

**Officer South Employment Precinct Structure Plan
Draft Amendment C274card**

Victorian Planning Authority Projects Standing Advisory Committee Referral 8 Report

Planning and Environment Act 1987

6 June 2024

Planning Panels Victoria acknowledges the Wurundjeri Woi Wurrung People as the traditional custodians of the land on which our office is located. We pay our respects to their Elders past and present.

Planning and Environment Act 1987

Advisory Committee Report pursuant to section 25 of the PE Act

Officer South Employment Precinct Structure Plan

Draft Amendment C274card

6 June 2024

A handwritten signature in blue ink, appearing to read 'Sarah Carlisle'.

Sarah Carlisle, Chair

A handwritten signature in black ink, appearing to read 'Lester Townsend'.

Lester Townsend, Member

A handwritten signature in black ink, appearing to read 'Ian Hamm'.

Ian Hamm, Member

A handwritten signature in black ink, appearing to read 'John Hartigan'.

John Hartigan, Member

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Glossary and abbreviations

AEP	Annual Exceedance Probability
Amendment	draft Cardinia Planning Scheme Amendment C274card
BCS	Biodiversity Conservation Strategy
BLCAC	Bunurong Land Council Aboriginal Corporation
BPEM	Best Practice Environmental Management
Cardinia	Cardinia Shire Council
Casey	Casey City Council
CEE report	<i>Recommended buffer zone for Officer South Pumping Station</i> prepared for South East Water by Consulting Environmental Engineers in May 2022
CHMP	Cultural Heritage Management Plan
Committee	Victorian Planning Authority Projects Standing Advisory Committee
CREP	Cardinia Road Employment Precinct
DEECA	Department of Energy, Environment and Climate Action
DSS	Development Services Scheme

DTP	Department of Transport and Planning
GAIC	Growth Area Infrastructure Contribution
Ha	hectare
ICP	Infrastructure Contributions Plan
IPO	Incorporated Plan Overlay
IWM	Integrated Water Management
KWRFPD	Koo Wee Rup Flood Protection District
LTC	Local Town Centre
NAC	Neighbourhood Activity Centre
PE Act	<i>Planning and Environment Act 1987</i>
Planning Scheme	Cardinia Planning Scheme
PSP	Precinct Structure Plan
RCZ	Rural Conservation Zone
RSCA	Regionally Significant Commercial Area
SCO	Specific Controls Overlay
SIDRA	signalised and unsignalised intersection design and research aid
SSIP	State Significant Industrial Precinct
SUZ	Special Use Zone
TfV	Head, Transport for Victoria
UDPA	Urban Design Performance Area
UGZ	Urban Growth Zone
VCAT	Victorian Civil and Administrative Tribunal
VITM	Victorian Integrated Transport Model
VPA	Victorian Planning Authority
WIK	works-in-kind
WLRB	wetland and retarding basin

Overview

Amendment summary

The Amendment	Draft Cardinia Planning Scheme Amendment C274card
Common name	Officer South Employment Precinct Structure Plan
Brief description	Implementation of the Officer South Employment Precinct Structure Plan and Infrastructure Contributions Plan
Subject land	Approximately 1,069 hectares of land south of Officer Township, bounded by the Princes Freeway to the north, Lower Gum Scrub Creek to the east, Cardinia Creek to the west and the Urban Growth Boundary to the south (see Figure 1)
The Proponent	Victorian Planning Authority
Planning Authority	Victorian Planning Authority
Exhibition	25 September to 27 October 2023
Submissions	Number of Submissions: 75 (see Appendix A)

Committee process

The Committee	Sarah Carlisle (Chair), Lester Townsend (Deputy Chair), Ian Hamm, John Hartigan
Supported by	Chris Brennan, Senior Project Officer and Gabrielle Trowse, Project Officer, Planning Panels Victoria
Directions Hearing	In person at 1 Spring Street, Melbourne and by video conference, 9 February 2024
Committee Hearing	In person at 1 Spring Street, Melbourne and by video conference, over 22 sitting days between 6 March and 19 April 2024
Site inspections	Unaccompanied, 26 February and 1 April 2024
Parties to the Hearing	See Appendix B
Citation	VPA Projects SAC Referral 8 – Officer South Employment Precinct Structure Plan [2024] PPV
Date of this report	6 June 2024

Executive summary

The Officer South Employment Precinct is one of the last Precinct Structure Plan (PSP) areas in the South East Growth Corridor to have a PSP prepared. It is earmarked in policy as part of a State Significant Industrial Precinct (SSIP), and Regionally Significant Commercial Area. It is set to deliver 22,000 jobs, and a compact residential community of around 5,000 people in 1,600 dwellings. It is identified as a priority precinct in Victoria's Housing Statement.

The Victorian Planning Authority (VPA) has prepared the Officer South Employment PSP and an accompanying Infrastructure Contributions Plan (ICP), along with draft Amendment C274card to implement the PSP and ICP into the Cardinia Planning Scheme.

Draft Cardinia Planning Scheme Amendment C274card (the Amendment) proposes some bold new approaches for growth area planning, including:

- a staging control to be applied through a Specific Controls Overlay that would see development of parts of the precinct prohibited until five 'gateway' infrastructure items are provided
- identification and protection of intangible Aboriginal cultural heritage values through the application of the Rural Conservation Zone (RCZ).

This is the first time these approaches have been proposed in a PSP context, and they were not without controversy.

The precinct is well located adjacent to the Princes Freeway, but existing transport infrastructure in the area is limited. Currently, the only access point into the precinct from urban areas is Officer South Road, which includes an interchange with the Princes Freeway. The interchange in its current layout includes an onramp and offramp on the west side, providing access to traffic travelling to and from Melbourne. The east ramps (for traffic heading to or coming from the east) will be constructed when the freeway interchange is upgraded to its ultimate layout.

New east and west access points into the precinct are proposed at:

- Lecky Road, which will connect the precinct to the neighbouring Cardinia Road Employment Precinct (CREP) to the east via a bridge over Lower Gum Scrub Creek
- Grices Road, which will connect the precinct to the neighbouring Minta Farm Precinct to the west via a bridge over Cardinia Creek
- Thompsons Road, a yet to be constructed east-west connection that will form part of the Principal Freight Network, and provide broader network connections through the precinct to neighbouring areas including the Pakenham employment corridor to the north east. Bridges are required over both Lower Gum Scrub Creek and Cardinia Creek to provide access to the precinct via Thompsons Road.

The freeway interchange upgrade and the two Thompsons Road bridges are to be provided by the State with State funding. The Lecky Road and Grices Road bridges are to be provided by Cardinia Shire Council with part funding under the ICP.

The proposed staging controls require these gateway infrastructure items to be delivered before development commences in parts of the precinct. The VPA considers there is sufficient capacity in the existing freeway interchange to allow development of the residential part of the precinct, and some of the employment land close to the freeway and Officer South Road. Hence the proposed staging control does not apply to this land, which is in Stage 1.

The precinct is significantly constrained by current drainage conditions. The precinct is located on a floodplain, and development to the north of the freeway, in Officer, drains to and through the precinct. This has caused significant flooding impacts on downstream properties since Officer was developed in 2010. The PSP includes a drainage strategy which proposes some significant drainage assets within the precinct, as well as downstream works outside the PSP, to address the drainage issues. The overall objective of the strategy is to ensure no adverse downstream impacts compared to pre-2010 conditions.

The VPA referred the PSP, ICP and Amendment (Referral number 8) to the Committee in December 2023, along with the 75 submissions it received during the public exhibition of the documents. It sought the Committee's advice on four key issues:

- the proposed approach to staging
- drainage
- the proposed approach to the protection of intangible cultural heritage
- the ICP.

These issues were hotly contested at the Hearing.

Our city is facing significant challenges in balancing rapid growth with the values that make it liveable and special. Managing these challenges successfully will require bold strategic planning choices and innovative approaches. While innovation is to be encouraged, new approaches must be carefully thought through, and backed up by sound strategic work and thorough analysis.

The Amendment adopted innovative approaches to staging of development and the protection of cultural heritage in Officer South. However, the VPA did not demonstrate to the Committee's satisfaction the strategic justification for its proposed staging control, or for the use of the RCZ to protect intangible cultural heritage.

The Committee's view is that the VPA brought the Amendment on too early. If the drainage strategy were more advanced, and more work had been done to demonstrate the strategic basis for the VPA's decisions on staging and cultural heritage, the Hearing would have been considerably shorter and less contested, and would have involved a lot less work from the parties, their experts, Melbourne Water and the Committee.

That said, the VPA's position on the key (and other) issues was thoroughly tested through the process. While the Committee does not support all aspects of the Amendment, no fundamental problems were identified that justify holding the Amendment back.

Staging

The Committee cannot support the staging control or the staging plan in the form proposed by the VPA. While the Committee accepts there are constraints in the existing transport infrastructure that mean development will likely need to be managed, the VPA's proposed approach has not been strategically justified, and is not supported by any empirical analysis demonstrating the significance of the problem that is sought to be addressed, or how the proposed staging will fix that problem.

Further, the drafting of the proposed Incorporated Document will have implementation challenges that the Committee fears will stymie development in the precinct, and (paradoxically) delay the delivery of the very infrastructure the VPA considers critical to unlock development in the precinct.

In particular:

- The VPA has not demonstrated a clear link between the gateway infrastructure items required for each stage, or why the gateway infrastructure items need to be delivered in the order specified in its proposed Staging Plan. Nor has it demonstrated that the gateway infrastructure items are needed before any development in the relevant stage can proceed, or whether some level of development may be acceptable before the items are delivered.
- There is a strategic imperative for the VPA to maximise the amount of land in Stage 1. To demonstrate that it has done so, analysis of the existing capacity of the freeway interchange is required. The VPA has not done this analysis. (The only analysis done to date is that of Mr Abdou for Cardinia Shire Council, and the Committee has found Mr Abdou's analysis was overly conservative and cannot be relied upon).
- The VPA has not demonstrated the strategic justification for Stage 1 taking up all of the precinct's residential land and only a small amount of employment land. Officer South is a SSIP, and greater priority should be given to the early deliver of industrial land through the staging control.
- The staging control sets up a 'catch 22' whereby development needs to proceed in Stages 2, 3 and 4 to create the conditions and the funding required to deliver the gateway infrastructure, but the staging controls prohibit development in those stages until the gateway infrastructure is provided.
- The Committee is concerned the VPA's proposed approach will create significant cash flow issues under the ICP, and will make the efficient management and implementation of the ICP very challenging.

The Committee is not in a position to solve these conundrums on the material before it. Nor is that its role. Rather, the Committee has set out some principles the VPA should adopt in preparing a new staging control, and a suggested starting point for the drafting of the control, should a staging control be found to be warranted on completion of the further strategic work and empirical analysis recommended by the Committee.

Drainage

Drainage took up a lot of Hearing time. Ten expert witness reports on drainage were put to the Committee, indicative of a high level of concern from landowners over the lack of certainty and lack of resolution in the proposed drainage strategy.

The design of the drainage strategy remains at a preliminary stage. While the strategy's objectives and performance standards are generally appropriate, it is not yet supported by a consolidated drainage report, or modelling that demonstrates that the objectives and performance standards can be met. Further, those objectives and performance standards cannot be met without downstream works outside the PSP area which have not yet been fully designed or constructed.

This is troubling, and in the Committee's view, the PSP and ICP should have been deferred until the drainage strategy was further resolved. Neither the Committee nor the experts were able, on the material before them, to determine whether the strategy will be able to deliver the objective of no adverse downstream impacts.

That said, none of the drainage experts identified any fundamental flaw in the proposed drainage strategy. On balance, and not without some hesitation, the Committee considers the drainage strategy is sufficiently progressed to allow the PSP and ICP to proceed.

Intangible cultural heritage

The VPA has not demonstrated that using the RCZ to protect intangible cultural heritage values in Officer South is strategically justified. While the Committee is satisfied that it is likely that both tangible and intangible cultural heritage values are present within 200 metres of Cardinia Creek, the nature and extent of those values has not been fully determined. In the circumstances, the Committee considers the *Aboriginal Heritage Act 2006* and the associated regulations are the proper and most suitable tool for identifying, protecting and managing cultural heritage values in Officer South.

Once a Cultural Heritage Management Plan (or Plans) have been prepared for the land to the east of Cardinia Creek, the nature and extent of the cultural heritage values present on the land will be better understood. It may be appropriate at that point for the VPA to reconsider the extent of what is now defined as the Cultural Value Investigation Area in the PSP, the appropriate zoning for that land, and whether other planning tools (such as a Significant Landscape Overlay) might be a better fit to recognise and manage those values going forward. For now though, cultural heritage should be managed through the cultural heritage legislation.

Other issues

Submissions raised many other issues in addition to the four key issues addressed above. All issues on which evidence was called have been addressed in some detail in this report. Other issues are necessarily addressed in less detail, and while all issues have been considered, some are not the subject of commentary in this report. Some have been addressed through recommended drafting changes without any accompanying commentary. Where changes have been requested and there is no commentary or recommended drafting changes, the Committee does not support the requested change.

The Committee has provided marked up versions of the PSP and the Urban Growth Zone Schedule 7, incorporating the Committee's specific recommendations as well as recommended drafting changes. The Committee has also made recommendations for changes to the Infrastructure Contributions Plan and the schedule to clause 66.06 of the Planning Scheme. These recommendations are relatively contained, and markups of these documents are not considered necessary.

Consolidated recommendations

Based on the reasons set out in this Report, the Committee recommends:

General recommendations

- 1. Adopt draft Cardinia Planning Scheme Amendment C274card subject to the recommendations in this Report.**
- 2. For land identified in the Precinct Structure Plan solely as 'Cultural Value Investigation Area' (without intersecting values such as the environmental values in the Biodiversity Conservation Strategy area):**
 - a) do not apply the Rural Conservation Zone**
 - b) retain the land in the Urban Growth Zone, with an applied Industrial 1 Zone**
 - c) do not apply the Incorporated Plan Overlay.**

Adjust the Precinct Structure Plan and the planning scheme maps accordingly.

3. Do not apply the Specific Controls Overlay to any land in the precinct.
4. If a staging control is found to be warranted after completing the further strategic work and empirical analysis recommended by the Committee in Chapter 3.5 of this report, the Victorian Planning Authority should carefully consider the following when preparing its new staging control:
 - a) how the staging plan impacts cash flows under the Infrastructure Contributions Plan, so as to minimise negative cash flows and avoid exacerbating funding shortfalls
 - b) adjustments to the Infrastructure Contributions Plan to facilitate the early delivery of key gateway infrastructure items identified in the new staging plan (such as borrowing costs for early delivery).
5. Before progressing the Amendment, the Victorian Planning Authority should:
 - a) Revise the statement of significance for 425 Officer South Road, Officer South (Jesmond Dene) to remove references to the timber gate.
 - b) Resolve the issue of ownership of heritage buildings located within local parks.
 - c) Explore whether any of the green spine land can be used to accommodate the sports reserve. If this is viable, adjust the land use budgets in the Infrastructure Contributions Plan accordingly.

Changes to the Precinct Structure Plan

6. Amend the Precinct Structure Plan as shown in Appendix D, to:
 - a) Provide more flexibility in relation to the delivery of the housing density and typology targets by:
 - inserting a new Requirement R50A
 - converting Requirement R51 into a new Guideline G40A
 - amending Table 5.
 - b) Specify an overall size of 0.5 to 1 Hectare for the Local Town Centre.
 - c) Remove the master planning requirements for the Urban Design Performance Area.
 - d) Update Guidelines G50 and G61 to make it clear the land can be developed in accordance with its underlying zoning if it is not required for the State Government Facility.
 - e) Amend Guideline G51 so the sunset clause for the Emergency Services Facility is triggered at 80 per cent build out.
 - f) Amend Guideline G60 and Appendix 3 to allow flexibility for the electricity transmission easement to be used for purposes ancillary to adjacent industrial or employment uses.
 - g) Rewrite Guideline G74, relating to the high pressure gas pipeline easement, to clarify its meaning and intent.
 - h) Amend Requirement R31 and the text under Plan 9 (Integrated Water Management) to strengthen the notion that flexibility should be applied when considering whether changes to the size or location of drainage assets are 'generally in accordance with' the Precinct Structure Plan.

- i) Amend Plan 9 (Integrated Water Management) to:
- Remove the Stephens Road waterway. Retain the waterway on other plans only if there are other reasons (for example high value tree retention) which justify its retention.
 - Include some supporting text encouraging the implementation of the relevant Integrated Water Management initiatives in each 'pilot area'. This could be a note on Plan 9, or a Requirement or a Guideline in the appropriate section of the Precinct Structure Plan.
 - Remove references to Class A recycled water in pilot areas 1 and 3 if the use of recycled water would compromise the potential benefits of stormwater harvesting in reducing the total volume of stormwater in the system.
 - Correct the boundaries of pilot area 4 if required.

Make any consequential changes to the Infrastructure Contributions Plan.

- j) Add the two new objectives and new requirement with respect to Integrated Water Management in section 3.4 as proposed by Cardinia Shire Council (Document 264) if appropriate.
- k) Add notes to Plan 3 to read:
- The underlying zoning for the land affected by the PAO for Thompsons Road is Industrial 1. Applications can be made for the use and development of that land, but they must be referred to the acquiring authority to determine whether the land is surplus to the needs of the acquiring authority.
- The underlying zoning for the land affected by the PAO for the city bound onramp from Officer South Road to the Princes Freeway is Commercial 2. Applications can be made for the use and development of that land, but they must be referred to the acquiring authority to determine whether the land is surplus to the needs of the acquiring authority.
- l) If Plan 12 (Infrastructure and Development Staging) is to be retained in the Precinct Structure Plan, amend Plan 12 by:
- removing intersections IN-01 to IN-12, or
 - alternatively, removing the colour coded depiction of the intersections which matches them to the proposed stages.
- m) If, contrary to the previous Recommendation, intersections are to remain on Plan 12 and linked to a particular stage of development:
- amend Plan 12 to show the whole of intersection IN-05 linked to Stage 1
 - include provisions in either the Precinct Structure Plan or the Urban Growth Zone Schedule 7 to require intersection IN-05 to be delivered in Stage 1.
- n) Clarify whether the ultimate land take for intersections IN-09, IN-10, IN-11 and IN-012 includes or excludes the land within the Public Acquisition Overlay 8. If required:
- adjust the land use budgets in the Infrastructure Contributions Plan, and/or
 - amend the Public Acquisition Overlay 8 mapping.

Make any consequential changes to the Infrastructure Contributions Plan.

- o) Remove any references to a road crossing of the freeway at Stephens Road. If there is merit in preserving the option for a future pedestrian or cyclist crossing, amend the Precinct Structure Plan accordingly.**

Make any consequential changes to the Infrastructure Contributions Plan.

- p) Add notes to the relevant road cross sections to:**
- allow for paths or shared paths to be located within abutting public open space or abutting road reserves**
 - specify that footpaths in the town centre be 1.8 metres wide**
 - make it clear that the paths on either side of the primary and secondary arterials will initially be a shared path, then converted to a dedicated cycle path once the footpath is provided along the entire length of the adjoining development front.**

Make any consequential changes to the Infrastructure Contributions Plan.

- q) Remove the brown (cultural heritage) layer from Plan 3 and any other plans, but retain the brown hatched (Cultural Value Investigation Area) layer.**
- r) Relocate drainage asset outside the Cultural Value Investigation Area, and add a note indicating assets may be relocated to within the Cultural Value Investigation Area subject to Cultural Heritage Management Plans and at the election of the developer. Make any consequential changes to the Infrastructure Contributions Plan.**

Changes to the Infrastructure Contributions Plan

7. Amend the Infrastructure Contributions Plan as follows:

- a) Remove references to road project RD-01 if it is not required.**
- b) Remove references to RD-04.**
- c) Include an allowance in the land use budget for shared paths that are not able to be located in either a drainage and waterway reserve or a road reserve.**
- d) Remove Property 4 from the Net Developable Area.**
- e) Remove item PP-01 (plan preparation costs) and references to plan preparation costs.**
Recalculate the levies accordingly, and make consequential amendments to the Precinct Structure Plan.
- f) Include text to provide that an application to use or develop Property 4 in connection with its current use as a Freeway Service Centre is exempt from levies.**
- g) Amend the last paragraph in section 5.3 to read:**

For the purposes of this ICP, the number of net developable hectares for any specific parcel of land as set out in Table 17 is changed if the area of non-developable land is reduced through detailed design and/or the collecting agency and the owner of that parcel agree to a variation to the parcel specific land budget as set out in Table 17. The changes to Table 17 and any consequential changes to the public purpose land credit and equalisation

amounts in Table 11 must be set out in an agreement made under section 173 of the *Planning and Environment Act 1987*. In that event:

- the Monetary Component for that parcel must then be paid based on that varied number net developable hectares;
- the Land Credit Amount for that parcel is the amount set out in that agreement; and
- the Land Equalisation Amount for that parcel is the amount set out in that agreement.

h) Make the changes recommended in Chapter 9.2 of this report.

Changes to the draft Amendment

8. Amend the Urban Growth Zone Schedule 7 as shown in Appendix E, to:

- a) Remove the master planning requirements for the Urban Design Performance Area.
- b) Remove the permit trigger (and the associated application requirements and decision guidelines) for use of land with an applied Industrial 1 Zone for 'warehouse'.
- c) Make 'rural industry' a section 1 use in the Gin Gin Bean sub-precinct, subject to the same conditions as those that apply in the surrounding Farming Zone.

9. Make the following additional changes to the draft Amendment:

- a) Amend the last row in Table 1 in the Schedule to Clause 66.06 to add the following to the list of applications that require notification to the licensee and/or operator of the gas transmission pipeline:
 - Cinema based entertainment facility
 - Child care centre
 - Corrective institution.
- b) Amend the Incorporated Plan Overlay Schedule 3 to remove the requirements for a land management plan for applications in the Cultural Value Investigation Area.

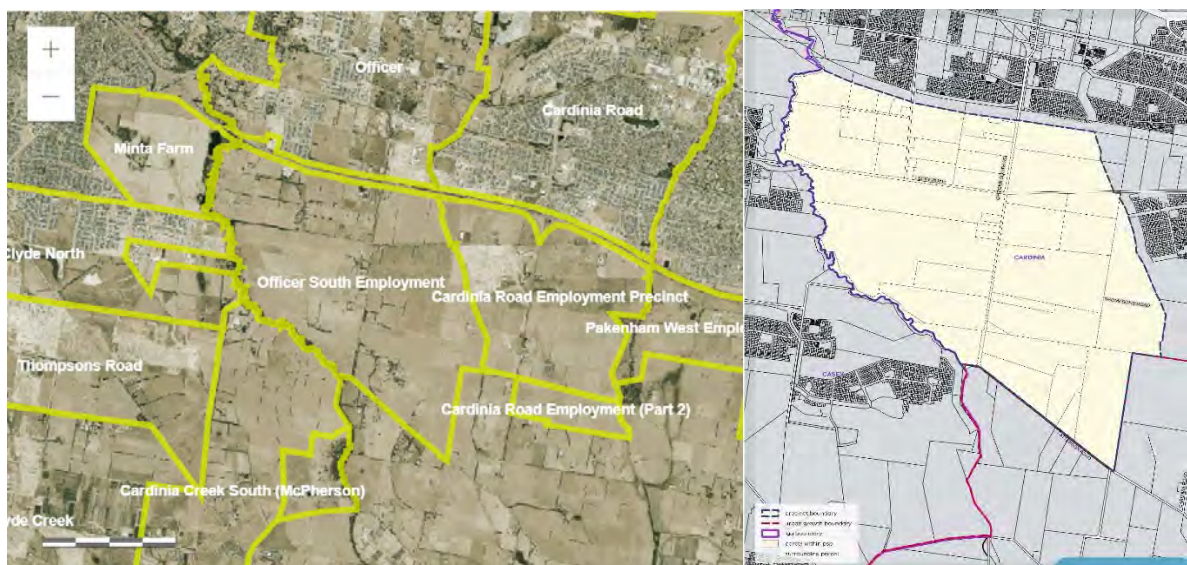
1 Introduction

1.1 The precinct

(i) The precinct

The Officer South Employment Precinct is located around 45 kilometres southeast of Melbourne's central business district in the municipality of Cardinia. The precinct is around 1,069 hectares, bound by Cardinia Creek to the west, the Princes Freeway to the north, Lower Gum Scrub Creek to the east and the Urban Growth Boundary to the south.

Figure 1 Location of the Officer South Employment Precinct



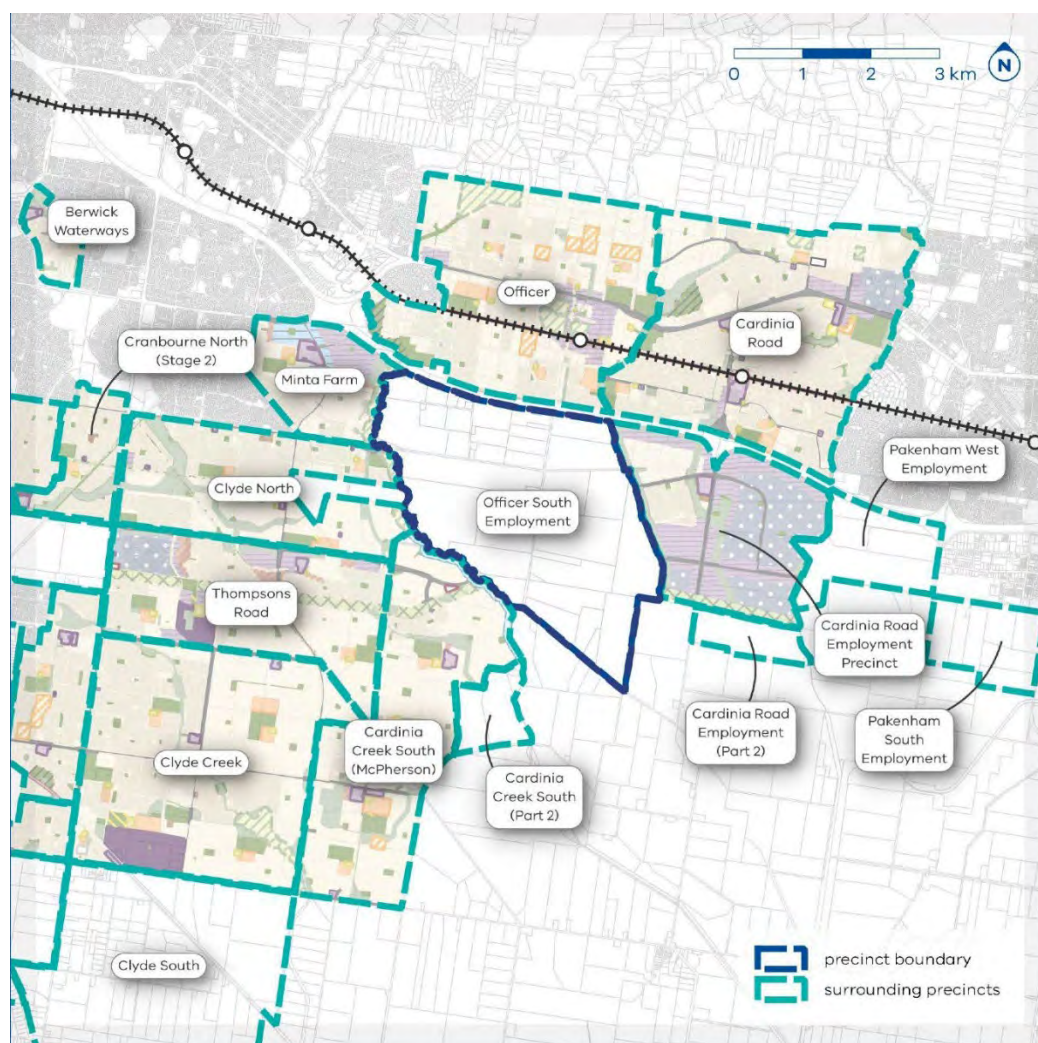
Source: VPA website

It is intended that the precinct deliver a State Significant Industrial Precinct (SSIP) and Regionally Significant Commercial Area (RSCA) along with a reasonably compact residential area.

(ii) Surrounding precincts

The precinct is surrounded by other precincts as shown in Figure 2. It sits to the immediate west of the Cardinia Road Employment Precinct (CREP), which is mainly industrial and commercial land with a residential area in its north west corner. Other surrounding precincts are mainly residential, with some employment land. The surrounding area includes various commercial centres and key community infrastructure.

Figure 2 **Precinct surrounds**



Source: VPA's Part A submission

1.2 The draft Precinct Structure Plan

The Part A submission of the VPA states the Officer South Employment PSP envisions:

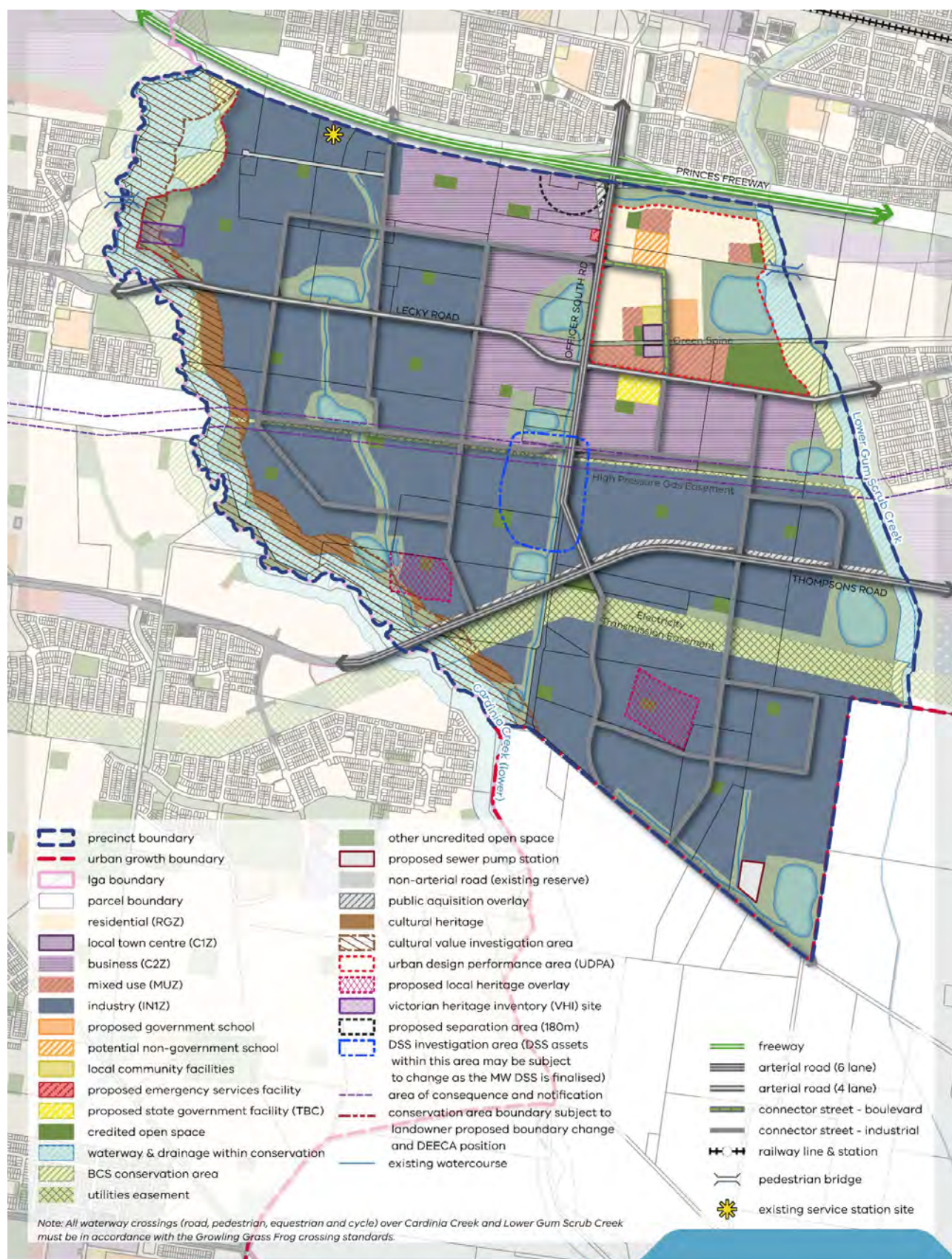
... an innovative and sustainable employment precinct that will deliver a high amenity regionally significant commercial and state significant industrial area, combined with a modern and diverse urban living hub to form a unique working and living environment, that integrates and expands the CREP community.

The PSP identifies:

- around 630 hectares of land for industrial and commercial development, creating around 22,000 jobs in the long term
- residential land for the development of around 1,600 new homes to accommodate an expected population of 5,000 residents
- a local town centre and community facilities in the residential and mixed use part of the precinct (known as 'the Village' sub-precinct).

The exhibited Place Based Plan (Plan 3 in the PSP) is extracted in Figure 3.

Figure 3 Place Based Plan



Source: Plan 3 from the PSP (exhibited version)

Proposed key infrastructure is summarised in Table 1. An asterisk indicates shared funding with neighbouring PSPs (CREP or Minta Farm). Table 1 is based on the exhibited PSP and Infrastructure Contributions Plan (ICP).

Table 1 **Proposed infrastructure**

Item	Funding
Roads	
Officer South Road between the Princes Freeway and Patterson Road – realignment and upgrade to a bus capable 6 lane primary arterial road between the freeway and Thompsons Road, and a connector road between Thompsons and Patterson Roads	Ultimate land and interim construction – ICP Ultimate construction – State
Lecky Road between Cardinia Creek and Lower Gum Scrub Creek – realignment and upgrade to a bus capable 4 lane secondary arterial road	Ultimate land and interim construction – ICP Ultimate construction – State
Thompsons Road between Cardinia Creek and Lower Gum Scrub Creek – construction of a bus capable 6 lane primary arterial road	Ultimate land (41 metre reservation) and interim construction – ICP Public Acquisition Overlay 8 (PAO8) is proposed to allow acquisition of an additional 29 metres by the State for drainage/flood related works (taking the total road reservation width to 70 metres)
Network of new connector streets , many of which are bus capable	Developers (land and works)
Bridges	
Lecky Road bridge (BR-01)	Ultimate land and interim construction – ICP Ultimate construction – State
Thompsons Road east bridge (BR-02)	Ultimate land and interim construction – ICP Ultimate construction – State
Grices Road bridge (BR-03)	State
Thompsons Road west bridge (BR-04)	State
Two pedestrian bridges	ICP
Intersections	
Various internal intersections (IN-01 to IN-12)	Ultimate land and interim construction – ICP Ultimate construction – State
Upgrade of Princes Freeway/Officer South Road interchange (IN-13) to ultimate configuration (including new east ramps)	State (facilitated by existing PAO1 for the west ramp upgrades and proposed PAO8 for the east ramp construction)
Drainage	
A series of retarding basins , some connected by waterways	Development Services Schemes under the <i>Water Act 1989</i> (DSS) (Melbourne Water being the delivery agency)

Item	Funding
A series of culverts	Land – developers (generally located in road reserves and/or encumbered open space) Construction – ICP
Active transport infrastructure	
Active transport networks including offroad bike paths and an equestrian trail network	Land – developers (generally located in road reserves and/or encumbered open space) Construction – developers
Open space and recreation facilities	
Local sports reserve (SR-01)	Ultimate land and construction – ICP
Series of local parks (LP-01 to LP-25)	Land – ICP Construction – Council
Passive open space and conservation areas along Cardinia Creek and Lower Gum Scrub Creek	Developers (land and works)
Other	
Level 2 community centre including kindergarten rooms	Ultimate land and construction – ICP
Proposed government primary school	State (Department of Education)
Potential non-government primary school	Private provider
Proposed Emergency Services Facility	State (Victorian Health Building Authority)
Proposed state government health facility	State (Department of Health)

1.3 The draft Infrastructure Contributions Plan

The Officer South Employment ICP is designed to ensure the provision of basic and essential infrastructure to the precinct community, and (in part) to the neighbouring residential community in the CREP. It includes a standard levy, and a supplementary levy to fund non-standard transport infrastructure items. The exhibited supplementary rate is \$114,316.30.











1.4 The draft Amendment

The purpose of draft Cardinia Planning Scheme Amendment C274card (the Amendment) is to implement the PSP and ICP into the Cardinia Planning Scheme (Planning Scheme), to guide growth in the precinct over the next 20 to 30 years.

(i) Changes to zones, overlays and other provisions

The Amendment proposes a number of changes to the Planning Scheme, summarised in Table 2.

Table 2 Proposed changes to the Planning Scheme

Proposed planning controls		
Land		
Developable land within the precinct		<p>Apply a new:</p> <ul style="list-style-type: none"> - Schedule 7 to the Urban Growth Zone (UGZ7) - Schedule 3 to the Infrastructure Contributions Overlay
Developable land in Stages 2, 3 and 4		<p>Apply a new Schedule 14 to the Specific Controls Overlay (SCO14) to provide for the staging of development in the precinct (see below)</p>
Conservation areas under the Biodiversity Conservation Strategy ¹		<p>Rezone to Rural Conservation Zone (RCZ)</p> <p>Apply a new Schedule 7 to the Environmental Significance Overlay (ESO7)</p> <p>Apply a new Schedule 3 to the Incorporated Plan Overlay (IPO3)</p>
Cultural heritage and cultural value investigation areas		<p>Rezone from UGZ to RCZ</p> <p>Apply IPO3</p>
Land within the electricity transmission line easement		<p>Rezone to Special Use Zone and apply a new Schedule 8 (SUZ8)</p>
410 Officer South Road, Officer		<p>Reduce the extent of the existing Heritage Overlay (HO91)</p> <p>Amend HO91 to apply tree controls and permit prohibited uses</p>
425 Officer South Road, Officer		<p>Reduce the extent of the existing Heritage Overlay (HO92)</p> <p>Amend HO92 to permit prohibited uses</p>
94 Princes Freeway, Officer		<p>Apply the Environmental Audit Overlay</p>
185 Officer South Road, Officer		<p>Apply PAO8 to allow acquisition of land for the eastern ramp at the Princes Freeway/Officer South Road interchange (IN-13)</p>
Land along the north side of the existing Thompsons Road reserve		<p>Apply PAO8 to allow acquisition of land for widening of Thompsons Road between Cardinia Creek and Lower Gum Scrub Creek for flood/drainage reasons</p>
Administrative changes		
Amend the Schedule to Clause 52.17 (Native Vegetation) to identify native vegetation that does not need a planning permit for its removal		

¹ Biodiversity Conservation Strategy for Melbourne's Growth Corridors (former Department of Environment and Primary Industries, 2013)

Administrative changes

Amend the referral requirements in Clause 66.04 to require:

- referral to the Secretary to the Department of Energy, Environment and Climate Action (DEECA) for an application to subdivide land in the conservation area
- referral to the Department of Transport and Planning (DTP) of a permit application for land identified as 'service station site' on the Place Based Plan

Amend the notice requirements in Clause 66.06 to require:

- notice to the gas pipelines licensee under the *Pipelines Act 2005* for a permit application for sensitive uses or a service station within the '240m measurement length' shown on Plan 3 of the PSP

Make the following incorporated documents in the Planning Scheme:

- PSP
 - ICP
 - *State Infrastructure Items – Officer South Employment Precinct*, September 2023 (the Incorporated Document)
-

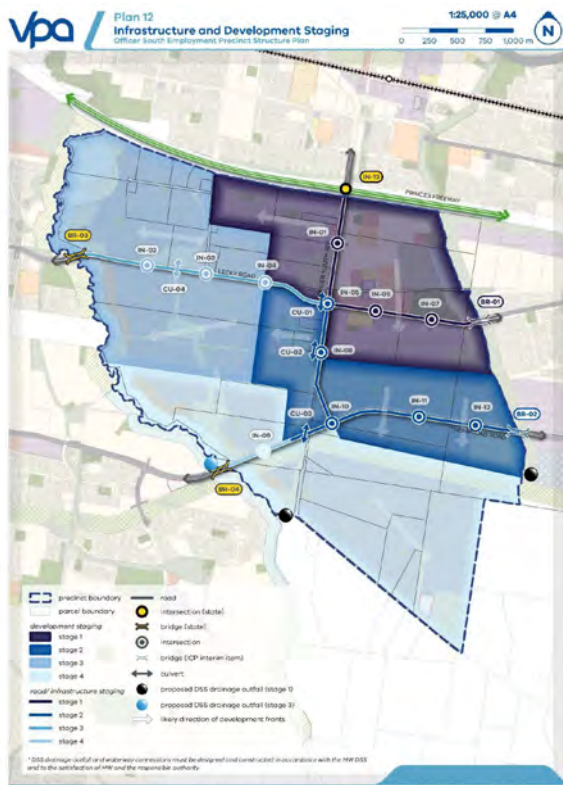
(ii) Development staging and the Specific Controls Overlay

The Amendment proposes to apply the SCO14 along with the Incorporated Document to prohibit the use and development of land in Stages 2, 3 and 4 until certain infrastructure items (referred to in this report as 'gateway infrastructure') have been constructed, or have a confirmed state government funding commitment. The gateway infrastructure items are:

- upgrade of the Princes Freeway/Officer South Road interchange (IN-13) to its ultimate layout
- construction of the Lecky Road bridge (BR-01) to interim standard
- construction of the Thompsons Road east bridge (BR-02) to interim standard
- construction of the Grices Road bridge (BR-03) to ultimate standard
- construction of the Thompsons Road west bridge to ultimate standard.

