a Main Street will create an impetus for pedestrian movement between the central and northern portions of the ACP area and support more active frontages.

The Civic and Cultural zone accommodates existing civic uses, ensuring a civic presence remains with the WTC and providing activation of retail and entertainment uses within the ACP area.

Development Standards

Table 6 outlines the standards for non-residential development within the Commercial and Mixed Use zones of the ACP area.

Non-residential uses at ground level are required within the Commercial zone of the ACP. It is not intended to mandate non-residential uses within the Mixed Use zone of the ACP, however the design of buildings should be capable of adaptive re-use to enable land use to change over time.

For land within the Commercial zone, the requirement for a minimum non-residential land use plot ratio of 0.5 applies. For the purposes of calculating non-residential plot ratio floorspace area, the floorspace area may be accommodated across all floors of buildings on a development site and includes the area of any internal and external walls but not including the areas of any lift shafts, stairs, areas used exclusively for the parking of vehicles at or below natural ground level, service areas, balconies, courtyards etc in accordance with the definition under the R-Codes.

Furthermore, opportunity sites have been also identified on **Plan 1** in response to priority view lines, reinforce the public realm and/or define a hierarchy of places. A LDP shall be prepared and approved by Council prior to a development application being considered for any site identified as an opportunity site.

Non-residential Floorspace

An Economic, Retail and Employment Strategy has been prepared by Pracsys in support of the ACP (refer **Appendix 4**). This Strategy has been prepared in response to the requirements of SPP 4.2 in recognition of the subject land's designation as a 'Secondary' centre.

The WTC currently has a total employment floorspace of 68,000sqm comprising largely of shop retail, entertainment and health/education uses. WTC serves an important role in providing population-driven goods and services to the surrounding catchment. The Wanneroo Central Shopping Centre acts as both an origin and strategic destination point given its retail offering of approximately 24,000sqm of floorspace. WTC provides a relatively high quantum of café, restaurant and takeaway food related uses west of Wanneroo Road. WTC has evolved to accommodate the needs of car travel over the needs of pedestrians. Greater walkability and improved pedestrian access, particularly across Wanneroo Road and within the centre core reducing the reliance on car usage will encourage economic activation.

Based on projected population growth within the ACP area and supporting catchment, there is an estimated demand of between 96,666sqm (low growth scenario) and 144,999sqm (high growth scenario) of non-residential floorspace within the ACP area at full build out (2041).

Population growth will increase the demand for population-driven goods and services and present the opportunity to attract a greater diversity of offerings (e.g. comparison retail and entertainment) that will increase diversity and active use hours within the ACP area as follows:

- Expand the range of specialty retail stores and become more of a comparison retail destination.
- Expand local health services (aged care services, social services, allied health services, medical services).
- Potential for bulky goods retail along Wanneroo Road where consistent with the vision and objectives of the ACP.
- Increase employment in education (school education and tertiary education, however limited potential in tertiary due to proximity to Joondalup).
- Expand certain financial services, including: financial asset investing, and health and general insurance.

Continued maturation of the centre beyond specialised retail needs provides the opportunity to actively attract knowledge intensive service industries through:

- Encouraging communication channels with key local industry stakeholders (i.e. business perception survey, direct communication with Edith Cowan University and other high-knowledge local enterprises).
- Investigating and promoting the industry advantages available within the ACP area (i.e. through the development of a business attraction strategy or locational advantages survey).

3.5.3 EMPLOYMENT

Analysis of existing employment within the ACP area and surrounding catchment has provided key insights into the role of the subject land as a 'secondary' centre, industry demand relevant to the centre and export-orientated industries in the centre. The ACP area currently employs approximately 2,800 persons. The top industries within the ACP area include the City of Wanneroo (22%) and cafes, restaurants and takeaway food outlets (11%). Existing employment within the ACP area is predominately population-driven (78%).

Employment within the ACP area is assumed to grow at a similar pace to population. As such, it is estimated that employment within the ACP area could increase to 5,700 employees by 2041. Providing the capacity for the ACP area to accommodate employment growth will contribute positively to maintaining and potentially surpassing sub-regional employment self-sufficiency (ESS) targets and meeting SPP 4.2 objectives.

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TABLE 15 – CONTRIBUTION TO ESS

	Sub-regional 2050	Town Centre Low - additional	Town Centre High - additional
Dwellings	283,710	1,979	2,969
Population	740,330	5,164	7,747
Employment	224,130	1,600	2,900
Labourforce	376,390	2,625	3,939
ESS	60%	61%	74%
Positive contribution to ESS (jobs)		37	554

Source: DPLH Northwest Sub-regional Planning Framework
https://www.planning.wa.gov.au/dop_pub_pdf/North-West_Sub_Region_March2018.pdf

TABLE 16 – EMPLOYMENT BY PLUC

Scenario	ENT	HEL	MAN	OFF	PRI	RES	RET	SER	SHP	STO	UTE	Total
High Scenario Employment	449	686	71	2,530	-	-	14	10	1,904	3	33	5,700
Low Scenario Employment	347	530	55	1,953	-	-	11	7	1,469	2	26	4,400

Source: DPLH Land Use and Employment Survey

TABLE 17 – FLOORSACE BY PLUC

Scenario	Floorspace use Scenario	ENT	HEL	MAN	OFF	PRI	RES	RET	SER	SHP	STO	UTE	VFA
High Scenario	Base Case Floorspace Mix	26,000	25,000	5,000	24,000	5,000	-	1,000	1,000	45,000	2,000	-	4,000
	Growth KIPS Employment	20,000	42,000	2,000	20,000	3,000	4,000	1,000	1,000	35,000	1,000	5,000	4,000
	Growth CS	19,000	15,000	6,000	22,000	3,000	-	7,000	7,000	50,000	5,000	1,000	4,000

	Employment												
Low Scenario	Base Case Floorspace Mix	20,000	19,000	4,000	19,000	4,000	-	1,000	1,000	35,000	2,000	-	3,000
	Growth KIPS Employment	15,000	32,000	2,000	15,000	2,000	3,000	1,000	1,000	27,000	1,000	4,000	3,000
	Growth CS Employment	15,000	12,000	5,000	17,000	2,000	-	5,000	5,000	39,000	4,000	1,000	3,000

3.5.4 EDUCATION FACILITIES

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

- Wanneroo Primary School (Kindergarten to Year 6 Independent Public School).
- St Anthony's School (Pre-Kindergarten to Year 6 Private Catholic School).
- East Wanneroo Primary School – 1 km south-east of the subject land.
- Wanneroo Senior High School – 1 km south-east of the subject land.
- Spring Hill Primary School – 2.5 km north of the subject land.

