

This document forms part of a set of three incorporated documents applying to the development of Manor Lakes being the:

Manor Lakes Native Vegetation Precinct Plan

Manor Lakes Precinct Structure Plan

Manor Lakes Development Contributions Plan

Any person making or considering a planning permit application in the Manor Lakes precinct should consult all three documents for relevant requirements.



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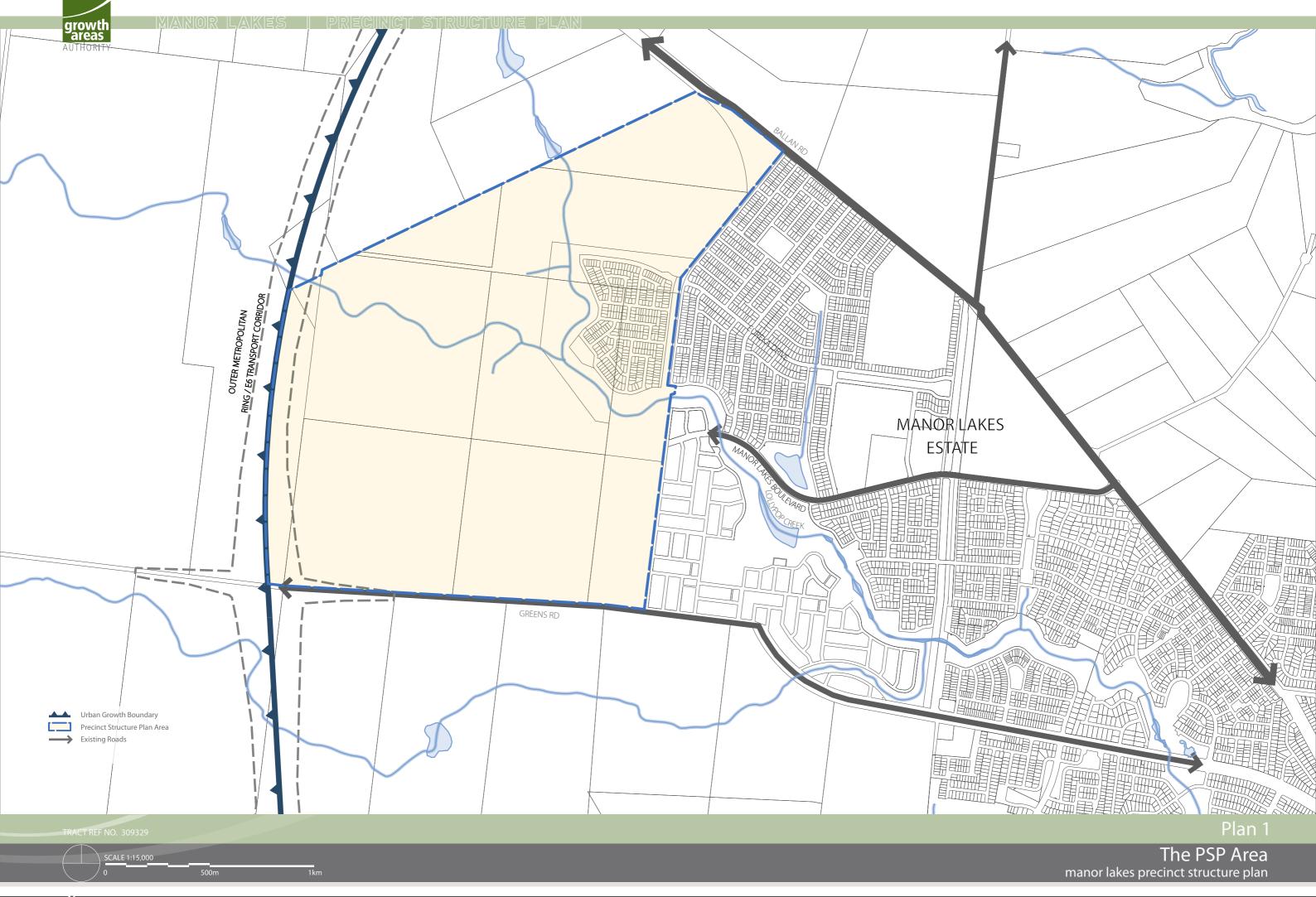
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1.0 INTRODUCTION

1.1 ROLE OF THE PRECINCT STRUCTURE PLAN

The Manor Lakes Precinct Structure Plan (the "PSP") has been prepared by the Growth Areas Authority, with the assistance of Wyndham City Council, Government agencies, service authorities and major stakeholders.

The PSP:

- Is a strategic plan which guides the delivery of a quality urban environment in accordance with Victorian Government and Wyndham City Council Guidelines.
- Enables the transition of non-urban land to urban land.
- Sets the vision for how land should be developed, illustrates the future urban structure and describes the objectives to be achieved by the future development.
- Outlines projects required to ensure that future residents, visitors and workers within the area are provided with timely access to services and transport infrastructure necessary to support a quality and affordable lifestyle.
- Details the form and conditions that must be met by future land use and development.
- Provides the basis for the use and development controls that apply in the schedule to the Urban Growth Zone and planning permits which may be granted under the schedule to the zone.
- Provides developers, investors and local communities with guidance about future development.
- Meets Commonwealth obligations under the Environment Protection and Biodiversity Conservation Act (1999) by following prescriptions for matters of national environmental significance.

The PSP is informed by:

- The State Planning Policy Framework set out in the Wyndham Planning Scheme, including the Growth Area Framework Plan, draft Corridor Plans (November 2011) and the Precinct Structure Planning Guidelines.
- The Local Planning Policy Framework of the Wyndham Planning Scheme.

The following planning documents have been developed in parallel with the PSP to inform and direct the future planning and development of the locality:

 Manor Lakes Development Contributions Plan (the "DCP") which sets out the requirements for development proponents to make a contribution toward infrastructure required to support the development of the precinct.

 Manor Lakes Native Vegetation Precinct Plan (the "NVPP") which sets out requirements for the protection and management of native vegetation within the PSP area and an adjacent area to the east.

1.2 LAND TO WHICH THE PRECINCT STRUCTURE PLAN APPLIES

The land to which the PSP applies is shown on Plan 1 and on the Wyndham Planning Scheme maps as Schedule 3 to the Urban Growth Zone. The PSP applies to approximately 386 hectares of land generally bounded by the proposed Outer Metropolitan Ring / E6 Transport Corridor (OMR) to the west, the Rural Conservation Zone area to the north-west, Ballan Road to the north, the existing Manor Lakes Estate to the east and Greens Road to the south.

1.3 IMPLEMENTATION

The PSP is implemented by:

- Development proponents who develop land generally in accordance with this PSP.
- The Commonwealth and Victorian Governments and the Wyndham City Council by funding, delivering and managing a range of infrastructure and services to support the development of the precinct
- Non-government service providers and individuals, such as volunteers, who manage and deliver services.

The PSP is implemented through the Wyndham Planning Scheme including:

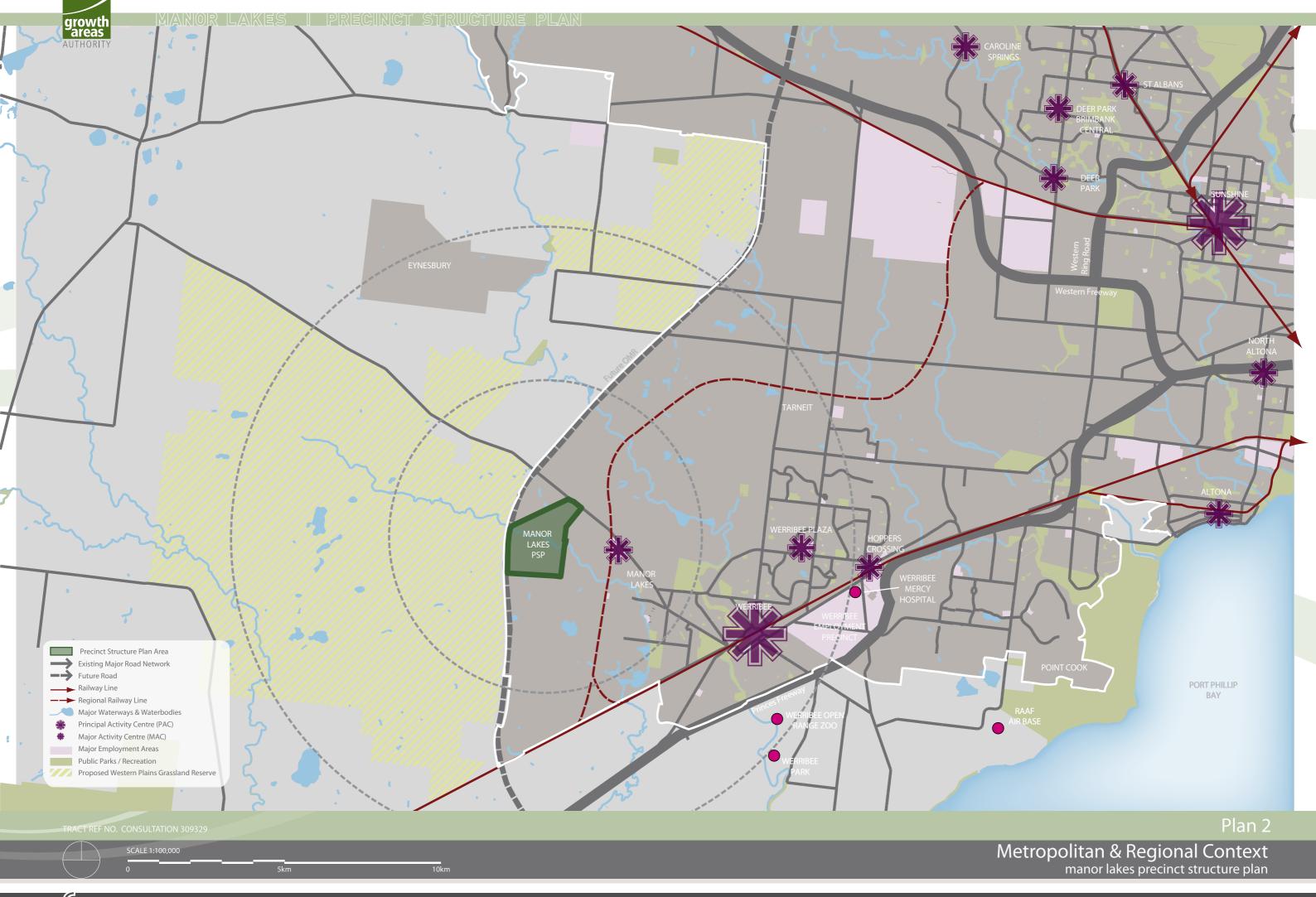
- The schedule to the Urban Growth Zone in Clause 37.07.
- The Manor Lakes Development Contributions Plan incorporated into the Scheme at Clause 45.06.
- The Manor Lakes Native Vegetation Precinct Plan incorporated into the Scheme at Clause 52.16.
- Open space requirement under Clause 52.01 of the Scheme.
- Other requirements of the Wyndham Planning Scheme.

1.4 REFERENCE MATERIAL

A glossary and other information such as technical studies supporting the preparation of this PSP are listed in Section 6.3 – Supporting Information.

1.5 MONITORING AND REVIEW

The Growth Areas Authority and Wyndham City Council will jointly monitor the implementation of the PSP, the effectiveness of the PSP will be evaluated regularly, at least every five years. The PSP may be revised and updated following review.





2.0 STRATEGIC CONTEXT

2.1 METROPOLITAN AND REGIONAL CONTEXT

The Precinct Structure Plan area is located approximately 40 km from the Melbourne CBD in the Wyndham Growth Area as shown in Plan 2. The Wyndham Growth Area is experiencing rapid growth and this is forecast to continue for several decades. The draft Growth Corridor Plans (November 2011) have identified land for large scale residential growth as well as for substantial employment areas and transport networks.

The Werribee West Concept Plan and the draft Corridor Plans:

- Support greater residential development and employment uses around existing rail-based activity centres, including the Werribee Town Centre, Rose Grange Activity Centre and Manor Lakes Activity Centre.
- Locate major new town centres and activity nodes on the proposed new rail corridor.
- Require neighbourhood parks and waterway corridors with natural assets such as remnant native vegetation to be established, many within walking distance of residential areas.

When constructed, the Regional Rail Link project will provide rail access from the new Manor Lakes rail station to the Melbourne CBD. The Outer Metropolitan Ring / E6 Transport Corridor skirts the western boundary of the PSP area and is planned to connect the Princes Freeway to the Hume Freeway





2.2 LOCAL CONTEXT

2.2.1 HISTORY

The traditional indigenous owners of land within the precinct were the Wathaurong people.

Since European settlement of the Manor Lakes area the land has been predominantly used for farming and agricultural purposes with a long history of pastoral activities including the plan area forming part of the extensive Chirnside Holdings. Wyndham has retained its semi- rural character, despite its transformation during the 1970's when housing development increased transforming Wyndham into a Metropolitan growth area. Such character is defined by the Werribee South Intensive Agriculture Precinct and the agricultural landscape along the perimeter of the Urban Growth Boundary.

2.2.2 LOCAL STRATEGIC PLANNING CONTEXT

The Manor Lakes Estate was rezoned to Residential 1 and Development Plan Overlay (Schedule 2) was applied to guide the land's development in 1994. The eastern half (approximately 3,000 lots) of the Estate has been developed. These sections of Manor Lakes have been excluded from this PSP and the DCP as it has been developed or approved for development in accordance with previous planning policies and development contributions based on Wyndham City Council's "Infrastructure Financing Framework, 1996". The Infrastructure Financing Framework is derived from the Werribee West Concept Plan, April 1996. The Werribee West Concept Plan is the key strategic planning document for the area and is implemented through provisions in the Local Planning Policy Framework of the Wyndham Planning Scheme.

Planning for the balance of the Manor Lakes Estate has employed the PSP tool in preference to the Residential 1 Zone and Development Plan Overlay as the PSP provides for a strategic approach to, and the streamlining of, biodiversity related development approvals. Precinct Structure Plans are under preparation for land located to both the north and south of the PSP area so that urban development can proceed in the broader area consistent with the UGB extensions provided for in Amendment VC68 in 2010.

2.2.3 TRANSPORT AND MOVEMENT

Vehicle access

The Manor Lakes PSP area will benefit from easy freeway access to the south (Geelong / Avalon), inner Melbourne as well as the wider Metropolitan area:

- Westward via Greens Road to a proposed OMR freeway interchange.
- North and west via Ison and Ballan Roads to a proposed OMR freeway interchange.
- South and east via Ison Road to a proposed Princes Freeway interchange.

Ballan Road is an existing VicRoads declared main road and will be an important primary arterial road linking both to the OMR and eastward into the Werribee Principal Activity Centre. Over time, Ison Road will be developed as a 6 lane primary arterial road to provide a key regional north-south arterial road function. It is planned that Ison Road will become a VicRoads declared main road in the future and will link north and east across the Werribee River and south to the Princes Freeway. Greens Road will provide an arterial road function linking from the OMR into the Werribee Town Centre.

Within the residential area, Manor Lakes Boulevard provides an important connector street function linking east to the proposed Manor Lakes rail station and the large Manor Lakes Town Centre.

Public transport access

Overtime, Manor Lakes will benefit from services to be rolled out as part of Melbourne's planned Public Transport Network including easy access to the planned Manor Lakes rail station. This network will also enable the progressive delivery of local bus services.

2.2.4 EMPLOYMENT AND ACTIVITY CENTRES

The Wyndham municipal component of Melbourne's western growth area is being planned to meet Victorian Government guidelines for employment self-sufficiency (measured dividing the number of jobs in an area by the people living there that are employed in the labour force).

When new employment opportunities in Melbourne's west are fully developed, Manor Lakes residents will have access to more than 100,000 jobs in the region including those at:

- The Manor Lakes Town Centre.
- A potential new employment area located in the south western section of the growth corridor proposed by Wyndham City Council.
- The existing and expanding Truganina Employment Area.
- The proposed future Western Rail Freight Terminal.
- Werribee Town Centre (PAC-Transit City).
- The proposed Werribee Employment Precinct.
- The expanding Avalon Airport employment area.

The planned hierarchy of activity centres in Melbourne's west includes:

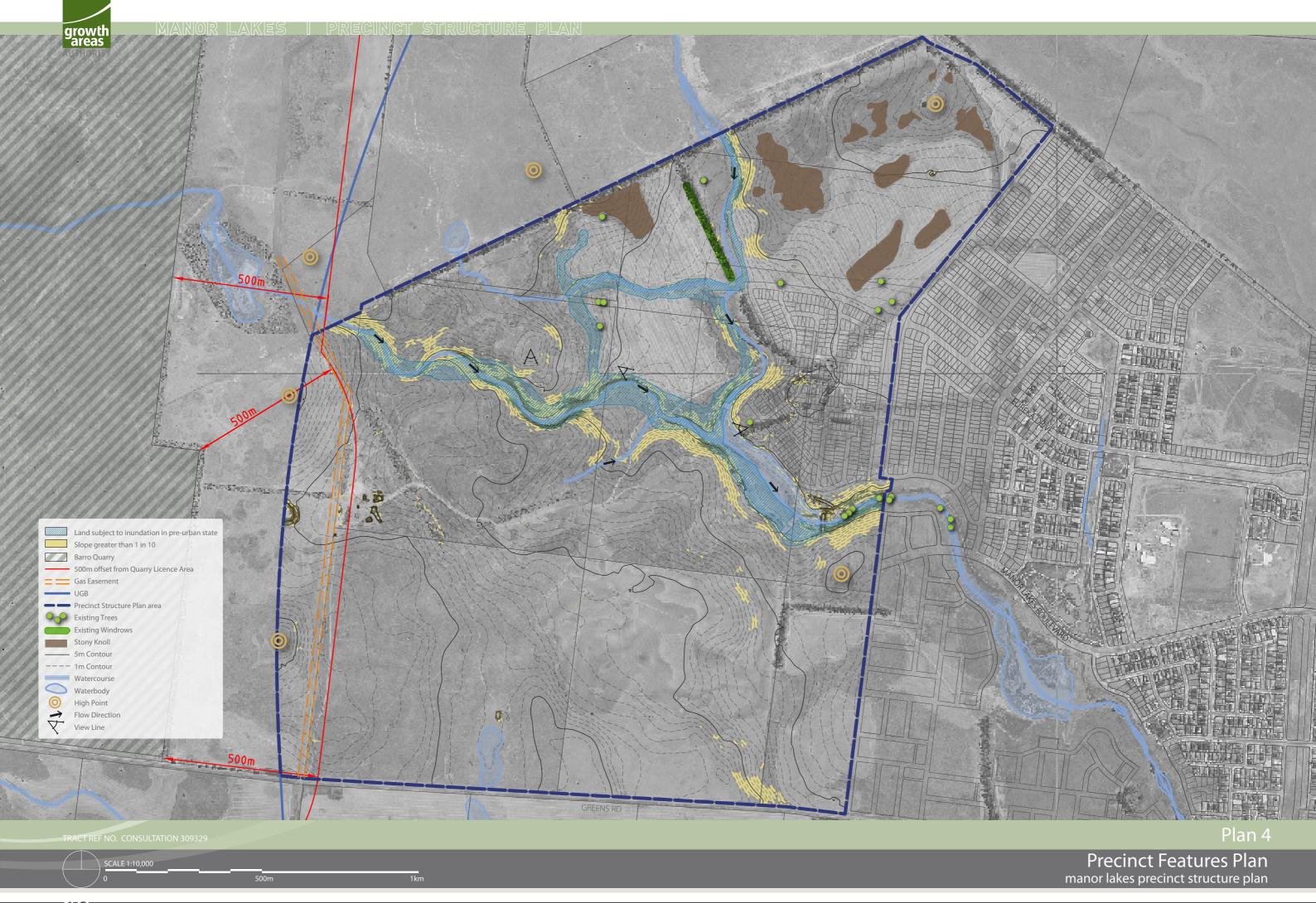
- Central Activities District Footscray.
- Specialised Activity Centre Werribee Employment Precinct.
- Principal Activity Centre Werribee Transit City.
- Major Activity Centres Manor Lakes, Werribee Plaza, Point Cook, Williams Landing and other centres as designated in the draft Growth Corridor plans November 2011.

Neighbourhood activity centres – proposed within Manor Lakes including the Ison Road Local Town Centre as well as centres planned to the south of the PSP area. These are outlined later in Section 4.3 of the Precinct Structure Plan.

In addition to these jobs, employment opportunities will also be created through the establishment of home based businesses and in local community and retail services embedded within future residential areas.

The new residents moving into the PSP area will form part of the core catchment for the Manor Lakes Town Centre (MAC) located on Armstrong Road.

Approximately 450-470m west of the PSP, the Barro group have a licence for a extractive industry. Development within 500m of the land will require a risk assessment and referral to the Department of Primary Industries.





2.2.5 OPEN SPACE

The Manor Lakes PSP is located within close proximity to a range of recreational reserves and passive open space areas. To the east of the PSP, alongside the Werribee River, is Presidents Park and the planned Werribee River township park. These parks will eventually include hundreds of hectares of passive recreation activities but will also include district and regional sports fields. The mix of activities will be determined in future parkland concept and master planning.

Lollypop Creek which traverses the precinct and travels east and south east through the existing Manor Lakes estate provides a continuous linear park through to Blackforest Road. This open space corridor provides a mix of passive recreation opportunities as well as a developing formalised walking and cycling trails.

Located directly to the west of the PSP area will be the Western Plains Grassland Reserve which has been reserved for conservation purposes to offset the removal of grassland vegetation within the Urban Growth Zone.

2.2.6 COMMUNITY FACILITIES

Manor Lakes provides opportunities to plan and deliver a whole-of-government proposal for local level community infrastructure. The district or sub-regional community service focus will be at the Manor Lakes Major Activity Centre – a future transit orientated activity centre located in the triangular space surrounded by Armstrong Road, Ballan Road and Manor Lakes Boulevard. Services delivered to date include a government and non-government secondary college, a special education school and local community services. Wyndham City Council is planning for new higher level services to be provided in the vicinity of the Manor Lakes Town Centre over time.

At a local level, and within the PSP itself, the plans include two community hubs at strategic locations that will include government schools, active recreation reserves and community facilities. School facilities are co-located with recreational playing fields and community hubs to encourage a sharing of facilities. All community facilities will be designed to ensure ease of walking, cycling and vehicle access.

2.3 EXISTING PRECINCT FEATURES

2.3.1 HERITAGE

The traditional indigenous owners of land within the precinct were the Wathaurong people.

Indigenous archaeological artifacts have been found through testing undertaken as part of the preparation of the Manor Lakes PSP Cultural Heritage Management Plan. No sites are required to be retained in the future development, however, there are recommendations within the report to recognise and promote the cultural heritage values of the area.

There are no Post-settlement heritage values identified as requiring retention in the precinct.

2.3.2 BIODIVERSITY SIGNIFICANCE

The Biodiversity Assessment Report, Manor Lakes PSP 41, April 2011 prepared by Biosis Research provides the technical basis for the PSP and NVPP. Biosis found areas of native vegetation within the PSP area. All of the native vegetation Ecological Vegetation Class (EVC132) are classified as Low-rainfall Plains Grassland.

One nationally significant flora species (nine Spiny Rice-flower *Pimelea spinescens subsp. spinescens*) was recorded to the east of the PSP area.

There were nine flora species of state significance recorded, they were:

- Eight Buloke Allocasuarina luehmannii,
- 19 Arching Flax-lily Dianella sp. aff longifolia (Benambra),
- 1089 Small Scurfpea Cullen parvum,
- 15 Slender Bindweed Convolvulus angustissimus subsp. omnigracilis,
- 108 Pale Spike-sedge Eleocharis pallens,
- Approximately 182 Flat Spike-sedge Eleocharis plana,
- · One Wimmera Woodruff Asperula wimmerana,
- 10 Pale-flower Crane's-bill Geranium sp. 3 and
- Six Slender Tick-trefoil Desmodium varians were recorded.

A fauna species of national significance, the Golden Sun Moth *Synemon plana*, was recorded. This species was found in grassland habitat within the survey area. Targeted survey was carried out for three fauna species of national significance: Growling Grass Frog *Litoria raniformis*, Plains-wanderer *Pedionomus torquatus* and Yarra Pygmy Perch *Nannoperca obscura*. None of these species were recorded during these targeted surveys.

Potential habitat for Plains Wanderer, Growling Grass Frog and

Striped Legless Lizard (also nationally significant) has been assessed. Potentially suitable habitat for Growling Grass Frog occurs along drainage lines and lower parts of the Lollypop Creek outside of the PSP area. Striped Legless Lizard habitat is found in native and non native vegetation scattered across the precinct.

