

# **Contents**

1.0	INTRODUCTION	5
	1.1 How to read this document	7
	1.2 Land to which the Precinct Structure Plan applies	7
	1.3 Infrastructure Contributions Plan	7
	1.4 Background Information	7
2.0	OUTCOMES	9
	2.1 Vision	9
	2.2 Objectives	10
	2.3 Land budget AMENDED BY C242hume	15
3.0	IMPLEMENTATION	17
	3.1 Image, character, heritage & housing	17
	3.1.1 Image & character	17
	3.1.2 Heritage	17
	3.1.3 Housing	19
	3.1.4 Sensitive Residential Areas	21
	3.2 Buffers & Future Investigation Area	25
	3.2.1 Buffers	25
	3.2.2 Landfill Buffer	25
	3.2.3 Organic Waste Facility Buffer	25
	3.2.4 Quarry Buffer	25
	3.2.5 Future Investigation Area	26
	3.3 Town Centres & Employment	27
	3.3.1 Town Centres	27
	3.3.2 Redstone Hill Major Town Centre	27
	3.3.3 Harpers Creek Local Town Centre	27
	3.3.4 Local Convenience Centres	27
	3.3.5 Town Centre Transport, Access & Connectivity	32
	3.3.6 Employment Areas	34

3.4	Open S	pace, Community Facilities, Education and Biodiversity	41
	3.4.1	Open Space	41
	3.4.2	Community Facilities & Education	42
	3.4.3	Biodiversity and Threatened Species	45
3.5	Transpo	ort & Movement	51
	3.5.1	Street Network	51
	3.5.2	Walking & Cycling	53
	3.5.3	Public Transport	54
3.6	Integrat	ed Water Management & Utilities	57
	3.6.1	Integrated Water Management	57
	3.6.2	Utilities	59
3.7	Precinc	t Infrastructure Plan & Staging	61
	3.7.1	Precinct Infrastructure Plan	61
	3.7.2	Subdivision Works	62
	3.7.3	Development Staging	63
ΑP	PEND	CES	
4.1	Append	ix A: Local Town Centre – Design Guidelines	68
4.2	Append	ix B: Street Cross Sections	74
4.3	Append	ix C: Parcel Specific Land Use Budget AMENDED BY C242hume	104
4.4	Append	ix D: Local Convenience Centre Guidelines	108
4.5	Append	ix E: Service Placement Guidelines	111

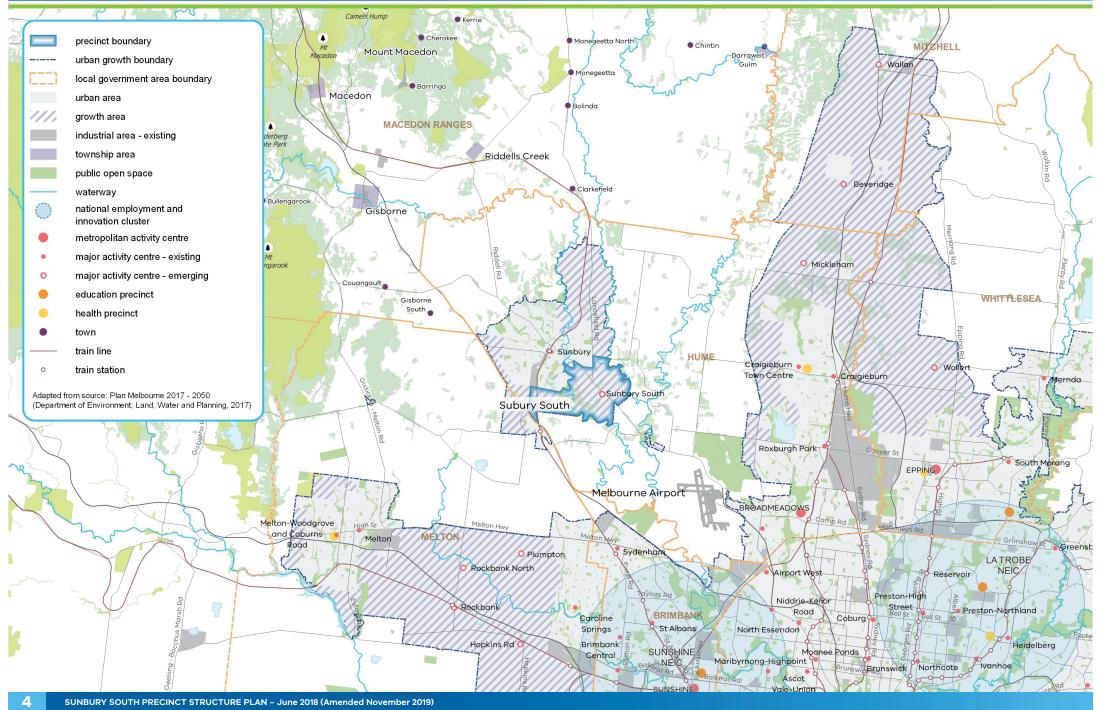
4.0

# **PLANS**

Plan 1	Regional Context	
Plan 2	Precinct Features	(
Plan 3	Future Urban Structure AMENDED BY C242hume	
Plan 4	Land Use Budget AMENDED BY C242hume	1
Plan 5	Image, Character, Housing and Heritage AMENDED BY C242hume	1
Plan 6	Interfaces and Slope AMENDED BY C242hume	1
Plan 7	Open Space AMENDED BY C242hume	3
Plan 8	Native Vegetation Removal and Retention	4
Plan 9	Street Network AMENDED BY C242hume	5
Plan 10	Public Transport and Path Network AMENDED BY C242hume	5
Plan 11	Integrated Water management AMENDED BY C242hume	5
Plan 12	Utilities AMENDED BY C242hume	5
Plan 13	Precinct Infrastructure Plan AMENDED BY C242hume	6
TABLE	ES .	
Table 1	Summary Land Use Budget AMENDED BY C242hume	1:
Table 2	Housing Type by lot size	2
Table 3	Town Centre Hierarchy – External to Sunbury South Precinct	2
Table 4	Sunbury South Town Centre Hierarchy	2
Table 5	Anticipated Employment Creation in the Sunbury South Precinct	3
Table 6	Sports Reserves and Open Space Delivery Guide	3
Table 7	Streets and Slope	5
Table 8	Stormwater Assets	6
Table 9	Precinct Infrastructure Plan AMENDED BY C242hume	6

# **FIGURES**

Figure 1	Gellies Road Residential Concept Plan	22
Figure 2	Harker Street Residential Concept Plan	23
Figure 3	Harpers Creek Residential Concept Plan AMENDED BY C242hume	24
Figure 4	Redstone Hill Major Town Centre Organising Elements	30
Figure 5	Redstone Hill Major Town Centre Concept Plan	31
Figure 6	Harpers Creek Local Town Centre Concept Plan	33
Figure 7	Sunbury Road Employment Area Concept Plan	36
Figure 8	Vineyard Road Employment Area Concept Plan	37
Figure 9	Redstone Hill Hilltop Reserve Concept Plan	43
Figure 10	Conservation Area 21 (Eastern) - Conservation Area Concept Plan	46
Figure 11	Conservation Area 21 (Western A)  - Conservation Area Concept Plan AMENDED BY C242hume	47
Figure 12	2 Conservation Area 21 (Western B)  — Conservation Area Concept Plan	49
Figure 13	Sunbury South Train Station Concept Plan	55



# 1.0 INTRODUCTION

The Sunbury South Precinct Structure Plan ("the PSP") has been prepared by the Victorian Planning Authority (VPA) in consultation with Hume City Council and with the assistance of Government agencies, service authorities and major stakeholders.

The PSP is a long-term plan for urban development. It describes how the land is expected to be developed, and how and where services are planned to support development.

The PSP guides proposed development within the Sunbury South precinct.

#### Generally, the PSP:

- Sets out plans to guide the delivery of quality urban environments in accordance with relevant Victorian Government guidelines, including the VPA Precinct Structure Planning Guidelines, The Victorian *Planning and Environment Act*, 1987 and the State Planning Policy Framework.
- Enables the transition of non-urban to urban land.
- Sets the vision for how land should be developed and the outcomes achieved.
- Outlines the projects required to ensure that future residents, visitors and workers within the area can be provided with timely access to services and transport necessary to support a quality, affordable lifestyle.
- Sets out objectives, guidelines and requirements for land use and development.
- Provides Government agencies, the Council, developers, investors and local communities with certainty about future development.
- Addresses the requirements of the 2013 Commonwealth Approval for Urban Development in the western, north-western and northern growth corridors under the Environment Protection and Biodiversity Conservation Act 1999.
- Acknowledges that development must also comply with other Acts and approvals where relevant e.g. in the case of Aboriginal cultural heritage, compliance with the Aboriginal Heritage Act 2006 is required.

#### The PSP is informed by:

- The State and Local Planning Policy Framework set out in the Hume Planning Scheme.
- The Sunbury-Diggers Rest Growth Corridor Plan, June 2012.
- Plan Melbourne, 2017-2050, 2017.
- The Biodiversity Conservation Strategy and applicable Sub-Regional Strategies for Melbourne's Growth Areas, June 2013.
- The VPA Precinct Structure Planning Guidelines, 2008.
- A series of background technical reports.
- The Sunbury HIGAP Spatial Strategy, July 2012.

The Sunbury South and Lancefield Road Background Report has been developed in parallel with the PSP to inform the future planning and development of the precinct.

#### 1.1 How to read this document

The Sunbury South Precinct Structure Plan guides land use and development as required by the Urban Growth Zone or any other provision of the planning scheme that references this precinct structure plan.

A planning application and planning permit must implement the outcomes of the precinct structure plan. The outcomes are expressed as the vision and objectives.

Each element of the precinct structure plan contains Requirements and Guidelines as relevant.

Requirements must be adhered to in developing the land. Where they are not demonstrated in a permit application, requirements will usually be included as a condition on a planning permit whether or not they take the same wording as in this precinct structure plan. A requirement may include or reference a plan, table or figure in the precinct structure plan.

**Guidelines** express how discretion will be exercised by the responsible authority in certain matters that require a planning permit. If the responsible authority is satisfied that an application for an alternative to a guideline implements the outcomes the responsible authority may consider the alternative. A guideline may include or reference a plan, table or figure in the precinct structure plan.

Meeting these Requirements and Guidelines will implement the outcomes of the precinct structure plan.

Not every aspect of the land's use and development is addressed in this structure plan and a responsible authority may manage development and issue permits as relevant under its general discretion, even where the use or development is not specifically shown in the PSP.

## 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 Hume Planning Scheme maps as Schedule 9 to the Urban Growth Zone. The PSP applies to approximately 1759 hectares of land generally bounded by Watsons Road and the Jacksons Creek to the south, Gellies Road and the Emu Creek to the north and north-east, the high-voltage transmission line easement to the east and Vineyard Road to the west. The precinct abuts a number of existing communities within the Sunbury township, including Goonawarra and Jacksons Hill. The Lancefield Road precinct is located to the north-east of the precinct, and the Sunbury West precinct to the west.

The precinct itself is bisected by the Jacksons Creek, which defines future neighbourhoods in the west and east of the precinct respectively.

#### 1.3 Infrastructure Contributions Plan

Development proponents within the Sunbury South precinct will be bound by the *Sunbury South and Lancefield Road Infrastructure Contributions Plan* (the ICP). The ICP will set out requirements for infrastructure funding across Sunbury South precinct.

The ICP will be a separate document incorporated in the *Hume Planning Scheme*.

# **1.4** Background Information

Detailed background information on the precinct is available, including the local and metropolitan context, history, biodiversity, heritage, landform and topography, land contamination, drainage, transport, economic and retail provision, and community infrastructure. This information is summarised in the *Sunbury South and Lancefield Road Precinct Background Report* and has informed the preparation of the PSP.

**Plan 3 - Future Urban Structure** 1:32,000 @ A4 Sunbury South Precinct Structure Plan (AMENDED BY C242hume) precinct boundary walkable catchment boundary residential town centre local convenience centre restricted retail/trade supplies Goonawarra Sunbury employment & commercial Centre industrial light industrial quarry/landfill/organic waste future government school potential non-government school community facilities credited open space conservation area landscape values landfill cells Jacksons Hill waterway/drainage reserve in conservation waterway/stormwater asset holden flora reserve non urban land (existing) organič waste facility KENTHILL CT LENNOX CT utilities easement public transport facilities utilities - water potential residential potential industrial OBE Redstone Hil potential residential (sloping) potential residential expansion area future investigation area \* heritage site (confirmed) heritage site (possible) primary arterial road connector - boulevard main street WATSONS RD connector road key local access steet RD bridge/ underpass CRINNION railway line and future station gas pipeline measurement length (164m) quarry buffer (500m) organic waste facility buffer (1.3Km)

SUNBURY SOUTH PRECINCT STRUCTURE PLAN - June 2018 (Amended November 2019)

landfill buffer (500m)

NOTE: For Open Space Detail refer Plan 07

# 2.0 OUTCOMES

#### 2.1 Vision

The Sunbury South precinct will facilitate:

- The creation of attractive 'boulevard' outcomes for Sunbury Road and Vineyard Road as not only key components of the movement network within the precinct, but as the two key gateways to the Sunbury Growth Area.
- Development that sensitively responds to, improves community access to, and protects the fragile twin creek valleys of Jacksons and Emu Creek, and their significant tributaries.
- Protection of the landscape, cultural heritage and biodiversity values of the Holden Flora Reserve, and support the emerging role of the Jacksons Creek Valley as a key regional open space destination.
- Establishment of a district open space destination at Redstone Hill comprising a range of recreation, community, and tourism functions that will attract visitors from across Sunbury and the wider area.
- Development of a broader network of open space along the Jacksons Creek valley providing a regional landscape and open space asset for Sunbury Township.
- A key sub-regional retail and services centre (Redstone Hill Major Town Centre) servicing future communities to the south and east of Sunbury, and complementing the primary role of the existing Sunbury Town Centre in servicing the growth area and surrounding region.
- Key regional employment opportunities for the broader Sunbury Growth Area, at the future Major Town Centre and two designated employment areas within the precinct.
- Reinforcement of the established arterial road network within Sunbury, and support
  of the logical extension of the local road network, including provision for a crossing
  of Jacksons Creek.
- Development that responds to the unique, undulating landforms of the precinct, including the creek corridors and the Redstone Hill volcanic cone. In particular housing design will respond to key viewlines, and sensitive planning for key landscape assets.
- Development that is sensitive to the highly valued cultural significance of the area, and in particular the Jacksons Creek corridor and adjacent culturally significant sites.

- Enhanced local mobility for existing communities, in particular the residents of the Jacksons Hill neighbourhood to the north-west of the precinct.
- A natural extension of the established Sunbury Township, preserving and reinforcing the township and heritage character of the settlement.
- Protection of important populations of Growling Grass Frog within conservation areas fronting the Jacksons and Emu Creeks.

The precinct will have strong transport connections to key destinations in the region and will be well linked to the rest of metropolitan Melbourne and north-western Victoria. The Calder Freeway and the Melbourne to Bendigo Rail Line provide particularly strong regional connections for the precinct. Major new infrastructure that will be easily accessed by the precinct, including the Outer Metropolitan Ring Road some 3km to the south, will enhance regional connections to northern and western Melbourne. Sunbury will continue to play an important regional services and employment role for peri-urban communities to the north-west of Melbourne, particularly in the southern part of Macedon Ranges Shire, and it is therefore critical that the expanded regional transport network continues to support this role.

The proposed southern link crossing of the Jacksons Creek provides for important local connections as well as a more robust local road network for the broader Sunbury growth area. Importantly, it will connect the core of the precinct to the east of the Jacksons Creek with the potential future Sunbury South railway station near Vineyard Road. It forms part of an ultimate Sunbury Ring Road network around the township. The southern link creek crossing is a key priority for early construction to provide additional regional road network capacity (although its relative priority for early delivery will need to be reviewed in the event of an early commitment to the construction of the Bulla Bypass).

The Jacksons Creek valley runs through the centre of the precinct, and provides a major regional landscape and open space asset for the broader Sunbury Growth Area, as well as providing high quality local amenity and a natural landscape relief from urban development. The Creek itself plays an important biodiversity function, for Growling Grass Frogs and other important and endangered species. In addition the proposed Redstone Hill hilltop park provides for a key regional open space destination, with commanding views across the region and back to central Melbourne. It provides an opportunity for a unique regional passive open space offer.

The local infrastructure needs of the new neighbourhoods within the precinct will be largely met within the precinct itself. Three key community hubs – one focused on the Jacksons Creek, one on the Major Town Centre, and one on a local centre in the west of the precinct (Harpers Creek), will each feature a range of community, educational and district recreational facilities to support their immediate catchment. Early development in the Harpers Creek area will be serviced by community infrastructure in the Jacksons Hill estate, while the broader precinct will have excellent access to the higher order services already on offer in the existing Sunbury Town Centre.

The precinct provides an important opportunity to improve the employment self-sufficiency of the Sunbury Growth Area. In addition to the future Redstone Hill Major Town Centre, two key employment precincts on Sunbury Road and Vineyard Road respectively are well placed to provide for growth of 'population driven' employment needs within Sunbury. Importantly, the two areas at key gateways to Sunbury Township, with excellent access to the regional arterial road network, provide a unique opportunity for regionally significant employment opportunities currently absent from Sunbury itself.

# 2.2 Objectives

The following objectives describe the desired outcomes of the precinct's development, and guide the implementation of the vision.

#### **OBJECTIVES**

Imaa	& el	Cha	racter

01	Create an attractive urban environment through the provision of well-designed and integrated housing, local services and businesses, well-designed roads, attractive open spaces and park networks.
02	Create a high-amenity landscape, maximising opportunities for landscaping in tree reserves along the arterial road network, key connector roads, and establish high quality gateways to the expanded Sunbury Township.
О3	Create subdivision layouts and built form that responds to the topographical constraints and the undulating nature of much the precinct including the key landscape features of the Jacksons Creek and Emu Creek corridors, and their significant tributaries, as well as Redstone Hill.
04	Encourage built form that demonstrates environmentally sustainable design, universal design and crime prevention through environmental design principles.
05	Promote greater housing choice through the delivery of a range of lots capable of accommodating a variety of dwelling typologies and densities
06	Ensure medium and high density development is prioritised within a walkable catchment of town centres, local and district open space, and public transport.
07	Minimise visual impact of development on sloping land forms from prominent view lines with site responsive subdivision design, including larger lots as appropriate.
80	Ensure that development responds to and celebrates local cultural and built heritage.
09	Achieve a diversity of streetscape and open space outcomes to enhance local distinctiveness and amenity.
010	Support the improvement of Sunbury Road as a major, high quality boulevard with a rural character which promotes a sense of arrival to Sunbury Township.

011	Deliver a precinct which is well-connected and integrated with adjacent established neighbourhoods, and the broader Sunbury Township.
012	Facilitate urban development that responds sympathetically to the unique, high landscape values of the precinct, protecting the natural landscape qualities of the Jacksons and Emu Creek corridor and their tributaries and providing a usable network of open space adjacent to the creeks and above the escarpment.
Sensitive	e Residential Areas
013	Ensure that new development responds sensitively to any adjacent established residential areas, particularly in relation to access and character
014	Ensure that subdivision design and development positively addresses and responds to site characteristics, including sloping land, waterways, and conservation areas.
015	Support subdivision design that provides for appropriate local street network connectivity across parcel boundaries.
Buffers and Future Investigation Areas	
016	Protect the quarry, landfill and organic waste facilities at the Bulla Hub from the encroachment of incompatible uses during their operational lifespan.
017	Facilitate the safe transition of land within proximity of the quarry, landfill and organic waste facilities to accommodate residential land uses as the operations at the facilities at the Bulla Hub change over time and it becomes appropriate to do so.
018	Ensure that any non-residential uses developed on land within buffers which is designated as potential future residential are transitional in nature or can be integrated into a future residential subdivision.
Employment & Town Centres	
019	Support the development of a Major Town Centre which provides sub regional retail, community and commercial services, and complements the continuing primary role of the Sunbury Town Centre as the key service centre in the region.
020	Provide for local retail and convenience employment opportunities to meet the needs of existing and future residents, ensuring that all new neighbourhoods have strong access to local services.

021	Recognise the existing and planned town centre network immediately outside the precinct, and ensure that town centre planning within the precinct support and complement this network.
<b>022</b>	Support the early provision of local community infrastructure, including

#### Open Space, Natural Systems & Community Facilities

precinct.

023	Build upon the regional landscape and open space function of the Jacksons Creek (including the Holden Flora Reserve) and Emu Creek corridors, including important habitat for Growling Grass Frogs and other native fauna, as well as path network connections to existing open space to the south and beyond.
024	Ensure that the future management of the Jacksons Creek and Emu Creek corridors is co-ordinated across a number of potential future land managers, to balance the conservation, landscape, and passive open space functions on the land.
025	Support the creation of a district destination-based parkland at Redstone Hill that comprises a range of recreation, community, and tourist functions, is developed sympathetically to its landscape significance and provides for strong physical and visual connections to both the Major Town Centre, the Jacksons Creek regional park, and surrounding hill tops.
026	Support the development of a local park network to provide local amenity to each part of the precinct to complement the unique open space opportunities presented by the twin creek corridors and other conservation areas.
027	Deliver a high quality landscaped interface between nature conservation areas and surrounding development and enable appropriately managed community access which provides for interpretation of the values but provides sufficient protection of important conservation values.
028	Ensure strong connections are provided to community facilities and open space networks within the surrounding neighbourhoods.
029	Ensure that waterway protection measures are considered for Jackson Creek, Emu Creek and their tributaries in the layout, staging and design of development and the local street network.

# THIS PAGE HAS BEEN LEFT INTENTIONALLY BLANK

#### Biodiversity, Threatened Species & Bushfire Management

<b>O30</b>	Ensure that bushfire protection measures are considered in the layout, staging and design of development and the local street network.
031	Contribute to the long term conservation of significant flora and fauna species and vegetation communities through protection of habitat, particularly along the two creek corridors Conservation Area 21 and Holden Flora Reserve.

#### Transport and Movement

Provide for strong, multi-modal connectivity across the Jacksons Creek, including logical road connectivity between Sunbury Road, the Major Town Centre, and a potential future Sunbury South Station.  Establish an integrated and permeable transport network to encourage walking and cycling, reduced car dependency and maximise safety and connectivity for all road users.  Encourage a high-amenity street network by considering natural and heritage features in street alignments and design.  Create a range of off-street pedestrian and cycle links that promote the use of existing utility easements and waterways as green transport links.  Build upon the well-established arterial road network through the precinct with an integrated, high quality local road network that provide strong external connections to foster accessibility of the precinct.  Support strong local access to adjacent communities, in particular to the Jacksons Hill neighbourhood to the north-west of the precinct.  Create a range of road configurations that promotes green links and vistas throughout the precinct, and maximise landscaping opportunities i expanded road reserves, in particular the twin arterial road gateways to
walking and cycling, reduced car dependency and maximise safety and connectivity for all road users.  Encourage a high-amenity street network by considering natural and heritage features in street alignments and design.  Create a range of off-street pedestrian and cycle links that promote the use of existing utility easements and waterways as green transport links.  Build upon the well-established arterial road network through the precinc with an integrated, high quality local road network that provide strong external connections to foster accessibility of the precinct.  Support strong local access to adjacent communities, in particular to the Jacksons Hill neighbourhood to the north-west of the precinct.  Create a range of road configurations that promotes green links and vistas throughout the precinct, and maximise landscaping opportunities in particular to the twin arterial road gatevage to
heritage features in street alignments and design.  Create a range of off-street pedestrian and cycle links that promote the use of existing utility easements and waterways as green transport links.  Build upon the well-established arterial road network through the precinc with an integrated, high quality local road network that provide strong external connections to foster accessibility of the precinct.  Support strong local access to adjacent communities, in particular to the Jacksons Hill neighbourhood to the north-west of the precinct.  Create a range of road configurations that promotes green links and vistas throughout the precinct, and maximise landscaping opportunities in a provided transport in particular the twin arterial road activation to
use of existing utility easements and waterways as green transport links.  Build upon the well-established arterial road network through the precinc with an integrated, high quality local road network that provide strong external connections to foster accessibility of the precinct.  Support strong local access to adjacent communities, in particular to the Jacksons Hill neighbourhood to the north-west of the precinct.  Create a range of road configurations that promotes green links and vistas throughout the precinct, and maximise landscaping opportunities in particular the twin exterial road gateways to
<ul> <li>with an integrated, high quality local road network that provide strong external connections to foster accessibility of the precinct.</li> <li>Support strong local access to adjacent communities, in particular to the Jacksons Hill neighbourhood to the north-west of the precinct.</li> <li>Create a range of road configurations that promotes green links and vistas throughout the precinct, and maximise landscaping opportunities in the precinct of the precin</li></ul>
Jacksons Hill neighbourhood to the north-west of the precinct.  Create a range of road configurations that promotes green links and vistas throughout the precinct, and maximise landscaping opportunities in the precinct of
vistas throughout the precinct, and maximise landscaping opportunities i
Sunbury of Vineyard and Sunbury Roads, the important southern crossing of the Jacksons Creek and the Melbourne-Bendigo Rail Corridor, and along key connector and local roads, as appropriate.
Ensure that road connections to Vineyard Road have regard for the likely local road network of the future Sunbury West precinct.
O40 Preserve the capacity of the regional arterial and public transport commuter networks to support the existing connections to Sunbury and Melbourne from regional Victoria.

#### Integrated Water Management & Utilities

041	Deliver an integrated and resilient water system that supports liveable and sustainable communities, protects the environmental health of urban waterways and bays, provides secure water supplies efficiently, protects public health and delivers affordable, essential water services by preparation of a Regional Integrated Water Management Servicing Strategy.
042	Manage urban stormwater to best practice outcomes to minimise the impact upon the highly erosive, sensitive Jacksons Creek and Emu Creek Corridors and their tributaries.
043	Preserve opportunities within development for a range of innovative water management solutions that protect the two creek corridors and their tributaries.
044	Deliver a high quality, lush green urban environment through the sustainable and intelligent use of alternative water and stormwater and passive irrigation of vegetation and open space where possible.
045	Ensure that the riparian and instream habitats of waterways in the precinct, including their hydrological conditions, are suitable for local flora and fauna.

#### **Precinct Infrastructure Plan and Staging**

046	Encourage development staging to be coordinated with the delivery of key local and state infrastructure to provide cohesive and integrated neighbourhoods.
047	Ensure that areas of land ownership fragmentation and/or challenging topography are developed in an integrated fashion, in accordance with any relevant concept plan.

1,200 1,500





# 2.3 Land budget (Amended by C242hume)

The Sunbury South PSP land budget in Table 1 provides a summary of the land required for transport, community facilities, government education facilities, and open space and identifies the total amount of land available for development.

The Net Developable Area (NDA) is established by deducting the land requirements for transport, community facilities, public and private education facilities, open space (sports reserves and local parks), drainage corridors, conservation areas and other encumbered land from the Gross Developable Area (GDA).

The GDA for Sunbury South precinct is 1798 hectares. The NDA is 816 hectares, of which 762 hectares are residential, meaning approximately 42% of the land within the Sunbury South PSP area is available for residential development. A total of 53.5 hectares is available for industrial development.

Based on a residential development yield average of 15 dwellings per net developable hectare, Sunbury South PSP will generate approximately 11,470 dwellings to accommodate nearly 32,100 new local residents.

Table 1 Summary Land Use Budget (Amended by C242hume)

DESCRIPTION	PSP SUNBURY SOUTH		
DESCRIPTION	HECTARES	% OF TOTAL	% OF NDA
TOTAL PRECINCT AREA (HA)	1,798.66		
TRANSPORT			
Arterial Road - Existing Road Reserve	27.88	1.55%	3.42%
Arterial Road - Public Acquisition Overlay	2.01	0.11%	0.25%
Arterial Road - New / Widening / Intersection Flaring (ICP land)	5.26	0.29%	0.64%
Non-Arterial Road - Retained Existing Road Reserve	9.57	0.53%	1.17%
Non-Arterial Road - New / Widening / Intersection Flaring (ICP land)	20.30	1.13%	2.49%
Public Transport Facilities / Reserve	9.04	0.50%	1.11%
Sub-total Transport	74.07	4.1%	9.08%
COMMUNITY & EDUCATION			
Government School	18.88	1.05%	2.31%
Potential Non-Government School	2.60	0.14%	0.32%
Local Community Facility (ICP land)	2.35	0.13%	0.29%
Sub-total Education	23.84	1.3%	2.9%

RECORDETION	PSP SUNBURY SOUTH		
DESCRIPTION	HECTARES	% OF TOTAL	% OF NDA
OPEN SPACE			
UNCREDITED OPEN SPACE			
Conservation Reserve	28.87	1.61%	3.54%
Waterway and Drainage Reserve	423.64	23.55%	51.93%
Utilities Easements	19.49	1.08%	2.39%
Landscape Values	114.41	6.36%	14.02%
Tree Reserve	0.27	0.02%	0.03%
Other uncredited IS (isolated land between Rail & Gas Easement)	0.94	0.05%	0.12%
Sub-total Service Open Space	587.63	32.67%	72.03%
CREDITED OPEN SPACE			
Local Sports Reserve (ICP land)	36.15	2.0%	4.43%
Local Network Park (ICP land)	18.14	1.0%	2.22%
Sub-total Credited Open Space	54.29	3.0%	6.66%
REGIONAL OPEN SPACE			
Holden Flora & Fauna Reserve (existing)*	39.76	2.2%	4.87%
Sub-total Regional Open Space	39.76	2.2%	4.87%
Total All Open Space	681.68	37.9%	83.56%
OTHER			
Existing Non-Urban Land	10.29	0.57%	1.26%
Utilities Sub-stations / facilities (acquired by relevant authority)	0.30	0.02%	0.04%
Potential Residential	24.25	1.35%	2.97%
Potential Industrial	6.37	0.35%	0.78%
Potential Residential (sloping)	10.54	0.59%	1.29%
Future Investigation Area	33.28	1.85%	4.08%
Potential Residential Expansion	1.29	0.07%	0.16%
Quarry/Landfill/Organic Waste	116.95	6.50%	14.34%
Sub-total	203.27	11.30%	24.92%
TOTAL NET DEVELOPABLE AREA - (NDA) HA	815.79	45.36%	
NET DEVELOPABLE AREA - RESIDENTIAL (NDAR) HA	762.31	42.38%	
NET DEVELOPABLE AREA - EMPLOYMENT (NDAE) HA	53.48	2.97%	

<sup>\*</sup>Holden Flora Reserve is approximately 90ha in total area. Part of this area is included in Uncredited Open Space above

services by Melbourne Water's Development Services Scheme. It can be considered for development subject to developing an appropriate local drainage solution for the

land, to the satisfaction of Melbourne Water.