Given the nature of the development, anticipated demographic and location of two primary schools (one public school and one private school) within the ACP area, development of the subject land does not generate the need for additional education facilities to service the locality.

3.6 OPEN SPACE

3.6.1 PUBLIC OPEN SPACE

A variety of POS typologies, comprising Pocket Parks and Local POS are to be provided generally in accordance with **Plan 1** and should be vested in the Crown and managed by the City. The POS is to provide for both active and passive recreation uses in accordance with the requirements of Liveable Neighbourhoods (LN) and Local Planning Policy 4.3 – Public Open Space (LPP 4.3). Some POS areas may also accommodate stormwater generated from the ACP area; however, this should be designed such that its function as local open space is not compromised.

Where development is proposed in areas supporting mature trees, proponents should undertake a Significant Tree Survey to inform retention of significant trees in the subdivision design process.

3.6.2 CONSERVATION POS

Vegetation worthy of retention as identified as Parks and Recreation Reserve (Conservation) on **Plan 1** shall incorporate retained vegetation for conservation purposes and be retained in POS.

Following formal environmental assessment by the Environmental Protection Authority (EPA), additional areas of environmental significance identified by the EPA as part of its Bulletin will be reserved for 'Parks and Recreation' for conservation purposes may need to be reserved for Parks and Recreation (Conservation) prior to subdivision and/or development.

It is noted that LPP 4.3 requires that a minimum of 3% of the gross subdivisible area shall be provided as POS for the purposes of conservation where significant natural assets exist.

3.6.3 POS SCHEDULE

A POS calculation has been prepared in accordance with Liveable Neighbourhoods (LN), as detailed in **Table 18**. A total of 4.0141 ha (excluding the Wanneroo Showgrounds) of Open Space or 9.6% provision is provided on the ACP of differing forms and functions as detailed on **Figure 12**.

WAPC policy requires an area equating to 10% of the project area be set aside for public recreation purposes where land is first zoned and/or developed for residential purposes. Given the existing urban context of the subject land, it is evident that land has already been given up for open space as part of an earlier subdivision of the subject land and surrounding areas. Furthermore, in the case of mixed-use development, there is no minimum requirement for the provision of POS under LN. LN states that the appropriate POS contribution for mixed use development will be determined by the WAPC on a case by case basis. LPP 4.3 also states that subject to discussion and approval of the City, less than 10% POS provision may be considered appropriate in centre zones where higher densities are proposed subject to:

- A minimum of 10% POS being provided in the wider catchment (i.e. outside the centre).
- The balance of POS being paid as Cash-in-Lieu to enhance the quality of POS provided in the wider catchment.

A number of non-creditable urban space is provided throughout the subject land contributing to the overall POS provision. These areas will be hard and soft-landscaped to a very high standard, will be fully publicly accessible and will contribute to the landscape identity and sense of character for the ACP area.

The subject land is well located within an existing urban context comprising of significant parkland, nature reserves and regional parks, as listed below and the proposed and existing POS areas within the ACP area will act as an extension of this existing amenity value.

- Wanneroo Showgrounds (12.95ha) – located within the ACP area.
- Lake Joondalup, Yellagonga Regional Park and associated parkland – 1 km to the west of the subject land.
- Lake Mariginiup – 1.5 km to the north of the subject land.
- Jandabup Nature Reserve – 2.5 km east of the subject land.
- Frederick Duffy Park – 200m to the east of the subject land.
- Boyagin Park (Conservation Area) – directly abutting the subject land to the east.

The POS to be provided shall be in accordance with **Plan 1** and the POS Schedule and will be landscaped to a standard commensurate to, or above, LN requirements and to the satisfaction of Council as outlined in LPP 4.3.

TABLE 18 – POS PROVISION

PUBLIC OPEN SPACE		
Gross Site Area		86.5981
DEDUCTIONS		
D1 – Existing Road Reserves	7.6177	
D2 – Conservation	1.4035	
D3 – St Anthony's School & Catholic Church	3.3820	
D4 – Wanneroo Primary School	4.5546	
D5 – Commercial (50% of site area)	7.1993	
D6 – Existing Civic and Cultural sites	2.9719	
D7 – Proposed Civic and Cultural sites	3.4910	
D8 – Existing Parks and Recreation Reservations	13.9085	
Drainage Basins (1:1)	0.1270	
Total Deductions	44.6555	
Gross Subdivisible Area		41.9427

Required Public Open Space @ 10%		4.1943
PROPOSED PUBLIC OPEN SPACE PROVISION		
Unrestricted Public Open Space		
POS 1	0.3460	
POS 2	0.7601	
POS 3	0.3664	
Total Unrestricted Public Open Space		1.4725
Restricted Public Open Space (1:5)	0.1820	
EXISTING PUBLIC OPEN SPACE		
D8 – Existing Parks and Recreation Reservations (excluding Wanneroo Showgrounds & including Conservation Area)	2.3596	
TOTAL CREDITED PUBLIC OPEN SPACE		4.0141
PERCENTAGE OF PUBLIC OPEN SPACE PROVIDED		9.6%