In addition, a range of general fauna habitats have been recorded within the precinct. Fauna habitats vary in size and quality and include grassland areas, remnant and standing dead trees, wetlands and waterways, exotic pastures and grasslands, planted vegetation, rock walls, rock piles and log piles. These areas provide varying potential habitat for a range of fauna species.

A total of 84.96 ha of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) listed ecological community Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP) and the Flora and Fauna Guarantee Act 1988 (FFG Act) listed community Western (Basalt) Plains Grassland Community are present within the Manor Lakes survey area. This comprises 54 indigenous vegetation patches which equates to 43.47 habitat hectares (hha) of Lowrainfall Plains Grassland. The grasslands have very high conservation significance, based on their conservation significance, size, habitat for threatened species and habitat connectivity values.

2.3.3 TOPOGRAPHY AND LANDFORM

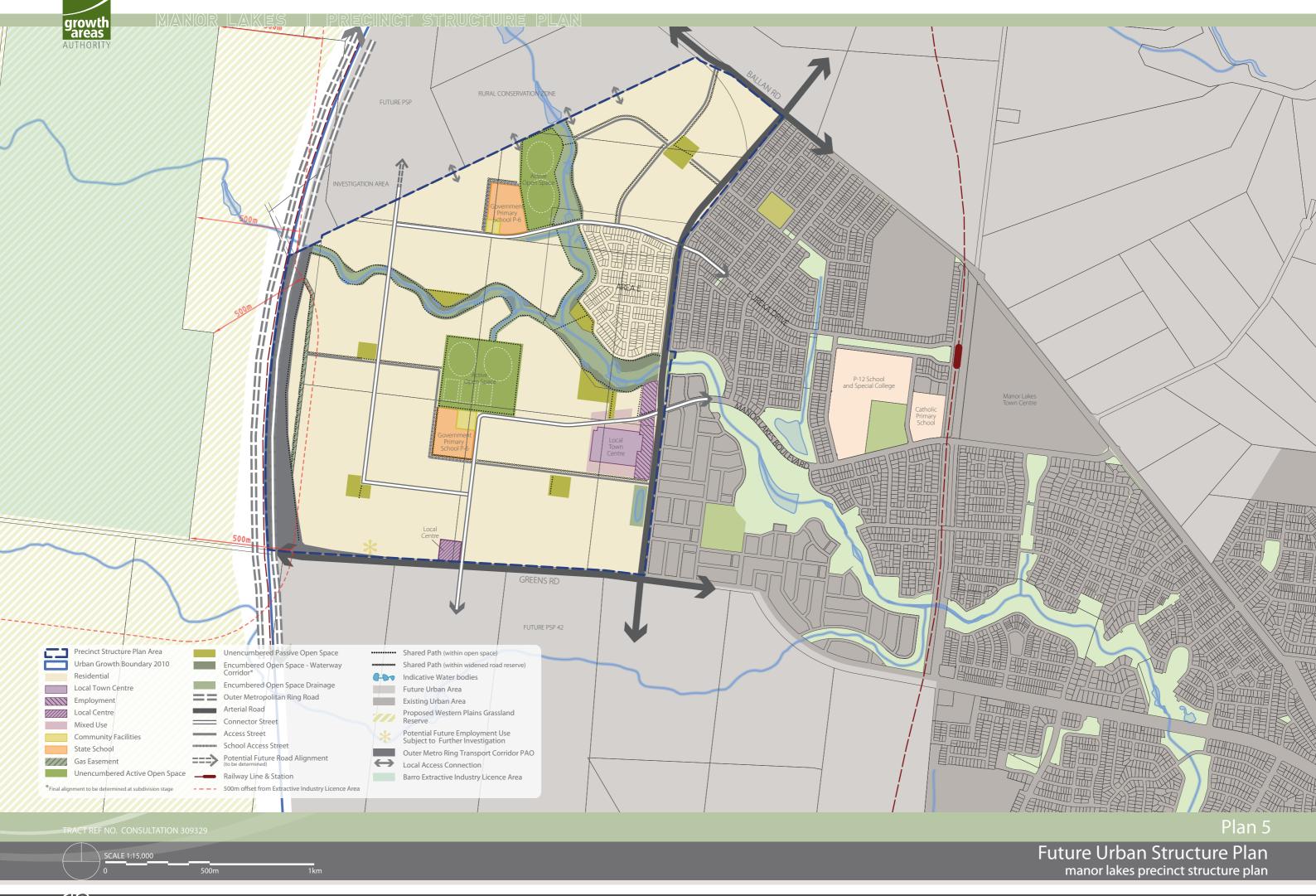
The Manor Lakes PSP area is located on the Western Basalt Plains and as such is on a relatively flat grassy plain characterised by elasticity of soils, rocky outcrops and sub-surface rocks. The Lollypop Creek valley provides an interesting landform in the area and will be an attractive location for future residents for walking and cycling. The PSP design and future landscape proposals for the corridor take advantage of this important design opportunity.

2.3.4 CATCHMENTS AND DRAINAGE

The Manor Lakes PSP area forms part of the Lollypop Creek catchment. Plan 4 indicates the location of the existing waterways. Most of the existing drainage is in the form of farm drains with no formed permanent waterways.

2.3.5 OUTER METROPOLITAN RING / E6 TRANSPORT CORRIDOR (OMR)

The proposed OMR road and rail transport corridor will be a significant physical feature in the post-development landscape. Cross section 13 shows the typical section through the future OMR infrastructure.





3.0 VISION AND URBAN STRUCTURE

3.1 VISION

The vision is a high-level statement of what is envisaged for the new community. The vision will be realised through the implementation of the Manor Lakes Precinct Structure Plan. The vision for the Manor Lakes Precinct Structure Plan is:

Manor Lakes: A place where people can enjoy a healthy, affordable and quality lifestyle.

Manor Lakes will be a prosperous, vibrant and sustainable community offering a sense of place characterised by natural settings, quality infrastructure and amenities and a strong sense of community.

The vision is built on the foundations of a walkable street and trail network with access to public transport, housing choices, local schools, and safe, attractive and functional open space areas which cater for a broad range of recreational pursuits. The Manor Lakes community will be serviced by a new well located local town centre, two new primary schools, two new recreation reserves, passive parklands and community facilities.

This new suburb will be connected with the wider urban area, including the existing Manor Lakes to the east and future planned urban growth areas to the north and south.

Manor Lakes will consist of several new residential neighbourhoods, centered on local services and open space which will form part of the larger Werribee West community centred on the emerging Manor Lakes Town Centre

These new neighbourhoods provide opportunities for public transport and alternatives to car travel through a road and open space network and provision of off road and road based cycle lanes. Watercourses and drainage lines are central to an integrated open space network, providing pedestrians and cycle paths which link to the broader area.

The Manor Lakes precinct will include areas of natural values, predominantly along Lollypop Creek, which has been retained for conservation and water management purposes.

The Manor Lakes community will be developed in a logical and orderly manner and provide for services and facilities which not only support the community at an early stage of development, but which can be built with sufficient capacity to maintain high standards of services in perpetuity.

The Manor Lakes community will have diverse housing including higher density housing close to services and parkland.

3.2 URBAN STRUCTURE

The vision will be realised through the development of the future urban structure for the precinct as an integrated neighbourhood design. The Future Urban Structure illustrated in Plan 5 shows how the precinct will be developed over time to achieve the Victorian Government's and Wyndham City Council's objectives for sustainable growth.

Sections 3.2.1 through to 3.2.6 describe how the PSP delivers the vision and an integrated neighbourhood design.

3.2.1 ESTABLISH A SENSE OF PLACE AND COMMUNITY

The Manor Lakes PSP establishes a framework for the development of a sustainable urban structure. The structural elements of the plan are interlinked and combine to create a built environment which supports the development of a strong community and sense of place for Wyndham West.

A sense of place and community is fostered through careful planning for the development of the community infrastructure such as schools, sporting fields and other community facilities. The plan serves to connect the key services for the residential community on the central transport spine and ensure that each facility is as central to its catchment as is possible, while linked to other services directly on the key road and pedestrian cycle network. The plan seeks to respond to natural features by retaining them within the public realm in prominent locations and view lines. The Lollypop Creek will provide a central unifying physical character element that links through the precinct. Most residents will be within easy walking distance of the creek corridor.

The environment for positive community interaction is further enhanced by the location of the Ison Road LTC. The provision of shops to meet weekly and convenience shopping needs will promote interaction through the provision of formal and informal meeting spaces. This is further enhanced by the specific desire to see the LTC develop over time as a place that offers more than retail services. The centres will provide opportunities to establish non-retail related businesses which service both the immediate community and the broader catchment. The local office component is an important aspect to facilitate local employment.

3.2.2 CREATE HIGHLY ACCESSIBLE AND VIBRANT ACTIVITY CENTRES

The future urban structure provides for a sustainable network of activity centres within the broader Wyndham Vale region which will provide local employment opportunities and community based services generally within walkable catchments.

All of the centres will be low speed centres, serviced by bike and pedestrian trails and public transport, offering a mix of retail, non-retail commercial and other employment opportunities.

The location of the activity centres which are accessible to their residential catchments, will reduce the dependency on motorised private transport by developing a variety of destinations within a reasonable walking distance from the residential neighbourhoods.

A local centre has been nominated on Greens Road. This is an indicative location for a small scale retail and service centre within walking distance to residents.

While initially providing local retail services, the planning for each centre is flexible enough to enable a response to retail demand over time and to evolve.

3.2.3 PROVIDE FOR LOCAL EMPLOYMENT AND BUSINESS ACTIVITY

The Ison Road LTC will support a variety of local services such as public transport, child care, medical, financial, legal, retail and accounting and will provide space for other local economic development opportunities.

The location of the Ison Road LTC ensures its exposure to passing trade through direct access from Ison Road and Manor Lakes Boulevard. This will assist in ensuring the long term viability of the centre.

The connector street network and planned public transport services reinforces the centre's viability and encourages more efficient use of motor vehicles by being situated in locations which are easily accessible from a multi-purpose trip perspective.

One of the key objective of the PSP is to seek to optimise local employment opportunities and provision of local services. This must be assessed within the context of Wyndham providing significant existing and future employment areas within the growth corridor and the future developing Manor Lakes Town Centre, all within close proximity to the PSP.



The objective of this PSP is to provide a residential community with local service provision opportunities within activity centres. Table 1 identifies the potential jobs created by activities proposed within the PSP and estimates the employment potential of public and private services likely to be provided to a residential population of the size proposed. The expected outcome, based in the assessment in Table 1 is that almost 1,000 jobs could be provided within the plan area, which equates to approximately 20% of total job demand created by the residential areas within the PSP.

Local Centre Greens Road

The location of the local centre on Greens Road will provide access to local convenience services for residents of the PSP's southern development area.

Future Investigation Area

The future land use fronting Greens Road between the OMR/ E6 and the north-south connector street is designated with an underlying residential land use. This area may require further land use investigation based on the ultimate impact of the OMR/E6, dependent upon the timing for delivery of the freeway.

Table 1: Estimated Precinct Employment Supply

Land Use	Measure	Jobs	Qty in PSP	Est. Jobs
Council kindergarten	Jobs/centre	10	2	20
Primary school	Jobs/school	40	2	80
Multi purpose community centre	Jobs/centre	10	2	20
Retail	Jobs/1,000 sq m	0.03	9,500	285
Office/non retail commercial	Jobs/1,000 sq m	0.025	4,000	100
Medical centre	Jobs/practitioner	3	2	6
Private childcare centre	Jobs/100 places	15	2	30
Home based business	Jobs/dwelling	0.1	4,696	470
Total				1,011

3.2.4 TRAVEL TO WORK STATEMENT

The urban structure established by the Manor Lakes PSP responds to the need for urban development to be more ecologically, socially and economically sustainable. A key requirement for a more sustainable urban structure is to design it to reduce travel distances, travel times and carbon emissions for travel to work.

The travel to work statement outlines how the development of land in the PSP area will positively affect the lives of Manor Lakes residents, and residents of surrounding areas on a daily basis. This is established by undertaking some analysis of the types of jobs predicted in the area based on the land use assumptions and understanding how the provision of local services and employment land within the PSP area can accommodate the expected job demand. The PSP plans to reduce travel distances to work by providing:

An efficient road and public transport network

The location and distribution of the road network grid promotes efficient movement within the precinct with strong connections to the surrounding area. The grid sets the foundations for a highly permeable precinct which connects directly to the employment and services located in the Wyndham corridor and allows for long term development beyond the PSP boundary.

The road network supports efficient movement through the distribution of lower order roads forming a sub-grid which has the effect of reducing congestion at major intersections and providing for direct links between residential neighbourhoods. This in turn provides the basis for the provision of efficient public transport by creating the ability to locate over 95% of all dwellings within 400m of a future public transport service route which would run along the main arterial and connector street grid.

A walkable street structure orientated to promote energy efficient dwelling layout

The existing arterial road grid of Ballan Road, Greens Road, Armstrong Road and Ison Road provides for the most suitable arterial road pattern consistent with the Growth Areas Framework Plan. This plan seeks to provide a higher order road network based on roads at approximately 800m separation integrated with existing or proposed roads adjoining the plan area.

The 1 mile (1.6km) and 800 metre grid informs an internal street layout which supports passive solar lot orientation, permeable and connected residential neighbourhoods, and walkable neighbourhoods with functional and viable destinations located in key strategic parts of the precinct (i.e. schools, shops and passive and active open space).

Attractors located to promote walking to frequently used services

The location of activity centres, schools and community facilities, open space and the cycle/pedestrian network will promote a local street structure which encourages and facilitates safe walking and cycling for all residents. Most residents will be within walking distance of an activity centre, community facilities, active and passive open space.

Local employment

The provision of local schools and community oriented services central to this new community along with local retail and business opportunities within the Ison Road LTC generates opportunities for people to work locally. This has the added benefit of building a sense of place and community.

The need to travel to work will also be reduced by provision of shop top residences and other forms of development which encourage working in or close to home.

Support for the Manor Lakes Town Centre

The urban structure will facilitate access to Manor Lakes Town Centre for retail, recreation and employment activity. The PSP area forms a significant component of the primary catchment for the centre and its expansion to provide higher level services to the established community is directly linked to this PSP.

Future Regional Rail Link

The urban structure will provide convenient road and shared trail connections through to the future Wyndham Vale Railway which will provide commuter services to Melbourne.

This PSP has been prepared in anticipation of the RRL and provides a framework for the future development of Manor Lakes assuming this public transport service.



3.2.5 CLIMATE CHANGE AND SUSTAINABILITY

Energy Statement

The future urban structure responds to climate change and environmental sustainability by:

- Reducing travel distances to 'everyday' services and facilities.
- Encouraging the intensification of development along public transport routes.
- Encouraging travel by means other than private car by providing walking, cycling, and bus links to new residential neighbourhoods.
- Encouraging efficient movements by a network of roads based on the traditional 1 mile (1.6km) grid of arterial roads and connector streets. The road grid also provides public transport access to key destinations.
- Integrating the road network with linear open space network to encourage easy walking and cycling access to key destinations within and outside the precinct. The connector streets include dedicated on-road bike paths and wide pedestrian paths.
- Designing all connector streets to accommodate bus movements.
- Extending and introducing new local bus services throughout Manor Lakes (linking to key regional destinations such as Werribee and Manor Lakes Town Centres) along the road network grid.

Water Sensitive Urban Design

Water Sensitive Urban Design ("WSUD") features for the open space network will provide for water quality treatment and quality self-sustaining landscapes. The main water sensitive features of the precinct include treatment ponds in the headwaters of the Lollypop Creek catchment draining via formalised overland flow paths, only partly within existing defined channels, to the main Lollypop Creek and wetland area immediately east of the plan area. An opportunity exists to enhance waterways by creating a more defined and rehabilitated watercourse in the upper reaches of the catchment while rehabilitating the well defined lower reaches.

Further opportunities for WSUD should be explored during the detailed subdivisional design phase of development.

3.2.6 DELIVER ACCESSIBLE, INTEGRATED AND ADAPTABLE COMMUNITY FACILITIES

A key component of the urban structure is the ability to co-locate and integrate service and facility provision. The Ison Road LTC will provide retail services as well as some private services such as a childcare centre and medical services. In addition to providing retail services, the centre is expected to include some private services such as a child care centre and medical services.

Community facilities are located on the central transport spine, the central connector street and located on the main transport routes.

The future urban structure supports walking and cycling links to activity centres and areas of open space. The open space network and linear pedestrian and cycle network forms an integral community asset. The open space assets will be linked with local and linear parks, active playing fields, road verges and view corridors. The linear trail network will follow watercourses radiating out from the more defined Lollypop Creek channel central to the plan area. These corridors comprise a network of trails and series of multifunction open spaces that serve as drainage corridors and passive recreational opportunities.

Social and cultural initiatives which will contribute to the sense of community and place are anticipated to include physical activity from walking, cycling and participation in sports, arts or cultural activities as well as community events and networks.





3.3 LAND USE BUDGET

The Manor Lakes PSP covers an area of approximately 386 hectares with a Net Developable Area ("NDA") of approximately 293 hectares, representing approximately 76% of the total PSP area.

The land budget demonstrates that the urban structure established by the Manor Lakes PSP achieves an average lot density of 16 dwellings per Net Developable Hectare ("NDHa"). Overall, based on net residential area, the Manor Lakes PSP will achieve an average residential lot size of between 400 sq-m and 500 sq-m comprising a variety of larger and smaller lots.

Based on the estimates in Table 2, the Manor Lakes PSP area will provide for approximately 4,690 homes for over 13,000 people.

It should be noted that the areas designated for local town centre and local centre have been included as part of the NDA, but are discounted (i.e. excluded) for the purpose of calculating the NRHa and anticipated lot yields. Higher density housing developed within the local town centre sites will add further to the estimated housing yields.

Table 2: Summary Land Budget

Total Area (ha)	Area NDA			
	Hectares	% of Total PSP	% of NDA	
Total Area (ha)	386.46	100.00%		
Transport				
Proposed OMR	17.22	4.46%		
Arterial Roads	8.94	2.31%		
Sub-total	26.16	6.77%		
Government Education				
Government Schools	7.00	1.81%		
Subtotal	7.00	1.81%		
Community Facilities				
Community Facilities	1.20	0.31%		
Subtotal	1.20	0.31%		
Encumbered Land				
Encumbered Land - slope	8.40	2.17%		
Encumbered Stormwater Management - drainage	19.89	5.15%		
Gas Easement (20m wide)	1.79	0.46%		
Subtotal	30.08	7.78%		
Developable Area (DA) ha	322.02	83.33%		
Unencumbered Land Available for Recreation				
Active Open Space	21.19	5.48%	7.24%	
Passive Open Space	8.04	2.08%	2.75%	
Subtotal	29.23	7.56%	9.98%	
Net Developable Area (NDA) ha	292.79	75.76%		
Development Area Budget				
Activity Centres				
Local Town Centre (LTC)	3.92	1.01%	1.34%	
Local Centre	1.00	0.26%	0.34%	
Employment	2.83	0.73%	0.97%	
Mixed Use Precinct	2.58	0.67%	0.88%	
Subtotal	10.33	2.67%	3.53%	
Residential	NRA (Ha)	Dwelling/NRHa	Dwellings	
Residential Conventional	260.51	16.3	4246	
Medium Density	19.61	20	392	
High Density	2.34	25	58	
Subtotal Against Net Residential Area (NRA)	282.46	16.6	4696	
Combined Res/ Retail/ Emp/ Other	NDA (Ha)	Dwell / NDHa	Dwellings	
Total Residential Yield Against NDA	292.79	16.0	4696	

Table 3: Property Specific Land Use Budget

		Tran	sport	Comn	nunity	Encumbe	ered Land Ava Recreation	ilable for		pered Land reation			Key Pero	centages				
Property Number	Property Area (HA) (Vicmap)	Proposed Outer Metropolitan Ring Road	Arterial Road/Widening	Community Facilities	Government Schools	Waterway/ Drainage Line/ Wetland/Retarding	Drainage Slope	Gas Easment	Active Open Space	Passive Open Space (Local Parks and Linear Reserves)	Total Net Developable Area (Hectares)	Net Developable Area % of Property	Active Open Space % NDA	Passive Open Space % NDA	Total Passive & Active Open Space %	Open Space Development Target %	Difference	Equivalent Land Area (Hectares)
		Not Included in NDA	Not Included in NDA	Not included in NDA	Not included in NDA	Not included in OS %	Not included in OS %	Not included in OS %	Included in OS %	Included in OS %	Not including Arterial Roads, Community, Govt Schools & Recreation							
1	4.98	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.06	81.53%	0.00%	0.00%	0.00%	9.99%	-9.99%	-0.41
2	25.09	0.00	0.04	0.00	0.00	0.45	0.08	0.00	0.21	0.63	23.68	94.38%	0.89%	2.66%	3.55%	9.99%	-6.44%	-1.52
3	12.86	0.00	0.00	0.19	0.54	0.00	0.00	0.00	0.00	0.00	12.13	94.32%	0.00%	0.00%	0.00%	9.99%	-9.99%	-1.21
4	43.44	0.00	1.79	0.21	2.96	2.82	0.66	0.00	7.90	0.87	26.23	60.38%	30.12%	3.32%	33.44%	9.99%	23.45%	6.15
5	1.73	0.77	0.00	0.00	0.00	0.11	0.08	0.01	0.00	0.00	0.76	43.93%	0.00%	0.00%	0.00%	9.99%	-9.99%	-0.08
6	19.20	13.97	0.00	0.00	0.00	0.00	0.00	1.78	0.00	0.00	3.45	17.97%	0.00%	0.00%	0.00%	9.99%	-9.99%	-0.34
7	64.45	0.00	0.00	0.00	0.00	2.90	2.81	0.00	5.05	1.60	52.09	80.82%	9.69%	3.07%	12.76%	9.99%	2.77%	1.44
8	10.62	0.00	0.61	0.00	0.00	2.16	0.05	0.00	0.03	0.00	7.77	73.16%	0.39%	0.00%	0.39%	9.99%	-9.60%	-0.75
9	33.59 18.45	0.00	0.00	0.00	0.00	2.46 6.09	0.99	0.00	6.80 0.00	1.29	22.05 9.55	65.64% 51.76%	30.84%	5.85% 12.46%	36.69% 12.46%	9.99% 9.99%	26.70%	5.89 0.24
11	21.54		2.88	0.00						0.46	14.43	66.99%		3.19%				
12	63.17	0.00 2.48	0.00	0.52	3.06	0.00	0.00	0.00	0.00	1.00	55.60	88.02%	0.00%	1.80%	3.19% 2.72%	9.99%	-6.80% -7.27%	-0.98 -4.04
13	47.63	0.00	0.00	0.32	0.44	0.00	0.00	0.00	0.69	1.00	45.22	94.94%	1.53%	2.21%	3.74%	9.99%	-6.25%	-2.83
14	19.71	0.00	2.70	0.00	0.00	1.24	0.00	0.00	0.00	0.00	15.77	80.01%	0.00%	0.00%	0.00%	9.99%	-9.99%	-1.58
	386.46	17.22	8.94	1.20	7.00	19.89	8.40	1.79	21.19	8.04	292.79	75.76%	7.24%	2.75%	9.98%	9.99%		



3.4 DEMOGRAPHIC PROJECTIONS

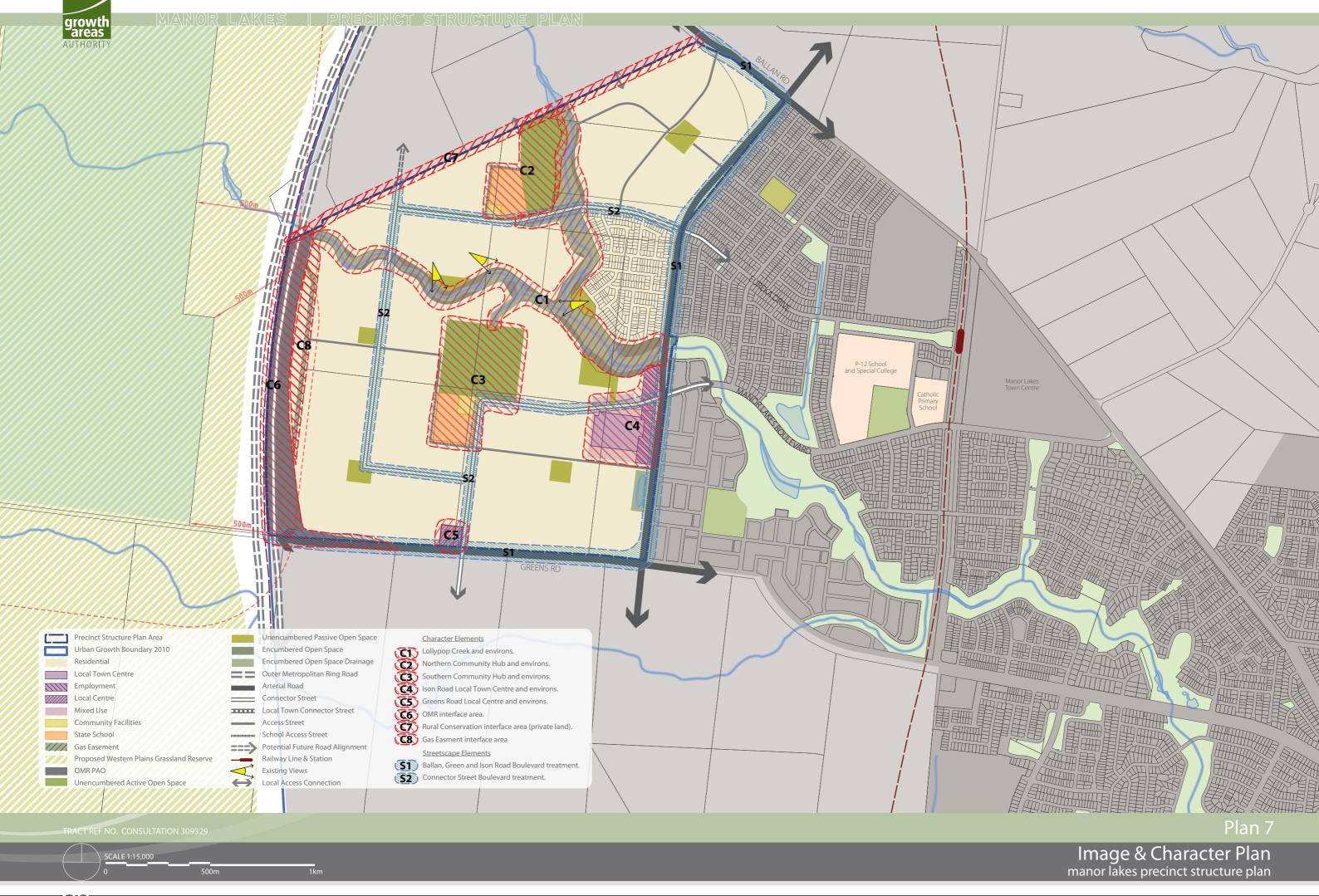
The preparation of the Manor Lakes PSP has assumed an average household size of 2.8 persons per household to 2031 (derived from Victoria in Future 2008) as the basis for estimating the future population within the PSP area. This household size is forecast to gradually decline towards the current Metropolitan average which is around 2.5 people per dwelling in the very long term.