# 3.0 IMPLEMENTATION

# 3.1 Image, character, heritage & housing

#### 3.1.1 Image & character

**G1** 

REQUIF	REMENTS
R1	All public landscaped areas must be planted and designed to the satisfaction of the responsible authority.
R2	Street trees must be provided on both sides of all roads and streets (excluding laneways) at regular intervals appropriate to tree size at maturity, unless otherwise agreed by the responsible authority.
R3	Trees in parks and streets must be:  Suitable for local conditions.  Planted in modified and improved soil as required to support tree longevity.
R4	Subdivision of land adjacent to an <i>interface with escarpment (visual)</i> , as set out in Plan 6 – must provide for an interface outcome consistent with the relevant cross-section at Appendix B, Section 28 to the satisfaction of the responsible authority
R5	Street tree planting must use locally appropriate species and be consistent with any guidance provided on the relevant cross section within this Precinct Structure Plan unless otherwise approved by the responsible authority.
GUIDE	- LINES

Street networks within subdivisions should be designed to maximise the

number of connections and direct views to landscape features and public

open spaces, with significant landscapes and built form elements used

as focal points for view lines along streets, having consideration to the

need for a legible and well circulating road network. This includes:

areas immediately north of Redstone Hill: and

Redstone Hill and Jacksons Hill.

Views towards Rupertswood Mansion and Macedon Ranges for

Views towards the Melbourne CBD for areas immediately south of

Street trees should be used consistently across subdivisions and the wider precinct to reinforce movement hierarchy and local character. G2 Variations in street tree planting themes can be used to differentiate neighbourhood character, where agreed with the responsible authority. Subdivision design should preserve the opportunity for additional G3 landscaping in existing wider road reserves. Significant trees, where possible, should be retained and located within the public domain, including parks and road reserves, unless otherwise G4 agreed by the responsible authority. A consistent suite of lighting and furniture should be used across G5 neighbourhoods, appropriate to the type and role of street or public space, unless otherwise agreed by the responsible authority. Buildings should avoid protruding above significant ridgelines and trees. G6 Subdivision of land adjacent to an interface with escarpment (non *visual*) or *interface* – *waterway*, as set out in Plan 6, should provide for an interface outcome consistent with the relevant cross section at **G7** Appendix B, Section 26 and Section 29, or an appropriate variation to the satisfaction of the responsible authority.

#### 3.1.2 Heritage

#### REQUIREMENTS Landscape features which include, or are likely to include, Aboriginal **R6** cultural heritage must be sensitively incorporated into the subdivision. Any subdivision and/or development of land adjoining a heritage site identified under the Heritage Overlay in the Hume Planning Scheme and/ **R7** or of post-contact cultural heritage significance, must have regard to the heritage significance of the site and provide a sensitive interface. Development of parks, streets and shared paths within or adjacent to a heritage site identified under the Heritage Overlay in the Hume Planning **R8** Scheme must be developed in accordance with the objectives of the overlay, and relevant state and local policies **GUIDELINES** Any subdivision and/or development of land surrounding a possible heritage site as identified in Plan 3 should look to preserve the site G8 as part of urban development, and where possible, integrate through adaptive re-use.

G9

Where possible any heritage features not shown on the PSP maps, including stone walls, should be retained and integrated into surrounding development.

**G10** 

Proponents undertaking development of land identified on the Victorian Aboriginal Heritage Register, and/or with high Aboriginal cultural heritage values including those identified on Plan 2, should liaise with the designated Registered Aboriginal Party (or the relevant Traditional Owner Groups and Aboriginal Victoria in its absence) to ascertain whether heritage interpretation is appropriate in these identified locations, and how the heritage site(s) should be incorporated into the design of the subdivision.

#### 3.1.3 Housing

#### **REQUIREMENTS**

R9

Subdivision of land within walkable catchments shown on Plan 3 must create lots suitable for delivery of medium or high density housing as outlined in Table 2, and achieve a minimum average density of 17 dwellings per net developable hectare.

Applications for subdivision that can demonstrate how target densities can be achieved over time, to the satisfaction of the responsible authority, shall be considered.

**R10** 

Subdivision layout and lot diversity must respond to the natural features of the area, including topographical and landscape features identified on Plan 5 and Plan 6.

Subdivision must consider the future design of areas identified for higher density or integrated housing, and provide for:

- active interfaces with adjacent streets, open space and waterways
- safe and effective internal vehicle and pedestrian circulation
- dwelling and lot size diversity
- appropriate servicing arrangements.

R12	development must minimise landscape visual scarring and avoid the need for large amounts of cut and fill, to the satisfaction of the responsible authority.
R13	Subdivisions which retain larger lots around existing dwellings must be designed to ensure that the future subdivision of these larger lots that appropriately integrates with the surrounding subdivision layout.
R14	Lots must front (in order of priority where a lot fronts multiple elements):  Conservation areas Public open space Landscape areas Local access streets Connector roads Arterial roads
R15	In areas within the 'Redstone Hill Sensitive View Line' area as identified on Plan 5, development height must be limited such that it does not protrude above the 253m AHD level, to the satisfaction of the responsible authority. Further guidance is provided in the cross-section 'Redstone Hill indicative views across rooftops" at Appendix B, Section 30.
R16	Any development in proximity to the freeway that triggers the VicRoads Requirements of Developers – Noise Sensitive Uses document must respond to its requirements to the satisfaction of the responsible authority.
R17	Subdivision in areas of significant slope, as identified on Plan 6, must be designed such that:  The grade of driveways is minimised for pedestrian safety. This may be achieved by setting garages/carports further from the street for lots on the higher side of the street and closer to the street for lots on the lower side of the street, or any other design outcomes to the satisfaction of the responsible authority  Flooding risks for properties lower than the street is minimised, including through kerbing heights and crossover/ driveway profiles, or other design outcomes to the satisfaction of the responsible authority.
R18	Any buffer established to minimise fire threat must be functional and be able to be managed appropriately and cost effectively, to the satisfaction

In areas which contain slope in excess of 10% as identified on Plan 6.

of the responsible authority and the CFA.

GUIDE	LINES
G11	Specialised housing forms, such as retirement living or aged care or lifestyle communities should:  Be integrated into the wider urban structure,  Be located within the walkable catchment boundary shown on Plan 3, other than within the Gas Pipeline Measurement Length as identified on Plan 3,  Be accessible by public transport,  Not present a barrier to movement through the surrounding road network.
G12	<ul> <li>Any retaining structures (with the exception of those which are part of a building) should be:</li> <li>No more than 1.0 metres in height between a dwelling and a street or public space, or where visible from a street or public space.</li> <li>Set back at least 1.0 metres from any building envelope.</li> <li>Staggered, with a minimum 0.75 metre distance between each stagger to allow for the inclusion of landscaping where cutting and filling is deeper than 1.0 metres.</li> <li>Positioned so that associated drainage infrastructure and structural foundation are fully located within the same lot.</li> <li>No more than 2.0 metres in overall height to avoid unreasonable overshadowing of secluded private open space and habitable room windows.</li> </ul>
G13	Subdivision on sloping land should:     Incorporate larger lot sizes and frontages; and/or     Incorporate integrated housing developments, with smaller building envelopes that respond to slope  To minimise the need for retaining walls and excessive excavation.
G14	Dwellings should front or side:  Waterways and the open space network (including local parks).  Arterial roads and connector streets.  Melbourne-Bendigo rail corridor (with a frontage road), unless otherwise agreed by the responsible authority.

	Subdivision in areas of significant slope, as identified in Plan 6, should be designed such that:		
<b>G15</b>	<ul> <li>The majority of street blocks generally run parallel to the contours.</li> <li>Road reserves can safely accommodate grade changes.</li> <li>Earth works between a dwelling and the street are minimised.</li> <li>The height of retaining walls is minimised by split level housing design and terrace/stepped retaining walls, providing for grade changes to occur more evenly across lots.</li> <li>Solar access to dwellings is maximised through adequate distances/setbacks between retaining walls and buildings on the lower side of retaining walls. The depth and width of lots should enable appropriate setbacks to be achieved.</li> </ul>		
G16	Lots on south facing slopes with a gradient greater than 5% (>2.9 degrees or >1 in 20) should ensure dwellings or building envelopes are setback at least 2.0 metres from the northern boundary.		
G17	The cutting of land should not result in sunken houses where the top of windows or eaves of the dwelling are at road height. Windows should be clearly visible from the street.		
G18	Earthworks exceeding 1.0 metre depth in cut or 1.0 metre depth in fill should be avoided within 1.0 metre of any side, rear or front boundary. Minor changes in gradient are acceptable within 1 metre from outside the property boundary to ensure footpaths in the road reserve have an appropriate grade or cross-fall.		
<b>G</b> 19	Where a lot has a cross-fall greater than 12%, the crossover for the driveway should be located on the lower side of the lot.		
G20	Roads should be designed to avoid repetition in extended lengths of road (180 metres or greater) running up and down the slope.		
<b>G21</b>	<ul> <li>Commercial and retail uses should only occur in residential areas where:</li> <li>The use will not detract from the residential amenity of the area.</li> <li>The use has appropriate access to the higher order road network and will not cause congestion on local roads.</li> <li>The use will not prejudice the subdivision of surrounding land identified for residential purposes.</li> <li>Preference will be given to locations adjacent to nominated Major and Local Town Centres and Local Convenience Centres.</li> </ul>		

#### 3.1.4 Sensitive Residential Areas

A number of areas within the precinct feature a range of specific site conditions that are likely to present unique challenges for detailed subdivision design. This includes areas where land ownership is heavily fragmented, areas with heavily undulating topography, or areas which directly interface with established communities. These areas are identified as 'Sensitive Residential Areas' on Plan 5.

The PSP includes a series of more detailed Residential Concept Plans for these areas that provide greater direction on future subdivision design than for the rest of the precinct. Whilst these provide an indicative local street network and implied lot layout, they are not intended to constrain future site-responsive subdivision design. It is therefore expected that future permit applications may incorporate a modified road and lot layout to those reflected in the concept plans, while preserving consistency with the general elements of each Residential Concept Plan.

	<b>IRFN</b>	

**R19** 

Subdivision in an area nominated as a 'sensitive residential area' on Plan 5 must respond to any relevant concept plan for the area.

**R20** 

Form a coherent movement network across the wider precinct

Street layouts of individual subdivisions must integrate to:

 Ensure no dwelling is disadvantaged by poor access to open space or community facilities.

**R21** 

Staging of subdivisions must provide for the timely connection of road links between properties, as well as to the connector street, arterial road, and off-road pedestrian and bicycle networks to the satisfaction of the responsible authority.

**R22** 

Any local street connections to the north of the Harpers Creek Residential Concept Plan area (Jacksons Hill) as shown at Figure 3 must be consistent with the local access street functions of this road network, and not place unnecessary burden on the capacity of these roads, to the satisfaction of the responsible authority.

#### **GUIDELINES**

Subdivisions should provide for inter-parcel connections to the local road network as reflected in the Residential Concept Plans, or a variation that

**G22** 

- provides a similar degree of local connectivity and
- supports the future development of adjacent undeveloped parcels

to the satisfaction of the responsible authority.

Any development in the area designated as 'Potential Residential Expansion Area' on the Harker Street Residential Concept Plan at Figure 2 should be designed to

 preserve key view lines, as much as practical, for existing dwellings fronting Harker Street,

#### G23 •

- incorporate an offset between any new local road created as part of the subdivision and the rear of existing properties fronting Harker Street, and
- manage the potential for erosion and minimise the visual impact on the Jacksons Creek and adjacent development of any local road near the gully in the centre of the investigation area

#### Table 2 Housing Type by lot size

The following table is intended to provide guidance on the achievement of housing diversity objectives by providing an example of how variation in lot sizes supports the delivery of a broad range of housing types.

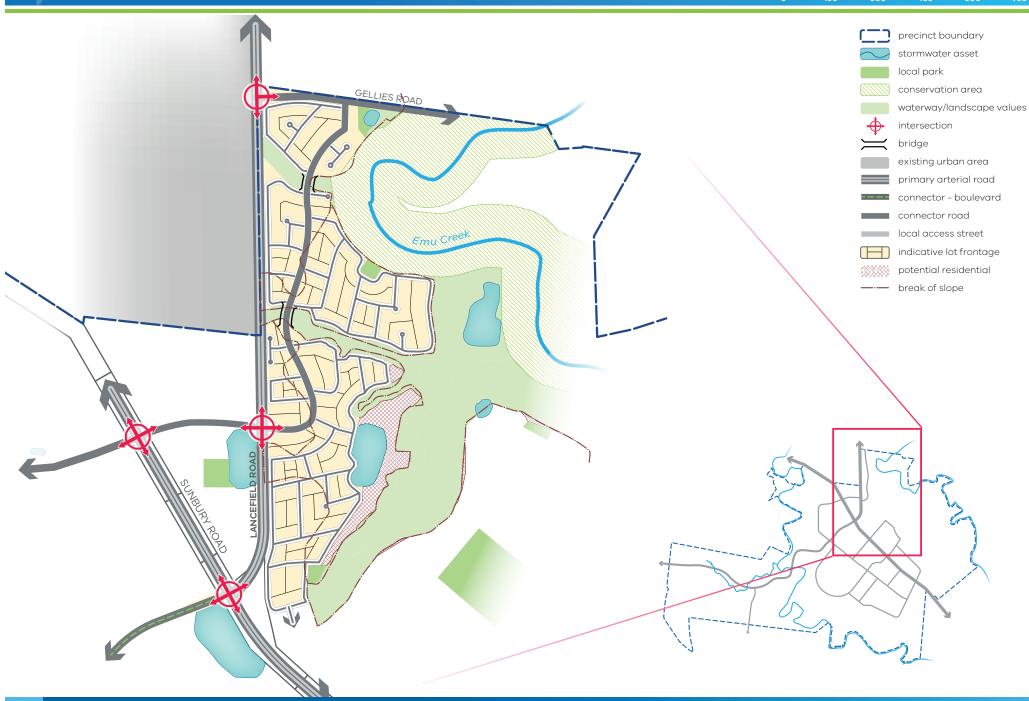
	TYPICAL LOT SIZE (m²)		
INDICATIVE HOUSING TYPE	LESS THAN 300m <sup>2</sup>	301m² -600m²	MORE THAN 600m²
Small Lot Housing including townhouses and attached, semi-detached and detached houses	<b>√</b>		
Dual occupancies, duplexes	✓		✓
Detached houses		✓	✓
Multi-unit housing sites including terraces, row houses and villas		✓	✓
Walk up flats and Apartments			✓

Figure 1 - Gellies Road Residential Concept Plan

**Sunbury South Precinct Structure Plan** 

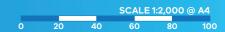
SCALE 1:12,000 @ A4





# Figure 2 - Harker Street Residential Concept Plan

**Sunbury South Precinct Structure Plan** 



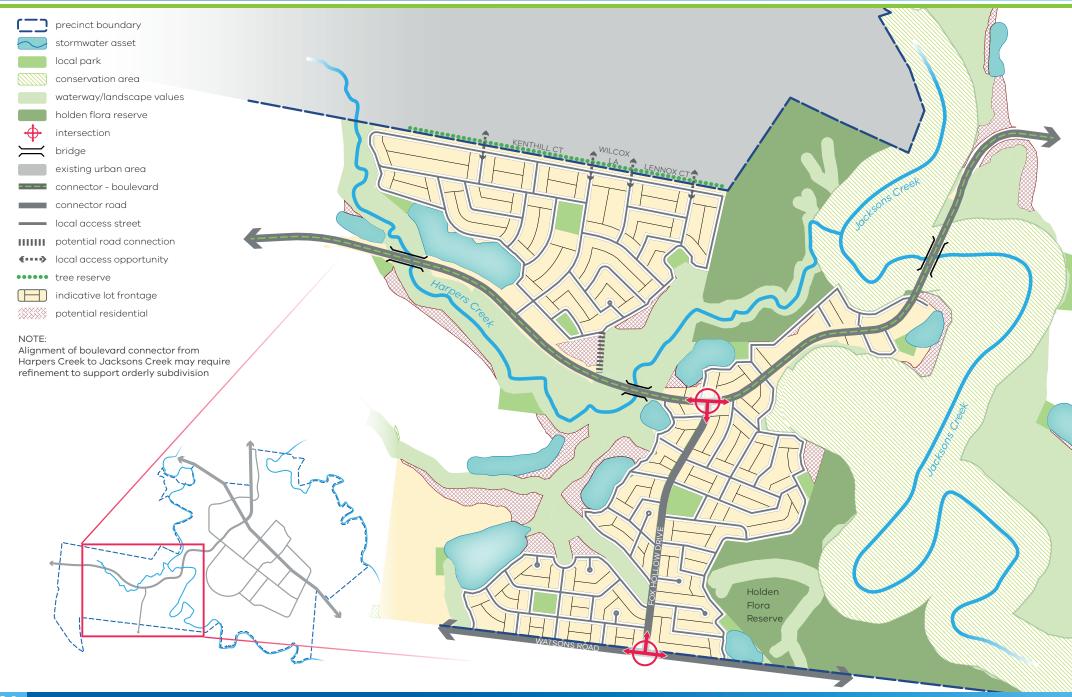




# Figure 3 - Harpers Creek Residential Concept Plan Sunbury South Precinct Structure Plan (AMENDED BY C242hume)

SCALE 1:12,000 @ A4





## **3.2** Buffers and Future Investigation Area

#### 3.2.1 Buffers

The Precinct contains a combined waste facility of State importance referred to as the "Bulla Waste Hub". The Bulla Hub includes the landfill operations and organics recovery facility at 570, 580 and 600 Sunbury Road, Bulla. Quarrying is also occurring at this site. These operations have varying lifespans.

The Sunbury South PSP includes areas of land which are required in the short-medium term to operate as buffers to these operating industries. These buffer areas are required to be kept free of sensitive land uses (including residential dwellings) until such time as the relevant industries cease or alter operations, or until it can be demonstrated that impacts of industry can be appropriately mitigated. The buffers protect both the industries from encroachment of sensitive uses, as well as future residences and sensitive land uses from impacts of industrial uses.

It is intended that the "residential" land shown as buffers on Plan 3 may be developed for residential communities once the suitability of this area is established via methods detailed in Urban Growth Zone - Schedule 9 in the Hume Planning Scheme.

#### 3.2.2 Landfill Buffer

The landfill buffer extends to a distance of 500m from the edge of the landfill at the Bulla Hub. The landfill buffer provides protection to sensitive land uses from noise, dust, odour, litter and vibration impacts, as well as ensuring that any buildings and works will be assessed for risk of landfill gas migration.

The landfill buffer will limit the land uses and buildings and works that can occur on the affected land until such time as the landfill cells which the buffer is measured from are closed and rehabilitated. No sensitive uses will be permitted within the buffer during this time. Following the rehabilitation of the landfill sites, and subject to the completion of an EPA approved environmental audit, the land will be suitable for development for residential purposes.

# 3.2.3 Organic Waste Facility Buffer

The Organic Waste Facility Buffer is located at a distance of 1.3km from the lease boundary of the Veolia Bulla Organics Recovery Facility at the Bulla Hub. The purpose of the buffer is to protect sensitive land uses from odour impacts from the facility, and protect the industry from the encroachment of sensitive uses.

This buffer will be in place until such time as the organic waste facility ceases operations at the Bulla Hub. The distance of the buffer may be reduced should the operations at the composting facility change, and if a detailed environmental assessment demonstrates that it is appropriate for sensitive land uses to establish, to the satisfaction of the Environment Protection Authority.

A limited range of non-sensitive land uses may be appropriate for establishment within the buffer to the organic waste composting facility, in accordance with the applied zones. Land uses will be subject to a planning permit in order to allow the responsible authority to consider any potential amenity impacts.

#### 3.2.4 Quarry Buffer

Extractive industry operations at 600 Sunbury Road have the potential for amenity impacts including vibration, dust and noise. A buffer of 500m is provided to this basalt quarry, and will remain until the works authority boundary is reduced to no longer affect adjacent land.

Any applications within the quarry buffer will require a referral to the Secretary to the Department administering the Mineral Resources (Sustainable Development) Act 1990. It is unlikely that the construction of new buildings will be supported within the quarry buffer whilst blasting continues to occur at the site.

#### REQUIREMENTS

**R23** 

Subdivision applications which abut land within a buffer to the landfill, organic waste facility or quarry must consider and appropriately address the interface to the buffer areas.

**R24** 

Applications for non-sensitive uses within the landfill, organic waste facility or quarry buffers on land where the underlying land use is Residential on Plan 3 must be transitional in nature or be capable of being incorporated into a cohesive future residential subdivision.

**R25** 

Subdivision applications which abut a buffer to the landfill, organic waste facility or quarry where the underlying land use is Residential on Plan 3 must demonstrate how the land within the buffers can be integrated into a cohesive future residential subdivision.

#### **GUIDELINES**

G24

Any transitional uses developed within a buffer to the landfill, organic waste facility or quarry should provide for an attractive and responsive interface to established and future residential neighbourhoods.

#### 3.2.5 Future Investigation Area

The investigation area shown on Plan 3 comprises two gullies in the east of the precinct adjacent to the Hi Quality landfill and quarry. The land is zoned Rural Conversation Zone and Special Use Zone 1.

The alignment of the stormwater treatment assets shown on Plan 3 has been agreed to by Melbourne Water to service the land within the PSP. A different stormwater treatment strategy may be agreed between Melbourne Water and the relevant landowners within the Development Services Scheme in order to service the land and surrounding precinct.

The land shown as 'Future Investigation Area' may be developed for urban purposes, including a range of residential and employment uses, subject to a rezoning occurring to allow for urban development in the future. This would need to be accompanied by separate planning permit process for any earthworks, and would be subject to an appropriate drainage solution being determined to the satisfaction of Melbourne Water. This planning scheme amendment process will need to define the location of land uses across the investigation area, and may result in the need to modify this PSP including the Future Urban Structure.

#### 3.3 Town Centres & Employment

#### 3.3.1 Town Centres

The Sunbury South PSP makes provision for a new Major Town Centre at Redstone Hill, to provide higher order retail, commercial and community services for the eastern part of the greater Sunbury Growth Area. It will complement the existing Sunbury Town Centre, which will remain the primary retail, commercial, community and employment services centre for all of Sunbury and the surrounding region.

There will also be provision for a new Local Town Centre at Harpers Creek, in the western part of the precinct, as well as five Local Convenience Centres, to provide convenience retailing, health, community and other services to meet local needs for nearby residents and workers.

#### 3.3.2 Redstone Hill Major Town Centre

The Redstone Hill Major Town Centre is a central component to the Sunbury South precinct, and will service new growth areas to the east and south of Sunbury, particularly those communities east of the Jacksons Creek. It will be an important destination for sub-regional retail, commercial, employment and community services, second only within the Sunbury Growth Corridor to the established Sunbury Principal Town Centre.

The centre will be based around a traditional main street. The main street will be accessed via a connector road connecting with Sunbury Road, which itself will provide a key view line between Sunbury Road and the important local landscape feature of Redstone Hill. It will be anchored by supermarkets, mini majors and a discount department store and provide a range of smaller tenancy opportunities along the main street and secondary street frontages for specialty retail, food and drink premises, small scale health facilities and service uses. Larger office, health facilities, and service uses will be located at the gateway to the centre and adjoining Sunbury Road. Diverse housing opportunities will be provided above ground floor and in select locations at ground level, as well as on the fringe of the centre.

The centre will be easily accessed by a range of transport modes. All key roads connecting to the centre will have dedicated and shared cycling and walking infrastructure, and high frequency and local bus services will service the centre arriving at a conveniently located bus interchange.

The centre will be complemented by a network of smaller local centres both within and immediately outside the precinct, including Local Convenience Centres.

#### 3.3.3 Harpers Creek Local Town Centre

The Harpers Creek Local Town Centre is planned for the western part of the precinct, south of the existing Jacksons Hill neighbourhood and proximate to the potential future Sunbury South Railway Station. This centre has been planned to provide for up to 5,000sqm of retail, and will be co-located with future community uses, including a multipurpose community centre, and a government primary school.

Given the challenging topography of the area, as well as the presence of an adjacent high-pressure gas pipeline, the centre is offset from the potential future train station, but is planned to have strong pedestrian and road connections to the station. It abuts a highly defined creek corridor that will provide strong landscape and pedestrian/cycling connectivity to the core catchment for the centre. District sporting fields are located further south, creating a neighbourhood civic spine running north-south along Buckland Way.

#### 3.3.4 Local Convenience Centres

A planned Local Convenience Centre (LCC) at the Jacksons Creek hub will provide for a range of convenience retailing, health, community and other services for residents in the central part of the precinct, and for users of the adjacent community facilities.

A planned LCC at the potential future Sunbury South station will provide activation to the station precinct and provide convenience retail services for train passengers and surrounding residents.

A planned LCC on Sunbury Road in the northern part of the precinct will provide convenience retailing for future residents in the area bound by Sunbury Road, Lancefield Road, and the Goonawarra Golf Course. Whilst it may provide some highway-related convenience uses given its arterial road location, this should not compromise local function of the centre and should be designed to positively address the residential areas to the north and east.

A planned LCC in the south-east of the precinct will provide basic convenience services to the surrounding area.

In addition, a small LCC on Sunbury Road in the industrial area of the precinct will largely cater for day to day convenience retail needs of nearby workers.

Table 3 Town Centre Hierarchy – External to Sunbury South Precinct

TOWN CENTRE	RETAIL FLOOR SPACE	LOCATION AND ANCILLARY USES
Sunbury Town Centre	60,000m²	The existing regional retail, commercial and services centre, based upon the historical town centre of Sunbury. Will continue to play the pre-eminent role in servicing the expanded Sunbury township, as well as the surrounding region.
Goonawarra Local Convenience Centre	2,000m²	Existing Local Convenience Centre with some local community facilities. Will predominantly service the existing Goonawarra Community, with some local convencience function for the southern part of the precinct, particularly early in the life of development. Has the potential for some small-scale future expansion.
Jacksons Hill Local Convenience Centre	1,200m²	Planned convenience centre with the Jacksons Hill estate. Will provide early convenience retail services for residents in the western part of the precinct, prior to the establishment of the Buckland Way Local Town Centre.
Vineyard Road Local Town Centre	5,000 m²	Planned centre to the west of the precinct. Will provide weekly shopping and services for the western part of the precinct, particularly that section of the precinct west of the rail line.

Table 4 Sunbury South Town Centre hierarchy

TOWN CENTRE	RETAIL FLOOR SPACE	LOCATION AND USES
Redstone Hill Major Town Centre	25,000m²	Located central to the precinct adjacent Sunbury Road, with strong connections to Redstone Hill. Will provide subregional retail and commercial services, community uses, higher density residential, and will service the southern and eastern parts of the greater Sunbury township.
Harpers Creek Local Town Centre	5,000m²	Located central to that part of the precinct west of Jacksons Creek, with strong connections to the future Sunbury South train station, and proximate to the intersection of two connector roads. Include a full range of neighbourhood level services and facilities.
Sunbury Road Industrial Local Convenience Centre	500m²	Small local centre providing basic convenience needs for employees in the industrial portion of the precinct.
Jacksons Creek Local Convenience Centre	1,500m²	Located near the east bank of the Jacksons Creek, ajdacent to the Southern Link Boulevard and the Jacksons Creek Community Hub. Provides for convenience level retail for a local catchment.
Sunbury South Station Local Convenience Centre	1,500m²	Located to the west of the proposed future Sunbury South train station to provide local convience retailing for future train passengers, as well as the surrounding residential area.
Sunbury Road North Local Convenience Centre	1,500m²	Principally focused on providing local conveninece retail to residents in the area bounded by Sunbury Road and Lancefield Road, to avoid a linear 'highway-based' centre.
Redstone Hill South Local Convenience Centre	1,000m²	Small local centre to provide local conveience retailing for areas within the south-east of the precinct that are otherwise remote from other planned centres. This centre is planned to be smaller than others given its relative proximity to the MTC.

#### **Redstone Hill Major Town Centre**

#### MAJOR TOWN CENTRE REQUIREMENTS

An Urban Design Framework (UDF) must be approved by the responsible authority for the Redstone Hill Major Town Centre as defined at Figure 5.

#### The UDF must:

- Comply with and fulfil the vision and associated key organising elements for the centre as shown in Figure 4, and respond to the Redstone Hill Major Town Centre Concept Plan at Figure 5.
- Provide for the strong integration of the centre with the surrounding residential areas and community/education facilities, with a high level of built edge and surveillance along the primary streets for pedestrian access to the centre.
- Minimise barriers to pedestrian and bicycle access to the centre, notably across Sunbury Road, loading and car parking areas.
- Provide for a balanced movement network within the town centre, catering for the needs of vehicles, pedestrians, cyclists and buses, including clear designation of public and private streets, and arrangements for bus movements to the bus interchange facilities, to the satisfaction of the responsible authority and Public Transport Victoria.
- Provide for the prioritisation of pedestrian movement on key desire lines, and provide for a continuous path of travel within the centre to key destinations, including the location and form of pedestrian crossing of streets, use of laneways, and paths across car parks that reflect desire lines.
- Integrate the commercial and office areas fronting Sunbury Road with the Main Street and retail core.
- Provide for any public street or laneway to meet the required Council standards, or any alternatives as agreed with Council.
- Ensure that development and access along Sunbury Road does not direct activity away from Main Street as the primary retail and civic heart of the centre.
- Limit the development of convenience restaurants along the Sunbury Road frontage.

#### MAJOR TOWN CENTRE GUIDELINES

#### The UDF should:

**G25** 

- Provide for a diversity in the size of tenancies which deliver vibrancy and continuous street activation, particularly along Main Street
- Ensure suitable movement for required modes along private streets and for appropriate pedestrian access through internalised and/or private spaces, to ensure pedestrian access through the centre is not compromised outside regular business hours.
- Distribute key land uses to ensure appropriate activation of Main Street as the heart of the town centre, as well as opportunities for continual activity within the centre throughout the day and evening
- Locate buildings which achieve high levels of articulation along the Main Street and secondary streets, including (as appropriate) clear glazing and regular entrances, an appropriate range of building material/colour palette themes and architectural design treatments (including opportunities for signage integration into building design).

#### Maintain views to Redstone Hill and ensure landmark buildings and public spaces present well to key view lines within the centre.

- Stage the development of the centre to achieve a main street feel early in the life of the development and provide high levels of accessibility,
- Ensure that high quality gateways define the entrances to the town centre through landmark buildings, landscaping and public realm treatments.
- Reinforce the sense that Sunbury is more like a country town than a suburb of Melbourne, including an appropriately landscaped boulevard treatment to Sunbury Road, building orientation, and building scale, orientation and massing, and signage height and design.
- Minimise impact on the amenity of the town centre associated with deliveries and loading, waste storage and vehicle parking.