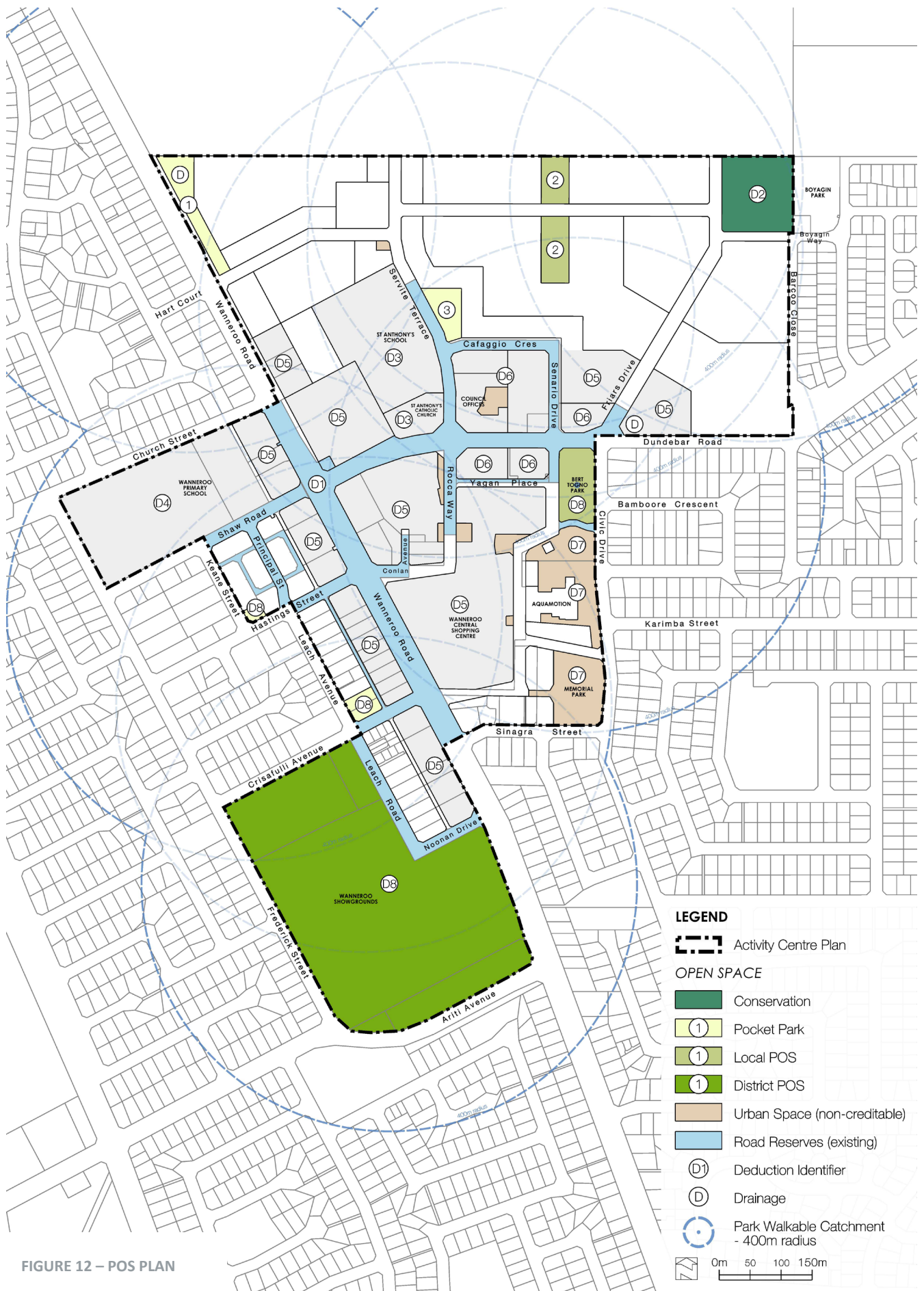


FIGURE 12 – POS PLAN

3.6.4 LANDSCAPING

An Overall Landscape Concept Plan and Rocca Way (Main Street) Concept Plan and Perspective have been prepared by Emerge in support of the ACP to provide a graphical representation of how the key public space areas may be developed (refer **Appendix 6**).

The overarching principles and objectives relating to the development of the public realm are outlined below:

Character and Textures

- Due to the level changes across the subject land there is opportunity to optimise the outlook over the existing tree canopies on the high side of the site. These existing tree canopies shall be retained as far as possible providing a point of difference to the Town Centre character and experience.
- There are a number of well-established existing sentinel trees throughout the subject land, which add significant amenity. The landscape strategy identifies the importance of retaining and celebrating these significant trees that bookend key pedestrian links and at the end of view corridors. Key existing trees as shown on Plan 1 shall be retained as key landmark features. The provision of a mature tree at landmark and corner locations can also be contemplated by the City, which could include the recessing of the building to provide room for the tree.
- Landscape material textures and colours shall focus on the existing landscape character of the site, which draw from the local character and enhance the existing landscape treatment throughout. New hardscape materials should be of a high quality, durable finish yet maintain the rural character of the Town Centre.
- The selected plant palette is to reflect the species of the local area and include seasonal flower colour, foliage variation and a variety of forms to enhance the visual interest, texture and layering of the landscape.

Accessibility

- Opportunities exist to greatly improve wayfinding throughout the subject land. A hierarchy of landscape treatments from materials, plant species, signage and scale will provide greater clarity throughout.
- Connectivity of key sites through a network of pedestrian orientated green links (also identified as key pedestrian connections on Plan 1) will offer shade and amenity and reduce the reliance upon, and dominance of, vehicles.
- Encourage walkability and enhance permeability throughout the subject land through the provision of shelter, rest and interest. Shade trees and gentle gradients to all footpaths shall be adopted to cater for all levels of mobility.
- Encourage cycling as a mode of transport to, from and within the subject land through greater provision for bicycle facilities.
- The landscape treatment shall ensure clear sight lines to enhance passive surveillance. Lighting will be incorporated to provide night-time safety measures and vegetation will be predominantly low shrubs and groundcovers to maintain clear sight lines over time.

Rocca Way (Main Street) and Public Plaza

- Rocca Way and Conlan Avenue combined provide a continuous 'Main Street' with an urban space at the northern end of Rocca Way. Retail development with active edges to the street will facilitate the creation of an attractive and vibrant Main Street and prioritise pedestrian movement.
- Opportunities exist to bolster activity within the ACP area by providing key urban spaces within public or private ownership that provide flexibility for communal gathering, outdoor social functions as well as intimate sitting areas to cater for smaller gatherings and impromptu conversations.
- A fully accessible public plaza is to be provided generally in accordance with Plan 1 to provide an east-west public pedestrian link between Civic Drive and the Main Street (Rocca Way) and further west to Wanneroo Road. The plaza will provide a central key 'celebration' space for the community to linger as well as hold greater community events.
- The preferred north-south dimension of the public plaza is approximately 30m. The preferred north-south dimension of the urban space on the western side of Rocca Way is approximately 7-10m and 20-25m for the urban space on the eastern side of the shopping centre (west of Windan Way). Further consideration as to whether the plaza should be ceded to and maintained by the City would need to be given.

- Key east-west pedestrian movement will be enhanced through elements such as a feature arbour that frames the public plaza and provides a visual cue to link pedestrian desire lines.
- Tree planting, furniture and flush road paving treatments will contribute to a shared space and offer a calmer, pedestrian-friendly environment. These treatments will enable Rocca Way to act as an extension of the public plaza.
- Verge treatments including shade, paving, raised planting beds and furniture will be designed to allow flexibility and encourage businesses to activate the adjacent footpath space through alfresco dining, signage and product display.
- Items of interest, such as interactive artwork, will encourage activation of the space and opportunities to pause and linger.