The Wyndham area currently has:

- A population younger than the Melbourne Metropolitan average with a high proportion of residents aged 15 years or younger.
- Average per capita incomes lower than the Melbourne Metropolitan average but household incomes similar or even higher than the Metropolitan average due to higher than average household sizes.
- High level of home ownership (in the order of 90% of all households).
- A higher than average proportion of traditional families, with about 70% of all households comprising a couple with dependent children.
- A characteristic of most growth areas in the early stages of development – where household size often peaks well above 3 persons per household.

Characteristics of the future community are expected to be:

- A higher proportion of families with young children compared to the Metropolitan average.
- A higher proportion of families without children compared to the Metropolitan average.
- A higher proportion of population in the 0-9 and 30-39 age groups than the Metropolitan average.
- A lower proportion of population in the 55-65 age group than the Metropolitan average.
- The proportion of residents at or reaching retirement age by 2031 is projected to increase significantly in line with the Metropolitan average.



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4.0 ELEMENTS

This chapter sets out objectives and planning and design guidelines for the following elements:

- Image and Character.
- Housing.
- · Employment and Activity Centres.
- · Community Facilities.
- Open Space and Natural Systems.
- Transport and Movement.
- · Utilities and Energy.

Each element includes:

Objectives: an objective describes the desired outcome to be achieved in the completed development. Objectives must be met.

Plans: the plans are a spatial expression of objectives.

Planning and Design Guidelines: planning and design guidelines including figures and tables that "must" or "should" be met.

Where a planning and design guideline is listed as "must be met" no alternative is to be considered.

Where a planning and design guideline is listed as "should be met" an application for an alternative design solution or outcome envisaged by the planning and design guideline, which meets the objectives, may be considered to the satisfaction of the Responsible Authority.

4.1 IMAGE AND CHARACTER

4.1.1 IMAGE AND CHARACTER OBJECTIVES

The image and character objectives are:

- To promote housing diversity and a range of lot sizes.
- To establish a built environment that is functional, safe, aesthetically
 pleasing and that promotes a strong sense of place for future
 residents.
- To create residential neighbourhoods that promote liveability by using contemporary landscape design standards to establish attractive streetscapes and a distinctive neighbourhood character.
- To reinforce the importance of human scale and safety in street and open space design.
- To create an attractive and shady landscape character along arterial roads and connector streets.
- To promote subdivision design that achieves an integrated, connected, legible and permeable street network.
- To protect, retain and create a predominately indigenous landscape character in creek lines.
- To create a consolidated 'urban' built form in and near the Ison Road Local Town Centre.
- To create an appropriate interface to the rural conservation zoned land along the north western boundary of the precinct.

4.1.2 IMPLEMENTATION

The objectives for image and character are met by implementation of all the following:

- » Plan 5: Future Urban Structure.
- » Table 6: Local Town Centre Guide.
- » Plan 7: Image and Character.
- » Table 7: Open Space Design Guide.
- » Road and Street cross sections in the transport and movement element.
- » Planning and design guidelines set out under 4.1.3.

4.1.3 PLANNING AND DESIGN GUIDELINES

Urban Design:

The following planning and design guideline must be met:

• Subdivision design is to promote passive surveillance of the public realm, for example to streets, public open space, creeks and drainage assets.

The following planning and design guidelines should be met.

- Subdivision design to ensure street block connections to the Lollypop Creek to provide easy access for local residents.
- Street patterns are to reinforce the importance of the Ison Road LTC by providing easy connections through surrounding residential areas.
- Architecture and urban design is to promote an urban feel in and near the Ison Road LTC (Character Element 4 on Plan 7) by providing public space focused activity in key areas.
- Over time, seek to develop concept plans for the community hubs (Character Elements 3 and 4 on Plan 7) that reflect integrated urban and landscape design, integrated service delivery models and architectural design (where practical).
- Where practical, existing powerlines are to be placed underground and no new powerline assets are to be constructed above ground.

The following planning and design guidelines must be met for land within the C7 – Rural Conservation interface area (private land):

- Proximate to the Ballan Road boundary if lots are to back onto private land then a high quality architecturally designed wall treatment must be provided.
- Loop roads must be provided at the interface to the Lollypop Creek and the Conservation area (private land).

The following planning and design guidelines should be met for the land within C7 - Rural Conservation interface area (private land)

- The preferred treatment of this interface should be a combination (in similar proportions) of both direct street interface and lots backing onto the Conservation area (private land).
- The number of lots in any block backing onto the Conservation area (private land) should not exceed ten (10 no.).



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The objectives for residential development in the vicinity of C8 adjacent to the Gas easement are:

- To provide vehicular access to the land.
- To provide pedestrian and bicycle connection from Manor Lakes through to the OMR/E6 bike trail network.
- To provide passive surveillance of both the OMR/E6 land and the gas easement.
- To prevent lots from backing onto OMR/E6 land and the gas easement.

The following planning and design guideline must be met:

- Roads or rear loaded lots must have frontage onto the OMR/E6.
- Roads or rear loaded lots must have frontage onto the gas easement.

The following planning and design guidelines should be met:

- Lots with side abuttal to either the OMR/E6 or the gas easement should have solid fencing for no more than 60% of the lot boundary.
- Lots with side abuttal to either the OMR/E6 or to the gas easement are encouraged to be developed to 2 storeys with a habitable room window overlooking the public realm, or other measures to achieve passive surveillance.

Landscape Design:

The following planning and design guidelines should be met:

- Regenerate parts of the Lollypop Creek linear parkland (Character Element 1 on Plan 7) to reflect its indigenous landscape character, with non-indigenous plantings limited to key road/trail intersection points to assist with way finding and to provide a distinctive local landscape character.
- Create an indigenous landscape character along the northern rural conservation interface zone (Character Element 7 on Plan 7).
- Create a cohesive landscape character by planting from a consistent palette of large shady trees along connector streets (Streetscape Element 2 on Plan 7) that provide character and promote pedestrian and cycle use.
- Take advantage of the wide verge within the OMR reserve (Character Element 6 on Plan 7) to provide for large trees, passive surveillance, a shady trail and a green fringe to buffer residents from the future large scale transport infrastructure.
- Landscape design of the public realm should have regard to the Wyndham City Council landscape policies.
- Encourage the retention of trees identified for removal in the NVPP where practicable and appropriate.
- Encourage retention of natural features where practicable and appropriate.
- Encourage the retention of natural stream form of Lollypop Creek where practicable and appropriate.

Fire management:

The following planning and design guideline must be met:

• Fire rated fencing is to be provided to the satisfaction of the responsible authority, following consultation with the CFA for lots abutting the Rural Conservation zone area (Character Element 7).

Tree Planting:

The following planning and design guideline must be met:

Street tree planting on all arterial roads must be established in accordance with the clear zone guidelines and be to the satisfaction of VicRoads, and the responsible authority.

The following planning and design guidelines should be met.

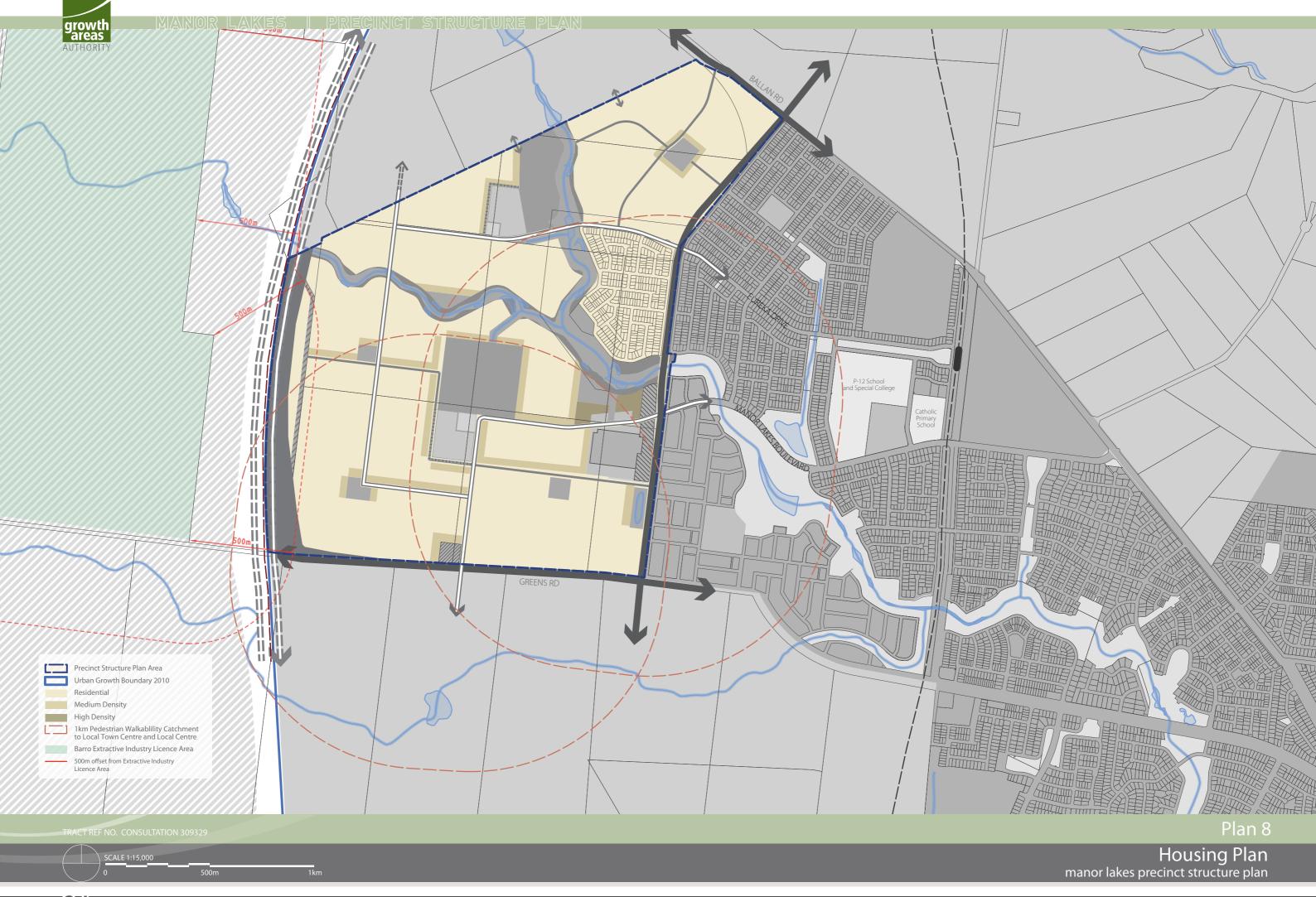
Tree selection should:

- Be suitable to the scale of the street and the planting space available, with larger tree species chosen for wider road reserves.
- Form strong avenues and canopies to provide shade and definition to streetscapes.
- Be suitable for local soil and climatic conditions (heavy clays on younger basalt and 400-500mm average annual rainfall).
- Be selected to provide visual markers and definition to different classes of roads, activity centres, park frontages and key intersections and entrances.
- Be indigenous tree species suitable for the urban environment, and used particularly where a street links with, or adjoins conservation areas.

Later developments should match tree species that have already been approved or planted in roads linking to adjoining development parcels.

The following factors should contribute to the selection of trees, such as:

- General consistency with the existing City of Wyndham street tree strategies.
- Proven performance and longevity in a highly modified urban environment.
- Consistency of mature tree sizes which are appropriate to the scale
 of the street and planting space, with the ability to provide an
 appropriate shading canopy.
- The need to manage public safety and the potential for limb drop, hazard production (e.g. thorns or slippery berries) and clear sitelines.
- Positively contributing to the urban design of the precinct through over-all tree form, foliage and flower colour.





4.2 HOUSING

4.2.1 HOUSING OBJECTIVES

The objectives for housing are:

- To provide a diversity of lot sizes and housing types to satisfy the needs and aspirations of the new community and to provide for the changing needs of the community over time.
- To achieve an average minimum of 16 dwellings per NDHa throughout the PSP.
- To encourage higher density housing addressing Lollypop Creek, the recreation reserves and the Ison Road LTC.
- To concentrate diverse and higher density housing forms proximate to the Ison Road LTC.
- To support specialised housing forms such as retirement villages close to services, and amenity by locating them proximate to open space, community hubs or activity centres or along connector streets (which provide local bus services).
- To provide the opportunity for larger residential lots to be accommodated within the PSP area, particularly in the western section of the PSP.

4.2.2 IMPLEMENTATION

The objectives for housing are met by implementation of all the following:

- » Plan 5: Future Urban Structure.
- » Plan 8: Housing Plan.
- » Planning and design guidelines set out in 4.2.3.
- » Plan 9: Open Space Network.

4.2.3 PLANNING AND DESIGN GUIDELINES

Residential development across the PSP should include a range of dwelling densities, including: conventional density residential lots, medium density residential lots and higher density/specialised housing.

These terms are defined in the glossary in section 6.2.

Development of medium density and high density housing is encouraged to:

- Be developed as part of an integrated development site or street block design response.
- Be developed to include specialised housing such as retirement or an aged care facility.
- Be overlooking, abutting or be within close proximity of public open space, local town centres, community hubs and public transport.
- Be provided in a variety of forms terrace / townhouse development, small lots, shared driveway housing, integrated development sites as well as retirement villages / nursing home care facilities.

The Manor Lakes PSP encourages higher housing density to be achieved for individual development sites above the minimum requirements specified. Flexibility has purposely been provided to support flexible density distribution patterns to promote greater housing diversity throughout the precinct.

4.2.4 REFERRAL OF APPLICATIONS

An application to develop land for a sensitive use within 500 metres of the property boundary of the land containing the Barro Group Quarry, Argoona Road, Mambourin subject to Work Authority 43 (WA43) under the *Mineral Resources (Sustainable Development) Act 1990*, must be accompanied by a risk assessment prepared by a suitably experienced and qualified consultant that acknowledges the existing and future land use at the Barro Quarry and provides sufficient confidence that a sensitive use can be safely developed within 500 metres of the Barro Quarry. The application and risk assessment must be referred to the Program Manager - Planning in the Earth Resources Regulation Branch at the Department of Primary Industries.

4.2.5 SMALL LOT HOUSING CODE

A permit is not required to construct or extend one dwelling on a lot with an area less than 300 square metres where:

- An approved building envelope as defined in Part 4 of the Building Regulations 2006 applies to the lot, and
- The building envelope complies with the Small Lot Housing Code incorporated into the Wyndham Planning Scheme, and
- The dwelling is constructed or extended in compliance with the building envelope.

4.2.6 BUSHFIRE RISK MANAGEMENT OBJECTIVES

The objectives for bushfire management are:

- To ensure that defendable space can be achieved between the area of bushfire hazard and residential dwellings.
- To ensure that all buildings constructed within the PSP are adequately protected from radiant heat.
- To manage the bushfire risk arising from open grasslands during construction.

4.2.7 IMPLEMENTATION

The objectives for bushfire risk management are met by implementation of all of the following:

• Planning and design guidelines set out in 4.2.8



4.2.8 PLANNING AND DESIGN GUIDELINES

The following planning and design guidelines must be met:

- Fire rated fencing, or an alternative approved radiant heat barrier, is
 to be provided and maintained to the satisfaction of the responsible
 authority, following consultation with the Country Fire Authority
 (CFA), for lots abutting the Rural Conservation zoned land.
 - Lot EK on PS633562A (V.11196 F.123).
 - CA 33(V.10034 F.631).
 - Lot EA on PS629853M (V. 11187, F.968).
 - Lot EY on PS636504Y (V.11274, F. F.547).
- Where fire rated fencing is to be provided for lots abutting the Rural Conservation zoned land a minimum rear setback to the nearest part of any building must be provided and maintained to the satisfaction of the responsible authority, following consultation with the Country Fire Authority (CFA).
- Except where fire rated fencing is provided, a minimum 19m separation distance must be provided to any building from the northern or western boundary of the subject land which abuts the Rural Conservation zoned land to the satisfaction of the responsible authority, following consultation with the Country Fire Authority (CFA).
- An appropriate fuel reduced managed area contiguous with the boundary of any undeveloped area of the subject land must be provided and managed by the land owner prior to the issue of a statement of compliance for any stage of subdivision to the satisfaction of the responsible authority, following consultation with the CFA.
- Prior to the grant of Statement of Compliance of a plan of subdivision, or ar such other time which is agreed by Council, the owner must enter into an agreement or agreements under section 173 of the Planning and Environment Act 1987 which ensures all fire risk management measures are implemented and maintained to the satisfaction of the responsible authority.

4.2.9 BUILD FOR LIFE

Wyndham City Council encourages and advocates for development



proponents to consider the design of houses that incorporate 'Build for Life' accessible features promoted by the Victorian Building Commission.

4.3 EMPLOYMENT & ACTIVITY CENTRES

4.3.1 EMPLOYMENT & ACTIVITY CENTRES OBJECTIVES

The objectives for employment areas and activity centres are:

- To increase opportunities for employment in the precinct to assist a move away from the historical trend of 'dormitory suburbs'.
- To ensure that planning outcomes are commercially viable and sustainable both in the short and longer term.
- To create the Ison Road LTC to provide a mix of retail, restricted retail, commercial, leisure and community services.
- To encourage the development of services, small offices, small office/warehouses and mixed use purpose built home based business within and at the edge of the Ison Road LTC.
- To encourage the development of home based businesses.
- To facilitate the establishment of private community services such as childcare centres, mixed business and convenience stores, retirement and aged care facilities which provide employment as well as services to the local community at suitable locations in residential areas.

4.3.2 IMPLEMENTATION

The objectives for employment areas are met by implementation of all the following:

- » Plan 5: Future Urban Structure.
- » Table 4: Activity Centre Hierarchy.

» Table 5: Local Town Centre Guidelines.

4.3.3 ACTIVITY CENTRE PLANNING & DESIGN GUIDELINES

The following planning and design guidelines must be met:

Planning permits must:

 Demonstrate an appropriate design response that addresses the Local Town Centre Guidelines in Table 5 and the relevant Local Centre Plan illustrated in Figure 1 and the local Town Centre Plan in Figure 2.

The following planning and design guidelines should be met:

The first permit for the Ison Road LTC or the Greens Road Local Centre should include the development areas shown in Figure 1 or 2 (as relevant) as being the first stage of the centre. The precise boundary of the applied Business 1 Zone and the Residential 1 Zone will be determined by the planning permit for the first stage of development in each centre.

An application for a permit for the first stage of the Ison Road LTC or the Greens Road local centre should address, as appropriate, the material set out below.

Table 4: Activity Centre Hierarchy

Activity Centre	Role and function
Ison Road Local Town Centre	Indicative retail floor space of 8,000 square metres.
	Indicative office floor space of 4,000 square metres.
	One full line supermarket which may be supported by a smaller supermarket or small anchor retails premises. All supported by specialty shops.
	Make provision for private community facilities, private medical and allied medical services.
	Include provision for the development of non-retail commercial uses which include office and small office/home office development.

Retail floor space of 1,500 square metres.
Indicative office floor space of 500+ square metres.
Anchored by small supermarket and supported by speciality shops.
Make provision for private community facilities, private medical and allied medical services.
Include provision for the development of non-retail commercial uses which include office and small office/home office development.
Potential for arterial based uses such as service station.

Planning permits should:

- Be generally consistent with the role and function for the centre set out in Table 4: Hierarchy of Activity Centres.
- Address the potential future structure of the whole of the LTC, as appropriate.
- Address any relevant design guidelines prepared by the Victorian Government or Wyndham City Council.
- Include site responsive architectural, urban design and landscape design treatments designed to create an attractive urban character.
- Explain how the proposal responds to feedback received following consultation with infrastructure agencies including VicRoads and the Department of Transport or landowners within the centre.
- Show how the proposal relates to existing or approved development in the area.
- Include an overall landscape concept for the centre as appropriate.
- Set out guidelines to positively address environmental sustainability including integrated water management and energy conservation.
- Set out provisions for car parking including the location and design of car parking areas and car parking rates for proposed uses within the centre.
- Set out design guidelines for the provision of advertising signs.
- Set out arrangements for the provision of service areas for deliveries and waste disposal including access for larger vehicles and measures to minimise the impact on the amenity of the centre and adjoining neighbourhoods.
- Show how opportunities for medium and higher density housing and future commercial expansion can be incorporated into the centre (including on future upper levels).
- Should resolve the ownership and management of local roads and town squares with preference towards public (Council) ownership, including any management arrangements.