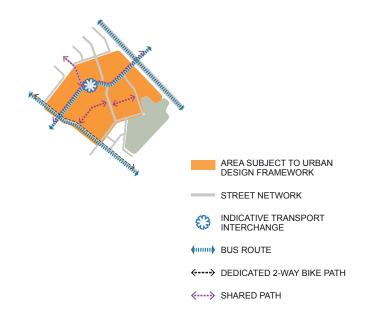
# **R26**



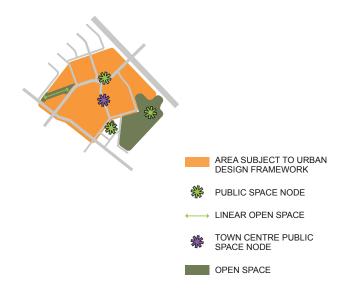
#### **URBAN DESIGN FRAMEWORK EXTENT**

# AREA SUBJECT TO URBAN DESIGN FRAMEWORK ARTERIAL ROAD CONNECTOR STREET FEATURE MAIN STREET KEY LOCAL ACCESS STREET STORMWATER ASSET

#### MOVEMENT NETWORK



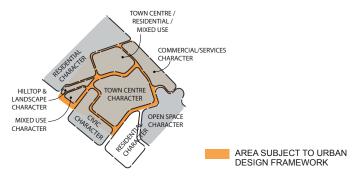
#### OPEN SPACE



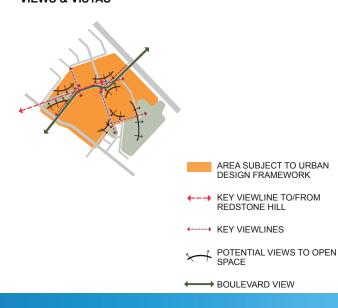
#### **PLACEMAKING**



#### **CHARACTER PRECINCTS**



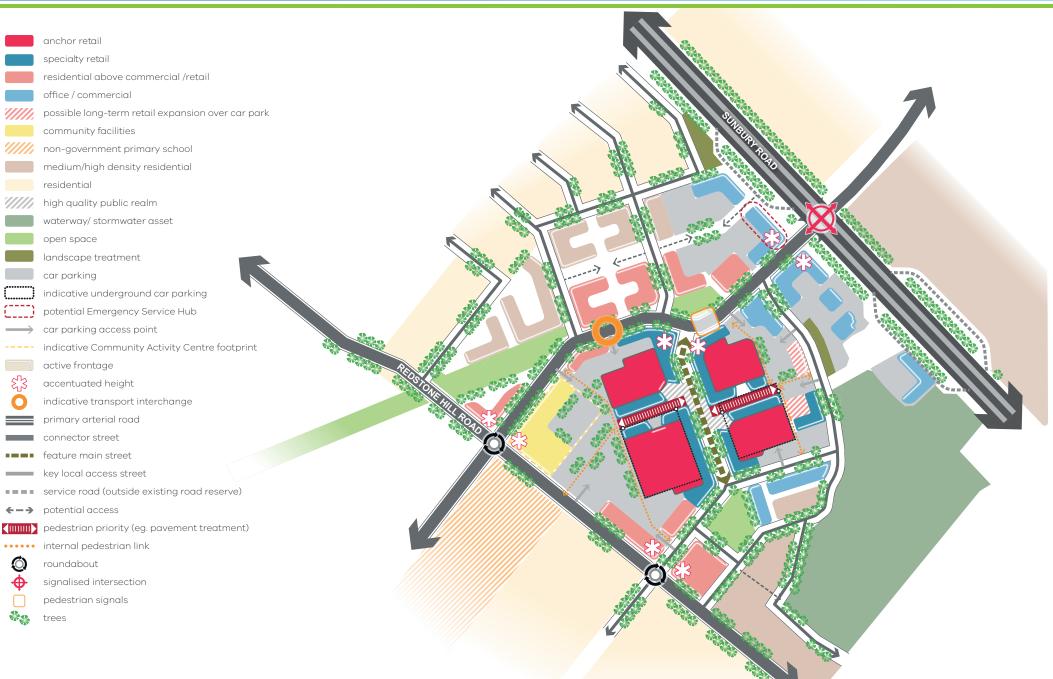
#### **VIEWS & VISTAS**



# Figure 5 - Redstone Hill Major Town Centre Concept Plan

**Sunbury South Precinct Structure Plan** 

SCALE 1:5,000 @ A4 0 50 100 150 200 250



# **Harpers Creek Town Centre**

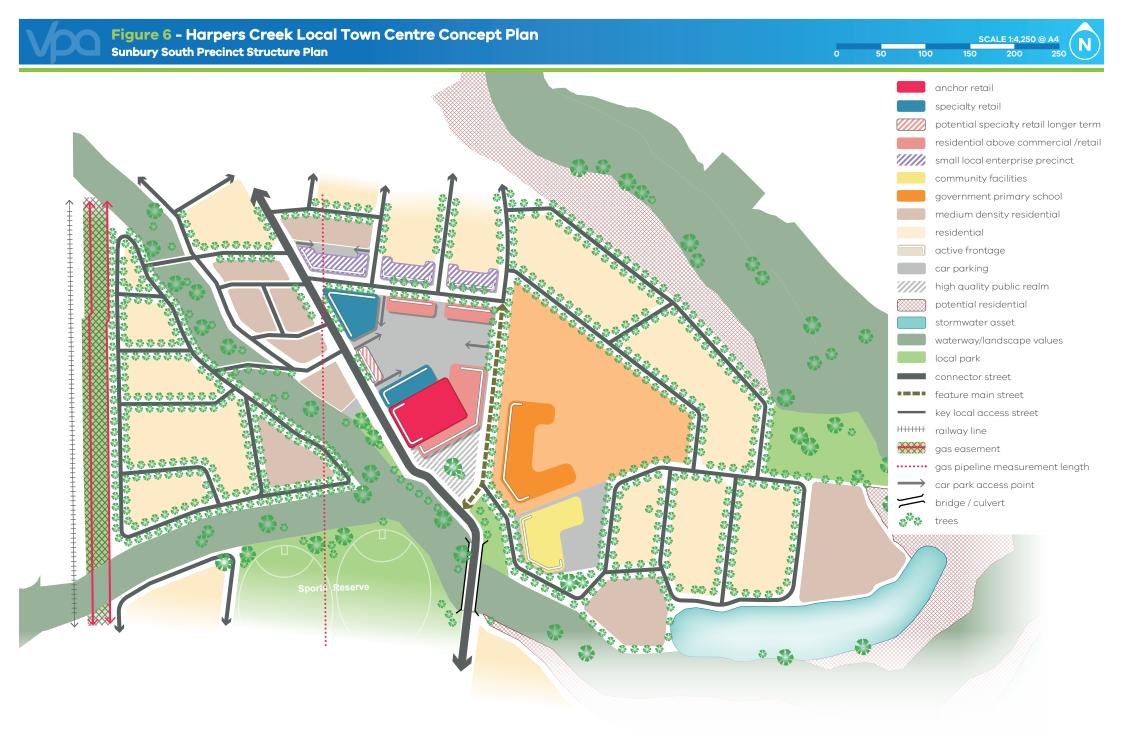
HARPE	RS CREEK LOCAL TOWN CENTRE REQUIREMENTS
<b>R27</b>	Shop floor space within the Harpers Creek Local Town Centre must not exceed 5,000sqm without a planning permit.
<b>R28</b>	Land use and development within the Harpers Creek Local Town Centre must respond to the concept plan at Figure 6 and address the design guidelines outlined in Appendix A.
HARPE	ERS CREEK LOCAL TOWN CENTRE GUIDELINES
G26	Design of buildings in the local town centre should provide visual interest at the pedestrian scale, with active and activated façade treatments. Long expanses of unarticulated façade treatments should be avoided.

# **Local Convenience Centres**

LOCAL CONVENIENCE CENTRE REQUIREMENTS		
R29	Any Local Convenience Centre must have direct vehicular access to a connector road with any access to an arterial road to the satisfaction of VicRoads.	
R30	Any Local Convenience Centre must appropriately address the surrounding road network and manage the relationship and interface with surrounding uses.	
LOCAL CONVENIENCE CENTRE GUIDELINES		
<b>G27</b>	The Local Convenience Centres should be located as illustrated on Plan 3.	
G28	The Local Convenience Centres should provide for a range of tenancies suitable for a mix of local convenience retail, health, community and other services to meet local needs.	
G29	The design of Local Convenience Centres should consider inclusion of two storey built form and ensure that all buildings are well articulated and of a high quality urban design that reflects their location in key community and employment hubs within the precinct.	
<b>G</b> 30	The Local Convenience Centres should feature a high degree of permeability and clear circulation to ensure that key destinations within the centre are easily accessible by walking or cycling.	

# 3.3.5 Town Centre Transport, Access & Connectivity

REQUIREMENTS			
R31	Heavy vehicle movements (loading and deliveries) must not front the main street/s and should be located to the rear and/or side street and sleeved or screened.		
R32	Main streets must be designed for a low speed environment of 40km/h or less, so vehicles and cyclists can share the carriageway safely and pedestrians can safely cross the road.		
R33	Pedestrian movement must be prioritised in the design of main streets while supporting local traffic to assist access and activity.		
R34	Pedestrian entrances must be located on main streets and be visually prominent, well-lit and accessible to people with limited mobility.		
R35	Safe and easy access for pedestrian and cycle trips must be provided to the town centre through the layout and design of the surrounding street network.		
R36	Transport hubs, stops and routes must be located to facilitate access to key destinations and generate activity in town centres.		
R37	Car park entrances must not be provided directly from the main street, access should be provided from side streets.		
GUIDELINES			
G31	Bicycle parking should be provided at entry points in highly visible location at key destinations, to the satisfaction of the responsible authority. Weathe protection, passive surveillance and lighting should be provided to the satisfaction of the responsible authority.		
G32	Pedestrian movements should be prioritised by providing links between the key destinations within town centres.		
G33	Car parking efficiencies should be provided through use of shared, consolidated parking areas.		
G34	Safe pedestrian access should be provided through all car parking areas.		
G35	"Filtered" pedestrian permeability, accessibility and walkability through centres should be encouraged.		
G36	Pedestrian priority should be provided across all side roads along main streets and all car park entrances, incorporating the principles of shared use spaces.		
	use spaces.		



#### 3.3.6 Employment Areas

In addition to the town centre network, the precinct incorporates two key locations for employment uses which will feature a mix of industrial, commercial, and bulky goods/ trade supply retail uses. Concept plans have been included within the PSP for each of these two locations.

Given the different site size and locational requirements for different types of employment uses, the PSP needs to provide some flexibility to cater for a variety of different potential employment outcomes. For this reason, future subdivision in these areas may need to incorporate changes to lot depths/sizes and the location of local streets as depicted on the relevant concept plans.

While this level of variation is appropriate, it is important that any future subdivision in these employment areas is generally consistent with key aspects of the relevant concept plans, including the location of key land uses, interfaces with major roads, and surrounding land uses and key access points.

REQUIREMENTS		
R38	The location of land uses, building design, and interface treatments in the 'industrial', 'light industrial', 'restricted retail/trade supplies' and 'employment and commercial' areas shown on Plan 3 must minimise negative impacts on the amenity of nearby residential areas.	
R39	Buildings must be located near the front of any site to present an attractive address to the street.	
R40	Goods and materials storage areas and refuse areas must not be visible from public areas.	
R41	Development proposals in 'industrial', 'light industrial', 'restricted retail/ trade supplies', and 'employment and commercial' areas as shown on Plan 3 must take into account Crime Prevention Through Environmental Design Guidelines.	

#### Buildings and car parking or other areas along Sunbury Road and Vineyard Road in the 'industrial', 'light industrial', 'restricted retail/trade supplies' and 'employment and commercial' areas must be set back a **R42** minimum of 5 metres and landscaped to provide an attractive interface to surrounding areas. Key locations including arterial and connector/arterial intersections; areas adjacent to the local parks or visible from important landscape values (including Emu Creek) must incorporate features of interest into the built form and surrounding landscape, including: **R43** · Variations in built form elements (such as building heights, use of parapets, awnings, shade structures, balconies, and roof elements) Articulation of building facades; and Feature colours and materials. Vehicular access to properties fronting Sunbury or Vineyard Road must be via service roads, internal loop roads and/or rear laneways. Service **R44** roads and internal loop roads must provide indented parking lanes to cater for on street parking. Land use and development within the Sunbury Road Employment Area **R45** must respond to the concept plan in Figure 7 Land use and development within the Vineyard Road Employment Area **R46** must respond to the concept plan in Figure 8 The design of any restricted retail centre or area on Vineyard Road must be integrated, even where development is proposed on multiple adjoining properties, and must: Provide for easy vehicular and pedestrian movement to all restricted retail tenancies within the centre or area. Provide integrated car parking with dedicated pedestrian routes that enables access to all tenancies and a 'park once' approach. Limit fencing and landscaping which prohibits vehicular and pedestrian movement between tenancies. **R47** Provide dedicated access arrangements for servicing and delivery vehicles from the road network or a clearly separate arrangement where access is proposed from the car park. Be separated from residential and other sensitive uses by a local road. Be designed to minimise impact on amenity of adjoining uses including appropriate siting of buildings, height controls, landscaping and use of materials. Respond to slope and minimise cut and fill.

GUIDE	LINES
G37	Buildings should address (in order of priority where a lot fronts multiple elements):  Arterial Roads  Waterways and public open space  Connector Roads  Local roads
G38	Subdivision should provide for the creation of a range of lot sizes to cater for a diversity of commercial uses.
<b>G39</b>	Development in the Sunbury Road Employment Area should be designed to limit visual impact on open space along the Emu Creek, with appropriate setbacks and landscape screening. Where development is visible from the creek it should present attractively to the creek environs, with complementary colour schemes and building materials.
G40	Ancillary offices should be located at the front of buildings; should include a façade addressing the street frontage of the lot; and provide for improved pedestrian access and engagement with the public domain.
G41	Any visitor car parking and access areas in the front setback area should be setback a minimum of 3m from the street frontage (except to Sunbury Road and Vineyard Road) to enable provision of sufficient landscape strips at the street frontage.
G42	Where fencing is required forward of building lines and along public streets, it should be visually permeable and not greater than 1.2m in height.
G43	Buildings should be designed to have an integrated appearance so as to avoid the appearance of clutter.
G44	Large expanses of continuous wall visible to the street should have appropriate articulation, landscaping and other elements to provide relief and visual interest.
G45	A consistent landscaping theme should be developed along streets and access ways. Variations in street tree species should be used to create visual cues in appropriate locations such as at the termination of view lines, key intersections, and in parks.
G46	Streets should be aligned to create views and direct connections to any open spaces and waterways.
G47	Water tanks, service infrastructure and other structures (including plant and equipment) that are not part of the building should be located behind the building line or, where this is not possible, behind constructed screening using durable and attractive materials.
G48	Car parking and loading facilities should be located to the side or the rear of any buildings to present an attractive address to the street.

Table 5 Anticipated Employment Creation in the Sunbury South Precinct

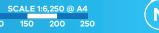
LAND USE	ASSUMPTION	AREA/NO.	JOBS	
Primary school (government)	40 jops per school	3	120	
Prmary school (non-govt)	30 jobs per school	1	30	
Secondary school (government)	90 jobs per school	1	90	
Community centre	15 jobs per facility	3	45	
Town centre - retail	1 job per 30sqm	31500	1050	
Town centre - commerical	1 job per 20sqm	18000	900	
Industrial area	30 jobs per ha	37.4	1122	
Employment and commerical	40 jobs per ha	16	640	
Home based business	0.05 jobs per dwelling	11460	573	
Total Jobs				

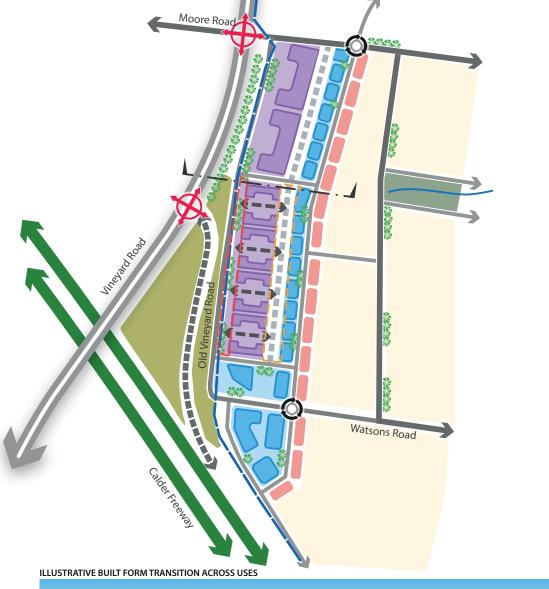


SCALE 1:8,000 @ A4



precinct boundary	
industrial	
potential industrial	
light industrial	
local convenience centre	
investigation area	
waterway/ stormwater asset	
bulky goods/ trade supplies	
attractive industrial and/or showroom uses (subject to permit)	
high voltage electricity easement	
residential	
quarry/landfill/organic waste	
utilities	
intersection  existing intersection	
Ψ	
potential link to investigation area arterial road	
connector road	
local street network (indicative)	
tree	
989	SONSURV ROAD OF THE PROPERTY O
	C Lagrent
	E Rect & September 1 September







Large format retail Arterial laneway Commercial Use Access Residential above Residential Access Residential Access Road Street Loading Street Commerical Street access

Table 6 Sports Reserves and Open Space Delivery Guide

PARK ID	AREA	TYPE	ATTRIBUTES
SS-LP-01	0.75	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-02	0.75	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-03	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-04	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-05	0.75	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-06	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-07	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-08	0.75	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-09	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-10	0.75	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-11	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-12	0.75	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-13	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-14	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area

PARK ID	AREA	TYPE	ATTRIBUTES
SS-LP-15	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-16	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-17	0.75	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-18	0.75	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-19	0.75	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-20	1.89	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-21	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-22	0.75	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-23	0.75	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-24	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-25	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-26	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-27	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-28	0.75	Local Park	Generally located as shown on Plan 7. Neighbourhood park

PARK ID	AREA	TYPE	ATTRIBUTES
SS-LP-29	0.50	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-30	1.00	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-31	0.75	Local Park	Generally located as shown on Plan 7. Neighbourhood park
SS-LP-32	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-33	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-34	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-35	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-LP-36	0.25	Passive Recreation Node	Generally located as shown on Plan 7. Small local park located adjacent to larger encumbered open area
SS-DP-01	Approx 17.03	District Park	Redstone Hilltop Parkland: Will accommodate a range of destinational recreation uses. Scale to public reserve to be determined. See Figure 9 for further information
SS-SR-01	10.75	Sporting Reserve	Harpers Creek Hub Sports Fields: The sporting reserve will accommodate: one pavilion, two senior ovals, three lawn bowls courts, playspace and on site parking.
SS-SR-02	10.20	Sporting Reserve	Jacksons Creek Hub Sports Fields: The sporting reserve will accommodate: one pavilion, two soccer pitches/one cricket oval, eight tennis courts, playspace and on site parking.
SS-SR-03	10.20	Sporting Reserve	Redsone Hill MTC Sports Fields: The sporting reserve will accommodate: one pavilion, two senior AFL/cricket ovals, four court indoor recreation centre, playspace and on site parking.
SS-SR-04	5.00	Sporting Reserve	Northern Hub Sports Fields The sporting reserve will accommodate: one pavilion, two soccer/rugby pitches, playspace and on site parking.

Note

Developer responsibilities for open space works prior to transfer to Council are set out at 3.7.2

# **3.4** Open Space, Community Facilities, Education & Biodiversity

## 3.4.1 Open Space

REQUIF	REMENTS
R48	Open space must be provided generally in accordance with Plan 7 and Table 6 of this PSP.
	The open space network must:
R49	<ul> <li>Provide flexible recreational opportunities that allow for the anticipated range of sporting reserves and local parks required by the community that is informed by planning undertaken by the Council as well as State Sporting Associations, where appropriate.</li> <li>Maximise the amenity and value of encumbered open space through the provision of shared paths, trails and other appropriate recreation elements.</li> </ul>
R50	All landscaped areas to be designed in accordance with relevant guidelines and to the satisfaction of the responsible authority, including the use of recycled water and storm water where possible.
	All local parks must be located, designed and developed in accordance with the relevant description in Table 6 and any local open space strategy to the satisfaction of the responsible authority.
R51	An alternative provision of land for local parks to that illustrated on Plan 7 is considered to be generally in accordance with this plan provided the local park:
	<ul> <li>Is located so as to not reduce the walkable access to local parks demonstrated on Plan 7.</li> </ul>
	<ul> <li>Does not diminish the quality or usability of the space for passive recreation.</li> </ul>
	<ul> <li>Is equal to or more than the passive open space provision within the ICP.</li> </ul>
	<ul> <li>Meets the requirements at R109 and R110 of the PSP (as relevant).</li> </ul>

R52	Applications with areas nominated as Passive recreation nodes are to include a concept plan showing the contours, recreational elements to be included and area required for the node, including playgrounds, shelters, landscaping, paths and accompanying seating areas to Council's satisfaction.
<b>R53</b>	Lots directly fronting open space must provide for a primary point of access from a footpath or shared path proximate to the lot boundary.
R54	In exceptional circumstances, any fencing of lots backing onto open space, whether encumbered or unencumbered, must be low scale and visually permeable to facilitate public safety and surveillance.
R55	Land designated for local parks must be finished and maintained to a suitable standard, prior to the transfer of land, to the satisfaction of the responsible authority.
<b>R56</b>	Appropriately scaled lighting must be installed along all major pedestrian thoroughfares traversing the public open space and cycling network to the satisfaction of the responsible authority.
GUIDE	LINES
G49	Subject to being compatible with Table 6, parks and open space should contain extensive tree planting.
G49 G50	
	should contain extensive tree planting.  Passive parks should cater for a broad range of users by providing a mix of spaces and planting to support both structured and unstructured recreational activities and play opportunities for all ages
G50	should contain extensive tree planting.  Passive parks should cater for a broad range of users by providing a mix of spaces and planting to support both structured and unstructured recreational activities and play opportunities for all ages and abilities.  Any pedestrian link through a drainage reserve or adjoining the road network should include a provision of park seating at appropriate
G50 G51	should contain extensive tree planting.  Passive parks should cater for a broad range of users by providing a mix of spaces and planting to support both structured and unstructured recreational activities and play opportunities for all ages and abilities.  Any pedestrian link through a drainage reserve or adjoining the road network should include a provision of park seating at appropriate intervals to the satisfaction of the responsible authority.  Open spaces should have a road frontage to all edges except where housing fronts open space with a paper road to the satisfaction of the

<b>G54</b>	Principles of Universal Design and Crime Prevention Through Environmental Design should be applied to encourage best practice thinking in the design and functionality of these open spaces and associated infrastructure.		
<b>G55</b>	Path networks associated with open space should include way finding signage which clearly identifies key destinations and communicates necessary information to all users.		
<b>G</b> 56	Water sensitive urban design principles should be used to direct water for passive irrigation in parks where appropriate and to the satisfaction of the responsible authority		
	Prior to a subdivision that creates the reserve for the Redstone Hill Parkland (or at another time as agreed by the responsible authority), a masterplan should be prepared for the reserve which responds to the Redstone Hill Hilltop Reserve Concept Plan at Figure 9.		
<b>G57</b>	<ul> <li>The masterplan should:</li> <li>reflect the district 'destination' scale of the park</li> <li>define a range of appropriate facilities consistent with its district role</li> <li>respond to the topography, view lines, existing vegetation and structures at the hilltop, and</li> <li>have regard for interfaces with adjoining development</li> <li>confirm future ownership/management of the parkland, including the area of any public reserve.</li> </ul>		
	to the satisfaction of the responsible authority.		

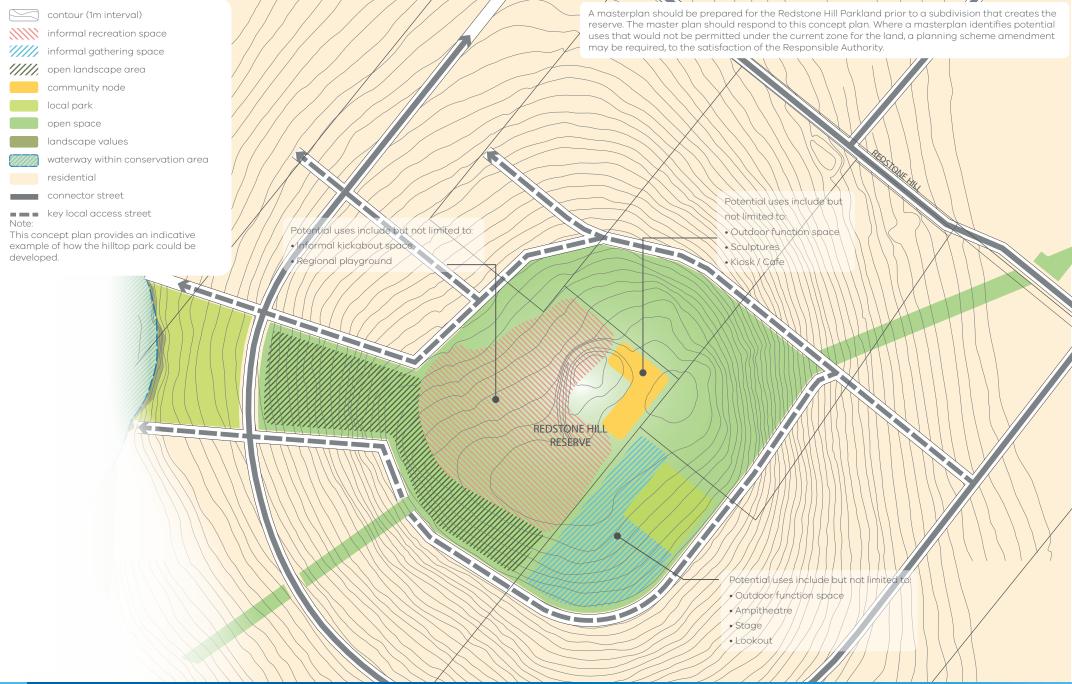
## 3.4.2 Community Facilities & Education

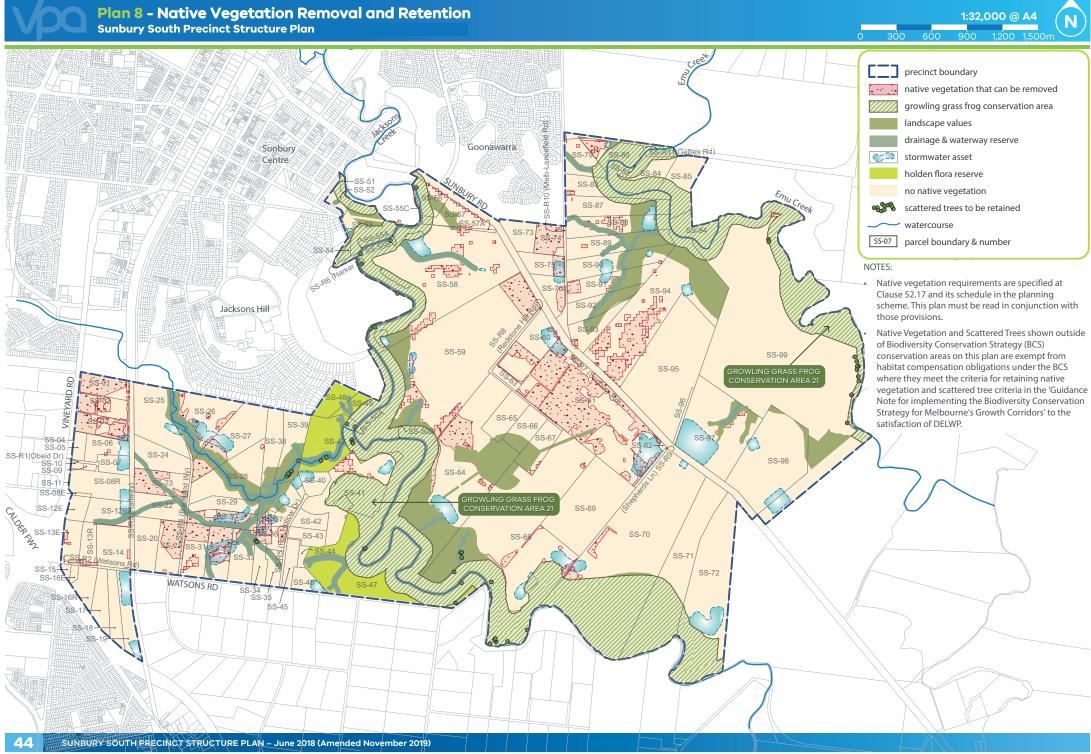
REQUIF	REMENTS
R57	Where the responsible authority is satisfied that land shown as a school site is unlikely to be used for a school at ultimate development of the PSP, that land may be used for an alternative purpose which is generally consistent with the surrounding land uses and the provisions of the applied zone.
<b>R58</b>	Schools and community facilities must be designed to front, and be directly accessed from a public street with car parks located away from the main entry.
<b>R59</b>	Any connector road or access street abutting a school must be designed to achieve slow vehicle speeds and provide designated pedestrian crossing points as required by the responsible authority.
GUIDE	LINES
	Community facilities, schools, and active recreation reserves which are colocated should be designed to:
	<ul> <li>Maximise efficiencies through the sharing of car parking and other complementary infrastructure.</li> </ul>
<b>G58</b>	<ul> <li>Maximise direct access and permeability for pedestrians and cyclists through and between facilities.</li> </ul>
	<ul> <li>Apply a user centred approach to ensure these spaces are accessible, flexible, safe, intuitive and overall will create a positive experience for community.</li> </ul>
<b>G59</b>	Schools should be provided with three street frontages where practicable.
G60	The indicative layout of community facilities, schools, and open space as illustrated in Plan 3 may be altered to the satisfaction of the responsible authority, in consultation with the Department of Education as appropriate.
G61	Community facilities should be planned and designed to have the flexibility and capacity to meet the changing needs of the community and provide for a range of uses.
G62	Any educational, community, or civic infrastructure not shown on Plan 3 should be located within or proximate to a Major or Local Town Centre, Local Convenience Centre or an existing community hub, as appropriate.
G63	Any private childcare, medical, or similar facility should be located proximate to a Major or Local Town Centre, Local Convenience Centres or nominated community hub, as appropriate.
G64	Where a community centre is located within a town centre, efficiency of land use should be maximised through the sharing and overall reduction of car parking and consideration of a multi-storey facility where practicable.