Public Open Space

- Opportunities exist to enhance and activate existing pockets of open space, such as Bert Togno Park and Memorial Park through landscape treatments and wayfinding strategies to activate and enhance these spaces.
- Integration of existing and proposed POS with the surrounding built form to provide activation of key spaces.
- Encourage the use of public art to celebrate the local character and history of the subject land and provide interactive elements within key nodes and along pedestrian links.
- Create a sequence of varied experiences within POS areas by ensuring the landscape design allows opportunities for communal gathering, large scale outdoor social functions and large civic uses, as well as intimate sitting areas to cater for smaller gatherings and impromptu conversations.
- Streetscapes should act as an extension of POS areas through the provision of shade trees, providing greater permeability and connectivity throughout.
- Urban spaces are to incorporate design principles of Crime Prevention Through Environmental Design (CPTED) and the provision of adequate lighting.
- Plan 1 provides an indication of the preferred locations and configurations for key urban spaces. The final dimensions and configuration of urban spaces shall be detailed within an approved LDP for the site.

Tree Retention

- Significant individual trees and groups of trees within private lots, existing and proposed road reserves and POS reserves are to be retained and respected, where possible, in order to preserve the amenity of streetscapes and the WTC area.
- The retention of existing trees over removal and replacement options should be prioritised.
- In the assessment of subdivision applications, the City will recommend to the WAPC that the location of significant trees be identified on subdivision plans to ensure protection where possible. Where development is proposed in areas supporting mature trees, proponents should undertake a Significant Tree Survey and the results should be used to inform the subdivision design process and prioritise significant tree retention. The 'significance' of trees should consider qualities such as age and condition, height, spread, girth, species, historical association, habitat value and landscape amenity value.

4 MOVEMENT

A Traffic and Transport Management Strategy has been prepared by Flyt in support of the ACP (refer **Appendix 2**). This Strategy has been prepared in response to the requirements of SPP 4.2 relating to transport and movement.

4.1 REGIONAL PERSPECTIVE

The subject land is well connected to the regional transport network via Wanneroo Road and Mitchell Freeway and key regional attractors including:

- 23 km north of Perth CBD
- 33 km north-west of Perth Airport
- 27 km south of Yanchep
- 9 km east of Joondalup
- 24 km north-west of Morley

There are a number of key sites and trip attractors within the subject land that influence the functionality of the existing transport network such as the Wanneroo Central Shopping Centre and other retail uses, civic facilities (e.g. City of Wanneroo Council offices, Wanneroo Library, Aquamotion and ECU Health Centre), education facilities (Wanneroo Primary School and St Anthony's School) and Wanneroo Showgrounds.

A Principal Shared Path (PSP) for cyclists and pedestrians borders Lake Joondalup adjacent to Scenic Drive. The local street and footpath network provide connections between the PSP and the subject land.

4.2 PUBLIC TRANSPORT

The existing public transport network within the subject land includes three bus routes, as follows:

- Route 389 - Perth to Wanneroo via Wanneroo Road/Charles Street.
- Route 467 - Whitfords Station to Joondalup Station via Pearsall, Hocking, Ashby.
- Route 468 - Whitfords Station to Joondalup Station via Wanneroo Road.

The three routes provide a total of 226 weekday bus services through the subject land. The bus stops with the highest patronage are those closest to the Wanneroo Central Shopping Centre and the City of Wanneroo Civic Centre. There are no bus priority measures, either on road or through signal priority, within or around the subject land.

Given the projected increase in trip generation and land use in the ACP area, public transport upgrades are required to increase patronage and reduce private car dependency, being a key performance indicator as outlined in SPP 4.2.

The East Wanneroo Rail Link (EWRL), a potential passenger rail service to connect the existing Joondalup and planned Ellenbrook rail lines in the long term, was identified in Transport @3.5 million. The alignment of this potential link is currently under investigation, however the City of Wanneroo advocates for a public transport link between the EWRL and the subject land which would service the Town Centre. An area within the subject land, to the north-east of the intersection of Dundobar Road and Friars Drive and at the south-western corner of the Rocca Way / Dundobar Road intersection, have been identified as a future potential transit nodes, to serve as the terminus of this public transit link.

However, given the long-term proposal and unknown nature of the EWRL, more immediate public transport improvements are required. The PTA has identified the need to improve bus connectivity between Whitfords and Joondalup via Wanneroo. As part of this project a high priority transit corridor will be constructed along Wanneroo Road, between Whitfords Avenue and Joondalup Drive, in the medium term, passing through the subject land.

4.3 ROAD NETWORK AND TRAFFIC MANAGEMENT DEVICES

With the exception of Wanneroo Road, which is under the care and control of MRWA, the existing road network within, and bordering, the subject land is dominated by 'Local Distributors' and 'Access Streets', all maintained and controlled by the City. The main distributor level roads include:

- Wanneroo Road – Primary Distributor
- Dundobar Road – Local Distributor
- Civic Drive – Local Distributor
- Church Street – Local Distributor
- Ariti Avenue – Local Distributor

The strategic road network within the subject land will remain unchanged in form, however the following changes are proposed for the local road network and associated road hierarchy to achieve the objectives of SPP 4.2 relating to transport and movement (refer **Figure 13**):

- Northwards extension of Servite Terrace through Lot 9000.
- Northwards extension of Friars Drive through Lot 9000.
- New east-west connection between Wanneroo Road (opposite Hart Court, with left-in/left-out intersection) and Servite Terrace, through Lot 9000.
- New east-west connections between Servite Terrace extension and Friars Drive, and between Friars Drive and Boyagin Way.
- New connection between Wanneroo Road (opposite Crisafulli Avenue, with left-in/left-out intersection) and Windan Way.
- New connection between Civic Drive and abovementioned Windan Way connection.
- Widening of Senario Drive road reserve from 16m to 20m on the eastern side to accommodate a suitable verge, pedestrian path and street tree planting area in support of the north-south green pedestrian connection.
- Widening of Cafaggio Crescent road reserve from 16m to on the northern side to accommodate two-way traffic movement, on-street parking, possible tree retention and a pedestrian path.
- Widening of Barcoo Close (outside of the ACP area) road reserve from 14m on the western side by at least 2.5m to accommodate on-street parking, whilst maintaining a minimum 4m verge between the on-street parking and road carriageway.
- Widening of Yagan Place road reserve from 6m to 12m to accommodate on-street parking, a pedestrian path and street tree planting once redevelopment occurs to the south to ensure the level difference is accommodated.
- Widening of the Conlan Avenue / Rocca Way road connection at the south-east corner of Lot 63 Conlan Avenue to enhance pedestrian connectivity within the Main Street.
- Pupil Lane to be widened to 6m on the eastern side.
- Public rights-of-way or reciprocal access easements for access to lots fronting the western side Wanneroo Road and Leach Road.