Retail applications to increase the retail floor space within the Local Town Centre should address and be assessed against the following



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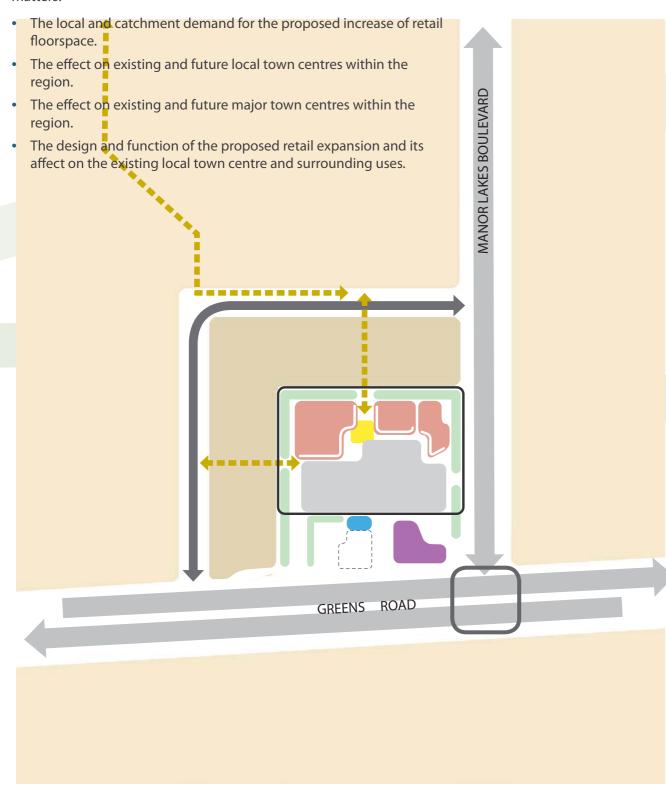
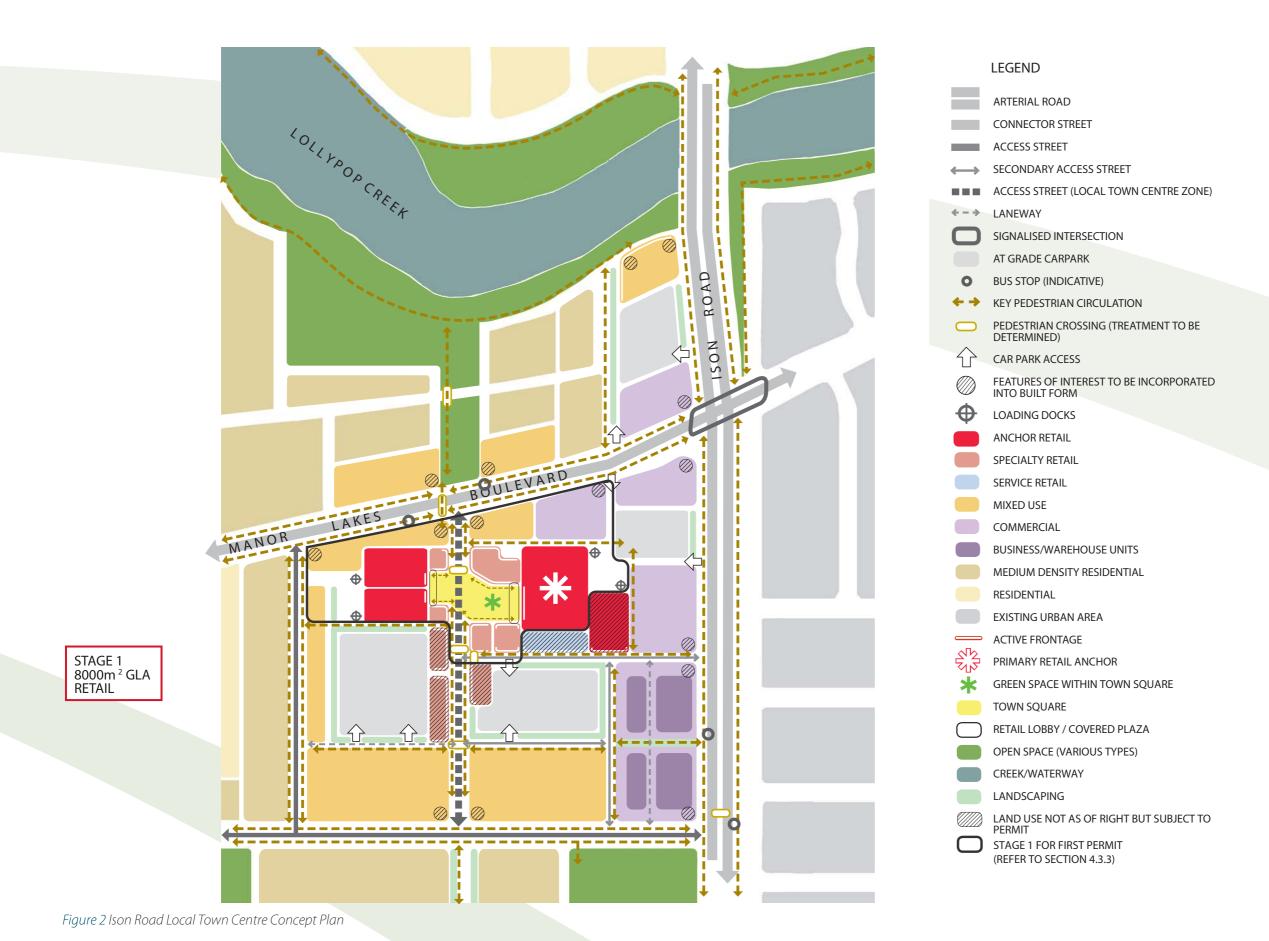


Figure 1 Greens Road Local Centre Concept Plan







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Table 5: Local Town Centre Guidelines

Design Issue	Planning and Design Guidelines
ublic Realm	 Footpath widths should be suitable for their urban context and sufficient to provide for a distribution of pedestrian and mobility access, outdoor dining and civic meeting spaces along the street frontages. The main street through the centre should be generally in accordance with the LTC Road Cross Section 5 in the Transport and Movement Element.
	 The design of building frontages (to key public realm spaces) should provide for weather protection and comfort conditions for pedestrians incorporating the use of such elements as consistent covered walkway, veranda, operable blinds etc.
	 Screening of centralised waste collection points should minimise amenity impacts with adjoining areas and users of the centre.
	 Long building facades and continuous concrete walls, with minimal articulation, activity or visual interest should be avoided.
	 Key locations within the Local Town Centre should include features of interest incorporated into the built from and landscape outcomes (refer to the Local Town Centre Concept Plan).
	Features of interest may include:
	 Two storey construction or elements of two storey construction (such as higher floor to ceiling heights, parapets, awnings, shade structures or other roof elements);
	 Sculptured facades which include recesses and projections to provide variation and segmentation to the building facade;
	 Strong vertical elements;
	Balconies;
	 Roof and/or wall articulation; and/or
	 Feature colours or materials which are sympathetic to their
	surrounds.
	 The LTC urban structure must provide a permeable network of streets, walkways, and public spaces that provide links throughout the centre.
	 Bus stops should be provided in accordance with the Department of Transport Guidelines.
	 Urban art should be incorporated into the design of the public realm to assist promoting a sense of place.
	 Streets, public spaces and car parks should be well lit with pedestrian- friendly light.
	 Street furniture should be located in areas that are highly visible and close to or adjoining pedestrian desire lines/gathering spaces and designed to add visual interest to the centre and for user comfort / utility.
	• Public toilets, baby change facilities should be available in locations which are safe and accessible.
	• The design of each building should contribute to a cohesive and legible character for the centre as a whole.
	 All public spaces should respond appropriately to the design for mobility access principles.
	 A street network through the centre should encourage and promote pedestrian and cycling links to the surrounding area. High standards of non vehicular mobility must be met.
	 The design of the centre should facilitate development with a high degree of community interaction and provide a vibrant and viable mix of retail, recreation and community cohesion.
	 The built form should generally be aligned with the property boundary of key street sections or public space focus.

•	Development should complement and enhance the character of
	the surrounding area by responding appropriately to key visual cues
	associated with the topography and hydrology of the site and surrounds.

- Development should not adversely impact on the amenity of the surrounding residential areas.
- The design of the Local Town Centre should address key view lines into and throughout the centre. Particular consideration needs to be given to key corners and the built form outcomes on these corners due to their prominence and role as the 'arrival' points into the Local Town Centre.

These key locations include:

- The intersection of Manor Lakes Boulevard and Ison Road;
- The intersection of the north-south access street (Local Town Centre Zone) and Manor Lakes Boulevard: and
- The intersection of the north-south access street (Local Town Centre Zone) and the future east-west access street.
- The design of the Local Town Centre should address key view lines to and from Lollypop Creek. The design of the north-south access street (Local Town Centre Zone) must provide strong visual connections to Lollypop Creek. In addition, uses and built form outcomes in the north-east corner of the mixed use node adjacent to Ison Road should maximise views and orientate towards Lollypop Creek.
- Plant structures on the roof should be included within roof lines or otherwise hidden or managed.
- The town square (or similar) should have a strong relationship to the
 anchor retail, speciality retail and commercial uses as well as the linear
 open space. The final configuration of the town square should consider
 passive surveillance opportunities, key pedestrian circulation and design
 outcomes which create an attractive destination and supports a range of

Interface with the road network

- Buildings which form part of the Local Town Centre should:
 - Provide primary access to tenancies from the main access street (Local Town Centre Zone);
 - Be built to the street front. Where buildings are set back from the street front, the frontage of the building must be active and must be designed in a way which contributes to the public domain; Include car parking and service infrastructure to the rear or side of the main street frontage.
- Landscaping of the interface should be of a high standard and is considered to be an important element to complement the built form design.
- Corner sites, where streets meet an arterial road should be designed to
 provide built form that anchors the key streets to the arterial road. This
 could be achieved through the use of a substantial multi-storey building
 located at the corner and should have active uses at the ground floor.
- Building facades on side streets (excluding shop fronts) and continuous walls should not exceed 10 metres without articulation, fenestration, activity or visual interest.
- Active and articulated frontages should be located to face the connector street, access street (Local Town Centre Zone), town square and to the linear open space which runs north-east/south-west through the Local Town Centre.
- Active and articulated frontages should be located to face the connector street, access street (Local Town Centre Zone), town square and to the linear open space which runs north-east/south-west through the Local Town Centre.

Design Issue	Planning and Design Guidelines
Distribution of Uses	 Retail and other commercial or community anchors or secondary anchors within the centre should be located to promote 'desire lines' that maximise pedestrian movement along the length of the street or public space focus.
	 Building frontages should address the 'key street / public space' to maximise exposure to passing trade, promote active frontages and pedestrian inter-action.
	 Shop fronts should have varying widths and floor space areas to promote a diversity of trading opportunities throughout the centre.
	 Where suitable, flexible floor space (including floor to ceiling heights) should be incorporated into building design to enable localised non-retain commercial uses to be integrated within the main street / public space focus areas.
	 A variety of employment and business opportunities should be planned through the provision of community, retail and non-retail commercial activities.
	 Where viable, a mix of uses should include retail and office at ground level, and office, non-retail commercial and residential above ground level.
	 Childcare, medical centres and specialised accommodation (e.g. aged care/nursing home) should be located within and at the edge of centre.
Supermarket and other 'large	 Supermarkets should not unreasonably impede the movement of people within the centre.
box uses'	 Supermarkets or large floor plate shops with a frontage to key streets or lanes should use clear glazing to allow view lines into the store from the street. (Planning permits for buildings and works should condition against the use of white washed windows and excessive window advertising).
	 The design and siting of supermarkets and other 'large box uses' should provide appropriate responses to the public areas. This includes but is no limited to car parking areas, pedestrian routes and streets.
	 The supermarket and secondary anchors should have frontage that directly addresses the 'main street' or town square so that the use integrates with and promotes activity within key street sections or key public areas.
	 Secondary access to the supermarket from car parking areas should be considered where it facilitates convenient trolley access and does not diminish the sole primary access from the 'main street'.
	 Small access lanes that address a supermarket / other 'large box uses' can form part of the overall design. Such access lanes may have a limited number of internalised shops. The primary access to these lanes should be from the 'main street / public space focus'. Alternative pedestrianised lanes accessing supermarkets should be no more than 200m in length.
Street traffic	 Traffic should be managed to prioritise and ensure pedestrian movement and safety.
	 Streets should give priority to pedestrian movement and provide for cycle routes accessing the centre.
	 Streets should be designed for a speed environment of 40km/h.
	 Bus stops are to be located and designed in accordance with the Public Transport Guidelines for Land Use and Development and provided in locations which promote the efficient movement of pedestrians and vehicular traffic to the satisfaction of the Director of Public Transport.
	 An application for a permit should be accompanied by a Traffic Impact Assessment Report ("TIAR") to the satisfaction of the responsible authority. The TIAR, including functional layout plans and a feasibility / concept road safety audit must be to the satisfaction of VicRoads for any connection to an existing or potential future VicRoads arterial road.
	 Circulation and permeability throughout the Local Town Centre should ensure that the key destinations within the Local Town Centre are easily accessible by walking or cycling. In particular, east/west connections through the town square and north-south connections between Lollypop Creek, the retail core, mixed use precincts and surrounding residential
	areas should be provided.



Design Issue	Planning and Design Guidelines		
Parking	 Parking areas should be located centrally to the site and to the rear and or side of street based retail frontages. 		
	 Vehicle parking areas should be designed to ensure passive surveillance and public safety through adequate positioning and lighting. 		
	 The retail strips should include on-street parking provided as either parallel or angle parking to encourage short stay parking. 		
	 Vehicle parking ingress and egress crossovers should be grouped and limited. 		
	 Car parking areas should be designed to limit the pedestrian/vehicle conflicts. 		
	 Heavy vehicle movements (i.e. loading and deliveries) should be located to the rear and or side of street based retail frontages. 		
	 Vehicle parking areas should provide for appropriate landscaping and planting of canopy trees. 		
	 Bicycle parking must be provided within the street network in highly visible locations and close to pedestrian desire lines and gathering spaces. 		
Public Transport	 Access to bus stops must be designed to incorporate the public transport network in consultation with the Department of Transport. 		
	 Public transport infrastructure / facilities must be planned for commuter friendly / convenient locations within the activity centre. 		
	 Consideration should be given to pedestrian movement north-south across Manor Lakes Boulevard. Opportunities for a pedestrian crossing should be explored in conjunction with determining bus stop locations. 		
Service Areas (e.g. loading and waste storage)	 Planning Permits should demonstrate that the provision of service areas are internalised wherever possible. 		
	 Where internalised service areas cannot be provided, they should be secured and screened at the rear of buildings. 		
	 Where service areas are accessible from car parks, they should present a well designed and secure façade to public areas. 		
Sustainable Design	 Planning permit applications should be accompanied by a sustainability management plan which demonstrates how the following considerations have been incorporated into the design of the centre: 		
	 Use of energy efficient design and construction methods is encouraged for the development of all buildings and meterials. 		
	 Water Sensitive Urban Design such as integrated stormwater retention and reuse (e.g. toilet flushing and landscape irrigation) is encouraged in accordance with design standards approved by Melbourne Water. 		
	 Access and mobility, safe pedestrian and bicycle movement should be demonstrated within and to and from the centre. 		
	 Encourage the use of passive shade and shelter through a combination of landscape treatment and built form elements 		
	 Where practical natural ventilation shall be used on buildings to reduce the reliance on plant equipment for heating and cooling. 		
	 Good solar access and passive solar orientation in the configuration and distribution of built form (e.g. north south orientation of streets to maximise natural daylight to shop fronts) is encouraged. 		
	 Waste collection points should be grouped to maximise opportunities for recycling and reuse. 		
	 Solar energy for water and space heating, electricity generation and internal and external lighting is encouraged. 		
	 The design of built form shall consider reduction of greenhouse gas emissions associated with the occupation and the ongoing use of buildings 		

4.4 COMMUNITY FACILITIES

4.4.1 COMMUNITY FACILITIES OBJECTIVES

The objectives for community facilities are:

- To provide for a community hub co-located with the southern school and recreation reserve as a focal point for community activity and interaction.
- To provide for a community hub co-located with the northern school and recreation reserve.
- To support the early provision of facilities such as local parks and playgrounds in each neighbourhood.
- To plan for the timely delivery of community facilities such as schools, health and children's services and formal recreation facilities as population thresholds are reached and funding becomes available.
- To plan for a range of community facilities, cultural venues and services to meet the varying needs of local residents.
- To plan and design for community facilities which represent quality architecture and offer flexible designs to accommodate a range of uses and meet the changing needs of the community.
- To locate community facilities with active and passive open space.
- To plan for community facilities which are accessible by public transport, walking and cycling.
- To plan for physical connections to integrate future adjoining land uses for community use.
- To provide sporting facilities and supporting infrastructure identified in the plan.

4.4.2 IMPLEMENTATION

The objectives for community facilities are met by implementation of all the following:

- » Plan 5: Future Urban Structure.
- » Plan 12: Public Transport Network.
- » Table 6: Community Facilities Table.
- » Table 7: Open Space Design Guide.
- » Figure 3 and 4: Indicative Community Hub Plans.
- » Planning and design guidelines set out in 4.4.3.
- » Community Facilities Delivery Statement set out in 4.4.4

4.4.3 PLANNING AND DESIGN GUIDELINES

The following planning and design guidelines should be met:

General

- Community facilities should be integrated with other council facilities and/or open space, and be co-located with proposed children's playgrounds, recreation infrastructure and kindergartens.
- Education and community services (public and private) and other
 activities (such as childcare centres) should be located within and
 or adjoining community hubs, within and or on the edge of activity
 centres, or on either connector streets or arterial roads where access
 can be provided safely.
- Standards contained in the '2009 GAA PSP Planning Guidelines'. including S1-S7 of Element 5.
- All public open space areas should be designed to provide passive surveillance.

The preliminary concept plans are provided as an indicative design solution. Alternative approaches that meet the objectives for community infrastructure may be considered to the satisfaction of the Responsible Authority.

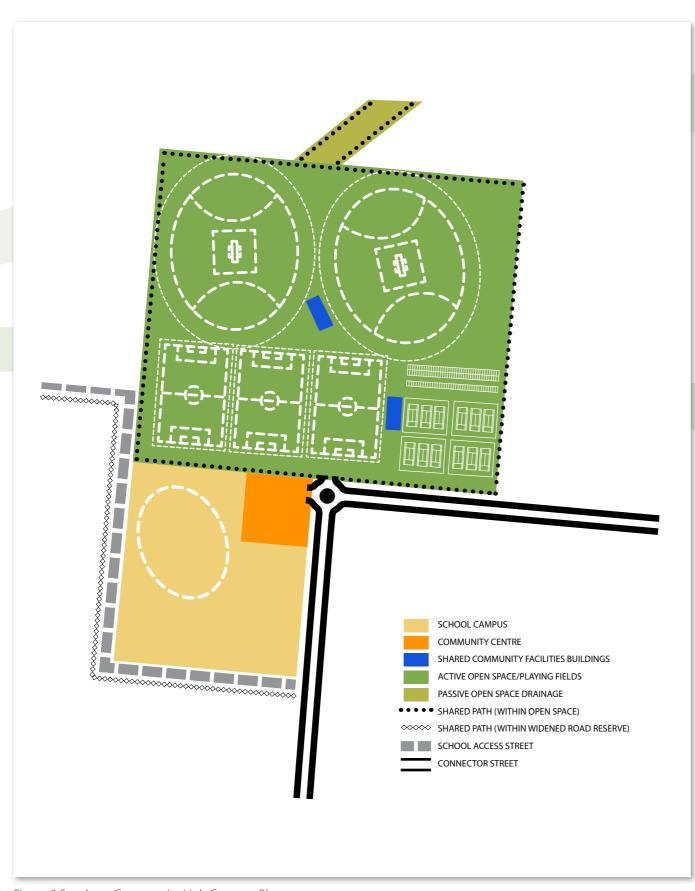


Figure 3 Southern Community Hub Concept Plan

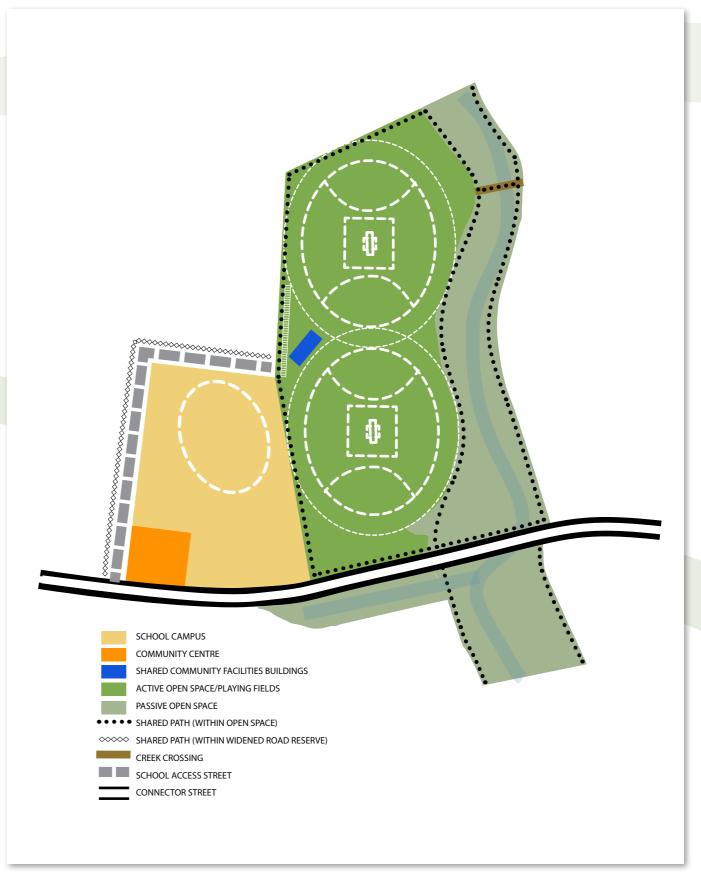


Figure 4 Northern Community Hub Concept Plan



Table 6: Community Facilities

Facilities & services	Location	Responsibility*
Northern Hub Facilities:		
Manor Lakes North West State Primary School P-6	Northern Community Hub	DEECD
Manor Lakes North West Level 1 Community Centre Double Kindergarten	Northern Community Hub	Wyndham City Council
Cricket nets	Northern Community Hub	Wyndham City Council
Pavilion	Northern Community Hub	Wyndham City Council
Playground	Northern Community Hub	Wyndham City Council
2 x AFL/cricket ovals (full size) and pavilion	Northern Community Hub	Wyndham City Council
Southern Hub Facilities:		
Manor Lakes South West State Primary School P-6	Southern Community Hub	DEECD
6-12 tennis courts and tennis pavilion	Southern Community Hub	Wyndham City Council
3 soccer pitches and soccer pavilion	Southern Community Hub	Wyndham City Council
2 x AFL/cricket ovals (full size) and pavilion	Southern Community Hub	Wyndham City Council
Playground	Southern Community Hub	Wyndham City Council
Manor Lakes South West Level 2 Community Centre Double Kindergarten and Maternal and Child Health Centre	Southern Community Hub	Wyndham City Council
Manor Lakes Community Centre - community meeting space & non government organisation (NGO) consulting rooms	Southern Community Hub	Wyndham City Council
General:		
Passive Open Space (inc. but not limited to: playgrounds, basketball ½ court, BBQ facilities, shelters and walking trail)	Distributed throughout the precinct and generally within 400 m of most residents	Wyndham City Council / Development proponents
Manor Lakes Community Centre - community meeting space & Community Sector Organisations consulting rooms	Southern Community Hub	Wyndham City Council

*Funding grants are available from the Commonwealth or Victorian Governments to support facility enhancement or service provision to be consistent the Development Contributions Plan.

4.4.4 COMMUNITY FACILITIES DELIVERY STATEMENT

It is important that community facilities are delivered in an integrated and co-ordinated manner to maximise both early and cost effective provision. The following statements guide these outcomes.

Integrated, efficient and timely facility provision

Funding opportunities and partnerships should be sought to support the early provision of community facilities.

The Victorian Government will work with the City of Wyndham to explore and pursue opportunities for partnership approaches to support integrated and timely provision of key community facilities.

Potential funding sources to be considered include:

- Manor Lakes Development Contributions Plan.
- City of Wyndham Capital Works Program.
- Development Proponent Funding. Provision of in-kind works requires approval by the City of Wyndham as the Collecting Agency (refer to the Manor Lakes Precinct Structure Plan Development Contributions Plan 2012).
- State Grants Programs. The State Government has many grants programs with funding potential across a broad range of community facilities and services.
- Non-Government organisations. Some community infrastructure may be able to be delivered by the Council working in partnership with Non-Government organisations.

Community Hub Concept Planning

- Delivery of integrated and timely community facilities is a complex and evolving task that takes place in stages over a long period of time given the involvement of many stakeholders with priorities that are subject to change over time. It is expected that models for service delivery will change over time as new approaches are adopted and the PSP has been designed to be flexible enough to enable this change to occur.
- Co-ordination and delivery will be greatly assisted by the establishment of:
 - A co-ordinated governance model for concept and master planning.
 - The development of community hub concept plans.
 - Master plans that provide detail for the delivery of the concept plans.
- The opportunities for integrated facility delivery apply equally to sporting facilities as they do to items such as community centres and schools. Opportunities for shared use of clubhouse and pavilion buildings should be investigated and if appropriate accommodated through flexible facility design and integration through hub master planning.
- Where facilities are associated with schools, they should be designed concurrently to ensue integrated facility delivery and maximise sharing opportunities.

Open space improvements

- Individual development proponents are required to provide basic improvements to local parks and passive open space including provision of native vegetation offsets, earthworks, fencing, water tapping, grassing, tree planting, local playgrounds and shared paths and footpaths, furniture and paving.
- The City of Wyndham may add to these basic improvements over time with the provision of additional facilities through its Capital Works Program.
- The active open space areas will benefit from the preparation of master plans by Wyndham City Council to guide their staged delivery over time. Consistent with the establishment of the community hubs discussed above, these processes will benefit from a governance model being established to support the master planning and the ongoing implementation and management of the reserves consistent with other approaches across the municipality.