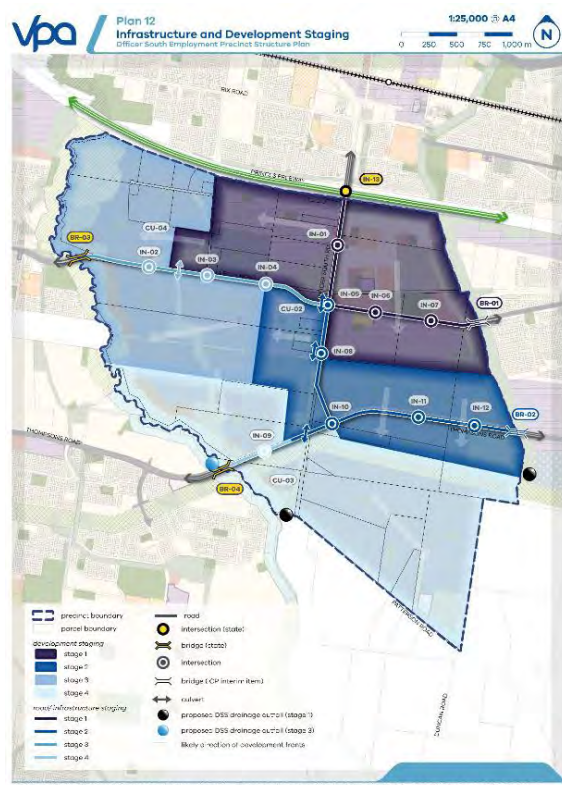
The exhibited Staging Plan is shown in Figure 4. The VPA updated the proposed Staging Plan (referred to as the 'Day 2' version) to include additional land in Stage 1 (Document 45, extracted in Figure 5).

Figure 4 Exhibited Staging Plan



Source: Exhibited Amendment documents

Figure 5 Day 2 Staging Plan



Source: Document 45

1.5 Updated documents

In response to submissions, the VPA revised the PSP, ICP and Amendment documentation. It presented Day 1 versions before the Hearing, and final versions at the conclusion of the Hearing. The Day 1 versions involved (among other things) changes to the Place Based Plan, additional land in Stage 1 of the Staging Plan as mentioned above, and introduction into the Incorporated Document of a review mechanism for the Staging Plan. The Day 1 versions formed the basis of discussions at the Hearing. The Committee has based its recommendations on the final versions.

1.6 Procedural issues

(i) Scope of the Committee's remit

The Victorian Planning Authority Projects Standing Advisory Committee (Committee) was established in July 2020 with the following purpose:

Purpose

4. The purpose of the Committee is to provide timely advice to the Minister for Planning and the VPA on specific matters referred to it related to various proposals, including but not limited to structure plans, infrastructure and development contribution plans, framework plans, development plans and any associated draft planning scheme amendment and planning permits.

The VPA refers matters to the Committee. This matter was referred on 19 December 2023.

The referral letter states that the Committee is to focus its proceedings and subsequent recommendations on the following issues:

1. **Development staging and use of the SCO** – the approach to development staging and use of the SCO and boundaries applied to identified areas within Plan 12 of the PSP.
2. **Drainage and water** – location and size of drainage infrastructure and management of downstream impacts.
3. **Protection of intangible cultural heritage** – the use of the Rural Conservation Zone (RCZ) to protect intangible cultural heritage and ongoing management and use of the land identified with intangible cultural heritage values.
4. **Infrastructure Contributions Plan (ICP)** – inclusion and exclusion of items identified in submissions, and apportionment of items.

At and before the Directions Hearing, several parties raised concerns in relation to the Committee's scope being confined to these four issues. They indicated their submissions raised other issues, and the Committee process was the only opportunity for them to be heard on those issues and for the issues to be independently reviewed.

The VPA indicated before the Directions Hearing that it did not consider the Committee was constrained from considering other issues.

At the Directions Hearing, the Committee outlined its preliminary view on the scope of its remit – namely that it is required by its Terms of Reference and its natural justice obligations to consider and report on all issues raised in submissions (those that are relevant to the Amendment), and to provide parties an opportunity to be heard on all such issues. This is because:

- the VPA referred all 75 submissions to the Committee
- the submissions raised a wide range of issues that go beyond the four key issues identified in the referral letter
- the Terms of Reference require the Committee to consider all referred submissions (clause 14(b)) and any material referred to it (clause 14(g))
- the Terms of Reference require the Committee's report to address a range of matters (clause 20), including:
 - whether the referred elements of the draft amendment are appropriate (noting that the whole Amendment was referred)
 - an assessment of the issues raised in referred submissions (which in this case was all submissions).

The Committee indicated it therefore intended to consider all relevant issues raised in submissions, and while the Hearing would focus on the four key issues identified in the referral letter, it did not intend to confine the Hearing to those issues. The VPA and other interested parties indicated they agreed with the Committee's preliminary view. No further concerns were raised.

(ii) Hearing process

At the Directions Hearing, the Committee advanced the proposal to conduct the Hearing as a series of roundtables, covering the four key issues in the referral letter and other issues on which evidence was to be called. Not all parties supported this approach, noting that its intended efficiencies may be illusory, and that for parties raising issues the subject of more than one roundtable, it required longer attendance at the Hearing than a more traditional format.

Having considered the parties' concerns, the Committee determined that the Hearing would be a mix of roundtables and conventional evidence and submissions. The Committee considered that given the number of expert witnesses, roundtables would deliver a more efficient hearing process. It scheduled roundtables on:

- Aboriginal cultural heritage
- strategic planning (which considered the staging controls)
- European heritage
- arboriculture
- drainage and related matters
- traffic (which considered the staging controls)
- infrastructure contributions
- economics.

The VPA's proposed staging controls were discussed at a number of the roundtables, including strategic planning, traffic and infrastructure contributions.

The European heritage and Arboriculture roundtables ended up not being required, as the issues were resolved before the roundtables.

Some parties with an interest in the roundtable topics were not available to attend all of the relevant roundtables. The Committee dealt with the potential procedural fairness implications of this by:

- directing the VPA to record the roundtables, and provide the recordings to parties on request
- inviting any party to request the Committee for an opportunity to recall witnesses, or provide addendum evidence or further written submissions on matters raised at roundtables they were not able to attend, should they consider this necessary.

The roundtables allowed the Committee to explore the issues with the experts in a less adversarial and more inquisitorial format, and in a more efficient way with less time than would have been required in a traditional hearing format. The Committee appreciates the cooperative approach taken by parties and experts to the roundtables.

(iii) Interim report

Parklea submitted in its closing submissions that the Committee should issue an interim report and defer issuing a final report until the drainage strategy has been better resolved. It submitted a further hearing should be convened to give parties the opportunity to make further submissions on the drainage strategy before it and the PSP and ICP are finalised. It submitted there is no formal opportunity for parties to input into the DSSs under the *Water Act 1989*, and this Committee process represents the only opportunity for parties to make submissions on the proposed drainage strategy, and for the strategy to be independently reviewed.

Drainage was a hotly contested issue at the Hearing, and took up a lot of Hearing time. Ten expert witness reports on drainage were put to the Committee, indicating a high level of concern from landowners over the lack of certainty and lack of resolution in the proposed drainage strategy.

As discussed in Chapter 4, the Committee has found:

- the design of the drainage strategy remains at a preliminary stage
- the strategy is not yet supported by a consolidated drainage report, or modelling demonstrating that the strategy's objectives and performance standards can be met
- the Lower Gum Scrub Creek catchment relies on downstream works which have not yet been fully designed or constructed.

This is troubling, and in the Committee's view, the PSP and ICP should have been deferred until the drainage strategy was further resolved. This would have provided more certainty and would likely

have resulted in a much reduced Hearing, with less work required from the parties, Melbourne Water and the Committee, and a substantially shorter report.

That said, the Committee has determined that while it considers the PSP and ICP have been brought on too early, on balance and not without hesitation, it does not consider that the drainage strategy is so preliminary as to warrant holding the PSP and ICP back. The Committee's reasons are set out in Chapter 4.

Further, the Committee is conscious that its task is to advise on the PSP and ICP. It does not have any role under the *Water Act 1989* to review or advise on the DSSs. That is a task for Melbourne Water, and Melbourne Water has indicated that it intends to consult with landowners as it finalises the DSSs as outlined in Chapter 4.

(iv) South East Water's position on the pumping station separation area

Material filed by South East Water in relation to the separation area shown around its existing sewer pumping station raised some procedural issues, which are discussed in Chapter 8.1.3.

1.7 The issues

(i) Key issues raised in submissions

Submissions raised many issues, including substantive issues and drafting issues. The key issues can be broadly grouped into the following themes, which intersect and expand on the four key themes identified in the referral letter:

- strategic issues including the VPA's proposed approach to staging development
- drainage
- traffic
- ICP (infrastructure items and costs, and impacts of staging on the ICP)
- Aboriginal cultural heritage
- pumping station issues (the separation area proposed to manage noise and odour from the existing South East Water pumping station)
- arboriculture
- European heritage
- open space
- bushfire requirements
- social and affordable housing
- buffer to the green wedge.

Many other issues were raised in submissions, and while they have been considered by the Committee (and in some cases have resulted in the Committee recommending changes to the PSP, ICP and Amendment documentation), they are not specifically addressed in this report.

(ii) Resolved issues

The referred material included a submissions summary table prepared by the VPA that indicated many of the issues raised in submissions had been resolved. The VPA indicated at the Directions Hearing that it was actively working with the parties to continue to resolve issues through the process.

The Committee indicated at the Directions Hearing that it would accept the VPA's summary of resolved issues on face value, and would not be inquiring into those issues in detail unless parties raised concerns with the VPA's resolution of the issue. It sought a letter of comfort from the VPA that confirmed:

- the submissions summary table accurately described how those issues have been resolved
- no third party interests are impacted by the final resolution of the issue, unless those third parties have been consulted and agree to the resolution proposed.

While a letter was not provided, the VPA circulated updated versions of the submissions summary table to the Committee and parties before the start of the Hearing (Document 18), with its opening statement (Document 61(a)) and with its closing submissions (Documents 223 and 224).

The Committee has recorded the key resolved issues that arose at the Hearing at the start of each chapter. Document 61(a) (which is in the order of 73 pages) provides a detailed record of issues raised in submissions that have been resolved. The Committee has not inquired into resolved issues.

(iii) Issues that are not relevant to the Amendment

The VPA's opening statement identified a number of issues raised in submissions that it said were out of scope and ought be disregarded by the Committee:

- existing infrastructure outside the precinct (raised in S4)
- an enquiry regarding whether landowners outside the precinct are affected by the ICP (raised in S5)
- requirements of the *Disability and Discrimination Act 1992* (raised in S12)
- amendments to planning controls within the CREP (raised in S25).

A further issue was raised during the Hearing, in relation to existing flood controls on land outside the PSP.

These issues do not relate to the Amendment and are beyond the Committee's remit. The Committee has not addressed them.

1.8 The Committee's approach

The Committee considered all written submissions made in response to the exhibition of the Amendment, observations from site visits, and submissions, evidence and other material presented to it during the Hearing. It has reviewed a large volume of material, and has had to be selective in referring to the more relevant or determinative material in the Report. All submissions and materials have been considered by the Committee in reaching its conclusions, regardless of whether they are specifically mentioned in the Report.

This Report focuses on the four key issues outlined in the referral letter, but also considers other unresolved issues raised in submissions. Many of the issues are interrelated, in particular staging, which interrelates with traffic, drainage and ICP related issues.

All issues on which evidence was called have been addressed in detail in this report. Other issues are necessarily addressed in less detail, and while all issues have been considered, some are not the subject of commentary in this report. Some have been addressed through recommended drafting changes without any accompanying commentary. Where changes have been requested and there is no commentary or recommended drafting changes, the Committee does not support the requested change.

This Report explores the issues under the following headings (underlining represents the four key themes outlined in the referral letter):

- Strategic issues
- Staging
- Drainage
- Traffic
- Infrastructure Contributions Plan
- Aboriginal cultural heritage
- Miscellaneous issues
- Drafting issues.

2 Strategic issues

2.1 Introduction

(i) Relevant policy

The VPA provided a summary of the strategic context in its Part A submission. The exhibited Explanatory Report and the planning evidence of John Glossop for the VPA also outline policy relevant to the Amendment. Overall strategic justification is addressed in Chapter 2.3.

Key policies are:

- *Plan Melbourne 2017-2050*, including Principle 5 (20 minute neighbourhoods) and Principle 8 (Infrastructure investment that supports balanced city growth), and the identification of Officer-Pakenham as one of five SSIPs across Melbourne
- clause 11 (Settlement) of the Planning Scheme, including 11.02-1S (supply of urban land), 11.02-2S (Structure planning), 11.02-3S (Sequencing of development) and 11.03-2S (growth areas)
- clause 12 (Environmental and landscape values), including 12.01-2S (Native vegetation management)
- clause 13 (Environmental risks and amenity), including 13.02-1S (Bushfire planning) and 13.04-1S (Contaminated and potentially contaminated land)
- clause 15 (Built environment and heritage)
- clause 16 (Housing), including 16.01-1S (Housing supply), 16.01-1R (Housing supply – metropolitan Melbourne) and 16.01-2S (Housing affordability)
- clause 17 (Economic development), including 17.03-1S (Industrial land supply)
- clause 18 (Transport), including 18.01 (Land use and transport) and 18.02 (Movement networks)
- clause 19 (Infrastructure), including 19.02 (Community infrastructure) and 19.03 (Development infrastructure)
- clause 21 (Municipal Strategic Statement), including 21.03-3 (Urban growth area)
- the *Melbourne Industrial and Commercial Land Use Plan* (MICLUP)
- the *South East Growth Corridor Plan*
- the *South East Economic Corridor Strategic Context Report to 2060*
- *Victoria's Housing Statement*, which identifies the PSP as one of 21 priority precinct structure plan areas to deliver more than 60,000 homes and 60,000 jobs.

The South East Growth Corridor Plan

Clause 11.03-2S requires consideration of the Growth Area Framework Plans (Department of Sustainability and Environment, 2006). The 2006 plans are out of date. The VPA's website hosts 2012 versions which are referred to in the VPA's Part A submission. Although the 2012 plans are not referenced in the Planning Scheme, the Committee has had regard to the 2012 version of the South East Growth Corridor Plan, as it represents the most up to date version.

The growth corridor plans seek to provide a framework to plan for housing and employment land supply over the next 30 to 40 years in each of Melbourne's growth corridors. The Part A submission noted:

Residents in the South East Growth Corridor will continue to rely upon the broader metropolitan south eastern suburbs for employment and services, however over the longer term, the potential exists for the South East Growth Corridor to be re-positioned as central to an emerging sub-regional economic triangle comprising Dandenong, the Casey–Cardinia employment area, and the Port of Hastings. Officer South Employment Precinct is identified as business with residential to the north of Lecky Road and industrial south of Lecky Road in the South East Growth Corridor Plan.

The references to the growth corridor plans in the Planning Policy Framework should be updated. This is not the first time this issue has been identified by a Panel or Advisory Committee. The Committee makes no recommendations in this regard, as it is beyond the scope of its remit.

2.2 The prerogative of authorities

The Committee has included a discussion about the prerogative of authorities as it provides context for the Committee’s thinking and approach in addressing the issues raised in submissions.

(i) The issue

The issue is:

- to what extent should the Committee seek to review the decisions of the VPA (as planning authority), Melbourne Water (as drainage authority) or DTP or Head, Transport for Victoria (TfV) (as the authority responsible for broad transport network planning)?

(ii) Discussion

A strategic planning exercise such as a PSP is an opportunity to maximise net community benefit and sustainable development.

In PSPs, issues around the prerogative of planning authorities typically arise in relation to the arrangement of land uses within the PSP, and selecting locations for infrastructure items (such as the non-government school site). In this PSP, the prerogative issues also relate to the broad planning strategies proposed to address drainage, transport and staging of development.

While it may be the prerogative of the relevant authority to determine the configuration and mix of land uses in a PSP, or the broad strategies to deal with matters such as staging, drainage and the transport network, the choices made by those authorities must be strategically justified, and be shown to produce acceptable outcomes and deliver net community benefit and sustainable development.

The Ballarat C185 Panel laid down some principles for considering submissions to the effect that there were other preferable locations for the proposal (a saleyard):²

... it is not our task to identify alternative locations (including the upgrade of the existing facility). While panels and the Tribunal do not assess alternative sites (or proposals), they do, when required, assess the strategic logic of a selected site. This is not to determine that the site is the optimum location, or indeed that it is suitable compared to other sites, but rather that there has been some analysis of what makes a suitable site, and the subject site meets those criteria. The benefit of fully informing a panel about site selection is to help inform the assessment of what makes a site suitable.

Those principles can be applied to the Committee’s consideration of alternatives put to it through submissions and evidence in this matter. In other words, it is not the Committee’s task to assess

² Ballarat C185 (PSA) [2015] PPV 103 at page 18.

alternative approaches to staging, drainage and the transport network, but it can (and should) assess the strategic logic of the strategic choices made by the authorities. It can look to alternatives to inform its assessment of whether the selected approach is strategically justified and suitable.

The broad arrangement of land uses and infrastructure

All PSPs set out proposed land uses including, for instance, non-government school sites. It is not the Committee's role to seek better locations for any specific use or infrastructure item (such as a Local Town Centre (LTC) or a non-government school) unless it can be shown that the proposed location is clearly suboptimal, or has unacceptable consequences to the achievement of the aims of the PSP.

In the absence of such evidence or persuasive submissions, the Committee thinks it is the prerogative of the VPA (as planning authority) to set out the broad land use configuration in the PSP.

Nevertheless, the Committee has considered submissions that there are alternative (better) locations for certain land uses or infrastructure items, and has recommended adjustments where it has been clearly demonstrated that the exhibited location or configuration may produce unacceptable outcomes.

Staging

Where there is a need to explicitly set out a staging regime in a PSP, the strategic choice of the regime is the prerogative of the planning authority (here, the VPA). However, that strategic choice has to be justified. The VPA must clearly establish the need for a staging regime, then provide a strategic justification for its proposed regime.

As discussed in Chapter 3, the Committee accepts there are limits to how much development can occur in the PSP area until certain transport infrastructure is delivered. That said, there was considerable debate about when the capacity of existing transport infrastructure might be reached, and whether staging of development could be controlled on a permit by permit basis rather than through a prescriptive staging control.

Some parties put to the Committee that there is a limit to how much development should occur in the PSP before certain drainage infrastructure is provided. As discussed in Chapter 4.3, there is likely a limit to how of the Lower Gum Scrub Creek catchment can be developed before that drainage scheme (including the diversion system to the Cardinia Outfall Drain) is constructed and operational. That said, there may be potential to provide temporary drainage works as part of development proposals which might negate the need for staging of development.

Accepting that there may be a need for a staging regime does not give the VPA (as planning authority) carte blanche to create a staging regime without strategic justification. A critical issue is whether the proposed staging regime is strategically justified in terms of the gateway infrastructure items identified, its sequence and its level of prescription. Further, the VPA must justify how that regime is operationalised in the planning system. The wording of any proposed controls, and how those controls might play out as development proceeds, is a legitimate matter for the Committee to consider. These matters are explored in Chapter 3.

Drainage

It is Melbourne Water's prerogative, as drainage authority, to determine the drainage strategy. The Committee thinks it should accept the drainage strategy unless it can be shown to have a fatal flaw or unacceptable outcomes when assessed against planning policy.

The drainage strategy has broad support among the relevant experts. At this stage, no fatal flaw has been identified, nor have unacceptable outcomes been demonstrated. That said, the detailed modelling of the downstream impacts of the strategy has not yet been completed.

On the basis that downstream impacts are modelled and found to be acceptable, the Committee broadly accepts the proposed drainage strategy is appropriate. It is nevertheless appropriate for the Committee to consider submissions and evidence and make recommendations about how the strategy is implemented. These issues are discussed in Chapter 4.

Transport

It is the role of the relevant authorities (DTP/TfV and the VPA) to determine an appropriate overall transport network based on their understanding of metropolitan or corridor-wide transport needs. The Committee accepts the overall transport network is appropriate, noting that the experts broadly support the network, and no fundamental flaws have been identified through submissions or evidence.

Having accepted that the proposed transport network is broadly appropriate, the Committee has considered matters of detailed design or efficiencies in layout of the network in Chapter 5. It notes that some decisions in terms of road classification and cross sections in the PSP area may have been determined by broader network considerations rather than specific considerations in this PSP.

(iii) Conclusions

The Committee concludes:

- It is not the role of the Committee to revisit the strategic choices made by public authorities unless those choices can be shown to be lacking strategic justification or unacceptable.
- It is the role of the Committee to:
 - provide advice on whether the selected strategy has been implemented in an appropriate way when considering all of the relevant strategic planning factors, including for instance maximising the efficient use of land
 - assess whether planning controls give proper effect to the selected strategy and that the drafting achieves the objectives of the control.

2.3 Overall strategic justification

(i) The issue

The issue is:

- whether the overall approach of the PSP and Amendment is strategically justified.

(ii) Evidence and submissions

No party or expert challenged the broad strategic justification of the PSP or the VPA's proposed approach of applying the UGZ7.

Mr Glossop identified the key strategic influences on the PSP as:

- the need to provide for State significant industrial land as identified in Plan Melbourne, MICLUP and the South East Growth Corridor Plan, and regionally significant commercial areas as identified in MICLUP
- the need to manage identified cultural values, the interface between the PSP area and adjoining precincts and the extent and location of required drainage infrastructure

- the need for staging, having regard to the timing and delivery of key infrastructure.

He considered the PSP effectively resolved these strategic challenges. He noted that while the layout of the commercial and industrial land differs slightly to the South East Growth Corridor Plan and MICLUP, MICLUP recognises that some reconfiguration may be required to support better connectivity with the CREP. He considered the PSP made strategic decisions to achieve this, including:

- locating the residential area adjacent to the residential area in the CREP
- buffering the residential area with commercial activity, to limit the adverse land use impacts from the industrial land.

Mr Glossop considered that from a strategic planning perspective, the proposed Place Based Plan (PSP Plan 3) is generally appropriate. While there may be some merit in proposals to relocate some uses and activities, this would not result in significant change to the overall future urban structure and layout, and could be managed in accordance with the requirement that future development be 'generally in accordance with' the PSP.

Mr Glossop concluded:

This is an appropriate allocation of activity and is consistent with the directions in MICLUP.

(iii) Discussion

The Committee has assessed the PSP and the Amendment against the principles of net community benefit and sustainable development, as set out in Clause 71.02-3 (Integrated decision making) of the Planning Scheme.

The Committee is satisfied the PSP is broadly consistent with the high level Planning Policy Framework. Plan Melbourne and MICLUP identify a strong demand for industrial land. The PSP area is within a SSIP identified in Plan Melbourne and MICLUP, and will play a key role in providing industrial land supply in the Melbourne metropolitan region. The land is strategically located for industrial and commercial development, being linked to the Principal Freight Network.

Key spatial planning policies including the South East Growth Corridor Plan (2006 and 2012 versions) and MICLUP identify the northern part of the precinct as a RSCA and the southern part as a SSIP. The PSP's allocation of land between the commercial and industrial uses is broadly consistent with these policies.

Neither the South East Growth Corridor Plan nor MICLUP specifically identify the PSP area as suitable for housing. However, the Planning Policy Framework (including the Housing Statement) recognises the South East Corridor plays a strategically important role in the provision of housing in Melbourne's industrial areas, close to jobs. The *South East Economic Corridor Strategic Context Report to 2060* (which is not referenced in the Planning Policy Framework) describes the strategic role of the RSCA as a "*growth area business precinct with mixed use/residential hub*".

The Amendment generally selects the appropriate tools (including the UGZ7) to implement the PSP into the Planning Scheme, although the Committee has considered whether the SUZ is the appropriate zone for the transmission easement (in Chapter 2.6.12), and the RCZ and IPO are the appropriate tools to manage the Cultural Value Investigation Area (in Chapter 7).

(iv) Conclusions and recommendation

For the reasons set out in this report, the Committee concludes that the Amendment:

- is supported by, and implements, the relevant sections of the Planning Policy Framework

- is generally well founded and strategically justified
- should proceed subject to addressing the more specific issues raised in submissions as discussed in the following chapters.

The Committee recommends:

General recommendation

Adopt draft Cardinia Planning Scheme Amendment C274card subject to the recommendations in this Report.

2.4 Dwelling densities and typologies

(i) What is proposed?

The PSP sets out dwelling density and typology requirements in Table 5 and R49 (R51 in the VPA’s final version), which states:

Subdivisions must respond to Plan [3] and Plan 10 with minimum densities and typologies per catchment as stated in Table 5, to provide a diverse neighbourhood character with a range of lot sizes and dwelling types in appropriate locations throughout the residential area.

Table 5 in the PSP sets out average target densities and typologies for different parts of the Village precinct (identified on Plan 10), summarised in Table 3.

Table 3 Dwelling density and typology targets

Area	Target density	Target typologies
Amenity based density area	36 dwellings per hectare (Ha)	At least three different typologies including: <ul style="list-style-type: none">- integrated and apartment style- multi-unit near schools and community facilities- attached townhouses- semi-detached/duplex or Small Lot Housing Code product- low to mid-rise medium density development surrounding the school and amenity areas
Mixed use area	40 dwellings per Ha	At least three different typologies including: <ul style="list-style-type: none">- attached townhouses with small offices- 2 to 3 storey integrated and apartment style- walk-up low-rise apartment style- shop-top retail low-rise (2 to 3 storey) residential with cafes and local produce stores to activate parks- social and affordable, key worker accommodation near the local town centre (LTC) and Lecky Road commercial precinct
Town centre area	40 dwellings per Ha	At least two different typologies including: <ul style="list-style-type: none">- 3 to 5 storey integrated and apartment style- walk-up low-rise apartment style- shop-top retail low-rise (2 to 3 storey) residential closer to the local parks- social and affordable, key worker accommodation located close to the Lecky Rd commercial precinct

Area	Target density	Target typologies
Balance area	32 dwellings per Ha	<p>At least two to three different typologies including:</p> <ul style="list-style-type: none"> - semi-detached/duplex style or Small Lot Housing Code product - multi-unit affordable housing closer to the local parks - detached traditional style - low rise social housing - attached townhouses

(ii) The issue

The issue is:

- whether the dwelling densities and typologies are achievable.

(iii) Evidence and submissions

Development Victoria (which owns all of the residential land in the precinct) generally supported the dwelling density targets, but submitted the controls should be flexible. It submitted the typology targets should be removed, including because they may discourage affordable housing (as providers have their own requirements for typology within certain locations).

Mr Granger gave planning evidence for Development Victoria. He considered the density and typology targets may not be deliverable, noting that conventional detached dwellings are *“by far the predominant dwelling typology being delivered in the surrounding area, including CREP over the past five years”*. He acknowledged the policy drivers seeking increased densities in metropolitan Melbourne, but noted that:

- the proposed densities are almost double the average in the PSP Guidelines (20 dwellings per Ha)
- he was not aware of any examples of these densities being delivered in a similarly sized growth area residential precinct in Melbourne
- townhouses are a *“niche dwelling product in this part of the world”*, and no apartments have been delivered in the CREP
- a wide scale rollout of Small Lot Housing Code dwellings may achieve the targeted density, but would likely lead to too many vehicle cross overs and large areas of impervious surfaces.

He concluded:

I agree that residential densities can be increased beyond what has been delivered to date, but it represents poor planning to require such a significant increase in the short-term...

The requirement to deliver such high densities (in this context), may actually have the effect of suppressing dwelling delivery at a time when more housing is required to meet the needs of the growing Officer-Pakenham population. This would be a great failure of planning.

Mr Quick gave economic evidence for Development Victoria. He considered the housing guidelines in the PSP, if strictly applied, may result in large areas of residential land sitting vacant for many years waiting for market demand to ‘catch up’ with the densities and typologies sought. He stated:

Not only will the need for housing in general not be addressed quickly as a result, but specialist housing needs such as social and affordable housing may not be met by apartment delivery.

Development Victoria submitted the target densities and typologies were consistent with its vision for its land in Officer South, and provided examples of townhouse developments by Development Victoria delivered or underway in Officer and Altona. However, more flexibility was required in the

PSP. It noted that the targets are targets, and submitted they should not be expressed in mandatory terms. It submitted:

- the exhibited R49 should be converted to a guideline rather than a requirement
- a new requirement should be added to the effect that subdivisions must demonstrate a diversity of lot sizes to ensure a range of dwelling types can be delivered
- Table 5 should be amended to replace 'must' with 'should'.

YourLand owns the balance of the land in the Village precinct, where housing is to be delivered. It submitted the proposed residential densities are "*an appropriate aspiration*", noting there is a significant demand for residential lots in the area, and across Melbourne more broadly. However, like Development Victoria, it submitted there should be some flexibility in how and where higher density accommodation can be achieved.

The VPA did not support the removal of the dwelling typologies in Table 5 of the PSP as sought by Development Victoria. The VPA submitted:

Without the dwelling typology requirements, there is the potential that an overabundance of a particular development typology could occur to supply a current demand, without properly considering and planning for the long term objectives of the area.

(iv) Discussion

The dwelling densities and typologies sought in the PSP were the subject of detailed discussion at both the strategic planning and economics roundtables. There was general agreement among the experts that the densities are substantially above what is generally delivered in Melbourne's growth areas, and that market demand for medium and higher density typologies is embryonic. While there are some examples of townhouse style development being delivered in Melbourne's growth areas, none of the experts were able to point to examples of the other higher density typologies sought by the PSP, including apartments.

There is strong policy support for increased densities in metropolitan Melbourne, including in growth areas. The PSP's aspirations for increased densities and more diverse typologies are appropriate. It will also be important that Officer South and the CREP deliver a combined population of around 10,000, to support an integrated residential community with appropriate access to local services including the Kaduna Park Neighbourhood Activity Centre (NAC) in the CREP. This will require higher than standard densities.

That said, the Committee agrees with Development Victoria that on balance, locking in these densities and typologies with mandatory language may not be wise given the limited market demand for these types of products in growth areas at this point in time. The Committee agrees with Mr Quick and Mr Granger that it could, unintentionally, stagnate the delivery of new housing in this area, which would be a poor planning outcome and contrary to policy.

The Committee agrees with Development Victoria that more flexibility is needed in the wording of the PSP requirements and guidelines dealing with housing densities and typologies, but it does not agree that the typology targets should be removed entirely. It agrees with the VPA that this could present a risk of an overabundance of a particular development typology to supply a current demand (most likely detached housing), limiting future opportunities for alternative typologies as the market matures.

With greater flexibility, the delivery of housing will require careful management, to ensure that all of the residential land is not taken up with conventional detached housing on standard sized lots. The

Committee is confident that flexible but clear guidance in the PSP, coupled with the application requirements in the VPA's final version of the UGZ7, can manage this risk appropriately.

This is in part because Development Victoria owns the bulk of the residential land in the PSP, and has committed to delivering higher densities and alternative typologies, consistent with its purposes and its leadership role in delivering innovative development solutions on behalf of government.

(v) Conclusion and recommendation

The Committee concludes:

- More flexibility is required in the PSP requirements and guidelines in relation to housing densities and typologies, but the housing typology targets should be retained.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

- a) Provide more flexibility in relation to the delivery of the housing density and typology targets by:**
 - inserting a new Requirement R50A
 - converting Requirement R51 into a new Guideline G40A
 - amending Table 5.

2.5 The Local Town Centre

(i) What is proposed?

The PSP envisages a LTC of 1.5 hectare, comprising 2,300 square metres of retail floorspace and 1,600 square metres of commercial office floorspace (3,900 square metres in total). It states:

The purpose of the Officer South Employment local town centre is to service all residents within the precinct and meet their day-to-day retail and community needs. The Officer South Employment local town centre will provide for a small grocery store.

In the exhibited Place Based Plan (PSP Plan 3), the LTC was split by the green spine, across Development Victoria land (north of the green spine) and YourLand land (south of the green spine). The Day 1 version moved it north, so that the whole of the LTC is located within the Development Victoria land.

The exhibited UGZ7 applied a soft cap on 'shop' (which includes 'supermarket') in the LTC of 2,300 square metres (in other words, a permit would be required to exceed 2,300 square metres). The VPA's final version added a soft cap of 1,200 square metres on 'supermarket' in the LTC.

The PSP includes design criteria for the LTC in Appendix 6.

(ii) The issues

The issues are:

- location of the LTC
- size of the LTC
- floor area caps in the LTC.

(iii) Evidence and submissions

Location

Relying on the economic evidence of Yilong Shi, the VPA submitted the location (and size) of the LTC are appropriate, providing for the daily convenience needs of residents of the Village sub-precinct within walking distance.

Development Victoria submitted the LTC should be relocated to the intersection of Officer South Road and Lecky Road (wholly within YourLand land). Mr Granger acknowledged some residents would be further from the LTC in this location, but considered it preferable because it would:

- maximise exposure to the LTC and improve the ongoing viability of the centre
- maximise public transport accessibility to the LTC
- increase the amount of developable land within the LTC's 800 metre catchment (as less of the catchment would be taken up by open space and drainage infrastructure along Lower Gum Scrub Creek)
- increase the amount of commercial land within the catchment, providing more workers with easier access to everyday shopping and services.

Mr Quick supported the relocation of the LTC as proposed by Development Victoria because it would provide better access and exposure, while still being co-located with the proposed State Government Facility (discussed below). He acknowledged the alternative location was further from some residents, but thought it was still close enough to the school and community centre. He considered access and exposure for a small retail centre were a higher priority than proximity to residents.

Ms Dunstan gave traffic evidence for Development Victoria. She also supported the relocation of the LTC, as it would allow for good access to public transport, including co-location with a bus/modal interchange at the intersection as sought by Cardinia Shire Council (Cardinia) in its submission to the VPA (Cardinia did not pursue this request through the Hearing).

The VPA opposed Development Victoria's suggestion to relocate the LTC, submitting that the alternative location would diminish the LTC's function of providing for daily convenience needs for local residents within convenient walking distance. It could also risk extending the role of the LTC beyond that envisaged in the PSP, as the alternative location could potentially result in commercial uses from the adjacent commercial area 'bleeding' into the LTC.

Cardinia opposed the relocation on similar grounds, and also raised concerns about the urban design implications of locating the LTC on a major intersection. It submitted the Kaduna Park NAC in the CREP is intended to be the primary centre in this area and the local centre at Officer South should not be permitted to emerge as a significant competitor in any way. It considered a more prominent location on a major intersection would heighten this risk.

YourLand opposed the move, on the basis that the Day 1 location (wholly on Development Victoria land) ensures the LTC is central to its local catchment, improving accessibility and ultimately supporting its success and function as a local centre. It also considered locating the LTC on a busy intersection would have negative urban design outcomes.

Size and floor area caps

Mr Shi considered 2,300 square metres of retail floorspace anchored by an 800 square metre grocer is *"a small local centre that is unlikely to result in significant trade diversion impacts for other centres"*. He considered:

- reducing the size of the retail component of the LTC beyond this would threaten its potential establishment and viability
- retail floorspace caps in the LTC were not necessary to protect the viability of the Kaduna Park NAC, noting that the Kaduna Park NAC will not be within walking distance of the residential area in Officer South.

Parklea submitted the size of the LTC was ‘neither fish nor fowl’, too big to be a truly local centre and too small to serve a larger catchment. It submitted it should be reduced to limit the potential for competition with the Kaduna Park NAC. Relying on the planning evidence of Mr Woodland and the economic evidence of Mr Dimasi, it submitted there should be a hard cap of 1,500 square metres of retail floorspace in the LTC, with a cap of 500 square metres (revised to 800 square metres in Parklea’s closing submissions) on any supermarket/grocery store.

Mr Woodland considered there was limited guidance on the role of the LTC within the PSP or the UGZ7, other than a broad reference in the PSP to the role of the centre being to meet day to day retail and community needs. He was concerned about potential competition between the LTC and the Kaduna Park NAC, and considered a hard cap on ‘shop’ floorspace in the LTC (above which the use would be prohibited) would be strategically justified. He said this would “*ensure the relevant activity centre hierarchies are maintained and that no activity centre has an unacceptable impact on the viability of another nearby centre*”. He deferred to the economics experts on nominating a floorspace figure for “*a small convenience type of supermarket*”.

Mr Dimasi gave retail economic evidence for Parklea. He supported a reduction in size of the LTC to 1,500 square metres including the grocery store, with a 500 square metre cap on the supermarket/grocery store. His reasons included that the assessment of need for local convenience retail facilities in Officer South:

- appears not to have considered the Kaduna Park NAC, a 5.5 hectare centre comprising 6,000 square metres of retail including a full line supermarket and 4,000 square metres (minimum) of office, as well as other commercial (non-retail) uses
- assumed an overly optimistic residential population of 5,000 people in Officer South
- was based on assumptions of available expenditure for groceries/supermarket and retention rates of expenditure that were too high.