# Figure 9 - Redstone Hill Hilltop Reserve Concept Plan Sunbury South Precinct Structure Plan

SCALE 1:5,000 @ A4 0 50 100 150 200 250







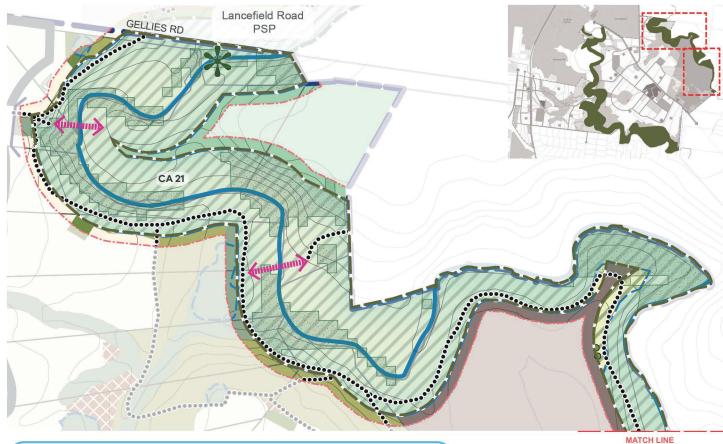
## 3.4.3 Biodiversity & Threatened Species

REQUIF	REMENTS
R60	Native vegetation may be removed as illustrated on Plan 8 and in accordance with the 'Final approval for urban development in three growth corridors under the Melbourne urban growth program strategic assessment, 5 September 2013' pursuant to section 146B of the Environment Protection and Biodiversity Conservation Act 1999 (Cth).
R61	Development within Conservation Area 21 must be in accordance with the relevant Conservation Area Concept Plans at Figures 10-12 and Interface Cross Section at Appendix B, to the satisfaction of the responsible authority and the Department of Environment, Land, Water and Planning.
R62	Any public paths or infrastructure located within a conservation area must be designed and located to avoid /minimise disturbance to vegetation and Growling Grass Frog habitat. Public paths are to be generally located in accordance with the Conservation Area Concept Plan to the satisfaction of the Department of Environment, Land, Water and Planning.
R63	Public lighting must be designed and baffled to prevent light spill and glare within and adjacent to Conservation Area 21 and the Holden Flora Reserve, unless otherwise agreed by the Department of Environment, Land, Water and Planning.
BIODIV	/ERSITY & THREATENED SPECIES GUIDELINES
G65	Street trees and public open space landscaping should contribute to habitat for indigenous fauna species, in particular arboreal animals and birds, where practical.
G66	The layout and design of the waterways, wetlands and retarding basins (including the design of paths, bridges and boardwalks and the stormwater drainage system) should integrate with the biodiversity and natural systems to the satisfaction of the responsible authorities.
<b>G67</b>	Planting in streetscapes and parks abutting waterways should make use of indigenous species to the satisfaction of the responsible authorities.

CONSERVATION AREA CONCEPT PLAN GUIDELINES		
G68	Where appropriate, public open space areas should be co-located with conservation areas and waterways.	
G69	Planting adjacent to the conservation area, waterway corridors, landscape values and retained indigenous vegetation should be indigenous species.	
<b>G70</b>	Areas defined as 'landscape values' should provide for the retention, restoration and revegetation of indigenous flora and fauna.	
<b>G71</b>	Where located adjacent or nearby to each other, local parks should be designed and constructed to maximise integration with the conservation area.	
G72	Street trees and public open space landscaping should contribute to habitat for indigenous fauna species, in particular animals and birds that use trees as habitat.	
G73	Drainage of stormwater wetlands should be designed to minimise the impact of urban stormwater on the biodiversity values of the conservation area.	
G74	In general, trees should not be planted within 10m of native grasslands or wetlands.	

Figure 10 - Conservation Area 21 (Eastern Section) - Conservation Area Concept Plan Sunbury South Precinct Structure Plan

1:10,000 @ A4





precinct boundary

growling grass frog conservation area (CA 21)

conservation interface zone (30m)

• scattered trees

native vegetation

landscape values

credited open space
heritage sites (confirmed)

waterway / stormwater asset

waterway / drainage reserve in conservation area

quarry / landfill / organic waste

non urban land (existing)

wilities easement

residential (adjacent house lots to front onto conservation area and areas of regionally significant landscape values)

potential residential

••••• potential shared path (final alignment subject to future planning and approvals process)

potential cross-creek shared path connection

management location represents the full extent of the area allocated for the construction, access and maintenance of storm water treatment infrastructure, including all associated works such as retarding basins, treatment wetlands, swales, access tracks, sediment ponds, drying areas and bio-retention systems.

The plan can be amended with the approval of DELWP & Melbourne Water.

Works are indicative and do not form developer works unless otherwise set out in the PSP

## Figure 11 - Conservation Area 21 (Western Section - A) - Conservation Area Concept Plan Sunbury South Precinct Structure Plan (AMENDED BY C242hume)

1:10,000 @ A4

precinct boundary growling grass frog conservation area conservation interface zone (30m) scattered trees native vegetation landscape values credited open space holden flora reserve heritage sites (confirmed) heritage sites (possible) waterway / stormwater asset waterway / drainage reserve in conservation area residential (adjacent house lots to front onto conservation area and areas of regionally significant landscape values) potential residential potential residential expansion area potential residential (sloping) potential shared path (final alignment subject to future planning and approvals

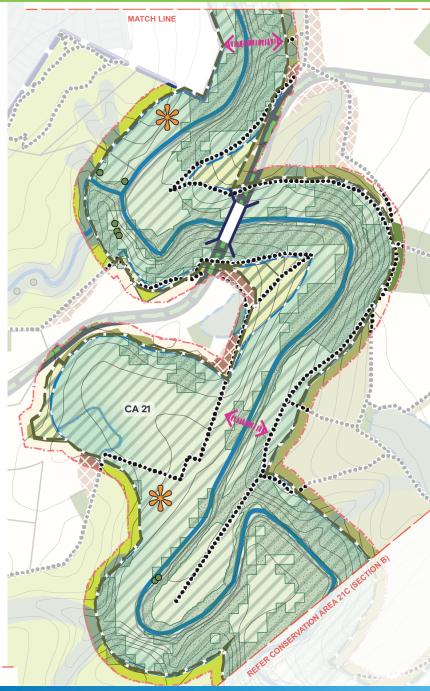
potential cross-creek shared path

connector road - boulevard

bridge & culvert

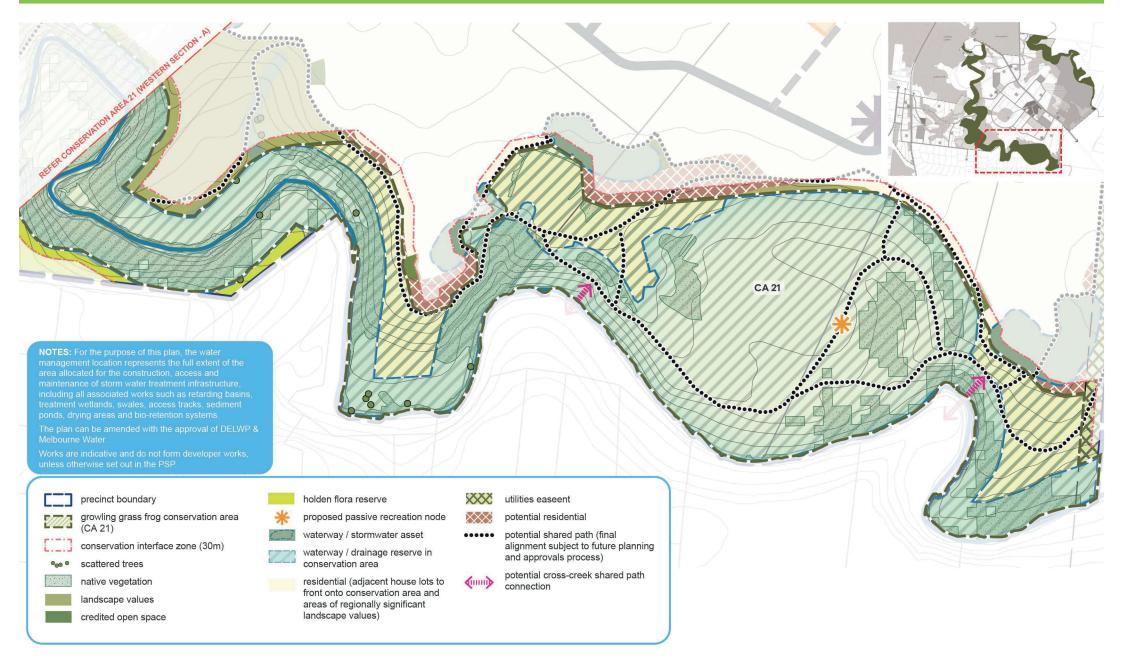


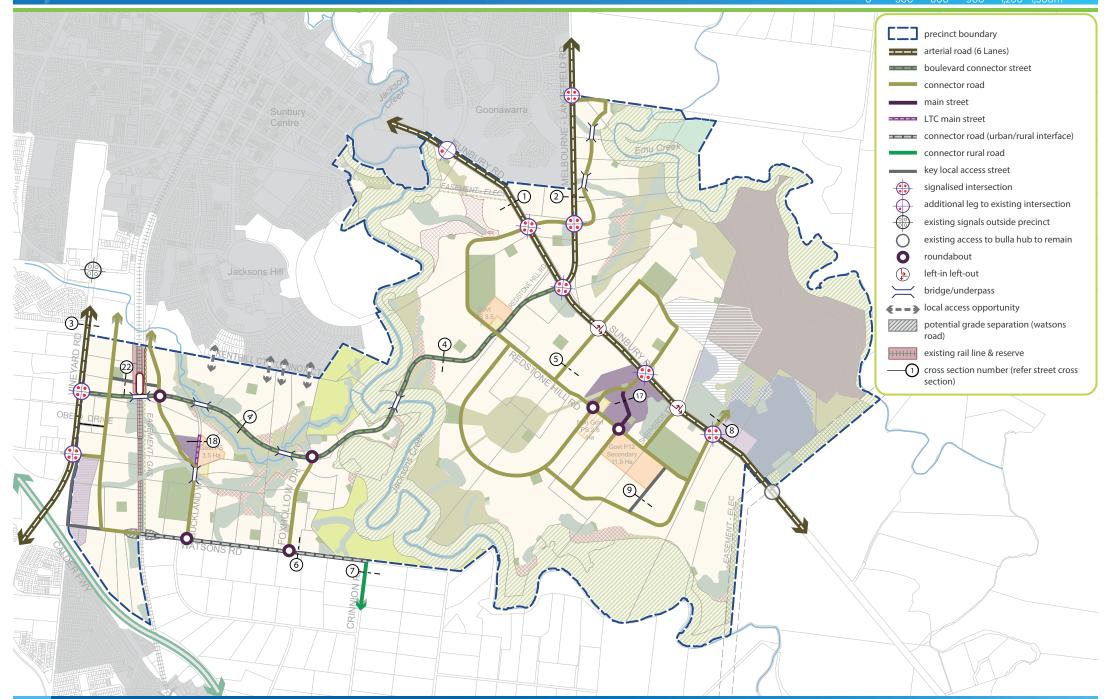




# THIS PAGE HAS BEEN LEFT INTENTIONALLY BLANK







## 3.5 Transport & Movement

## 3.5.1 Street Network

REQUIR	REMENTS
R64	Subdivision layouts must provide:  A permeable, safe and low speed street network that encourages walking and cycling  Convenient access to local points of interest and destinations  For the effective integration with neighbouring properties.
R65	The connector street network must provide a safe low speed environment.
R66	Where a single street spans across multiple properties that street may consist of multiple cross sections so long as a suitable transition has been allowed for between each. Where that street has already been constructed or approved for construction to a property boundary, the onus is on the development connecting into that street to adopt a consistent cross section until that suitable transition can be made.
R67	In areas of slope greater than 10%, streets must run generally with the contours where practical and include canopy street trees to minimise the visual impact of development.
R68	Convenient and direct access to the connector road network must be provided through neighbouring properties where a property to be subdivided does not otherwise have access to the connector network or signalised access to the arterial road network, as appropriate.
R69	Vehicle access to lots fronting arterial roads must be provided from a local internal loop road, rear lane, or service road to the satisfaction of the responsible authority, and provide a widened road reserve for car headlight glare barrier planting in accordance with VicRoads and the responsibility authorities requirements.
R70	Road crossings of waterways must respond sensitively to landform, environment, and the amenity of the waterway subject to Melbourne Water approval.
R71	Development should positively address all waterways through the use of frontage roads to the satisfaction of Melbourne Water and the responsible authority.
R72	Streets must be constructed to property boundaries where an inter-parcel connection is intended or indicated in the PSP, by any date or stage of development required or approved by the responsible authority. Provision must be made for temporary vehicle turning until the inter-parcel connection is delivered.

R73	Where determined that roundabouts are required at cross road intersections, they must be designed to slow vehicles, provide for pedestrian visibility and safety, and ensure connectivity/continuity of shared paths and bicycle paths.			
R74	Frontage streets are to be the primary interface between the development and rail/utility easement shown on Plan 10, and the relevant cross section at Appendix B.			
R75	Where a connector street crosses a waterway the developer(s) must construct a connector street bridge (unless this bridge is otherwise funded through an ICP) prior to the issue of a statement of compliance for the first stage of residential subdivision on the second side of the waterway to be developed, regardless of whether that residential subdivision directly abuts the waterway, unless the developer enters into an agreement to guarantee delivery of the bridge at a later stage, to the satisfaction of the responsible authority.			
R76	The design and construction of any crossing of the Jacksons Creek or Emu Creek must be consistent with the 'Design and construction standards for Growling Grass Frog passage structures' (DELWP 2016) to the satisfaction of the Department of Environment, Land, Water and Planning. The final design will need to avoid a reduction in existing high quality instream habitat for Growling Grass Frog.			
R77	Bus stop facilities must be designed as an integral part of town centres and activity generating land uses such as schools, sports fields, and employment areas.			
<b>R78</b>	The Jacksons Creek road crossing must respond sensitively to landform, amenity, and cultural and heritage values.			
<b>R79</b>	Where a lot is six metres or less in width, vehicle access must be via real laneway, unless otherwise agreed by the responsible authority			
R80	Any connector road or access street abutting a school must be designed to achieve safe and low vehicle speeds.			
GUIDE	LINES			
G75	At least 30% of local streets (including connector streets) within a subdivision should apply an alternative cross section to the 'standard' cross section for these streets outlined in Appendix B.			
	Examples of potential variations are provided in Appendix B, however others are encouraged including but not limited to:  • varied street tree placement,			
	varied footpath or carriageway placement,			
	introduction of elements to create a boulevard effect,     varied carriageway or parking bay pavement material, and			
	differing tree outstand treatments.			

Plan 10 - Public Transport and Path Network Sunbury South Precinct Structure Plan (AMENDED BY C242hume) precinct boundary arterial road (bus capable) connector road (bus capable) HHHHH railway line potential future rail station signalised intersections (ICP funded) additional leg to existing intersection left in / left out • • • • bike path (off-road) ••••• shared path (off-road) oooooo shared path each side (off-road) shared path (on-road indicative only subject to subdivision design) existing urban area land reserve for train station (1.5ha each side) SUNBURY SOUTH PRECINCT STRUCTURE PLAN - June 2018 (Amended November 2019)

G75 Cont.	<ul> <li>Alternative cross sections must ensure that:</li> <li>Minimum required carriageway dimensions are maintained to ensure safe and efficient operation of emergency vehicles on all streets as well as buses on connector streets.</li> <li>The performance characteristics of standard cross sections as they relate to pedestrian and cycle use are maintained.</li> <li>The proposed location of services are shown and achieve the dedicated off road and shared path network in Plan 10.</li> <li>Relevant minimum road reserve widths for the type of street (illustrated in Appendix B) are maintained.</li> </ul>
<b>G76</b>	Street layouts should provide multiple convenient routes to major destinations such as town centres, sporting fields, creek/waterway crossings and the arterial road network.
<b>G77</b>	Street block lengths should not exceed 240m to ensure a safe, permeable and low speed environment for pedestrians, cyclists and vehicles is achieved.
<b>G78</b>	Cul-de-sacs should be avoided wherever possible, and not detract from convenient pedestrian and cycle connections. Where cul-de-sacs are provided they must provide for walkway connections through to adjoining streets.
<b>G79</b>	All signalised intersections should be designed in accordance with the VicRoads <i>Growth Area Road Network Planning Guidance and Policy</i> Principles handbook, to the satisfaction of VicRoads and the responsible authority.
G80	The frequency of vehicle crossovers on widened verges (i.e. a verge in excess of six metres) should be minimised through the use of a combination of:  rear loaded lots with laneway access vehicle access from the side of a lot combined or grouped crossovers increased lot widths.

## 3.5.2 Walking & Cycling

**R81** 

#### REQUIREMENTS

Design of all streets and arterial roads must give priority to the requirements of pedestrians and cyclists by providing:

- Footpaths of at least 1.5 metres on both sides of all streets and roads unless otherwise specified by the PSP.
- Shared paths or bicycle paths where shown on Plan 10 or as shown on the relevant cross-sections in Appendix B or as specified by another requirement in the PSP.
- Safe, accessible and convenient crossing points of connector roads and local streets at all intersections, key desire lines and locations of high amenity (e.g. town centres and open space). Refer to the Greenfield Engineering Design and Construction Manual for typical intersection treatments
- Safe pedestrian/cyclist crossings of arterial roads at all intersections, at key desire lines, and on regular intervals appropriate to the function of the road and public transport provision.
- Widened footpaths on roads abutting schools.
- Pedestrian/cyclist priority crossings on all slip lanes.
- Safe and convenient transition between on and off-road bicycle networks.

All to the satisfaction of the coordinating roads authority and the responsible authority.

Shared and pedestrian paths along waterways must:

- Be delivered by development proponents consistent with the network shown on Plan 10.
- Be above 1:10 year flood level with any crossing of the waterway designed to be above the 1:100 year flood level to maintain hydraulic function of the waterway.
- Be constructed on each side of the waterway to an all-weather standard that satisfies the requirements of Melbourne Water.

All to the satisfaction of the responsible authority.

## **R83**

**R82** 

Bicycle priority at intersections of minor streets and connector roads with dedicated off-road bicycle paths must be achieved through strong and consistent visual and physical cues and supportive directional and associated road signs, as per the designs in the *Greenfield Engineering Design and Construction Manual*, and to the satisfaction of the responsible authority.

_		-
D	Я	Z
_	•	-

Bicycle parking facilities including way finding signage are to be provided by development proponents in convenient locations at key destinations such as parks and town centres.

#### **GUIDELINES**

Lighting should be installed along shared, pedestrian, and cycle paths linking to key destinations, unless otherwise agreed by the responsible authority.

**G82** 

The alignment of the off-road bicycle path should be designed for cyclists travelling up to 30km/hr.

G83

Shared zone design principles should be incorporated for areas across the precinct that will experience a high volume and mix of pedestrians, cyclists and cars to create a more flexible and equitable transport environment

## 3.5.3 Public Transport

#### REQUIREMENTS

В		3	ī
ж	r.	5.	t
-	•		۹

Roads and intersections shown as bus capable on Plan 10 must be constructed to accommodate ultra-low-floor buses to the satisfaction of PTV and the responsible authority.

**R86** 

Bus stop facilities must be designed as an integral part of town centres and activity generating land uses such as schools, sports reserves, and employment areas.

**R87** 

The street network must be designed to ensure all households are able to directly and conveniently walk to public transport services.

**R88** 

Subdivision design must not provide connections over the rail line, except where crossing points are nominated on Plan 9.

Subdivision abutting the rail line must provide acoustic and vibration mitigation for sensitive uses that would otherwise be unreasonably affected by rail noise and vibration. Any measure must be consistent with the following:

## **R89**

- A front fence facing a road abutting the rail reserve must be no more than 1.2m high.
- A side fence facing the rail reserve must be solid for no more than 50% of the length of the lot with the balance of the length of the fence being visually transparent no more than 1.5m high.

**R90** 

Tree reserves and landscape trails abutting the rail reserve must be designed to ensure safe use of these areas and avoid facilitating opportunistic access to the rail reserve.

**R91** 

Galvanised cyclone fencing to 1.2m in height, or otherwise agreed by the rail reserve land manager, must be constructed by the developer along the shared boundary with the rail reserve.

#### **GUIDELINES**

	0	-
	×	4
$\mathbf{\mathbf{\mathbf{\mathcal{C}}}}$	u	_

Development should provide a frontage road between new sensitive land uses and rail reserves, rather than direct abuttal.

**G85** 

Where noise walls or mounds are proposed, these should be sited and designed to facilitate ongoing maintenance.

**G86** 

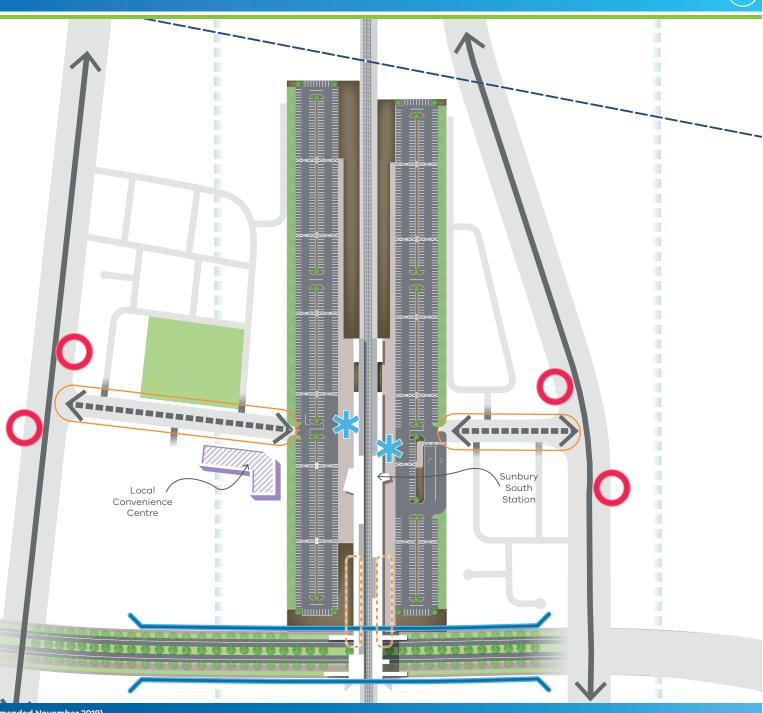
Where noise walls or mounds are proposed, they should be designed to contribute to an attractive neighbourhood. Alternative uses, such as open space, car parking, or play areas should be provided to minimise the need for noise walls or mounds, where practical.

#### Table 7 Streets & Slope

The following table is intended to provide statutory planners with guidance on the appropriate grade for different types of streets.

STREET / ROAD TYPE	DESIREABLE MAXIMUM SLOPE (%)	ABSOLUTE MAXIMUM SLOPE (%)
Access	10	20
Connector	8	12
Connector (bus capable)	6	9
Arterial	5	7





## 3.6 Integrated Water Management & Utilities

### 3.6.1 Integrated Water Management

Sunbury's urban growth will bring many challenges for not only water supply, security and resilience, but also in managing the detrimental impacts of stormwater and wastewater on the highly valuable Emu and Jacksons Creek catchments. This coupled with the unique landscape of Sunbury means that a holistic approach to water management is necessary.

Jacksons and Emu Creek catchments have been identified as having a diversity of ecological and social values and are designated priority areas within Melbourne Water's Healthy Waterways Strategy, in addition, they are highly valued by the community and have been identified as highly erosive. To protect the value and health of these waterways and not cause downstream impacts, significant flow reductions from the urban catchment are required to protect the receiving waterways. This includes appropriately managing the quality, quantity, timing and location of stormwater and alternative water releases to the waterways from the PSP.

$\neg$	$\sim$ 1	IIDI	- 1 4	- N	-

**R92** 

Final design and boundary of constructed waterway corridors, retarding basins, wetlands, stormwater quality treatment infrastructure and associated paths, boardwalks, bridges and planting, must be to the satisfaction of Melbourne Water and the responsible authority.

Stormwater conveyance and treatment must be designed in accordance with the relevant development services scheme or drainage strategy, to the satisfaction of Melbourne Water and the responsible authority including:

**R93** 

- Overland flow paths and piping within road reserves will be connected and integrated across property/parcel boundaries.
- Melbourne Water and the responsible authority freeboard requirements for overland flow paths will be adequately contained within the road reserves.

**R94** 

Stormwater runoff from the development must meet or exceed the performance objectives of the *Best Practice Environmental Management Guidelines for Urban Stormwater Management* (1999) prior to discharge to receiving waterways.

**R95** 

Stormwater conveyance and treatment must ensure impacts to native vegetation and habitat for Matters of National Environmental Significance within Conservation Area 21 and Holden Flora Reserve are minimised to the greatest feasible extent. Where practical natural or pre-development hydrological patterns must be maintained in these areas.

## **R96**

The regional stormwater harvesting scheme designed to reduce the volume of stormwater discharge to receiving waterways and their tributaries must be nominated in the approved regional integrated water management plan for the precinct

**R9**7

Development must have regard to the relevant policies and strategies being implemented by the responsible authority, Melbourne Water and Western Water, including any approved integrated water management plan. A Sunbury Integrated Water Management Plan is being developed by Western Water and Melbourne Water (the Approving Authorities). The developer is responsible for completing an Integrated Water Management Plan that meets the objects of the overall Sunbury Integrated Water Management Plan.

**R98** 

Water management features proposed in conservation areas must accord with the relevant design requirements prepared by the Department of Environment, Water, Land and Planning (DELWP) for water management assets in conservation areas identified in the Biodiversity Conservation Strategy. Approval from DELWP is required for any additional water management features in conservation areas.

**R99** 

Stormwater conveyance and treatment must ensure impacts to significant geomorphic values are minimised to the greatest feasible extent.

A permit for subdivision must ensure that the ultimate stormwater management assets and associated land described in the precinct structure plan are provided by the developer prior to the issue of a statement of compliance.

**R100** 

In the event that Melbourne Water and the responsible authority agree to an interim stormwater management solution, the developer must:

- Provide the land required for the ultimate drainage solution prior to the issue of a statement of compliance.
- Demonstrate that the interim solution will not result in an increase in the cost of achieving the ultimate outcomes.

#### **GUIDELINES**

**G87** 

Development should support and facilitate the use of alternative water supplies nominated in the approved integrated water management plan for the precinct.

G88

Development should maximise the potential for integration of stormwater management infrastructure with recreation and environmental uses in open space where this does not conflict with the primary function of the open space.

G89	<ul> <li>Subdivision in areas containing natural waterways should:</li> <li>Minimise earthworks and changes to the existing landform.</li> <li>Retain existing vegetation.</li> <li>Make provision for appropriate works to stabilise existing erosion (if required) of the waterway (bed and banks) in a manner that is sensitive to the waterway values.</li> <li>Make provision for appropriate revegetation of indigenous species to improve waterway vales.</li> <li>Stabilise and rehabilitate all disturbances caused by development works.</li> </ul>
G90	The design and layout of roads, road reserves, car parks and public open space should optimise water use efficiency and long-term viability of vegetation and public uses through the use of overland flow paths, water sensitive urban design initiatives such as rain gardens and locally treated stormwater for irrigation.
G91	Development should increase the use of fit-for-purpose alternative water sources such as stormwater, rain water and alternative water.
G92	<ul> <li>Integrated water management systems should be designed to:</li> <li>Support and enhance habitat values for local flora and fauna species.</li> <li>Enable future harvesting and/or treatment and re-use of stormwater.</li> </ul>
<b>G93</b>	Streets should be the primary interface between development and waterways. Public open space and lots with a direct frontage may be provided as a minor component of the waterway interface only where necessary for logical subdivision design. Where lots with direct frontage are provided, they should be set back up to 5.0 metres from the waterway corridor to provide pedestrian and service vehicle access to those lots, to the satisfaction of Melbourne Water and the responsible authority.
G94	Any constructed waterways should be created and landscaped to provide a natural appearance, as practical.
<b>G95</b>	Increase the use of fit-for-purpose alternative water sources such as storm water, rain water, and alternative water.

## 3.6.2 Utilities

REQUIRE	MENTS
R101	Delivery of underground services must be coordinated, located, and bundled (utilising common trenching) to facilitate the planting of trees and other vegetation within road verges.
R102	All new electricity supply infrastructure (excluding substations and cables of a voltage greater than 66kV) must be provided underground.
R103	Where existing above ground electricity cables of 66kV voltage are retained along road ways, underground conduits are to be provided as part of the upgrade of these roads to allow for future undergrounding of the electricity supply.
R104	All lots must be provided with potable water, electricity, reticulated sewerage, drainage, gas (where available) and telecommunications to the satisfaction of the relevant servicing authority.
R105	Landscaping and development adjacent the existing gas pipeline shown on Plan 12 must not jeopardise the integrity of the pipeline.
R106	Any plan of subdivision must contain a restriction which provides that no dwelling or commercial building may be constructed on any allotment unless the building incorporates dual plumbing for alternative water supply for toilet flushing and garden watering use should it become available.
R107	Where works necessary for the construction of infrastructure assets will require the removal of fencing to an adjacent land parcel, the fencing must not be removed without prior consultation with the adjacent landowner. Fencing must be reinstated at the developers cost.
R108	Utilities must be placed outside conservation areas in the first instance. Where services cannot avoid crossing or being located within a conservation area they must be located to avoid disturbance to existing waterway values, native vegetation, matters for national environmental significance, and significant landform features and heritage sites, to the satisfaction of the Department of Environment, Land, Water and Planning.

GUIDEL	INES CONTRACTOR OF THE CONTRAC
G96	Trunk services should be placed along the general alignments shown on Plan 12, subject to any refinements as advised by the relevant servicing authorities.
<b>G97</b>	Above ground utilities should be located outside of key view lines and screened with vegetation, as appropriate.
<b>G98</b>	Existing above ground electricity cables should be removed and re-routed underground as part of a subdivision (excluding cables greater than 66kV).
<b>G99</b>	Design and placement of underground services in new or upgraded streets should utilise the service placement guidelines outlined in Appendix E.
G100	Utility easements to the rear of lots should only be provided where there is no practical alternative.
G101	Vegetation should not be planted within 3 metres of the existing gas pipeline, as shown on Plan 12 where practical. Where vegetation is proposed to be planted within 3 metres of the pipeline alignment, it must be shallow rooted and must not exceed 1.5 metres in height once mature. Line of sight must be maintained between high pressure gas pipeline awareness markers.
G102	Any stormwater infrastructure constructed adjacent to or crossing the 'gas pipeline' shown on Plan 12 should cross the pipeline at 90 degrees and be engineered to protect the integrity of the pipeline.
G103	Any road or utility infrastructure constructed adjacent to or crossing the 'gas pipeline' shown on Plan 12 should cross the pipeline at 90 degrees and be engineered to protect the integrity of the pipeline.
G104	Utilities should be placed outside of natural waterway corridors or on the outer edges these corridors to avoid disturbance to existing waterway values, native vegetation, significant landform features, and heritage sites, to the satisfaction of Melbourne Water and the responsible authority.
G105	Development applications should demonstrate how the development will avoid and minimise impacts to conservation areas through consolidating utilities into dedicated service corridors.
G106	Where practical, utiliities should be co-located within the transmission line easements, to the satisfaction of the relevant servicing authorities and the responsible authority.