4.5 OPEN SPACE AND NATURAL SYSTEMS

4.5.1 OPEN SPACE OBJECTIVES

The objectives for open space are:

- To provide a variety of open spaces to meet the active and passive recreation needs of the community and to integrate, protect and restore environmental values and features.
- To establish a network of appropriately sized, connected and distributed open spaces to meet local and district open space needs
- To establish an attractive urban environment with a strong sense of place through the provision of well designed landscaping of open spaces as well as the road and linear park networks.
- To promote easy walking and cycle access to, across and along, the Lollypop Creek corridor and other waterways.
- To create a network of trails in the PSP area connecting to major open spaces, local town centres and community hubs.
- To create a diversity in the shape, landscape treatment and recreation facilities within the network of passive local parks by providing spaces generally in the range of 0.7 hectares through to 2.0 hectares.
- To support the early development of recreation reserves through a range of funding sources.
- To facilitate regional bike trails linking along the OMR (within its reserve as shown on the cross section 13).
- To encourage the timely provision of land for active open space to provide for community needs.
- To rehabilitate existing vegetation within proposed parks (both indigenous and exotic) where appropriate and consistent with the intended park function.
- To implement open space development standards which provide for a sustainable future maintenance regime.

4.5.2 IMPLEMENTATION

The objectives for open space and natural systems are met by implementation of all the following:

- » Plan 5: Future Urban Structure.
- » Plan 9: Open Space & Natural Systems Plan.
- » Plan 10: Threatened Species Action Plan.
- » Plan 13: Walking and Trails Plan.
- » Table 6: Community Facilities Table.
- » Table 7: Open Space Design Guide.
- » Manor Lakes Native Vegetation Precinct Plan.
- » Table 8: Park Details.
- » Manor Lakes Drainage Scheme.
- » Figure 5: Lollypop Creek Concept Plan
- » Figure 6: Lollypop Creek Concept Sections

The guidelines outlined in Table 8 should be met.

4.5.3 INTERGRATED WATER MANAGEMENT OBJECTIVES

The objectives for IWM are:

- To plan for the future drainage needs of the new urban environment.
- To mitigate flooding of urban areas.
- To manage the flows of storm water runoff into the Lollypop Creek catchment.
- To reduce and filter sediment and nitrogen levels through an integrated water sensitive urban design system.
- Where appropriate, to enhance the biodiversity and habitat values of the waterways.

4.5.4 IMPLEMENTATION

The objectives for the integrated water management are met by implementing the following:

- » Plan 5: Future Urban Structure.
- » The Planning and Design Guidelines set out in 4.5.5.
- » The approved Manor Lakes Estate Overall Drainage Strategy DPM Consultants May 2011.

4.5.5 INTERGRATED WATER MANAGEMENT PLANNING AND DESIGN GUIDELINES

The following planning and design guidelines should be met:

- Drainage systems should be designed to ensure that storm water quality is enhanced to best practice standards prior to discharge to the drainage lines.
- Planting of drainage areas should promote the establishment of habitat for local species.
- Drainage systems should maintain flow regimes from the precinct area (including flow intensity and duration) at pre-development levels.
- Drainage and waterway reserve sizes are indicative only, and final sizes will be subject to further detailed design. All drainage and waterway reserve areas must address the requirements of Melbourne Water at the time of submission.
- Water sensitive urban design should be explored and addressed with the relevant agencies at subdivision design stage.



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4.5.6 LOLLYPOP CREEK OBJECTIVES

The objectives for the Lollypop Creek Corridor are:

- Recognise the values of the Lollypop Creek Corridor from a landscape, hydrological, cultural, ecological, environmental and recreational perspective and ensure that future development of the Manor Lakes PSP responds to these core attributes.
- Provide necessary drainage function within the corridor subject to the approved Melbourne Water drainage strategy whilst protecting and enhancing the core attributes of the Corridor.
- Rehabilitate and improve the ecological and environmental values of the Corridor.
- Provide appropriate recreational functions within and adjacent to the Corridor.
- Ensure appropriate locations for vehicular, pedestrian and bicycle crossing points across the Corridor that provide maximum connectivity to the broader community subject to the satisfaction of Melbourne Water.

4.5.7 IMPLEMENTATION

The objectives for the Lollypop Creek Corridor are met by implementing the following:

- » Plan 5 Future Urban Structure Plan.
- » Plan 9 Open Space and Natural Systems Plan.
- » The Planning and Design Guidelines set out in 4.5.8
- » Figure 5 Lollypop Creek Park Concept Plan.
- » Figure 6 Lollypop Creek Park Concept Section.
- » Table 7 Open Space Design Guide.

4.5.8 Lollypop Creek Planning and Design Guidelines

The following planning and design guidelines should be met:

- The width and dimensions of the Lollypop Creek is to be determined at the subdivision stage to the satisfaction of Melbourne Water.
- The Corridor is to be revegetated in line with Ecological Vegetation Class 68 (EVC 68).

The following planning and design guidelines must be met:

- A planning permit application involving the Lollypop Creek Corridor should be accompanied by the following information (as appropriate):
 - A summary of the Aboriginal cultural heritage implications related to the development of the Corridor within the specific permit area.
 - An analysis of the ecological, landscape and geomorphic values of the Corridor within the specific permit area.
 - A plan clearly demonstrating the recreation facilities to be provided within the Corridor within the specific permit area.
 - A plan demonstrating the stormwater facilities to be provided in the Corridor within the specific permit area and how this is compliant with the approved drainage strategy.
 - A plan identifying the retention of vegetation and revegetation proposed within the corridor.
 - Where appropriate, the development proponent may be required to prepare an Environmental Management Plan for the Corridor within the specific permit area prior to the commencement of works.
 - A response as to how the plan complies with the principles of the Lollypop Creek Park Concept Plan at Figure 5.
- A 2.5m shared path must be provided along both sides of the Lollypop Creek Corridor with a 3.0m shared path provided as required by Melbourne Water for maintenance purposes.

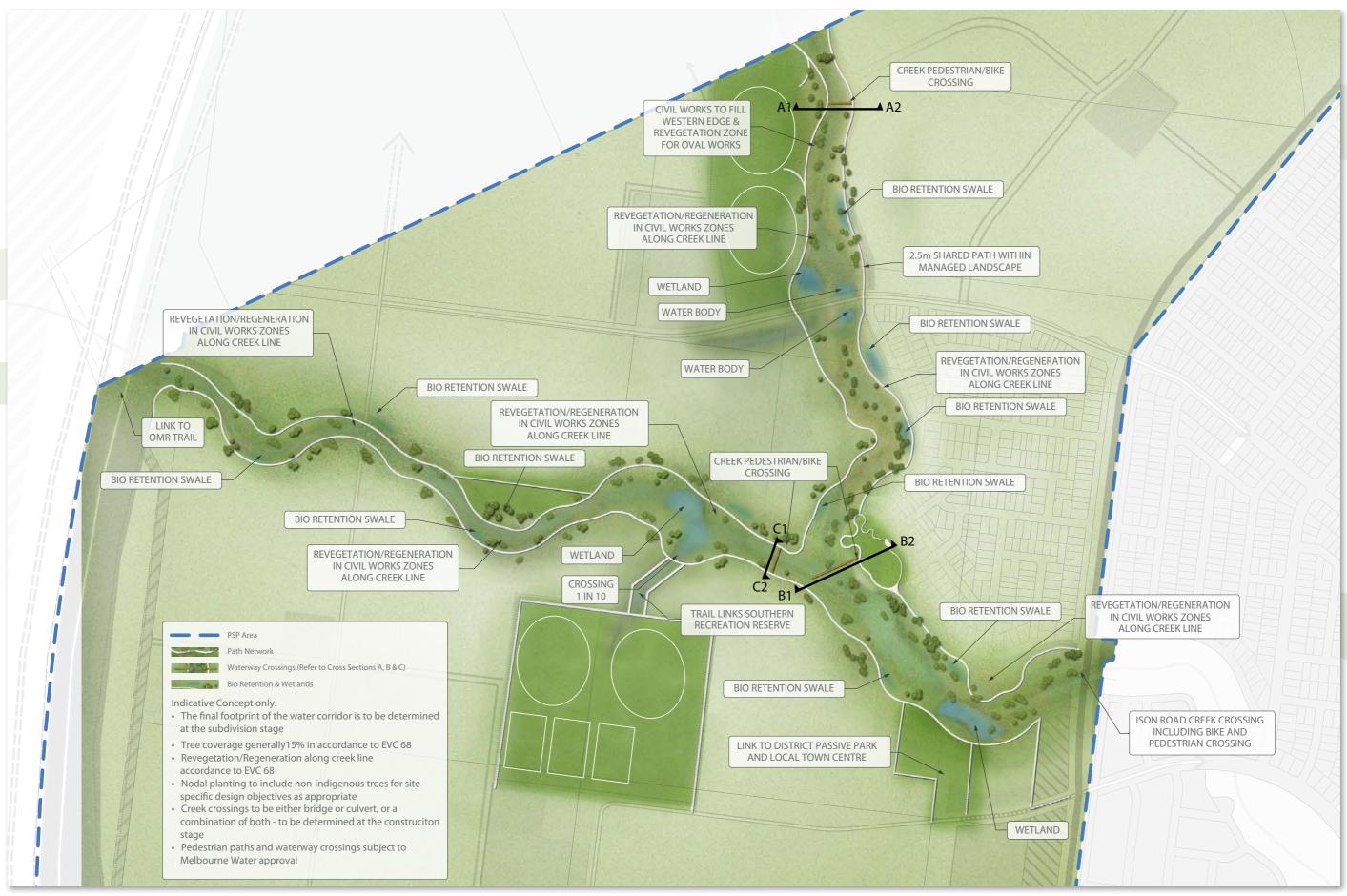
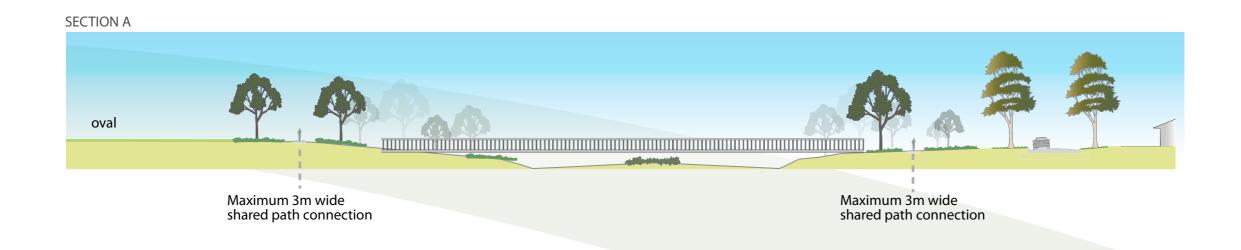
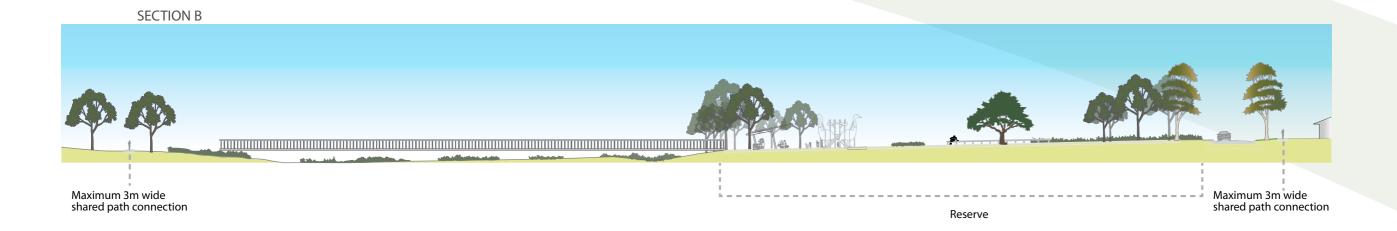
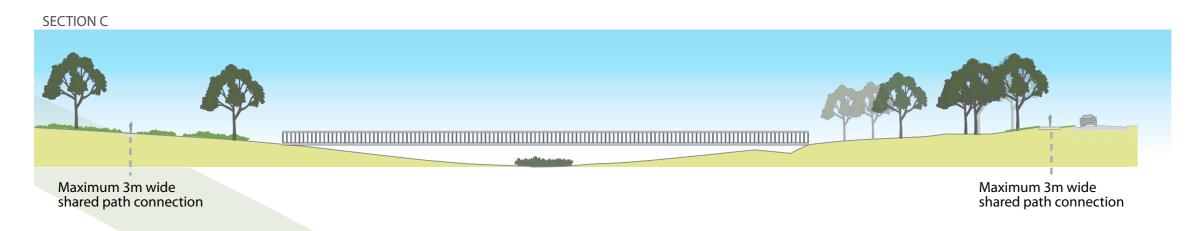


Figure 5 Lollypop Creek Park Concept Plan









Note: These are concepts only. Final design to be determined at subdivision stage.

Figure 6 Lollypop Creek Park Concept Sections

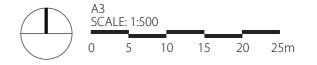




Table 7: Open Space Design Guide

Docion Isous	Planning and Design Guidelines
Design Issue	Planning and Design Guidelines
General	 Open spaces should be designed and constructed to a fit for purpose standard with an appropriate mix of facilities.
	 Design of open spaces should be contemporary in nature, innovative and draw upon the precinct landscape design themes.
	 Passive parks should cater for a broad range of users by providing a mix of spaces and planting to support both structured and informal recreational activities.
	 Active recreation reserves should be designed to maximise co-location and sharing opportunities between complementary sports and adjoining school facilities. Sharing of Council managed facilities with schools will require a formal management agreement.
	 Parks should contain both cleared open areas for unstructured activities, as well as areas for shade and shelter.
	 The appropriate mix of infrastructure in parks should be provided to the satisfaction of the Responsible Authority.
	 Any pedestrian link through a drainage reserve or adjoining the road network should include provision of park seating at appropriate intervals to the satisfaction of the Responsible Authority.
	 Vegetation in parks and open space corridors should be managed to minimise the threat to life or property from bushfire.
Interface with road network	 Open spaces should have a road frontage to all edges except where these are otherwise addressed by active frontage from careful design of residential, commercial or community facility development.
	• Streetscape planting and paths should complement and integrate with the adjoining parkland design.
Interface with adjoining	The open space network should be enhanced by careful design of residential, community and commercial development adjacent to it.
development	• The primary frontage of development that immediately abuts open space areas should address and promote use and surveillance of the parkland.
	 Development abutting open space should be well articulated and facilitate passive surveillance with windows, balconies, and pedestrian access points.
	 Development should avoid the rear of properties or blank walls abutting parklands.
	 Where fencing is required it should be low scale and permeable to facilitate public safety and surveillance.
	 Landscaping of adjoining development should complement the park landscape design.
Interface with conservation	The design of parks and open space corridors should enhance and preserve areas of conservation significance.
areas	 Landscape master planning of open space containing native vegetation conservation areas should be designed to protect sensitive areas from vehicle or pedestrian traffic.
	 Appropriate buffer zones should be provided between native vegetation conservation areas and 'hard' infrastructure such as paths, furniture, picnic shelters.
	 Passive or low impact activities should occur closest to offset/ conservation areas, with more high impact or formal activities to be located further away.
Interface with Drainage	 Pedestrian and bicycle paths should be incorporated into the drainage system to connect the open space and street network.
system	 Pedestrian bridges and boardwalks should be incorporated into the path network of the drainage system to facilitate permeability of neighbourhoods.
	 Paths, bridges and boardwalks must be designed to be above a minimum of the 1:10 year flood line to the satisfaction of the relevant authority.

Design Issue	Planning and Design Guidelines
Park Buildings	Park buildings should be sited and designed to integrate with and complement landscaping and should not dominate the parkland.
	 Park buildings should be sited to frame park spaces and should avoid splitting up otherwise usable and effective spaces.
	 Park buildings should be contemporary in design with orientation, materials and design detail planned to minimise resource use and maximise sustainability performance or heritage themes.
	Selected materials should complement the proposed landscape character
Public safety & Lighting	• Open spaces should be designed to be safe and comfortable places that encourage use by a wide range of people.
	 The use of the design principles known as "Crime Prevention Through Environmental Design" ("CPTED") should guide the design of open spaces and the infrastructure it contains.
	 Surrounding land uses should provide passive surveillance to adjoining open space and planting design should promote a highly visible public realm.
	 The detailed design of open spaces that immediately abut development should complement and enhance the function and safety of that development.
	 Open space path systems should facilitate clear, direct and easy movement to and from key destinations.
	 Lighting in open spaces should be restricted to key pedestrian thoroughfares to encourage safe pedestrian movement throughout the network, but discourage inappropriate use of main parkland areas after dark.
	 Light fittings should be energy and cost efficient and 'cut-off' type to direct light where it is required and reduce unnecessary spill to sides or above.
	 Light fittings should be compact fluorescent or similar that emits white light.
Tree planting and	• Species chosen should be appropriately robust to perform adequately in the local urban environment prior to finalising planting schemes.
landscaping	 Advice should be sought from qualified professionals and Council officers regarding the suitability of proposed species prior to confirming the planting scheme.
	 Species associated with local Ecological Vegetation Classes ("EVC") found in the area should be considered in opens space planting schemes, as appropriate.
Other park landscape	 The design and siting of landscape elements and infrastructure should compliment the area.
elements and infrastructure	 Park infrastructure such as playgrounds, shelters, BBQs picnic tables, toilets etc should be clustered in nodes. Park planting themes should enhance and complement these nodes.
	 Park seating should be provided to the satisfaction of the Responsible Authority.
	 Public toilet facilities should be integrated with pavilions and clubhouses where possible.
	 Park infrastructure should be contemporary in design with materials and design detailing complementing the planting character and drawing upon an overall theme.
	 Use of bollards and fencing should be well targeted, maximise transparency and generally kept to a minimum.
	 Where car parking is required within parks it should be sensitively designed to minimise large areas of hard surfaces and maximise tree and ground level planting. Safe pedestrian access should be integrated within car park designs.
	 Bicycle parking must be located in highly visible locations and close to pedestrian desire lines/gathering spaces.

Design Issue	Planning and Design Guidelines
Signs	 Parks and sports fields should be clearly signed. Generally, signs within parks should be kept to a minimum with locations focussed on key access or interpretation points and major pedestrian / cycle routes. Design and materials choice should be contemporary and should complement other park design elements.
Water sensitive urban design ("WSUD")	 The design and layout of open spaces should maximise water use efficiency, stormwater quality and long term viability of vegetation through the use of WSUD initiatives. WSUD principles should be used so that excess run-off water from within, or where appropriate, external to the park, is directed to support park planting and / or rain gardens rather than being diverted to drains. Warm season grasses should be used within passive reserves and sports fields to minimise potable water use.
Transfer of land requirements	 All parks must be finished to the following level of development to the satisfaction of the responsible authority prior to the transfer of land: Removal of all existing disused structures, foundations, pipelines or stockpiles. Cleared of rubbish and environmental weeds, levelled, topsoiled and grassed with warm climate grass (unless a conservation reserve). Provision of water tapping, potable and recycled water connection points. Sewer and gas connection points must also be provided to land identified as an active reserve. Satisfaction of biodiversity offset requirements. Drought resistant plantings. Vehicles exclusion devices (fence or other suitable method) and maintenance access points. Construction of a 2.5 metre concrete shared path around the perimeter of the reserve, connecting and linking into any other surrounding paths or points of interest. Installation of park furniture including BBQs, shelters, tables, playgrounds and rubbish bins.



4.5.9 HOW TO MAKE A PUBLIC OPEN SPACE CONTRIBUTION IN THIS PRECINCT

Further to the public open space contribution required at Clause 52.01 of the Wyndham Planning Scheme, this provision sets out the amount of land to be contributed by each property (refer to Plan 6 for property numbers) in the precinct and consequently where a cash contribution is required in lieu of land.

Where the PSP (by reference to the Property Specific Land Budget Table) requires a property to contribute:

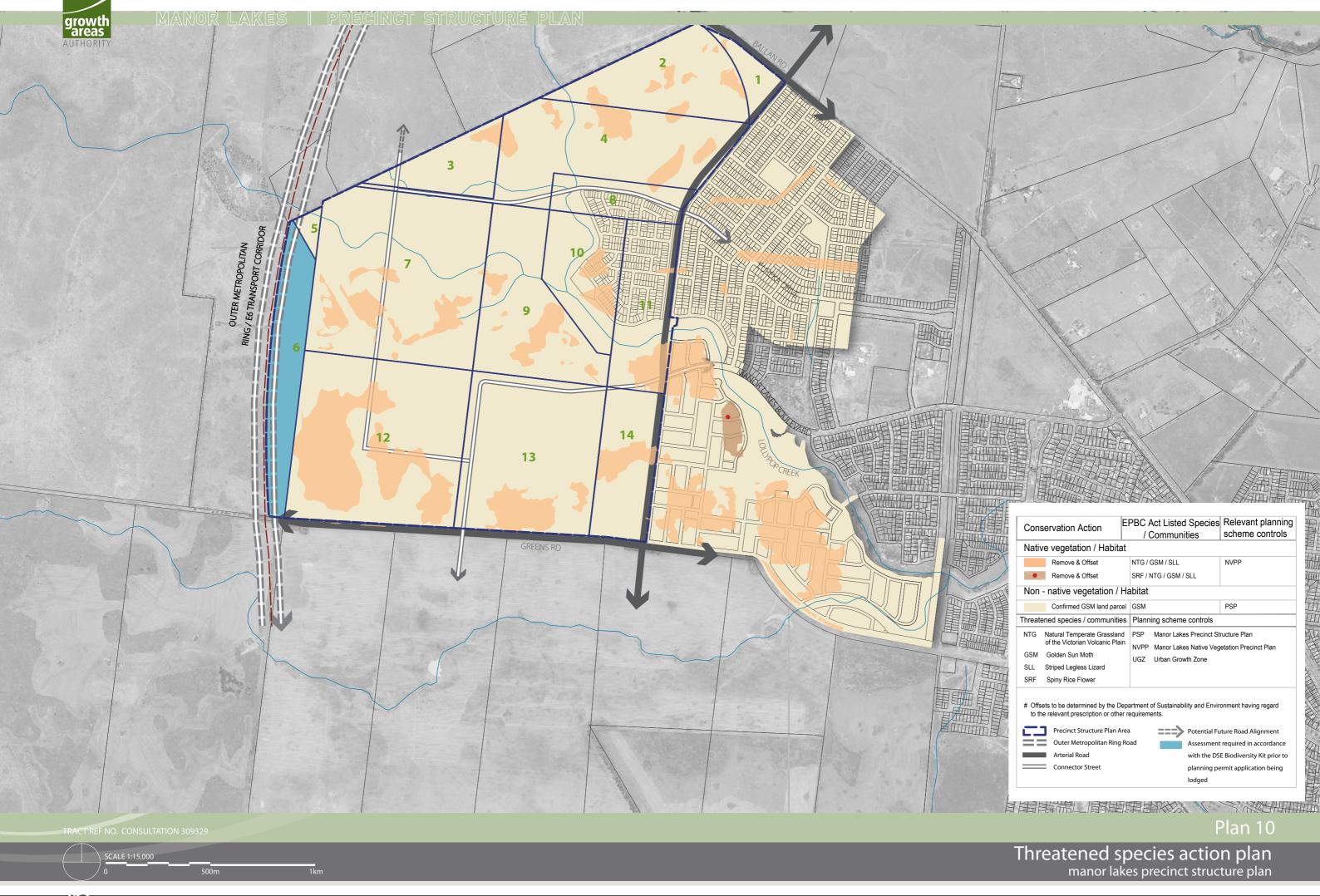
- 0% of the land as Passive Open Space ('POS'), the contribution is a cash contribution of 9.99% of the site value.
- More than 0% and less than 9.99% of the land as POS, the
 contribution is a land contribution equal to the amount specified
 in the Property Specific Land Budget Table and a further cash
 contribution that is equal to the difference in value between the
 land contribution and 9.99% of the site value.
- More than 9.99% of the land as POS, the contribution is a land contribution equal to the amount specified in the Property Specific Land Budget Table as POS.

In the latter instance, the subdivider may request that the responsible authority reimburse the subdivider for the difference in site value between 9.99% and the amount of POS specified for that land in the Property Specific Land Budget Table, to the satisfaction of the Responsible Authority.

The Responsible Authority may accept a variation to the specific amounts of land set out in the Property Specific Land Budget Table provided the total amount of public open space land and/or cash contribution provided is equal to the amount required in Clause 52.01.