He considered the combined resident populations of the CREP and Officer South (no more than 10,000) will be “*at around the threshold*” required to sustain the Kaduna Park NAC. He considered the retail and commercial floorspace suggested for the Officer South LTC are unlikely to be supportable, and the LTC may not be viable at the proposed size. He considered a smaller centre (1,500 square metres, with a 500 square metre cap on the supermarket/grocery store) would result in “*desirable outcomes*” including:

- support for the intended role of the Kaduna Park NAC
- a LTC in Officer South that is more likely to be economically viable
- freeing up more land in Officer South for residential development (up to 40 additional dwellings and 100 additional residents).

Mr Quick considered the dwelling densities set out in the PSP (discussed above) are unrealistically high in the short to medium term, and the retail floorspace needs in the LTC should be reduced to around 1,560 square metres (from 3,900 square metres), to reflect a likely smaller residential population. He considered that ensuring the size of the LTC is not excessively large will ensure it does not undermine the Kaduna Park NAC.

The size of the LTC, including the retail component, were the subject of detailed discussion at the retail economics roundtable. All experts (including Mr Shi) agreed that a total size of 1.5 hectares is too large given the intended function of the LTC. There was general agreement that between 0.5 and 1.0 hectare would be appropriate.

Views on the appropriate amount of retail floorspace varied from 1,600 square metres (Parklea and Mr Dimasi) to 2,300 square metres (Mr Shi). Views on the appropriate size of the supermarket/grocery store ranged from 300 square metres (Mr Dimasi's lower end) to 800 square metres (Development Victoria, Mr Quick, Mr Dimasi's upper end). Views varied on whether hard or soft caps were appropriate, with Parklea maintaining that hard caps should be applied based on the opinions of Mr Woodland and Mr Dimasi, and Mr Shi, the VPA and Development Victoria expressing support for soft caps.

In closing, the VPA submitted it supported:

- reducing the LTC to between 0.5 and 1 hectare, subject to further testing through the preparation of a high level concept plan to ensure that area would be sufficient in that location to accommodate the proposed floor area without compromising quality urban design
- a soft cap of 2,300 square metres for total 'shop' floorspace
- a soft cap of 1,200 square metres for 'supermarket' floorspace.

Regarding the supermarket soft cap, the VPA submitted:

While ultimately the market may only deliver an 800sqm supermarket at the LTC, the VPA submits the use of a 'soft cap' of 1,200sqm for supermarket size is appropriate and does not consider the weight of the economic evidence demonstrated the adoption of a 1,200sqm soft cap would result in an adverse outcome for [the Kaduna Park] NAC.

(iv) Discussion

Location

The Committee supports the consolidation of the LTC into one landholding as proposed in the VPA's Day 1 and final PSP. Delivery of the LTC will be more straightforward if it is located within a single landholding.

In terms of location, there is strong support in the PSP Guidelines and the Planning Policy Framework³ for dwellings to be located within walking distance (800 metres) of an activity centre. The Committee agrees with Mr Shi, the VPA and YourLand that the Day 1 location better meets this policy objective, while still providing good vehicles access via the residential connector street proposed to connect Officer South Road and Lecky Road through the Village.

While the LTC may receive more exposure from passing traffic if it were located at the intersection of Lecky and Officer South Roads, its primary purpose is to serve the daily convenience needs of the Officer South residents (and to a lesser extent workers). It is not intended (or needed) to service a broader catchment, and the Committee was not persuaded that its viability is dependent on passing trade. Further, the Committee agrees with Cardinia that the more prominent location would increase the risk that the LTC may compete with the Kaduna Park NAC, which would be inconsistent with the intended activity centre hierarchy for the area.

³ Specifically, clauses 11.02-25, 11.03-1S and 11.03-2S

Size and floor area caps

In terms of overall size, the Committee supports the reduction of the LTC to between 0.5 and 1 hectare, but was not persuaded that it should be reduced any further. A LTC of this size (particularly with the proposed soft caps on 'shop' and 'supermarket' uses) would not undermine the role of the Kaduna Park NAC or threaten its viability. As Mr Shi pointed out in the economics roundtable, the total size of the LTC allowed for other uses in the LTC, including housing and potentially open space or public areas which could increase the vibrancy and amenity of the LTC.

The VPA's final version of the PSP did not reflect the position in its closing submission that it supported reducing the LTC to between 0.5 and 1 hectare, subject to further testing through a high level concept plan. The final version continued to describe the LTC as 1.5 hectares.

The Committee was not persuaded that further testing is required. All experts agreed that between 0.5 and 1 hectare was appropriate given the intended function of the LTC. Even if the full floorspace allocations for retail (2,300 square metres) and commercial (1,600 square metres) were taken up, there would still be 6,100 square metres in a 1 hectare town centre (1,100 square metres in a 0.5 hectare town centre) for the other uses referred to by Mr Shi that would bring vibrancy and amenity to the LTC.

Another benefit of reducing the overall size of the LTC to between 0.5 and 1 hectare is that it limits the amount of 'spare' space in the LTC above the retail and commercial allowances. Too much 'spare' space may create a risk that the LTC is taken up with excessive amounts of at grade carparking, which would be a poor urban design outcome and contrary to the VPA's stated intention that the Urban Design Performance Area (UPDA) be designed to reduce car usage.

In terms of floorspace caps, the Committee was not persuaded that 2,300 square metres of retail (including 1,200 square metres of supermarket) will undermine the role of the Kaduna Park NAC or threaten its viability. The UGZ7 provides an appropriate check and balance, by requiring any proposal that exceeds the soft caps to be accompanied by a retail impact assessment. This will ensure potential competition effects on the Kaduna Park NAC are considered through the permit process.

(v) Conclusions and recommendation

The Committee concludes:

- The 'Day 1' location of the LTC is appropriate. The LTC should not be relocated to the intersection of Officer South and Lecky Roads.
- The overall size of the LTC should be reduced to between 0.5 and 1 hectare, consistent with VPA's closing submission. No further testing is required to support the reduction.
- The VPA's final proposed soft caps on retail floorspace (2,300 square metres in total, including 1,200 square metres of supermarket) are appropriate.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

- a) Specify an overall size of 0.5 to 1 Hectare for the Local Town Centre.**

2.6 Other strategic issues

2.6.1 The issues

Submissions raised a number of other strategic issues which the Committee has addressed more briefly, as they are not key issues. They are:

- the balance between commercial and industrial land
- the mixed use areas north of the LTC
- master planning requirements in the Village Precinct
- whether the State Government Facility should be removed
- whether the Emergency Services Facility should be relocated
- whether the non-government primary school should be removed
- whether 'warehouse' should be a section 2 use in the Industrial 1 Zone
- whether 'rural industry' should be a section 1 use in the Gin Gin Bean precinct
- whether 'restricted retail' should be prohibited in the Industrial 1 Zone
- whether child care, primary school or residential hotel uses should be allowed within the Commercial 2 Zone
- the treatment of the electricity transmission easement
- the treatment of the high pressure gas pipeline
- whether the lot size diversity requirements are sufficiently flexible.

2.6.2 The balance between commercial and industrial land

(i) Evidence and submissions

ProUrban submitted:

- the PSP has an overly strong focus on the proposed business areas, particularly to the north of the PSP area (abutting the Princes Freeway west of Officer South Road)
- some of the land parcels in the RSCA should be reviewed with consideration given to applying the Industrial 1 Zone instead
- land supply and take up in the industrial sector over the last 5 years has occurred at unprecedented record levels
- the evolution of warehousing, e-commerce and the manufacturing industries, in the wake of the Covid-19 pandemic, has resulted in a fundamental shift in the type and scale of warehousing and logistics facilities, as well as specialist manufacturing businesses
- strategic policies such as MICLUP were prepared between 2018 and 2022, and the PSP *"requires a more up to date and critical analysis of the importance of the role Officer South will play in the delivery of employment land"*
- research undertaken by Urbis on behalf of the Property Council of Australia that suggests there is only 4 years of supply of industrial land remaining in metropolitan Melbourne.

The concerns raised by ProUrban were not shared by other parties, or by any of the strategic planning experts. Mr Glossop noted the allocation of commercial and industrial land in the PSP is consistent with MICLUP and other strategic policies, and that MICLUP contemplates some reallocation of land uses provided there is no net loss in industrial land (which the exhibited PSP achieves).

(ii) Discussion

While the Committee notes the Urbis research mentioned by ProUrban, that research was not before the Committee. The allocation of commercial and industrial land is consistent with the strategic policies referenced in the Planning Scheme, and is broadly appropriate.

(iii) Conclusion

The Committee concludes:

- The allocation of commercial and industrial land in the PSP is broadly consistent with the Planning Policy Framework, and is appropriate.

2.6.3 Mixed use areas north of the town centre

(i) Evidence and submissions

Relying on the planning evidence of Mr Granger, Development Victoria submitted the two mixed use areas north of the LTC should be removed and replaced with a residential designation. Mr Granger's evidence was it is:

- unclear why the Mixed Use Zone is required or considered appropriate
- questionable whether these areas would support non-residential land uses beyond what could already be delivered in the Residential Growth Zone which applies to the balance of the Development Victoria land.

Development Victoria submitted these mixed use areas *"carry some planning risk insofar as they may dilute amenities from the Town Centre, and may be difficult to deliver"*.

The VPA submitted:

With the current ability to build in stages, paired with the higher densities set in this precinct than the usual, there is the opportunity for small retail and creative spaces to thrive within a 400m walkable catchment, without impacting the local town centre. With more people working from home, there is a new opportunity for small localised retail development to leverage local parks.

It submitted:

- various PSP requirements and guidelines encourage the mixed use areas to provide retail or commercial uses at ground level, with residential above
- this outcome will ensure convenience services are available to residents within a highly convenient walkable distance, promoting reduced car usage and providing work from home liveability measures
- the mixed use areas have been located to ensure specific uses (including small localised retail uses) have local park frontage
- these uses otherwise risk being built out by residential development
- these outcomes *"are more readily achieved through the application of the Mixed Use Zone and not usually taken up by developers via the Residential Growth Zone"*.

(ii) Discussion

Consistent with the Committee's reasoning in Chapter 2.2, it is the VPA's prerogative (as planning authority) to set the vision for the PSP and the outcomes to be delivered in the Village precinct. While the Committee acknowledges the concerns of Development Victoria and Mr Granger in relation to the deliverability of the mixed use areas, it does not consider the VPA's vision is fundamentally flawed. It is broadly consistent with the description in the *South East Economic Corridor Strategic*

Context Report to 2060 of the strategic role of the RSCA as a “*growth area business precinct with mixed use/residential hub*”. The Committee was not persuaded on the evidence that the mixed use areas are likely to substantially draw services and amenities out of the LTC.

That said, the development of the mixed use areas should be closely monitored as part of the PSP’s five yearly review process. If the mixed use areas are slow to develop or end up undermining the vibrancy of the LTC by attracting services and amenities out of the town centre, corrective action should be undertaken. This might include rezoning those areas from Mixed Use Zone to Residential Growth Zone. Adjustments may also need to be made to the PSP (for instance, designating the areas as ‘amenity based density area’ or ‘balance area’ on Plan 10, and adjusting the density and typology targets in Table 5).

(iii) Conclusion

The Committee concludes:

- The mixed use areas will not likely result in a poor planning outcome. However, they should be closely monitored, and if the areas are slow to develop, or undermine the vibrancy of the LTC, corrective action will need to be undertaken as part of the first five yearly review of the PSP.

2.6.4 Requirements for the Urban Design Performance Area

(i) What is proposed?

The PSP designates the Village sub-precinct as an Urban Design Performance Area (UDPA). It states a masterplan and vision is required to set the benchmark for the subdivision, buildings, and road and active movement networks “*to ensure high quality outcomes*”. This requirement is reflected in exhibited R48 in the PSP and in the UGZ7, which states:

- permits for subdivision and buildings and works in the UDPA must not be granted until a Concept Masterplan has been prepared to the satisfaction of the responsible authority
- the Concept Masterplan must be generally in accordance with the PSP
- the responsible authority must seek the views of DTP and Melbourne Water in relation to how the Concept Masterplan responds to the potential impacts to the freeway interchange onramp and drainage assets
- subdivision applications must be consistent with the approved Concept Masterplan.

The PSP includes performance measures for the UDPA in Table 6.

(ii) Evidence and submissions

The VPA explained that it intends the Concept Masterplan will be a high level guide that provides the critical foundations for the future development of the UDPA, with flexibility for innovation and for outcomes that suit current and future demand in the residential area of the PSP.

Cardinia explained its original intent for the UDPA was for a plan to provide an overall approach to the UDPA so as to ensure:

- the intended density for the residential precinct can be achieved in an appropriate manner
- the residential precinct is designed in a manner that is consistent with the *Urban Design Guidelines Victoria*, 2017 and enables a cohesive 20 minute neighbourhood
- key elements of the plan, such as the LTC and the Green Spine, would integrate with each other.

It submitted the UDPA provisions should be primarily directed to these purposes.

Cardinia had some concerns with the way the UDPA requirements in the PSP and UGZ7 were drafted. It submitted the references to Concept Masterplan are unclear, and the notion of a concept masterplan is “*something of an oxymoron*”. It submitted that a requirement to be generally in accordance with the vision and layout of the concept masterplan is an ineffective control, given a concept masterplan only provides only very high level guidance.

Relying on the evidence of Mr Granger, Development Victoria submitted the Concept Masterplan requirements should be removed from the PSP and the UGZ7. Mr Granger’s evidence was:

- a Concept Masterplan introduces an additional, mandatory approval step in an already lengthy and complex planning process
- a Concept Masterplan demands a level of design detail and supporting technical work that is better prepared at the subdivision stage (and would likely be sought again at the permit stage)
- the PSP and other parts of the Planning Scheme⁴ already provide sufficient guidance to prepare responsive planning applications in the UDPA.

Mr Granger also considered the LTC design principles in Appendix 6 of the PSP should be removed, as:

- much of the design guidance replicates requirements elsewhere in the Planning Scheme
- the content is overly prescriptive and repetitive
- it is unclear how permit applicants or assessors should utilise this guidance.

The VPA opposed the removal of the master planning requirements, submitting:

... the intent behind the UDPA is to ensure that the higher density target for the residential area is supported by suitably planned options for allocating density, amenity and services, and reducing car usage.

It submitted:

- the UDPA and the associated performance criteria and Concept Masterplan “*provide a tool for Council to assess development applications with confidence that density targets can be met, and in a varying built form outcome*”
- the Concept Masterplan could be approved in tandem with subdivision applications to speed up the process.

The VPA proposed various changes to refine the UDPA provisions in its final version of the PSP. It submitted it had consulted with Development Victoria and Cardinia to facilitate a balanced outcome that:

- provides enough guidance for Council officers to assess proposed development in the UDPA with confidence that the density will be managed appropriately
- provides enough flexibility for development to respond to current market demand and ‘future proof’ for changes in the housing market
- allows the Concept Masterplan to be delivered in parts to allow for various landowner or developer timeframes.

(iii) Discussion

Requirement R48 includes detailed requirements for the Concept Masterplan, including:

⁴ For example, clauses 15.01, and 56 and the Urban Design Guidelines for Victoria.

- detailed urban design principles
- consideration of the performance outcomes outlined by Table 6
- preliminary staging and indicative development timing
- a high level concept layout that provides a clear indication of a range of matters including:
 - placemaking elements, character precincts and destinations
 - key views and connectivity to the sports reserve and conservation area including the pedestrian bridge to the CREP
 - appropriate land uses and their integration of community facilities and services
 - indicative treatments for interfaces with non-residential land uses
 - active transport networks
 - quality built form design outcomes to landmark sites
- a preliminary proposal for climate resilience measures and Environmentally Sustainable Development principles
- a preliminary landscape plan, vision for the streets and public realm (including how the 30 per cent tree canopy cover will be achieved), and a preliminary Integrated Water Management Strategy
- indicative built form typologies
- Built Form Design Guidelines for landmark sites.

The Committee does not consider this interim level of master planning is required. It agrees with Mr Granger that this would be largely unnecessary, and the outcomes sought can be better achieved through the permit application process. Permits will be assessed against the detailed guidance in the PSP (including the performance measures in Table 6) and other parts of the Planning Scheme, which collectively capture the thrust of what is specified in R48. The views of DTP and Melbourne Water are important, but will be sought (where required) through the referral provisions as part of the permit application process.

Further, the Committee agrees with Cardinia that the drafting of the Concept Masterplan requirements in the PSP and UGZ7 are problematic.

While the Committee agrees with Mr Granger that the urban design principles for the LTC in Appendix 6 of the PSP may not add a great deal to other provisions in the Planning Scheme, there is nothing fundamentally wrong with them. They are supported by Cardinia, and will provide further guidance for preparing and assessing permit applications in the LTC. They should be retained.

(iv) Conclusions and recommendations

The Committee concludes:

- While the performance requirements for the UDPA in the PSP should be retained, the master planning requirements are poorly drafted, and are not required to achieve good planning outcomes.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

- a) Remove the master planning requirements for the Urban Design Performance Area.**

The draft Amendment

Amend the Urban Growth Zone Schedule 7 as shown in Appendix E, to:

- a) Remove the master planning requirements for the Urban Design Performance Area.**

2.6.5 State Government Facility and Centre of Excellence

(i) What is proposed?

The Place Based Plan identifies a 2 hectare State Government Facility on the YourLand land, south of Lecky Road. The PSP states:

The precinct accommodates land for a ... future proposed state government facility that may provide a health campus and mental health services to the broader catchment and is envisaged to evolve over time. A work hub or industry training institute (centre of excellence) ... with potential links to a proposed state government facility and surrounding commercial uses, may provide an economic and community enabler with space for business leaders, educators, and residents to meet and share ideas, work, learn and conduct business.

The Place Based Plan does not identify a Centre of Excellence.

The PSP guidelines refer briefly to both facilities:

- exhibited G43 states the State Government Facility land can be used for an alternative purpose such as a local pop-up park until such time the Department of Health requires the land
- exhibited G1 states facilities such as the proposed Centre of Excellence are encouraged in commercial or mixed use areas on high amenity sites that are well serviced with access to transport and community facilities.

(ii) Evidence and submissions

The VPA submitted:

- given the significant growth in the region, government will need to be proactive in planning for the delivery of future health services to meet the needs of the community in 20 years
- the Department of Health determined a state government facility would be required in the precinct to cater for the broader community.

Mr Panozzo undertook the Community Infrastructure Assessment that supported the PSP, and provided evidence to the Committee in relation to community infrastructure issues. He undertook external agency consultation to inform the preparation of the assessment. The Department of Health and the Victorian Health Building Authority had requested land be set aside for a proposed facility, preferably close to the LTC with good access to public transport and main roads. His evidence was the site will be used to accommodate a range of public health services including a future acute and subacute health campus and mental health services.

Mr Panozzo was not able to provide any more detail on the justification for the facility, noting that this information would need to be obtained from the Department of Health. However:

... I wish to highlight the significance of this commitment by the Department of Health. Over the past 24 years of working in the community infrastructure planning sector, this is the first time I have encountered such a clear commitment for a State Government health facility in a PSP location. My review of services and facilities across Melbourne's growth areas indicates that public health infrastructure deficits in Melbourne's fringe areas are very real.

YourLand submitted:

- reference to the State Government Facility should be removed from the PSP, or it should be relocated further to the east
- alternatively, a PAO should be applied and the PSP and ICP amended “*to mitigate the risk of unfairly sterilising [YourLand’s] land*”.

It submitted:

- only limited information has been provided in relation to the State Government Facility, and its future remains highly uncertain
- showing the State Government Facility on the Place Based Plan with no PAO would prevent the development of the land, while leaving YourLand unable to access compensation for permit applications that are refused (given compensation is only available under the PE Act where a PAO applies)
- the holding costs of the land are significant over 10 years
- if the facility is retained, the PSP should include a sunset provision that allows the land to be used for purposes consistent with the applied zoning if the Department of Health does not acquire the land.

In its closing submissions, the VPA indicated it agreed to:

- relocate the State Government Facility to the east
- include a sunset provision.

Minor disagreement remained between YourLand and the VPA on the wording of the sunset provision. The key point of difference was whether the sunset clause should be triggered by 80 per cent development of YourLand’s land (as proposed by YourLand), or the whole of Stage 1 (as proposed by the VPA).

In relation to the Centre of Excellence, Cardinia submitted:

- YourLand and Cardinia entered into a non-legally binding, cooperative arrangement in relation to an industry/education training facility
- the facility was to be shown in the PSP on YourLand’s land
- the PSP should show the facility, consistent with the agreement (although its precise location could be flexible)
- Officer South is the preferable location for the Centre for Excellence because:
 - Officer South is intended to be a large employment precinct adjacent to and complementing other large employment precincts in this corridor (such as the CREP)
 - the Social Infrastructure Index for the area is very low, and the Centre for Excellence “*would be a valuable piece of social infrastructure that is complementary to the employment purposes of the precinct*”.

(iii) Discussion

Other than Mr Panozzo’s general statement to the effect that there is a deficit of health facilities in Melbourne’s fringe areas, no real justification was put to the Committee as to why the State Government Facility is needed. It is not apparent from the PSP, or the Community Infrastructure Assessment. The Committee understands YourLand sought more information from the Department of Health, and was not provided with it.

It would be inappropriate for the Committee to recommend the addition of a PAO without the express support of the acquiring authority (the Department of Health). In any event, YourLand did not indicate it was pursuing a PAO in its closing submissions.

Under the circumstances, the Committee considers the compromise reached between the VPA and YourLand appears reasonable. On balance, the Committee supports YourLand's wording of the sunset clause (G61 in the VPA's final version of the PSP), given the substantial impost on YourLand of holding the land pending its acquisition by the Department of Health.

The compromise position will also require minor adjustments to exhibited G43 (G50 in the VPA's final version).

There is very little information before the Committee regarding the Centre of Excellence – certainly insufficient information to support a recommendation that the Centre be shown in the PSP.

(iv) Conclusions and recommendation

The Committee concludes:

- It is not appropriate to recommend a PAO be applied to the State Government Facility site in the absence of support from the acquiring authority.
- The relocation of the State Government Facility on the Place Based (and other) plans in the PSP and the inclusion of a sunset clause are a reasonable compromise.
- YourLand's wording of the sunset clause is preferred and should be applied.
- There is insufficient information to support a recommendation that the Centre of Excellence be shown in the PSP.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

- a) Update Guidelines G50 and G61 to make it clear the land can be developed in accordance with its underlying zoning if it is not required for the State Government Facility.**

2.6.6 Emergency Services Facility

(i) What is proposed?

The exhibited Place Based Plan shows a proposed Emergency Services Facility on Officer South Road, south of the freeway on land owned by GLG Investments Pty Ltd. Officer South Road in its ultimate configuration will be a six lane primary arterial road in this location.

(ii) Submissions

TfV submitted the exhibited location for the proposed Emergency Services Facility, close to IN-13 (the freeway interchange), would require a median break in Officer South Road allowing for U turns and control lights to hold traffic when emergency vehicles are exiting the site. It considered this creates opportunities for unsafe vehicle movements close to the interchange.

GLG submitted:

- the facility should be relocated to Development Victoria land on the eastern side of Officer South Road abutting a signalised intersection

- this would avoid the need for the State to purchase more land and satisfy TfV's concerns about vehicle movements in and out of the site
- the VPA's amended location will be impacted by the traffic splays required for the upgraded IN-10, and would unfairly prejudice GLG's ability to develop as it would be in an area where GLG may need to construct interim drainage works
- if the facility must remain on GLG's land:
 - flexibility should be allowed in relation to the facility's location
 - a sunset date of no more than five years should be included for the acquisition of land for the facility, after which the land should be available for development in accordance with the underlying zoning.

In its final version of the PSP, the VPA proposed an alternative location for the Emergency Services Facility slightly further south but still on GLG land, at the intersection of Officer South Road and the industrial and boulevard connector street. This would allow emergency vehicles to enter the road network from a lower order road onto a signalised intersection, allowing for full unrestricted movements. It also included a sunset provision (G51 in the final version of the PSP) allowing the land to be used for alternative purposes if, at full development of the PSP, it is unlikely to be used as an emergency services facility, subject to confirmation from the Department of Health.

The VPA did not support removing the facility from GLG's land. It submitted its final day location allows full unrestricted movements in and out of the site.

(iii) Discussion

The Committee supports the relocation of the Emergency Services Facility to the VPA's final day location, noting it allows safer vehicle movements in and out of the site, is on the same land parcel, and is to TfV's satisfaction. If it needs to be shifted to avoid the splays of IN-10 or to accommodate interim drainage works on the GLG land, the Committee considers this would be 'generally in accordance with' the PSP.

There remains a difference between GLG and the VPA on the trigger under the sunset clause. GLG proposed five years, whereas VPA proposed full build out. The Committee considers five years is insufficient, but full build out may take decades and may be too long. The trigger should be consistent with the sunset clause for the non-government school – namely 80 per cent of build out.

(iv) Conclusion and recommendation

The Committee concludes:

- The location of the Emergency Services Facility proposed in the final version of the PSP is appropriate.
- The sunset clause in relation to the Emergency Services Facility should be triggered at 80 per cent of full build out.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

- a) Amend Guideline G51 so the sunset clause for the Emergency Services Facility is triggered at 80 per cent build out.**

2.6.7 Non-government primary school

(i) What is proposed?

The Place Based Plan shows a proposed government primary school and a potential non-government primary school, both located in the Village precinct.

(ii) Evidence and submissions

The VPA explained that the Catholic Diocese of Sale conducted a high level analysis of the underlying enrolment demand and the combined long term enrolment at a Parish level (Document 203), which demonstrated the strategic justification for a 3 hectare non-government primary school in the precinct to provide for long term, future demand within the region.

Relying on the evidence of Mr Granger, Development Victoria submitted:

- there is limited strategic justification for the non-government primary school, and it should be deleted from the PSP
- while the Community Infrastructure Assessment supporting the PSP contemplated the need for the non-government school, the PSP sets strong ambitions for a significant residential population in a relatively small land area
- a school that serves a broader catchment *“provides a significant impediment to the achievement of those ambitions”*.

Mr Granger’s evidence (which was prepared before the enrolment analysis undertaken by the Catholic Diocese of Sale was provided) stated:

- there is limited analysis justifying the non-government primary school, and allocating such a significant portion of the Village sub-precinct (3 hectares) for a non-residential use *“should be strongly justified”*
- it is not clear why Officer South is the preferred solution to addressing future Catholic primary school demand in the region, as opposed to another precinct
- nominating a three hectare site within a comparatively small residential area is a significant decision to make, *“especially when the demand for residential land is so great”*.

The VPA responded that it does not consider it necessary to demonstrate that the site is the best or only site suitable site for the proposed school:

For this stage of the planning process, there is a reasonable basis that the land for the school will be needed and that what is proposed is an appropriate location.

(iii) Discussion

Consistent with the Committee’s reasoning in Chapter 2.2, it is the VPA’s prerogative (as planning authority) to determine the community infrastructure needs within the precinct, including the need for a non-government school. The Committee is satisfied that the enrolment analysis prepared by the Catholic Diocese demonstrates a likely future need for a primary school in this region.

It is not inappropriate to locate the school in Officer South simply because it will serve a broader catchment. The school needs to be provided somewhere, and the surrounding precincts in this area are already largely fully planned.

The Committee does not consider that the non-government primary school (though a substantial size at 3 hectares) will necessarily prevent the achievement of a 5,000 person strong residential population in Officer South. However, achieving that level of population will be challenging for the

reasons discussed in Chapter 2.4. If the school is not ultimately required, the land should be released for residential development.

The exhibited PSP included a sunset clause (in G44) providing that the land could be developed for residential purposes if the education provider confirms, at 80 per cent build out of the full PSP, that the land is no longer required. This is appropriate.

(iv) Conclusion

The Committee concludes:

- The non-government primary school is strategically justified and should be retained in the PSP.

2.6.8 Warehouse in the Industrial 1 Zone

(i) What is proposed?

In response to submissions from Cardinia, the VPA's Day 1 version of the UGZ7:

- made 'warehouse' a section 2 (permit required) use in the applied Industrial 1 Zone
- added an application requirement for an Economic Impact Assessment to accompany permit applications for warehouse
- added a decision making guideline requiring the adequacy of job creation to be considered in the grant of a permit for a warehouse.

Warehouse was a section 1 use (no permit required) in the exhibited version.

(ii) Evidence and submissions

Cardinia submitted:

- jobs are a key issue for Cardinia
- all of the SSIP has an applied Industrial 1 Zone where 'warehouse' is an as of right use
- allowing 'warehouse' (which is a low job intensity use) as of right:
 - may prejudice the PSP's aspiration for 22,000 jobs in the precinct
 - risks the SSIP being developed with a substantial number of warehouses that would 'crowd out' opportunities for other higher value, more job-intensive uses that are more consistent with the vision and objectives of the PSP.

It submitted the Requirements and Guidelines in the PSP are generally directed toward achieving a thriving production and distribution precinct with local and regional employment and economic activity and job density, but these won't have any effect without a permit trigger that requires the Requirements and Guidelines to be considered.

Cardinia further submitted the UGZ7 should require any permit application for a warehouse to be accompanied by an economic assessment which includes:

- a land suitability assessment for the proposed use
- the expected number of jobs which the proposed use will generate
- whether the proposed use contributes to achieving the economic needs and job density of the precinct
- the cumulative impacts of the proposed use in meeting the economic needs of the precinct.

Several submitters opposed the Day 1 changes to the UGZ7, including the Best Hooper clients (Abiwood, ISPT and GLG), Parklea and Officer Land Co.

Officer Land Co submitted that while the provision of jobs is important, the proposed control will not assist in reaching the estimated number of jobs. It submitted the industrial area has already been determined to be suitable for industrial uses, and pointed to a number of practical concerns with the proposed control:

- there are no conditions or circumstances identified in the control that would preclude warehouse use on a particular site
- there are no meaningful targets or measures set out in the PSP or UGZ7 against which the application could be assessed, including the expected number of jobs
- there is no way of measuring the extent to which the proposed use would contribute to the precinct's needs and job densities, particularly during the early development of the precinct
- the control will discourage warehouse use, which is not supported by any aspect of the PSP or planning policy.

Mr Milner gave planning evidence for Officer Land Co. He opposed making warehouse a section 2 use, noting that:

- the PSP, and the SGS background economic assessment, encourage freight and logistics land uses, as well as wholesaling – all of which rely on warehousing
- the SGS assessment did not prescribe job densities
- SGS reviewed the identification of those parts of the precinct as suitable for industrial uses, including warehousing, and there is no need to review the suitability of the industrial area for warehouse use
- assessing permit applications against the application requirements sought by Cardinia would be fraught with forecasting, interpretative and enforcement issues
- the requirement for an economic impact assessment would be a disincentive for an otherwise specifically encouraged use, and would mean more cost and regulation.

This issue was discussed at some length at the strategic planning roundtable:

- Mr Woodland (for Parklea) noted that only the Princes Freeway sub-precinct is specifically identified as suitable for warehousing in the PSP. Nevertheless, warehousing should remain a section 1 use, and requiring every warehouse to go through a permit application in order to track jobs numbers was 'overkill'. He questioned why warehousing should be treated differently to other industrial uses in this SSIP.
- Mr Milner (for Officer Land Co) echoed the observations of Mr Woodland and noted that managing job densities on a business by business, permit application by permit application basis would be very difficult.
- Under cross examination, Mr Glossop (for the VPA) stated he considered warehouse should remain a section 1 use in the industrial area. While he agreed that it would be difficult to monitor or influence job densities without a permit trigger, he questioned whether a permit trigger was the right way to address this given the land is in a SSIP and it would be unusual to treat this area any differently to other industrial areas.

Officer Land Co (and others) pointed out that warehouse is a section 1 use in the Commercial 2 Zone (which applies to the RSCA), submitting:

This has the prospect of channelling or concentrating warehouses into the business areas and away from industrial areas. If that is intended, no justification has been put forward. It would seem to be an odd and undesirable outcome.

Cardinia responded that it did not see the need to make warehouse a section 2 use in the RSCA, because warehouses are not likely to develop in that area given warehouse would not be the highest and best use of commercially zoned land.

The VPA responded in its closing submission, noting the tension between the Industrial 1 Zone (which is likely to attract warehouse uses), the heavy industrial purpose of the precinct, and the employment targets in the PSP. It submitted warehouse should be retained as a section 2 use in the Industrial 1 Zone as proposed in its Day 1 UGZ7, submitting it would support Cardinia's objective of limiting the industrial land in the precinct being consumed by warehouses which employ very few staff.

(iii) Discussion

The PSP envisages an innovative technology focussed industrial precinct with a strong focus on varied manufacturing activities and job-dense industries. The Committee agrees with Cardinia that a proliferation of warehouses could undermine that vision. However, introducing a permit trigger for warehouse is not the right way to address the risk. None of the planning experts supported the proposal. A permit trigger for warehouse in a SSIP seems incongruous, and would result in potentially unnecessary administrative and regulatory burden.

The Committee agrees with submitters and experts that introducing a permit trigger could discourage the early establishment of industrial uses in the precinct – not just warehouses, but also the types of industrial uses that rely on them.

Further, the Committee agrees with Officer Land Co and Mr Milner that implementing the controls would be fraught with practical difficulties.

A better way to address the potential risk identified by Cardinia is to monitor the industrial uses being established in the SSIP over time. Permit triggers are not the only way to monitor the establishment of uses in the precinct. 'On the ground' monitoring may be required. If Cardinia's fears are realised, there may be a justification for intervention in the future. However, at this point the Committee does not consider that the permit trigger is strategically justified.

(iv) Conclusions and recommendations

The Committee concludes:

- A permit trigger for 'warehouse' use in the Industrial 1 Zone introduced in the Day 1 version of the UGZ7 is not appropriate or strategically justified.

The Committee recommends:

The draft Amendment

Amend the Urban Growth Zone Schedule 7, as shown in Appendix E, to:

- a) Remove the permit trigger (and the associated application requirements and decision guidelines) for use of land with an applied Industrial 1 Zone for 'warehouse'.**

2.6.9 Rural industry in the Gin Gin Bean sub-precinct

(i) Evidence and submissions

Cardinia made the general point in the strategic roundtable that there seems little point in the PSP identifying sub-precincts, with different functions and target industries, if the applied zone (Industrial 1) is uniform across all the sub-precincts and does not encourage the targeted industries to establish

in the relevant sub-precinct. It presented rural industry as a section 2 use in the Gin Gin Bean precinct as an example. It submitted 'rural industry' should be a section 1 (no permit required) use in the Gin Gin Bean sub-precinct, given its interface with the farmland to the south, and the fact that the PSP encourages food and fibre industries in this sub-precinct, to leverage farming and agricultural businesses of the green wedge.

No other party (including the VPA) expressed a particular view about whether rural industry should be a section 1 use in the Gin Gin Bean sub-precinct. It remained a section 2 use in the VPA's final version of the UGZ7.

(ii) Discussion

The Committee agrees with Cardinia that allowing rural industry as a section 1 use would encourage at least some of the types of uses envisaged in the PSP for the sub-precinct. There seems to be no amenity based reason to require a permit for rural industry in this location, given it is separated from the residential areas in the Officer South and neighbouring CREP PSP areas, and rural industry (except abattoir and sawmill) is a section 1 use in the Farming Zone which applies to the land outside the Urban Growth Boundary that surrounds the sub-precinct.

(iii) Conclusion and recommendation

The Committee concludes:

- Rural industry should be a section 1 use in the Gin Gin Bean sub-precinct, subject to the same conditions that apply in the surrounding Farming Zone.

The Committee recommends:

The draft Amendment

Amend the Urban Growth Zone Schedule 7, as shown in Appendix E, to:

- a) Make 'rural industry' a section 1 use in the Gin Gin Bean sub-precinct, subject to the same conditions as those that apply in the surrounding Farming Zone.**

2.6.10 Restricted retail in the Industrial 1 Zone

(i) What is proposed?

The exhibited UGZ7 prohibits 'restricted retail premises' in the industrial area.

(ii) Evidence and submissions

In its original submission, Parklea submitted that restricted retail should not be prohibited in the industrial area.

Mr Woodland noted that restricted retail is a discretionary use within the Industrial 1 Zone, so a clear case would need to be made to justify prohibiting this use in the Officer South industrial areas. He had not seen any economic or planning analysis that articulates why restricted retail should be prohibited in the Officer South industrial area. That said, he considered it preferable that bulky goods be concentrated within the commercial precinct for a number of reasons, including:

- they can contribute to the amenity and vitality of this precinct
- they will benefit from being on or close to the secondary arterial and public transport routes
- they would be separated from industrial uses and the associated freight movements on Thompsons Road.

He therefore considered there is some strategic planning basis for the UGZ7 to prohibit restricted retail uses in the Officer South industrial area, but considered a consistent approach should be taken in similar areas (such as CREP, where restricted retail is allowed in the industrial area).

Parklea did not pursue this issue through the Hearing.

(iii) Discussion

The Committee notes the absence in the PSP or the background documents of a specific strategic rationale for prohibiting restricted retail in the Officer South industrial area. That said, it is generally consistent with the vision for the precinct as a whole that restricted retail be concentrated in the RSCA rather than the SSIP. Mr Woodland put forward sound and logical reasons why this should occur, and in the absence of any expert opinion to the contrary, the Committee considers the prohibition of restricted retail in the SSIP is appropriate.

(iv) Conclusion

The Committee concludes:

- Restricted retail should be prohibited in the industrial parts of the precinct.

2.6.11 Uses in the Commercial 2 Zone

(i) What is proposed?

The exhibited UGZ7 prohibits 'child care centre', 'primary school' and 'residential hotel' in the commercial area. The Day 1 version extended the prohibition on 'child care centre' to the industrial area as well.

(ii) Evidence and submissions

In its original submission, Parklea submitted there should be flexibility for child care, primary school or residential hotel uses in the commercial area. Mr Woodland partially supported this submission. He considered these uses should ideally be located within the Village sub-precinct, but opportunities to do so may be limited due to the limited size of the Village sub-precinct. He considered that allowing those uses to locate in the commercial area but adjacent to the Village might be an acceptable outcome (subject to the siting, design and accessibility of the facility).

(iii) Discussion

The Committee agrees with Mr Woodland that uses such as child care centre, primary school and residential hotel ought be located in the Village sub-precinct. The Committee considers there is sufficient land in the Village sub-precinct to accommodate these uses. As well as the residential parts of the Village, there is potentially a substantial amount of spare capacity in the LTC (over and above the envisaged retail and commercial floorspace) to accommodate these types of uses (as discussed in Chapter 2.5). These uses should not be allowed outside the Village sub-precinct.

(iv) Conclusion

The Committee concludes:

- Child care centre, primary school and residential hotel should be prohibited in the commercial area.

2.6.12 The electricity transmission easement

(i) What is proposed?