Existing local roads are to be upgraded to reflect an inner urban street character, featuring on-street parking, high quality landscape and pedestrian facilities. Existing road reserves may require widening to ensure that the street serves a high quality public realm function and facilitate local traffic movement. It is noted that landowners may be entitled to seek reimbursement from other landowners abutting these road reserves in accordance with Part 10 Division 4 of the Planning and Development Act 2005. Subdivision or development on lots that abut or rely upon these roads should be required to, as a condition of approval, to cede the land required for the road widening.

Typical cross sections relating to the recommended road hierarchy have been developed through an assessment of the likely traffic volumes resulting from the proposed development yield and are provided in the Traffic and Transport Management Strategy contained at **Appendix 2**. The application of the Access Street B cross-section (minimum road reserve width of 17.9m) is required for all new streets not indicated on **Figure 13**. The City can require the verge width and the road reserve width to be increased where retention of existing trees is required.

The opportunity to introduce additional road network capacity was discussed with MRWA. In response, it was requested by MRWA that the ACP accommodates the ultimate road reserve width for Wanneroo Road (north of Dundebur Road) to match the road reserve width south of Dundebur Road. The Primary Regional Roads reservation has been taken into consideration in the preparation of this ACP.

The ACP retains the existing roundabout at the intersection of Dundebur Road and Rocca Way. Modification of the roundabout to an alternative traffic management device (for example, traffic signals) may occur when the ACP is reviewed in the future.

4.3.1 WANNEROO ROAD ACCESS

Given the variety of land uses and large number of crossovers along Wanneroo Road, as redevelopment of properties occurs, the removal of crossovers along Wanneroo Road is required with access to properties to be gained from secondary streets or laneways. The City may support temporary crossovers to Wanneroo Road if rear vehicle access is unachievable in the first instance. Any development application should be accompanied by a vehicle access plan approved by MRWA where temporary access is provided along Wanneroo Road.

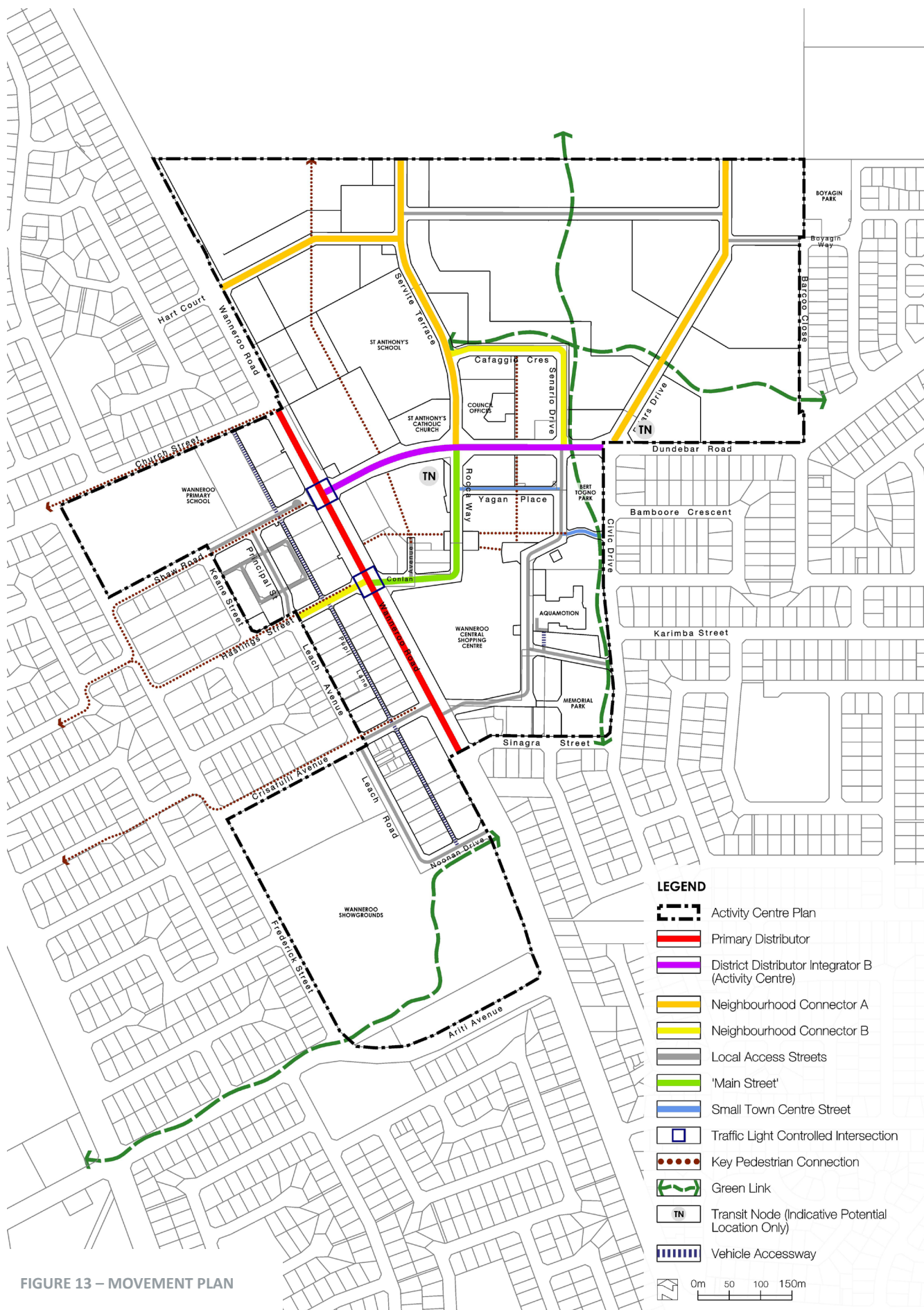


FIGURE 13 – MOVEMENT PLAN

4.4 EXISTING TRAFFIC VOLUMES

Existing traffic volumes within the subject land have been obtained from MRWA for Wanneroo Road and Dundebur Road (2016) and the City of Wanneroo for local roads (within the past 5 years) as outlined in **Table 19**.