Table 8 Stormwater Assets

PARK ID	AREA	ТҮРЕ
SS-WI-01	2.62	Stormwater quality treatment
SS-WI-02	1.67	Stormwater quality treatment
SS-WI-03	2.43	Stormwater quality treatment
SS-WI-04	1.04	Stormwater quality treatment
SS-WI-05	0.84	Stormwater quality treatment
SS-WI-06	4.01	Stormwater quality treatment
SS-WI-07	1.77	Stormwater quality treatment
SS-WI-08	3.52	Stormwater quality treatment
SS-WI-09	1.61	Stormwater quality treatment
SS-WI-10	0.62	Stormwater quality treatment
SS-WI-11	1.65	Stormwater quality treatment
SS-WI-12	0.12	Stormwater quality treatment
SS-WI-13	2.70	Stormwater quality treatment
SS-WI-14	0.09	Stormwater quality treatment
SS-WI-15	1.39	Stormwater quality treatment
SS-WI-16	1.34	Stormwater quality treatment
SS-WI-17	0.75	Stormwater quality treatment
SS-WI-18	0.87	Stormwater quality treatment

PARK ID	AREA	ТУРЕ
SS-WI-19	1.23	Stormwater quality treatment
SS-WI-20	0.83	Stormwater quality treatment
SS-WI-21	2.84	Stormwater quality treatment
SS-WI-22	1.93	Stormwater quality treatment
SS-WI-23	2.84	Stormwater quality treatment
SS-WI-24	4.31	Stormwater quality treatment
SS-WI-25	2.60	Stormwater quality treatment
SS-WI-26	0.82	Stormwater quality treatment
SS-WI-27	8.25	Stormwater quality treatment
SS-WI-28	0.33	Stormwater quality treatment
SS-WI-29	5.22	Stormwater quality treatment
SS-WI-30	0.72	Stormwater quality treatment
SS-WI-31	0.24	Stormwater quality treatment
SS-WI-32	2.90	Stormwater quality treatment
SS-WI-33	1.52	Stormwater quality treatment
SS-WI-34	1.72	Stormwater quality treatment
SS-WI-35	1.70	Stormwater quality treatment
SS-WI-36	0.20	Stormwater quality treatment

## 3.7 Precinct Infrastructure Plan & Staging

#### 3.7.1 Precinct Infrastructure Plan

The Precinct Infrastructure Plan (Table 9) sets out the infrastructure and services required to meet the need of the proposed development within the precinct. The infrastructure items and services are to be provided through a number of mechanisms including:

- Subdivision construction works by developers.
- Agreement under S173 of the Planning and Environment Act 1987.
- Utility service provider requirements.
- The Infrastructure Contributions Plan.
- Relevant development contributions for adjoining areas.
- Capital works projects by Council, state government agencies and non government organisations.
- Works in Kind (WIK) projects undertaken by developers on behalf of Council
  or state Government Agencies.

A key element of the staging set out in the PIP is the early delivery of the Sunbury Ring Road crossing of Jacksons Creek (BR-01 on Plan 13), and associated road upgrades. These projects have been prioritised to provide additional capacity to the Sunbury regional road network in advance of the delivery of the Bulla Bypass (and associated Sunbury Road upgrades).

In the event that these projects have not been delivered prior to a commitment to construct the Bulla Bypass, the relative timing of these projects will need to be reviewed. This may see these projects become longer term priorities.

#### 3.7.2 Subdivision Works

#### **REQUIREMENTS**

Subdivision of land within the precinct must provide and meet the total cost of delivering the following infrastructure:

- Connector roads and local streets (excluding any works specifically funded through the ICP).
- Local bus stop infrastructure (where locations have been agreed in writing by Public Transport Victoria).
- Landscaping of all existing and future roads and local streets.
- Intersection works and traffic management measures along arterial roads, connector streets, and local streets (excluding any works specifically funded through the ICP).
- Council/VicRoads approved fencing and landscaping (where required) along arterial roads, including glare planting.
- Local shared, pedestrian and bicycle paths along local arterial roads, connector roads, utilities easements, local streets, escarpment top area and within local parks including bridges, intersections and barrier crossing points (except those included in the ICP).

## R109

- Bicycle parking as required in this document.
- Appropriately scaled lighting along all roads, major shared and pedestrian paths, and traversing public open space.
- Basic improvements to local parks and open space (refer open space delivery below).
- Local drainage system.
- Local street or pedestrian path crossings of waterways unless included in the ICP or outlined as the responsibility of another agency in the Precinct Infrastructure Plan.
- Infrastructure as required by utility service providers including water, sewerage, drainage (except where the item is funded through a Development Services Scheme), electricity, gas (where available), and telecommunications.
- Provision of water tapping, potable and alternative water connection points for any potential open space on the land located within the electricity transmission line easement.

- Tree reserves along Vineyard Road and Lancefield Road to achieve boulevard treatments (refer to Appendix B).
- Shared paths and bridges for local streets, unless otherwise funded through the Sunbury South ICP.
- Shared paths along escarpments and waterways, as generally depicted in Appendix B.
- Victrack/PTV approved fencing along railway corridors which have not already been fenced.

#### LOCAL OPEN SPACE DELIVERY

All public open space identified in Table 6 must be finished to a standard that satisfies the requirements of the responsible authority prior to the transfer of the public open space, including:

- Removal of all existing and disused structures, foundations, pipelines, stockpiles, and contaminated soils.
- Clearing of rubbish and weeds.
- Levelled, topsoiled and grassed with warm climate grass (unless conservation reserve requirements dictate otherwise). For the district open space, this requirement does not apply to areas identified as 'open landscape' in Figure 9, unless otherwise specified in an approved masterplan.
- Provision of water tapping, potable and alternative water connection points. Sewer and gas connection points must also be provided to land identified as a sports reserve and community facility.
- Planting of trees and shrubs.
  - Provision of vehicular exclusion devices (fence, bollards, or other suitable method).
  - Maintenance access points.
  - Installation of park furniture including, shelters, furniture, rubbish bins, local/district scale playground equipment, local/district scale play areas, drinking fountains and kick about spaces and appropriate paving to support these facilities, consistent with the type of public open space listed in the open space delivery guide (Table 6) and Figure 9 (where relevant).
  - Include boundary fencing where the public open space abuts private land, or as required by the responsible authority.
  - Remediated of any contamination
  - Protection and interim maintenance of any remnant trees identified for retention.

Local sports reserves identified on Plan 7 must be vested in the relevant authority in the following condition:

- Free from surface/ protruding rocks and structures.
- Reasonably graded and / or topsoiled to create a safe and regular surface (with a maximum 1:6 gradient).

## **R111**

- Bare, patchy and newly graded areas seeded, top-dressed with drought resistant grass.
- Consistent with the ICP, where these works are not considered to be temporary works, these works may be eligible for a works in kind credit against the landowner/ developers ICP obligation to the satisfaction of the collecting agency. Works associated with adjacent road construction (e.g. earthworks for a road embankment) are not eligible for a works in kind credit.

## 3.7.3 Development Staging

#### **REQUIREMENTS**

Development staging must provide for the timely provision and delivery of:

- Arterial road reservations.
- Connector streets and connector street bridges.

## **R112**

- Street links between properties, constructed to the property boundary.
- Connection of the on- and off-road pedestrian and bicycle network to key destinations within and outside the precinct from the early stages of development.
- Land for community infrastructure, active recreation and open space.

Development viability and staging in this precinct will be determined largely through the availability and provision of local road infrastructure in order to access and service each development site. Within this context, development must:

## **R113**

- Ensure safe and orderly vehicular access to the existing arterial network; and
- Provide access from an arterial road to each new lot via a sealed road to service the development and constructed to an urban standard (unless specified elsewhere in the PSP), all to the satisfaction of the responsible authority.

## **R114**

Development of land bound by the Jacksons Hill estate and Harpers Creek must have access to Fox Hollow Drive or Buckland Way prior to commencement of development. No road connection will be approved into the Jacksons Hill estate prior to the construction of the Jacksons Hill Link, unless otherwise agreed with the responsible authority.

#### **GUIDELINES**

## G107

Infrastructure projects identified in the Precinct Infrastructure Plan at Table 9 should be delivered as per the timing priority identified in the timing column of Table 9, unless otherwise agreed to with the responsible authority.

Table 9 Precinct Infrastructure Plan (Amended by C242hume)

CATEGORY	TITLE	DESCRIPTION	LEAD AGENCY	ULTIMATE LAND 60	INTERIM ITA	ULTIMATE Z CONSTRUCTION 3	TIMING*	INTERNAL APPORTIONMENT	ICP REF
TRANSPORT									
Road	Lancefield Road: Gellies Road to	Interim - Land and construction of upgraded 4-lane divided arterial road within the existing road reserve/ public acquisition overlay	VicRoads	No	No	No	M-L	0%	SS DD 01
Noau	Sunbury Road	Land and construction of ultimate 6-lane arterial road within the existing road reserve/public acquisition overlay	VicRoads	No	No	No	L	076	SS-RD-01
	Sunbury Road: Jacksons Creek to	Construction of upgraded 4-lane divided arterial road within existing road reserve	VicRoads	No	No	No	S-M		SS-RD-02
Road	Urban Growth Boundary	Construction of ultimate 6-lane arterial road within the existing road reserve	VicRoads	No	No	No	L	0%	
Road	Vineyard Road: Calder Freeway to Elizabeth Drive	Land and construction of ultimate 6-lane arterial road within the existing road reserve/public acquisition overlay	VicRoads	No	No	No	L	0%	SS-RD-03
Road	Sunbury Ring Road - Southern Link: Sunbury Road to Jacksons Creek	Land and construction of 2-lane boulevard connector within 34m road reserve	Hume City Council	Yes	No	Yes	S-M*	100%	SS-RD-04-1
Road	Sunbury Ring Road - Southern Link: Jacksons Creek to Fox Hollow Drive	Land and construction of 2-lane boulevard connector within 34m road reserve	Hume City Council	Yes	No	Yes	S-M*	100%	SS-RD-04-2
Road	Sunbury Ring Road - Southern Link: Harpers Creek East to Harpers Creek West	Land and construction of 2-lane boulevard connector within 34m road reserve	Hume City Council	Yes	No	Yes	S-M	100%	SS-RD-04-3
Road	Sunbury Ring Road - Southern Link: Harpers Creek West to Jacksons Creek Link Road (ultimate)	Land and construction of 2-lane boulevard connector within 34m road reserve	Hume City Council	Yes	No	Yes	S-M	100%	SS-RD-04-4
Road	Sunbury Ring Road - Southern Link: Rail Line to Vineyard Road	Land and construction of 2-lane boulevard connector within 34m road reserve	Hume City Council	Yes	No	Yes	S-M	100%	SS-RD-04-5
Road	Buckland Way: Sunbury Ring Road to Watsons Road	Construction of a 2-lane connector and land to widen the existing reserve to 25m in part and to connect to the Sunbury Ring Road.	Hume City Council	Yes	No	Yes	S-M	100%	SS-RD-05

				СОМРОМ	ENT INCLUD	ED IN ICP		<sub> </sub>	
CATEGORY	TITLE	DESCRIPTION	LEAD AGENCY	ULTIMATE LAND	INTERIM	ULTIMATE CONSTRUCTION	TIMING*	INTERNAL APPORTIONMENT	ICP REF
Road	Fox Hollow Drive: Sunbury Ring Road to Watsons Road	Construction of 2-lane connector and land to widen the existing reserve to 25m in part and to connect to the Sunbury Ring Road	Hume City Council	Yes	No	Yes	S-M*	100%	SS-RD-06
Road	Watsons Road: Crinion Drive to Vineyard Road	Construction of 2-lane connector within existing road reserve	Hume City Council	No	No	Yes	S-M*	100%	SS-RD-07
Road	Crinion Drive: Watsons Road to Bulla-Diggers Rest Road	Upgrade of existing 2 lane road within existing road reserve	Hume City Council	No	No	Yes	S-M*	100%	SS-RD-08
Road	Jacksons Hill Link Road	Construction of ultimate 2 lane connector and land purchase for 25m road reserve	Hume City Council	Yes	No	Yes	S-M	100%	SS-RD-09
Intersection	Intersection: Sunbury Road and	Land for ultimate configuration and construction of interim configuration 4 way intersection	Hume City Council	Yes	Yes	No	М	100%	SS-IN-01
	Southern Connector	Construction of ultimate configuration	VicRoads	No	No	No	L		
Intersection	Intersection: Sunbury Road and	Land for ultimate configuration and construction of interim configuration 4 way intersection	Hume City Council	Yes	Yes	No	S-M	100%	SS-IN-02
	Main Street (Redstone Hill MTC)	Construction of ultimate configuration	VicRoads	No	No	No	L		
Intersection	Intersection: Sunbury Road and Lancefield Road/Sunbury Ring	Land for ultimate configuration and construction of interim configuration 4 way intersection	Hume City Council	Yes	Yes	No	S-M	100%	SS-IN-03
	Road	Construction of ultimate configuration	VicRoads	No	No	No	L		
Intersection	Intersection: Sunbury Road and	Land for ultimate configuration and construction of interim configuration 4 way intersection	Hume City Council	Yes	Yes	No	S-M	100%	SS-IN-04
	Northern Connector	Construction of ultimate configuration	VicRoads	No	No	No	L		
Intersection	Intersection: Vineyard Road and Sunbury Ring Road	Land for ultimate configuration and construction of interim configuration 3 way intersection	Hume City Council	Yes	Yes	No	S-M	100%	SS-IN-05
		Construction of ultimate configuration	VicRoads	No	No	No	L		
Intersection	Intersection: Vineyard Road and Moore Road/Old Vineyard Road	Land for ultimate configuration and construction of interim configuration 3 way intersection	Hume City Council	Yes	Yes	No	S-M	100%	SS-IN-07
	Woole Road/Old Villeyard Road	Construction of ultimate configuration	VicRoads	No	No	No	L		

				COMPONENT INCLUDED IN ICP				E	
CATEGORY	TITLE	DESCRIPTION	LEAD AGENCY	ULTIMATE LAND	INTERIM	ULTIMATE CONSTRUCTION	TIMING*	INTERNAL APPORTIONMENT	ICP REF
Intersection: Gellies Road and	Land for ultimate configuration and construction of interim configuration 4 way intersection	Hume City Council	Yes	Yes	No	M-L	100%	SS-IN-08	
	Lancefield Road	Construction of ultimate configuration	VicRoads	No	No	No	L		
Intersection	Intersection: Southern Link, Buckland Way and Jacksons Hill Link	Land and construction of ultimate configuration 4 way intersection	Hume City Council	Yes	No	Yes	S-M	100%	SS-IN-09
Intersection	Intersection: Southern Link and Fox Hollow Drive	Land and construction of ultimate configuration 3 way intersection	Hume City Council	Yes	No	Yes	S-M	100%	SS-IN-10
Intersection	Intersection: Crinion Road and Bulla Diggers Rest	Construction of ultimate configuration	Hume City Council	No	No	Yes	S-M	100%	SS-IN-11
Intersection	Intersection: Lancefield Road and Central Connector	Land for ultimate configuration and construction of interim configuration 4 way intersection	Hume City Council	Yes	Yes	No	M-L	25%	SS-IN-12
		Construction of ultimate configuration	VicRoads	No	No	No	L		
Intersection	Intersection: Fox Hollow Drive and Watsons Road	Land and construction of ultimate 3 leg roundabout	Hume City Council	Yes	No	Yes	S-M	100%	SS-IN-13
Intersection	Intersection: Buckland Way and Watsons Road	Land and construction of ultimate 3 leg roundabout	Hume City Council	Yes	No	Yes	S-M	100%	SS-IN-14
Intersection	Intersection: Watsons Road and Crinnion Road	Construction of a curved road corner treatment with a traffic island and reverse priority within existing road reserve	Hume City Council	No	No	Yes	S-M	100%	SS-IN-15
Bridge	Sunbury Ring Road - Southern Link: Jacksons Creek Crossing	Land and construction of 2 lane bridge	Hume City Council	Yes	No	Yes	S-M*	100%	SS-BR-01
Bridge	Sunbury Ring Road - Southern Link: Harpers Creek East Crossing	Land and construction of 2 lane bridge	Hume City Council	Yes	No	Yes	S-M	100%	SS-BR-02
Culvert	Sunbury Ring Road - Southern Link: Harpers Creek West Crossing	Land and construction of culvert	Hume City Council	Yes	No	Yes	S-M	100%	SS-BR-03
Bridge	Sunbury Ring Road - Southern Link: Grade Separation	Land and construction of 2 lane road underpass of rail line	Hume City Council	Yes	No	Yes	S-M	100%	SS-BR-04

CATEGORY	TITLE	DESCRIPTION	LEAD AGENCY	ULTIMATE LAND SO	INTERIM ZZI CONSTRUCTION DO	ULTIMATE Z CONSTRUCTION 3	TIMING*	INTERNAL APPORTIONMENT	ICP REF
PUBLIC TRANSP	ORT INFRASTRUCTURE								
Rail	Sunbury South Train Station	New two platform train station, including car parking, bus interchange and associated facilities	TfV	No	No	No	S-M	0%	-
COMMUNITY INI	FRASTRUCTURE								
Community	Level 2 Community Centre	Land and construction of Harpers Creek multipurpose community centre	Hume City Council	Yes	No	Yes	S-M	100%	SS-CI-01
Community	Level 2 Community Centre	Land and construction of Jacksons Creek multipurpose community centre including kindergarten rooms	Hume City Council	Yes	No	Yes	S-M	100%	SS-CI-02
Community	Level 2 Community Centre	Land and construction of Redstone Hill multipurpose community centre including kindergarten rooms	Hume City Council	Yes	No	Yes	S-M	100%	SS-CI-03
Education	Government Primary School (Jacksons Creek)	Land and construction of a government P-6 (primary) school	DET	No	No	No	S-M	0%	-
Education	Government Primary School (Harpers Creek)	Land and construction of a government P-6 (primary) school	DET	No	No	No	L	0%	-
Education	Government P12 School (Redstone Hill MTC)	Land and construction of a government P-12 (primary and secondary) school	DET	No	No	No	L	0%	-
Education	Non-Government Primary School (Redstone Hill MTC)	Land and construction of a non-government P-6 (primary) school	Others	No	No	No	М	0%	-
RECREATION IN	RECREATION INFRASTRUCTURE								
Sports Fields	Harpers Creek Hub Sports Fields	Land and construction of local sporting fields, including sports pavilion	Hume City Council	Yes	No	Yes	L	100%	SS-SR-01

				COMPONENT INCLUDED IN ICP				L E	
CATEGORY	TITLE	DESCRIPTION	LEAD AGENCY	ULTIMATE LAND	INTERIM	ULTIMATE	TIMING*	INTERNAL	ICP REF
Sports Fields	Jacksons Creek Hub Sports Fields	Land and construction of local sporting fields, including sports pavilion	Hume City Council	Yes	No	Yes	М	100%	SS-SR-02
Sports Fields	Redsone Hill MTC Sports Fields	Land and construction of local sporting fields, including sports pavilion	Hume City Council	Yes	No	Yes	М	100%	SS-SR-03
Sports Fields	Northern Hub Sports Fields - Sub District	Land and construction of local sporting fields, including sports pavilion	Hume City Council	Yes	No	Yes	L	100%	SS-SR-04
LOCAL PARKS									
Local Parks	Local Parks	Land for Local Parks and Passive Recreation Nodes - Refer to Table 6 for further information	Hume City Council	Yes	No	No	Various	100%	SS-LP-01 to LP-36

ICP = Funded by Infrastructure Contributions Plan, delivered by Council or as Works in Kind by developers/land owners

DET = Funded and delivered by Department of Education and Training

TFV = Funded and delivered by Transport for Victoria

Project timing indication: S = 0-10 years, M = 11-20 years, L= 21 years +

<sup>\*</sup> Specific timing for these projects is dependant upon the timing of delivery of the Bulla Bypass

## **4.0** APPENDICES

## 4.1 Appendix A – Local Town Centre Design Guidelines

## **LOCAL TOWN CENTRES**

## **Principle 1**

Locate Village Centres in attractive settings and as the focus of the surrounding neighbourhood.

## **Principle 2**

Focus on a public space as the centre of community life.

#### PERFORMANCE CRITERIA

- Locate Village Centres in attractive settings and incorporate natural or cultural landscape features such as creeks and waterways, linear open space, pedestrian and cycle links and areas of high aesthetic value.
- The design of the Village Centre should respect existing views and vistas to and from the Village Centre location.

#### PERFORMANCE CRITERIA

- A public space which acts as the central meeting place within the Village Centre must be provided. This public space may take the form of a civic square, town park, foreshore park, public plaza space, public market place or a similar locally responsive option.
- The public space should be located in a position where the key uses of the Village Centre are directly focused on this public space to ensure that it is a dynamic and activated space.
- The public space should be designed to function as the identifiable 'centre' or 'heart' with a distinctive local character for both the Village Centre and the broader residential catchment.
- The public space should be designed as a flexible and adaptable space so that a range of uses can occur within this space at any one time. Such uses
  may include people accessing their daily shopping and business needs as well as providing a space where social interaction, relaxation, celebrations and
  temporary uses (such as stalls, exhibitions and markets) can occur.
- The public space should be well integrated with pedestrian and cycle links around and through the Village Centre.
- The main public space or town square within the Village Centre should have a minimum area of 500sq m. Smaller public spaces which are integrated within the built form design, are surrounded by active frontages and facilitate high levels of pedestrian movement are also encouraged.
- Footpath widths within and around the public space as well as along the main street should be sufficient to provide for pedestrian and mobility access as well as provide for outdoor dining and smaller gathering spaces.
- Maximise solar passive orientation and providing suitable protection from high winds through suitable siting and design techniques, and
- Ensure that this public space remains publicly accessible outside regular business hours.

## **Principle 3**

Provide a range of retail, local community and other facilities within Village Centres.

#### PERFORMANCE CRITERIA

- Land uses should be located generally in accordance with the locations and general land use terms identified in Figure 6.
- The design of the Village Centre should facilitate development with a high degree of community interaction and provide a vibrant and viable mix of retail, recreation and community facilities.
- The design of the Village Centre should encourage a pattern of smaller scale individual tenancies and land ownership patterns to attract investment and encourage greater diversity and opportunities for local businesses.
- Active building frontages should address the main street and town square to maximise exposure to passing trade, and promote pedestrian interaction.
- Shop fronts should have varying widths and floor space areas to promote a diversity of trading opportunities throughout the Village Centre.
- Flexible floor spaces (including floor to ceiling heights) should be incorporated into building design to enable localised commercial uses to locate amongst
  the activity of the Village Centre.
- Childcare, medical centres and specialised accommodation (e.g. aged care/nursing home, student accommodation, and serviced apartments) should be
  located within the Village Centre and at the edge of the Village Centre to contribute to the activity of the centre and so these uses are close to the services
  offered by the centre.
- Car parking areas should be located centrally to the site and to the rear and or side of street based retail frontages.
- Car parking areas should be designed to accommodate flexible uses and allow for long term development opportunities.
- Public toilets should be provided in locations which are safe and accessible and within the managed area of the propertyEnsure that 80-90% of households are within a 1km walkable catchment of a local or higher order Town Centre.
- Locate Local Town Centres in attractive settings and incorporate natural or cultural landscape features such creeks and waterways, linear open space, pedestrian and cycle links and areas of high aesthetic value.
- The design of the Local Town Centre should respect/enhance existing views and vistas to and from the Local Town Centre location.
- Tenancies should be designed such that they can transition to a range of uses over time, particularly in multi-storey developments.

## **Principle 4**

Integrate local employment and service opportunities in a business friendly environment.

#### PERFORMANCE CRITERIA

- A variety of employment and business opportunities should be planned through the provision of a mix of land uses and commercial activities.
- Options for office based businesses should be provided within the Village Centre.
- Services and facilities to support home based and smaller businesses are encouraged within the Village Centre.
- Appropriate locations for small office/home office ('SOHO') housing options which maximise the access and exposure to the activity of the Village Centre should be considered as part of the design process.

## **Principle 5**

Include a range of medium and high density housing and other forms of residential uses within and surrounding the Village Centre.

#### PERFORMANCE CRITERIA

- Medium and high density housing in and around the Village Centre is required to provide passive surveillance, contribute to the life of the centre and to
  maximise the amenity of the centre.
- Medium and high density housing should establish in locations of high amenity around the Village Centre and be connected to the activity of the Village Centre through strong pedestrian and cycle links.
- A range of housing types for a cross section of the community (such as retirement living) should be included in and around the Village Centre.
- Specialised accommodation (such as aged/nursing care, student accommodation and serviced apartments) is encouraged at the edge of Village Centres
  with strong pedestrian and cycle links to the central activity area of the Village Centre.
- The Village Centre design should avoid potential land use conflicts between residential and commercial uses by focusing on retail operations on the main street and around the town square/public space and locating residential uses predominantly at the edge of the Village Centre and/or on upper levels.
- Refer to the Small Lot Housing Code for further information about housing requirements for small lots around Village Centres.

## **Principle 6**

Integrate local employment and service opportunities in a business friendly environment

#### PERFORMANCE CRITERIA

- The Village Centre should be easily, directly and safely accessible for pedestrians, cyclists, public transport modes, private vehicles, service and delivery
  vehicles with priority given to pedestrian movement, amenity, convenience and safety.
- The Village Centre should provide a permeable network of streets, walkways and public spaces that provide linkages throughout the centre and designated
  pedestrian crossing points.
- The main street should be designed to comply with the relevant cross sections found within the Precinct Structure Plan.
- A speed environment of 40km/h or less should be designed for the length of the main street.
- Public transport infrastructure/facilities should be planned for commuter friendly/convenient locations within the Village Centre.
- Bus stops should be provided in accordance with the Department of Transport Public Transport Guidelines for Land Use and Development, to the satisfaction of the Public Transport Victoria.
- Bicycle parking should be provided within the street network and public spaces in highly visible locations and close to pedestrian desire lines and key
  destinations.
- Supermarkets and other 'large format' buildings should not impede on the movement of people around the Village Centre.
- Key buildings within the Village Centre should be located to encourage pedestrian movement along the length of the street through public spaces.
- The design of buildings within the Village Centre should have a relationship with and should interface to the public street network.
- Car parking areas should be designated to ensure passive surveillance and public safety through adequate positioning and lighting.
- Car parking areas should be designed to provide dedicated pedestrian routes and areas of landscaping.
- On street car parking should be provided either as parallel or angle parking to encourage short stay parking.
- Car parking ingress and egress crossovers should be grouped and limited.
- Car parking ingress or egress and car parking areas accommodating heavy vehicle movements should be designed to limit the pedestrian/vehicle conflict.
- Car Parking should be provided such that commercial car parking supply doesn't rely on on-street provision on local streets.
- Heavy vehicle movements (i.e. loading and deliveries) should be located to the rear and or side of street based retail frontages.
- Streets, public spaces and car parks should be well lit to Australian standards and with pedestrian friendly (generally white) light. Lighting should be
  designed to avoid unnecessary spill to the side or above.
- All public spaces should respond appropriately to the design for mobility access principles.

#### **Principle 7**

Create a sense of place with high quality engaging urban design.

#### PERFORMANCE CRITERIA

- Development should complement and enhance the character of the surrounding area by responding appropriately to key visual cues associated with the topography of the Village Centre location and its surrounds.
- The Village Centre design should seek to minimise amenity and noise impacts resulting from the mix of uses by maintaining separation and transitional
  areas between retail and housing activities, such as open space, road networks and community facilities.
- The design of each building should contribute to a cohesive and legible character for the Village Centre as a whole.
- Sites in prominent locations (such as at key intersections, surrounding public spaces and terminating key view lines and vistas) should be identified for significant buildings or landmark structures.
- The design of building frontages should incorporate the use of a consistent covered walkway or verandah to provide for weather protection.
- The built form should define the main street and be aligned with the property boundary.
- Street facades and all visible side or rear facades should be visually rich, interesting and well articulated and be finished in suitable materials and colours
  that contribute to the character of the Village Centre.
- Corner sites, where the main street meets an intersecting connector street / arterial road should:
- Be designed to provide built form that anchors the main street to the intersecting road. This can be achieved through increased building height, scale and articulated frontages;
- Incorporate either 2 storey building or 2 storey elements (such as awnings and roof lines);
- Be developed to have a ground floor active frontage and active floor space component to the main street frontage; and
- Not be developed for standard single storey fast food outcomes.
- Materials and design elements should be compatible with the environment and landscape character of the broader precinct.
- Any supermarket and secondary anchors should have frontages that directly address the main street and/or town square so that the use integrates with
  and promotes activity within the main street and public spaces/thoroughfares.
- Any supermarkets or large format retail uses with a frontage to the main street 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, excessive window advertising and obtrusive internal shelving or 'false walls' offset from the glazing).
- Secondary access to any supermarket from car parking areas should be considered where it facilitates convenient trolley access and does not diminish the
  role of primary access from the main street or town square.
- The design and siting of any supermarkets and other 'large format retail uses' should provide an appropriate response to the entire public domain. This includes but is not limited to car parking areas, predominantly routes and streets.
- Retail uses along street frontages should generally include access points at regular intervals to encourage activity along the length of the street.
- Retail and commercial buildings within the Village Centre should generally be built to the property line.
- Public spaces should be oriented to capture north sun and protect from prevailing winds and weather.
- Landscaping of all interface areas should be of a high standard as an important element to complement the built form design.
- Urban art should be incorporated into the design of the public realm.

## Principle 7 cont.

- 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 Village Centre.
- Wrapping of car parking edges with built form, to improve street interface, should be maximised.
- Car parking areas should provide for appropriate landscaping with planting of canopy trees and dedicated pedestrian thoroughfares.
- Screening of centralised waste collection points should minimise amenity impacts with adjoining areas and users of the centre.
- Where service areas are accessible from car parks, they should present a well designed and secure facade to public areas.
- Mechanical plant and service structure roofs should be included within roof lines or otherwise hidden from view.
- Landscape buffers should be provided between carparks and adjacent roads.
- Landscape buffers should be provided between carparks/commercial uses and medium density housing sites.

## **Principle 8**

Promote localisation, sustainability and adaptability.