An electricity transmission easement runs east west through the precinct, south of the proposed Thompsons Road alignment. Exhibited G52 in the PSP (G60 in the VPA's final version) encourages the use of the transmission easement for walking, cycling and equestrian paths as part of the broader open space network, and service utilities such as roads and renewable energy sources. The PSP includes a concept plan for the transmission easement (in Appendix 3) that shows a future biolink as well as equestrian trails, a cycle path and an off road shared path.

The Amendment proposes to rezone the electricity transmission easement to Special Use Zone Schedule 8.

(ii) Submissions

The Committee received submissions from the owners of a parcel of land within the electricity transmission easement, bordered by Cardinia Creek. The landowners submitted:

- land within the transmission easement has greater value to adjacent employment land if hard stand or car parking associated with adjacent industrial uses were allowed in the easement, rather than just serving a pathway function
- rezoning the land to the Special Use Zone would preclude the use of the land for these ancillary purposes
- the concept plan in the PSP creates expectations for what will happen in the easement, limiting options for using the land for purposes other than shared paths and the like
- their parcel of land is set to host a number of key infrastructure items, including a drainage retarding basin, part of Thompsons Road and part of BR-04
- these key infrastructure items are less likely to be delivered if there is no viable development option for the land.

(iii) Discussion

The Committee agrees with the landowner that the PSP and Amendment should allow sufficient flexibility for the transmission easement to be used for purposes ancillary to adjacent industrial or employment uses. This would allow maximal efficiency of the use of the land in the precinct.

The Special Use Zone Schedule 8 has the following purposes:

To manage the transition of non-urban land into urban land generally in accordance with the [PSP].

To provide for a range of uses and the development of land generally in accordance with the [PSP].

The Special Use Zone Schedule 8 does not prevent ancillary industrial or employment uses of the transmission easement. Rather, the application requirements in clause 2.0 of the Schedule (for use permits) contemplate potential industrial uses.

However, the Schedule (in its purposes and in the application requirements in clause 4.0, for buildings and works permits) require the proposal to be generally in accordance with the PSP. The PSP, through G52 and the transmission line concept plan, do not contemplate ancillary industrial or employment uses in the easement, and there may be an argument as to whether such uses were 'generally in accordance with' the PSP.

The Committee recommends minor changes to G52 (G60 in the VPA's final version) and Appendix 3 to make it clear that ancillary industrial uses are permitted in the easement. It considers the Special Use Zone to be the appropriate zone for the land.

(iv) Conclusions and recommendation

The Committee concludes:

- The Special Use Zone is the appropriate zone for the transmission easement land.
- The PSP should allow sufficient flexibility for the transmission easement to be used for purposes ancillary to adjacent industrial or employment uses.
- With appropriate amendments to the PSP to provide for that flexibility, the zone would not prevent ancillary industrial uses in the transmission easement.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

- a) Amend Guideline G60 and Appendix 3 to allow flexibility for the electricity transmission easement to be used for purposes ancillary to adjacent industrial or employment uses.**

2.6.13 Treatment of the high pressure gas pipeline

(i) What is proposed?

A high pressure gas pipeline, owned and operated by APA, runs through the precinct. The PSP identifies the high pressure pipeline area as linear open space. The Amendment proposes that APA be notified of certain permit applications in the high pressure gas pipeline 'zone of consequence'. Exhibited G65 contemplates carparking and landscaping within gas pipeline easements.

(ii) Submissions

APA submitted that:

- the clause 66.06 notification requirements for applications within the 'zone of consequence' should include applications for 'cinema based entertainment facility', 'child care centre' and 'corrective institution'
- to avoid confusion, G65 should either be removed or amended to refer to 'distribution pipeline easements' if it is intended to refer to the high pressure gas pipeline easement.

(iii) Discussion

The Committee agrees that applications for 'cinema based entertainment facility', 'child care centre' and 'corrective institution' within the 'zone of consequence' should be notified to APA. These are sensitive uses where large numbers of people may gather, and APA should be made aware of them. Notification of these types of applications will bring this PSP into line with the notification requirements for the Pakenham East PSP.

Guideline G65 (G74 in the VPA's final version) states:

The asset manager may consider the high pressure gas distribution pipeline easement to be located within the front of private lots where there is car parking and landscaping. In this scenario, the asset manager retains the legal access to the pipeline. Approval from the asset manager and responsible authority must be obtained prior to proceeding with any construction.

The Guideline is poorly drafted, and its intent is unclear. The easement either is, or is not, within privately owned lots. This is a matter of fact, not a matter of opinion of the asset manager. The Guideline should be rewritten to clarify its intent and operation.

(iv) Conclusion and recommendation

The Committee concludes:

- Minor revisions are required to the PSP and clause 66.06 in relation to the high pressure gas pipeline easement to clarify the intent and operation of Guideline G74 and to add notice requirements for certain permit applications.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

- a) Rewrite Guideline G74, relating to the high pressure gas pipeline easement, to clarify its meaning and intent.**

The draft Amendment

Amend the last row in Table 1 in the Schedule to clause 66.06 to add the following to the list of applications that require notification to the licensee and/or operator of the gas transmission pipeline:

- **Cinema based entertainment facility**
- **Child care centre**
- **Corrective institution.**

3 Staging

3.1 Introduction

(i) What is proposed?

As briefly noted in Chapter 1.4(ii), the VPA's proposed approach is to prohibit development in Stages 2, 3 and 4 until certain gateway infrastructure items are delivered for each stage. The prohibition on development would be implemented through the SCO14 and the associated Incorporated Document.

Three of the gateway infrastructure items are to be delivered and funded by the State:

- the upgrades to the freeway interchange with Officer South Road (IN-13)
- the Thompsons Road east bridge (BR-02)
- the Thompsons Road west bridge (BR-04).

Two of the gateway infrastructure items are to be delivered by Cardinia or developers, with part funding under the ICP:

- the Lecky Road bridge (BR-01)
- the Grices Road bridge (BR-03).

The stages and the gateway infrastructure items are shown on PSP Plan 12 (Infrastructure and development staging), extracted in Figure 6 below. Plan 12 will be reproduced in the Incorporated Document.

The VPA explained the intended operation of the staging controls as follows:

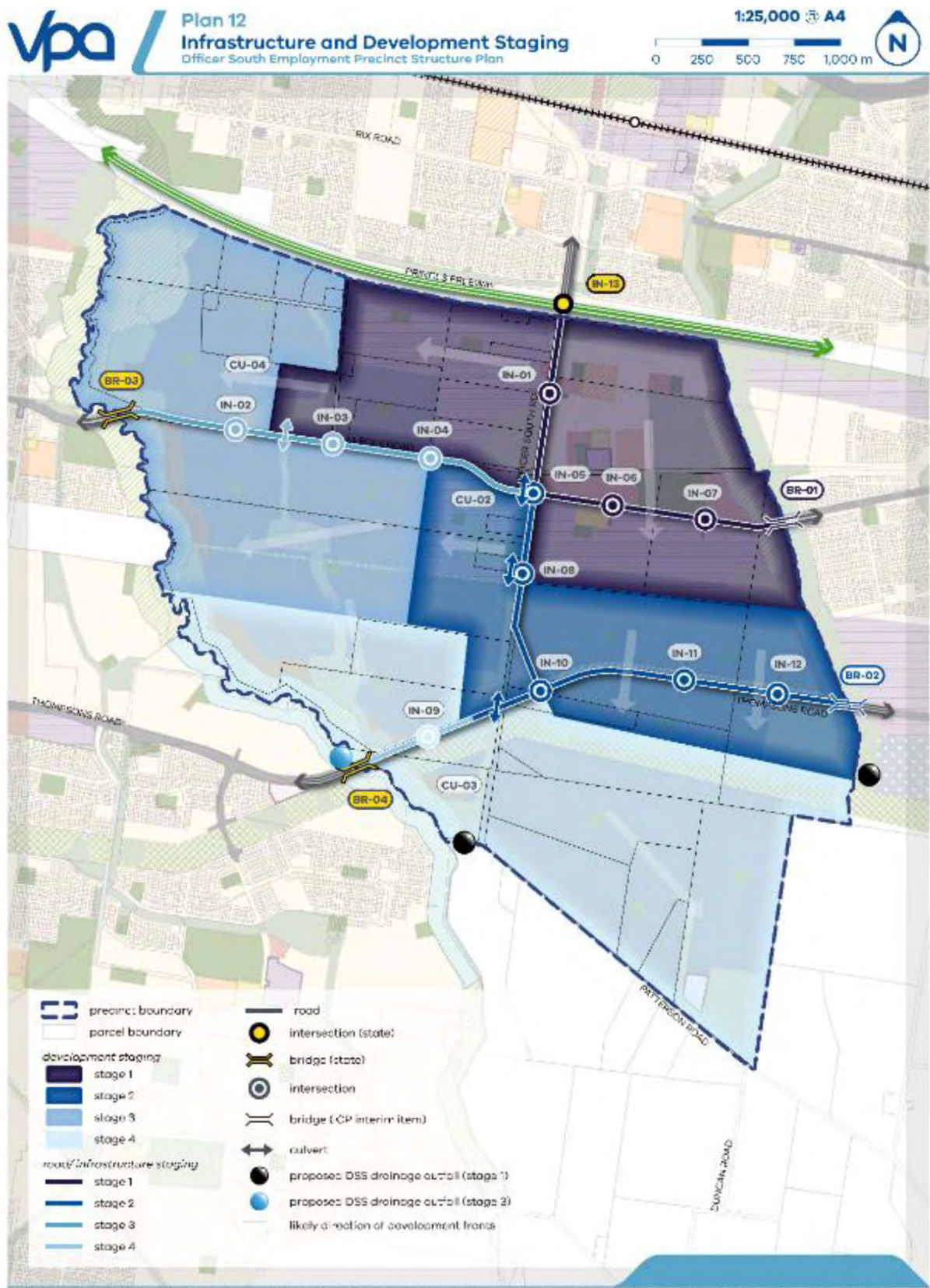
- As the gateway infrastructure items are delivered, the extent of the SCO14 will be reduced, and removed entirely once all five infrastructure items have been constructed.
- The Staging Plan is subject to review. Reviews can have regard to any change in circumstances that might support amendments to the Staging Plan.
- The staging controls will expire on the earlier of:
 - a letter from TfV confirming that the prohibition on development is no longer required
 - delivery of the gateway infrastructure items to the satisfaction of TfV
 - if the Staging Plan is not reviewed within three years on a rolling basis.
- The Staging Plan is intended to operate sequentially, with development to start in each stage on completion of development in the previous stage. The infrastructure items are also intended to be delivered in the order shown in Plan 12.

The approach is described in more detail in a Technical Paper titled *Coordinated Delivery of Infrastructure and Staging Provisions* (February 2024) (Document 20) and a Supplementary Staging Document explaining the methodology in the Staging Technical Paper (Document 19).

The VPA iteratively updated the Incorporated Document through the process. Document 237.31 was the VPA's final version, which (among other things):

- changed the agency responsible for confirming the prohibitions on development are no longer required, from TfV to the Minister for Planning
- included a new requirement that the extent of land covered by the staging controls be reviewed in no less than three years
- included a new three year sunset for the controls.

Figure 6 'Day 2' Staging Plan



Source: Document 45

3.2 Strategic justification

(i) The issues

The issues are:

- whether a staging plan is needed
- whether the VPA's proposed staging control sets up a 'catch 22' in terms of the delivery of the gateway infrastructure
- the geographic boundaries of the proposed stages
- whether the use of the SCO is justified.

(ii) Evidence and submissions

There was general agreement among the transport experts that some form of staging is required to manage development of the precinct to ensure capacity constraints in the existing road network are not exceeded.

The VPA

The VPA's Part A submission emphasised its proposed staging controls are premised on:

... a logical rationale that accounts for the opportunity for serviceable and accessible land to be monitored while areas more dependent on state infrastructure are timed to align with its delivery. A benefit of this approach is that the planning vision for the Precinct is incorporated in the Scheme providing clarity and momentum for state funding decisions.

The VPA submitted its staging approach "*is consistent with State government requirements for PSP delivery, in line with government policy development*". It submitted there are a myriad of possible approaches to staging, and urged the Committee to support its proposed approach on the basis that there was nothing fundamentally wrong with it.

The VPA submitted its proposed Staging Plan has practical benefits:

- Stage 1 includes the residential precinct, which is ready to commence
- it facilitates development around Officer South Road, the only practical connection to the existing road network, leveraging proximity to the freeway and the freeway interchange at IN-13
- Stage 1 includes both residential and industrial land
- Stage 1 includes land where early drainage works would provide broad benefits, including to downstream landowners.

Mr Glossop's evidence for the VPA was:

- It is prudent for the PSP and the Amendment to provide appropriate measures for staging to ensure the delivery of the PSP occurs in an orderly matter.
- That said, staging plans "*should not lead to outcomes that impose unacceptable constraints on the development of land to the extent that the objectives of the PSP cannot be achieved...*"
- A degree of flexibility and/or in built review process would be beneficial to allow a response to changed circumstances or if the PSP's expected outcomes are not being realised.

He considered the SCO is the preferred tool for implementing the staging, on the basis that:

- staging is a strategically significant issue
- the Staging Plan is visible and clear as a stand-alone control
- separation of staging from the PSP further elevates its visibility.

Mr Glossop supported the concept of ongoing three yearly reviews of the staging controls, but considered there should be further mechanisms introduced to allow for flexibility.

Cardinia

Cardinia supported the concept of staging, noting that it would struggle to manage development in the precinct without some form of staging control, but put forward an alternative that included more industrial land in Stage 1, with different 'matching' of gateway infrastructure items to stages.

Cardinia's key concerns with the VPA's proposed Staging Plan were:

- it gives priority to residential land rather than industrial land to take up the limited capacity in the existing road network – this is inappropriate in a SSIP, and may create further congestion on the broader network because residents would need to leave the precinct to access jobs, leisure, school, and daily essentials
- it allows development in the Lower Gum Scrub Creek Catchment to proceed in advance of Melbourne Water addressing the historical drainage issues associated with the Officer PSP (discussed in more detail in Chapter 4)
- it would give rise to inefficient (and very high) negative cashflows under the ICP, which would *"hamstring the orderly and efficient implementation of the ICP"* (discussed in more detail in Chapter 6.2)
- Thompsons Road is in Stage 4 – it should be delivered earlier given it is a key part of the east west road network connections in the region, and both Cardinia and Casey councils have been advocating for the timely construction of the road for some time.

Supportive parties

Several parties, including Development Victoria, YourLand and Officer Land Co, supported the VPA's proposed approach to staging. Notably, all of the supportive parties were located in Stage 1.

YourLand submitted:

... what the VPA has proposed is a reasonable outcome having regard to the broader need for development sequencing in the Officer South Employment PSP to tie in with key road upgrades to accommodate increased traffic.

It added:

- its land is well located as part of the initial phase of development
- it stands ready to develop its landholdings for both residential and employment purposes, consistent with the PSP's vision and objectives
- the Stage 1 land (as shown in the 'Day 2 version') is an appropriate mix of land uses
- Stage 1 is logical, noting that all traffic experts agreed development would logically occur off Officer South Road and that IN-13 can accommodate a level of development before being upgraded to its ultimate form
- YourLand has identified around \$100 million worth of infrastructure that it will deliver to get its land to market, including significant upgrades to Officer South Road and services within the road reserve, and drainage assets identified in Melbourne Water's DSS Asset Overview Plan (Document 30).

Development Victoria submitted it was ready to develop and intended to deliver key drainage assets as part of the development of its land, including the critically important wetland and retarding basin (WLRB) G, which will deliver immediate downstream benefits.

YourLand submitted that alternative approaches to staging proposed by various parties should be rejected. It explained:

- none of the alternatives have had regard to the broad suite of considerations to which the VPA, as planning authority, has had regard
- none of the parties proposing alternatives had widely consulted with all relevant agencies as the VPA, as planning authority, had done
- the alternatives do not address matters of servicing and other key planning issues in any detail, and constitute ‘planning on the run’
- Cardinia’s alternative is primarily driven by the funding shortfalls for community infrastructure arising out of bad planning for the CREP, and does not have proper regard to other strategic planning drivers, including the imperative for the rollout of additional residential land at an early stage.

Opposing parties

Many of the landowners outside Stage 1 opposed the principle that staging controls should be applied, and/or the VPA’s proposed approach. Common concerns, many of which were supported by expert planning evidence, included:

- the staging controls will unnecessarily and unreasonably delay development of industrial land in a SSIP
- the Planning Scheme and the VPA’s Technical Paper (Document 19) set a high bar for the use of the SCO, and its use in this instance has not been justified (including because ‘extraordinary circumstances’ have not been demonstrated)
- the proposed Staging Plan is not supported by any modelling that demonstrates that network capacity will be exceeded or that unacceptable congestion will result if development in each stage were to proceed before the gateway infrastructure identified for that stage
- on the evidence of most of the traffic experts, the existing road network, and in particular intersection IN-13, can accommodate more development than allowed for in Stage 1 (Cardinia’s traffic expert Mr Abdou was a notable exception)
- the proposed Staging Plan inappropriately emphasises the need for transport infrastructure without considering how other critical infrastructure such as drainage and services will be delivered
- the proposed Staging Plan inappropriately prioritises residential and commercial development over industrial development
- there is no logic to:
 - why the gateway infrastructure is needed before development proceeds
 - why the gateway infrastructure needs to be delivered in the order specified in the Staging Plan
 - the boundaries of the various stages (some of which do not follow property boundaries)
- other approaches and solutions should be able to be tested through the permit application process, and the VPA has not demonstrated why this should not be allowed
- the review process under the VPA’s proposed Staging Plan:
 - is opaque
 - does not require appropriate consultation and engagement with directly affected parties (namely landowners in the precinct)
 - should be subject to independent review at the Victorian Civil and Administrative Tribunal (VCAT).

Parklea

Parklea submitted the VPA's proposed Staging Plan is "*fundamentally contrary to policy*" as it sets out a rigid development sequence with no mechanism or certainty for the delivery of the gateway infrastructure items that are required to unlock development in the precinct. It submitted:

- multiple development fronts should be allowed, as it makes sense to take advantage of existing infrastructure in surrounding PSPs and provide a continuing supply of industrial land in this SSIP
- the standard approach of allowing permit applications, with staging guidance provided in the PSP and the UGZ7, is a better approach, as it allows alternative development specific solutions to be put forward based on appropriate technical assessments of specific development proposals and their impacts on the existing infrastructure.

Abiwood, GLG Invest and ISPT

The Best Hooper clients submitted the VPA's proposed staging control sets up a 'catch 22':

- TfV confirmed at the Hearing that it (or DTP) normally delivers State transport projects *after* capacity constraints are reached in the network (in other words, it typically 'plays catch up')
- further, TfV/DTP is unlikely to deliver the Thompsons Road bridges before Thompsons Road itself
- Cardinia will need the funds collected under the ICP to construct the interim Thompsons Road, as well as the Lecky Road bridge, the Grices Road bridge and the related roads
- it won't be able to collect those funds until permits are issued and acted on in Stages 2, 3 and 4
- permits cannot be issued for Stages 2, 3 and 4 until TfV/DTP provides the Thompsons Road bridges and IN-13
- the delivery of the Thompsons Road bridges by TfV/DTP is unlikely, because:
 - Cardinia won't have the funds to construct the road
 - capacity constraints won't be reached without development in Stages 2, 3 and 4.

Further, it is not clear that Cardinia will ever have the funds to construct the Lecky Road and Grices Road bridges, given the significant funding shortfalls in the ICP.

VPA response

The VPA responded in its closing submission that:

- if staging is applied, some development must inevitably wait
- the staging approach should be seen as "*organis[ing] decisions into a time sequence that is comparable to reasonable expectations*", rather than delaying development
- subsequent stages benefit from the earlier application of zones and planning certainty for their own land
- the staging controls will generate momentum for further State action on infrastructure.

On the absence of traffic modelling, the VPA responded that the Staging Plan was developed using an iterative methodology that considered local and regional context, traffic, drainage, utilities, development trends and financial analysis in a multi-disciplinary process. Transport capacity and connectivity was only one consideration and could not reasonably be isolated for analysis due to the interdependencies between staging components. Instead, the Staging Plan has been determined:

... having regard to alignment with appropriate staging of State and local infrastructure and represents a logical expansion of existing development and infrastructure...

On the so-called catch 22, the VPA responded:

- the precinct is currently restricted by the fact that it is served by a single access point (Officer South Road)
- all traffic experts agreed that the roll out of development requires management
- the proposed Staging Plan will be regularly reviewed, so if development stalls or circumstances materially change, alternate options for traffic movement can be explored and the Staging Plan can be amended
- Thompsons Road has been variously referred to throughout the Hearing as the final ‘missing piece of the puzzle’ or similar, and is therefore unlikely to be significantly delayed despite the concerns raised by the Best Hooper clients and Cardinia
- it is not realistic to suggest development would stagnate – the Staging Plan would be reviewed and amended if this were to occur.

On the geographic boundaries of the stages, the VPA responded that it had attempted to align the stage boundaries with property boundaries and roads as far as possible. This was not possible for all parcels. Where a parcel is split between two stages, this can be managed through the subdivision process through creating super lots, including with staged Growth Area Infrastructure Contribution (GAIC) payments.

Multiple alternative approaches to staging were put to the Committee. The VPA responded that:

- none of the alternatives were supported by traffic modelling, other than:
 - limited intersection modelling by Mr Maina, which did not account for traffic external to the precinct and in any event was not the *“multi-disciplinary approach that ought be used to inform the development of a staging plan”*
 - Mr Abdou’s modelling of the capacity of IN-13, which was shown to be overly conservative (discussed in detail in Chapter 3.3)
- any potential advantages of alternate approaches could be picked up during the regular reviews of the VPA’s proposed Staging Plan
- the Parklea approach would have development proceeding on multiple development fronts which could proceed concurrently – Cardinia has expressed significant concerns as to how it would manage development in this scenario.

(iii) Discussion

Staging is one of the key issues on which the VPA seeks the Committee’s advice. It was highly disputed in the Hearing, and occupied a considerable amount of time. This is no doubt a reflection of the novel, and restrictive, approach taken by the VPA.

In considering whether the VPA’s approach is strategically justified, the Committee has turned its mind to whether:

- there is a need for staging
- there is a clear link between the gateway infrastructure items ‘matched’ to each stage
- the proposed approach will result in a net community benefit.

Policy support for staging

Staging or sequencing of development in growth areas is a well accepted principle, and consistent with the PSP Guidelines and policy objectives and strategies set out in clause 11.02-3S of the Planning Scheme and Principle 8 in the Growth Corridor Plan. These guidelines, policies and strategies seek to ensure development:

- represents a logical and contiguous extension of existing urban development
- is managed within the confines of existing and future infrastructure
- is staged and located to:
 - use available capacity in existing infrastructure
 - support orderly and economic extension or augmentation of existing infrastructure
 - match the timely provision of new infrastructure.

The standard approach to staging

PSPs generally manage staging through an indicative staging plan in the PSP, supported by requirements and guidelines about the staging of development. Permit applicants are required to demonstrate general accordance with the PSP, and that infrastructure (existing or proposed) has sufficient capacity to accommodate the proposed development. Permit conditions can be applied requiring infrastructure to be provided or upgraded where necessary. Where significant infrastructure constraints exist, other more directive mechanisms may be used, such as lot caps which prevent development over a certain amount from proceeding until a key infrastructure item is provided. An example is the lot cap that applies to residential development in the neighbouring Minta Farm PSP.

The standard approach has benefits, including:

- allowing an assessment of the infrastructure demands of a particular development at the time the development is proposed, when more is understood about the constraints of existing infrastructure and the needs generated by the particular development under consideration
- allowing permit applications to be considered in advance of the delivery of infrastructure
- facilitating the timely delivery of infrastructure by developers through permit conditions
- allowing some development, thereby enabling developers to obtain financing and to generate revenue to help finance later stages of development with sales from earlier stages.

Are staging controls required in Officer South?

All of the traffic experts agreed that the existing network has capacity constraints that would be exceeded by full buildout of the PSP, and some form of management of development is required. The Committee accepts there are restrictions on access to the precinct, and until the bridge connections to the east or west are established, Officer South Road is the only access point. It also accepts there is a limit to the capacity of IN-13 before it is upgraded to its ultimate form (although for the reasons set out in Chapter 3.3 it considers IN-13 has significantly more capacity than determined by Mr Abdou).

In these circumstances, the Committee accepts that a case for some form of staging control has been made out, at least on face value. However it has significant concerns with the VPA's proposed approach, which it elaborates on below. Further, the VPA has not demonstrated why managing staging through the standard approach (by allowing permit applications with staging guided by the PSP) would lead to unacceptable outcomes.

A non-standard approach must be strategically justified

The VPA is proposing a significant departure from the standard approach in Officer South, involving a restrictive approach that prohibits development until certain key infrastructure items have been delivered. This has obvious and significant implications for progressing development in the precinct,

and the collection of infrastructure contributions associated with that development which will fund essential infrastructure (discussed in detail in Chapter 6.2).

Given those significant implications, it is imperative that any proposed staging controls have a sound strategic justification, and will deliver a demonstrable net community benefit (or avoid a demonstrable community harm).

The Committee is troubled by the absence of empirical analysis that:

- demonstrates unacceptable outcomes would result if development in each stage were to start before the gateway infrastructure required for that stage was delivered
- quantifies those unacceptable outcomes
- demonstrates how the gateway infrastructure items matched to each stage will resolve those unacceptable outcomes.

Without that empirical analysis, it is difficult for the Committee to conclude with certainty that the VPA's proposed staging approach will deliver a net community benefit, and impossible to quantify that benefit.

Other strategic concerns

The Committee has other concerns in relation to the overall strategic justification of the VPA's proposed approach to staging.

The VPA has not demonstrated that it is appropriate and strategically justified to include all of the precinct's residential land and some commercial land in Stage 1, with no industrial land.⁵ This does not sit well with Officer South's status in MICLUP and Plan Melbourne as a SSIP. While the Committee acknowledges that the Village sub-precinct is largely development ready, that alone does not justify such a large proportion of non-industrial land in Stage 1. If the VPA chooses to pursue a staging control, it should prioritise employment land (both industrial and commercial) in Stage 1.

There is a clear strategic imperative for the PSP and Amendment to facilitate the early delivery of as much development in the precinct as possible (particularly industrial and commercial development), without creating unacceptable traffic congestion. For reasons that are explored further in Chapter 3.3, the Committee considers that the Stage 1 boundaries do not strike the appropriate balance between these two strategic imperatives. The Committee thinks it possible that IN-13, with minor modifications to the operation of the intersection, has capacity to accommodate more development than allowed for in Stage 1.

The Committee is concerned that the proposed Staging Plan will delay and potentially stymie development of industrial land in this SSIP. The 'catch 22' identified by the Best Hooper clients is a real problem, and the VPA's response in its closing submissions did not grapple with the fundamental practical challenges inherent in the catch 22. Saying that potential delays can be addressed in the regular review of the control is no answer. The control must be properly designed from the outset, rather than relying on a future review to fix what appears to be a fundamental problem in the design of the control.

The Committee is concerned the VPA's proposed Staging Plan will create significant cash flow issues under the ICP, and will make the efficient management and implementation of the ICP and the

⁵ The Committee acknowledges that a small amount of industrial land was added in the VPA's 'Day 2' version.

delivery of the infrastructure provided for under the ICP very challenging. This issue is discussed in more detail in Chapter 6.2.

There is no clear link between the gateway infrastructure items ‘matched’ to each stage, or explanation why the gateway infrastructure items need to be delivered in the order specified in the proposed Staging Plan. Nor has it demonstrated whether the gateway infrastructure items are needed before any development in the relevant stage can proceed, or whether some level of development may be acceptable before the item is delivered. This issue is further explored in Chapter 3.4.

It is not clear why the Staging Plan needs to operate sequentially, with the next stage of development not able to be commenced until full buildout of the previous stage. Further, while the Committee understands this is the intent of the control, it is not convinced this is how it would operate on the VPA’s drafting. Nor is it convinced that delivering the gateway infrastructure in a particular order is necessary, or that the VPA’s staging control has this effect (which the VPA indicated was the intent).

Finally, without an empirical demonstration of the problem that the Staging Plan seeks to address, the use of the SCO has not been justified. The VPA has not demonstrated the existence of extraordinary circumstances, or that the other criteria set out in the VPA’s Technical Paper (Document 19) have been met.

For these reasons, the Committee cannot support the Staging Plan in the form proposed by the VPA.

(iv) Conclusions and recommendation

The Committee concludes:

- The Staging Plan in the form proposed by the VPA is inappropriate and should not be supported.
- There is no justification to apply the Specific Controls Overlay.

The Committee recommends:

General recommendation

Do not apply the Specific Controls Overlay to any land in the precinct.

3.3 The freeway interchange

(i) What is proposed?

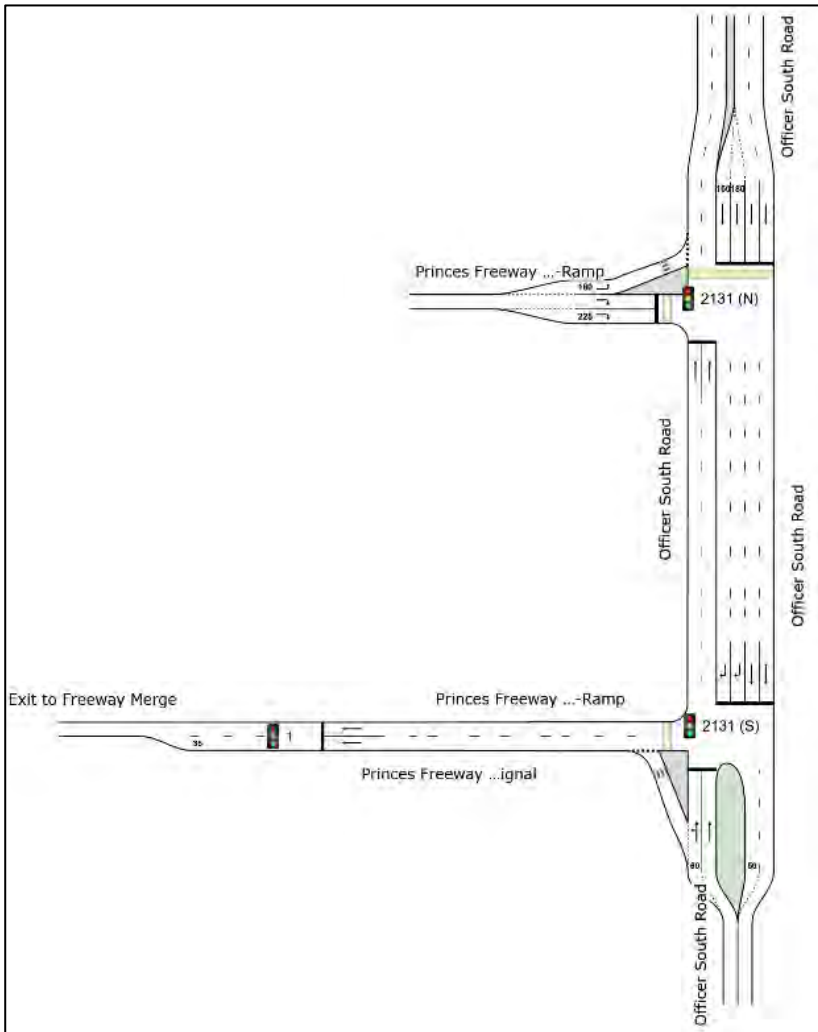
The VPA’s proposed Staging Plan requires the freeway interchange at Officer South Road (IN-13) to be upgraded to its ultimate layout before development in any of Stages 2, 3 or 4 can proceed. The controls allow development of all of Stage 1 before IN-13 is upgraded.

In its existing layout (shown on Figure 7), IN-13 provides:

- one left-turn exit lane and two right-turn exit lanes from the freeway’s east bound offramp onto Officer South Road
- two right-turn entry lanes and one left-turn entry lane from Officer South Road onto the freeway onramp towards Melbourne.

The ultimate layout for IN-13 provides a full diamond interchange, that is, the upgrade includes an onramp to the east from Officer South Road (that will be constructed to the north of the freeway) and an offramp from the east (that will be constructed to the south).

Figure 7 Existing layout of the freeway interchange



Source: Document 80 (Mr Abdou's evidence), Figure 22

(ii) The issue

The issue is:

- whether the existing capacity of IN-13 justifies limiting or expanding the Stage 1 boundaries.

(iii) Evidence and submissions

The Joint Expert Statement of the traffic experts records that all the experts except for Ms Donald (who considered this issue outside her scope), agreed that a level of development within the PSP area can be accommodated within the existing interchange. The disagreement related to how much additional traffic could be absorbed by IN-13 before unacceptable congestion occurred.

Cardinia submitted it was critical for the Committee to understand the capacity limits in IN-13. Relying on Mr Abdou's evidence, it submitted the practical capacity of IN-13 in its current form would be reached at around 1,600 dwellings (less if the annual network growth rate is 5 per cent, rather than the 3 per cent assumed by Mr Abdou). This is significantly less than full buildout of Stage 1, which envisages 1,600 dwellings plus a significant amount of commercial land. Cardinia submitted Stage 1 should be revised accordingly, and include more employment land rather than residential land.

Mr Abdou modelled the existing capacity of IN-13 using SIDRA (and was the only expert to do so). His modelling indicated that the existing IN-13 has limited peak hour capacity of 990 vehicles per hour, based on:

- the existing IN-13 layout (base case at 2036)
- the PSP interim layout, which incorporates a duplicated southern leg on Officer South Road south of the freeway (as part of IN-01).

In his SIDRA analysis Mr Abdou assumed a network growth rates of 3 and 5 per cent, and applied the existing 110 second traffic signal cycle time on the freeway onramp. His evidence was that his iterative assessment revealed:

- all approaches on the existing intersection layout currently operate at acceptable congestion levels, with ratings of good to excellent, except for the freeway onramp
- the AM peak period was the critical peak due to the limited queuing capacity of the onramp (215 metres)
- if Stage 1 were allowed to proceed with IN-13 in its current layout, for both the existing (baseline) and future (PSP interim) intersection layouts, congestion levels will exceed acceptable degrees of saturation with ratings of poor to very poor for growth rates of 3 and 5 per cent.

Mr Abdou concluded:

The available capacity at the Officer South Road/Princes Freeway interchange is estimated to be significantly lower than the expected traffic generation of Stage 1. Hence, upgrades to increase traffic capacity to/from the PSP will be required to facilitate the full development of Stage 1.

Ms Dunstan gave traffic evidence for Development Victoria. Her evidence was that the upgrade of IN-13 to its ultimate layout (to provide for east bound movements on and off the freeway) would be of limited benefit to Stage 1, and Stage 1 should therefore be allowed to develop before the upgrade of IN-13.

In Ms Dunstan's view, the traffic estimations undertaken by Mr Abdou were overly conservative and his conclusion was not soundly based. Under cross examination at the traffic roundtable, she explained why she thought Mr Abdou's analysis was flawed:

- he used overly conservative traffic generation rates, based on the *NSW Road Traffic Authority Guide*
- he significantly underestimated the storage available on the existing onramp, as he did not include the significant amount of storage available in the two right turn lanes on the northern approach of Officer South Road
- the onramp signals are relatively new and could respond dynamically to traffic conditions on the freeway and on the onramp, including by adjusting the cycle time for the signals, without any impact on the flow of traffic on the freeway
- if necessary, relatively minor works could be undertaken to the existing onramp to increase the intersection capacity before the full upgrade, such as:
 - duplicating the onramp lane beyond the onramp signals
 - adding an additional entry lane on the freeway.

The VPA submitted Ms Dunstan's evidence was that IN-13 could comfortably accommodate the traffic generated from Stage 1 of the VPA's proposed Staging Plan. Moreover, with minor adjustments to the intersection and/or the onramp signals, the existing IN-13 could accommodate additional traffic. The VPA noted that Mr Abdou repeatedly acknowledged in the traffic roundtable

that his assessment was conservative, and concluded that the evidence of both Ms Dunstan and Ms Donald supported the proposition that Stage 1 can comfortably be developed before the upgrade of IN-13.

Mr Walley gave traffic evidence for the VPA. He was confident the existing IN-13 could cater for the level of development included in Stage 1. He reiterated under cross examination that he agreed with Ms Dunstan that Mr Abdou's conclusion that the existing freeway onramp effectively limits capacity for development in the PSP area is overly conservative.

Development Victoria submitted that no other traffic expert agreed with Mr Abdou that the available capacity of IN-13 was significantly lower than the expected traffic generation from Stage 1. It submitted that while it was no doubt not his intent, the level of conservatism adopted by Mr Abdou reached a point where it "*misrepresents*" the capacity of the existing freeway interchange.

Cardinia responded to the criticisms of Mr Abdou's evidence by pointing out he was the only expert to have undertaken an analysis of the existing capacity of IN-13. It submitted the fact that the VPA's experts had not done so was notable. It added:

Contrary to endeavours to cast that assessment as being coloured by the conservativeness of Mr Abdou's first principles assessment, it is important to note that Mr Abdou has made it clear that his SIDRA analysis was not affected at all by his traffic generation rates. It looked at the intersection capacity, not at traffic generation.

(iv) Discussion

The Committee accepts that there is a limit to the capacity of IN-13 before it is upgraded to its ultimate form, and this will limit the extent to which the PSP should be developed before IN-13 is upgraded (and other significant transport infrastructure is delivered).

However, on the evidence presented at the Hearing and in particular the discussion and cross-examination during the traffic roundtable, the Committee considers the existing layout of IN-13 has significantly more capacity than suggested by Mr Abdou. The Committee is satisfied on the evidence that there is sufficient capacity in IN-13 for Stage 1 to proceed before the upgrade of the intersection to its ultimate layout. In reaching this finding, the Committee notes that this is not dependent on traffic generation rates, which are separate to an assessment of the intersection's capacity.

Mr Abdou was the only expert to present a specific analysis of the operation of IN-13. This is disappointing, and the Committee considers the VPA should have undertaken its own analysis of the intersection to demonstrate empirically that:

- the intersection has sufficient capacity to absorb the traffic generated by its proposed Stage 1
- further development beyond Stage 1 would exceed the capacity of IN-13 and result in unacceptable traffic congestion (and that the Stage 1 boundary was therefore strategically justified).

Mr Abdou's analysis showed that during the critical morning peak period, congestion on all legs of IN-13 was acceptable except for the freeway onramp. Ms Dunstan's explanation at the traffic roundtable has demonstrated to the satisfaction of the Committee that the two right turn lanes on the northern approach to IN-13 provide significant additional capacity for the intersection, and any congestion on the onramp can be managed by adjustments to the traffic signal phasing, and/or minor modifications to the onramp geometry.

On that basis, the Committee is confident that IN-13 will operate to an acceptable level and will not be a constraint on the development of Stage 1. Intersection IN-13 may be able to accommodate more development than that allowed for in Stage 1, but that has not been demonstrated.