TABLE 19 - EXISTING TRAFFIC VOLUMES [MRWA; CITY OF WANNEROO]

Road Link	Average Existing Volumes (vpd)
Wanneroo Road (north of Dundebur Road)	35,286
Wanneroo Road (south of Dundebur Road)	27,589
Dundebur Road (east of Wanneroo Road)	10,525
Servite Terrace	1,800
Senario Drive	220
Conlan Avenue (northern extension)	3,900
Conlan Avenue (east-west portion)	4,700
Sinagra Street	650
Civic Drive (east of subject land)	3,900
Church Street (north of subject land)	1,800
Hastings Street	2,000
Leach Road / Noonan Drive	200

The existing road network is dominated by Wanneroo Road, a Primary Regional Road carrying between approximately 28,000 and 35,000 vehicles per day (vpd), which bisects the subject land. Approximately 8.3% of these volumes is heavy vehicle traffic. Wanneroo Road is part of the secondary freight network, approved to carry restricted access vehicles (RAVs) up to 27.5m in length and up to a mass of 87.5 tonnes and will continue to serve as part of the freight network for the foreseeable future. Dundebur Road, a Local Distributor, carries approximately 10,500 vpd with 6.3% heavy vehicles.

4.5 TRAFFIC FORECASTS

To understand the strategic traffic movements within, and around, the subject land, output from MRWA's Regional Operations Model 24 (ROM24) was examined. The ROM24 road network includes only Wanneroo Road (with two lanes in each direction) and Dundebur Road (with a single lane in each direction). Existing traffic volumes (2016) and forecast daily volumes (2031) are shown in **Table 20**. Strong growth is predicted for Dundebur Road and Wanneroo Road (south of Dundebur Road). Analysis also shows large increases are expected on Wanneroo Road northbound traffic in the AM peak period, and for both directions of travel on Dundebur Road in both peak periods.

TABLE 20 - EXISTING AND FORECAST TRAFFIC VOLUME ANALYSIS [MRWA]

Road Link	Direction	2016 Volumes (vpd)	2031 Forecast (vpd)	% Increase
Wanneroo Road north of Dundebur Road	northbound	17,400	18,400	5.7%
	southbound	17,900	18,500	3.4%
Wanneroo Road south of Dundebur Road	northbound	13,700	16,800	22.6%
	southbound	13,900	16,700	20.1%
Dundebur Road east of Wanneroo Road	eastbound	4,700	8,000	70.2%
	westbound	5,800	7,900	36.2%

Volume to capacity ratios indicate there is requisite midblock capacity within the strategic road network to accommodate the 2031 forecast volumes. However, the section of Wanneroo Road (north of Dundebur Road) will be approaching peak period capacity by 2031, with limited ability to accommodate further traffic volume increases. Any further growth in traffic is likely to cause the peaks to extend over an increased time period (known as peak spreading).

4.6 PEDESTRIAN AND CYCLING NETWORK

The majority of existing streets within the subject land include footpaths on both sides of the street. Pedestrian activity within the subject land is predominantly related to leisure, shopping and school trips. The key pedestrian desire lines include:

- East-west movements to the north of the Wanneroo Central Shopping Centre.
- North-south movements between Dundebur Road and the Wanneroo Central Shopping Centre.
- East-west movements along Dundebur Road.
- East-west movements between Scenic Drive and Wanneroo Road towards Lake Joondalup (including north-south route along Scenic Drive, located outside of the subject land).

Pedestrian movement at present within the subject land is impacted by two main barriers; the four lane Wanneroo Road which carries in the order of 28,000 vpd (south of Dundebur Road), and the topography of the subject land, where existing retaining walls and level differences restrict access where the majority of pedestrian activity is focused. Along the extent of Wanneroo Road within the ACP area boundary, there are 10 pedestrian crossings; 4 of them at the signalised intersections with Dundebur Road and Hastings Street/ Conlan Avenue, with the 6 remaining crossings located close to the unsignalised intersections.

The existing cycle network within and around the subject land includes a shared path on the eastern side of Wanneroo Road, shared paths and on-street bike lanes along Dundebur Road and Servite Terrace, and shared paths along Cafaggio Crescent and Senario Drive. There are also a number of local roads considered to provide a good riding environment, due to low traffic volumes and traffic speeds.

Within the subject land, the City of Wanneroo's draft Bike Plan identifies Dundebur Road as a key bicycle corridor. Within the vicinity of the subject land, the draft Bike Plan identifies a connection between Scenic Drive and Wanneroo Road along Church Street. It is recommended the existing 1.2m insitu concrete footpath on the northern side of Church Street be upgraded to a 2.5m shared path.

The City will consider similar footpath and landscaping upgrades in other streets within the subject land that provide connection between Wanneroo Road and the Lake Joondalup foreshore.

To promote walking and cycling as the primary mode of transport for travel within the ACP area, priority should be given to pedestrians rather than traffic, through consideration of the following measures:

- Implementation of a 40km/h posted speed zone within the subject land (either side of Wanneroo Road corridor) and 50km/h along Wanneroo Road.
- Retention and improvement of pedestrian phases at all signalised intersections.
- Any new streets to provide footpaths on both sides of the street, or a footpath on one side, and a shared path on the other side of the street.
- All intersecting streets along Dundebur Road, Civic Drive and Servite Terrace to incorporate Wombat Crossings for pedestrian priority – except at signalised intersections (Wombat Crossings being raised, marked crossings to slow vehicles but provide pedestrians with an unimpeded path along the street).

4.6.1 KEY PEDESTRIAN CONNECTION

Key pedestrian connections as shown on **Plan 1** shall include a minimum 2.5m shared path and street tree planting that will provide a high level of shade along the path. Street crossings shall be designed to maximise safety for pedestrians and cyclists.

4.6.2 GREEN LINK

Green links as shown on **Plan 1** are to be provided through streets and public spaces, and include a minimum 3.0m shared path and street tree planting that will provide a high level of shade along the path. The alignment of a green link will be determined at the detailed design stage and will be influenced by the location of existing trees to be retained along the green link corridor.

Where the green link forms parts of a road reserve, the width from a kerbline (on-street parking and/or carriageway) to the property boundary shall be a minimum of 9.0m. The verge width is to accommodate tree planting on each side of the shared path. The City can require the verge width and the road reserve width to be increased where retention of existing trees is required.

The design of any public space along the green link is to accommodate a dedicated corridor for the shared path and trees.

4.7 PARKING

4.7.1 OFF-STREET PARKING

There are estimated to be approximately 2,270 off-street parking bays within the subject land, located primarily within the central portion of the subject land associated with the Wanneroo Central Shopping Centre and other retail uses. The current off-street parking provision equates to approximately 1 car bay per 30.5m² of commercial gross floor area.

Parking is typically located within discrete areas within the front setback of development site with no consideration given to reciprocal use. The 'park once' initiative should be encouraged within the ACP area, where parking service the entire area, and not just individual developments. In this regard, a maximum car parking provision is proposed as outlined in **Table 21**.