Table 8: Park Details

Park		Size (Hectares)	Туре	Facilities	Other Attributes
Park	Property No.	Size (Hectares)	Туре	Facilities	Other Attributes
1	2,4	1.50	Local Park	Paths, seating, shelter, local playground, fun goals	Located on gentle rise
2	3,4	8.13	Active Recreation Reserve	Two full size AFL ovals, cricket nets and large local playground	Co-located with State primary school and Lollypop Creek trail
3	7	0.90	Local Park	Paths, seating, shelter and local playground	Linked to Lollypop Creek
4	7	0.70	Local Park	Paths, seating, shelter, lookout, local playground and fun goals	Located on east-west trail link
5	7,9,12,13	13.06	Active Recreation Reserve	Two full size AFL ovals, cricket nets, 6-12 tennis courts, District playground, three soccer fields	Oppotunity for formal tree planting designate throughout the reserve
6	10	0.94	Local Park	Paths, seating, shelter, local playground	Co-located with Lollypop Creek at the junction of the waterways.
7	9,10,13	2.00	District Passive Park	Paths, seating, picnic facilities, shelter, large local playground, fun goals, community events space	Co-located with Lollypop Creek and provides amenity for town centre. Larger strategic park with additional space for picnic area and formal planting of large trees
8	12	1.00	Local Park	Paths, seating, shelter and local playground	Anchored to connector street network
9	13	1.00	Local Park	Paths, seating, shelter, local playground and fun goals	Anchored to shared trail link
Total		29.23			





4.5.10 BIODIVERSITY ASSETS

Native vegetation in the precinct includes:

- Natural Temperate Grassland of the Victorian Volcanic Plains (EVC132) which is endangered within the bioregion and which is also EPBC listed.
- A number of scattered indigenous trees.
- Habitat values and habitat nodes within the precinct include rock features, mature eucalypts, grassland patches and exotic vegetation.

Fauna species recorded include:

 The Golden Sun Moth is listed as critically endangered under the EPBC Act, it is listed under the FFG Act and considered endangered in Victoria.

4.5.11 BIODIVERSITY OBJECTIVES

- To plan for the long term conservation management of retained areas of significant native vegetation and fauna habitat in accordance with the Manor Lakes NVPP.
- To plan for biodiversity values to be retained within the precinct where practical.
- To provide a focus for revegetation activities along the Lollypop Creek and where compatible with other intended infrastructure services, open space and recreation functions.
- To enhance the biodiversity of the area where practical to provide habitat and ecological connectivity along the Lollypop Creek corridor as the area develops in accordance with the Manor Lakes PSP.

4.5.12 IMPLEMENTATION

The objectives for biodiversity are met by implementation of all the following:

- » Section 4.5.13: Biodiversity Conservation Planning and Design Guidelines.
- » Clause 52.16 of the Wyndham Planning Scheme.
- » The Manor Lakes Native Vegetation Precinct Plan.
- » Table 7: Open Space Design Guide.

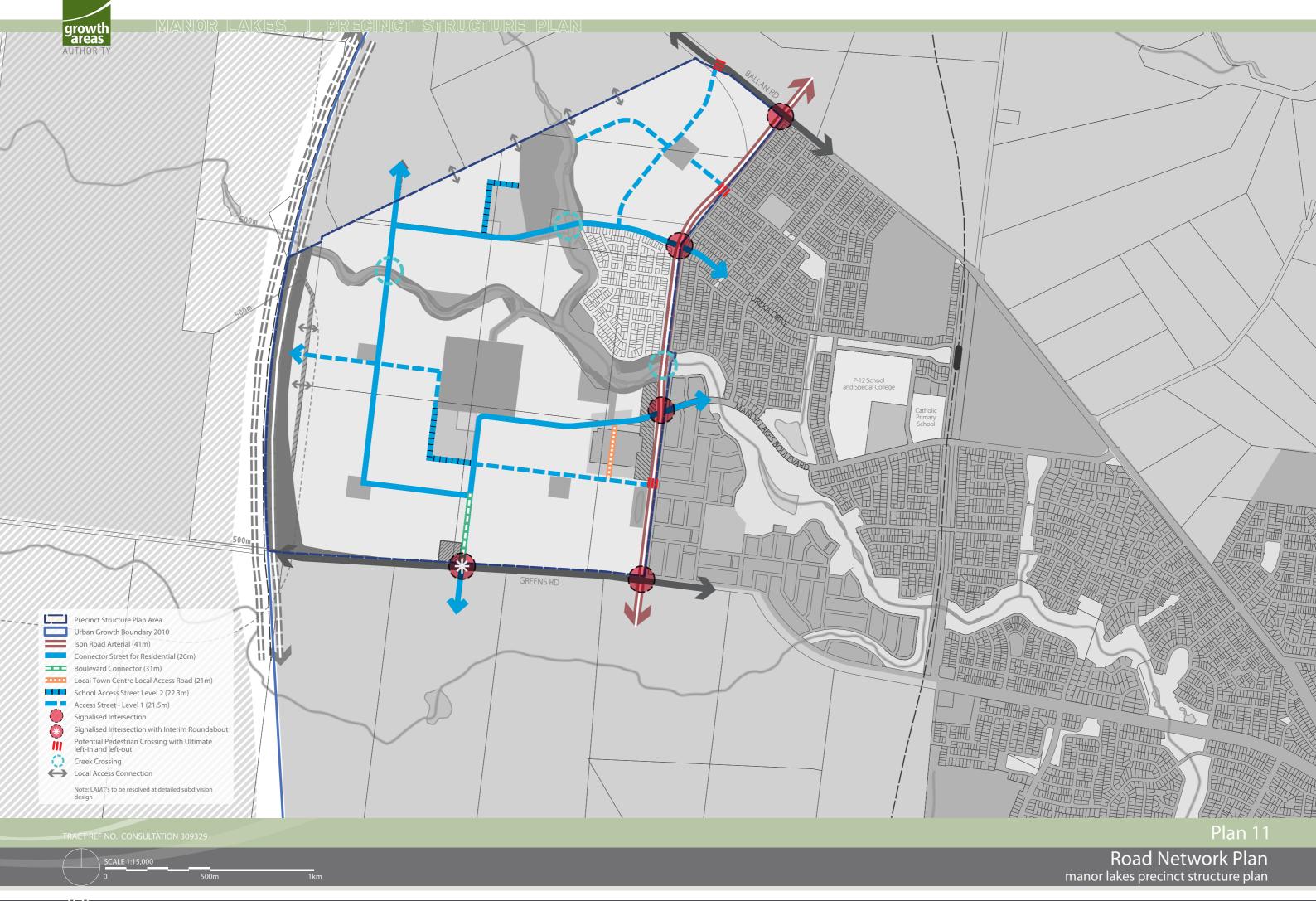
4.5.13 BIODIVERSITY CONSERVATION PLANNING AND DESIGN GUIDELINES

The following planning and design guidelines should be met:

- Street trees and public open space landscaping should contribute to habitat for indigenous fauna species in particular arboreal animals and avifauna (birds).
- The use of indigenous trees in streets and open space reserves and the use of lower level indigenous planting should be considered where it can be demonstrated that it is compatible with the planning and design guidelines for street tree planting, the delivery of public open space and community safety.
- Where suitable, planting of drainage areas should promote the establishment of habitat suitable for species such as the Growling Grass Frog (*Litoria raniformis*).
- Linear parks, water ways and widened road reserves should support the connection of areas capable of supporting flora and fauna habitat through appropriate design and planting.

4.5.14 EXTENT OF NATIVE VEGETATION PRECINCT PLAN

The vegetation mapping and biodiversity assessment which has informed the preparation of this PSP and corresponding Native Vegetation Precinct Plan, does not include property 6 as identified in Plan 10. A separate biodiversity report will need to be prepared for this property prior to vegetation removal on that property.





4.6 TRANSPORT AND MOVEMENT

4.6.1 TRANSPORT AND MOVEMENT OBJECTIVES

The objectives for transport and movement are:

- To establish an integrated and sustainable transport network that reduces dependency on the use of private vehicles, maximises access to public transport and encourages walking and cycling within and between neighbourhoods.
- To establish a bus network that connects residential neighbourhoods, local town centres, schools, parks and ovals with the Manor Lakes Town Centre, the future rail line and the Werribee Town Centre.
- To establish and construct an arterial and connector street network that provides for the safe and efficient operation of bus movements.
- To support the early provision of local bus services and walking and cycling links.
- To enable 95% of all households to be located within 400 metres of a future bus service.
- To support the early provision of safe and efficient pedestrian and bicycle paths and links which are connected to the key features of the precinct and which link to regional networks inside and outside the precinct.
- To provide for the landscaping of roads, transport and movement corridors to help create safe and attractive urban environments.
- To ensure that the transport network provides for the safe and efficient operation of the existing and future arterial road network both in the short and long term.
- To limit vehicular access to primary arterial roads to protect their function and safety.
- To manage access to the secondary arterial roads to protect their function, safety and to promote integrated design treatments consistent with the objectives of the Manor Lakes PSP.

- To protect options for future use of the OMR reserve for major transport infrastructure.
- To ensure that the transport network is planned to provide for the safety of all road users.
- To ensure that the design of arterial and connector streets provide for the safe and efficient operation of public transport.

4.6.2 IMPLEMENTATION

The objectives for Transport and Movement are met by implementation of all the following:

- » Plan 5: Future Urban Structure Plan.
- » Plan 11: Road Network Plan.
- » Plan 12: Public Transport Plan.
- » Plan 13: Walking and Trails Plan.
- » Table 9: Road Hierarchy.
- » Planning and design guidelines set out in 4.6.3
- » Road and street cross sections.

4.6.3 PLANNING AND DESIGN GUIDELINES

Construction of intersections with arterial roads

The following planning and design guidelines must be met:

 All intersections with existing or proposed arterial roads as shown on Plan 11 must be designed, constructed and controlled to the satisfaction of the Roads Corporation and the Responsible Authority, with the main design objective being to allow for a minimum 10-year design capacity having regard to the anticipated traffic growth on the affected roads from both the ultimate development of the PSP area and the external traffic.

- Staging of subdivisions must provide for the timely connection of road links to support timely transport connections (i.e. bus, cycle and walking), to the satisfaction of the Responsible Authority.
- Land must be provided for right of way flaring at all arterial road connections to existing and proposed arterial roads for the ultimate design of the intersection to the satisfaction of the Responsible Authority and the Roads Corporation.

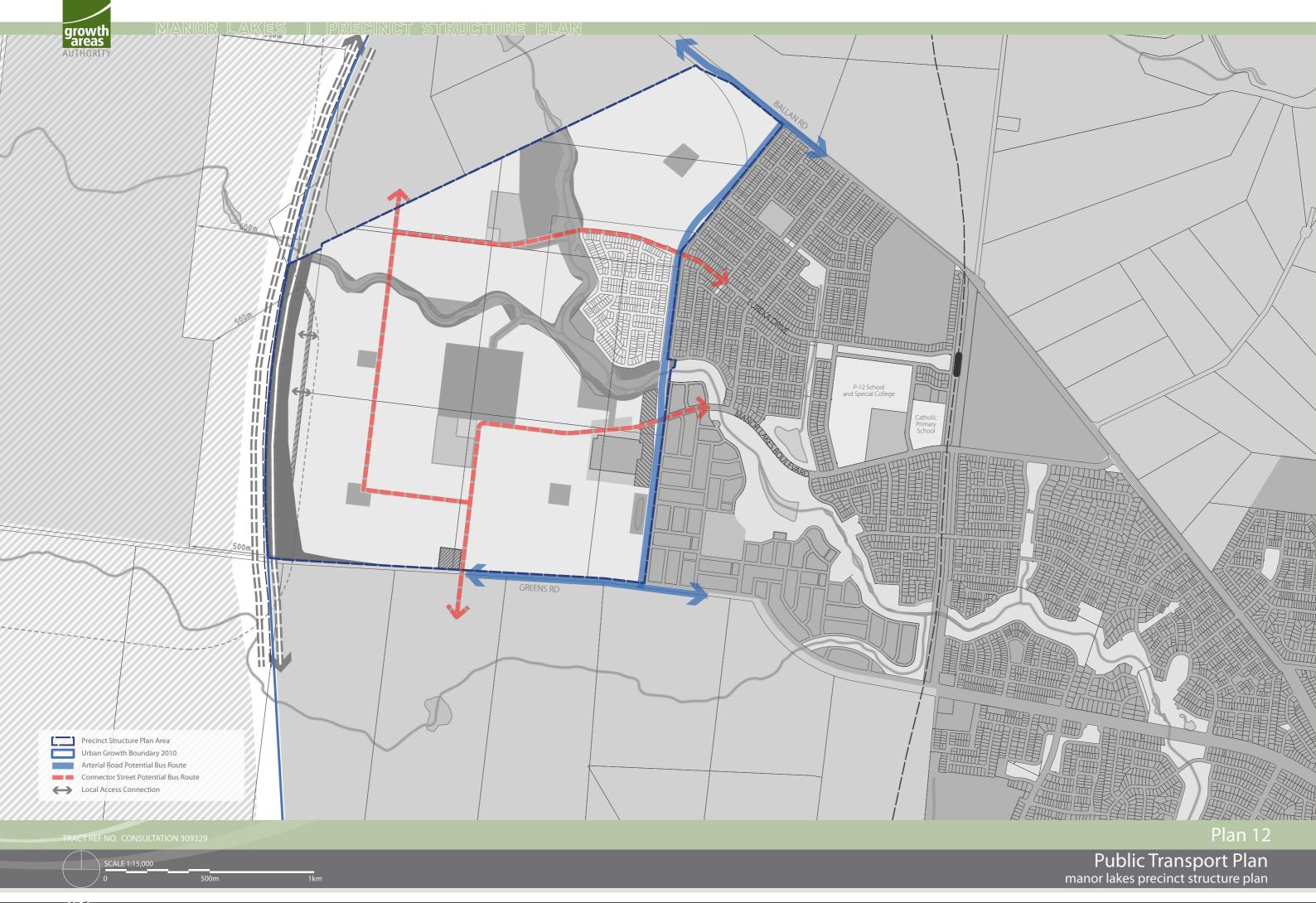
Primary arterial road connections - general requirements

The following planning and design guidelines should be met:

- Access to streets connecting to a primary arterial road should be considered within the context of the requirements of traffic management, safety, urban design and its urban environment.
- Intersection design should provide for the safe and efficient operation of the primary arterial road and the side road to the satisfaction of the Responsible Authority, with consideration to vehicle speeds, vehicle queues and conflicting movements on approach to and departure from the intersection.
- Access points (temporary and permanent) to the existing or proposed primary arterial road network beyond those shown on Plan 11, will be considered on a case by case basis and to the satisfaction of the Responsible Authority.
- Design the road network consistent with Plan 11, however, consider variation and flexibility of this layout if the performance and function of the road network is maintained subject to the approval of the Responsible Authority.

Table 9:	Road	Hierar	chy
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Road/street	Existing Reserve	Ultimate Reserve	VicRoads Access Management Policy	Indicative vehicles per day (VPD)	Traffic Lanes	Median	Posted Speed	Bus Compatible	Property Access and Parking	Tree Reserve	On Road Cycle Lane	Shared path	Responsibility
Outer Metropolitan Ring	0m	Varies	AMP 1 (Freeway)	70,000+	6	Yes	100 km/h	Yes	No	No	No	Both sides	VicRoads
Ballan Road	Varies	42m	AMP 2 limited access (urban)	40,000	6	Yes	80 km/h	Yes	No	No, unless sideage or no internal loop road	Yes	Both sides	VicRoads
Greens Road	20m	41m	AMP 2 limited access (urban)	40,000	6	Yes	80 km/h	Yes	No	No, unless sideage or no internal loop road	Yes	Both sides	Council (VicRoads in the future)
Ison Road	0m	41m	AMP 2 limited access (urban)	40,000	6	Yes	80 km/h	Yes	No	No, unless sideage or no internal loop road	Yes	Both sides	Council (VicRoads in the future)
Boulevard Connector	0m	31m	Not applicable	Up to 11,000	2	Yes	50 km/h	Yes	Yes	No	Yes	No	Council
Connector Street	0m	Varies	Not applicable	Up to 7,000	2	No	50 km/h	Yes	Yes	No	Yes	No	Council
School Access Street	0m	22.3m	Not applicable	Up to 7,000	2	No	50 km/h	Yes	Yes	No	No	One side	Council
Access Street Level 1 with shared landscape trail	0m	21m	Not applicable	Up to 1,000	2	No	50km/h	No	Yes	Yes	No	One side	Council
Access Street Level 1	0m	16m	Not applicable	Up to 1,000	2	No	50 km/h	No	Yes	No	No	No	Council
Access Street Level 1 Open Space frontage	0m	13m	Not applicable	Up to 1,000	2	No	50 km/h	No	Yes	No	No	One side	Council





Bus Network

The following planning and design guidelines must be met.

Bus stops must be provided in locations as nominated by the Department of Transport.

Where a requirement for a bus route or bus stop has been nominated by the Department of Transport, bus stops must:

- Be constructed by development proponents as part of the subdivision works (prior to the issue of a statement of compliance for the relevant stage) in accordance with the requirements of the Public Transport Guidelines for Land Use and Development to the satisfaction of the Director of Public Transport,
- Be provided with DDA compliant direct and safe pedestrian access connected to an existing pedestrian/shared path, and
- Be designed as an integral part of activity centres and activity generating land uses, such as schools, sports fields and employment areas."





Shared pathways

The following planning and design guidelines must be met:

- Walking and cycling networks must be constructed by development proponents as part of subdivision works (prior to the issue of a statement of compliance for the relevant stage).
- Footpaths and cycle paths must be provided with increased width in areas expecting high foot traffic such as near schools, community centres, activity centres, rail station and public transport interchanges and bus stops or as required by Melbourne Water along waterway corridors.
- Pedestrian and cycle crossings must be provided at all relevant street intersections and along key desire lines.
- Bicycle lane connections must be designed to allow for the smooth transition between on-road and off-road facilities.
- Pedestrian and cycle paths must be designed and located to maximise passive surveillance and provided in wide road verges with safe crossing points at key locations.
- The local street network must be designed to provide permeable and safe routes for walking and cycling to activity centres, community facilities, parks and open space, major trail networks and public transport.

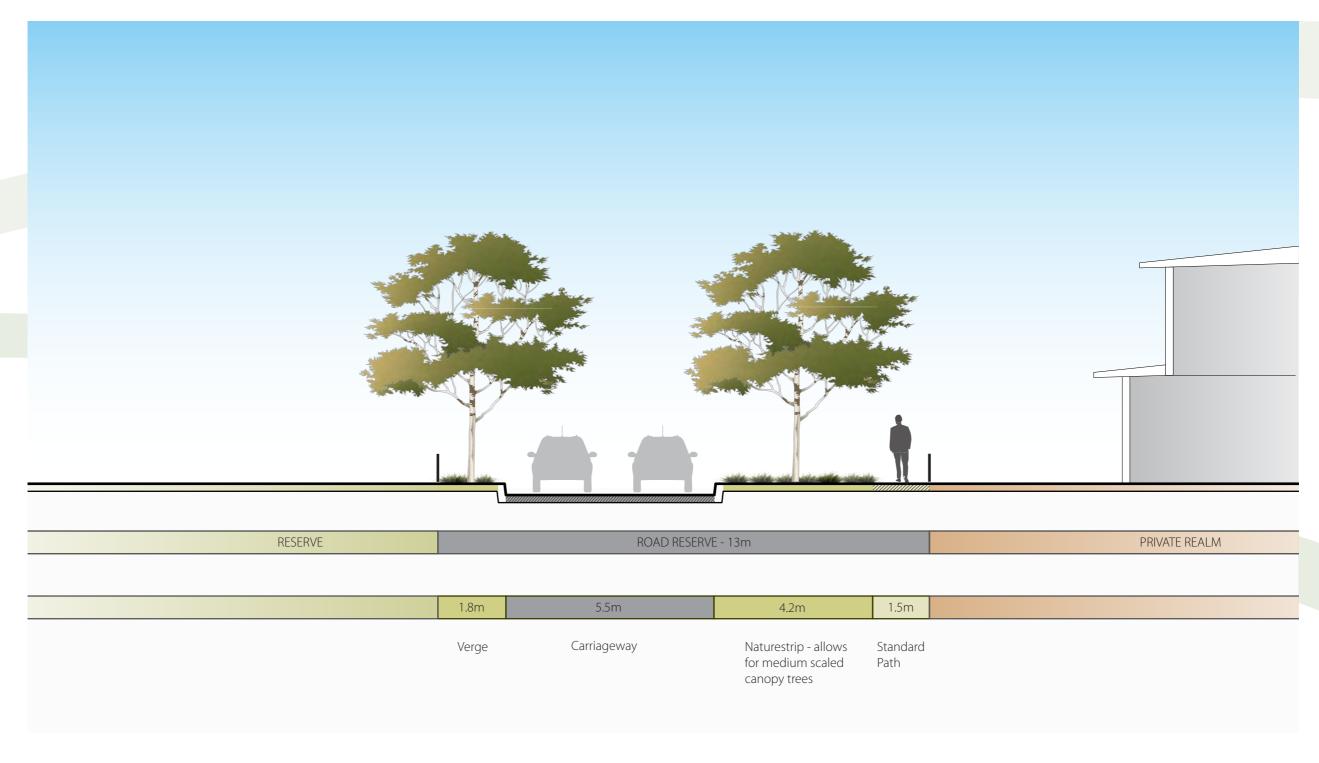
Road and street cross sections

The following planning and design guidelines must be met:

- Lots must be designed to address the road network to the satisfaction of the Responsible Authority.
- A tree reserve must be provided to an arterial road where an internal loop road (or service road) is not provided.
- Road and street cross sections designs must be generally consistent with the cross sections included in this element.

The following planning and design guidelines should be met:

- Where possible common trenching should be used to accommodate underground utilities and services.
- With respect of Greens Road west of the proposed Local Centre, if service roads are provided, these would in the interim, act as the Greens Road carriageway without need to upgrade Greens Road subject to the approval of the responsible authority.
- Cross section 4 to be applied as directed by the Department of Education and Early Childhood Development and to the satisfaction of the responsible authority.



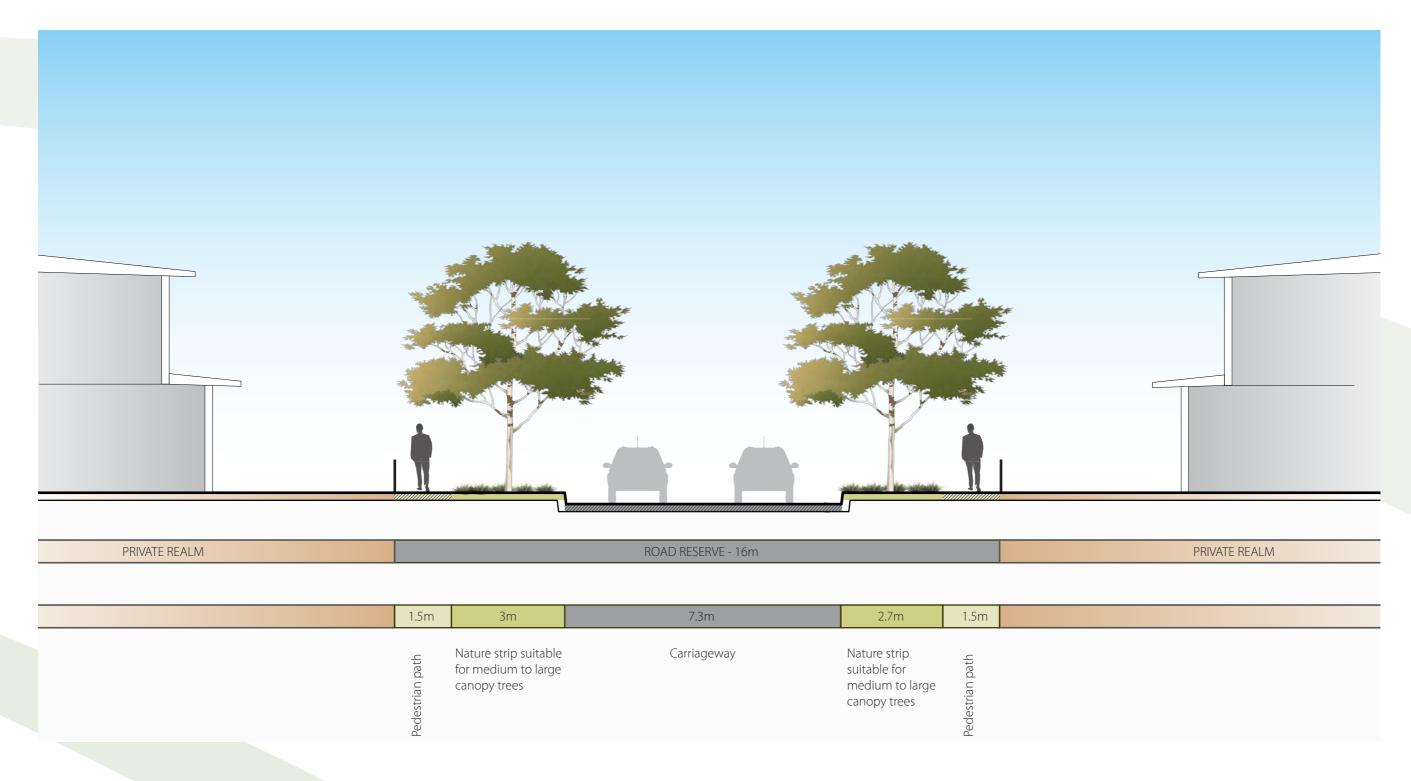
^{*} Footpaths to be offset 50mm from property boundary.