(v) Conclusions

The Committee concludes:

- The existing capacity of IN-13 is sufficient to allow for the development in the VPA's proposed Stage 1, possibly more.
- There is no justification to reduce the amount of development in Stage 1 based on capacity constraints of intersection IN-13.

3.4 Other gateway infrastructure

(i) The issue

The issue is:

- whether the remaining gateway infrastructure items identified for each stage are appropriate.

(ii) Evidence and submissions

The Lecky Road bridge

The VPA explained the Lecky Road bridge (BR-01) will provide a road link between the residential communities in Officer South and the CREP, as well as access to the employment areas in Officer South from the east. The VPA's proposed Staging Plan shows it being delivered as part of Stage 1.

Parklea submitted BR-01 should be delivered as part of Stage 1, and the staging controls should require this (which they currently do not). It noted Mr Woodland's evidence that both BR-01 and PB-02 are critical to the long term success of the Officer South residential neighbourhood, and essential to achieving government policy on land use integration, 20 minute neighbourhoods and active transport. It submitted if the residential precincts in Officer South and the CREP are not connected, each residential area will be isolated and without access to the range of services and facilities residents would expect.

Parklea considered the staging controls provide no certainty or mechanism for BR-01 to be delivered. It noted:

- BR-01 cannot be delivered by developers in the residential parts of the CREP, as permits have already issued for most of the residential area
- developers in Stage 2 of Officer South cannot deliver it, as the staging controls don't allow permits for Stage 2 to be granted with conditions requiring its delivery
- in any event, there is little to no nexus between the need for BR-01 and industrial development in Stage 2.

YourLand submitted neither BR-01, nor any other key road upgrades, are required before development can progress in Stage 1 and there is no traffic engineering evidence to suggest otherwise. It agreed there is an ultimate need for BR-01, to enable connectivity with the CREP. However, before Stage 1 has developed, the main factors requiring connectivity will not be in place. It submitted:

- there is no need for residents in the CREP to access community services in Officer South until those services are delivered as part of Stage 1
- the Kaduna Park NAC will be closer to the CREP catchment than the proposed Officer South LTC, which will further reduce the need for vehicle trips from the CREP into Officer South.

YourLand opposed Parklea's proposal to require BR-01 to be delivered as part of Stage 1 (rather than as a pre-condition to development in Stage 2), noting that:

- Parklea's own traffic expert (Mr Walsh) did not say BR-01 is required before Stage 1 can proceed (and in any event he has not done the work to be able to conclude this)
- Mr Woodland highlighted the importance of BR-01, but did not say it needed to be delivered before Stage 1 is complete
- Parklea's own submissions and evidence underscore the importance of BR-01 being built for the success of the CREP
- BR-01 is located on Parklea land on both sides of the creek and is 50 per cent apportioned to the CREP, so if its delivery is as critical as Parklea say it is, Parklea has every opportunity to build it.

Development Victoria relied on Ms Dunstan's evidence that the bridge would provide limited benefit to Stage 1, as until the Kaduna Park NAC is constructed there is no destination in the CREP that Officer South residents are likely to want to visit.

The Thompsons Road east bridge

Parklea submitted that the staging controls (if they operate as intended) do not allow BR-02 to be delivered until the Stage 1 gateway infrastructure items (IN-13 and BR-01) are constructed, and there is no certainty as to when this might occur. It submitted:

Parklea can deliver BR-02 and currently plans to do so (assuming it is permitted), as it works through development of the adjacent land in CREP. This outcome should be supported and encouraged by the planning controls for this PSP.

Intersection IN-05

Intersection IN-05 is the intersection of Officer Road South and Lecky Road. It sits on the border between Stages 1 and 2. The VPA's proposed Staging Plan shows:

- the northern and eastern legs being delivered Stage 1
- the intersection itself and the southern leg being delivered in Stage 2
- the western leg being delivered in Stage 3.

In his evidence for the VPA, Mr Walley noted the VPA's Stage 1 includes commercial land to the south of Lecky Road, as well as the Lecky Road bridge (BR-01). He stated that in the absence of IN-05, traffic moving between Officer South Road and Lecky Road would have to rely on the residential connector street through the Village sub-precinct, which has a target daily volume of 12,000 vehicles and will pass one (potentially two) school sites and the LTC. Mr Walley added that the GHD modelling indicates the commercial land south of Lecky Road would generate in the order of 10-11,000 vehicles per day when fully developed, including a higher proportion of heavy vehicles (given the land uses permitted in the Commercial 2 Zone). Mr Walley concluded:

To avoid excessive traffic volumes and heavy vehicles relying on the residential connector street through the residential sub-precinct, delivery, or partial delivery, of IN-05 should be included within Stage 1 to link Officer South Road and Lecky Road east.

The traffic Joint Expert Statement records that with the exception of Mr Humphreys (who considered this issue outside his scope), all experts agreed that IN-05 should be delivered as part of Stage 1.

Cardinia's proposed matching of gateway infrastructure to stages

Cardinia's alternative staging plan provided for an alternative matching of gateway infrastructure items with stages of development:

- delivery of the upgraded IN-13, and the Thompsons Road bridges (BR-02 and BR-04) as part of Stage 1, with timing dependant on traffic demand
- delivery of the Stage 1 infrastructure plus the Lecky Road bridge (BR-01) before any permits are issued for Stage 2
- delivery of the Stage 1 and Stage 2 infrastructure plus the Grices Road bridge (BR-03) before any permits are issued for Stage 3.

(iii) Discussion

As noted in Chapter 3.2, the Committee has found :

- no clear link between the gateway infrastructure items 'matched' to each stage and the need to provide those items to support development in that stage
- no explanation whether the gateway infrastructure items are needed before any development in the relevant stage can proceed, or whether some level of development may be acceptable before the item is delivered
- no supporting information to explain why the gateway infrastructure items need to be delivered in the order specified in the proposed Staging Plan.

There is no empirical demonstration (through modelling) of why each infrastructure item is required to unlock development in the relevant stage, or what the consequences would be for traffic congestion if the particular stage was allowed to develop (or how far) without the matched infrastructure items being in place.

That aside, there initially appears to be some geographic logic to matching infrastructure to stages. With the exception of IN-05, the Staging Plan indicates that the infrastructure items are to be delivered as part of the stage in which they are located. However, the staging controls do not actually require the items to be delivered as part of the stage in which they are located. Rather, the controls require the items to be delivered as a pre-condition to development in the next stage proceeding.

There is no clear funding commitment for the State infrastructure items to be delivered by the State. TfV indicated it is not in a position to advise the Committee when funding commitments might be made or when the infrastructure might be delivered. This includes IN-13, which is required to unlock any development in the PSP area beyond Stage 1. It is not clear how long development might have to wait before the State is in a position to deliver IN-13 in its ultimate form. This level of uncertainty is unsatisfactory.

Further, the gateway infrastructure items that are part funded under the ICP are unlikely to be delivered by developers, as permits cannot issue for development in the stage in which the items are located. Instead, the items have to be delivered *before* permits can issue for the relevant stage.

Even if developers were willing to deliver infrastructure, some of which may be located on land they do not own, ahead of when they are able to develop their land, there are obvious practical impediments to this. There is no obvious nexus between the need for infrastructure located in one stage, and development in another (subsequent) stage. Hence, even if permits were able to be issued with conditions requiring the delivery of infrastructure in another part of the precinct (which they are currently not), there is a significant risk they would be unlawful and unenforceable.

Further, there are significant funding constraints that are likely to impede the delivery of the ICP funded gateway infrastructure items. Even if the impediments outlined in the previous paragraph were able to be overcome, developers are unlikely to be able to fund the early delivery of these items, as they will be unable to raise finance if they cannot develop their land. Nor will they be able to raise revenue from early sales. The items could be delivered by Cardinia, but Cardinia is facing a significant funding shortfall under the ICP. Further, the limited funds that can be collected through the ICP are unlikely to be collected for some time, as development in the PSP is not allowed until after the infrastructure items are delivered.

For these reasons, as well as the reasons set out in Chapter 3.2, the Committee does not support the VPA's proposed approach to staging.

Nevertheless, it has considered the evidence and submissions made about the timing of the delivery of specific infrastructure items, and sets out its findings below.

The Lecky Road bridge

There is no evidence supporting the proposition that BR-01 is required to service development in Stage 1. The Committee therefore considers it inappropriate to recommend the staging controls be amended to require BR-01 to be delivered as part of Stage 1.

However, in the absence of such a requirement, Parklea is correct in asserting that there is no certainty as to when or how BR-01 will be delivered, or by whom. This could significantly delay development in Stages 2, 3 and 4.

Development Victoria and YourLand have indicated they do not intend to deliver the bridge. Cardinia faces significant funding constraints in delivering the bridge, as noted above. While the bridge may be located on Parklea land, it is unlikely Parklea would commit to delivering the bridge, as:

- BR-01, while on Parklea land, does not provide direct access to the main developable part of its land in the precinct
- delivery of BR-01 alone would not unlock development of Parklea's land, since IN-13 must also be delivered by the State (and there is no certainty as to when that might happen)
- BR-01 has a significant cost, which is only partly funded under the ICP, and the bulk of those funds cannot be collected until development in Stages 2, 3 and 4 is allowed to proceed (which can't proceed until BR-01 is delivered). It would therefore likely be some time before the funds could be collected to reimburse Parklea for the upfront costs of delivering the bridge.

The Committee is not in a position to resolve this conundrum. Instead, if after completing the strategic work referred to in Chapter 3.2 some form of staging control is found to be warranted, the control must be designed to avoid this (and similar) conundrums.

The Thompsons Road east bridge

The Thompsons Road east bridge (BR-02) further demonstrates the inherent lack of logic in the proposed Staging Plan. Parklea has indicated it is ready and willing to deliver the bridge as part of the development of its land in Stage 2, but it is unable to do so because it cannot seek permits (let alone commence development) of its Stage 2 land until the bridge is in place.

Intersection IN-05

If the intersections are to be depicted on the staging plan as linked to a particular stage (as is shown on the VPA's proposed Staging Plan), it makes no sense to the Committee for IN-05 not to be included

in Stage 1. The evidence of Mr Walley is clear and compelling that significant traffic implications would arise if IN-05 is not delivered as part of Stage 1. There was no evidence or submissions to the contrary.

That said, assuming the VPA chooses to pursue some form of staging control, the Committee sees no benefit in showing any of the intersections on the new staging plan, or colour coding them, unless they are required to be delivered before or as part of a particular stage. This is not the case in the VPA's proposed staging control (except for IN-13), and showing the intersections as colour coded and linked to a particular stage simply causes confusion.

The Committee anticipates the VPA may wish to retain Plan 12 (Infrastructure and Development Staging) in the PSP even if the SCO14 is not applied. If so, the VPA should either remove the intersections from Plan 12 or remove the colour coding linking them to particular stages.

(iv) Conclusions and recommendations

The Committee concludes, assuming Plan 12 is retained in the PSP:

- the intersections should be removed from Plan 12
- if they are retained, the colour coding should be removed that links the intersections to any particular stage
- if, contrary to the Committee's recommendations, intersection IN-05 is to remain linked to any particular stage, it should be linked to (and required to be delivered in) Stage 1.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

- a) If Plan 12 (Infrastructure and Development Staging) is to be retained in the Precinct Structure Plan, amend Plan 12 by:**
 - removing intersections IN-01 to IN-12, or
 - alternatively, removing the colour coded depiction of the intersections which matches them to the proposed stages.
- b) If, contrary to the previous Recommendation, intersections are to remain on Plan 12 and linked to a particular stage of development:**
 - amend Plan 12 to show the whole of intersection IN-05 linked to Stage 1
 - include provisions in either the Precinct Structure Plan or the Urban Growth Zone Schedule 7 to require intersection IN-05 to be delivered in Stage 1.

3.5 A way forward

The Committee has provided some principles and guidance to inform the development of any new staging control by the VPA, should a staging control be found to be warranted.

Several alternative approaches to staging were put to the Committee during the course of the Hearing, including by Cardinia, Parklea, the Best Hooper clients, Mack Property Developments Pty Ltd and Eildon. It is not possible within the Committee's reporting timelines to summarise the alternatives in this report. Nor is the Committee in a position on the material before it to recommend any particular form of alternative staging control, as none of the alternatives were supported by the strategic work and empirical analysis that the Committee considers is required to inform a staging control.

The Committee has turned its mind to how a new staging control might be drafted to address the key principles set out in this Chapter, and has provided a recommended starting point in Appendix F. Appendix F has been informed by the various alternative approaches presented by the parties, and the drafting comments on the VPA's proposed staging control provided by parties, but it will likely need to be adjusted once the strategic work and empirical analysis is completed.

(i) Further strategic work

The VPA should not pursue a staging control unless it is shown to be warranted by further strategic work and empirical analysis that:

- addresses the various strategic issues identified in Chapters 3.2
- demonstrates how the existing capacity of the road network, in particular IN-13, has been maximised in stage 1, as discussed in Chapter 3.3
- as discussed in Chapter 3.4, demonstrates why the gateway infrastructure items identified in the new staging plan:
 - are required to unlock development in each stage, and at what point in the development of that stage
 - need to be delivered in a particular order, if that is in fact the case.

The VPA should adopt the following principles in designing the control only if further strategic work and empirical analysis demonstrates that a staging control is warranted.

(ii) Design principles for any new staging controls

Any new staging control:

- must address the delivery conundrums identified in Chapters 3.2 and 3.4, including the 'catch 22' identified by the Best Hooper clients
- should be as flexible as possible but as prescriptive as necessary
- must provide a framework for decision making
- should be regularly reviewed and updated to respond to changing circumstances
- must ensure an efficient cash flow under the ICP (discussed in more detail in Chapter 6.2).

Flexibility

Given the strategic imperative to facilitate development (particularly employment generating development) in this SSIP, the Committee does not support a mandatory approach to staging unless there is a compelling case – demonstrated by empirical analysis – that particular infrastructure items are required to ensure future development will not have unacceptable outcomes.

Without any such compelling case, any new staging control should be sufficiently flexible to:

- allow out of sequence development where appropriate, by providing discretion to consider alternative solutions to potential traffic congestion through permit applications
- at the very least, allow permit applications to be progressed in advance of the gateway infrastructure items being delivered and operational, should developers choose to do so (although the Committee notes developers may be unwilling to invest in a permit application if there is no guarantee that the permit could be granted and acted on).

The VPA submitted that mandatory controls were acceptable in the context of a regular review mechanism, when the controls could be adjusted to address any implementation issues or unintended consequences (such as stymied development). The Committee does not agree. Mandatory controls must be justified on the basis that unacceptable outcomes would occur without

them – not on the basis that the controls can be reviewed if their implementation turns out to be problematic.

A framework for decision making

Given the Committee recommends any new staging control allows discretion to consider alternative solutions through permit applications, the control should include a framework to guide decisions. The framework should include objectives to be achieved, and decision guidelines to consider when making decisions about allowing development within each stage.

The VPA indicated it intended to provide a framework for decision making to accompany its proposed Staging Plan, but not necessarily in the control itself. It suggested an accompanying practice note or guidance document.

The Committee considers the framework should be included in the control, as this is more transparent and gives the framework statutory force. The Committee has included some suggested purposes, objectives and decision guidelines in Appendix F, but these will likely need to be reshaped to respond to the outcomes of the further strategic work and empirical analysis that needs to be undertaken.

Review

The Committee supports a regular review mechanism in any new staging control, to enable staging to respond to changing circumstances including the delivery of new or upgraded transport infrastructure in the PSP or surrounding area.

The review mechanism should involve a structured and transparent process that sets out:

- the purpose and objectives of the review
- the matters that must be considered in any review, so that the status of critical infrastructure delivery can be readily understood as development in the precinct rolls out (this might include updated transport modelling, updates to available land supply and demand, the status of ‘on the ground’ delivery of development and infrastructure and the like)
- procedural steps for conducting a review, including consultation with relevant agencies and affected landowners
- the following elements, which were provided for in the VPA’s final version of the Incorporated Document:
 - a requirement to review the geographic extent of the control, as well as the content of the staging plan
 - a sunset clause that ends the control if it is not reviewed in accordance with the review mechanism.

There is merit in a staging plan that sits outside the Planning Scheme, so updates to the staging plan do not require a planning scheme amendment. Adding the words ‘as amended from time to time’ as initially proposed by the VPA will not have any practical legal effect. If the plan is in the scheme, a planning scheme amendment will be required to update it. Further, the Practitioners Guide discourages terms in planning schemes that seek to provide for alternative versions, such as ‘as amended from time to time’, ‘as revised’ or ‘as updated’.

While the Committee acknowledges that Ministerial amendments are an option to update a plan that forms part of the Planning Scheme, a far preferable option is to include a mechanism and process in

the control itself that allows the plan to be updated according to a clear framework and with a clear process, but without needing a planning scheme amendment. Appendix F does this.

Some parties submitted the staging plan, and any review of it, should be subject to third party review at VCAT. In the Committee's view, approval of a staging plan is a planning authority role (not a responsible authority role) and so the content of the plan should not be subject to VCAT review. However, the process for reviewing the plan could potentially be subject to VCAT review (similar to the process for reviewing procedural defects in the planning scheme amendment process).

(iii) Other matters to consider

The staging control should consider who the authority should be who determines that gateway infrastructure items have been delivered to its satisfaction, or are no longer required. For example, the Committee queries whether TfV, or the Minister for Planning, should be responsible for determining that local infrastructure items (such as BR-01 and BR-03) have been delivered to its satisfaction, or are no longer required. There will likely be a role for Cardinia to play, either through consultation, or through being the authority that determines whether infrastructure it is responsible for has been delivered to its satisfaction or is no longer required.

(iv) Conclusions

The Committee concludes:

- The VPA should undertake further strategic work and empirical analysis to demonstrate that a staging control is strategically justified before pursuing any alternative form of staging control.
- If the strategic work and empirical analysis demonstrates that some form of staging control is warranted, any new staging control should be prepared in accordance with the design principles set out in this Chapter.

4 Drainage

The location of drainage assets in the Cultural Value Investigation Area is addressed in Chapter 7.3.

4.1 Introduction

(i) What is proposed?

The three catchments

Three DSSs are proposed for the PSP area covering catchments referred to as:

- Stephens Road
- Officer South Road
- Lower Gum Scrub Creek.

Melbourne Water expects the design of the draft DSSs would take a further six months, at which time the draft DSSs would be released for consultation with relevant parties before they are finalised.

Hydrological objectives and performance standards

The overall hydrological objective of the drainage strategy is to ensure there are no adverse impacts on downstream properties compared to pre-2010 levels caused by:

- future development in the Officer South Employment PSP area
- existing development north of the Princes Freeway in Officer, and to the east in the CREP.

The drainage strategy is designed to factor in climate change effects in the 1 per cent Annual Exceedance Probability (AEP) event.

The performance standards are designed to meet Best Practice Environmental Management (BPEM) water quality standards and to ensure there are no additional downstream inundation impacts, duration impacts and flood impacts by applying flow rate and volume controls.

Plan 9 (Integrated Water Management)

The exhibited PSP at Plan 9 (Figure 8 below) outlines an Integrated Water Management strategy which includes the indicative size and location of drainage scheme assets including retarding basins and wetlands, waterway reserves and proposed DSS drainage outfalls. The PSP also includes several requirements and guidelines with respect to the delivery of drainage assets.

DSS Asset Overview Plan

The indicative drainage scheme shown on Plan 9 is based on a preliminary DSS Asset Overview Plan prepared by Melbourne Water (Figure 9 below), which shows the DSS assets for each of the three catchments.

The Cardinia Outfall Drain diversion system

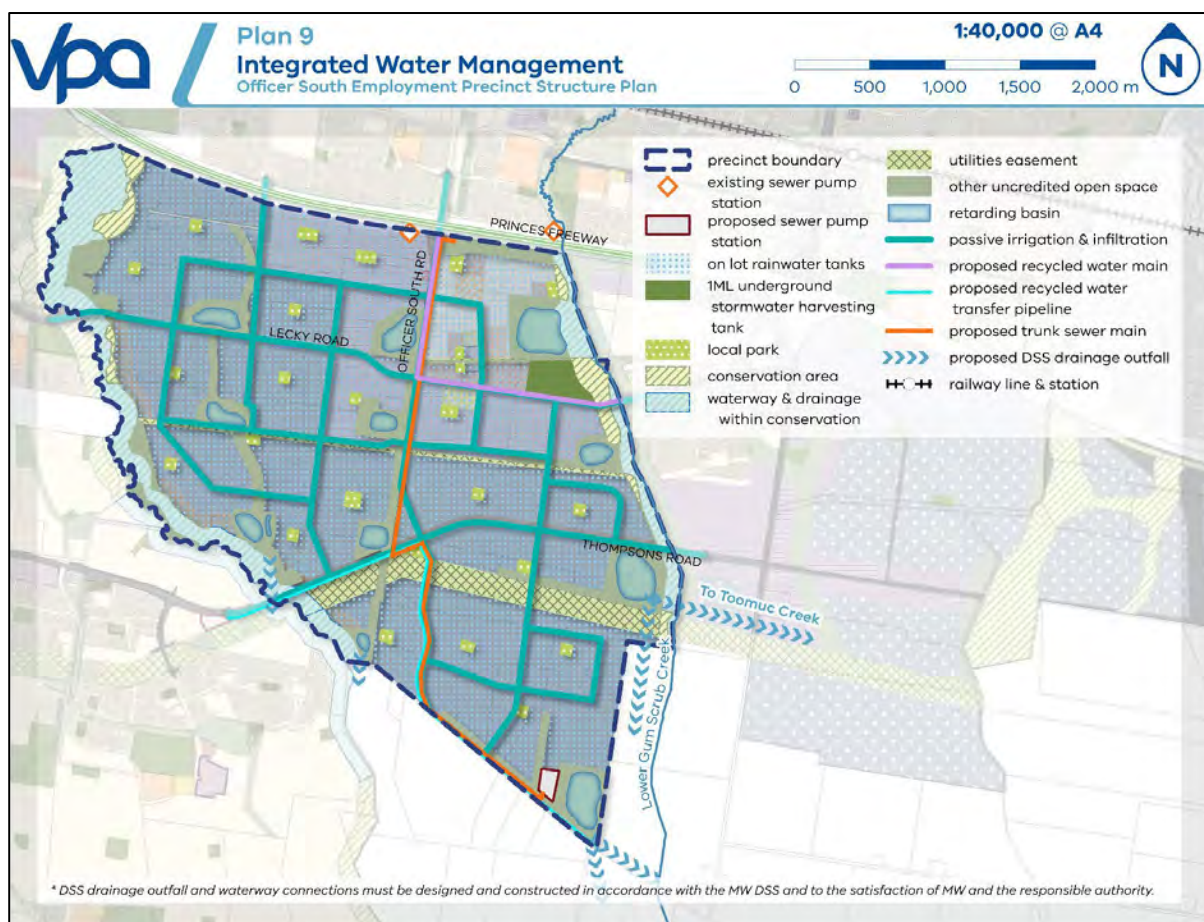
Melbourne Water proposes a diversion system that will augment the Lower Gum Scrub Creek DSS. The diversion system (which requires works outside the PSP area) will divert outflows from the Lower Gum Scrub Creek outfall generally eastward to ultimately reach the Cardinia Outfall Drain which in turn flows to Westernport Bay. Preliminary work for the diversion system has been done. The detailed design is the subject of investigation and design work. Melbourne Water has retained Alluvium to undertake this work.

The DSS Investigation Area

The Place Based Plan (see Figure 3) shows a 'DSS Investigation Area' surrounding the APA City Gate Terminal at 330 Officer South Road. A note on Plan 3 indicates:

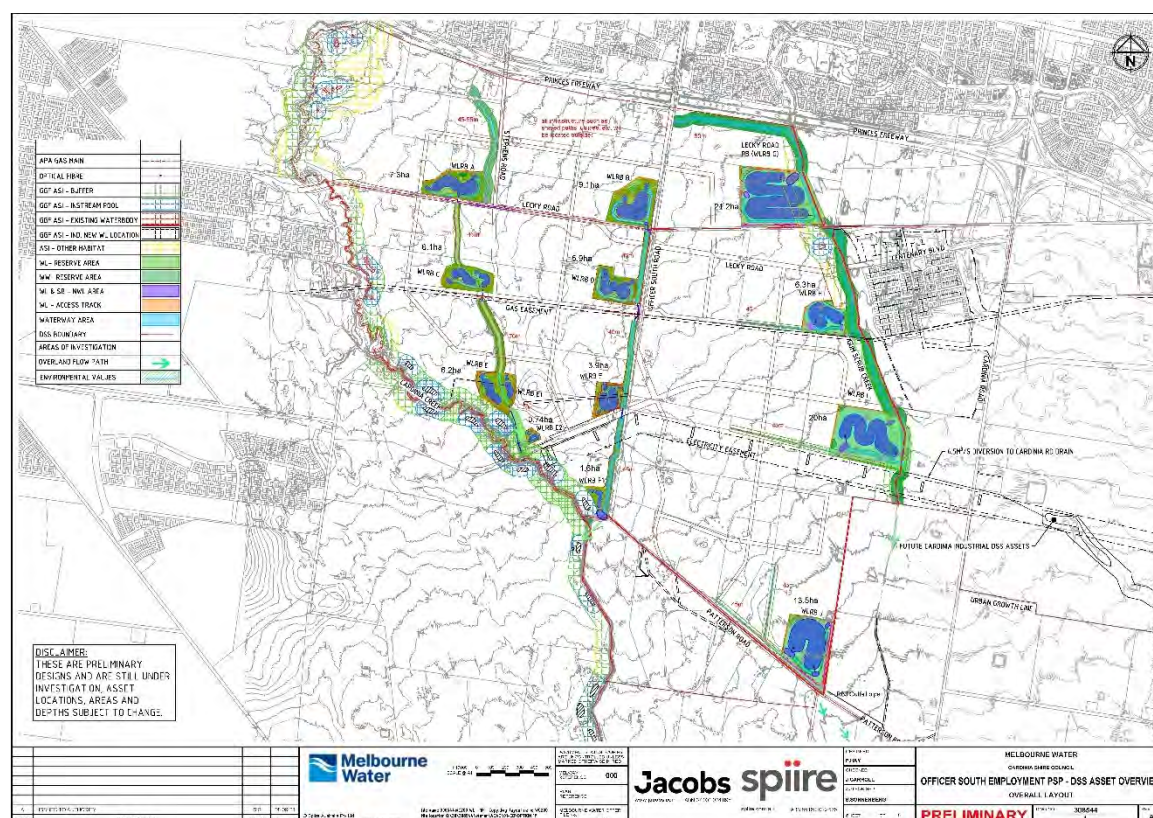
DSS assets within this area may be subject to change as the [Melbourne Water] DSS is finalised.

Figure 8 PSP Plan 9 (Integrated Water Management)



Source: Exhibited PSP

Figure 9 Indicative DSS Asset Overview Plan



Source: Document 30

(ii) Resolved issues

Resolved issues are:

- the drainage system should be designed to:
 - ensure no additional downstream inundation impacts, duration impacts and flood impacts by applying flow rate and volume control management measures
 - meet BPEM water quality standards
 - achieve pre-2010 volumes
 - factor in climate change effects in the 1 per cent AEP event
- development in the Stephens Road and Officer South Road catchments should not be held back before delivering the relevant DSS
- the PSP does not need to specify the order in which the drainage works are delivered.

4.2 Threshold and overarching issues

4.2.1 The issues

Submissions and evidence raised a number of threshold and overarching drainage issues:

- whether the objectives and performance standards for the drainage strategy are appropriate and achievable
- whether the drainage strategy is sufficiently resolved to approve the PSP
- whether there is sufficient information to support the proposed drainage strategy
- whether the PSP provides sufficient flexibility in relation to drainage assets
- whether alternative designs for particular drainage assets should be reflected in the PSP.

4.2.2 Drainage strategy objectives and performance standards

(i) Evidence and submissions

Melbourne Water submitted the overall objective of the drainage strategy is to ensure no adverse impact on downstream properties, compared to pre-2010 levels (before Officer and the CREP were developed). This includes mitigating the existing effects of development north of the freeway (in Officer) and to the east (in the CREP), and ensuring development in Officer South does not exacerbate downstream flooding issues. The performance standards for stormwater volumes, flow rates, flood duration and water quality are designed to achieve this overall objective.

Melbourne Water submitted one of the key features of the concept design for the Lower Gum Scrub Creek DSS (which is reflected in the PSP requirements) is volume controls (in addition to the 'usual' flow rate and water quality controls). By way of context, Melbourne Water outlined that:

- flows from Officer are not managed and treated within the Officer PSP area due to historic catchment planning decisions that rely on assets south of the freeway (in Officer South) to perform this function
- the prevailing topography means that stormwater from Officer flows under the freeway to Officer South and beyond, in part via Lower Gum Scrub Creek
- the development of Officer has corresponded with increased inundation, and increased duration of inundation, of downstream properties in the Koo Wee Rup Flood Protection District (KWRFPD)
- the increased inundation frequency and duration downstream is caused by the additional stormwater runoff from Officer filling the available capacity of the downstream levee system that conveys Lower Gum Scrub Creek flows to Westernport Bay
- as a result, properties in the KWRFPD are unable to drain into the levee system and so become inundated in relatively minor events, and remain inundated for longer than they did before development in Officer commenced.

Melbourne Water submitted the drainage scheme's performance standards and design have responded to this legacy issue, and that existing conditions downstream will worsen without detention and volume control measures in Officer South, specifically the planned assets in the Lower Gum Scrub Creek catchment. The online assets (WLRB G and the associated waterway and WLRB I) are the critical assets to alleviate downstream conditions.

Mr Carroll did the preliminary design work on the drainage strategy and gave drainage evidence for Melbourne Water. He outlined the key drainage objectives for the PSP as follows:

- to mitigate the flood impacts of the PSP and upstream catchments (particularly the Officer PSP area) on downstream land
- to deliver a drainage strategy designed for a 1 per cent AEP event plus climate change
- to ensure no increase in flows at the DSS outfalls based on 2010 levels
- to protect and minimise impacts on existing environmental and waterway values and to protect Growling Grass Frog habitat and conservation zones
- to meet BPEM standards for phosphorous and nitrogen and exceed BPEM standards for sediment
- to ensure constructed waterways provide safe drainage and flood protection and incorporate environmental, cultural and amenity values
- to make up for shortfalls in stormwater quality from the upstream catchments as much as practicable

- to ensure constructability to meet the asset operational requirements of the relevant authorities
- to achieve the principles set out in Melbourne Water's *Principles for provision of waterway and drainage services for urban growth*.

The drainage Joint Expert Statement (Document 150) indicates the experts agreed with some, but not all, of these objectives. They agreed that given a lack of clarity surrounding the hydrological performance standards in the drainage strategy documentation, a table should be prepared to provide clarity. The Joint Expert Statement included Table 1 which is reproduced in Figure 10.

Figure 10 Table developed by the drainage experts to record the hydrological objectives of the drainage strategy

Outfall Node	Pre-developed Flow Targets (2010) (matching flood flow rate estimates)				Pre-developed Volume Targets					
					Flood Event Volume (matching flood event volume estimates)				Volumetric Reduction MAR [ML/year]	
	50% AEP	10% AEP	1% AEP	1% AEP + CC*	50% AEP	10% AEP	1% AEP	1% AEP + CC		
A	Applied	Applied	Applied	Applied	Not Applied	Not Applied	Not Applied	Not Applied	No specific targets for DSS assets. Refer to IWMP for property-specific requirements.	
B	Applied	Applied	Applied	Applied	Not Applied	Not Applied	Not Applied	Not Applied		
C	Applied	Applied	Applied	Applied	Not Applied	Not Applied	Not Applied	Not Applied		
D	Applied	Applied	Applied	Applied	Not Applied	Not Applied	Not Applied	Not Applied		
E	Applied	Applied	Applied	Applied	Not Applied	Not Applied	Not Applied	Not Applied		
F	Applied	Applied	Applied	Applied	Applied	Applied	Applied	Applied		
Diversion	N/A				Diverts 4.5 m³/s to Cardinia Road Drain/Toomuc Creek					

*To be compared against the relevant post-developed AEP including CC

Source: Document 150, Table 1

Melbourne Water did not adopt Table 1 but submitted this information will be included in the proposed consolidated drainage strategy report (discussed in Chapter 4.2.4 below).

(ii) Discussion

The Committee considers the flow rate, volume control, flood duration and water quality standards for the drainage strategy are generally appropriate. If these standards are met, the overall objective of the drainage strategy can be achieved.

Key to the Committee's conclusion is the assumption that the performance standards can be met.

Melbourne Water is yet to finalise the three DSSs for the PSP area. In developing these DSSs, Melbourne Water will need to demonstrate (with flood modelling) how the DSSs will meet the objectives and performance standards it has articulated. The need for modelling is discussed in more detail in Chapter 4.2.3.

It would be inappropriate to include Table 1 in the PSP. The proper place for the hydrological objectives and performance standards is in the consolidated background drainage report (discussed in Chapter 4.2.4). Information in relation to performance standards could be in the form of Table 1 as proposed by the Joint Expert Statement, or something similar, but it will be important that the consolidated background report also sets out the overall objectives of the drainage strategy. Including this information (and the supporting modelling) in the consolidated background report should give some comfort to the downstream landowners that the strategy can deliver on those objectives.

(iii) Conclusions

The Committee concludes:

- The overall objectives and performance standards of the drainage scheme are generally appropriate.
- It will be critical that detention and volume control standards in particular are met so that downstream conditions are not made worse by the development of Officer South.
- Melbourne Water should include the objectives and performance standards in the proposed consolidated drainage strategy report, as well as supporting modelling demonstrating that the objectives and performance standards can be met.

4.2.3 Whether the drainage strategy is sufficiently resolved

(i) Evidence and submissions

Melbourne Water noted it was common practice for PSPs to be adopted before the relevant DSSs are finalised, and the drainage schemes and assets included in PSPs are often based on preliminary drainage asset designs which can be (and often are) modified at the planning permit application stage subject to the agreement of the relevant authorities.

It submitted the drainage concept design reflected in the PSP is strategically justified, and is a suitable and workable drainage solution designed to ensure offsite impacts are acceptable. Accordingly, subject to some refinements set out in its Day 1 version of the PSP and UGZ7 (which were largely picked up in the VPA's final versions), the Committee should find that the drainage elements of the PSP and Amendment are acceptable.

At the Hearing, Melbourne Water explained the DSS Asset Overview Plan is based on extensive investigation, analysis and preliminary design work. This work is documented in a series of background technical reports. Melbourne Water stressed that the scheme and assets shown on the DSS Asset Overview Plan are based on high level preliminary design work and the location and design of the assets will be subject to change as work progresses on the design of the DSSs.

Detailed submissions were made at the Hearing by three downstream farming property owners (Sherrill Willmott, Simon Beard and Darcsfield Co-operative) to the effect that:

- the flooding impacts on downstream properties had become worse in the last 10 years, and they had experienced increased flooding, and increased duration of flooding, with less rainfall
- they attributed this to:
 - urban development in Officer and the CREP
 - a failure to properly maintain downstream creeks and drains and the levee system
 - thick vegetation in Toomuc Creek on a neighbouring property
- they were concerned about biosecurity and water quality impacts from flood waters on their properties and pastures
- the regular flooding of downstream farms is not acceptable and they will not survive unless the current flooding situation is improved in terms of both the duration and extent of flooding
- while they generally supported the proposed diversion system:
 - they had concerns about the capacity of Toomuc Creek to take additional flows (particularly given the thick vegetation on the neighbouring property)

- flows in the Officer South Drain should be restored to previous levels (prior to development of Officer and the CREP)
- a complete cleanout and upgrade of Lower Gum Scrub Creek, Toomuc Creek, Deep Creek and the Cardinia Outfall Drain all the way to Westernport Bay should be done as part of the DSSs for Officer and Officer South.

The downstream landowners tabled photographs and videos illustrating the extent and impact of recent flooding events.

During the drainage roundtable, Darcsfield asked Melbourne Water several questions including:

- What are Melbourne Water's intentions to fix Toomuc Creek so that it will handle the discharge from the proposed diversion system, plus the CREP when developed, so that flood water does not overflow from Toomuc Creek and Lower Gum Scrub Creek causing road blockages for at least two days?
- Has Melbourne Water seen the thick vegetation in Lower Gum Scrub Creek on the east side of Cardinia Road shown in the Darcsfield and Willmott submissions, and what does it propose to do about it?

Melbourne Water understood the issue to be that Darcsfield and other downstream landowners were challenging Melbourne Water's position that the Toomuc Creek-Deep Creek outfall system will not overtop until around a 10 per cent AEP event, based on their observations that Toomuc Creek has overtopped four times in the past four years. Melbourne Water responded that an AEP represents a probability – a 10 per cent AEP event can occur several times in any one year, or over consecutive years. In these cases, the Toomuc Creek-Deep Creek system may already have been nearing capacity due to multiple rainfall events in the lead-up to the main event that caused the overtopping.

Melbourne Water viewed the video provided by Darcsfield showing inundation of the area south of the PSP and break out flows into Wenn Road from the Lower Gum Scrub Creek carrier drain. It responded as follows:

- Melbourne Water is aware of the maintenance required in desilting and vegetation removal to ensure the effective operation of the Cardinia Outfall Drain system.
- It considered this to be part of its ongoing maintenance program for the KWRFPD rather than 'a future town planning matter'.
- Further investigation and the Alluvium study will reconfirm the capacity of the Cardinia Outfall Drain system to take the intended stormwater flows.
- This information will be used to determine the required sizes of further outfall connections to the Cardinia Outfall Drain and to convey the flows satisfactorily through the Cardinia Outfall Drain system.

With regard to the vegetation in the Lower Gum Scrub Creek, Melbourne Water confirmed the vegetated bushland area is protected by a Trust for Nature covenant which limits the amount of clearance that can be done. It noted there is a high flow bypass channel which takes most of the flows in a large event, and regular maintenance of this high flow channel by Melbourne Water is of greater benefit for flood flow conveyance compared to works within the creek channel.

The landowners challenged Melbourne Water's characterisation of the bypass channel and the assertion that it was regularly maintained.

Mr McLean (who gave drainage evidence for Cardinia) expressed the view that:

...hydraulic modelling and flood mapping of the fully developed precinct structure plan conditions is required to demonstrate the effectiveness of the proposed drainage scheme

assets [and that] diversions do not compound flooding impacts to downstream landowners outside the precinct.

Melbourne Water confirmed hydraulic modelling of the downstream catchments would be included in the consolidated drainage strategy report that will be prepared for the DSSs. It did not consider it necessary for the modelling to be completed before the PSP being approved, as:

- the proposed assets along Lower Gum Scrub Creek have been sized to control flows within the PSP to the historic (pre-2010) flows
- the sizing of the assets in the Lower Gum Scrub Creek catchment will not change as a result of the hydraulic modelling
- the diversion system to the Cardinia Outfall Drain will be completed as part of the work being done by Alluvium.