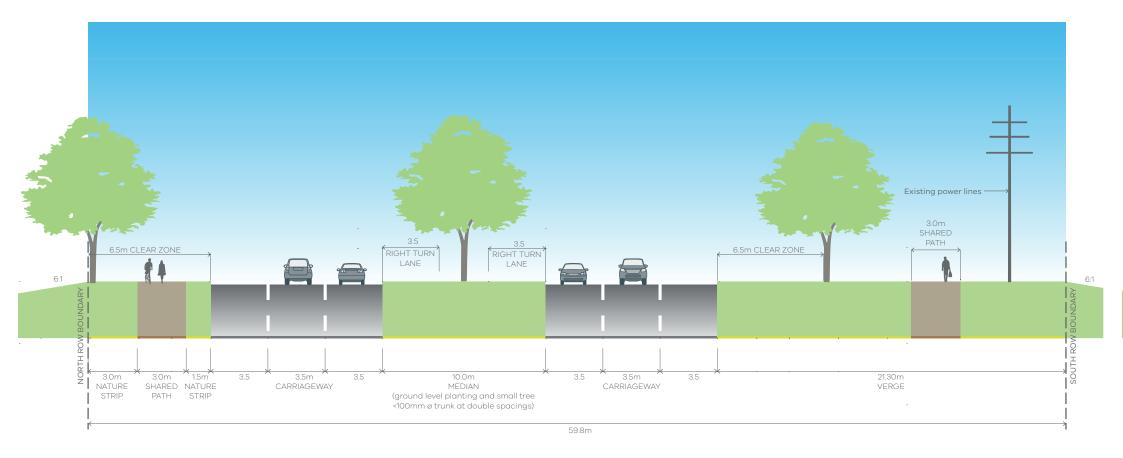
#### PERFORMANCE CRITERIA

- The Village Centre should promote the localisation of services which will contribute to a reduction of travel distance to access local services and less
  dependence on the car.
- The Village Centre should be designed to be sympathetic to its natural surrounds by:
  - Investigating the use of energy efficient design and construction methods for all buildings;
  - Including Water Sensitive Urban Design principles such as integrated stormwater retention and reuse (e.g. toilet flushing and landscape irrigation);
  - Promoting safe and direct accessibility and mobility within and to and from the Village Centre;
  - Including options for shade and shelter through a combination of landscape and built form treatments;
  - Ensuring buildings are naturally ventilated to reduce the reliance on plant equipment for heating and cooling;
  - Promoting passive solar orientation in the configuration and distribution of built form and public spaces;
  - Grouping waste collection points to maximise opportunities for recycling and reuse;
  - Promoting solar energy for water and space heating, electricity generation and internal and external lighting;
  - Investigating other opportunities for the built form to reduce greenhouse gas emissions associated with the occupation and the ongoing use of buildings.
  - Including suitable locally indigenous plant species in landscape treatments.
- Encourage building design which can be adapted to accommodate a variety of uses over time.
- Ensure the Village Centre has an inbuilt capacity for growth and change to enable adaptation and the intensification of uses as the needs of the community change.

#### HARPERS CREEK LOCAL TOWN CENTRE - DEVELOPMENT PRINCIPLES

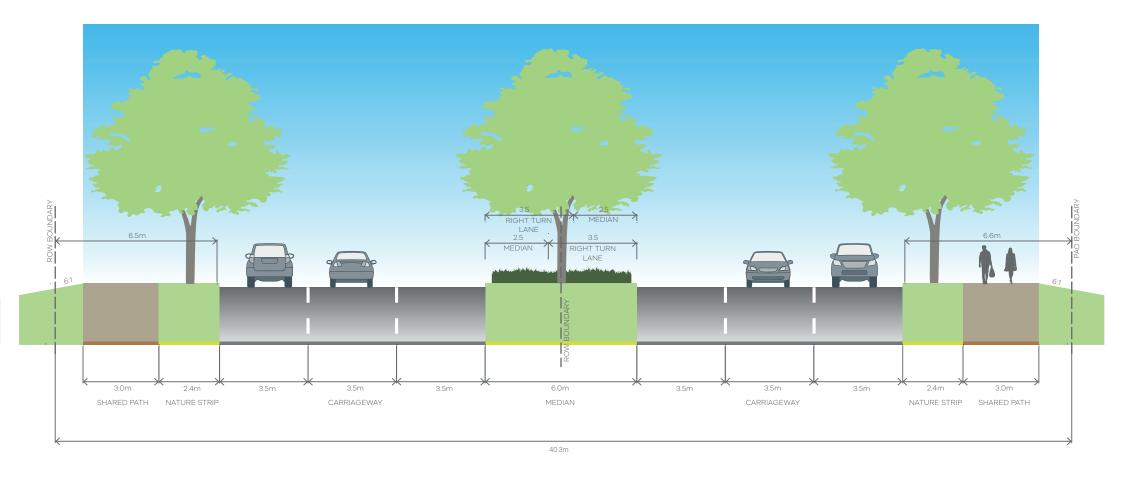
- Locate and orient the town centre to address the connector street, with integration with the community uses to the east, and creation of a
  'main street' streetscape on Buckland Way.
- Establish the town centre on the ridgeline, taking advantage or natural and rural outlook towards Harpers Creek, Jacksons Hill and onwards towards the horizon.
- Establish a vibrant and compact main street between the retail core and community facilities.
- Ensure education facilities, open space and retail can be delivered responding appropriately to slope.
- Ensure the northern "island" of specialty retail consists of highly activated frontages on at least three sides.
- Ensure the plaza is located in the heart of the town centre, heavily activated by retail and commercial uses, and linking the various components of the centre.
- Ensure that the centre heart addresses the waterway framing the centre to the south, with opportunities for pedestrian connections from the waterway into the town centre.

## **4.2** Appendix B – Street Cross Sections

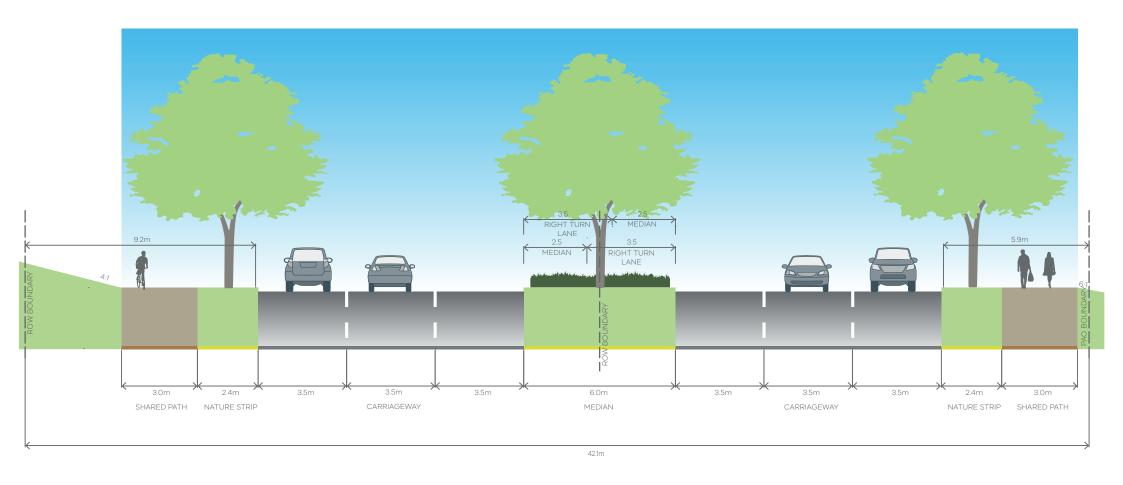


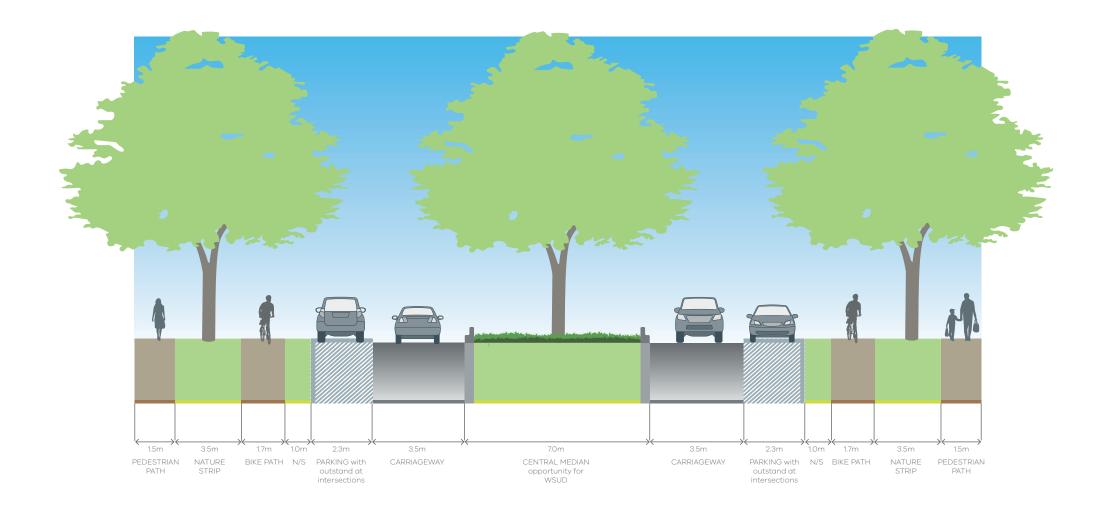
#### NOTES:

· Cross section may need to be adjusted to accomodate existing and future service infrastructure

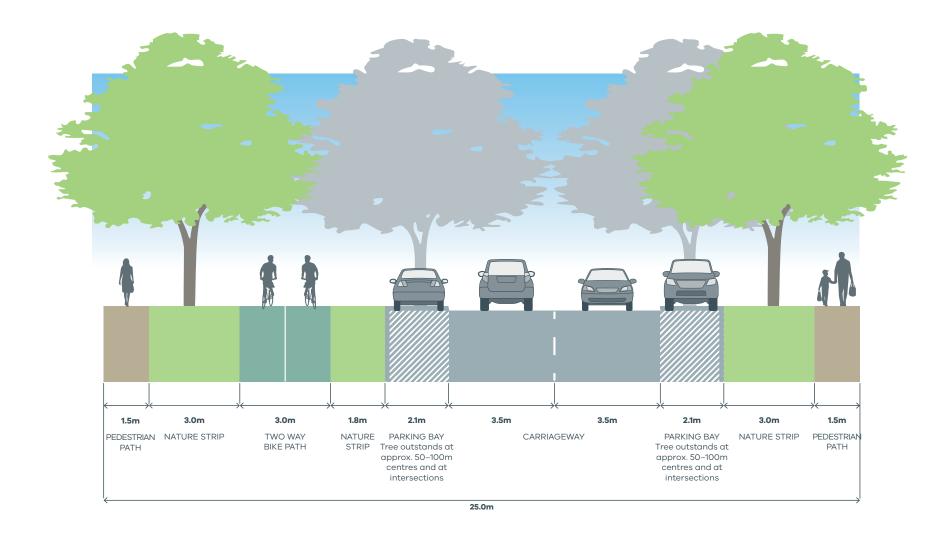


 Potential need for sewerage and water infrastructure within adjacent internal loop roads or parallel connector road network

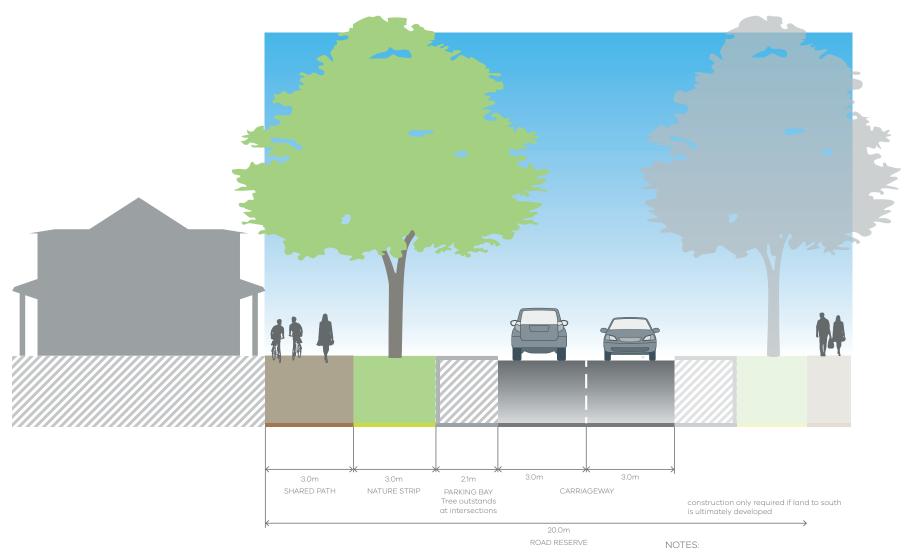




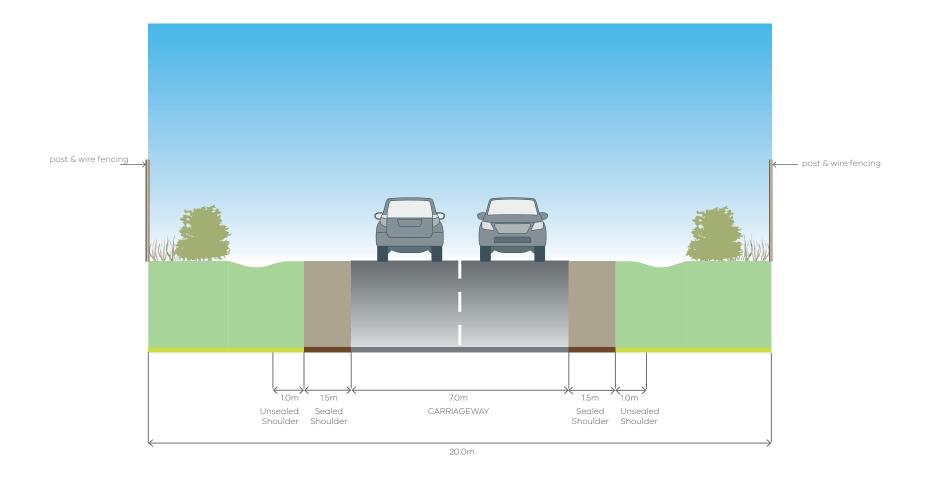
• Direct property access to boulevard connector will be supported where appropriate

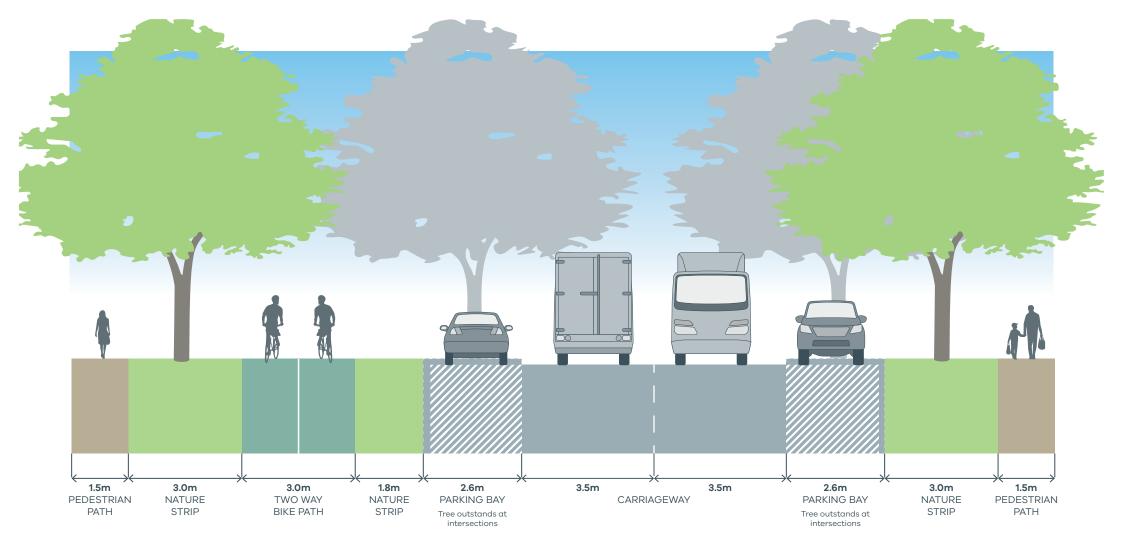


- Minimum street tree mature height 15 metres.
- All kerbs are to be B2 Barrier Kerb.
- · Where roads abut school drop-off zones and thoroughfares, grassed nature strip should be replaced with pavement. Canopy tree planting must be incorporated into any additional
- · Verge widths may be reduced where roads abut open space with the consent of the responsible authority.
- Variations to indicative cross-section may include water sensitive urban design (WSUD) outcome. These could include but are not limited to bioretention tree planter systems and/or median bioretention swales. Such variations must be to the satisfaction of the responsible authority.

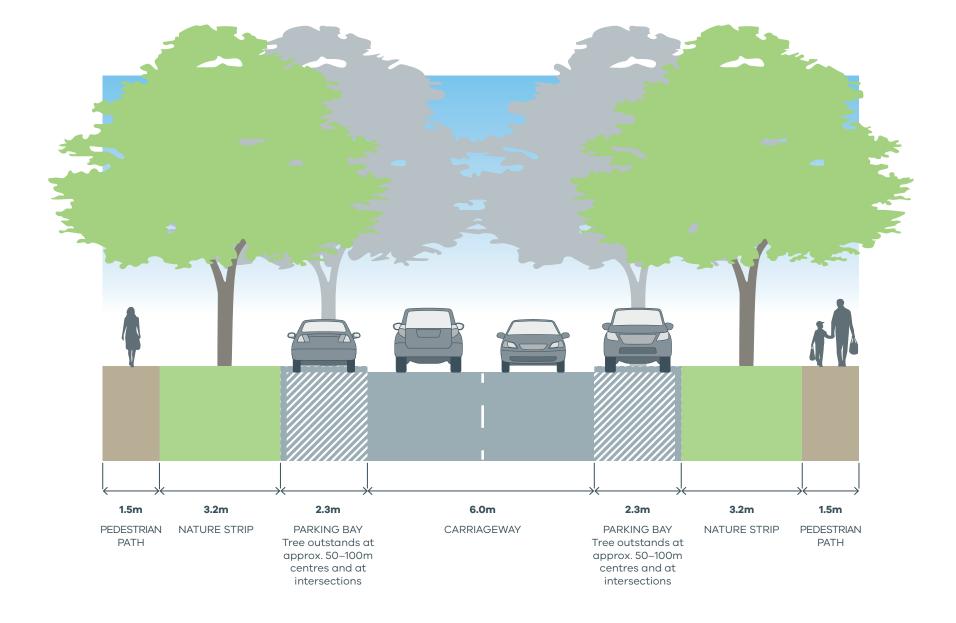


- Minimum street tree mature height 15 metres
- All kerbs are to be B2 Barrier Kerb as per Figure 008 in Engineering Design and Construction Manual for Subdivision in Growth Areas (April 2011)

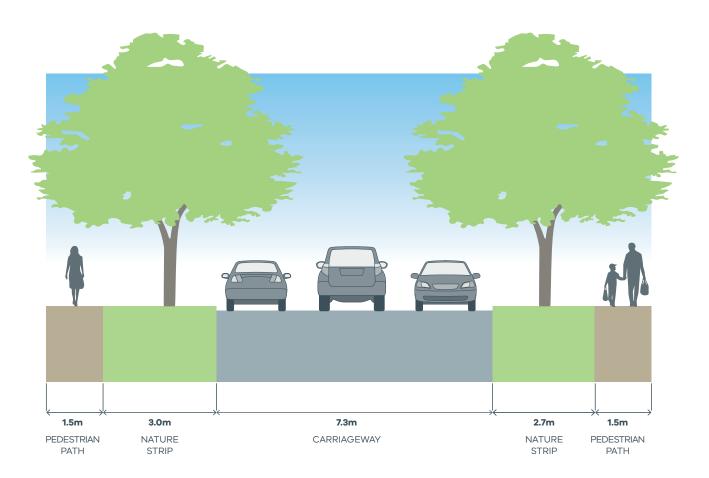




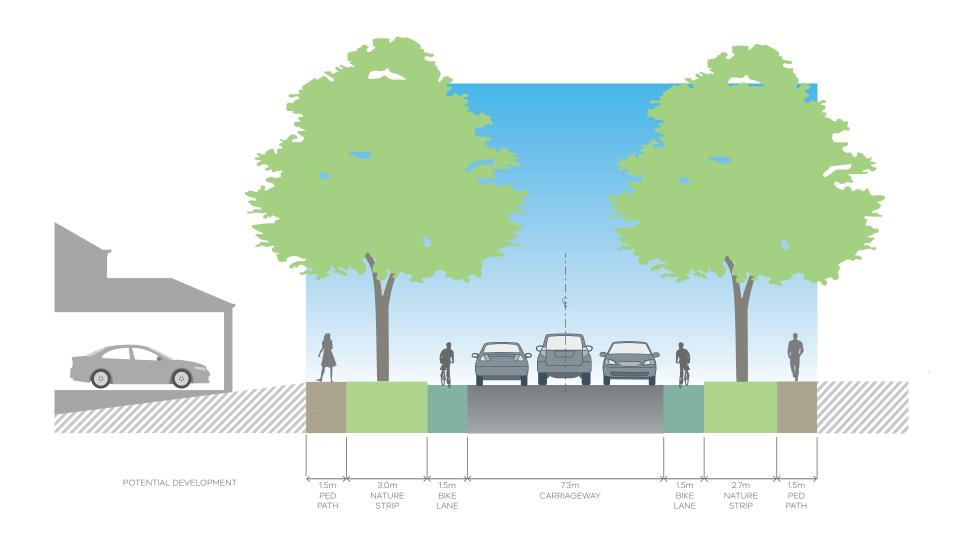
- Minimum street tree mature height 15 metres.
- All kerbs are to be B2 Barrier Kerb.
- Where roads abut thoroughfares, grassed nature strip should be replaced with pavement. Canopy tree planting must in incorporated into any additional pavement.
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority.
- Variations to indicative cross-section may include water sensitive urban design (WSUD) outcome. These could include but are not limited to bioretention tree planter systems and/or median bioretention swales. Such variations must be to the satisfaction of the responsible authority.

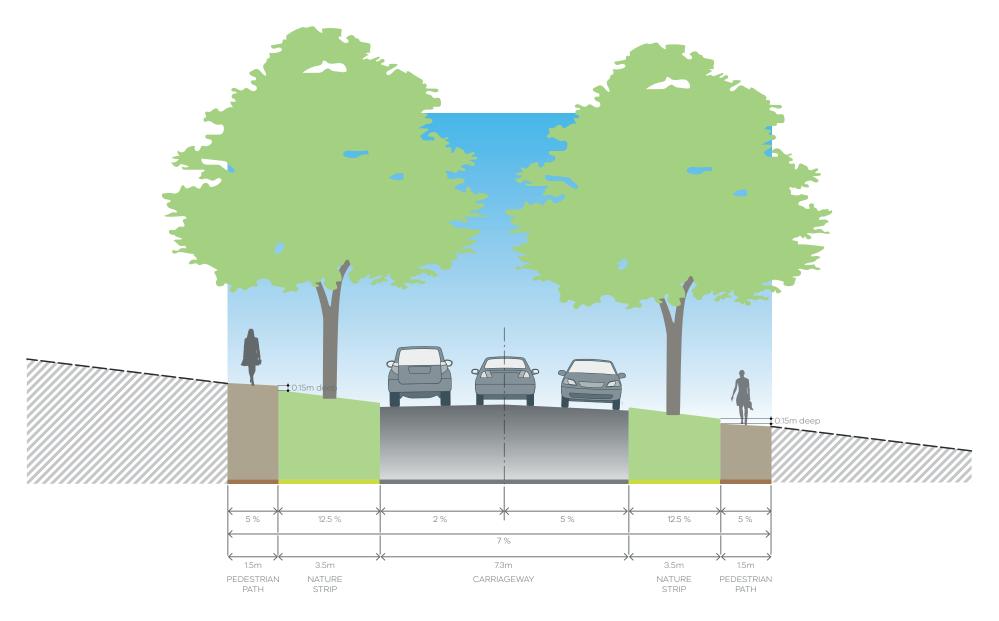


- Minimum street tree mature height 12 metres
- All kerbs are to be B2 Barrier Kerb
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority.

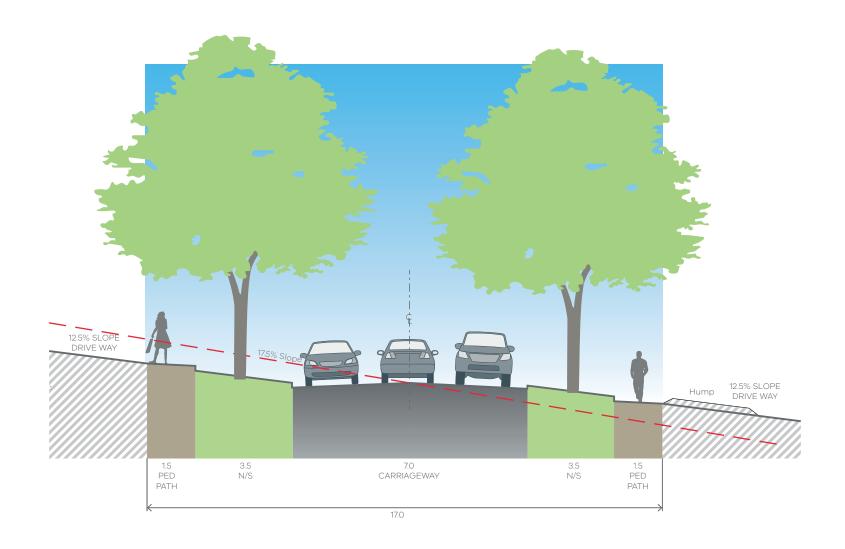


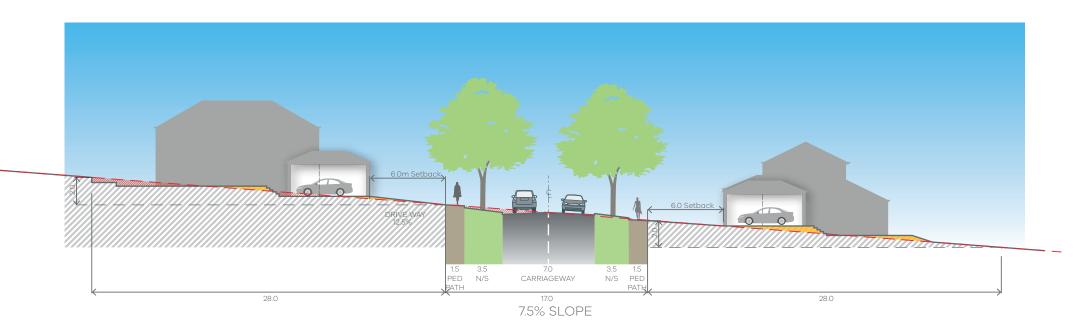
- Minimum street tree mature height 15 metres
- All kerbs are to be B2 Barrier Kerb

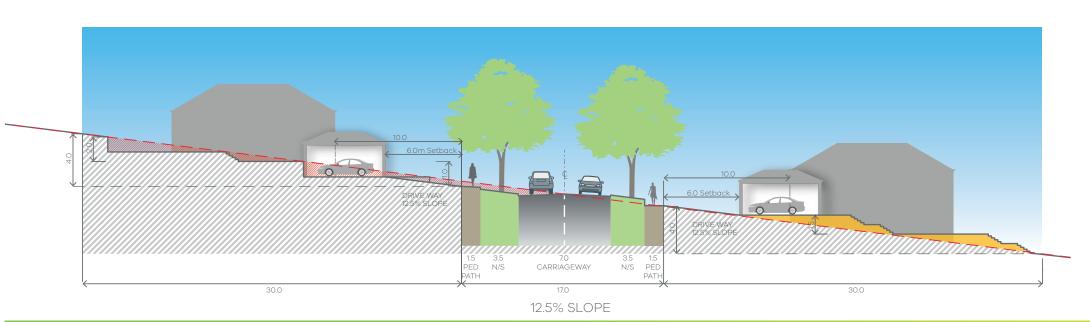


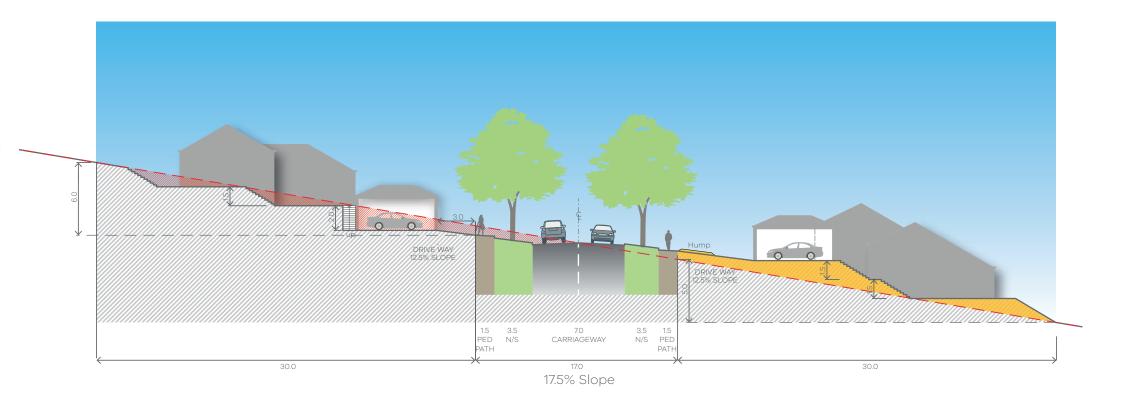


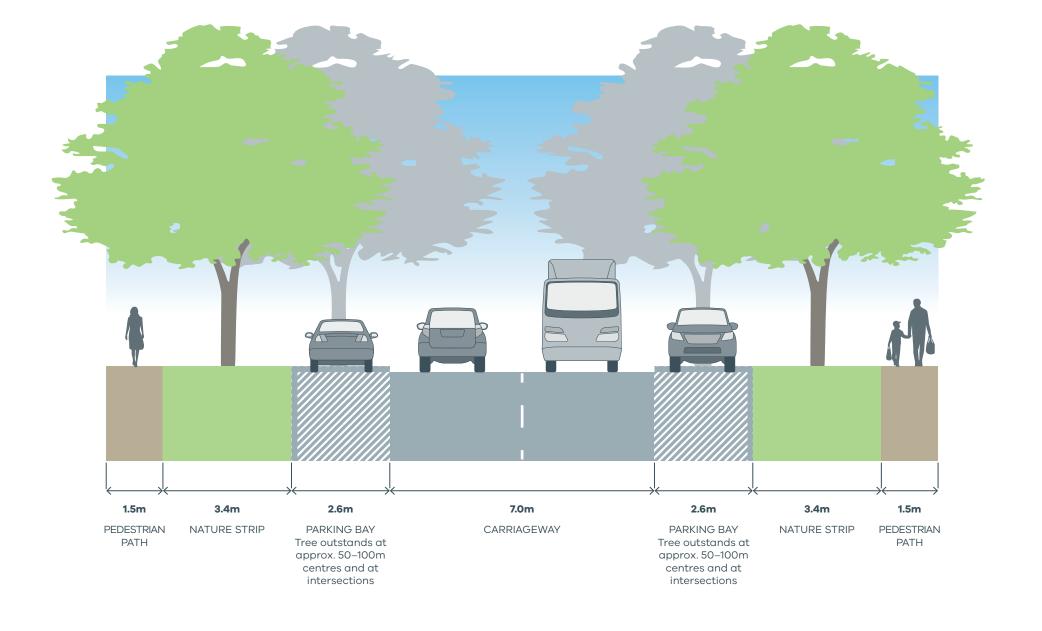
- Minimum street tree mature height 12 metres
- All kerbs are to be B2 Barrier Kerb