Cross Section 1

SCALE 1:100

Access Street Level 1 (13m open space frontage)
manor lakes precinct structure plan





^{*} Footpaths to be offset 50mm from property boundary.

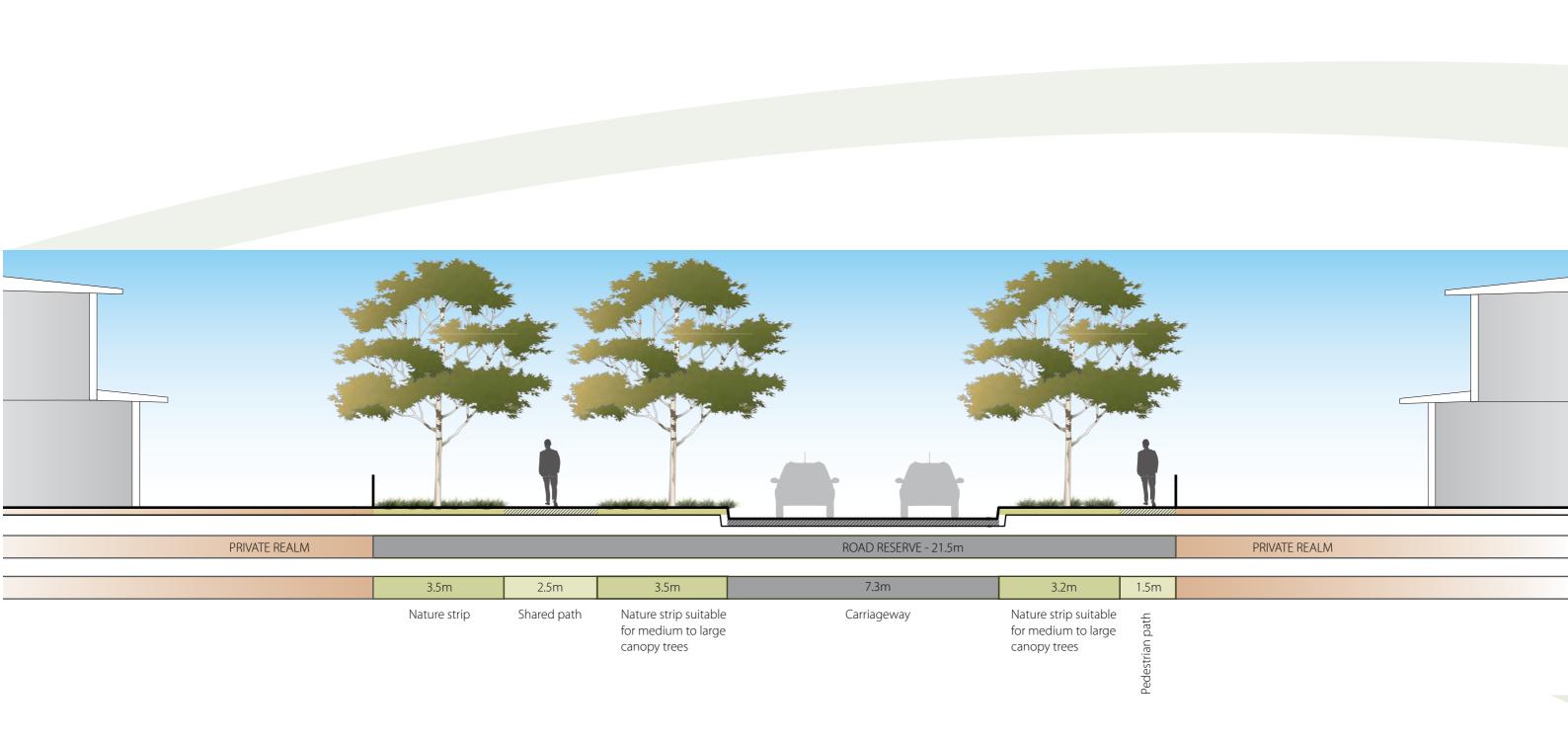
Cross Section 2

SCALE 1:100

O Im 2m 5m

Cross Section 2

Access Street Level 1 (16m standard)
manor lakes precinct structure plan



Cross Section 3

SCALE 1:100

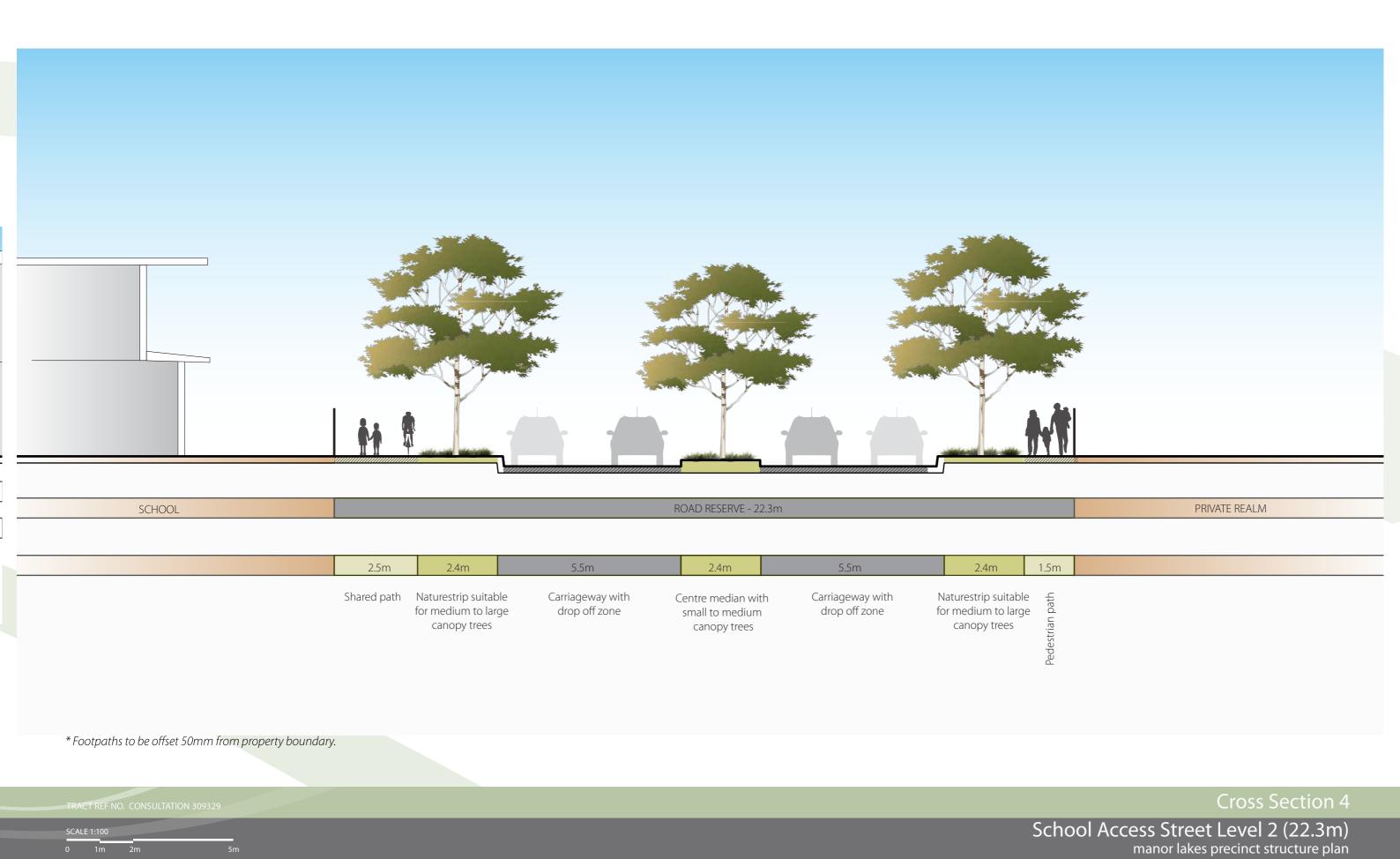
O 1m 2m 5m

Cross Section 3

Access Street Level 1 (21.5m with landscape trail)
manor lakes precinct structure plan

^{*} Footpaths to be offset 50mm from property boundary.







Wide pedestrian strip, allowing for cafe furniture etc. Under deady and the same of the s							
allowing for cafe parking with parking with parking with allowing for cafe furniture etc. trees in furniture etc.	4m	2.3m	4.2m	4.2m	2.3m	4m	
Octitation	allowing for cafe	parking with		te safe sharing with bicycles	parking with	allowing for cafe	

* Key principles:

- Key crossing points are to be combined with tree outstands.
 Elsewhere, tree outstands are to be provided at approx every 3 car spaces (18m) and should be planted with deciduous canopy trees;
 Building awnings are to be free standing and provide shelter to at least 2m of the path width.
- Outdoor seating area's must not exceed more than 1.5m of path width.

Cross Section 5

LTC Internal Road Reserve (21m)
manor lakes precinct structure plan





^{*} Footpaths to be offset 50mm from property boundary.

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Connector Street for Residential (26m) manor lakes precinct structure plan

Cross Section 6

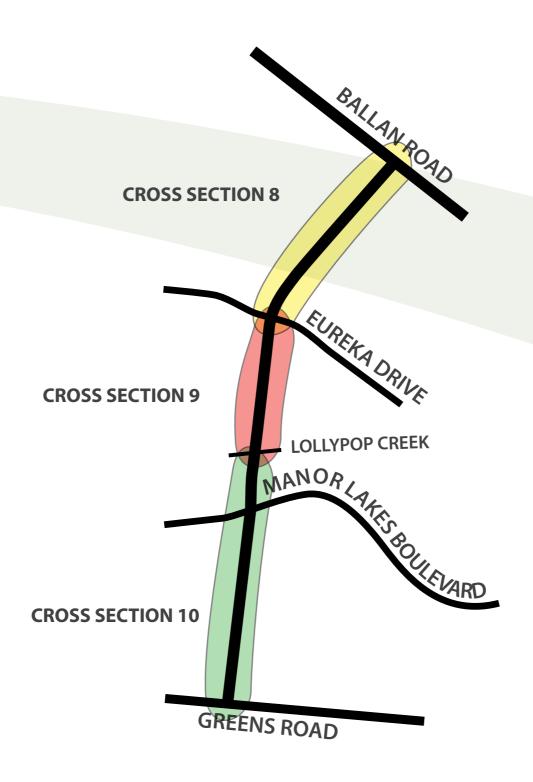




1.5m	3.5m	2.3m	1.7m	3.5m	6m	3.5m	1.7m	2.3m	3.5m	1.5m	
Pedestrian Path	Nature Strip	Parking Bay	Bike Lane	Carriageway	Median	Carriageway	Bike Lane	Parking Bay	Nature Strip	Pedestrian Path	

Cross Section 7

SCALE 1:100 0 1m 2m 5m Boulevard Connector (31m) manor lakes precinct structure plan



Note: Interim design solutions on east or west side to be resolved with council in detailed design.

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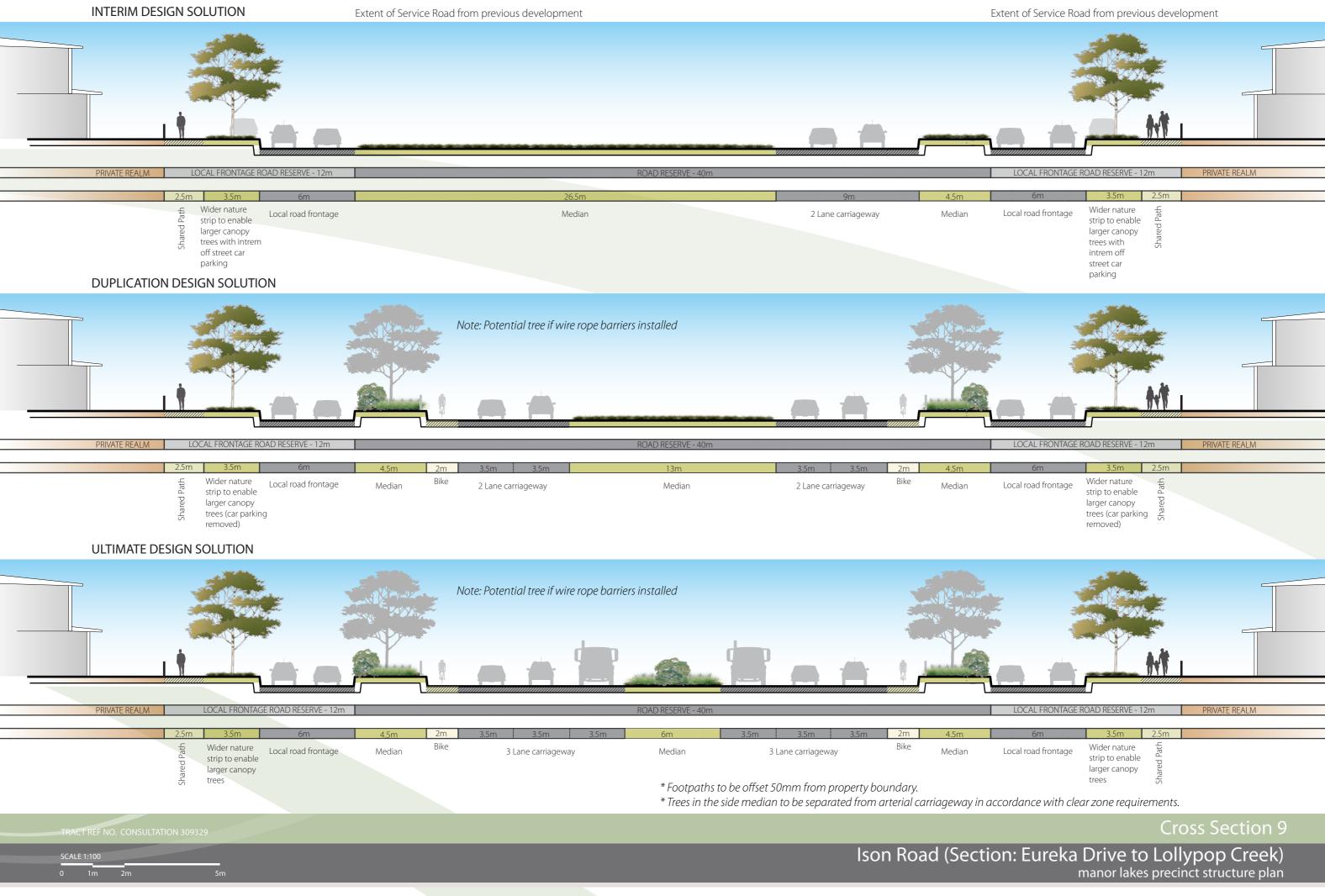
SCALE 1:100

0 1m 2m 5m

Ison Road Cross Section Key

manor lakes precinct structure plan



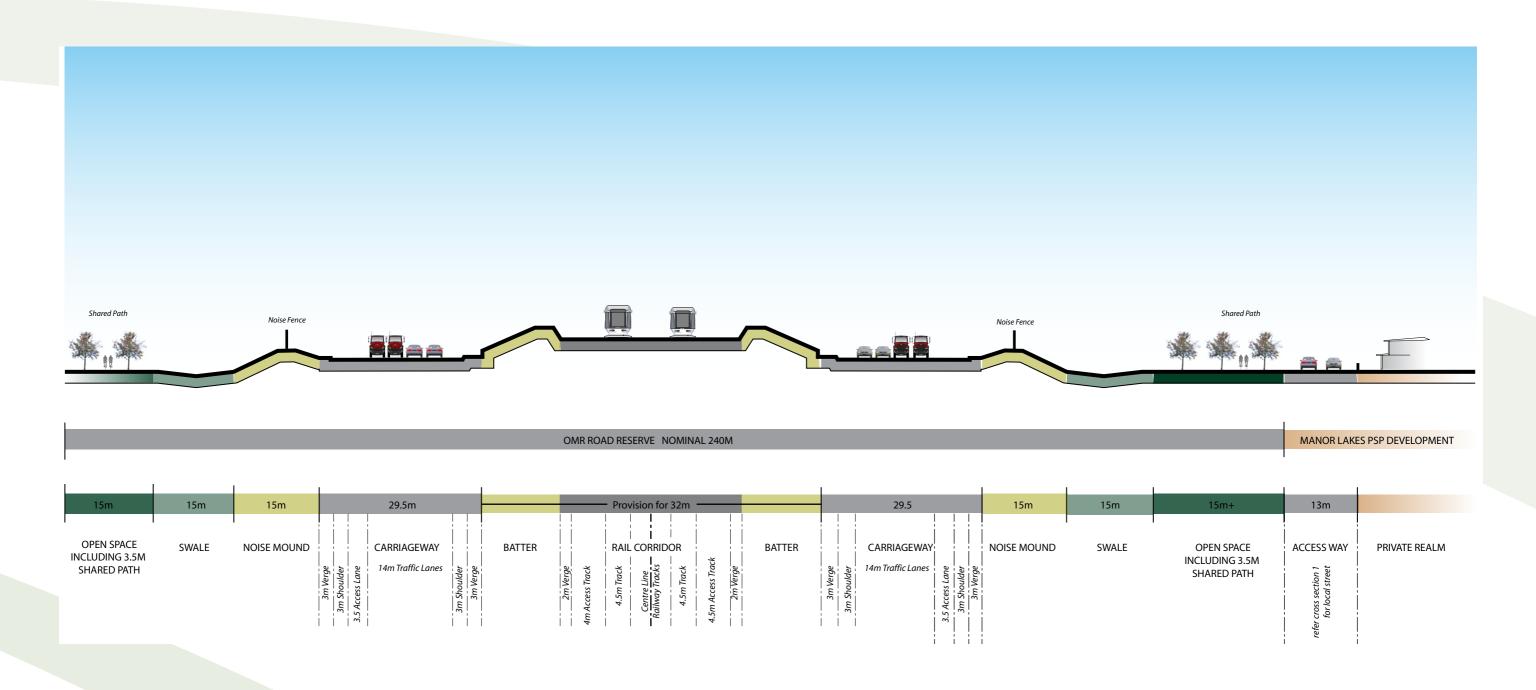








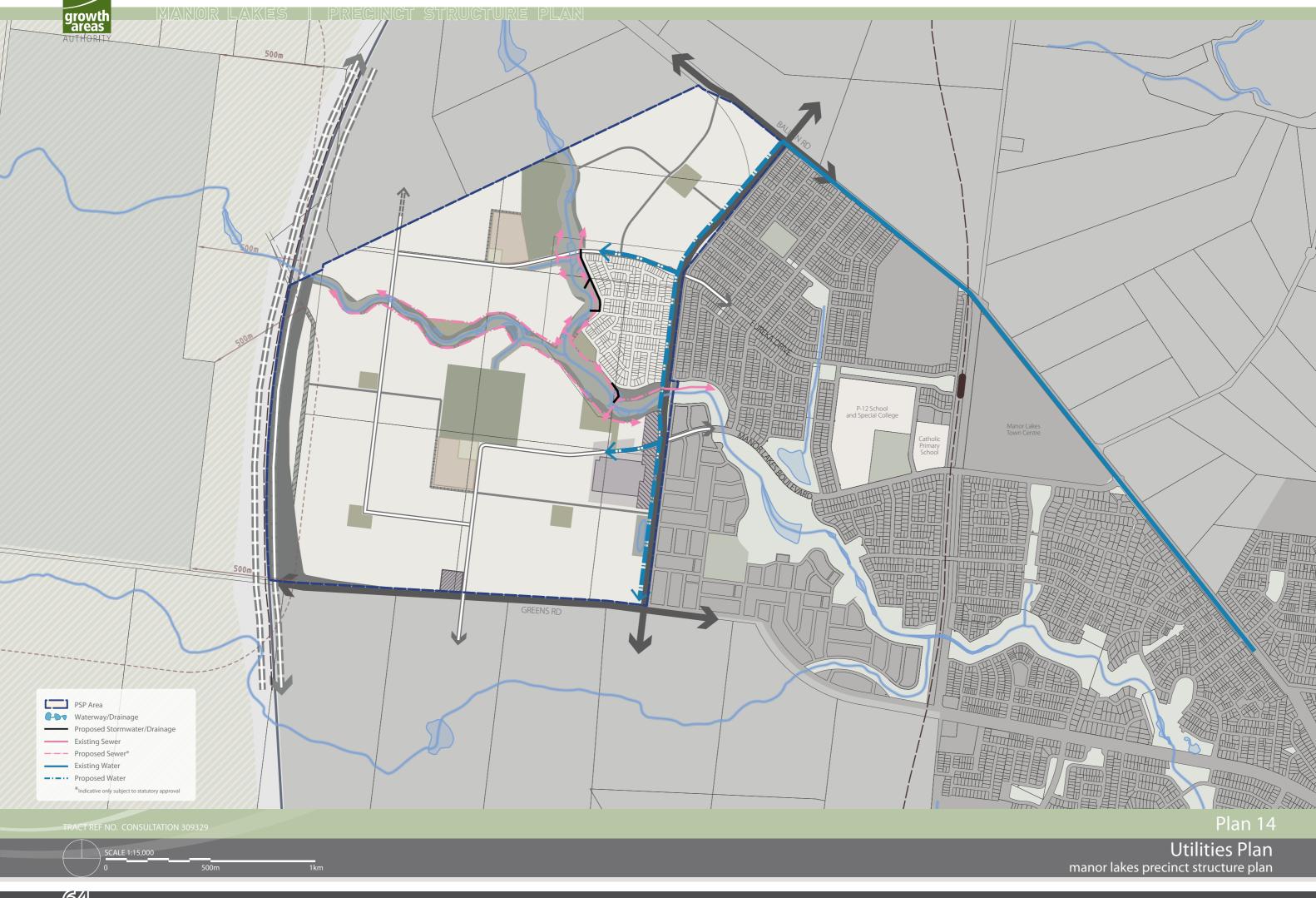




^{*} Footpaths to be offset 50mm from property boundary.

Cross Section 13

Outer Metropolitan Ring Road with rail reserve (240m+) manor lakes precinct structure plan





4.7 UTILITIES AND ENERGY

4.7.1 UTILITIES AND STAGING OBJECTIVES

The utilities and staging objectives are:

To provide all developed lots, to the satisfaction of the relevant authority, with a potable water service, reticulated recycled water, electricity, a reticulated sewerage service, drainage, gas and telecommunications.

To stage development to provide for timely provision of land for open space and key road, cycle path and footpath connections including those needed to facilitate the delivery of public transport.

4.7.2 IMPLEMENTATION

The objectives for utilities are met by implementation of all the following:

- » Meeting requirements of the relevant service authority/provider.
- » Planning and design guidelines set out in 4.7.3.

4.7.3 PLANNING AND DESIGN GUIDELINES

Electricity

The following planning and design guidelines must be met:

- All new electricity supply infrastructure must not be provided on land set aside for open space unless to the satisfaction of the responsible authority.
- All new electricity supply infrastructure must be provided underground (excluding substations).
- New substations must be identified at the subdivision design response stage to ensure effective integration with the surrounding neighbourhood and to minimise amenity impacts.
- The design of subdivision electricity infrastructure must consider the practicality of removing existing above ground electricity lines in the local and arterial road network both within and abutting the subdivision and re-routing lines underground through the subdivision.

Telecommunications

The following planning and design guidelines must be met:

 All dwellings and businesses must have broadband access to the internet.

The following planning and design guidelines should be met:

• Developers should allow flexibility for future technology such as fibre optic cabling.

Development staging

Generally, staging will be determined by the development program of developers within the precinct and the availability of infrastructure services. Within this context, the following planning and design guidelines must be met:

• Access to each new lot must be provided via a sealed road.

The following planning and design guidelines should be met:

- Development staging should not create circumstances in which residents will be unreasonably isolated from commercial and community facilities or public transport for extended periods.
- Development staging should be integrated with adjoining developments, including the timely provision of connecting streets and walking / cycling paths.

Coordination of utilities and services

The following planning and design guidelines should be met:

 Where appropriate the installation of underground utilities and services should be coordinated to maximise the use of common trenching.