Parklea submitted:

- no single document has been prepared that provides a basis for and supports the proposed drainage strategy as shown on Plan 9 and the DSS Asset Overview Plan
- on the information before the Committee, it is not possible to confirm the drainage strategy will operate as intended, or that the drainage reserve sizes provided for in the PSP are adequate
- modelling must be undertaken to confirm the ‘no additional impacts’ standard can be achieved before the drainage asset sizes and land take in the PSP and ICP can be confirmed to a reasonable level (this was agreed by Melbourne Water)
- a consolidated drainage strategy report must be prepared which clearly sets the baseline against which future permit applications can be assessed
- it is critical that this additional work (both the modelling and the consolidated report) be done as soon as possible, because the land takes for drainage assets recorded in the PSP and ICP could not be finalised without that work.

Cardinia submitted the DSSs should be finalised or at least progressed to a more certain state before the PSP and ICP are approved. It added:

While it may be true that in times past, panels and advisory committees have not seen the necessity for this, in the ICP context, and having regard to the Gum Scrub Creek issues, because of the implications, that position ought be reconsidered.

Mr Carroll noted the drainage reserves as shown in the PSP are based on designs that are more advanced than typical concept designs, but generally not detailed enough to meet Melbourne Water’s functional design standards. He considered that:

This level [of detail] is deemed appropriate for a PSP since it is a high level document and there are many unknowns, such as urban design layouts for specific properties. It has been assumed that the asset shapes and sizes will be refined by developers once they apply for permit.

There were wide ranging discussions at the drainage roundtable on many issues of detail around the drainage scheme, the feasibility of the meeting the scheme’s objectives and the criticality of delivering key assets such as the diversion system. However, in response to specific questions from the Committee, there was general agreement among the experts that there were no fundamental problems with the drainage strategy as set out in Melbourne Water’s DSS Asset Overview Plan, and no critical items were missing from that Plan. Mr Swan expressed the opinion in his written evidence for YourLand that the PSP provides “*a generally reasonable approach to drainage, with appropriately sized treatments included from the DSS*”. Other experts raised issues with the size of specific drainage assets and the ability of Melbourne Water to deliver the critical diversion system in a timely manner

(discussed in the following chapters), but none suggested that the drainage strategy was fundamentally flawed.

(ii) Discussion

The experience of the Committee is that PSPs are often adopted before the relevant DSS is finalised, particularly when a PSP is considered in advance of an ICP.

The threshold question is whether the drainage strategy proposed by Melbourne Water for Officer South is sufficiently resolved for the purposes of the PSP.

In the Committee's view, the PSP and ICP should have been deferred until the drainage strategy was further resolved. It would likely have led to a shorter Hearing, without the need for 10 drainage expert reports and many days of discussion on drainage issues. It would have provided more certainty that the drainage strategy could achieve the objectives and standards it is being designed to achieve, and that the land take for drainage assets recorded in both the PSP and the ICP is likely to be relatively accurate.

That said, on balance, the Committee considers the drainage strategy is not so preliminary as to warrant holding the PSP and ICP back. While questions were raised with respect to the size and design of some assets, key aspects have been agreed including the objectives of the strategy. No experts considered there were fundamental problems with the proposed strategy, or that any critical elements were missing.

The detailed and informative submissions from the three downstream landowners were of considerable assistance to the Committee. These submitters provided:

- an insightful history of their experiences with the frequency and duration of flood events in recent years since development commenced in the surrounding area, particularly in Officer
- a helpful explanation of the drainage system downstream of the PSP area and the interconnectivity between the key parts of the drainage system.

Melbourne Water and the VPA have acknowledged the flood impacts on downstream properties of urban development in Officer, and have adopted clear objectives for the drainage strategy to limit downstream flows to pre-2010 conditions. The strategy includes standards for flow rates, water quality, flood duration and (for the Lower Gum Scrub Creek catchment) volume controls. Volume controls are unusual for a drainage strategy or DSS.

The strategy's overall objectives are to mitigate the impacts of flood waters from existing development north of the freeway, and to control flows from the PSP area, to ensure conditions on downstream properties are not exacerbated. These reflect the reasonable expectations of downstream property owners, and it is incumbent on Melbourne Water as the drainage authority, and the developers of land in Officer South, to ensure that the design and implementation of the drainage strategy and drainage assets meets these objectives.

Some experts have questioned whether it can be concluded that the drainage objectives will be met in the absence of detailed flood modelling of post development conditions on downstream properties. Downstream landowners are understandably concerned over the impacts of development of Officer South on their land, and are somewhat sceptical that the proposed drainage strategy will address current flood impacts and improve conditions.

The modelling will be critical in demonstrating that the drainage strategy will deliver the key objective of 'no additional impacts' on downstream properties. It will also be needed to confirm the location

and size of critical drainage assets both within and outside the PSP area, and must therefore be completed before (in particular) the Lower Gum Scrub Creek DSS is finalised.

The Committee notes Mr Carroll's advice that the drainage assets are designed to somewhere between a concept and a functional level, and Melbourne Water's opinion that the strategy is sufficiently resolved to have informed the basic layout and sizes of the drainage assets as shown in the PSP. Melbourne Water confirmed that the drainage assets as shown in the PSP have been conservatively sized, and Melbourne Water is confident that they are appropriately sized to achieve the strategy's overall objectives and performance standards.

On that basis, the Committee is satisfied that notwithstanding the need for modelling to confirm the strategy's objectives and performance standards can be met, the drainage strategy is sufficiently developed to allow the PSP and ICP to progress.

The Committee accepts that asset shapes and sizes may be refined through the finalisation of the three DSSs, and potentially further refined by developers at the planning subdivision application stage (with the agreement of Melbourne Water). This will require flexibility in the PSP and associated planning controls in relation to drainage assets, which is discussed in Chapter 4.2.5. The Committee acknowledges the potential for drainage assets to change in their sizes and locations, and that this will have impacts on the property specific land budgets. This is discussed in more detail in Chapter 6.8.

(iii) Conclusions

The Committee concludes:

- The drainage strategy is sufficiently resolved to enable the PSP to progress, even though the PSP was, in the Committee's view, brought on too early given the preliminary state of the drainage strategy.
- Additional flood modelling of the post-development conditions on properties downstream of the PSP area will be critical to:
 - demonstrate that the proposed drainage strategy objectives and performance standards can be achieved
 - confirm the location and size of drainage assets for the purpose of finalising the DSSs.

4.2.4 Supporting information

This issue is related to the issue discussed in Chapter 4.2.3.

(i) Evidence and submissions

Several parties and experts were concerned about the lack of a single supporting document informing the drainage strategy and providing performance criteria for individual assets. They considered a consolidated drainage strategy report should be prepared before the PSP is approved. Concerns included:

- Mr Mag (who gave drainage evidence for Parklea) stated he could not form an opinion on the appropriateness of the drainage strategy as the information available is not complete or consistent across all documents.
- Mr McLean (for Cardinia) recommended the preparation of an overall consolidated drainage report, informed by the flood modelling yet to be completed.
- Ms Barich (for Development Victoria and Mack Property), Mr Mathios (for the Best Hooper clients), Mr Watters (for Galileo), Mr Swan (for YourLand) and Mr Mag all supported the

production of a consolidated document containing specific performance requirements as part of the PSP process.

- As noted above, Parklea submitted it was imperative that a consolidated drainage strategy report be prepared which clearly sets the baseline against which future permit applications can be assessed.

Melbourne Water noted the concerns, and responded that while it agrees a background report should be prepared, this should be done as part of the process for finalising the DSSs. Melbourne Water did not accept that the level of material available at the current stage of the planning process is insufficient to progress the PSP. It submitted:

Melbourne Water has provided a significant amount of information in numerous background reports as part of Public Exhibition and considers there is adequate information available across these documents.

Melbourne Water confirmed its intention to produce a consolidated drainage strategy report which will form part of the consultation package provided to landowners when it undertakes consultation on the DSSs pursuant to the *Water Act 1989*.

YourLand agreed with Melbourne Water that there is sufficient information to conclude that an appropriate envelope for drainage assets has been provided to enable the DSS to be finalised following the PSP. Mr Carroll also agreed with Melbourne Water's position.

(ii) Discussion

There is a wealth of background evaluation and analysis that provides the basis of the drainage strategy. The Committee acknowledges the concerns of many of the experts that the information in its current form is difficult to navigate, and that there are inconsistencies between some of the information and data in these background reports.

There is general agreement that a consolidated drainage background report should be prepared to explain the basis of the drainage strategy and to assist Melbourne Water and council officers in future in assessing whether development applications are generally in accordance with the PSP's drainage requirements. Melbourne Water has agreed to prepare this consolidated report as part of the package of information to be used in finalising the DSSs. The background report will essentially draw together the information and data already available into one report. It should therefore not be an onerous nor time consuming task.

The Committee agrees that a consolidated background report is essential to underpin the DSSs. It does not, however, consider this needs to be done before the PSP is progressed.

That said, the consolidated background report should be prepared as soon as practicable, and it should not be held back as part of the process of consulting on and finalising the DSSs. If the PSP is gazetted before the DSSs are finalised (which is a possibility on the information before the Committee), permit applications may be lodged before the DSSs are finalised. The consolidated report needs to be available to assist in assessing permit applications against the drainage requirements of the PSP. If the report is prepared before the PSP and ICP are gazetted, the land takes in the PSP and ICP should be updated accordingly.

(iii) Conclusions

The Committee concludes:

- The consolidated background report does not need to be finalised before the PSP is finalised, but should be:
 - prepared by Melbourne Water as soon as practicable
 - available by the time the PSP is approved and gazetted and permit applications are able to be made in the PSP area.

4.2.5 Flexibility

(i) Evidence and submissions

Several parties and experts were concerned the PSP (and ICP, through the property specific land budgets) did not provide sufficient flexibility to allow drainage assets to be reduced in size as detailed designs are finalised. This was of particular concern because of the lack of resolution of the overall drainage strategy and the DSSs.

Melbourne Water submitted the role of the PSP and ICP is to:

- identify land that is expected to be required for drainage assets
- ensure a statutory mechanism that allows permit applicants, Melbourne Water and council planners to adjust to changes in land required for drainage assets where necessary.

It submitted the land area identified in a PSP for drainage purposes should be conservative, and sufficient to guarantee the assets can be delivered within that area. It submitted:

... through the application of the applied zones via the UGZ Schedule and the principles of generally in accordance, the PSP provides a degree of flexibility to respond to final designs and asset footprints.

Melbourne Water tabled a list of examples of where it has approved a reduction in the size of drainage assets compared to those shown in the respective gazetted PSPs (Document 228).

Cardinia submitted the concept of general accordance is a clearly established principle and allows flexibility and would ordinarily allow scope for moving assets around. It submitted the identification of land in the PSP for drainage assets:

... should err on the more conservative side; namely that, for example, retarding basins should not be tightly designed as it is always easier to use excess land for development rather than trying to claim back net developable area for an infrastructure asset.

In the drainage roundtable, the experts (except for Mr Carroll) advised that in their experience, Melbourne Water or councils rarely agree to downsize drainage assets at the permit application stage.

Parklea submitted:

- Experience shows the concept of 'generally in accordance with' does not provide an adequate level of flexibility with respect to drainage assets, as in practice both Melbourne Water officers and Council officers are not often prepared to depart from the asset sizes contained in the PSP.
- The examples provided by Melbourne Water are of little assistance to the Committee, as:
 - the majority are for very early PSPs where DSSs were completed years later
 - the two most recent examples both included consolidated drainage reports as background documents for the relevant PSPs (unlike for Officer South), allowing for changes to assets to be justified against the drainage strategy reports.

Parklea and Abiwood both provided revised wording for the note on Plan 9 to ensure greater flexibility in the resizing of drainage assets. Abiwood provided an accompanying guideline for inclusion in the PSP:

The drainage assets as shown on Plan 9 are indicative only and subject to change through detailed design and, as a consequence, changes may be made to the size or location of such assets with the approval of Melbourne Water and the responsible authority.

Melbourne Water responded that assertions from developers about insufficient flexibility were not backed up by any specific examples, and *“the suggestion that Melbourne Water’s examples are of little assistance is emphatically rejected”*. It submitted Abiwood’s proposed guideline was not particularly problematic, but the substance of it was already addressed in R31 and the note on Plan 9. Melbourne Water suggested that if the Committee thought it necessary then further wording to the effect of Abiwood’s guideline could be added to R31.

(ii) Discussion

It is particularly important in the case of Officer South that the PSP is sufficiently flexible for drainage assets to be resized or relocated during the detailed design process. Adjustments to drainage assets may well be required, given:

- the design of the drainage strategy remains at a preliminary stage
- the strategy is not yet supported by a consolidated drainage report, or modelling demonstrating that the strategy’s objectives and performance standards can be met
- the Lower Gum Scrub Creek catchment relies on downstream works (in the form of the diversion system discussed in Chapter 4.3) which have not yet been fully designed or constructed.

The Committee agrees with Cardinia and Melbourne Water that the size of the assets as reflected in the PSP should be conservative, particularly given the drainage assets shown in the PSP are based on preliminary designs. In the words of Cardinia, *“it is easier to give land back than take extra land at the permit approval stage”*.

The Committee agrees with Cardinia that the ‘generally in accordance with’ principle is well established in assessing planning permit applications against PSPs. In theory, it should allow for drainage assets to be both relocated and reduced in size during the permit application process, when detailed designs are finalised.

Parties and experts were not able to provide examples which supported their assertion that Melbourne Water and council officers rarely agree to reduce the size of drainage assets. Melbourne Water, on the other hand, provided examples of where it had agreed to changes to drainage assets in response to planning permit applications.

The note on Plan 9 in the VPA’s final version of the PSP states that drainage asset designs are subject to detailed design to the satisfaction of Melbourne Water and the responsible authority. This perhaps provides more flexibility than the note on the exhibited version. However, as the Officer South drainage strategy is at a preliminary stage, and to give more comfort to landowners that changes can be made as detailed design progresses, the Committee supports:

- further amending the note on Plan 9 to make that flexibility more explicit
- including further words in R31 along the lines of the guideline suggested by Abiwood.

(iii) Conclusions and recommendation

The Committee concludes:

- The ‘generally in accordance with’ principle can and should be applied by Melbourne Water and council officers when assessing proposals to resize or relocate drainage assets as part of permit applications.
- The note on Plan 9 in the PSP should be strengthened to reinforce the notion that there is flexibility for the size and location of drainage assets to be changed. Additional words should also be added to R31.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

- a) Amend Requirement R31 and the text under the note on Plan 9 (Integrated Water Management) to strengthen the notion that flexibility should be applied when considering whether changes to the size or location of drainage assets are ‘generally in accordance with’ the Precinct Structure Plan.**

4.2.6 Alternative drainage designs

(i) Evidence and submissions

Some parties made submissions that the PSP should be amended to show alternative designs for certain drainage assets, including substantial reductions in their sizes and/or changes in their locations, to facilitate a more efficient use of land in the PSP area. The alternative designs were supported mainly by evidence from Ms Barich (for Development Victoria and Mack Property). Mr Mag also provided high level evidence in support of possible changes to the location and design of some of the assets on Parklea’s land.

The Committee has considered the evidence in detail, but it has not been possible to summarise the evidence within the Committee’s reporting timeframes.

In response, Melbourne Water indicated it had considered the alternative designs, but did not support changes to the PSP. It submitted:

- these types of changes are properly considered through detailed design as part of a permit application for a specific development proposal, facilitated through ‘general accordance’
- the work done by the experts on alternative designs and/or locations does not take into account the full range of matters and is not based on any site investigations about groundwater and sodic soils or a subdivision design with land levels, or a site based drainage strategy
- some of the changes would require input from other agencies (for example, Mr Mag’s proposal to relocate certain assets to the transmission easement would require the consent of the easement owner, AusNet).

(ii) Discussion

The proposed drainage strategy includes some relatively large WLRBs with consequent large land take and significant impacts on net developable area. This is because of Officer South’s relatively flat topography and susceptibility to flooding, exacerbated by development to the north. In this context it

is understandable that landowners have proposed alternative designs of drainage assets to reduce their size and impact on net developable area.

As noted earlier, the drainage strategy and associated assets shown in the PSP are preliminary. They may well change after the DSSs are finalised, which may be after the PSP is approved.

Previous panels and advisory committees considering PSPs have tended not to recommend changes to the drainage assets shown in PSPs, but have often noted assets can change as a result of detailed design. This Committee holds a similar view, and is reluctant to endorse changes to the size and location of particular assets before the more detailed design work and modelling which will be done as part of finalising the DSSs or as part of a permit application – particularly given none of the changes are endorsed by the drainage authority, Melbourne Water.

The alternative designs for WLRB A and WLRB G put forward by Ms Barich were detailed and not without merit, as agreed by Mr Carroll. However, as Melbourne Water pointed out, they did not constitute functional designs to Melbourne Water's standards (with the level of detail that would be expected through a permit application). Further, while Ms Barich factored in Melbourne Water's shear stress requirements, not all the relevant factors had been fully assessed by the experts (such as a full assessment of sodic soils and ground water).

The process for finalising the DSSs includes consultation with affected landowners. This provides an opportunity for landowners to put forward more detailed alternative designs for drainage assets. There is also the opportunity for developers to propose changes to the location and design of drainage assets at the permit application stage, at which time detailed, functional designs of drainage assets must be included for assessment by the drainage authority.

Regarding Parklea's (and Mr Mag's) suggestion that drainage assets be relocated within the electricity transmission easement, the Committee agrees that this would provide for a more efficient use of the land in the PSP area. It understands there is precedent for drainage assets and other infrastructure to be sited within transmission easements with the agreement of the asset owner. The Committee sees no reason why that could not occur as development is approved in Officer South. However, this will require the consent of the easement owner, and the Committee does not consider it appropriate to relocate the assets into the easement at this stage, in the absence of AusNet's consent.

Finally, the Committee notes that its recommendation in Chapter 4.2.5 to strengthen the notion of flexibility in the final sizing and location of drainage assets will assist permit applicants to demonstrate that alternative designs are 'generally in accordance with' the PSP.

(iii) Conclusions

The Committee concludes:

- Changes to the PSP with respect to the location and size of drainage assets are not justified at this stage based on available information.
- Landowners will have an opportunity to put forward more detailed alternative designs for drainage assets as part of the finalisation of the DSSs and in permit applications.
- The Committee's recommended changes to the PSP to strengthen the notion of flexibility in the sizing and location of drainage assets will assist in this regard.

4.3 The diversion system

(i) The issues

The issues are:

- the design of the diversion system
- whether the diversion system can be delivered
- whether development should be allowed in the Lower Gum Scrub Creek catchment before the diversion system is delivered
- if so, whether different standards should apply before the diversion system is operational.

(ii) Evidence and submissions

Melbourne Water tabled a memorandum (Document 166) which sets out in some detail the intended outlet arrangements proposed for the Lower Gum Scrub Creek catchment. The outlet arrangements involve diverting outflows to the Cardinia Outfall Drain and Toomuc Creek. Melbourne Water noted:

- The diversion system is required to facilitate full development of the Lower Gum Scrub Creek catchment, with the priority works being the proposed diversion pipe connection into the Cardinia Road Drain and sufficient clean out works of the Drain to allow free draining operation.
- Alluvium has been retained to undertake the design work for the diversion system, which Melbourne Water indicated would be completed within six months.
- The works are to be divided into two stages, with initial works to provide a connection into the Cardinia Road Drain and Stage 2 consisting of works to Toomuc Creek.
- Discussions are ongoing with the planning permit applicant for the subdivision of land east of Cardinia Road in the CREP, which contemplates a 23 metre wide road reserve along the electricity easement that could potentially house the Stage 1 works.
- The Stage 1 works are deliverable in the short term, but the balance of the works still need to be designed by Alluvium, and the precise route remains to be confirmed.

Melbourne Water's preferred delivery methodology is for assets to be delivered by developers rather than by Melbourne Water, one key reason being that in its view, the construction of assets is best undertaken in conjunction with development of the land on which the assets are located. It submitted that should negotiations with affected landowners be unsuccessful, Melbourne Water would utilise its powers under the *Water Act 1989* to facilitate delivery of the works.

The drainage Joint Expert Statement (Document 150) records that all experts agreed that the diversion system is essential to manage increases in flood event volumes from the Lower Gum Scrub Creek catchment and is therefore a critical asset to the delivery of the PSP. The experts were concerned with the lack of design detail for the diversion system and its associated interim outfall. Specifically, they were not able to determine how the system would improve flood conditions downstream while not making conditions worse elsewhere.

Parklea noted the diversion system may need to traverse up to 10 properties before it reaches the levee system. It submitted most of these properties are outside the Urban Growth Boundary, which makes it unlikely the diversion system will be delivered by developers through conditions on subdivision permits. Parklea submitted that without Melbourne Water using its powers under the *Water Act 1989* and constructing the diversion system across those properties itself, *"it is fanciful to think the diversion system could be delivered in 12 to 24 months"*.

Cardinia submitted given the number of ‘moving parts’ in the Lower Gum Scrub Creek catchment, it would be reasonable to deal with this catchment differently to the other catchments. It submitted that R33 and R67 in the PSP are key and should be revised to the effect that no development should be permitted in the Lower Gum Scrub Creek catchment, other than drainage works, until the diversion system and WLRBs G and I are operational, except with the consent of Melbourne Water. It submitted this was necessary to:

- ensure no further impacts downstream
- more to the point, alleviate the circumstances that downstream owners are currently experiencing as a result of the development north of the freeway, in Officer.

The drainage Joint Expert Statement stated the experts all agreed that development could only occur in the Lower Gum Scrub Creek catchment before the diversion system being in place if the proposed volume controls were not applied, or were relaxed. All the experts apart from Mr McLean recommended Melbourne Water develop an ‘interim design objectives’ table which clearly specifies targets that are reasonably practicable to achieve before the diversion system is fully operational, and which could be referenced in R67.

Cardinia submitted that the Committee should be mindful of the potential further impacts on the downstream landowners. Cardinia, for its part, would be hesitant to agree to development that compromised the ability to meet stormwater volume requirements if it were the approval authority. Melbourne Water stated that it would not accept a lower performance standard before the diversion system was operational.

(iii) Discussion

The diversion system, including the outfall extension to the Cardinia Outfall Drain, is critical to the operation of the Lower Gum Scrub Creek catchment drainage system. It is disappointing that the design of the diversion system was not further advanced by the time this matter came before the Committee.

There was insufficient information to enable the Committee (or the experts) to be confident the diversion system will be effective in ensuring downstream impacts are managed. That said, none of the experts raised fundamental concerns that the diversion system would not be able to be designed to achieve the hydrological objectives and performance standards of the drainage strategy.

There are some challenges in delivering the diversion system. It is yet to be designed, its precise location through the CREP is yet to be confirmed and the route of the extension of the outfall to the Cardinia Outfall Drain and Toomuc Creek drainage network will be the subject of negotiations with multiple landowners to the south of the CREP. Much of the works required for the diversion system lie outside the PSP area. There is no scope for the PSP to assist in its delivery.

Melbourne Water has committed to design and deliver the diversion system within the next 12 to 24 months, including the use of its powers under the *Water Act 1989* should that be necessary. The Committee considers this timeline to be ambitious, but not, as Parklea put it, ‘fanciful’. It will be essential for Melbourne Water to meet that commitment so that once the PSP is gazetted, applications for permits in the Lower Gum Scrub Creek catchment can proceed with a degree of confidence that downstream impacts will not be worsened.

Is it, however, necessary to prohibit development in the Lower Gum Scrub Creek catchment before the diversion system, and WLRBs G and I, are constructed and operational as Cardinia submitted?

In the Committee's view, the importance of these assets cannot be overstated. They will be critical to achieving the objective of no adverse impact on downstream properties, and it is essential that the assets are delivered concurrently with development in the Lower Gum Scrub Creek catchment.

The Committee was not, however, persuaded that development in the catchment should be prohibited without these drainage assets being operational. It may in fact be counterproductive to do so. The Committee notes:

- Development Victoria has committed to delivering WLRB G and the waterway to their ultimate standard concurrently as part of the development of its land.
- Parklea is likely to construct WLRB I as development of its land progresses into the Officer South PSP from its landholding in the adjoining CREP.
- Requirements R33 and R67 (now R69) in the PSP already provide tight controls such that development can only be approved with the delivery of the necessary drainage assets to meet water quality, flows and volume control outcomes.
- All permit applications will be referred to Melbourne Water as a determining referral authority, and it can refuse development applications if it is not satisfied that drainage assets will be delivered to the required standard as part of any approved development so as to not worsen downstream conditions.

The benefits of the early delivery of WLRB G and WLRB I are discussed further in Chapter 4.4.2.

In terms of whether different (more relaxed) performance standards should apply for development that precedes the diversion system, the Committee considers the volume control standard adopted by Melbourne Water is a fundamental and critical requirement in the development of the drainage strategy for the Lower Gum Scrub Creek catchment. A relaxation of this control potentially has adverse consequences for downstream landowners, who are already subject to the impacts of increased flooding from development in Officer. The Committee agrees with Melbourne Water and Cardinia that a lower performance standard is unacceptable, even if that means that development in the Lower Gum Scrub Creek catchment ahead of the diversion system may not be feasible.

(iv) Conclusions

The Committee concludes:

- It will be essential for developers to deliver critical drainage assets (WLRB G, the associated waterway and WLRB I) and for Melbourne Water to ensure delivery of the diversion system concurrently with development occurring in the Lower Gum Scrub Creek catchment, so that development in the catchment can proceed with a degree of confidence that downstream impacts will not be worsened.
- While there is insufficient information to assess the likely effectiveness of the diversion system, no fundamental concerns over the design were raised.
- Doubt over the diversion system is not sufficiently serious to warrant delaying the PSP.
- Performance standards (specifically volume controls) should not be relaxed for development in the Lower Gum Scrub Creek catchment that occurs before the diversion system is operational.

4.4 Other drainage issues

4.4.1 The issues

The issues are whether:

- interim drainage works should be permitted
- requirements relating to the DSS Investigation Area should be removed from the PSP and the UGZ7
- the Stephens Road waterway should be removed from the PSP.

4.4.2 Interim drainage works

(i) Evidence and submissions

The issues around whether interim drainage works should be permitted related mainly to development in the Lower Gum Scrub Creek catchment, as this has greater potential impacts on downstream properties.

WLRB G (on Development Victoria's land) and WLRB I (on Parklea's Property 37) are both online assets in the Lower Gum Scrub Creek catchment that address flow rate, treatment and volume control to manage the downstream impacts of not just future development within the PSP but also of existing development in Officer (north of the freeway).

Melbourne Water submitted:

- The evidence of the drainage experts (particularly Ms Barich for Development Victoria) suggested that delivery of WLRB G in its ultimate form would provide some immediate improvements to conditions on downstream properties even if delivered in isolation of the other assets in the Lower Gum Scrub Creek catchment.
- Melbourne Water considered similar benefits would result from the delivery of WLRB I in its ultimate form.
- There should be a requirement in the PSP that WLRB G and WLRB I are delivered in their ultimate form as part of the first stage of development of the Development Victoria land (WLRB G) and Parklea's Property 37 (WLRB I).
- Any development proposals in the Lower Gum Scrub Creek catchment upstream of WLRB I that seek to rely on interim drainage works will need to provide evidence to Melbourne Water's satisfaction that interim works achieve the required retarding, treatment and volume control outcomes.
- Volume controls are challenging and can be expensive to achieve on an interim basis.

Melbourne Water proposed a number of changes to the requirements and guidelines in the PSP that would allow development reliant on interim works to proceed only where the interim works were designed to its satisfaction.

Development Victoria submitted that it intended to develop WLRB G and the associated waterway in their ultimate form, rather than developing interim treatments.

Parklea submitted it was unnecessary, inappropriate and unenforceable to prescribe the delivery of drainage assets to ultimate standards. Parklea noted that:

- standard Melbourne Water permit conditions in growth areas capture the need for Melbourne Water's approval for both interim and ultimate proposals

- applicants may be able to demonstrate at the planning permit stage that interim assets are appropriate, depending on the level of development proposed and whether upstream development is prohibited under any staging plan for a significant period of time
- WLRB I is located only partly on land within the PSP, and PSP requirements cannot regulate works on land not affected by the PSP.

(ii) Discussion

The PSP at R69 already provides for construction of interim drainage assets with the approval of Melbourne Water. It is not uncommon in other PSP areas for the drainage authority to approve the delivery of drainage assets to interim standards as part of a planning permit.

Interim treatments for WLRB H (an offline WLRB in the Lower Gum Scrub Creek catchment) and assets in the Stephens Road and Officer South Road catchments may be acceptable depending on the progress of development that depends on those assets. Melbourne Water should consider interim assets in those areas.

The key online assets in the Lower Gum Scrub Creek catchment (WLRB G, WLRB I and the waterway on Development Victoria's land) are critical to meeting the objective of 'no adverse impacts' on downstream properties. Delivery of these key assets to an interim standard should only be allowed if it can be demonstrated that any proposed interim works will meet the required retarding, water quality and volume control outcomes, to Melbourne Water's satisfaction.

The question of whether interim works in the Lower gum Scrub Creek catchment should be permitted is really a matter for Melbourne Water, and in any event is probably a moot point. Development Victoria stated that it would deliver the critical assets (WLRB G and the waterway) on its land to their ultimate standard, and Parklea is likely to do the same with WLRB I.

The Committee agrees with Parklea that adding a requirement to the PSP, as requested by Melbourne Water, that WRLB G and WRLB I be delivered in their ultimate form is unnecessary. Melbourne Water already has the capacity to require delivery of ultimate assets under R69 and as part of conditions on a planning permit.

(iii) Conclusions

The Committee concludes:

- An additional requirement that WLRBs G and I are delivered in their ultimate form is not necessary, given:
 - drainage assets must be delivered to a standard to the satisfaction of Melbourne Water under R69
 - all development proposals will be referred to Melbourne Water as a determining referral authority.

4.4.3 The DSS Investigation Area

(i) Evidence and submissions

YourLand submitted the DSS Investigation Area shown on Plan 3 of the PSP should be removed from the PSP, as it creates uncertainty.

Melbourne Water explained that the area and notation on Plan 3 are required because approval from APA will be required for the proposed waterway crossing of the T1 Gas Main and for DSS works in

proximity to the City Gate Terminal. It submitted the DSS Investigation Area is required until Melbourne Water has received consent from both the transmission and network arms of APA to the proposed drainage assets in that area.

In closing submissions, Melbourne Water advised that it has received conditional consent from both arms of APA, and was considering whether those consents allowed the removal of the DSS Investigation Area. Melbourne Water subsequently provided further advice (Document 277) that it was still reviewing the requirements and conditions stipulated by APA, and could not support removal of the DSS Investigation Area at this stage.

(ii) Discussion

Removal of the DSS Investigation Area is primarily a matter for Melbourne Water. While the Committee is sympathetic to the request from YourLand and other landowners that the DSS Investigation Area be removed, the Committee does not have sufficient information before it to recommend removal. The Committee encourages Melbourne Water to continue working with APA to resolve this issue before the PSP is finalised, to give more certainty to the owners of the affected properties. That said, there are no requirements or guidelines in the PSP, or provisions in the UGZ7, which apply to applications in the DSS Investigation Area. While it may create a level of uncertainty, it does not create onerous requirements for the affected landowners.

(iii) Conclusions

The Committee concludes:

- There is insufficient available information to recommend the removal of the DSS Investigation Area at this stage.
- Melbourne Water should decide whether the DSS Investigation Area can be removed before the PSP is finalised.

4.4.4 The Stephens Road waterway

(i) Evidence and submissions

Relying on the evidence of Ms Barich, Mack Property submitted the waterway along Stephens Road should be removed from the PSP because it does not meet the definition of a waterway in the *Water Act 1989*, does not perform any hydrological function, and serves only a very small catchment from which stormwater runoff could be managed using pipes and overland flow conveyance along a road reserve.

Melbourne Water advised that, contrary to the suggestion from Mack Property that the Stephens Road waterway does not presently perform any drainage function, the waterway conveys flows from the Freeway Service Centre north of Hanford Lane, and there are minor drainage connections from Hanford Lane into the waterway. It conceded, however, that the waterway does not currently perform a significant drainage function, and will not do so in the future. Melbourne Water stated by way of clarification that:

[Its] position is that the waterway is not required in the developed outcome to perform a drainage function outcome (i.e. there are other options) but that there are other reasons for its retention.

Melbourne Water provided a detailed memorandum setting out the reasons why the waterway should be retained (Document 205), including:

- the waterway does fall within the definition of a waterway under the *Water Act 1989*

- it accommodates time stamped vegetation under the Melbourne Strategic Assessment and high value trees identified in the background report to the PSP
- it is in an area of cultural heritage sensitivity (identified on Plan 2 (Precinct features), not the Cultural Value Investigation Area identified on Plan 3).

(ii) Discussion

Melbourne Water confirmed that the waterway is not required for drainage purposes, but there are environmental reasons for its retention. It also confirmed there are alternative ways of managing the runoff from the small catchment feeding into the proposed waterway.

Given that is the case, the Committee was not persuaded the waterway should be retained in the PSP, certainly as part of the drainage strategy shown on Plan 9. The VPA and Melbourne Water should review the justification for the waterway to establish whether or not it should be retained for environmental reasons (and if so, which PSP plans should show the waterway).

(iii) Conclusions and recommendation

The Committee concludes:

- The Stephens Road waterway should be removed from Plan 9 in the PSP.
- The VPA and Melbourne Water should review the waterway to determine whether its retention is justified on environmental grounds.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

a) Amend Plan 9 (Integrated Water Management) to:

- **Remove the Stephens Road waterway. Retain the waterway on other plans only if there are other reasons (for example high value tree retention) which justify its retention.**

Make any consequential changes to the Infrastructure Contributions Plan.

4.5 Integrated Water Management

(i) The issues

The issues are whether:

- the PSP or the Integrated Water Management (IWM) strategy prepared by Spiire adequately describes IWM initiatives
- land should be identified in the PSP for 'leading edge' IWM initiatives
- the PSP should encourage a third pipe (recycled water reuse) system.

(ii) Evidence and submissions

The drainage Joint Expert Statement stated that all experts agreed the IWM Strategy prepared by Spiire should be updated to set out the IWM requirements of the PSP with reasonably practical and achievable IWM initiatives. The VPA responded that it did not intend to update the Spiire IWM Strategy as it is a background document produced at a point in time to aid the preparation of the PSP. It will not form part of the Planning Scheme.

Cardinia submitted the PSP needs to provide action on IWM and identified a list of projects that represented good practice IWM opportunities. It sought revisions to Plan 9 to show four areas as potential locations for 'leading edge' initiatives. Mr McLean's evidence was that it will be difficult to further explore and implement leading edge initiatives unless land is "*set aside*" in the PSP.

The VPA advised in its Part A submission that the exhibited Plan 9 has been amended to include four pilot areas for the following IWM initiatives, with the support of Cardinia and South East Water:

- Class A recycled water in the residential area
- potable Class A recycled water and harvested rainwater in the commercial area
- regional on-lot rainwater tanks in industrial areas.

These changes are reflected in the VPA's final version of the PSP, at Plan 9 and Guideline G35.

Cardinia submitted the VPA's final version of Plan 9 incorrectly identified Area 4 where on-lot rainwater tanks could be located.

In closing submissions, Cardinia noted that it had been invited by the VPA to provide drafting for the provision of passive irrigation of streets. It proposed (in Document 264) that two new objectives be inserted in PSP section 3.4 (High quality public realm). Cardinia also proposed that a new requirement be added with respect to the design of roads, road reserves and public open space to optimise water use efficiency.

In its submission to the exhibited Amendment, South East Water:

- supported the application requirement in the UGZ7 for an IWM plan for subdivisions of 10 or more lots
- sought to add a requirement that the IWM plan include initiatives that maximise the use of alternative water to substitute potable water use maximisation and also measures that encourage potable water use efficiency
- requested that Plan 9 be changed to designate the Village sub-precinct as an area where recycled water will be supplied, with recycled water reticulation mains and internal household plumbing to be provided by developers.

Mr Swan in his evidence for YourLand recommended that the use of recycled water for any purpose should be agreed by South East Water before implementing any third pipe system. In his view, recycled water use could effectively offset the benefits of stormwater harvesting for irrigation or non-potable uses, and reduce the benefit of stormwater harvesting in terms of volume reduction.

(iii) Discussion

The Committee agrees with the VPA that the Spiire IWM Strategy does not need to be updated, as it is a background report used to inform the preparation of the PSP. It is not the source of any requirements for development going forward.

Plan 9 in the VPA's final version of PSP identifies four pilot areas, and describes IWM initiatives for each area. However, the plan is not supported by any text that specifically encourages the IWM initiatives in those areas. This should be rectified.

The correction to Area 4 on the final version of Plan 9 sought by Cardinia is a matter of detail that can be resolved with the VPA.

The Committee has no issue with the new objectives and requirement with respect to IWM proposed by Cardinia. The VPA did not respond to these additions proposed by Cardinia and the Committee is

therefore reluctant to endorse them without understanding the VPA's position. The VPA should resolve this matter with Cardinia as it finalises the PSP.

South East Water's requested changes are largely dealt with in the VPA's final versions of the PSP and UGZ7. The Committee does not consider that any further adjustments are required.

Regarding third pipe systems for recycled water, the Committee shares Mr Swan's concern that the use of recycled water may compromise the potential benefits of stormwater harvesting in reducing the total volume of stormwater in the system. This should be further considered by the VPA in finalising the PSP.

(iv) Conclusions and recommendations

The Committee concludes:

- There is no need to update the IWM Strategy prepared by Spiire.
- The identification of areas on Plan 9 where IWM initiatives should be pursued, but some accompanying text is required encouraging those initiatives in those areas.
- The above conclusion is qualified in respect of Area 1 and Area 3, both of which refer to Class A recycled Water. Before including references to recycled water, the VPA should consider whether this could compromise the potential benefits of stormwater harvesting in reducing the total volume of stormwater in the system.
- The VPA should consider whether the boundary of pilot area 4 on Plan 9 needs to be corrected.
- The VPA should consider whether the two new objectives and new requirement with respect to IWM proposed by Cardinia Shire Council are appropriate and should be added to the PSP.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

a) Amend Plan 9 (Integrated Water Management) to:

- **Include some supporting text encouraging the implementation of the relevant Integrated Water Management initiatives in each 'pilot area'. This could be a note on Plan 9, or a Requirement or a Guideline in the appropriate section of the Precinct Structure Plan.**
- **Remove references to Class A recycled water in pilot areas 1 and 3 if the use of recycled water would compromise the potential benefits of stormwater harvesting in reducing the total volume of stormwater in the system.**
- **Correct the boundaries of pilot area 4 if required.**

b) Add the two new objectives and new requirement with respect to Integrated Water Management in section 3.4 as proposed by Cardinia Shire Council (Document 264) if appropriate.

5 Traffic

Traffic related aspects of the proposed Staging Plan are addressed in Chapter 3.

5.1 Introduction

(i) What is proposed?

The PSP includes Plan 4 (Road Network) which sets out the arterial and connector road network and the location of signalised intersections and a set of pedestrian operated signals. Plan 5 shows the public transport and active path networks.