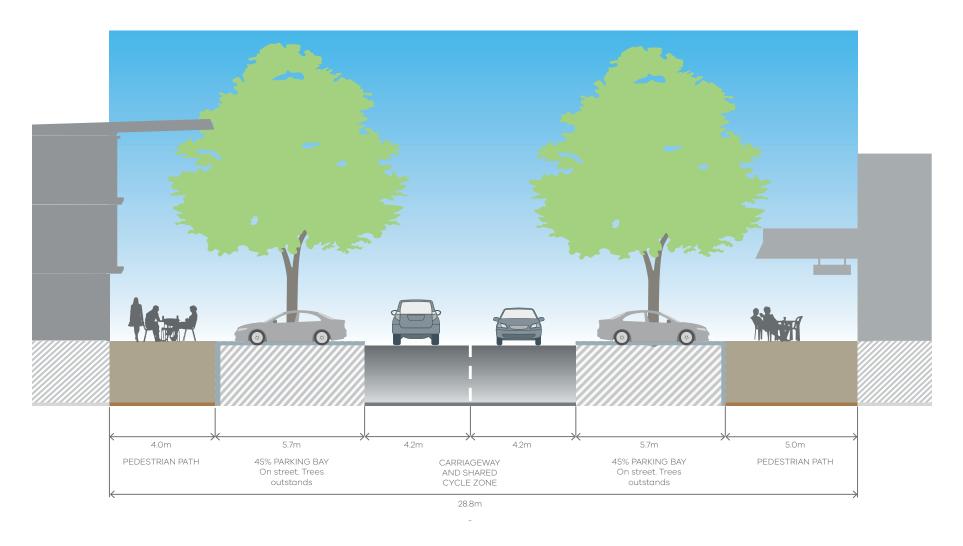




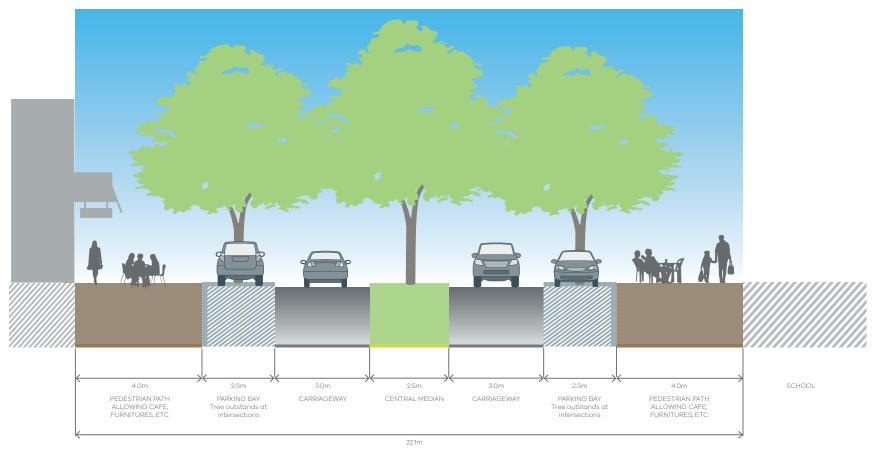








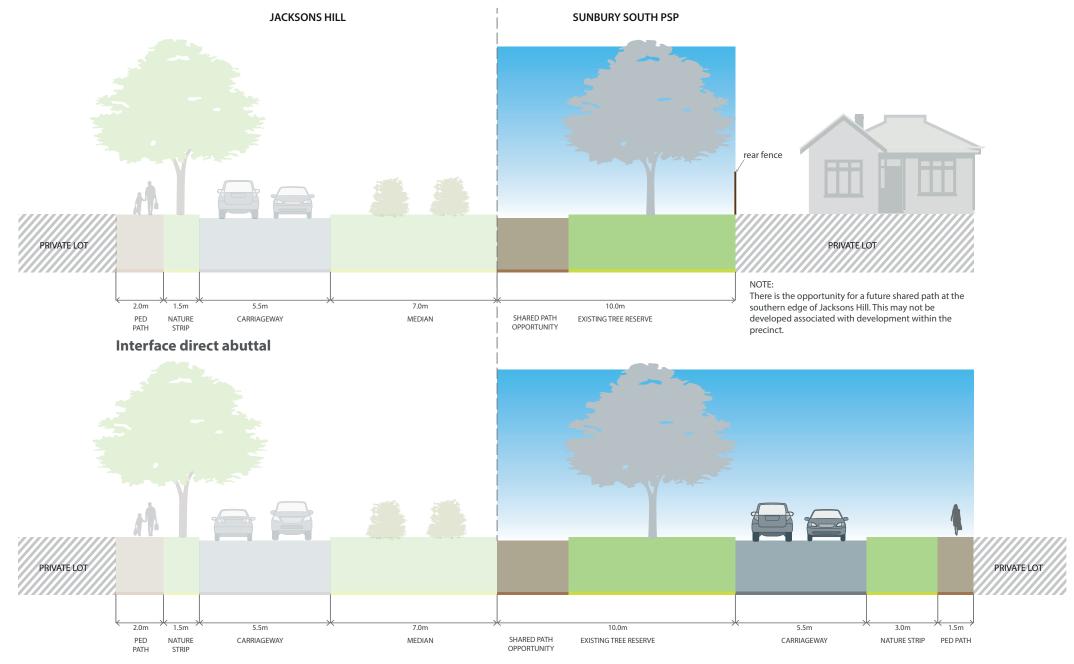
- Minimum street tree mature height 15 metres
- All kerbs are to be B2 Barrier Kerb as per Figure 008 in Engineering Design and Construction Manual for Subdivision in Growth Areas (April 2011)

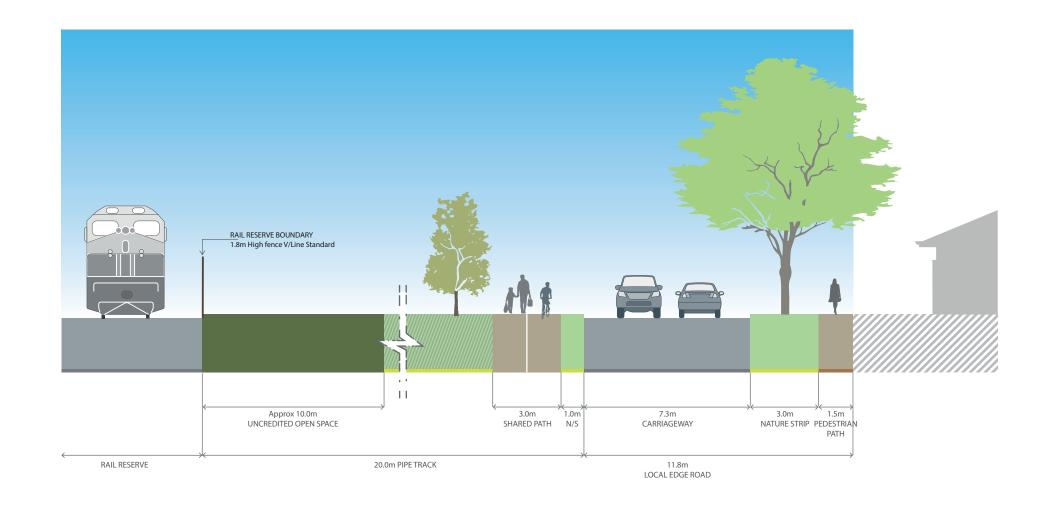


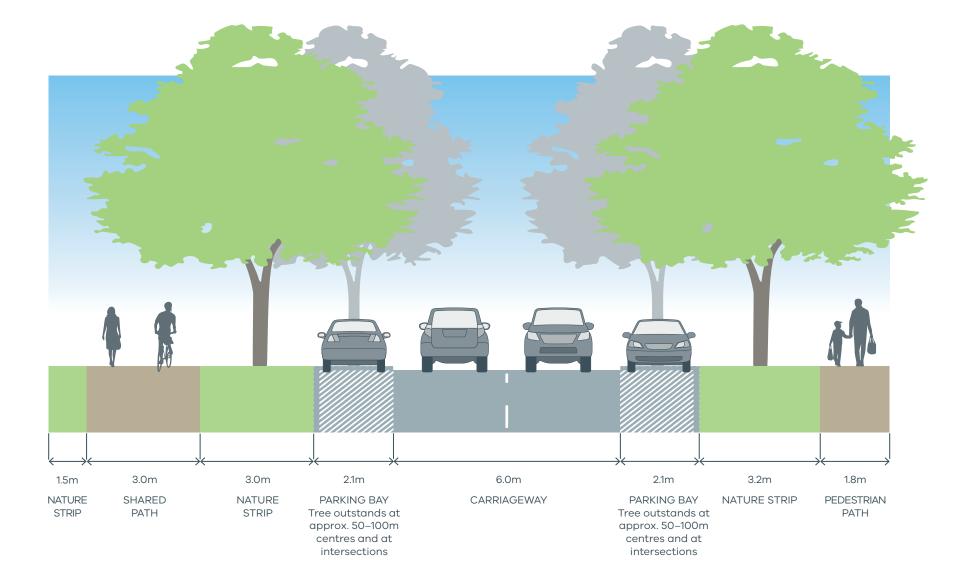
- Minimum street tree mature height 15 metres
- All kerbs are to be B2 Barrier Kerb as per Figure 008 in Engineering Design and Construction Manual for Subdivision in Growth Areas
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority
- Road to be designed with traffic calming devices, including raised pedestrian crossings and roundabouts to achieve a speed limit of 40km/h to allow safe on road cycling



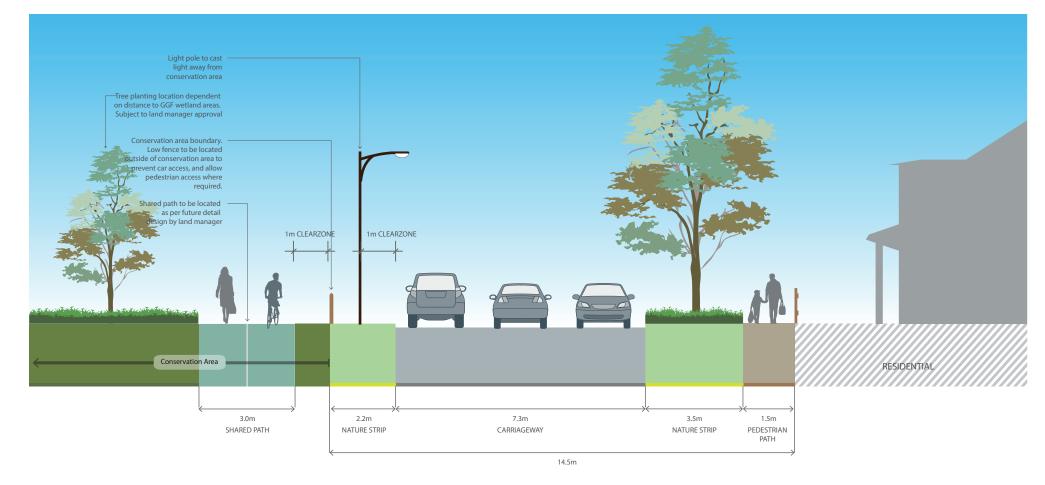
- A shared path is to be provided along the Rail reserve where shown on Plan 9
- The shared path is to be located outside of the rail reserve, unless a proposal to locate the path within the rail reserve is approved in writing by VicTrack
- Fencing to the Rail reserve boundary is to be visually transparent



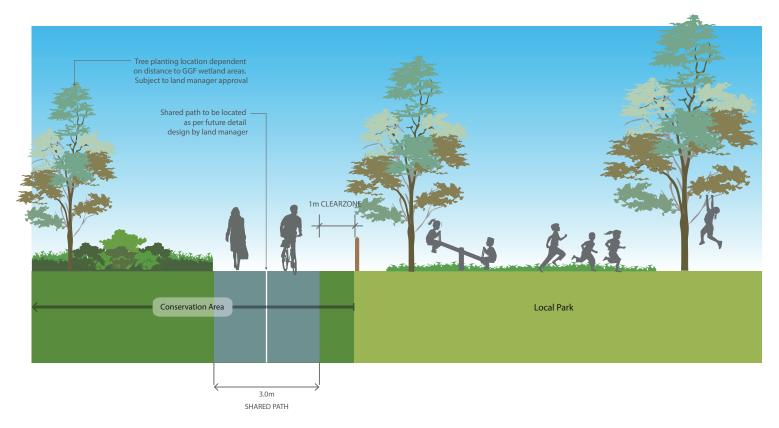




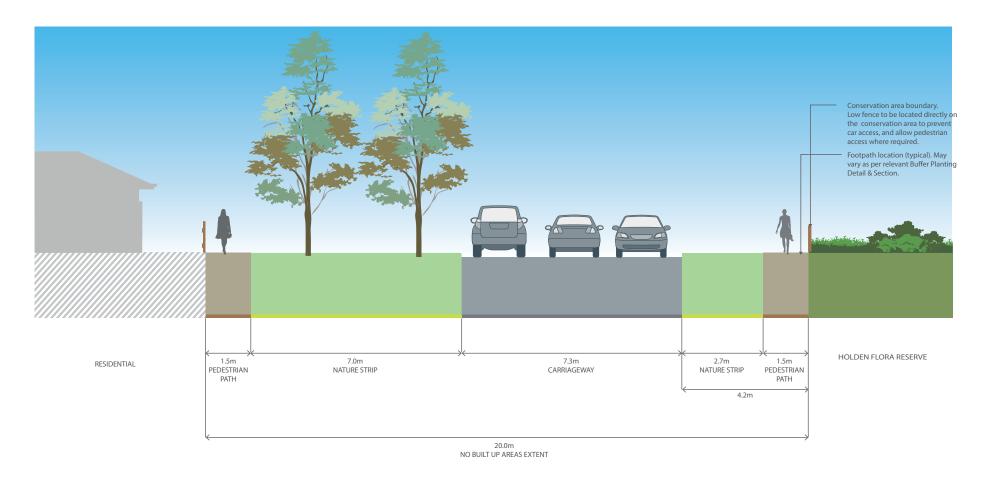
- Minimum street tree mature height 12 metres
- All kerbs are to be B2 Barrier Kerb
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority.



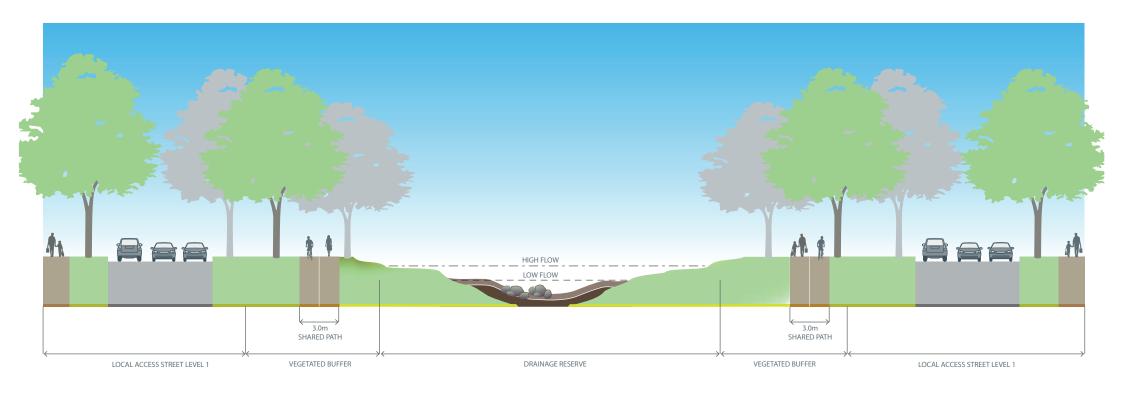
- All kerbs are to be B2 Barrier Kerb as per the Engineering Design and Construction Manual for Subdivision in Growth Areas
- · Verge widths may be reduced where roads abut open space with the consent of the responsible authority
- Any streetscape lighting required on the conservation area side of the street must cast light away from the conservation area
- · Encourage native and indigenous vegetation in the front setback of properties fronting the conservation area
- The conservation area must be fenced appropriately to protect biodiversity values to the satisfaction of the Department of Environment, Land, Water & Planning
- All necessary fire breaks must be located outside the conservation area
- Indigenous grasses preferred on nature strips adjacent to conservation areas
- Streetscape plantings must be Australian natives and should be indigenous to the area.



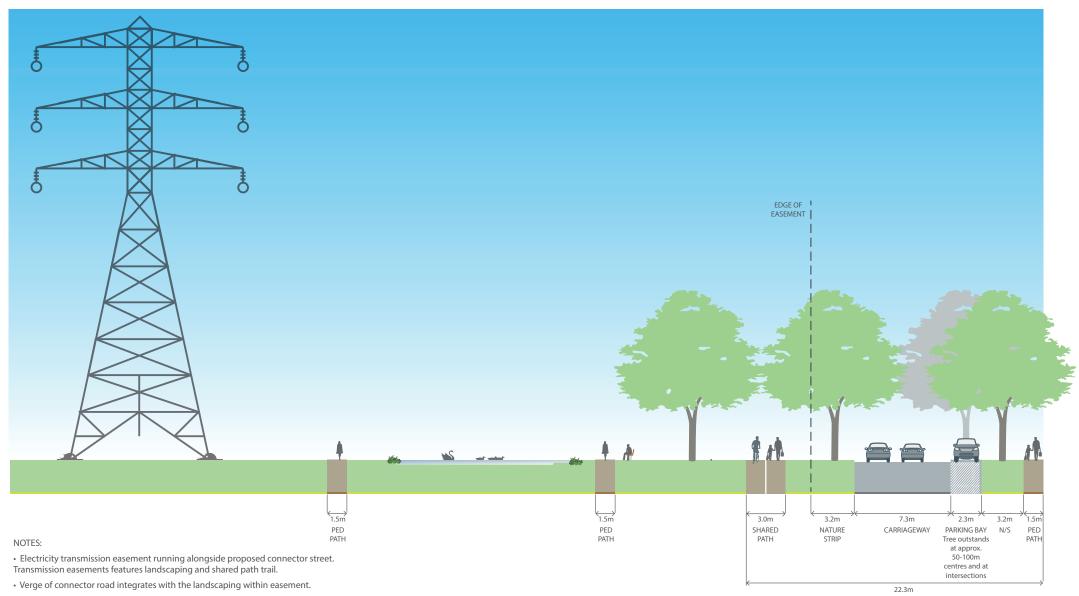
- Tree, shrub, and grass planting within fronting open space must be Australian natives, indigenous to the area, and to the satisfaction of the responsible authority
- All necessary fire breaks must be located outside the conservation area
- The conservation area must have appropriate demarcation of edge to clarify maintenance responsibility, for example bollards at 10m intervals, to the satisfaction of DELWP and the responsible authority
- Indigenous grasses preferred on nature strips and parks adjacent to conservation areas
- Open space and streetscape plantings must be Australian natives and should be indigenous to the area.



- · All kerbs are to be B2 Barrier Kerb as per the Engineering Design and Construction Manual for Subdivision in Growth Areas
- Mature street tree size must be in accordance with Hume City Council's landscaping policy
- · Verge widths may be reduced where roads abut open space with the consent of the responsible authority
- · Any streetscape lighting required on the conservation area side of the street must cast light away from the conservation area
- · Encourage native and indigenous vegetation in the front setback of properties fronting the conservation area.

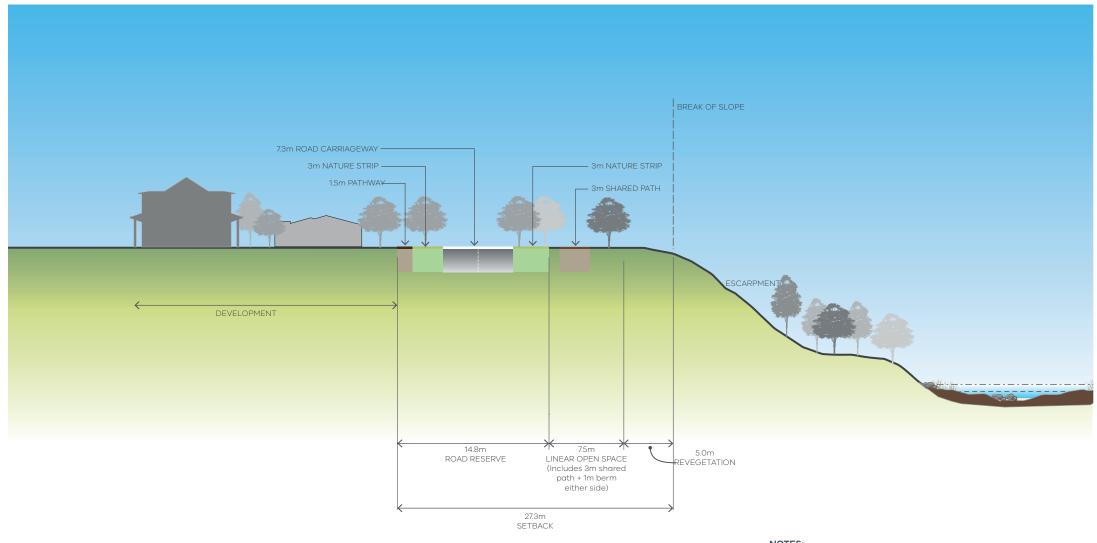


- Waterway widths are to be consistent with Plan 11 and subject to Melbourne Water approval
- Shared path placement is shown for both sports field and local access street interfaces for indicative purposes. The shared path network is shown on Plan 10.
- Indicative open space and road cross section shown abutting waterway.
- Residential subdivision will need to incorporate setbacks to ensure that a BAL-12.5 rating under AS 3959-2000 can be achieved at all dwellings.

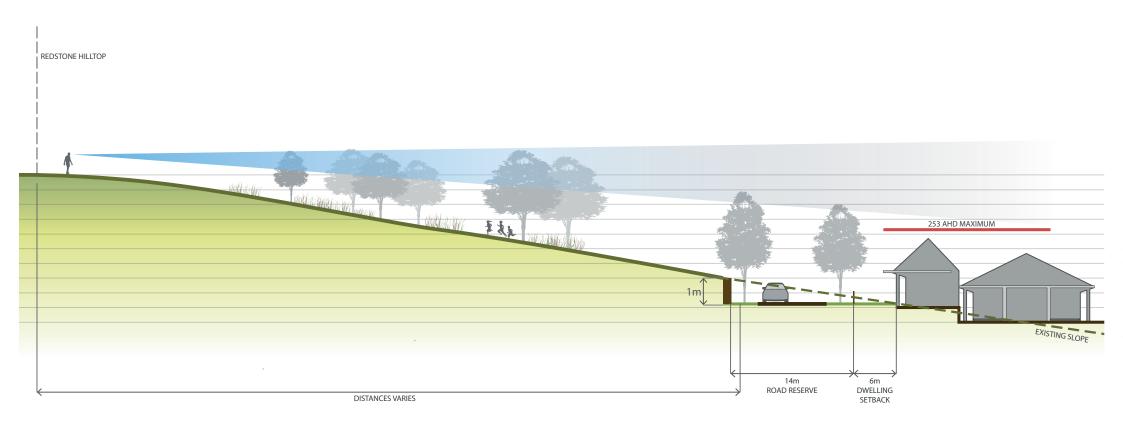


- Easement to also be a focus for water quality treatment where practical.
- Planting should be small to medium sized indigenous trees to outer edge of electricity easement eg. Red Flowering Gum (Corymbia ficifolia), and planting associated with water quality treatment (wetlands, rain gardens etc).
- The inclusion of roads, paths, utility installations and other infrastructure within the transmission line easement is encouraged in appropriate circumstances, to the satisfaction of the relevant reviewing authorities.

 Growling Grass Frog corridor generally sits below the break of slope



• Growling Grass Frog corridor generally sits below the break



## **4.3 Appendix C:** Parcel Specific Land Use Budget

TRANSPORT									OPEN SPACE										OTHER								>		
	(SE	AI	RTERIAL RO	AD	отн	HER TRANSF	PORT	соммии	ITY & EDU	CATION		U	NCREDITED	OPEN SPAC	CE		CREDIT SP	ED OPEN PACE	REGIONAL OPEN SPACE	ş	IS / FACILITIES IT AUTHORITY)			PING)	ŒΑ	Noisn	WASTE	AREA	PROPERT
DEP PARCEL ID	TOTAL AREA (HECTAR)	ARTERIAL ROAD - EXISTING ROAD RESERVE	ARTERIAL ROAD - PUBLIC ACQUISITION OVERLAY	ARTERIAL ROAD - NEW / WIDENING / INTERSECTION FLARING (ICP LAND)	NON-ARTERIAL ROAD - RETAINED EXISTING ROAD RESERVE	NON-ARTERIAL ROAD - NEW / WIDENING / INTERSECTION FLARING (ICP LAND)	PUBLIC TRANSPORT FACILITIES / RESERVE	GOVERNMENT SCHOOL	POTENTIAL NON- GOVERNMENT SCHOOL	ICP COMMUNITY FACILITIES	CONSERVATION RESERVE	WATERWAY AND DRAINAGE RESERVE	UTILITIES EASEMENTS	LANDSCAPE VALUES	TREE RESERVE	OTHER UNCREDITED IS (ISOLATED LAND BETWEEN RAIL & GAS EASEMENT)	LOCAL SPORTS RESERVE (ICP LAND)	LOCAL NETWORK PARK (ICP LAND)	HOLDEN FLORA & FAUNA RESERVE (EXISTING)*	EXISTING NON-URBAN LAI	UTILITIES SUB-STATIONS / FAC	POTENTIAL RESIDENTIA	POTENTIAL INDUSTRIAL	POTENTIAL RESIDENTIAL (SLC	FUTURE INVESTIGATION AI	POTENTIAL RESIDENTIAL EXPA	QUARRY/LANDFILL/ORGANIC	TOTAL NET DEVELOPABLE (HECTARES)	NET DEVELOPABLE AREA % OF
SUNBURY SOUTH																													
SS-01	7.0692	-	-	-	-	-	0.5940	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.4753	91.60%
SS-02	7.4395	-	-	-	-	-	0.6051	-	-	-	-	-	-	-	-	-	-	0.7500	-	-	-	-	-	-	-	-	-	6.0844	81.79%
SS-03	7.7298	-	-	0.4903	-	1.5125	0.2819	-	-	-	-	0.3842	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0608	65.47%
SS-04	0.1424	0.0022	-	-	-	-	-	-	-	-	-	-	-	-	0.1402	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00%
SS-05	2.4207	-	-	0.0318	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3889	98.69%
SS-06	6.1071	-	-	-	-	-	-	-	-	-	-	1.0619	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0452	82.61%
SS-07	4.1077		-	-	-	-	-	-	-	-	-	1.1802	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.9275	71.27%
SS-08R	10.9779	-	-	0.1440	-	-	-	-	-	-	-	0.8332	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.0007	91.10%
SS-08E	0.4521			0.1337	-			-	- 1	-	-	-	-	-	-	-	- 1		-	-	-	-	-	-	-	-		0.3184	70.42%
SS-09	0.5885			-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5885	100.00%
SS-10	0.5609	0.0004		-	-		-	-	-	-	-		-	-	0.4004	-		-	-	-	-	-	-	-	-	-		0.5609	100.00%
SS-11	0.1365	0.0031		-	-	-	-	-	-	-	-	- 0.0040	-	-	0.1334	-	-	-	-	-	-	-	-	-	-	-	-		0.00%
SS-12R SS-12E	7.7129 3.4528	-		-	-		-	-	-	-	-	2.3813	-	-	-	-	-	-	-	-	-	-	-	-	-	-		5.3316 3.4528	69.13% 100.00%
SS-12E SS-13R	4.7601			-			-	-	-	-	-	0.0531	-	-	-	-	-		-			-	-		-	-		4.7071	98.88%
SS-13E	5.3177	-	-	- 1	-	- 1	- 1	-	- 1	-		0.0531	- 1	- 1		-	- 1	-			-	-	-	-	-	-	-	5.3177	100.00%
SS-14	10.1826									-		0.0971						0.7500			-		-	-	-			9.3356	91.68%
SS-15	0.8403											0.0371	-					0.7500					-			-		0.8403	100.00%
SS-16R	5.0809																											5.0809	100.00%
SS-16E	0.9172						-				-				-						-		-		-			0.9172	100.00%
SS-17	6.3378								-		-												-	-				6.3378	100.00%
SS-18	6.0370								-																			6.0370	100.00%
SS-19	8.0907							-		-	-	3.4729	-		-	-				-	-	-	-	-		-		4.6177	57.07%
SS-20	9.0332	-	-	-	-	-	-	-	-	-	-	0.0047	0.8993	-	-	0.4348	1.7545	-	-	-	-	-	-	-	-	-	-	5.9399	65.76%
SS-21	9.0264	-		-	-	0.3238	-	-	-	-	-	-	-	-	-	-	5.9757			-	-	-	-	-	-	-	-	2.7269	30.21%
SS-22	8.9865	-		-	-	0.2275	-	-	-	-	-	2.2047	0.3171	-	-	0.1498	3.0198	-	-	-	-	-	-	-	-	-	-	3.0676	34.14%
SS-23	9.2702	-	-	-	-	0.8190	-	-	-	-	-	1.3242	0.4007	-	-	0.1717	-	-	-	-	-	-	-	-	-	-	-	6.5547	70.71%
SS-24	10.0686	-	-	-	-	1.0516	-	-	-	-	-	0.6846	0.4015	-	-	0.1880	-	-	-	-	-	-	-	-	-	-	-	7.7428	76.90%
SS-25	17.6202	-	-	-	-	3.3141	1.4850	-		-	-	1.1142	0.2004	0.5042	-	0.0002	-	0.2515	-	-	-	0.3386	-	-	-	-	-	10.4119	59.09%
SS-26	19.4819	-	-	-	-	0.4046	-	-		-	-	6.5428	-	1.0265	-	-	-	0.2500	-	-	-	0.0163	-	-	-	-	-	11.2417	57.70%
SS-27	19.1408	-	-	-	-	1.1171	-	0.3269	-	-	-	3.1028	-	1.2685	-	-	-	0.7500	-	-	-	0.5150	-	-	-	-	-	12.0605	63.01%
SS-28	19.3509	-	-	-	-	1.4249	-	3.1731	-	-	-	3.2748	-	2.9693	-	-	-	0.7500	-	-	-	0.9157	-	-	-	-	-	6.8430	35.36%
SS-29	6.2591	-	-	-	-	-	-	-	-	0.7106	-	0.7110	-	0.2143	-	-	-	-	-	-	-	0.6738	-	-	-	-	-	3.9494	63.10%
SS-30	7.6279	-	-	-	-	0.0224	-	-	-	0.0894	-	4.5026	-	0.0923	-	-	-	-	-	-	-	0.9086	-	-	-	-	-	2.0127	26.39%
SS-31	9.0103	-	-	-	-	0.2360	-	-	-	-	-	0.2333	-	-	-	-	-	0.2500	-	-	-	0.2641	-	-	-	-	-	8.0269	89.09%
SS-32	9.0201	-	-	-	-	-	-	-		-		4.1267	-	-	-	-	-	-	-	-	-	1.1080	-	-	-	-	-	3.7854	41.97%
SS-33	9.0096	-	-	-	-	-	-	-		-	-	2.2591	-	0.2728	-	-	-	0.7500	-	-	-	1.4130	-	-	-	-	-	4.3148	47.89%
SS-34	4.0055	-	-	-	-	-	-	-	-	-	-	0.4806	-	0.0008	-	-	-	-	-	-	-	0.3205	-	-	-	-	-	3.2035	79.98%
SS-35	4.0048			-	-	0.0792	-	-	-	-	-	0.9460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.9797	74.40%
SS-36	4.3337			-	-	0.0247	-	-	-	-	-	0.6969			-	-	-	-	-	-	-	0.0652	-	-	-	-	-	3.5469	81.84%
SS-37	4.0592			-	-	0.1225	-	-		-	-	1.1136	-	0.2994	-	-	-	-	-	-	-	0.7147	-	-	-	-	-	1.8089	44.56%
SS-38	16.1579	-	-	-	-	0.5811	-	-	-	-	-	4.1018	-	2.7399	-	-	-	-	-	-	-	0.7739	-	-	-	-	-	7.9611	49.27%