For all mixed-use development within the ACP area, reciprocal rights for parking use and unbundling parking bays from land uses should be encouraged in accordance with the principles and requirements as set out in **Appendix 2**.

TABLE 21 – MAXIMUM NON-RESIDENTIAL PARKING RATIOS

Use Class	Parking Requirements (maximum)
Non-residential uses	3.5 car bays per 100m ² of gross floor area

The maximum parking requirements as outlined above will take effect once the requirements have been incorporated or normalised into DPS 2. Where no rate is provided for the use proposed, reference is to be made to the rates contained in DPS 2.

4.7.2 ON-STREET PARKING

There are estimated to be approximately 312 on-street parking bays within the subject land, located primarily along Dundobar Road and Rocca Way, with on-street parking located within Servite Terrace, Scenario Drive / Cafaggio Crescent and Shaw Road/Church Street predominately for use during school drop-off and pick-up times.

The majority of the on-street parking is provided as parallel bays, although there are sections of angled parking along Rocca Way, Cafaggio Crescent, Scenario Drive and Servite Terrace. The majority of on-street parking bays are time unrestricted, and all bays are exempt from parking fees.

4.7.3 BICYCLE PARKING

A key performance indicator of SPP 4.2 is improved access and facilities for pedestrian and cyclists and provision of end-of-trip facilities (EOTF), including showers, change rooms and lockers. The suggested provision of bicycle parking within the ACP area is outlined in **Table 22**:

TABLE 22 – BICYCLE PARKING & EOTF PROVISION

Type	Minimum Provision
Tenant and employee bicycle parking	1 bay per 200m ² of non-residential gross floor area
Visitor bicycle parking	1 bay per 400m ² of non-residential gross floor area
EOT Lockers	1 locker per tenant / employee bicycle bay
EOT Showers	1 male and 1 female shower for every 10 tenant / employee bicycle bay

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5 INFRASTRUCTURE & SERVICING

An Infrastructure and Servicing Strategy has been prepared by The Civil Group in support of the ACP (refer **Appendix 7**).

5.1 WATER SUPPLY

The subject land is well served with water reticulation via an established network of reticulations mains connecting to the Wanneroo Reservoir. A 1,000 mm diameter water distribution trunk main is located on the northern boundary of the ACP area contained within a 5m wide easement. Any future development will need to consider this easement (and infrastructure) or relocation within a road reserve. A 250 mm diameter reticulation main is located within Dundobar Road, as well as a 305 mm diameter main is located within Civic Drive between Dundobar Road and Karimba Street (along the eastern boundary of the ACP area).

Where reticulation mains are 100 mm or less (mainly on the western side of Wanneroo Road), developments requiring water for fire-fighting purposes will require larger reticulation mains. There is also a small section of 50 mm reticulation main within Shaw Road which will require upgrading.

5.2 WASTEWATER

The subject land is served by gravity sewer reticulation mains (two 225mm diameter mains) that flow to the Ariti Avenue Wastewater Pumping Station (WWPS) in the Wanneroo Sewer District.

Based on the Water Corporation's sewer planning, the northern portion of the subject land (north of Dundobar Road) falls within the Neerabup Sewer District that will outfall into the Neerabup WWPS No 2 located on Scenic Drive. However, there are some gaps in the existing sewer infrastructure that will require construction / upgrade as follows:

- A new 225 mm sewer within the northern portion of the subject land.
- A missing section of 225 mm sewer will require construction along Wanneroo Road, between Dundobar Road and Church Street.
- A section of 150 mm sewer downstream will require upgrading to 225 mm, or a new section of 225 mm sewer would need to be constructed along Wanneroo Road, between Hart Court and Neville Drive.
- A missing section of 225 mm sewer on Dundobar Road upstream of the subject land (construction will be driven and funded by developers upstream).

The exact timing of these upgrades will be dependent on the speed and density of development within the ACP area. The timing and need will be confirmed by the Water Corporation as development progresses.

5.3 POWER SUPPLY

Electricity within the subject land is supplied via the Wanneroo Zone Substation located on Wanneroo Road in Tapping. Based on Western Power forecasting, there is sufficient supply for the next 10 years, however at some stage in the future it is likely that a new high voltage (HV) feeder will be required from one of the nearby substations to serve the development. In the meantime, supplies will be provided from existing high and low voltage infrastructure within and surrounding the subject land. Some minor upgrades of the HV infrastructure may be required in localised areas as demands change. The timing of upgrades will require a feasibility study to be undertaken by Western Power.

5.4 GAS SUPPLY

The subject land is supplied by reticulated gas via a network of medium-low, medium, polyethylene and high-pressure pipes. Although gas supply is not an essential or required service, there appears to be sufficient supply within the network to support the development. Should the upgrade of mains be required, it will be progressive and supported by the network of high pressure mains.

5.5 TELECOMMUNICATIONS

A portion of the subject land already connected to the NBN via a combination of fibre to the node technology (east of Wanneroo Road) and fibre to the kerb (FTTK) (west of Wanneroo Road). The NBN Co is currently installing a network across the balance of the subject land using FTTK technology with an anticipated completion date of January - March 2019.

It is not expected that broadband capacity will be a burden to future development once the NBN Co system has been implemented throughout the ACP area.

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6 RESOURCE CONSERVATION

6.1 WATER MANAGEMENT

A LWMS has been prepared by Emerge in support of the ACP (refer **Appendix 8**). 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.

6.1.1 STORMWATER MANAGEMENT

Stormwater management focuses on maintaining the current drainage network within the subject land, with the addition of Water Sensitive Urban Design (WSUD) structures to be considered as part of any redevelopment. For the northern portion of the subject land (Lot 9000), WSUD structures will be utilised to treat small rainfall event runoff on site and major rainfall event runoff retained within the site. Surface water quality is also proposed to be addressed through non-structural measures (including street sweeping, minimising fertiliser use, education etc).