Table 10: Infrastructure and services required within the precinct to support the development of the precinct

Table 10	inirastructure	e and services	required within the precinct to s	upport the development of the precinct				
ltem Number	Project Group	Project Category	Title	Project Description	Lead Agency	Timing: S=2011-15 M=2015-20 L=2020+	Indicative Costs (\$2011)	Included in Manor Lakes Development Contributions Plan
1	Transport	Road	Ballan Road / Ison Road Interim Intersection	Ballan Road / Ison Road Intersection. Construction of an interim signalised intersection at the intersection of Ballan Road and Ison Road.	Development Propenents / Council	S	5,110,000	Yes
2	Transport	Road	Ballan Road / Ison Road Ultimate Intersection	Ballan Road / Ison Road Intersection. Construction of an ultimate signalised intersection at the intersection of Ballan Road and Ison Road.	VicRoads	L	Undetermined	No
3	Transport	Road	Ison Road Land Acquisition and First Carriageway	Ison Road Land and Construction. Acquisition of ultimate road reserve and construction of first carriageway of Ison Road between Ballan Road and Greens Road (excludes signalised intersection construction).	Development Proponent / Council	S-M	7,394,000	Yes
4	Transport	Road	Ison Road Crossing of Lollypop Creek	Ison Road Creek Crossing. Construction of Ison Road crossing of Lollypop Creek.	Development Proponent / Council	S-M	2,960,000	Yes
5	Transport	Road	Ison Road Duplication and Triplication	Construction of second and third carriageway of Ison Road.	VicRoads	L	Undetermined	No
6	Transport	Road	Ison Road / Eureka Drive Interim Intersection	Ison Road / Eureka Drive Intersection. Construction of an interim signalised intersection at the intersection of Ison Road and Eureka Drive.	Development Proponent / Council	S	3,980,000	Yes
7	Transport	Road	Ison Road / Eureka Drive Ultimate Intersection	Ison Road / Eureka Drive Intersection. Construction of the ultimate signalised intersection at the intersection of Ison Road and Eureka Drive.	VicRoads	L	Undetermined	No
8	Transport	Road	Ison Road / Manor Lakes Boulevard Interim Intersection	Ison Road / Manor Lakes Boulevard Intersection. Construction of an interim signalised intersection at the intersection of Ison Road and Manor Lakes Boulevard.	Development Proponent / Council	S-M	3,660,000	Yes
9	Transport	Road	Ison Road / Manor Lakes Boulevard Ultimate Intersection	Ison Road / Manor Lakes Boulevard Intersection. Construction of ultimate signalised intersection at the intersection of Ison Road and Manor Lakes Boulevard.	VicRoads	L	Undetermined	No
10	Transport	Road	Ison Road / Greens Road Interim Intersection	Ison Road / Greens Road Intersection. Construction of an interim signalised intersection at the intersection of Ison Road and Greens Road.	Development Proponent / Council	S-M	5,360,000	Yes
11	Transport	Road	Ison Road / Greens Road Ultimate Intersection	Is on Road/GreensRoadIntersection. ConstructionofultimatesignalisedintersectionattheintersectionofIs onRoadandGreensRoad.	VicRoads	L	Undetermined	No
12	Transport	Road	Initial Construction of Greens Road	Greens Road Construction. Construction of first carriageway of Greens Road between Ison Road and the western connector street.	Council	S-M	1,030,000	Yes
13	Transport	Road	Greens Road / Western Connector Street Intersection	Construction of an interim roundabout at the intersection of Greens Road and the western connector street.	Council	L	1,180,000	Yes
14	Transport	Road	Ultimate Construction of Greens Road	Construction of ultimate carriageways of Greens Road.	VicRoads	L	Undetermined	Part
15	Transport	Road	Left in-left out intersections to Ballan Road, Ison Road and Greens Road	Construction of left in - left out intersections for development access onto existing and future arterial roads.	Development Proponent / Council	S-L	Undetermined	No
16	Transport	Cycle	Shared Trails	Construction of shared trails throughout the Manor Lakes PSP generally as shown on Plan 13: Walking and Trails Plan.	Development Proponent	S-M	Undetermined	No
17	Transport	Cycle	Pedestrian Footbridges Accross Lollypop Creek	Construction of three pedestrian crossings of Lollypop Creek generally as shown on Plan 13: Walking and Trails Plan.	Development Proponent	S-M	Undetermined	No
18	Transport	Road / Cycle	Vehicular and Cycle Crossings of Lollypop Creek	Construction of connector street crossings of Lollypop Creek generally as shown on Plan 11: Road Network Plan.	Development Proponent	S-M	Undetermined	No
19	Public Transport	Bus	Manor Lakes Bus Services	Progressive extension of local bus services to service the precinct.	Department of Transport	S-L	Undetermined	No
20	Public Transport	Bus	Bus stops	Provision of bus stops to be delivered with local street system as part of subdivision construction approvals.	Development Proponent / Department of Transport	S-L	Undetermined	No
21	Education	School	Manor Lakes North West Primary School	Provision of new primary school.	DEECD	S - M	8,000,000	No
22	Education	School	Manor Lakes South West Primary School	Provision of new primary school.	DEECD	M - L	8,000,000	No
23	Open Space	Active	Land for Northern Recreation Reserve	North Western Recreation Reserve establishment. Land acquisition for the Northern Recreation Reserve.	Manor Lakes Developer	S-M	4,800,000	No
24	Open Space	Active	Construction of Northern Recreation Reserve	Construction of sports facilities at the Northern Recreation Reserve.	Manor Lakes Developer or Council	M-L	6,193,749	Yes
25	Open Space	Active	Land for Southern Recreation Reserve	Southern Recreation Reserve establishment. Land acquisition for the Southern Recreation Reserve.	Manor Lakes Developer	S-M	7,800,000	No
26	Open Space	Active	Construction of Southern Recreation Reserve	Construction of sports facilities at the Northern Recreation Reserve.	Manor Lakes Developer or Council	M-L	11,646,578	Part
27	Open Space	Passive	Lollypop Creek Parkland	Earthworks, drainage works, landscape construction, trail development and passive park development works.	Development Proponent	S-L	Undetermined	No
28	Open Space	Passive	Construction of Local Passive Parks	Earthworks, drainage works, landscape construction, trail development and passive park development works.	Development Proponent	S-M	Undetermined	No
29	Community Services	Community Centre	Land for Community Centres	Manor Lakes Community Centres. Acquisition of land for future community centre establishment.	Manor Lakes Developer / Council	S-M	720,000	Yes
30	Community Services	Community Centre	Construction of Community Centres	Manor Lakes West Community Centres. Construction of future community centres.	Manor Lakes Developer / Council	S-M	7,749,847	No



5.0 PRECINCT INFRASTRUCTURE PLAN

5.1 INTRODUCTION

This Precinct Infrastructure Plan sets out infrastructure and services required to meet the needs of development of the precinct. The infrastructure and services are to be provided through a number of mechanisms including:

- Subdivision construction works by developers.
- Section 173 Agreements
- Conditions of permits
- Development contributions (community infrastructure levy and development infrastructure levy).
- Utility service provider requirements.
- Capital works projects by Council, State government agencies and non-Government organisations.

5.1.1 SUBDIVISION CONSTRUCTION WORKS BY DEVELOPERS

As part of subdivision construction works, new development must meet the cost of delivering the following infrastructure:

- Connector streets and local streets, including culverts.
- Local bus stop infrastructure.
- Landscaping of all existing and future roads and local streets.
- Intersection works and traffic management measures along arterial roads, connector streets and local streets.
- Council approved fencing and landscaping (where required) along arterial roads
- Local pedestrian and bicycle paths along arterial roads, connector and local streets and within local parks.
- Basic improvements to local parks and passive open space including procurement of biodiversity offsets, earthworks, grassing, tree planting, local playgrounds and shared paths and footpaths, basic furniture and structures (i.e. park shelter).
- Local drainage systems.
- Infrastructure as required by utility services providers including water, sewerage, drainage (except where the item is funded through a Drainage Scheme), electricity, gas, and telecommunications.

Development Contributions Plan

The Manor Lakes Development Contributions Plan has been prepared in conjunction with this PSP. The Manor Lakes DCP is an incorporated document of the Wyndham Planning Scheme.

5.2 INFRASTRUCTURE AND SERVICES REQUIRED TO SUPPORT DEVELOPMENT OF THE PRECINCT

Table 10 sets out the list of infrastructure and services required within the precinct to support its development, including details of:

- · Infrastructure Group and Category.
- Project Title and Description.
- Lead Agency. (The agency responsible for the coordination and approval of the project. Other agencies and / or developers may have an involvement in the project).
- Timing and Indicative Capital Cost (March \$2011).

Table 11 sets out the list of infrastructure and services required outside the precinct to support its development, including details of:

- Infrastructure Group and Category.
- Project Title and Description.
- Lead Agency (The agency responsible for the coordination and approval of the project. Other agencies and / or developers may have an involvement in the project).

5.3 PROJECT CO-ORDINATION

Where practical and compatible, infrastructure projects should be grouped and delivered in a coordinated manner.

Examples of the projects that could be grouped for coordinated delivery include:

- The separate clusters of primary schools, community centre and recreation reserve.
- Construction of Ison Road in the first stage of its upgrade from the north to Eureka Drive, including construction of a signalised intersection at Ballan Road.

5.4 DELIVERY AND MONITORING

The Victorian Government and Wyndham City Council will jointly monitor the implementation of the Precinct Infrastructure Plan.

Table 11: Infrastructure and services located outside the precinct structure plan required to support the development of the precinct

Item No.	Project Group	Project Category	Title	Project Description	Lead Agency
	Transport				
1	Transport	Road	Ballan Road Upgrade	Construction of duplicated carriageway of Ballan Road between Armstrong Road and the OMR.	Vic Roads
2	Transport	Road	Armstrong Road Upgrade, Stage 1	Land acquisition and construction of first section of Armstrong Road to service the Regional Rail Project.	Director of Public Transport
3	Transport	Road	Armstrong Road Upgrade, Stage 2	Construction of remainder of Armstrong Road between Ballan Road and Greens Road.	Council
4	Transport	Road	Greens Road Upgrade	Land acquisition and construction of duplicated carriageway of Greens Road between Ison Road and the OMR.	Vic Roads / Council
5	Transport	Road	Outer Metropolitan Ring (OMR) Freeway and Greens Arterial Interchange	Land acquisition and construction of OMR and Greens Road Freeway Interchange.	Vic Roads
6	Transport	Road	OMR, Stage 1	Land acquisition for OMR.	VicRoads
7	Transport	Road	OMR, Stage 2+	Development of regional transport corridor (road and rail)	VicRoads
8	Transport	Road	Armstrong Road, Werribee River Bridge Crossing	Construction.	Council
9	Transport	Rail	Regional Rail Line	Delivery of Regional Rail Services including construction of rail line and new rail station at Manor Lakes.	Director of Public Transport
10	Transport	Rail	Metropolitan Rail Services extension	Construction of metropolitan rail services extension to service Manor Lakes.	Director of Public Transport
11	Transport	Road	Westbrook/ Ison Road bridge over Melbourne-Geelong Railway line	Construction of a bridges, Bridge over Melbourne-Geelong Railway line.	VicRoads
12	Transport	Road	Westbrook/ Ison Road bridge over Regional Rail Link	Construction of a bridges, Bridge over Regional Rail Link.	VicRoads
13	Transport	Road	Westbrook/ Ison Road bridge over Werribee River	Construction of a bridges, Bridge over Werribee River.	VicRoads
14	Transport	Shared Path	Werribee River Crossing / Shared Path	Construction of Werribee River corssing and shared path adjacent to Regional Rail Link.	Council / Director of Public Transport

6.0 OTHER INFORMATION

6.1 ACRONYMS

AHD	Australian Height Datum
AFL	Australian Football League
CAD	Central Activities District
CBD	Central Business District
СНМР	Cultural Heritage Management Plan
CIL	Community Infrastructure Levy
CPTED	Crime Prevention Through Environmental Design
DCP	Development Contributions Plan
DEECD	Department of Education & Early Childhood Development
DDA	Disability Discrimination Act
DIL	Development Infrastructure Levy
DPCD	Department of Planning & Community Development
DoT	Department of Transport
DSE	Department of Sustainability & Environment
EVC	Ecological Vegetation Class
GAA	Growth Areas Authority
GDA	Gross Developable Area
Ha	Hectare
НО	Heritage Overlay
LTC	Local Town Centre
MAC	Major Activity Centre
МСН	Maternal & Child Health
MSS	Municipal Strategic Statement
NAC	Neighbourhood Activity Centre
NDA	Net Developable Area
NDHa	Net Developable Hectare

or



6.2 GLOSSARY

Active Open Space

Land set aside for the specific purpose of formal outdoor sports by the community.

Activity Centre

Provide the focus for services, commercial and retail based employment and social interaction. They are where people shop, work, meet, relax and live. They are well-served by public transport, they range in size and intensity of use. In the growth areas, these are referred to as principal activity centres, major activity centres, neighbourhood activity centres and local centres. For further information refer to Melbourne 2030.

Affordable Housing

Well-located housing, appropriate to the needs of a given household, where the cost (whether mortgage repayment or rent) is no more than 30 per cent of that household's income.

Arterial Road

A higher order road providing for moderate to high volumes at relatively high speeds typically used for inter-suburban journeys and linking to freeways, and identified under the Road Management Act 2004. All arterials are managed by the State Government.

Build For Life

A program sponsored by the Building Commission of Victoria that encourages the design of dwellings that can be adapted to changing needs in life from raising small children to using crutches while recovering from injury, living with a disability or welcoming ageing parents, Build for life features include design elements such as wider, step less entries and hallways; more spacious bathrooms with modern, easy access showers; and clever use of space (see www.buildforlife.com.au)

Co-location

Adjoining land uses to enable complementary programs, activities and services and shared use of resources and facilities. For example, the colocation of schools and active open space.

Community Facilities

Infrastructure provided by government or non-government organisations for accommodating a range of community support services, programs and activities. This includes facilities for education and learning (e.g. government and non-government schools,

universities, adult learning centres); early years (e.g. preschool, maternal and child health, childcare); health and community services (e.g. hospitals, aged care, doctors, dentists, family and youth services, specialist health services); community (e.g. civic centres, libraries, neighbourhood houses); arts and culture (e.g. galleries, museums, performance space); sport, recreation and leisure (e.g. swimming pools); justice (e.g. law courts); voluntary and faith (e.g. places of worship) and emergency services (e.g. police, fire and ambulance stations).

Connector Street

A lower order street providing for low to moderate volumes and moderate speeds linking local streets to the arterial network. Managed by the relevant local council. (See Table C1 in clause 56)

Conventional Density Housing

Housing with an average density of 10 to 15 dwellings per net developable hectare.

Development Contributions Plan

Document that sets out the contributions expected from each individual landowner to fund infrastructure and services. Refer to Part 3B of the Planning and Environment Act 1987.

Encumbered Land

Land that is constrained for development purposes. Includes easements for power/transmission lines, sewers, gas, waterways/drainage; retarding basins/wetlands; landfill; conservation and heritage areas. This land may be used for a range of activities (e.g. walking trails). This is not provided as a credit against public open space requirements.

Freeway

A high speed and high volume road with the highest level of access control and typically used for longer distance journeys across the metropolitan area and country Victoria. All freeways are managed by VicRoads.

Frontage

The road alignment at the front of a lot. If a lot abuts two or more roads, the one to which the building, or proposed building faces.

Growth Area

Areas on the fringe of metropolitan Melbourne around major regional transport corridors that are designated for large-scale change, over many years from rural to urban use. Melbourne has five growth areas

called Casey-Cardinia; Wyndham; Melton-Caroline Springs; Whittlesea and Wyndham.

Growth Area Framework Plan

Government document that sets long-term strategic planning direction to guide the creation of a more sustainable community in the growth areas.

High Density Housing

Housing with an average density of more than 30 dwellings per net developable hectare.

Housing Density (Net)

The number of houses divided by net developable area

Linear Open Space Network

Corridors of open space, mainly along waterways that link together forming a network.

Land Budget Table

A table setting out the total precinct area, net developable area and constituent land uses proposed within the precinct.

Local Centre

An activity centre smaller than a local town centre (neighbourhood activity centre) with a catchment radius of about 400 metres and may include a small supermarket or convenience store of 500 square metres to 1,500 square metres.

Lot

A part (consisting of one or more pieces) of any land (except a road, a reserve, or common property) shown on a plan, which can be disposed of separately and includes a unit or accessory unit on a registered plan of strata subdivision and a lot or accessory lot on a registered cluster plan.

Lower Density Housing

Housing with an average density of less than 10 dwellings per hectare.

Local Town Centre

An alternative term developed by the GAA to describe a 'neighbourhood activity centre' as defined in Melbourne 2030. The term 'local town centre' is favoured by the GAA as it encapsulates expresses the Victorian Government's vision for these important sites.

Major Activity Centre



Activity centres that have similar characteristics to Principal Activity Centres but serve smaller catchment areas. For further information refer to Melbourne 2030.

Major Employment Area

Areas identified on the Growth Area Framework Plan for economic and employment growth.

Medium Density Housing

Housing with an average density of 16 to 30 dwellings per net developable hectare.

Native Vegetation

Plants that are indigenous to Victoria, including trees, shrubs, herbs, and grasses.

Native Vegetation Precinct Plan

A plan relating to native vegetation within a defined area that forms part of the precinct structure plan. Native vegetation precinct plans are incorporated into local planning schemes and listed in the schedule to Clause 52.16.

Neighbourhood Activity Centre

Activity centres that are an important community focal point and have a mix of uses to meet local needs. Accessible to a viable user population by walking, cycling and by local bus services and public transport links to one or more principal or major activity centres. For further information refer to Melbourne 2030.

Net Developable Area

Total amount of land within the precinct that is made available for development of housing and employment buildings, including lots, local and connector streets. Total precinct area minus community facilities, schools and educational facilities and open space, arterial roads and encumbered land. Small local parks defined at subdivision stage are included in net developable area. Net Developable Area may be expressed in terms of hectare units (i.e. Net Developable Hectare ("NDHa")).

Net Residential Area

As per Net Developable Area but excludes neighbourhood activity centres, non-government schools and other existing or permitted non-residential land uses (e.g. golf course sites). Net Residential Area may be expressed in terms of hectare units (i.e. Net Residential Hectare ("NRHa"))

Passive Open Space

Open space that is set aside for parks, gardens, linear corridors, conservation bushlands, nature reserves, public squares and community gardens that are made available for passive recreation, play and unstructured physical activity including walking, cycling, hiking, revitalisation, contemplation and enjoying nature.

Precinct Infrastructure Plan

Section within the precinct structure plan that defines the priority regional and local infrastructure requirements for future planning and investment by council and government agencies.

Precinct Structure Plan

A statutory document that describes how a precinct or series of sites within a growth area will be developed over time. A precinct structure plan sets out the broad environmental, social and economic parameters for the use and development of land within the precinct.

Principal Activity Centre

Activity centres that accommodate a mix of activities that generate higher numbers of trips, including business, retail, services and entertainment. Generally well served by multiple public transport routes and on the Principal Public Transport Network or capable of being linked to that network. Has a very large catchment covering several suburbs and attract activities that meet metropolitan needs. For further information refer to Melbourne 2030.

Principal Public Transport Network

A high-quality public transport network that connects Principal and Major Activity Centres, and comprises the existing radial fixed-rail network, extensions to this radial network and new cross-town bus routes.

Public Open Space

Land that is set aside in the precinct structure plan for public recreation or public resort; or as parklands; or for similar purposes. Incorporates active and passive open space.

Public Transport Interchange

Places where people can access or change between multiple public transport routes. For example, between train and bus or a multi-route bus station at a major activity centre

Shared or Joint Use

When councils, schools and community service organisations come together to plan, build and in some cases jointly manage a single facility to be used by multiple service providers. E.g. Using a school as a

facility for wider community utilisation.

Social Housing

Non-profit housing owned and managed for the primary purpose of meeting social objectives such as affordable rents, responsible management, security of tenure and good location in relation to employment services. The term encompasses public housing and includes housing owned or managed by the community.

Social Infrastructure

Community facilities plus public open space.

Urban Growth Boundary

A statutory planning management tool used to set clear limits to metropolitan Melbourne's urban development.

Urban Growth Zone

Statutory zone that applies to land that has been identified for future urban development. The UGZ has four purposes: (1) to manage transition of non-urban land into urban land; (2) to encourage development of well-planned and well-serviced new urban communities in accordance with an overall plan; (3) to reduce the number of development approvals needed in areas where an agreed plan is in place; and (4) to safeguard non-urban land from use and development that could prejudice its future urban development.

Water Sensitive Urban Design

A sustainable water management approach that aims to provide water-quality treatment, flood management to reduce the pollution carried to our waterways and more sustainable urban landscapes. Key principles include minimising water resistant areas; recharging natural groundwater aquifers (where appropriate) by increasing the amount of rain absorbed into the ground; encouraging onsite reuse of rain; encouraging onsite treatment to improve water quality and remove pollution, and using temporary rainfall storage (retarding basins/ wetlands) to reduce the load on drains and improve landscape viability.

Wathaurang

Traditional land owners. Also known as the Wadda Wurrung people.



6.3 SUPPORTING INFORMATION

The following documents may assist in understanding the background to the vision, objectives and other requirements of this Precinct Structure Plan.

- A Plan for Melbourne's Growth Areas, Department of Sustainability and Environment, 2005.
- A Strategic Framework for Creating Liveable New Communities, Growth Areas Authority, March 2008.
- Activity Centre Design Guidelines, Department of Sustainability and Environment, January 2005.
- Central Region Sustainable Water Strategy, Department of Sustainability and Environment, 2004.
- Design for Trucks, Buses and Emergency Vehicles on Local Roads, VicRoads, 1998.
- Development Contributions Guidelines, Department of Planning and Community Development, March 2007.
- Flora and Fauna Guarantee Strategy: Victoria's Biodiversity,
 Department of Natural Resources and Environment, 1997.
- Guidelines for Conducting Historical Archaeological Surveys, 2008, Heritage Council of Victoria and Heritage Victoria.
- Guidelines for Higher Density Residential Development, Department of Sustainability and Environment, October 2004.
- Healthy by Design: A planners' guide to environments for active living,
 National Heart Foundation of Australia, 2004.
- Linking Melbourne: Metropolitan Transport Plan, State of Victoria, November 2004.
- Linking People and Spaces: A Strategy for Melbourne's Open Space Network, Parks Victoria, 2002.
- Meeting Our Transport Challenges, State of Victoria, May 2006.
- Melbourne 2030: Planning for Sustainable Growth, State of Victoria, October 2002.
- *Our Environment, Our Future,* Department of Sustainability and Environment, 2006.
- Port Phillip and Westernport Regional Catchment Strategy, Port Phillip Regional Catchment and Land Protection Board, 1997.
- Planning for all of Melbourne: The Victorian Government Response to the Melbourne 2030 Audit, State of Victoria, 2008.
- Planning for Community Infrastructure in Growth Areas, Australian Social and Recreation Research Pty Ltd for Growth Area Councils, April 2008.

- Public Transport Guidelines for Land Use Development, Department of Transport, 2008.
- Safer Design Guidelines for Victoria, Department of Sustainability and Environment, June 2005.
- Schools as Community Facilities, Department of Education and Training, November 2005.
- Shared Facility Partnership: A Guide to Good Governance for Schools and the Community, Department of Education and Early Childhood Development, December 2007.
- The Victorian Greenhouse Strategy, Department of Natural Resources and Environment, 2002.
- Urban Development Program, Department of Planning and Community Development, annual.
- Urban Stormwater Best Practice Environmental Management Guidelines, CSIRO, 1999.
- VicRoads Access Management Policies Version 1.02, VicRoads, May 2006
- Victorian Heritage Strategy, Heritage Victoria, 2000.
- Wyndham City Council Guidelines for the Planning Design and Construction of Open Space.

The following technical reports are specific to the Manor Lakes Precinct Structure Plan:

- Arboricultural Assessment Manor Lakes Wyndhamvale, Treelogic Pty Ltd, May 2011.
- Biodiversity Report, Biosis Research, April 2011.
- Growth Areas Authority Biodiversity Assessment Report: Manor Lakes PSP 41, Biosis Research Pty Ltd, August 2011.
- Ison Road Functional Layout, Cardno Grogan Richards Pty Ltd.
- Lollypop Creek Development Services Scheme, Melbourne Water, May 2007.
- Manor Lakes Estate Overall drainage Strategy Planning Report –
 Dennis Price & Miller Pty Ltd May 2011.
- Manor Lakes Future Urban Area Traffic Report, Ashton Traffic, December 2009.
- Manor Lakes PSP Traffic and Transport Assessment, Cardno Grogan Richards Pty Ltd, June 2011.
- Manor Lakes Servicing Report, Dennis Price & Miller Pty Ltd, July 2011.
- *Manor Lakes Wyndhamvale Structure Plan*, Cultural Heritage Management Plan 11108, April 2008.
- Manor Lakes Wyndhamvale Structure Plan: Historic Cultural Heritage Assessment No. 3677, Tardis Enterprises Pty Ltd, May 2011.

- Manor West Retail Assessment, ebb Consultants Pty Ltd, June 2011.
- Native Vegetation and Net Gain Assessment for Area D, Brett Lane and Associates Pty Ltd, March 2006.
- Native vegetation and net gain analysis for Area E, Brett Lane and Associates, March 2011.
- Phase 1 and Phase 2 Environmental Site Assessment Manor Lakes, GHD Pty Ltd, January 2007.



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