				TRAN	SPORT										OPEN SPAC	Œ							от	THER					>
	ŝ	AR	RTERIAL F	ROAD	۰.	THER TRANSP	ORT	соммин	IITY & EDL	CATION		U	NCREDITE	D OPEN SPAC	E			ED OPEN ACE	REGIONAL OPEN SPACE	۵	LITIES			PING)	EA	NOISA	ASTE	AREA	PROPERT
PSP PARCELID	TOTAL AREA (HECTARE:	ARTERIAL ROAD - EXISTING ROAD RESERVE	ARTERIAL ROAD - PUBLIC ACQUISITION OVERLAY	ARTERIAL ROAD - NEW / WIDENING / INTERSECTION FLARING (ICP LAND)	NON-ARTERIAL ROAD - RETAINED EXISTING ROAD	NON-ARTERIAL ROAD - NEW / WIDENING / INTERSECTION FLARING (ICP LAND)	PUBLIC TRANSPORT FACILITIES / RESERVE	GOVERNMENT SCHOOL	POTENTIAL NON- GOVERNMENT SCHOOL	ICP COMMUNITY FACILITIES	CONSERVATION RESERVE	WATERWAY AND DRAINAGE RESERVE	UTILITIES EASEMENTS	LANDSCAPE VALUES	TREE RESERVE	OTHER UNCREDITED IS (ISOLATED LAND BETWEEN RAIL & GAS EASEMENT)	LOCAL SPORTS RESERVE (ICP LAND)	LOCAL NETWORK PARK (ICP LAND)	HOLDEN FLORA & FAUNA RESERVE (EXISTING)*	EXISTING NON-URBAN LAN	UTILITIES SUB-STATIONS / FACILITIES (ACQUIRED BY RELEVANT AUTHORITY)	POTENTIAL RESIDENTIAL	POTENTIAL INDUSTRIAL	POTENTIAL RESIDENTIAL (SLOF	FUTURE INVESTIGATION ARE	POTENTIAL RESIDENTIAL EXPAN	QUARRY/LANDFILL/ORGANIC W	TOTAL NET DEVELOPABLE, (HECTARES)	NET DEVELOPABLE AREA % OF F
SS-39	12.5045	-	-	-	-	0.2702	-	-	-	-	-	3.3311	-	2.3501	-	-	-	0.2500	-	-	-	0.2823	-	-	-	-	-	6.0208	48.15%
SS-40	4.2367	-	-		-	1.1136	-		-	-	-	0.9086	-	0.0110	-		-	0.2500		-		0.0143	-	-	-		-	1.9392	45.77%
SS-41	30.7134	-	-		-	2.1423	-	-	-	-	1.6075	13.0121	-	0.4714	-	-	-	0.5000	-	-	-	1.8955	-	-	-	-	-	11.0846	36.09%
SS-42	4.0012	-	-		-	0.1234	-		-	-	-	-	-	-	-	-	-	-		-	-		-	-	-		-	3.8778	96.92%
SS-43	4.0851	-	-	-	-	0.0500	-	-	-	-	-	-	-	-	-	-	-	0.7500	-	-	-	-	-	-	-	-	-	3.2851	80.42%
SS-44	1.4006	-	-			0.0073	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	1.3933	99.48%
SS-45	4.0084	-	-		-	0.3575	-		-	-	-	-	-		-		-			-			-	-	-		-	3.6510	91.08%
SS-46	4.0095	-	-	-	-	-	-	-	-	-	-	0.8234	-	0.1304	-	-	-	0.2500	-	-	-	-	-	-	-	-	-	2.8056	69.98%
SS-47	80.0659				-		-				2.1282	45.7681							32.1695	-			-						0.00%
SS-48	5.8577	-	-		-	-	-		-	-	-	0.3172	-	-	-	-	-	-	5.5405	-			-	-	-		-		0.00%
SS-49	8.1566	-			-		-		-	-		6.1024	-		-		-		2.0541	-			-	-	-		-		0.00%
SS-50A	5.2918				-		-		-			5.2918	-		-		-		-	-									0.00%
SS-50B	5.2702	-	-		-		-		-	-		5.2702	-		-		-			-			-		-		-		0.00%
SS-51	0.6952										0.0949	0.6003																	0.00%
SS-52	2.8832										0.0010	1.6044	0.0257	0.0740	_											1.1684		0.0107	0.37%
SS-53	11.7735										0.0380	7.7528	0.6903	2.2112												0.1182		0.9630	8.18%
SS-54	0.8160				_						0.0000	0.8160	-		_											0.1102		-	0.00%
SS-55C	0.5706	-	-	-	_	-	-	-	-	-	_	0.5706	-	-	-	-	-	-	-	-	-	-		-		-	-		0.00%
SS-55B	1.9415	-	-		-	-	-		-	-		1.9415	-		-		-	-		-				-	-		-		0.00%
SS-55A	1.3631	-	-	-	_	-	-	-	-	-	_	1.3631	-	-	-	-	-	-	-	-	-	-		-		-	-		0.00%
SS-56	5.6928				-	-	-		-	-	0.7732	2.2168	-	1.0699	-		-	0.2501		-			-	-	-		-	1.3828	24.29%
SS-57A	0.6678		- 1		-		- 1			- 1	0.7732	2.2100	-	0.0728				0.2301			- 1	- 1	- 1	- 1	- 1	-	-	0.5950	89.10%
SS-57A	7.7044	-	-	-	-	-	-		-	-	-	0.6137	-	1.6836	-	-	-			-	-	-	-	-	-		-	5.4071	70.18%
		-	-	0.0404		-	-						0.0540				4 0040	0.0500		-	- 1	0.0500		10.5407		-			
SS-58	77.8763	-	-	0.3131	-	4.0000	-	0.4000	-	0.7540	4.0000	24.8920	0.9543	1.8932	-		1.3043	0.2500		-	-	0.0523	-	10.5407	-	-		37.6765	48.38%
SS-59	100.2072	-	-	0.0094	-	4.2398		3.4822	-	0.7512	1.0890	17.1491	-	6.8682			8.8957	1.5000		-		2.8257	-		-		-	53.3969	53.29%
SS-60	8.0241	-	-	0.5026	-	0.6404	-		-	-	-	1.7206	-	-	-	-	-	-		-	-	-	-	-	-		-	5.1605	64.31%
SS-61	71.8865	-		0.3854		0.0949	-	-	-	0.8000		6.3409	-	0.5655	-	-	-	1.5000		-	- 00000	-	-	-	-	-	-	62.1998	86.53%
SS-62	0.2966				-					-			-		-	-				-	0.2966	-	-	-			-	4 0000	0.00%
SS-63	1.9868	-				0.0040	-	-	-	-	-	-	-		-	-	-			-	-	-		-			-	1.9828	99.80%
SS-64	85.4299	-				-	-	-	-	-	-	22.3506	-	25.8277	-	-	-	2.1422	-	-	-	0.0751	-	-	-	-	-	35.0343	41.01%
SS-65	8.1030	-		-		-	-	-	-	-	-	-	-	0.4140	-	-	-	-	-	-	-	-	-	-	-	-	-	7.6890	94.89%
SS-66	7.3096	-		-		-	-	-	-	-	-	-	-	2.1523	-	-	-	-	-	-	-	-	-	-		-	-	5.1573	70.55%
SS-67	8.0401	-	-	-	-	-	-		-	-	-	-	-	3.1954	-	-	-	-	-	-	-	-	-	-	-	-	-	4.8447	60.26%
SS-68	114.2352	-	-	-	-	-	-	-	2.6025	-	9.9218	23.9511	-	13.7006	-	-	-	2.0000	-	-	-	2.3057	-	-	-	-	-	59.7534	52.31%
SS-69	32.5025	-	-	-		-	-	6.5481	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.9545	79.85%
SS-70	101.7342	-	-	0.3396	-	-	-	5.3519	-	-	4.8214	36.2514	-	0.7263	-	-	10.2000		-	-	-	4.2093	-	-	-	-	-	39.5843	38.91%
SS-71	40.3542	-	-	0.0190	-	-	-	-	-	-	0.1760	19.2975	-	0.0151	-	-	-	0.7507	-	-	-	-	-	-	-	-	-	20.0959	49.80%
SS-72	50.2424	-	-	-	-	-	-	-	-	-	6.5664	12.7035	5.6547	-	-	-	-	0.2493	-	-	-	0.7364	-	-	-	-	-	24.3322	48.43%
SS-73	6.1023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-	-	-	-	6.1023	100.00%
SS-74	6.1878	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.1878	100.00%
SS-75	6.1656	-	-	0.5963	-	-	-	-	-	-	-	1.0847	-	-	-	-	-	0.2270	-	-	-	-	-	-	-	-	-	4.2576	69.05%
SS-76	6.3002	-	-	-	-	-	-	-	-	-	-	0.4307	-	-	-	-	-	0.5230	-	-	-	-	-	-	-	-	-	5.3465	84.86%

# THIS PAGE HAS BEEN LEFT INTENTIONALLY BLANK

Part					TRAN	SPORT										OPEN SPAC	E							ОТІ	HER					>
Part			AF	TERIAL RO	AD	отн	HER TRANSF	PORT	соммин	IITY & EDU	CATION		U	INCREDITE	D OPEN SPAC	CE					۵	LITIES ORITY)			PING)	EA	NSION	VASTE	AREA	PROPERT
Section   Sect	P SP PARCEL ID	TOTAL AREA (HECTARE	ARTERIAL ROAD - EXISTING ROAD RESERVE	ARTERIAL ROAD - PUBLIC ACQUISITION OVERLAY	ARTERIAL ROAD - NEW / WIDENING / INTERSECTION FLARING (ICP LAND)	NON-ARTERIAL ROAD - RETAINED EXISTING ROAD RESERVE	NON-ARTERIAL ROAD - NEW / WIDENING / INTERSECTION FLARING (ICP LAND)	PUBLIC TRANSPORT FACILITIES / RESERVE	GOVERNMENTSCHOOL	POTENTIAL NON- GOVERNMENT SCHOOL	ICP COMMUNITY FACILITIES	CONSERVATION RESERVE	WATERWAY AND DRAINAGE RESERVE	UTILITIES EASEMENTS	LANDSCAPE VALUES	TRERESERVE	OTHER UNCREDITED IS (ISOLATED LAND BETWEEN RAIL & GAS EASEMENT)	LOCAL SPORTS RESERVE (ICP LAND)	LOCAL NETWORK PARK (ICP LAND)	HOLDEN FLORA & FAUNA RESERVE (EXISTING)*	EXISTING NON-URBAN LAN	UTILITIES SUB-STATIONS / FACI (ACQUIRED BY RELEVANT AUTH	POTENTIAL RESIDENTIAL	POTENTIAL INDUSTRIAL	POTENTIAL RESIDENTIAL (SLO	FUTURE INVESTIGATION AR	POTENTIAL RESIDENTIAL EXPAI	QUARRY/LANDFILL/ORGANIC V	TOTAL NET DEVELOPABLE (HECTARES)	NET DEVELOPABLE AREA % OF I
1	SS-77 (not used)																													
Seed	, ,																													
Section	SS-79	7.8200	-	0.1729	0.2880	-	-	-	-	-	-	0.0340	2.4677	-	0.0334	-	-	-	-	-	-	-	-	-	-	-	-	-	4.8241	61.69%
Seal		8.1975	-	-	-	-	-	-	-		-	0.0455	5.2930	-	0.3426	-	-		0.2498	-	-	-	-	-		-		-	2.2667	27.65%
Seal   19,0000	SS-82	1.4513	-	-	-	-	-	-	-	-	-	-	1.4513	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	0.00%
SABG 11438	SS-83	8.9901	-	0.3672	-	-	-	-	-	-	-	-	4.1510	-	0.0331	-	-	-	-	-	-	-	-	-	-	-	-	-	4.4389	49.38%
Self   13.457   2. 0.0502   3. 0.0502	SS-84	13.0625	-	-	-	-	-	-	-	-	-	-	9.3798	-	-	-	-	-	-	-	3.6827	-	-	-	-	-	-	-	-	0.00%
S-8-8   13-4021   2-0   2-0   2-0   2-1   2-0   2-0   2-1   2-0	SS-85	11.4358	-	-	-	-	-	-	-	-	-	-	4.8245	-	-	-	-	-	-	-	6.6114	-	-	-	-	-	-	-	-	0.00%
SR-96   117216   - 0, 1421   0, 2071   - 0, 1421   0, 2071   - 0, 1421   0, 2071   - 0, 1421   0, 2071   - 0, 1421   0, 2071   - 0, 1421   0, 2071   - 0, 1421   0, 2071   - 0, 1421   0, 2071   - 0, 1421   0, 2071   - 0, 1421   0, 2071   - 0, 1421   0, 2071   - 0, 1421	SS-87	13.4517	-	0.3622	-	-	-	-	-	-	-	-	3.6090	-	1.7499	-	-	-	0.2500	-	-	-	-	-	-	-	-	-	7.4806	55.61%
SS-01 13.090	SS-88	13.4821	-	0.2692	-	-	-	-	-	-	-	-	5.0636	-	1.3469	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8024	50.46%
83-91 1 2 2 4 3 1	SS-89	13.7216	-	0.1421	0.2671	-	-	-	-	-	-	-	3.9074	-	2.9825	-	-	-	-	-	-	-	0.5836	-	-	-	-	-	5.8388	42.55%
SE-92 8.7840	SS-90	13.9060	-	0.1660	0.5122	-	-	-	-	-	-	-	2.3230	-	3.9893	-	-	-	-	-	-	-	1.1877	-	-	-	-	-	5.7277	41.19%
SE-93	SS-91	12.2431	-	0.3663	-	-	-	-	-	-	-	-	1.6467	-	2.6545	-	-	-	-	-	-	-	1.1997	-	-	-	-	-	6.3758	52.08%
Seal 6 6 26226	SS-92	8.7840	-	0.1664	0.2032	-	-	-	-	-	-	-	1.3868	-	3.0256	-	-	-	0.2500	-	-	-	0.5270	-	-	-	-	-	3.2250	36.71%
SS-96	SS-93	7.8665	-	-	0.3301	-	-	-	-	-	-	-	0.3151	-	1.4472	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7741	73.40%
SS-96	SS-94	62.6226	-	-	-	-	-	-	-	-	-	-	9.6808	-	12.9566	-	-	4.7471	0.2500	-	-	-	0.2298	-	-	-	-	-	34.7583	55.50%
SS-97 36.1715 - 9. 0.361 - 9. 0.361 - 9. 0.361 - 9. 0.361 - 9. 0.361 - 9. 0.361 - 9. 0.361 - 9. 0.361 - 9. 0.362 - 9. 0. 0.362 - 9. 0. 0.362 - 9. 0.362 - 9. 0.362 - 9. 0.362 - 9. 0.362 - 9. 0.362 -	SS-95	49.6597	-	-	0.3439	-	-	-	-	-	-	-	0.0245	-	-	-	-	0.2529	1.0000	-	-	-	-	-	-	11.0809	-	-	36.9576	74.42%
SS-98	SS-96	1.0543	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0543	100.009
SS-99 189.1652	SS-97	36.1715	-	-	0.3511	-	-	-	-	-	-	-	9.5856	-	3.3763	-	-	-	-	-	-	-	-	4.1394	-	8.0342	-	0.0018	10.6829	29.53%
SUB-TOTAL Sunbury South 1,749,1345 0,0053 2,0123 5,2611 - 20,3044 2,9659 18,882 2,605 2,815 2,8159 19,989 19,489 114,2695 0,273 0,945 3,6150 18,1437 39,7642 10,296 2,41519 0,2966 2,41519 0,3275 3,27	SS-98	37.4258	-	-	-	-	-	-	-	-	-	-	1.6909	0.0276	1.6454	-	-	-	-	-	-	-	-	2.2354	-	-	-	-	31.8264	85.04%
SS-R1 (Deld Dr)   0.5194   0			-	-	-	-	-	-	-	-	-					-	-	-	-	-	-	-	-	-	-					0.07%
SS-R1 (Obeid Dr)	SUB-TOTAL Sunbury South	1,749.1345	0.0053	2.0123	5.2611	-	20.3044	2.9659	18.8822	2.6025	2.3512	28.5069	419.0989	19.4894	114.2695	0.2737	0.9445	36.1500	18.1437	39.7642	10.2941	0.2966	24.1519	6.3748	10.5407	33.2753	1.2866	116.9504	814.9386	46.59%
SS-R2 (Watsons Rd) 1.3222 1.3222 1.3222	ROAD RESERVE																													
SS-R3 (Railway) 6.2469 6.0764 0.1705	SS-R1 (Obeid Dr)	0.5194	-	-	-	0.5194	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00%
SS-R3 (Railway) 6,2469 6,0764 0,1705	SS-R2 (Watsons Rd)	1.3222	-		-	1.3222	-	-		-	-		-			-	-		-		-	-	-	-	-	-	-	-	-	0.00%
SS-R5 (Fox Hollow Dr) 1.7200 1.7200 1.7200		6.2469	-		-	-	-	6.0764	-	-	-	-	0.1705	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00%
SS-R6 (Harker St) 1.6926 0.4721 1.2205		2.2414	-		-	1.6012		-		-		-	0.1446		0.1360	-	-		-				0.1022	-	-	-		-	0.2574	11.48%
SS-R7 (Sunbury Rd) 24,9868 24,6246	SS-R5 (Fox Hollow Dr)	1.7200	-	-	-	1.7200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00%
SS-R8 (Redstone Hill Rd) 2.7121 2.1150	SS-R6 (Harker St)	1.6926	-	-	-	0.4721	-	-	-	-	-	-	1.2205	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	0.00%
SS-R9 (Shepherds Ln) 0.8783 0.8783 0.8783	SS-R7 (Sunbury Rd)	24.9868	24.6246	-	-	-	-	-	-	-	-	0.3622	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00%
SS-R10 (Melb-Lancefield Rd) 2.8437 2.8437	SS-R8 (Redstone Hill Rd)	2.7121	-	-	-	2.1150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5970	22.01%
SS-R11 (Gellies Rd) 4.3613 0.4063 - 0.9461 3.0089	SS-R9 (Shepherds Ln)	0.8783	-	-	-	0.8783	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	0.00%
SUB-TOTAL 49.5248 27.8746 9.5745 - 6.0764 0.3622 4.5445 - 0.1360 0.1022 0.8544	SS-R10 (Melb-Lancefield Rd)	2.8437	2.8437	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00%
	SS-R11 (Gellies Rd)	4.3613	0.4063	-	-	0.9461	-	-	-	-	-	-	3.0089	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00%
010 70741 0 7070 0 1 7074 0 707	SUB-TOTAL	49.5248	27.8746	-	-	9.5745	-	6.0764	-	-	-	0.3622	4.5445	-	0.1360	-	-	-	-	-	-	-	0.1022	-	-	-	-	-	0.8544	1.73%
SUB-TOTALS PSP Sunbury South   1,798.6593   27.8799   2.0123   5.2611   9.5745   20.3044   9.0423   18.8822   2.6025   2.3512   28.8691   423.6433   19.4894   114.4055   0.2737   0.9445   36.1500   18.1437   39.7642   10.2941   0.2966   24.2540   6.3748   10.5407   33.2753   1.2866   116.9504   815.7931	SUB-TOTALS PSP Sunbury South	h 1,79 <u>8.6593</u>	27.8799	2.0123	5.2611	9.5745	20.3044	9.0423	18.8822	2.6025	2.3512	28.8691	423.6433	19.4894	114,4055	0.2737	0.9445	36.1500	18,1437	39.7642	10.2941	0.2966	24.2540	6.3748	10.5407	33.2753	1.2866	116.9504	815.7931	45.36%

## **4.4** Appendix D – Local Convenience Centre Guidelines

### **LOCALCONVENIENCE CENTRES**

#### **Principle 1**

Provide smaller neighbourhoods with a viable Local Convenience Centre which offers accessible services to the surrounding community.

#### PERFORMANCE CRITERIA

- Local Convenience Centres should be planned in conjunction with Local Town Centres in order to deliver a fine grain distribution of town centres within the region.
- Local Convenience Centres should be planned for neighbourhoods that contain less than 8,000 people and are located more than 1km away from a Local Town Centre or higher order town centre.
- Locate Local Convenience Centres in locations which are central to the residential community they serve and that provide exposure to passing traffic.
- Where appropriate, locate Local Convenience Centres in attractive settings and incorporate natural or cultural landscape features such creeks and waterways, linear open space, pedestrian and cycle links and areas of high aesthetic value.

## **Principle 2**

Provide a range of local services and facilities which are appropriate to the Local Convenience Centre location and the catchment that it serves.

#### PERFORMANCE CRITERIA

- Land uses should be located generally in accordance with the locations and general land use terms identified in Table 4.
- The design of the Local Convenience Centre should facilitate development with a high degree of community interaction and provide an appropriate mix of
  retail, commercial and community facilities to suit the catchment that the Local Convenience Centre serves.
- The design of the Local Convenience Centre should also encourage a pattern of smaller scale individual tenancies and land ownership patterns within the Local Town Centre to attract investment and encourage greater diversity and opportunities for local business investment.
- Active building frontages should address the primary street frontage to maximise exposure to passing trade, and promote pedestrian interaction.

## **Principle 3**

Design the Local Convenience Centre to be pedestrian friendly and accessible by all modes including public transport, while enabling private vehicle access.

#### PERFORMANCE CRITERIA

- The Local Convenience Centre should be easily, directly and safely accessible for pedestrians, cyclists, public transport modes, private vehicles, service and delivery vehicles with priority given to pedestrian movement, amenity, convenience and safety.
- Public transport infrastructure/facilities should be planned for commuter friendly/convenient locations adjacent to the Local Convenience Centre.
- Bus stops should be provided in accordance with the Department of Transport Public Transport Guidelines for Land Use and Development, to the satisfaction of the Department of Transport.
- Bicycle parking should be provided within the street network and public spaces in highly visible locations and close to pedestrian desire lines and key destinations.
- The design of buildings within the Local Convenience Centre should have a relationship with and should interface to the public street network.
- Car parking areas should be located centrally to the site and to the rear and or side of street based retail frontages.
- Car parking areas should be designated to ensure passive surveillance and public safety through adequate positioning and lighting.
- Car parking areas should be designed to provide dedicated pedestrian routes and areas of landscaping, and treat stormwater runoff
- On street car parking should be provided either as parallel or angle parking to encourage short stay parking.
- Car parking ingress and egress crossovers should be grouped and limited.
- Car parking ingress or egress and car parking areas accommodating heavy vehicle movements should be designed to limit the pedestrian/vehicle conflict.
- Streets, public spaces and car parks should be well lit to Australian standards and with pedestrian friendly (generally white) light. Lighting should be
  designed to avoid unnecessary spill to the side or above.

### **Principle 4**

Design the Local Convenience Centre to be pedestrian friendly and accessible by all modes including public transport, while enabling private vehicle access.

- Development should complement and enhance the character of the surrounding area by responding appropriately to key visual cues associated with the topography of the Local Convenience Centre location and its surrounds.
- The Local Convenience Centre design should seek to minimise amenity and noise impacts resulting from the mix of uses by maintaining separation and transitional areas between retail and housing activities, such as open space, road networks and community facilities.
- The design of each building should contribute to a cohesive and legible character for the Local Convenience Centre as a whole.
- Sites in prominent locations (such as at key intersections, surrounding public spaces and terminating key view lines and vistas) should be identified for significant buildings or landmark structures.
- The design of building frontages should incorporate the use of a consistent covered walkway or verandah to provide for weather protection.
- The built form should define the primary street frontage and be aligned with the property boundary.
- Street facades and all visible side or rear facades should be visually rich, interesting and well articulated and be finished in suitable materials and colours that contribute to the character of the Local Convenience Centre.
- Materials and design elements should be compatible with the environment and landscape character of the broader precinct.
- If a supermarket is proposed, the supermarket should have a frontage that directly address the primary street frontage so that the use integrates with and promotes activity within the public realm.
- Supermarkets with a frontage to the primary street frontage 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, excessive window advertising and obtrusive internal shelving or 'false walls' offset from the glazing).
- Secondary access to a supermarket from car parking areas should be considered where it facilitates convenient trolley access and does not diminish the role of the primary access from the primary street frontage.
- The design and siting of supermarkets should provide an appropriate response to the entire public domain.

## **Principle 5**

Promote localisation, sustainability and adaptability.

- The Local Convenience Centre should promote the localisation of services which will contribute to a reduction of travel distance to access local services and less dependence on the car.
- The Local Convenience Centre should be designed to be sympathetic to its natural surrounds by:
- Investigating the use of energy efficient design and construction methods for all buildings;
- Including Water Sensitive Urban Design principles such as integrated stormwater retention and reuse (e.g. toilet flushing and landscape irrigation);
- Promoting safe and direct accessibility and mobility within and to and from the Local Convenience Centre;
- Including options for shade and shelter through a combination of landscape and built form treatments;
- Ensuring buildings are naturally ventilated to reduce the reliance on plant equipment for heating and cooling:
- Promoting passive solar orientation in the configuration and distribution of built form and public spaces;
- Grouping waste collection points to maximise opportunities for recycling and reuse;
- Promoting solar energy for water and space heating, electricity generation and internal and external lighting; and
- Investigating other opportunities for the built form to reduce greenhouse gas emissions associated with the occupation and the ongoing use of buildings.
- Encourage building design which can be adapted to accommodate a variety of uses over time.

# THIS PAGE HAS BEEN LEFT INTENTIONALLY BLANK

### 4.5 Appendix E: Service Placement Guidelines

#### STANDARD ROAD CROSS SECTIONS

Figures 003 and 004 in the *Engineering Design and Construction Manual for Subdivision in Growth Areas* (April 2011) outline placement of services for a typical residential street environment. This approach is appropriate for the majority of the 'standard' road cross sections outlined in Appendix B containing grassed nature strips, footpaths and road pavements.

#### NON-STANDARD ROAD CROSS SECTIONS

To achieve greater diversity of streetscape outcomes, which enhances character and amenity of these new urban areas, non-standard road cross sections are required. Non-standard road cross sections will also be necessary to address local needs, such as fully sealed verges for high pedestrian traffic areas in town centres and opposite schools.

For non-standard road cross sections where service placement guidance outlined in Figure 003 and 004 in the *Engineering Design and Construction Manual for Subdivision in Growth Areas* (April 2011) is not applicable, the following service placement guidelines will apply.

	UNDER PEDESTRIAN PAVEMENT	UNDER NATURE STRIPS	DIRECTLY UNDER TREES1	UNDER KERB	UNDER ROAD PAVEMENT	WITHIN ALLOTMENTS	NOTES
SEWER	Preferred	Possible	Possible	No	Possible	Possible <sup>3</sup>	
POTABLE WATER	Possible <sup>4</sup>	Preferred	Preferred	No	No	No	Can be placed in combined trench with gas
ALTERNATIVE WATER	Possible <sup>4</sup>	Preferred	Preferred	No	No	No	
GAS	Possible <sup>4</sup>	Preferred	Preferred	No	No	No	Can be placed in combined trench with potable water
ELECTRICITY	Preferred <sup>4</sup>	Possible	Possible	No	No	No	Pits to be placed either fully in footpath or nature strip
FTTH/TELCO	Preferred <sup>4</sup>	Possible	Possible	No	No	No	Pits to be placed either fully in footpath or nature strip
DRAINAGE	Possible	Possible	Possible	Preferred	Preferred	Possible <sup>3</sup>	
TRUNK SERVICES	Possible	Possible	Possible	Possible	Preferred	No	

#### NOTES 1 Trees are not to be placed directly over property service connections

- 2 Placement of services under road pavement is to be considered when service cannot be accommodated elsewhere in road reserve. Placement of services beneath edge of road pavement/ parking bays is preferable to within traffic lanes
- 3 Where allotment size/frontage width allows adequate room to access and work on a pipe
- 4 Where connections to properties are within a pit in the pedestrian pavement/footpath

## GENERAL PRINCIPLES FOR SERVICE PLACEMENT

- Place gas and water on one side of road, electricity on the opposite side
- Place water supply on the high side of road
- Place services that need connection to adjacent properties closer to these properties
- Place trunk services further away from adjacent properties
- Place services that relate to the road carriageway (eg. drainage, street light electricity supply) closer to the road carriageway
- Maintain appropriate services clearances and overlap these clearances wherever possible
- Avoid impact to native vegetation and habitat for matters of national environmental significance within Conservation Area 21.