The following stormwater management design criteria and objectives have been established for the subject land:

- All runoff up to the major rainfall event to be retained on site through strategies such as on-lot infiltration structures including flood storage areas, swales, basins and subsurface soakage/soakwells, rainwater tanks and temporary flooding of car parks or hardstand areas.
- Flood storage areas located in downstream POS will accommodate runoff beyond the capacity of treatment structures via pipe drainage network and overland flow and have been designed with minimum 1:6 side slopes and a maximum inundation depth of 1.2m.
- Finished floor levels to have a minimum of 300mm clearance above the major rainfall event in road reserves and 500mm clearance from the major rainfall event in flood storage areas.
- Ensure minor roads remain passable in the minor rainfall event.
- Retain and treat the small rainfall event runoff (first 15mm) as close to source as possible (e.g. pervious vegetated garden areas, vegetated swales and vegetated bio-retention areas (BRAs)). Surface runoff within the road reserves can be conveyed to roadside bio-pockets via slotted or flush kerbing and tree-pits.
- Size treatment areas in the northern portion of the subject land (Lot 9000) to (at least) 2% of the connected impervious area.
- Surface runoff retained within stormwater management structures in the northern portion of the subject land (Lot 9000) will fully infiltrate within 96 hours.

6.1.2 GROUNDWATER MANAGEMENT

Groundwater management focuses on the use of structural and non-structural measures to achieve groundwater quality design criteria. Achieving minimum clearances to maximum groundwater levels through the use of sand fill in some areas and/or appropriate design within lots is also considered.

The following groundwater management design criteria and objectives have been established for the subject land:

- Maintain groundwater water quality at pre-development levels. This can be achieved by treating surface runoff prior to infiltration via application of appropriate WSUD measures, thereby reducing the total nutrient load into the groundwater that originates from the development.
- New stormwater management structures to have a minimum clearance of 500mm above the maximum groundwater levels. For the majority of the subject land, depth to MGL is greater than 5m and is therefore not considered a constraint.

6.2 WATER CONSERVATION

Water conservation design criteria has been determined in line with the guidelines presented in Better Urban Water Management (WAPC 2008). The LWMS proposes the following water conservation criteria:

- Use fit for purpose water sources throughout the development so that waste of scheme water is mitigated and includes scheme water, groundwater, rainwater tanks (RWT) and greywater.
- Consumption target for water of 100 kL/person/year, including not more than 40-60 kL/person/year of scheme water through water efficient fixtures, fitting and appliances and waterwise gardens
- Maintain an average irrigation rate of 6,750 kL/ha/year.

6.3 URBAN WATER MANAGEMENT PLAN

The requirement to undertake preparation of more detailed water management plans to support subdivision is generally imposed as a condition of subdivision. The development of any future Urban Water Management Plan (UWMP) should follow the guidance provided in 'UWMPs: Guidelines for Preparing Plans and for Complying with Subdivision Conditions' (DoW 2008).

Development of areas progressed under a Development Application may not be required to prepare additional water management plans (i.e. UWMP) to support the application. In this case, detailed designs presented in Development Applications should be reviewed by the City in conjunction with the design criteria presented in this LWMS to ensure the appropriate elements of the water management strategy discussed herein are implemented.

7 IMPLEMENTATION

7.1 PLANNING FRAMEWORK

7.1.1 REVOCATION OF AGREED STRUCTURE PLAN 23 & LOCAL PLANNING POLICY 5.2

This ACP includes the built form and public realm requirements relating to the subject land within the ACP and as such, it is recommended that the City revoke ASP 23 in accordance with Clause 44, Schedule 2, Part 5 of the Planning and Development (Local Planning Scheme) Regulations 2015 and LPP 5.2 in accordance with Clause 6, Schedule 2, Part 2 of the Planning and Development (Local Planning Scheme) Regulations 2015.

This approach has been determined acknowledging the requirements of SPP 4.2 with regards to the requirement for the preparation of an ACP for secondary centres and Planning and Development (Local Planning Scheme) Regulations 2015.

7.1.2 'NORMALISATION' OF ACP

This ACP has been prepared with the view to future incorporation into DPS 2 via a basic scheme amendment and will be undertaken at a stage where the cadastral boundaries and ultimate zoning is well understood. This should be initiated at the earliest appropriate time.

In order to have the force and effect of the Scheme, it is also intended that land use permissibility within the Commercial and Mixed Use zones of the ACP area (**Tables 3 & 4**) and car parking standards (**Table 5**) as contained in Part 1 of the ACP will be incorporated or 'normalised' into DPS 2, via a scheme amendment.

7.2 STAGING

Table 2 contained in Part 1 provides an outline of the key triggers for enabling development within various parts of the ACP area. Development staging is still to be refined; however, the following provides the basis for future decision-making:

- Removal of poultry farm buffer and rezoning of land affected by buffer or demonstration of sufficient justification and amelioration methods.
- Lot 9000: referral of proposal to EPA for assessment to ensure that natural assets are protected and management / risk mitigation strategies are being implemented prior to subdivision or development.
- Utilise access to existing road and service infrastructure through a logical extension of the existing subdivision pattern.
- Extend development from the existing subdivision in the central portion of the site in a northwards direction.
- Subdivision and development of land less reliant on land assembly and rationalisation.
- Construction to occur in consecutive staging subject to market conditions.

7.3 DEVELOPMENT CONTRIBUTION PLAN

The City will establish an appropriate funding strategy for the ACP area. As part of the strategy, modification to the existing East Wanneroo Cell 2 DCP or establishment of a new DCA and DCP may be implemented to contribute to the funding of public infrastructure requirements to facilitate development in the ACP area.

Infrastructure items that would be eligible to be funded under a DCP should be in accordance with SPP 3.6 and may include:

- Construction/upgrades to roads, intersections and pathways, including any light controlled intersections.
- Land for POS.
- Landscape treatment for public realm areas.
- Infrastructure upgrades.

This ACP will inform any future DCP, particularly in relation to the proposed upgrades to roads and intersection treatments, creation of new subdivisional roads, POS and infrastructure upgrades (e.g. reticulation water mains, sewer reticulation mains, high voltage (HV) feeders, and low voltage (LV) power cables).

7.4 ENVIRONMENTAL MANAGEMENT

Based on the outcomes of the EAMS, a range of recommendation regarding future management of environmental values have been proposed:

- Where development is proposed in areas supporting mature trees, proponents should undertake a Significant Tree Survey and the results should be used to inform the subdivision design process and prioritise significant trees retention.
- Where the clearing of native vegetation and/or MNES habitat is proposed, individual proponents will need to attain appropriate approvals pursuant to the EP Act and EPBC Act. The areas of environmental significance identified by the EPA as part of its Bulletin will be reserved for 'Parks and Recreation' for conservation purposes.
- It is anticipated that a Reserve Management Plan (or similar) will be included as a condition of any future subdivision approval incorporating Lot 9000. This document will focus on the establishment and ongoing management of the identified conservation POS area.
- Where clearing of fauna habitat (including intact native vegetation or mature trees) is proposed, a Fauna Relocation Plan (or similar) is likely to be required to be prepared and implemented, prior to the commencement of any clearing.