Plan 11 (Precinct Infrastructure Plan), replicated in Figure 11 below, shows the transport infrastructure items to be funded under the ICP, as well as the three State funded gateway infrastructure items. Roads, bridges and intersections funded in the ICP are funded at least to an interim standard. The pedestrian signals are also funded in the ICP.

The road and transport networks were informed by a Transport Study prepared by GHD (the GHD study), which included modelling based on the Victorian Integrated Transport Model (VITM) to:

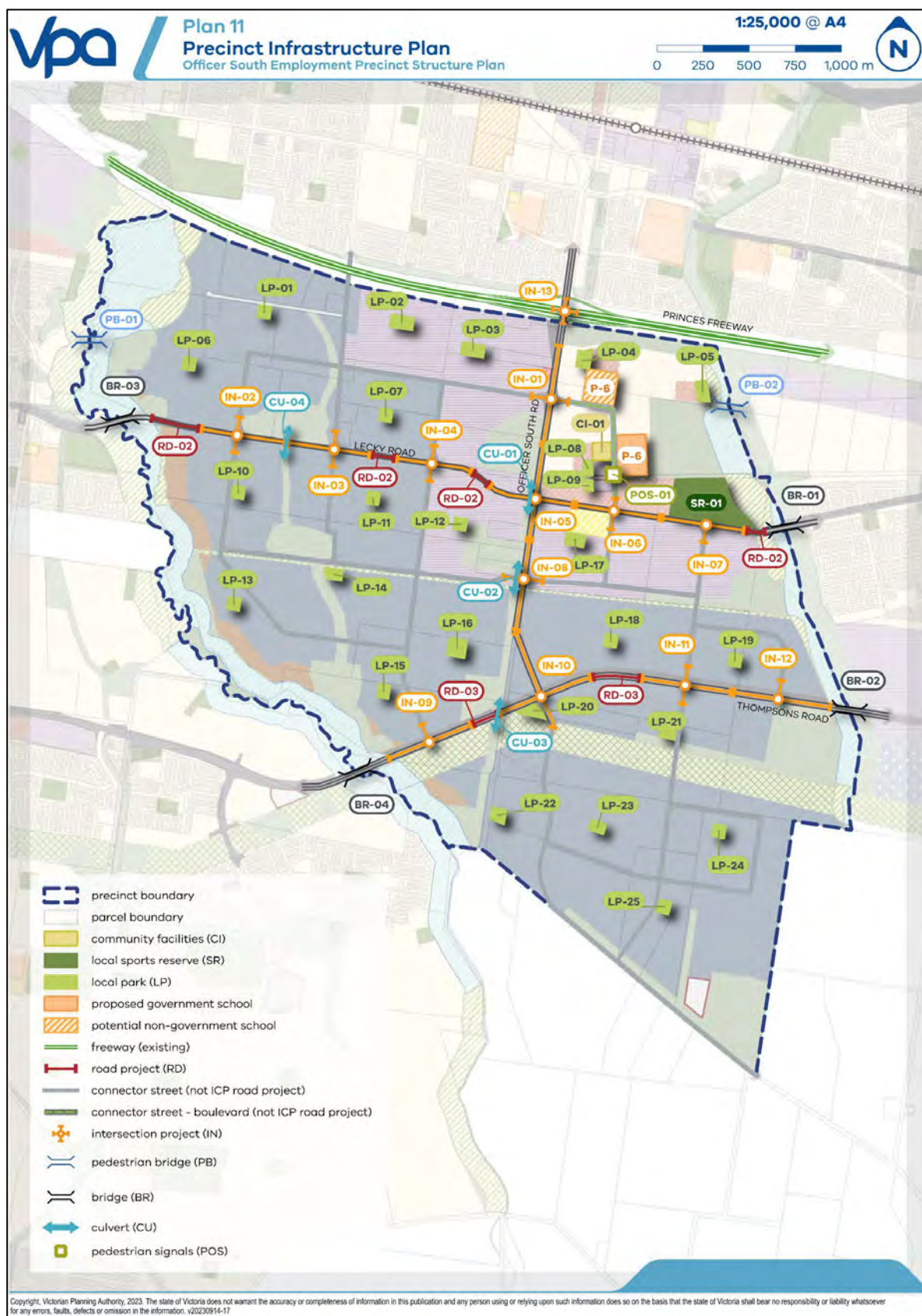
- assess the likely traffic generation from development in the PSP, based on job and population numbers provided to GHD by the VPA
- inform the design of the transport infrastructure (including roads and intersections) to cater for the expected traffic.

(ii) Resolved issues

The resolved issues are:

- The overall suitability of the proposed road network is not in dispute.
- It was agreed through the meeting of traffic experts that the interim cross sections for BR-01 and BR-02 should be amended to remove the shared path on the north side of the bridges. Both Cardinia and the VPA supported this change, subject to further design and costings to confirm the changes needed to the PSP and ICP.

Figure 11 PSP Plan 11 (Precinct Infrastructure Plan) showing transport infrastructure



Source: Exhibited PSP

5.2 Threshold issue

(i) The issue

The issue is:

- whether the modelling in the GHD study is fit for purpose.

(ii) Evidence and submissions

The traffic Joint Expert Statement (Document 151) records that on balance, the experts agreed the modelling outputs provided in the GHD study are suitable and the modelling is fit for purpose to inform the preparation of the PSP. Mr Abdou disagreed.

Cardinia submitted the GHD study has not been verified through a 'first principles' assessment or any sensitivity analysis. Further, GHD did not assess the capacity of the freeway interchange (IN-13) in its current (interim) layout, which is surprising given IN-13 is a key infrastructure item and is the only existing connection into the PSP area, on which the development if Stage 1 relies. Cardinia submitted a first principles assessment is required for two reasons:

- to enable testing to ascertain whether (and to what extent) the PSP can gain momentum before its roll out needs to pause due to traffic congestion
- to ensure the modelling is not overly sensitive to the key assumption of the number of jobs provided to GHD by the VPA.

Mr Abdou's evidence was that the assumptions inputted into the GHD model are unclear with no specific mention of the traffic generation or distribution assumptions adopted in the model. He acknowledged the employment and population figures applied in the GHD model are generally consistent with the PSP but in his view, the traffic generation rates assumed by GHD are too low. Using the traffic generation rates in the *NSW Road Traffic Authority Guide*, Mr Abdou estimated the precinct would generate up to 2.4 times the daily traffic volumes than those applied in the GHD model.

Mr Abdou recommended:

- the GHD model be reviewed and revised to ensure the traffic generation inputs and outputs are consistent with the proposed land uses within the PSP area
- the traffic impacts be reconsidered based on the revised strategic model and the proposed PSP infrastructure be modified to reflect the revised outputs.

Mr Humphreys was satisfied the GHD modelling is suitable to inform the PSP's proposed road and transport networks. He considered Mr Abdou's analysis prepared for Cardinia is an overestimate of the likely traffic generation from development in the PSP. He stated:

On balance I am satisfied that the peak period traffic generation from the VITM model as presented in the GHD report is a good representation of the estimated traffic forecasts and can be used as part of the analysis for the intersections for determining the intersection performance.

(iii) Discussion

Most traffic experts, except for Mr Abdou, agreed the GHD modelling is 'fit for purpose' and the outputs from the model are suitable for use in the transport planning assessment and to plan the road and transport networks, including the intersection designs.

Mr Abdou did not entirely reject the GHD modelling. Rather, he recommended the model be reviewed to ensure the inputs (trip generation and distribution) are appropriate and the outputs give a sound estimate of the likely traffic impacts of development of the precinct.

Mr Abdou provided a comprehensive 'first principles' analysis to arrive at his conclusion on the GHD model.

Cardinia provided several examples of PSPs in the area, including Minta Farm, where a first principles assessment had been undertaken to inform the PSP. However, these PSPs are predominantly residential in terms of land use, which has a widely accepted traffic generation rate. Officer South, on the other hand, has extensive areas of industrial and commercial development, with limited residential land. Industrial and commercial areas can be developed with a range of uses which will have different traffic generation rates.

The Committee is satisfied that on the balance of evidence presented, the GHD model is appropriate for its intended purpose. It considers a first principles assessment would be of limited value in informing the preparation of the Officer South PSP, given that at this stage of the planning process there is little information about the likely uses in the industrial and commercial areas and their traffic generation rates. These are important inputs into a first principles traffic impact assessment. At the traffic roundtable, Mr Abdou acknowledged during cross-examination that a first principles approach was more typically done at the permit application stage, when the proposed land uses were more defined and hence trip generation rates better able to be determined.

For completeness, the experts agreed the GHD model was not suitable for assessing the stages of development as proposed in the VPA's proposed Staging Plan. The Committee notes, however, that the GHD model was not intended to be used to inform the Staging Plan. Its purpose was to input into an overall transport planning assessment to confirm the capacity of the proposed road network.

(iv) Conclusion

The Committee concludes:

- The GHD model is fit-for-purpose and suitable to inform the road and transport networks in the PSP, including the intersection designs.

5.3 Officer South Road

5.3.1 Introduction

(i) What is proposed?

In its current form, Officer South Road is sealed from the north to the freeway interchange (IN-13). It then becomes a gravel road with a straight alignment south to Patterson Road.

The PSP proposes:

- the northern section (between the freeway interchange (IN-13) and Lecky Road (IN-01)) should be:
 - two lanes in one carriageway in its interim configuration
 - a divided six lane primary arterial road in its ultimate configuration
- the middle section (between Lecky Road (IN-01) and the future Thompsons Road (IN-10)) should be:

- realigned to curve to the south east to allow for a 90 degree intersection with Thompsons Road
- two lanes in one carriageway in its interim configuration
- a divided six lane primary arterial in its ultimate configuration
- the southern realigned section (between Thompsons Road and Patterson Road) should be constructed as a connector road in its ultimate configuration.

(ii) The issues

The issues are:

- whether the interim configuration of the northern section should be a secondary (4 lane) arterial
- whether the ultimate configuration of the middle section should be a primary (6 lane) arterial or a secondary (4 lane) arterial
- alignment of the middle section and its intersection with Thompsons Road (IN-10).

5.3.2 Interim configuration of the northern section

(i) Evidence and submissions

Mr Abdou recommended the northern section of Officer South Road be constructed as a four lane, two way road in its interim configuration to facilitate the first stage of development in the PSP and match the capacity of Officer South Road to the initial capacity of the northern leg of IN-01. He considered this would limit redundant works and provide the required capacity to accommodate the initial stage of development.

The VPA submitted the delivery of this section of Officer South Road in the manner proposed by Mr Abdou would not be allowed under the Ministerial Direction on ICPs. It noted the Ministerial Direction allows for arterial roads to be funded as a standard levy allowable item only if they are two lanes in one carriageway. A supplementary levy can only be used to fund the same two lane single carriageway where topographical, geographical, environmental or physical conditions increase the cost of the infrastructure. No such factors are present for this section of Officer South Road.

(ii) Discussion

Most of the northern section of Officer South Road will be delivered as part of the IN-01 works, as the northern leg of IN-01 extends almost (but not quite) to IN-13. The PSP at Table 7 describes IN-01 as an interim primary arterial to connector road intersection, with its interim construction fully funded by the ICP. Interim primary arterial roads are usually delivered as four lanes. It seems obvious then that the short section of the balance of Officer South Road (between IN-01 and IN-13) should be constructed to an interim standard to match the interim layouts of the two intersections.

In reality the interim standard for Officer South Road will be essentially as suggested by Mr Abdou.

(iii) Conclusions

The Committee concludes:

- The interim configuration of Officer South Road between IN-01 and IN-13 will, in all likelihood, be delivered to match the interim configuration of the two intersections.
- No change is needed to the PSP regarding the interim configuration of the Officer South Road northern section.

5.3.3 Ultimate configuration of the middle section

(i) Evidence and submissions

In his traffic evidence for Parklea, Mr Walsh stated the volumes predicted in the GHD traffic modelling for the middle section of Officer South Road suggest it could be downgraded to a secondary arterial road. He recommended the ultimate cross section south of Lecky Road be amended accordingly.

TfV maintained that Officer Road South should remain a six lane primary arterial road from the Princes Freeway through to Thompsons Road, as currently shown in the PSP. It noted:

- The figure of 28,000 vehicles per day quoted by Mr Walsh is at the upper end of the capacity range of a primary arterial road.
- Other factors such as broader network connectivity are also key considerations.
- The underlying intent of the road would be compromised by delivering the northern section as a primary arterial road and the middle section as a secondary arterial road. This would involve a change in speed limits (60 km/hr to 80 km/hr) with no benefit to either the local or wider transport network.
- The Principal Freight Network seeks to ensure corridors are able to accommodate future freight movements including B-Double trucks, which would be more difficult on a secondary arterial road.
- Access arrangements differ along primary and secondary arterial roads, with direct access from abutting properties allowed on secondary arterial roads but not on primary arterials. Further, direct access is not considered appropriate for Officer South Road.
- Downgrading the middle section to a secondary arterial road limits the ability to use this section as part of the Principal Public Transport Network.

Mr Walley's evidence for the VPA broadly agreed with Mr Walsh based on traffic volumes, but he noted that any downgrading of Officer South Road would require a reassessment and modelling of intersections IN-05, IN-08 and IN-10 to ensure the geometry would be appropriate for the anticipated traffic volumes.

Mr Abdou noted that both Officer South Road and Thompsons Road are designated freight routes, and this would need to be taken into account in any potential downgrading of this section of Officer South Road.

The VPA advised in closing submissions that it did not support the downgrading of the middle section of Officer South Road to a secondary arterial road. It noted the GHD modelling supports the network as shown in the exhibited PSP, including Officer South Road as a primary arterial over its full length between IN-13 and Thompsons Road.

(ii) Discussion

Based on projected traffic volumes in the GHD modelling, the middle section of Officer South Road between Lecky Road and Thompsons Road could be classified as a secondary arterial road as proposed by Mr Walsh. However, the expected traffic volume of 28,000 vehicles per day is approaching the upper end of the range considered appropriate for a secondary arterial road. Further, TfV has advised there are other considerations influencing its designation as a primary arterial, including the designation of Thompsons Road and Officer South Road as part of the Principal Freight Network.

TfV considers the primary arterial road designation for Officer South Road should be retained. The Committee thinks it is the prerogative of TfV (as the relevant road authority) to determine the ultimate configuration of the road. TfV has a role in broader network planning and ensuring the network is fit for purpose into the future, and without compelling evidence that its proposed designation is not strategically justified, the Committee is inclined to align with the view of TfV.

(iii) Conclusions

The Committee concludes:

- The designation and ultimate cross section of Officer South Road should remain as a primary (six lane) arterial road between Lecky and Thompsons Roads.
- No change is needed to the PSP regarding the ultimate configuration of the Officer South Road middle section.

5.3.4 Alignment of the middle section

(i) Evidence and submissions

Relying on the evidence of Mr Maina, Abiwood submitted the intersection of Officer South Road with Thompsons Road (IN-10) should be amended to reflect an alternative design prepared by Mr Maina. It submitted the exhibited alignment was based on assumptions with respect to:

- not impacting on HO91
- not requiring the removal of high retention value trees.

Abiwood submitted these assumptions are no longer relevant, because:

- the curtilage of HO91 has been reduced and reoriented which means that Mr Maina's alternative is unlikely to impact on HO91
- Plans 2 and 7 of the PSP do not show any trees of significance that would preclude a realignment of the road as proposed by Mr Maina.

It submitted the exhibited alignment results in an awkward triangular shaped section of its land at 345 Officer South Road that would essentially be undevelopable. That outcome would be avoided by the alternative alignment proposed by Mr Maina.

Mr Maina's alternative reduced the extent of the curve in Officer South Road and reduced the size of the awkward triangular parcel. He acknowledged that the validity of his design would need to be confirmed, in particular the suitability of the curve radii. His alternative also would require a realignment of a section of Thompsons Road, which is discussed in Chapter 5.4.2.

TfV did not support Abiwood's proposed alternative alignment, noting that:

- it brings the intersection much closer to the electricity transmission line pylons which will introduce construction challenges and costs and potentially limit drainage designs
- the required banking of the road's horizontal curves will impact the road levels which may result in additional land being required to construct the intersection
- the realignment may require the DSS to be reviewed and additional culverts introduced.

Relying on the evidence of Mr Ahmed, the VPA submitted the exhibited alignment of Officer South Road accords with all relevant design guidance and standards and is appropriate. Mr Ahmed supported the exhibited alignment as it:

- intersects with Thompsons Road (IN-10) at 90 degrees and provides an adequate length of straight section each side of the intersection, improving the visibility and safety of the intersection
- provides a better placement for the intersection and better spacing with adjacent intersections compared to the Abiwood alternative
- avoids the existing utilities and APA assets and minimises the impacts to existing and proposed drainage assets.

(ii) Discussion

The Committee acknowledges the proposed alignment of the middle section of Officer South Road and the configuration of IN-10 will result in an awkward shaped parcel on its land which would be difficult (or, according to Abiwood, impossible) to develop. Ideally, road alignments should minimise such an outcome.

There are, however, overriding considerations in this case, as set out by Mr Ahmed and TfV. The realigned design proposed by Mr Maina is preliminary only and he conceded the design would need to be validated. TfV considered the alternative alignment may have significant undesirable consequences. Mr Maina's alignment does not eliminate the problem of a small parcel of land being created, but rather shifts the problem onto the adjacent Parklea land, as discussed in Chapter 5.4.2.

The Committee considers there is insufficient justification to change the road alignment. There is no compelling evidence that the revised alignment would be a better outcome for the overall road network, the safety of the network or the development of the PSP.

(iii) Conclusions

The Committee concludes:

- The realignment of Officer Road South at its intersection with Thompsons Road as proposed by Abiwood has not been justified.
- no change is needed to the PSP regarding the alignment of the Officer South Road middle section.

5.4 Thompsons Road

5.4.1 Introduction

(i) What is proposed?

The PSP identifies Thompsons Road as a future primary six-lane arterial road running along the northern boundary of the transmission easement. It is part of the future Principal Freight Network and will be a key east west connection through the PSP and servicing the broader area. DTP has prepared a business case for the road, but funding has not yet been secured.

The section of Thompsons Road through the PSP area is currently unconstructed. The land required for its interim construction (a 41 metre wide road reserve) is set aside in the PSP and ICP land budgets. The Amendment proposes to apply the PAO8 to reserve an additional 29 metres for the construction of the road.

Most of Thompsons Road is included in the various intersections along the road (IN-09, IN-10, IN-11 and IN-12). There are two midblock sections identified on PSP Plan 11 as RD-03 that sit between intersections (see Figure 11).

(ii) The issues

The issues are whether:

- Thompsons Road should be realigned as suggested by Abiwood
- the Thompsons Road PAO8 is required
- the land take for the Thompsons Road intersections is included in the PAO8.

5.4.2 Proposed realignment

(i) Evidence and submissions

As noted in Chapter 5.3.4, Mr Maina's alternative alignment for Officer South Road and IN-10 results in changes to the alignment of Thompsons Road between IN-10 and Cardinia Creek. Abiwood acknowledged the alignment could be refined during detailed design, but it wanted to avoid a future debate about whether Mr Maina's alternative alignment (or something similar) was 'generally in accordance with' the PSP.

Parklea submitted there should be no change to the road's alignment. In Parklea's view, Abiwood's alternative alignment would shift the problem of an irregular shaped parcel of land from Abiwood's property to Parklea's property. Parklea submitted:

- various alignments were explored during the work on the business case and the alignment settled on is the preferred option
- the Abiwood proposal is unresolved as the suitability of the tighter curve radius has not been modelled
- the proposed alignment potentially encroaches over DSS asset WLRB F
- if the road was to be realigned, intersections along Thompsons Road would need to be realigned.

TfV stated that without further detailed work, it did not support the proposed realignment of Thompsons Road for a number of reasons, including:

- the Thompsons Road alignment takes precedence over the Officer South Road alignment because it is a higher order road
- Mr Maina's alternative increases the number of curves along the alignment, and results in a curve very close to IN-10
- the proposed realignment may require the DSS to be reviewed and additional culvert crossings introduced.

The VPA noted there has already been a considerable amount of work completed for Thompsons Road, including a business case, and on that basis any proposed realignment to better serve the interests of one developer is unlikely to receive broader support. The VPA submitted that Mr Maina's design would need further analysis including consideration of topography, drainage and vegetation impacts, intersection spacing and heritage. The VPA submitted that on the evidence of Mr Ahmed and the TfV submissions, the exhibited alignment of Thompsons Road is appropriate and should not be adjusted as proposed by Mr Maina.

(ii) Discussion

This issue is related to the proposed realignment of Officer South Road discussed in Chapter 5.3.4 above. There were similar submissions and evidence as to why the proposed realignment of Thompsons Road should or should not be accepted. The Committee's considerations and conclusions on the realignment of Thompsons Road are consistent with its considerations and conclusions with respect to the realignment of Officer South Road. That discussion is not repeated here.

(iii) Conclusions

The Committee concludes:

- The realignment of Thompsons Road as proposed by Abiwood has not been justified.
- No change is needed to the PSP regarding the proposed Thompsons Road alignment.

5.4.3 Whether the PAO8 is required

(i) Evidence and submissions

TfV submitted that the Thompsons Road Extension Business Case provides the basis for seeking the PAO8. It submitted the PAO8 is needed to facilitate the potential early delivery of Thompsons Road to an arterial standard, and the robustness and due diligence of the business case (although it remains confidential) should be recognised and given appropriate weight when considering whether the PAO8 should be retained.

TfV's initial explanation for why the additional 29 metre width provided by the PAO8 is needed for Thompsons Road was it would allow batters to be constructed to raise the road surface out of flood flows if it was delivered before the surrounding drainage works.

Parklea and Abiwood submitted the basis for the 29 metre wide PAO8 has been superseded by events since the preparation of the business case, and the PAO8 is no longer required and should be removed. Parklea noted that both Mr Mag and Mr Maina assumed the PAO8 was inserted to cater for drainage in the event that Thompsons Road is constructed prior to development of the surrounding land. Mr Mag thought this was unnecessary, as he understood the DSS caters for the drainage of a constructed Thompsons Road (set out in a memorandum prepared by Mr Mag, Document 189).

Melbourne Water provided a memorandum on Thompsons Road drainage (Document 209), setting out the following (among other matters):

- the relevant DSS within the PSP will service retarding, flow conveyance and stormwater quality treatment runoff from the future Thompsons Road reserve
- Thompsons Road DSS stormwater quality assets are not intended to replace other stormwater quality requirements prescribed by other legislation
- Melbourne Water has a zero afflux requirement for runoff from road reserves onto adjacent land
- if there is an interim increase in afflux (until the ultimate DSS works are constructed) that cannot be mitigated within the road reserve, it expects that the agency delivering the road would seek written consent from affected parties and Cardinia, and for that consent to be provided to Melbourne Water.

Melbourne Water confirmed in its memorandum that it understood the PAO8 relates to contingencies in the event that the road is constructed before the DSS infrastructure. It did not take a

position on whether it is necessary or appropriate to apply the PAO8, submitting this was a matter for DTP/TfV in the exercise of its road management authority functions.

Parklea submitted:

- since the interim Thompsons Road is an ICP funded item, the likelihood of the State constructing Thompsons Road to its ultimate configuration ahead of surrounding development is very remote
- the interim road will more likely be delivered by developers, as part of subdivision permit applications
- functional layout plans for the road would only be endorsed once stormwater management plans are approved by Melbourne Water and the responsible authority, showing how drainage will be managed (including for the road).

TfV maintained that should Thompsons Road be delivered early, and suitable DSS infrastructure has not yet been constructed, retarding, conveyance and water quality treatment infrastructure will still be needed and the full 70 metre wide reservation will provide for this outcome if required. It considered the memoranda prepared by Mr Mag and Melbourne Water, and responded:

- while the DSS will service retarding, flow conveyance and stormwater quality treatment of runoff from the road reserve, it will only do so once all the DSS assets required for Thompsons Road have been fully constructed
- zero afflux dispensations may be required to address adverse effects arising from delivery of Thompsons Road before the ultimate DSS works are in place
- such consents may not be given and cannot be relied on.

The VPA noted that if developers construct Thompsons Road concurrent with development, drainage infrastructure would likely be delivered at the same time, and the raised road (and the PAO8) may not be required. However, it deferred to TfV's view that the PAO8 is required to facilitate the construction of the ultimate Thompsons Road in advance of suitable DSS infrastructure.

In his evidence for Parklea, Mr Walsh proposed that the whole 70 metre road reservation be an ICP item, rather than the additional 29 metres being secured by the PAO8. The VPA did not consider Mr Walsh's proposal accorded with the requirements of the Ministerial Direction on ICPs and accordingly cannot be supported.

(ii) Discussion

There is general agreement that the PAO8 was appropriate when the Thompsons Road business case was prepared. The expectation was that Thompsons Road may be delivered by the State before the development of the surrounding land and the construction of the DSS drainage items. The PAO8 was a prudent approach to ensure there would be sufficient land to construct Thompsons Road ahead of the surrounding development, with appropriate elements to protect the road from flood impacts and meet the drainage and water quality management requirements of Melbourne Water.

The Committee accepts the submissions from Parklea that (if development were not prohibited by the Staging Plan) it is more than likely that Thompsons Road will be delivered to an interim standard by developers, concurrently with development of the surrounding land and the necessary DSS drainage assets.

The Committee therefore agrees that the PAO8 would likely be redundant, assuming the staging plan (whatever form it ultimately takes) would not prevent developers from delivering the interim Thompsons Road. That said, there is no certainty that the staging plan will allow this. Further, there

was some suggestion by TfV that until the functional design of Thompsons Road was prepared, it could not be certain that the 41 metre wide road reservation would be sufficient to accommodate the full cross section of road including any necessary works to respond to flood risks.

Melbourne Water and the VPA deferred to TfV (as the road authority) on whether the PAO8 should be retained. TfV considers it should be retained. However, it would be a poor planning outcome if the land covered by the PAO8 turned out not to be required. As things stand, the land cannot be incorporated in developments for the abutting land while the PAO8 remains in place, which risks the land being rendered sterile.

Given the state of uncertainty surrounding the staging plan and the likely timing of the delivery of Thompsons Road in its interim and ultimate configurations, it would be prudent in the Committee's view to retain the PAO8. The PSP should, however, allow the affected land to be developed in accordance with the underlying zone if it is no longer required.

(iii) Conclusions and recommendation

The Committee concludes:

- The Thompsons Road PAO8 should be retained at this time.
- The PSP should be amended to allow the land to be developed in accordance with the underlying zoning if the land turns out not to be required (see the Committee's recommendation in Chapter 5.10.3).

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

a) Add a note to Plan 3 to read:

The underlying zoning for the land affected by the PAO for Thompsons Road is Industrial 1. Applications can be made for the use and development of that land, but they must be referred to the acquiring authority to determine whether the land is surplus to the needs of the acquiring authority.

Make any consequential changes to the Infrastructure Contributions Plan.

5.4.4 Land take for the intersections

(i) Evidence and submissions

The traffic Joint Expert Statement noted that Mr Walsh and Mr Walley considered it is unclear if the land take for intersections along Thompsons Road (IN-09, IN-10, IN-11 and IN-012) includes or excludes land within the PAO8. The VPA responded that the land take for the intersections "*overlaps with the PAO8*", and allocating land in the PAO8 to the ICP for the intersections ensures there is certainty on the source of funding for these intersections.

(ii) Discussion

Table 7 of the PSP states that for these intersections, the ultimate land and interim construction are included in the ICP, but the ultimate construction is not. Notwithstanding the advice of the VPA that the land take for the intersections "*overlaps*" with the PAO8, it remains unclear as to whether:

- the land for the intersections is wholly contained within the PAO8

- the reference to ‘ultimate land’ for these intersections in Table 7 of the PSP refers to the entire 70 metre wide reservation, or just the 41 metre wide reservation.

If the ICP set aside land for the whole 70 metre wide reservation, it would seem that the PAO8 is unnecessary except for the midblock sections that do not form part of the intersections. Hence, the Committee assumes the ICP land take does not include the additional 29 metres provided for under the PAO8. However, the VPA should amend the PSP (and the PAO8 if required) to clarify these matters.

(iii) Conclusions and recommendation

The Committee concludes:

- The PSP should be amended to clarify whether the ultimate land take for intersections IN-09, IN-10, IN-11 and IN-012 provided for in the PSP and ICP includes or excludes the land within the PAO8.
- If the intersection designs and land takes in the PSP and ICP include the full 70 metre wide reservation, the POA8 should be amended to only apply to the midblock sections of RD-03.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as follows as shown in Appendix D, to:

- a) **Clarify whether the ultimate land take for intersections IN-09, IN-10, IN-11 and IN-012 includes or excludes the land within the Public Acquisition Overlay 8. If required:**
 - **adjust the land use budgets in Infrastructure Contributions Plan, and/or**
 - **amend the Public Acquisition Overlay 8 mapping.**

Make any consequential changes to the Infrastructure Contributions Plan.

5.5 Stephens Road

(i) What is proposed?

Stephens Road currently extends north of Handford Lane, and stops short of the Princes Freeway.

The PSP contemplates some form of crossing of the Princes Freeway from an extended Stephens Road into Officer, but it is unclear what form the crossing will take:

- The final PSP (on Plans 3, 4 and 5) show an extension of Stephens Road as a connector road crossing the freeway.
- On the final Plan 11, a road (unlabelled) is shown as an extension of Stephens Road to the PSP boundary but not crossing the Freeway.
- A new non-arterial road (RD-04) is included in the final PSP Table 7. The item is described as *“land for road approach to bridge”* with Cardinia as the lead agency, but there is no funding included for the interim or ultimate construction of the road approach (whatever that means).
- The final Plan 14 shows an area in red on each side of the most northerly section of Stephens Road described in the legend as *“new/widening/intersection flaring”*. There appears to be land set aside in the property specific land use budget (Table 9) for parcels 5, 6 and 7 for the land take for *“new/widening/intersection flaring”*. It is not clear what this

means or what the land is actually required for, as there is no intersection proposed – as the Committee understands it, Stephens Road would either cross over or under the freeway, not intersect with it.

There is no mention elsewhere in the final PSP of the proposed extension of Stephens Road which clarifies what is intended.

(ii) The issue

The issue is:

- whether the PSP should provide for a freeway crossing at Stephens Road.

(iii) Evidence and submissions

Mr Walsh recommended that land for a freeway crossing not be set aside in the ICP, as a road crossing would likely result in residential and industrial traffic on a collector road. Ms Dunstan agreed the land for a road crossing should not be retained, although there may be benefit in a cycling or pedestrian connection.

Cardinia relied on the evidence of Mr Abdou that a new additional north/south arterial road connection should be provided in the PSP area with consideration given to providing a freeway interchange at Stephens Road, to relieve future congestion on Officer South Road. It submitted the land should therefore remain set aside in the PSP and ICP.

TfV did not support a road crossing of the freeway from an extended Stephens Road. It submitted:

- the proposal had been prepared without any consultation with DTP/TfV
- no design work or evidence has been prepared in relation to how the crossing might work
- it is not known whether such a proposal is feasible
- the proposal is not part of the PSP and is likely to result in significant alterations to the planned road network if it were adopted
- there is no funding mechanism in the ICP to cover the construction costs of the crossing
- construction costs would not be considered for State funding ahead of upgrading State roads
- there is therefore a risk that the road crossing may remain undelivered.

Relying on the evidence of Mr Walley, the VPA submitted that if the Stephens Road crossing is removed, Officer South Road would be the only connection to the north to support active and public transport. The VPA submitted it is therefore appropriate to retain the potential link to the north at Stephens Road in the PSP and ICP.

(iv) Discussion

The Committee considers it is unfeasible for a road crossing to be built at Stephens Road for the reasons set out by TfV. A future extension of Stephens Road over or under the freeway is unfunded in the ICP, is unlikely to be funded by the State, and is likely to have limited benefits in terms of the road network for vehicular traffic (including buses) relative to its potential cost.

That said, there may be some merit in retaining land for a potential link to the north at Stephens Road to improve access and connectivity for pedestrians and cyclists. If the VPA considers this should be pursued, the land take required for an active transport link will need to be recalculated because the land take is likely to be significantly different (less) for an active transport connection than for a road connection.

(v) Conclusions and recommendations

The Committee concludes:

- A future road connection across the Princes Freeway at Stephens Road is likely to have limited benefits in terms of the road network relative to cost and is unlikely to be built for vehicular traffic.
- There may be some merit in preserving the option for a future active transport crossing of the freeway.
- If so, the VPA will need to amend the PSP and ICP accordingly, including recalculating the required land take.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

- a) Remove any references to a road crossing of the freeway at Stephens Road. If there is merit in preserving the option for a future pedestrian or cyclist crossing, amend the Precinct Structure Plan accordingly.**

Make any consequential changes to the Infrastructure Contributions Plan.

5.6 Road cross sections

(i) The issues

The issues are:

- whether the shared paths on the primary and secondary arterial road cross sections should be changed to dedicated two way cycle paths
- whether paths should be located in abutting open space rather than the road reserves
- the footpath width in the connector street boulevard cross section
- the carriageway width of local access streets.

(ii) Evidence and submissions

The primary and secondary arterial road ultimate cross sections show a dedicated two way cycle path on both sides of the road. The VPA explained that initially, a shared path would be provided until such time as a footpath is provided along the development frontage. Once the footpath is provided, the shared path would become a dedicated cycle path, consistent with the VPA's *Engineering Design and Construction Manual for Subdivision in Growth Areas – December 2019* which seeks to separate cyclists and pedestrians.

Mr Walsh recommended the road cross sections be amended to provide a shared path on each side rather than dedicated cycle paths. Mr Walley agreed. The VPA did not support this recommendation.

Ms Dunstan recommended a note be provided on the cross sections that allows for footpaths or shared paths to be located either within the abutting public open space or the road reservation. Mr Walley, Mr Walsh and Mr Abdou agreed. The VPA supported this recommendation.

Mr Walley, Mr Walsh, Ms Dunstan and Mr Abdou recommended a note be added to the residential connector street cross section that footpaths for community facilities in the town centre be 1.8 metres. The VPA agreed.

Ms Dunstan's evidence was that a carriageway width of 10.6 metres for an Access Street – Level 2 in a town centre residential context is unnecessary and 7.3 metres with no designated parking is appropriate. She recommended that a residential Access Level 1 cross section be introduced. Mr Walsh, Mr Walley and Mr Abdou agreed. The VPA supported the recommendation.

(iii) Discussion

The Committee agrees with the VPA that the cross sections should not be changed to provide a shared path on each side rather than dedicated cycle paths. While a shared path should be provided in the interim, ultimately the shared path will become a dedicated cycle path once footpaths are provided along the adjacent development frontage. This is consistent with the VPA's Design and Construction Manual for growth areas which seeks to separate cyclists and pedestrians. The Committee considers this to be a desirable objective from a safety and use perspective.

To avoid any confusion, a note should be added to the cross sections that indicates the path will initially be a shared path, then converted to a dedicated cycle path once the footpath is provided along the entire length of the adjoining development front.

The Committee supports the changes to the PSP recommended by the experts to:

- add a note to the road cross sections to allow for paths or shared paths to be located within either abutting public open space or the road reserve
- add a note to the residential connector street cross section that footpaths in the town centre be 1.8 metres wide
- add a residential Access Level 1 cross section with a width of 7.3 metres and no designated parking.

A new residential Access Level 1 cross section has been added to the VPA's final PSP, but the proposed notes have not been added. This should be rectified.

(iv) Conclusions and recommendations

The Committee concludes:

- The Committee supports:
 - the notes added to the relevant road cross sections with respect to the location of shared paths and the width of the footpath in the town centre
 - the addition of an Access Level 1 cross section to the PSP.
- There should be no change to the primary and secondary road ultimate cross sections to show a shared path on each side rather than two way cycle paths, but a note should be added to explain that the path will initially be a shared path, then converted to a dedicated cycle path once the footpath is provided along the entire length of the adjoining development front.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

- a) Add notes to the relevant road cross sections to:**
 - **allow for paths or shared paths to be located within abutting public open space or abutting road reserves**
 - **specify that footpaths in the town centre be 1.8 metres wide**

- **make it clear that the paths on either side of the primary and secondary arterials will initially be a shared path, then converted to a dedicated cycle path once the footpath is provided along the entire length of the adjoining development front.**

Make any consequential changes to the Infrastructure Contributions Plan.

5.7 Pedestrian bridges

5.7.1 The issues

The issues are whether the:

- Cardinia Creek pedestrian bridge (PB-01) should be removed from the PSP and ICP
- Lower Gum Scrub Creek pedestrian bridge (PB-02) should be removed and the existing Lecky Road bridge be upgraded instead.

5.7.2 Pedestrian Bridge PB-01

(i) Evidence and submissions

Pedestrian Bridge PB-01 is intended to provide a link across Cardinia Creek between Officer South and Minta Farm. The bridge is included in the Minta Farm PSP and the ICP at a cost of around \$2 million, apportioned 50/50 between the two ICPs. In the Officer South PSP, the bridge is shown differently to the Minta Farm PSP and ICP, based on advice from Melbourne Water and DEECA:

- the location of the bridge has changed
- the length has changes (from 80 metres to 375 metres)
- consequently, the cost of the bridge has increased substantially to around \$11 million.

Casey raised concerns about PB-01, noting the inconsistencies between the Minta Farm and Officer South PSPs and ICPs, and noting the significant cost differential results in a substantial funding shortfall for Casey's share of the costs of the bridge.

In his traffic evidence for Parklea, Mr Walsh recommended that PB-01 be removed. He considered there is insufficient demand for the bridge having regard to its cost. Mr Walley and Ms Dunstan agreed.

Parklea submitted PB-01 should be removed, noting that:

- there was general agreement among the ICP experts (expressed at the ICP Roundtable) that it should be removed
- the bridge would only serve a small residential catchment on the western side of Cardinia Creek to walk into the industrial precinct on the eastern (Officer South) side
- its removal would reduce the ICP shortfall to both Cardinia and Casey councils.

The VPA supported removing PB-01 from the PSP and ICP, noting that this was supported by Casey (although not by Cardinia, who submitted PB-01 should be retained in the ICP but its funds should be reallocated to State infrastructure projects – see Chapter 6.3 for more detail). The VPA submitted:

- Melbourne Water does not support the location of the bridge as shown in the Officer South PSP due to public safety and access issues on the Minta Farm side
- addressing the concerns of Melbourne Water would require the bridge to be extended a further 50 metres west at even more cost

- PB-01 cannot be located as shown in the Minta Farm ICP due to the proximity of Growling Grass Frogs ponds
- DEECA will not support its relocation further north for the same reason
- relocating the bridge to the south would negate its benefit in providing an active transport connection between Minta Farm and Officer South, due to its proximity to the Grices Road bridge which includes pedestrian paths.

PB-01 was removed from the VPA's final version of the PSP and ICP.

(ii) Discussion

The Committee considers the removal of PB-01 to be a sensible and logical outcome, given the significant increase in cost (compared to the provision in the Minta Farm ICP), the changes requires as a result of advice from Melbourne Water and DEECA and its limited catchment. The Committee is satisfied that alternative locations for the bridge have been investigated in sufficient detail and no viable options have been identified. The Committee considers the bridge would provide limited overall community benefit that would not be justified by the significant cost of the bridge (assuming the design and locational issues could be satisfactorily resolved).

(iii) Conclusions

The Committee concludes:

- PB-01 should be deleted from the PSP and ICP.

5.7.3 Pedestrian Bridge PB-02

(i) Evidence and submissions

Relying on the evidence of Mr Walsh, Parklea submitted that PB-02 should be deleted. Parklea argued that:

- the existing Lecky Road crossing of Lower Gum Scrub Creek could be repurposed for an active transport connection between Officer South and the CREP (subject to further investigation)
- alternatively, BR-01 will have a pedestrian path and would be a preferred location for workers from the employment precinct wanting to cross Lower Gum Scrub Creek into the CREP.

At the traffic roundtable, it was generally agreed that a pedestrian bridge over Lower Gum Scrub Creek was required and without confirmation that the existing Lecky Road culvert could be safely repurposed as a pedestrian crossing, the existing location of PB-02 should be retained in the PSP and ICP. Mr Walley, Ms Dunstan and Mr Abdou agreed that PB-02 should only be removed if the option of repurposing the existing Lecky Road crossing proved viable.

Melbourne Water advised in a memorandum dated 11 April 2024 (Document 220) that the currently planned location and design of WLRB G does not support pedestrian access over Lower Gum Scrub Creek at the existing Lecky Road culvert crossing. The latest drainage plans for WLRB G feature a spillway and rock outlet to be built at and partially over the existing Lecky Road crossing, and a pedestrian crossing at that location, at the existing Lecky Road level, is likely to be unsafe.

(ii) Discussion

At face value, Mr Walsh's suggestion of deleting PB-02 and instead using the existing Lecky Road crossing has some merit. It would appear to be cheaper than building a new bridge, and would provide an improved connection with the proposed green spine along the existing Lecky Road alignment.

On closer examination, using the existing Lecky Road culvert for pedestrian and cyclist traffic becomes problematic. As identified by Melbourne Water, there would be significant safety concerns due the impact of water being discharged from the nearby wetland and retarding basin (WLRB G). The potential additional cost to deal with this impact could be significant. Melbourne Water advised that any additional cost would not be covered by the DSS and would have to be met through the ICP.

In line with the general agreement reached at the traffic roundtable, the Committee considers that without confirmation that the existing Lecky Road crossing could be used as a safe pedestrian crossing, PB-02 should be retained in the PSP and ICP. In light of Melbourne Water's advice in Document 220, the Committee does not see any merit in further investigating the potential to use the existing Lecky Road crossing in place of the proposed PB-02.

(iii) Conclusions

The Committee concludes:

- The existing pedestrian bridge PB-02 over Lower Gum Scrub Creek should be retained in the PSP and ICP.
- Further investigation of the potential use of the existing Lecky Road culvert is not justified.

5.8 Equestrian trails

(i) The issues

The issues are:

- whether the PSP should include equestrian trails
- equestrian trails at crossing arterial roads 'at grade'.

(ii) Evidence and submissions

The traffic Joint Expert Statement records that all the traffic experts who considered the issue agreed it is:

- not appropriate that equestrian trails cross arterial roads at grade
- not desirable for horses to use shared pedestrian paths.

Mr Walsh recommended the equestrian trails be removed from the PSP.

TfV noted that while the trails appear logical, the reality is that the trail would need to cross a four lane secondary arterial road and a six-lane primary arterial road. It submitted that the trails should be shown as 'potential' in the PSP and that a guideline should be added making it clear that the solution for arterial road crossings must be incorporated into the design of the trails at the appropriate time (namely, the first subdivision of the first lot required to provide land for an equestrian trail).

Cardinia noted its Equestrian Trail Strategy and the extent to which equestrian trails are referenced in the Minta Farm and Clyde North PSPs. It added that the State Government has an approved strategy known as *Cardinia Creek Regional Parklands Future Directions Plan 2022* which includes support for

the provision of more and improved equestrian trails. Cardinia submitted that the inability to appropriately cross Thompsons Road would be a major barrier to implementing state and local policies for equestrian trails.

Parklea submitted the equestrian trails should be deleted from the PSP. Parklea noted that the evidence and submissions, including from TfV, are that these trails are non-essential infrastructure and their development around main roads is challenging from an engineering perspective. Parklea submitted that if the trails are to be retained, it should be made clear in the PSP that these trails are 'indicative'.

The VPA submitted:

- the equestrian trails were included in the PSP at the request of Cardinia
- it understood there are design and implementation issues regarding how the trails will cross arterial roads, and the PSP should therefore identify the equestrian trails as 'potential'
- it would continue discussions with DTP/TfV regarding the potential to include a note on the Cardinia Creek Concept Plan (Figures 4, 5 and 6 in the VPA's final version of the PSP) to the effect that Cardinia be required to demonstrate delivery of the equestrian trail to the satisfaction DTP.

(iii) Discussion

The inclusion of equestrian trails in the PSP accords with State and council objectives to support the provision of more equestrian trails. There are, however, clearly some significant implementation issues in Officer South, notably how to provide a safe crossing for riders and horses of the arterial roads in the precinct.

The provision of safe crossings will be challenging and will likely come at some cost to developers. More detailed investigations, design work and costings will be needed to determine that safe crossings are feasible and acceptable to the road authority.

The simple, straight forward solution would be to delete the equestrian trails from the PSP. The Committee considers, however, that such a step is premature without at least some preliminary work being done to shown that safe crossings are not feasible (or at least not at an acceptable cost). The equestrian trails should be retained as 'potential' trails as shown on the VPA's final version of PSP Plan 5.

The Committee considers there is merit in TfV's suggestion that the Cardinia Creek Concept Plan include a note to the effect that Cardinia be required to demonstrate delivery of the equestrian trail crossings of arterial roads to the satisfaction of DTP. This will require further discussion with Cardinia and DTP/TfV.

(iv) Conclusions

The Committee concludes:

- Retaining the equestrian trails on the relevant PSP plans as 'potential' trails (as indicated in the VPA's final version of Plan 5) is appropriate.
- Other references to equestrian trails in the PSP text and plans should be amended to make it clear that they are designated as 'potential'.
- Further discussions between the VPA, Cardinia and DTP should occur on the potential to include a note on the Cardinia Creek Concept Plans that Cardinia be required to demonstrate the equestrian trails are deliverable to the satisfaction of DTP.

5.9 Parklea traffic issues

5.9.1 The issues

The issues are:

- whether the north/south connector road running south from IN-04 should be removed
- whether the pedestrian operated signals in the LTC should be removed
- the configuration of IN-04
- the configuration of IN-12.

5.9.2 North/south connector road

(i) Evidence and submissions

Mr Walsh recommended the removal of the north/south connector road between IN-04 and the east/west connector road immediately north of the gas easement. He argued that the two way daily volume of 1,400 vehicles assigned in the GHD traffic modelling for the connector road implied that this road is not serving a significant role, and these volumes could easily be accommodated by a local road or by other north/south connector roads. He noted this connector road is on a single landholding and its removal would not materially impact other parties and would provide better flexibility for development of the Parklea land. The VPA did not support its removal.

(ii) Discussion

The Committee notes the expected two way traffic volumes on the north/south connector road are relatively low at 1,400 vehicles per day. Based on these expected volumes the designation of the road could be downgraded and removed from the PSP. However, in the absence of traffic modelling to assess the impacts of removing this north/south connector road on the road network more broadly, the Committee is not persuaded it should be removed.

Parklea (as the developer) will be responsible for the delivery of the road and will have the opportunity at the subdivision application stage to submit a traffic impact assessment to demonstrate that its downgrading to a local road will not have unacceptable, adverse impacts on the surrounding road network. The Committee considers that downgrading the road to a local road would be 'generally in accordance with' the PSP.

(iii) Conclusion

The Committee concludes:

- The north/south connector road running south from IN-04 should be retained in the PSP.

5.9.3 Pedestrian operated signals

(i) Evidence and submissions

Mr Walsh recommended the pedestrian operated traffic signals on the residential connector street in the LTC (POS-01) be removed from the PSP and ICP as the signals should be funded by the developer of the LTC. Mr Walley and Ms Dunstan disagreed. The other traffic experts considered the issue to be outside their scope.

The VPA confirmed that POS-01 has been included in the PSP and ICP having regard to the proposed location of the Government school and the provision of safe access. The VPA did not support the removal of the pedestrian signals from the PSP or ICP.

(ii) Discussion

The Committee considers that there is sufficient justification to retain POS-01 in the PSP and the ICP. POS-01 has been included because of the proposed Government School location and the need to provide safe access to the school. The Ministerial Guidelines on ICPs allow signalised pedestrian crossings on connector roads.

(iii) Conclusion

The Committee concludes:

- The pedestrian operating signals (POS-01) should be retained in the ICP.

5.9.4 Intersection IN-04

(i) Evidence and submissions

Parklea submitted that IN-04 should be changed to a left-in/left-out T intersection and the associated southern connector road leg removed, based on Mr Walsh's recommendation. Mr Walsh's evidence was this would allow for the removal of one set of traffic signals along Lecky Road while still providing reasonable connectivity for the network. He noted:

- there are six signalised intersections along Lecky Road in the PSP at an average spacing of 500 metres, considerably less than the standard 800 metre spacing
- the connector road to the south is not needed (see above)
- while the connector road to the north will remain, right turn movements out of this connector road would easily reroute to the Stephens Road intersection and the right turn in movements would reroute via Officer South Road or Stephens Road.

The traffic Joint Expert Statement records that Mr Walley, Ms Donald, Mr Maina and Mr Abdou disagreed with Mr Walsh's suggestion.

Mr Walley's evidence was that this intersection supports access north of Lecky Road in the order of 5,200 vehicles per day and requires control at the Lecky Road intersection. He stated that the transfer of that traffic onto other roads has the potential to overload the eastern approach to IN-01 and on that basis IN-04 should remain as proposed in the PSP.

Mr Maina considered that IN-04 was an important piece in the puzzle, would logically be delivered before other intersections to the west and therefore the right turn movement (from Lecky Road) will be important.

Ms Donald considered all movements are required at the intersection and a left-in/left-out arrangement would restrict and undesirably reroute traffic.

Cardinia noted that no modelling has been done to identify the redistribution of traffic if the changes recommended by Mr Walsh were made to IN-04 (and IN-12). It submitted that modelling would seem a necessary exercise before any decision is made to change the intersections.

The VPA submitted that IN-04 ought properly remain as a four way intersection as currently proposed in the PSP and ICP. It is retained in the VPA's final version of the PSP on Plans 4 and 11 as a four-way signalised intersection.

(ii) Discussion

The Committee acknowledges that changing IN-04 to a T intersection and removing the traffic signals at the intersection would reduce ICP costs. However, this is not sufficient justification to make that change. Most of the traffic experts disagreed with the change. The Committee agrees with Mr Maina, Ms Donald and others that IN-04 is an important item in the road network to provide connectivity and aid traffic circulation. No traffic modelling was submitted to demonstrate the potential impact on the road network of redistribution of traffic that would occur if the intersection was converted to left in/left out on its southern leg. The Committee does not consider that sufficient justification has been established for this change to IN-04.

(iii) Conclusion

The Committee concludes:

- Intersection IN-04 should be retained in the PSP and ICP as a four-way signalised intersection.

5.9.5 Intersection IN-12

(i) Evidence and submissions

Parklea submitted that IN-12 should be changed to a left in/left out intersection and removed from the ICP as recommended by Mr Walsh. Mr Walley and Mr Maina agreed. Mr Abdou disagreed, noting at the traffic roundtable that analysis was needed to understand the likely impact on the road network.

Cardinia submitted that no modelling had been done to identify the proposed redistribution of traffic which would be required before adopting this change.

The VPA submitted this change would require confirmation of TfV's position given IN-12 is located on Thompsons Road (part of the arterial road network) but it was open to recommendations in line with Mr Walsh's suggestions. In the VPA's final version of the PSP, IN-12 is shown as unchanged, that is a signalised T intersection funded through the ICP.

(ii) Discussion

The Committee notes that in the PSP and ICP, IN-12 is shown as a three way intersection with no southern leg to a connector road. There may be some justification for converting intersection IN-12 to an unsignalised left-in/left-out and its removal from the ICP. Again, however, no traffic modelling has been submitted by Parklea to demonstrate that there would be no unacceptable impacts on the operation of the road network. The VPA suggested it was open to the proposed change subject to advice from DTP/TfV that the change would be acceptable. The Committee thinks that is a sensible approach.

(iii) Conclusion

The Committee concludes:

- In the absence of traffic modelling to justify the change, intersection IN-12 should be retained as shown in the PSP unless DTP/TfV supports the changes.

5.10 Galileo traffic issues

5.10.1 The issues

The issues are:

- interim access to the Galileo land
- removal of the PAO associated with the western onramp at the Princes Freeway/Officer South Road interchange.

5.10.2 Interim access

(i) Evidence and submissions

Mr Maina provided a concept plan proposing interim right-in/left-out access from Officer South Road be allowed and a right turn lane be developed to provide for interim access to the Galileo land. He recommended that this be shown on the relevant PSP plans. Galileo submitted that once the precinct area becomes established, a service road could be provided along the length of the frontage of its land to Officer South Road as per Mr Maina's concept plan, indicating a left-in/left-out and right in arrangement which could remain operational until Officer South Road is duplicated and the right turn lane would no longer exist.

Galileo was concerned that a future permit application that included interim access would be regarded as not 'generally in accordance with' the PSP.

The traffic Joint Expert Statement records that Mr Walley, Mr Walsh and Ms Dunstan disagreed with Mr Maina's proposal.

TfV did not support the inclusion of temporary left-in/left-out access arrangements being shown in the PSP. It noted the general approach for interim access to sites abutting existing or future arterial roads is to allow interim left in/left out arrangements through the planning permit process, especially where a site is subject to an existing PAO.

The VPA relied on the evidence of Mr Walley that interim access to individual properties is not typically resolved at the PSP level but rather addressed at the permit application stage.

(ii) Discussion

The Committee understands Galileo's request for more certainty over interim access to its land. However, it is unusual for interim access arrangements to be shown in a PSP. The Committee agrees with Mr Walley and TfV that the appropriate time to consider interim access arrangements is when an application is made for a subdivision permit. A traffic impact assessment is usually required to be lodged with a permit application and that should provide the basis for the road authority to approve the interim access arrangements proposed.

The Committee considers that interim access arrangements approved under a planning permit would be 'generally in accordance with' the PSP even where interim arrangements are not contemplated in the PSP.

(iii) Conclusions

The Committee concludes:

- There is no need to show interim access arrangements to the Galileo property in the PSP.
- Interim access arrangements can be assessed at the subdivision permit application stage.

- Interim access arrangements would be ‘generally in accordance with’ the PSP.

5.10.3 Removal of the existing PAO

(i) Evidence and submissions

An existing PAO applies to the Galileo land for the purpose of developing the city bound onramps to the Princes Freeway from Officer South Road. Galileo noted the ramps have already been delivered, and the evidence of Mr Maina suggests the PAO has effectively served its purpose and could be amended to reflect the land required for the interchange, or removed.

Galileo indicated it is working with DTP to finalise the ultimate design of the interchange to identify surplus land, but this process may not be resolved before the PSP is gazetted. It requested the Committee to recommend express recognition of the need for surplus land to be put to productive use and to be allowed to be developed in accordance with the underlying zoning.

In closing submissions, Galileo noted that the VPA was proposing to alter Plan 3 in the PSP to make it clear the applied zone for any surplus land would be the Commercial 2 Zone. It considered that the VPA’s final version of Plan 3 did not clearly demonstrate this and further clarity is required. It submitted that for the avoidance of doubt, a guideline should be included in the PSP as follows:

Within the extent of the existing PAO1 (south west of the freeway interchange) consider development if surplus land exists subject to the satisfaction of Head, Transport Victoria. Any surplus land should be designated business (C2Z).

TfV explained that adjustments to the PAO were considered as part of the PSP process but it was decided that the existing PAO should be retained because it may be required for the delivery of the freeway interchange in its ultimate configuration. TfV advised it would consider reductions in, or removal of, the PAO once a suitable ultimate interchange design is prepared to its satisfaction. It submitted that the proposed plan prepared by Mr Maina had been prepared without consultation with TfV, and does not demonstrate how it accounts for three-dimensional design elements, drainage and other key design elements such as noise walls, landscaping and maintenance access required.

Relying on the evidence of Mr Walley, the VPA submitted that in the context of the interchange as currently delivered, it is unlikely the full area of the PAO would be required for the future interchange upgrade. However, until the design of the interchange upgrade is resolved, it would be premature to remove or reduce the PAO. The VPA’s final version of Plan 3 includes a note:

Applications affected by the PAO for the Western freeway [sic] onramps are to be referred to the acquiring authority.

(ii) Discussion

The Committee is satisfied that it is unlikely the entire area subject to the PAO will be required for the ultimate construction of the existing city bound onramp. However, until the ultimate interchange design is prepared to TfV’s satisfaction, reduction or removal of the PAO would not be appropriate. There is clearly more detailed design work to be done on the onramp to confirm the land take required for the ultimate treatment. It would be premature to make any change to the extent of the PAO until that design work is done and accepted by DTP/TfV.

The Committee acknowledges the note added to the VPA’s final version of PSP Plan 3, and the VPA’s intent to make changes to the hatching on Plan 3 to clarify that the underlining Commercial 2 Zone would apply to land eventually found to be surplus to the PAO. It is not clear that this further mapping change has been made to Plan 3. Galileo has sought a new guideline be added to the PSP to

put the issue beyond doubt. The new guideline proposed by Galileo is not required, but the note should be amended to clarify the intent.

(iii) Conclusions and recommendation

The Committee concludes:

- No change should be made to the existing PAO for the freeway interchange until an ultimate onramp design and required land take has been agreed with DTP/TfV.
- The note on Plan 3 should be amended to provide more clarity in relation to its intent.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

a) Amend the second note on Plan 3 to read:

The underlying zoning for the land affected by the PAO for the city bound onramp from Officer South Road to the Princes Freeway is Commercial 2. Applications can be made for the use and development of that land, but they must be referred to the acquiring authority to determine whether the land is surplus to the needs of the acquiring authority.

Make any consequential changes to the Infrastructure Contributions Plan.

6 Infrastructure Contributions Plan

6.1 Introduction

(i) What is proposed?

The infrastructure proposed to be funded by the ICP is listed in Table 1, in Chapter 1.2. The ICP also proposes to fund the VPA's plan preparation costs.

The following table sets out details of apportioned items.

Table 4 Apportioned items in the ICP

Item	Officer South ICP	Other funding source
BR-01 (the interim Lecky Road bridge)*	50%	50% to CREP/Cardinia
BR-02 (the Thompsons Road east bridge)*	50%	50% to CREP/Cardinia
PB-01 (the pedestrian bridge over Cardinia Creek into Minta Farm)	50%	50% to Minta Farm
PB-02 (the pedestrian bridge over Lower Gum Scrub Creek)	50%	50% to Cardinia
CI-01 (the Level 2 multipurpose community centre)	34% construction costs** 100% land costs	68% construction costs** to CREP/Cardinia
SR-01 (the sports reserve)	34% construction costs** 100% land costs	68% construction costs** to CREP/Cardinia
Plan preparation costs	28.65%	Third party funding agreements

* these items are 'gateway' infrastructure items in the VPA's exhibited Staging Plan

** the apportionment of construction costs for these items was adjusted in the Day 1 version (see below)

(ii) Resolved issues

Resolved issues are:

- The designs of the interim road bridges (BR-01 and BR-03) should be modified to only include a shared path on one side of the road (not both).
- The construction costs for the Level 2 Community Centre (CI-01) and the sports reserve (SR-01) should be apportioned on a per capita basis (45 per cent to Officer South and 55 per cent to the CREP), not a residential land area basis as exhibited (34 per cent to Officer South and 66 per cent to the CREP).⁶
- Based on discussions with the Department of Education, Cardinia is no longer pursuing the submission that the kindergarten rooms should be provided on the government school site, and the community centre reduced to a smaller (Level 1) centre.

⁶ Mr Hrelja (who provided ICP evidence on behalf of Development Victoria) expressed some concern at the ICP roundtable and in his evidence about whether the residential densities specified in the PSP are achievable, and if they are not, the costs should be apportioned on the basis of land area (as exhibited), not population.

- Cardinia initially submitted the VPA or the State should be the collecting agency and development agency under the ICP. This was not supported by its expert (Mr Shipp), and Cardinia did not pursue this through the Hearing.

There was no dispute about the costings of the ICP projects.

6.2 Cash flow issues and funding shortfalls

(i) The issues

The issues are:

- cash flow (particularly as a result of the VPA's proposed Staging Plan)
- funding shortfalls.

(ii) Evidence and submissions

Cardinia submitted there will be negative cash flows and funding shortfalls under the ICP in the VPA's proposed Staging Plan that will need to be managed consistent with Cardinia's financial obligations under the *Local Government Act 2020*.

It submitted that when negative cash flows arise:

- they have to be funded by developers (as they deliver works under works in kind (WIK) agreements, and then must wait until sufficient funds have been collected under the ICP to reimburse their credits)
- the infrastructure (if it is not delivered as WIK) must be delayed until sufficient funds have been collected.

Cardinia acknowledged that:

- it is responsible for shortfalls in the funding of some externally apportioned projects (due to legacy issues in the CREP)
- the ICP cannot do much about underfunding of community infrastructure arising from the cap on the Community and Recreation Standard Levy and the relatively small size of the Officer South residential area
- the debate about the cap on the Community and Recreation Standard Levy and its consequences is with the Minister for Planning, and not before the Committee.

Notwithstanding, Cardinia submitted the ICP must be managed so that development finances the cashflow of the ICP in an efficient way, initially through credits and then through reimbursement payments only as funds become available.

Further, the Staging Plan needs to allow development to proceed in a manner which minimises the negative balance of the ICP cash flow. Cardinia instructed Mr Shipp (who provided ICP evidence for Cardinia) to analyse the cash flow implications of its proposed staging plan, compared with the VPA's proposed Staging Plan. That analysis showed that Cardinia's proposed staging plan had substantially less funding shortfalls in Stages 1, 2 and 3 than the VPA's proposed plan. Mr Shipp's evidence was:

I agree that the proposed SCO and associated staging plan will significantly add to the funding shortfall experienced by Council and presents a risk to the realisation of the PSP's objectives.

Cardinia submitted the constraints on funding the State gateway infrastructure identified in the VPA's proposed Staging Plan (IN-13, BR-02 and BR-04) "*potentially leaves development in the PSP stranded at some point in the not too distant future*" (an issue identified by a number of submitters and discussed in more detail in Chapter 3).

(iii) Discussion

For the reasons set out in Chapter 3, the Committee considers a case has been made for some form of staging plan on face value, but the VPA's model is neither strategically justified nor practically implementable.

The Committee is not in a position to recommend any particular alternative staging plan over that of the VPA. Rather, it has set out some principles in Chapter 3 the VPA should adopt when developing its new staging control, should a staging control be found to be warranted. These include the need for careful consideration as to:

- what infrastructure is required to allow development in the different stages to proceed, and why
- what level of development triggers the need for that infrastructure.

Equally important will be whether the new staging plan allows an efficient cashflow under the ICP. It is critical that the new staging plan 'bakes in' efficient cash flows from the outset. This is not something that should be left to be addressed through a review of the staging plan. The new staging plan must:

- avoid the 'catch 22' identified by the Best Hooper clients
- facilitate the early and ongoing development of land within the precinct, to allow Cardinia to start collecting levies under the ICP as early as possible so that the infrastructure provided for in the ICP can be delivered in a timely way.

This is particularly important for any ICP funded gateway infrastructure that may be required under the new staging plan (if one is found to be warranted). If these items are delayed through cash flow issues and funding shortfalls, this will threaten the ongoing development of the precinct, the delivery of a SSIP and RSCA, and the delivery of critical State infrastructure that will serve not just Officer South but the broader region.

BR-01 is an example. This item is partially funded under the ICP and must be delivered under the VPA's proposed Staging Plan before any of Stages 2, 3 or 4 can proceed. It therefore makes sense for the ICP to facilitate the earliest possible delivery of BR-01.

The Committee sought to explore with the VPA why the ICP did not include borrowing costs for the early delivery of BR-01. The VPA's answer was that borrowing costs had not been included because Cardinia had not asked for them to be included.

The Committee appreciates there are certain difficulties in including borrowing costs in an ICP. Firstly, it can be difficult to calculate borrowing costs in the absence of certainty about the design and timing of the infrastructure item in question. Second, there are uncertainties associated with whether the council (in this case Cardinia) can (and is willing to) borrow money to fund the early delivery, given its financial management obligations. However, had this option been further explored when preparing the PSP, ICP and Amendment, it may have resolved some of the conundrums arising from the interaction between the ICP and the Staging Plan discussed in Chapter 3.

Regarding other reasons for funding shortfalls under the ICP, the Committee finds:

- While expected funding shortfalls are in part due to poor planning and legacy issues and are Cardinia's responsibility, expecting Cardinia to manage those shortfalls and deliver the infrastructure regardless is not the answer. The reality is, these shortfalls will make it more difficult for Cardinia to manage cash flows and deliver the projects required to be delivered under the ICP. This needs to be considered when the VPA develops any new staging plan.

- The issue of underfunding arising from the cap on the Community and Recreation Standard Levy is beyond the Committee's remit.

(iv) Conclusions and recommendation

The Committee concludes:

- There is a risk of significant cash flow issues and funding shortfalls under the ICP, primarily driven by the VPA's proposed staging control and its interaction with the ICP.
- The key to fixing this problem is for the VPA to give careful consideration to cash flow implications under the ICP as it develops any new staging plan. An analysis of cash flows in each stage of the kind provided by Mr Shipp in his written evidence would be helpful in this regard.
- Alternatively (or in addition), the VPA should explore adjustments to the ICP (such as inclusion of early borrowing costs for key gateway infrastructure items) to ensure those items can be delivered early.

The Committee recommends:

General recommendation

If a staging control is found to be warranted after completing the further strategic work and empirical analysis recommended by the Committee in Chapter 3.5 of this report, the Victorian Planning Authority should carefully consider the following when preparing its new staging control:

- a) how the staging plan impacts cash flows under the Infrastructure Contributions Plan, so as to minimise negative cash flows and avoid exacerbating funding shortfalls**
- b) adjustments to the Infrastructure Contributions Plan to facilitate the early delivery of key gateway infrastructure items identified in the new staging plan (such as borrowing costs for early delivery).**

6.3 Cardinia's alternative approach

(i) Evidence and submissions

Mainly in response to the cashflow issues and funding shortfalls anticipated under the ICP, Cardinia proposed an alternative approach essentially involving:

- redirecting the funds collected for the two pedestrian bridges to fund a contribution to the costs of constructing the Thompsons Road west bridge (BR-04) to an interim standard (by the State, with the State funding the balance)
- early delivery of BR-01, which unlocks development of Stage 2 and subsequent stages (and the flow of contributions from development in those stages).

Cardinia submitted the advantages of its alternative approach include:

- prioritising BR-04, which would provide more linkages and better network connections than some of the other State infrastructure items in the VPA's proposed Staging Plan
- delivering BR-04 at a lower cost to the State and earlier (including potentially through a GAIC WIK agreement with Parklea)

- early delivery of BR-04 may in turn incentivise the State to provide the other infrastructure required under the VPA's proposed Staging Plan earlier, thereby unlocking development in the precinct (and the flow of contributions under the ICP) earlier.

Abiwood, GLG Invest and ISPT provided conceptual support for Cardinia's alternative, submitting it is consistent with the need to preference delivery of a new connection to the west (via Thompsons Road) as early as possible to unlock more development opportunities in the PSP area. However, it noted there are unknowns, including:

- whether DTP will support the rearrangement of responsibilities for the delivery of BR-04 (at least to an interim standard) and BR-02
- the costs of an interim BR-04
- whether the ICP funding diversion would collect sufficient funds for an interim BR-04 to be delivered
- whether the relevant landowner (Parklea) would be willing to provide the interim BR-04 as GAIC WIK.

The VPA indicated that Cardinia's alternative approach was worth considering, but noted that significant work would need to be undertaken first, including preparing an interim design and costings for BR-04, and negotiations with Casey and DTP on solving the 'missing link' between BR-04 and Thompsons Road on the west of Cardinia Creek. Cardinia responded that approving the ICP before its alternative is fully investigated *"effectively kills the prospect"*.

In its closing submission, Casey indicated in-principle support for Cardinia's suggestion of retaining PB-01 in the ICP and redirecting its funds to an interim BR-04, but questioned whether this would meet the nexus principles in the ICP Guidelines.

(ii) Discussion

The Committee considers Cardinia's proposed alternative approach to funding BR-04 to an interim standard using funds redirected from PB-01 and PB-02 has some logic. However, the Committee:

- supports the removal of PB-01 for the reasons set out in Chapter 5.7
- shares Casey's concern about whether redirecting funds from one ICP project to another project (which is not currently included in the ICP) would meet the requirements of the ICP Guidelines, including the nexus requirements
- considers this alternative is not worth pursuing unless DTP provides in-principle support, and an indication that it would in fact incentivise the earlier provision by the State of any other gateway infrastructure items identified in the VPA's new staging plan (if one is warranted, and whatever form it ultimately takes).

(iii) Conclusions

The Committee concludes:

- There is a logic to Cardinia's alternative approach, and the Committee encourages the VPA to give it further consideration as it develops its new staging plan (assuming staging controls are found to be warranted).
- However, several issues would need to be worked through before the alternative approach could be implemented, including:
 - whether it would meet the requirements of the ICP Guidelines, including the nexus requirements
 - whether it has in-principle support from DTP.

6.4 Inclusions, exclusions and scope of projects

(i) The issues

The issues are:

- whether the following items should be removed from the ICP:
 - the Cardinia Creek pedestrian bridge (PB-01)
 - the Lower Gum Scrub Creek pedestrian bridge (PB-02)
 - the pedestrian operated signals in the LTC
 - intersection IN-12
 - road RD-01 and road RD-04
 - plan preparation costs (these are discussed separately in Chapter 6.7 below)
- whether the following item should be included in the land budget:
 - land allocations for shared paths that are not located in a road reserve or drainage and waterway reserve
- whether community infrastructure items should be reduced in scope (and therefore cost).

(ii) Evidence and submissions

Cardinia Creek pedestrian bridge

PB-01 is 50 per cent apportioned between the Minta Farm ICP and the Officer South ICP. The costs of the bridge have substantially escalated since the Minta Farm ICP was finalised. The Minta Farm ICP assumes a total cost of just under \$2.1 million, whereas the cost in the Officer South ICP is recorded as around \$24.3 million. This results in a substantial shortfall in funding under the Minta Farm ICP, and therefore a substantial unfunded liability for Casey City Council (Casey).

Mr Shipp recommended PB-01 be deleted as the cost differential between the Minta Farm and Officer South ICPs raises equity issues. He considered removing the bridge would bring overall costs under the Officer South ICP down and assist in managing the funding shortfalls and implementation challenges with the Officer South ICP discussed in Chapter 6.2 above.

In his traffic evidence for Parklea, Mr Walsh noted the ICP is expensive compared to other ICPs, and suggested PB-01 be removed to bring overall costs down. He considered there was insufficient explanation as to why it is required.

The VPA's final version of the ICP (Document 237.01) deleted PB-01 from the ICP, and recalculated the levies accordingly. This was generally supported, other than by Cardinia, as retaining the pedestrian bridges in the ICP is a key element of its alternative approach discussed in Chapter 6.3.

Casey's closing submission indicated that if PB-01 is removed, the Minta Farm ICP will continue to collect contributions for a project that cannot now be delivered. It submitted:

Should the Committee support the deletion of the project, Casey respectfully submits that the Committee be mindful of these consequential impacts and recommend that the VPA facilitate a separate planning scheme amendment to the Casey Planning Scheme that deletes the corresponding project from the Minta Farm ICP.

Lower Gum Scrub Creek pedestrian bridge

Mr Walsh suggested PB-02 be removed to reduce overall costs. He considered there was insufficient explanation as to why it is required. Alternatively, he suggested consideration be given to repurposing the existing Lecky Road culvert (currently a road crossing which will in future connect to

the green spine) as a pedestrian and bike crossing of Cardinia Creek instead of PB-02 (this is discussed further in Chapter 5.7.3).

Parklea submitted that if PB-02 is retained, its funding should be apportioned to the residential class of development only. The VPA responded that:

- the limited evidence of Mr Walsh on this issue (two paragraphs) is insufficient to justify apportionment of the cost of PB-02 to the residential catchment alone
- consistent with the evidence of Mr Walley, ICP items are generally not apportioned to specific land uses
- if that approach was adopted then apportionment of all infrastructure projects should be considered, including whether infrastructure unlikely to be utilised by the residential catchment should be fully apportioned to the industrial land
- it would be exceedingly difficult to demonstrate nexus in order to apportion one project but not others as proposed by Mr Walsh.

Pedestrian operated signals

Mr Walsh considered the pedestrian operated signals on the Connector Boulevard (POS-01) would not typically be funded on a connector road. He considered they should be developer funded works as part of the connector road. He recommended POS-01 be removed from the ICP, noting the cost is relatively minor at around \$400,000.

Parklea submitted that either POS-01 should be deleted as recommended by Mr Walsh or the funding should be apportioned wholly to the residential development, as usage of the LTC will predominantly be by people from the residential area.

Intersection IN-12

Mr Walsh recommended that IN-12 be converted to a left-in/left-out arrangement and be removed from the ICP. His reasons are discussed in more detail in Chapter 5.9.

Road projects

The exhibited ICP includes three road projects:

- RD-01, a 2-lane carriageway in a 41-metre road reservation (it is not identified on any of the PSP or ICP plans)
- RD-02, various midblock sections of the realigned and upgraded Lecky Road
- RD-03, various midblock sections of the future Thompsons Road.

The Day 1 version introduced a fourth project, RD-04, to allow for Stephens Road to include a future road crossing of the freeway (land component only). It was added at the request of Cardinia, on the advice of Trafficworks.

Mr Shipp's evidence was that RD-01 should be removed from the ICP, based on his understanding that RD-01 is redundant due to the extent of intersections.

Some traffic experts did not support a future Stephens Road crossing of the freeway, as discussed in Chapter 5.5. On that basis, they said that RD-04 should be removed from the ICP. Mr Shipp's evidence was that connector road bridges are allowable items under the Ministerial Direction if certain criteria are met. However RD-04 is not included in the Precinct Infrastructure Plan and *"it is not clear to me whether a crossing is in fact needed 'in order to develop the land for urban purposes' and therefore whether the criteria for including the item has been met"*. He deferred to the traffic experts on this issue.

Shared path land allocations

All drainage experts and Melbourne Water agreed shared paths should be located outside the area that conveys water in a 1-in-100 year flood event. The experts recommended the waterway corridors be widened to include the shared path provision, or the land use budget be amended to include additional land required for the shared paths as a separate line item where they could not be provided within either the drainage and waterway reserve or an adjacent road reserve.

Melbourne Water added that where there is no road frontage along a waterway corridor, a shared path will be required on both sides to allow for access to the waterway corridors for maintenance purposes. It agreed this should be accounted for in the land budget.

Over scoped community infrastructure

Mr Hrelja (who gave ICP evidence for Development Victoria) considered the housing density and population projections in the PSP are aspirational and may not be achieved, for the reasons set out in Chapter 2.4. He considered the scope or size of community and recreation infrastructure (being designed for an aspirational community of 5,000 persons in Officer South) should be reviewed, and the costs adjusted accordingly. Mr Shipp did not review expected densities or yields but agreed ICP items should be planned to meet the expected needs of the ultimate community.

(iii) Discussion

Cardinia Creek pedestrian bridge

All parties other than Cardinia agreed that PB-01 should be removed from the PSP and ICP. The Committee supports this, for the reasons set out in Chapter 5.7 and those outlined by Mr Shipp. This is reflected in the VPA's final version of the PSP and ICP.

The only question remaining is what should be done with the Minta Farm ICP, under which contributions for PB-01 have been (and are continuing to be) collected.

The Committee agrees with Casey that this needs to be resolved. This could be done either through an amendment to the Minta Farm ICP, or through the provisions of Part 3AB Division 7 of the PE Act (which deals with the responsibilities of collecting agencies and development agencies if contributions are not expended). The Committee encourages the VPA to work with Casey to reach a satisfactory resolution.

Lower Gum Scrub Creek pedestrian bridge

PB-02 is retained in the VPA's final versions of the PSP and ICP, and the Committee agrees with its retention for the reasons set out in Chapter 5.7.3. The pedestrian bridge will be important to ensure the residential communities in the CREP and Officer South are integrated and well connected without having to rely on vehicles. The Committee accepts Melbourne Water's explanation for why PB-02 needs to be located where shown in the exhibited PSP, and considers the reconfiguration of the existing Lecky Road culvert does not need to be further investigated.

The Committee considers there is insufficient justification to apportion the costs of PB-02 solely to the residential class of development. As the VPA pointed out, if that approach was adopted for PB-02, then apportionment of all infrastructure projects between the residential and employment parts of the precinct should be considered. The Committee agrees with the VPA it would be difficult to demonstrate nexus in apportioning the whole of PB-02 to the residential precinct, given part of the

justification for the bridge is to provide workers in Officer South who reside in the CREP with a convenient pedestrian access to work.

Pedestrian operated signals

Mr Walsh's proposal to remove POS-01 from the ICP was not considered at the ICP joint expert meeting. The VPA retained POS-01 in its final version of the ICP, although the costs have been slightly reduced.

In the absence of support from either the planning authority or any other experts, the Committee does not consider it appropriate to remove POS-01 from either the PSP or the ICP. In any event, its removal would make only a marginal difference to the overall levies payable under the ICP.

The Committee does not support Parklea's request to apportion the funding for POS-01 wholly to the residential class of development, for the same reason as it does not support the apportionment of PB-02 wholly to the residential class of development.

Intersection IN-12

For the reasons set out in Chapter 5.9.5, the Committee does not support Mr Walsh's recommendation that IN-12 be converted to a left-in/left-out arrangement. The fully directional intersection will service development beyond the immediately adjoining land, and should therefore be retained in the ICP.

Road projects

RD-01 is not shown on the PSP or ICP plans. The VPA's Day 1 submission summary table indicated that RD-01 may not be required, as the intersection extents take up the full length of the road. However, references to RD-01 remain in the VPA's final version of the ICP (with zero construction costs or land allocation). This creates ambiguity and confusion and should be rectified.

For the reasons set out in Chapter 5.5, the Committee does not support retaining the land for a future road crossing of the freeway at Stephens Road. Hence, RD-04 should be removed from the ICP. If the VPA considers there is merit in a future pedestrian and/or cyclist crossing, it will need to amend the PSP and ICP accordingly, including recalculating the required land take.

Shared path land allocations

The Committee supports the agreed position between Melbourne Water and all drainage experts that where shared paths are not able to be included within the drainage and waterway reserves or road reserves, an allowance for the land required should be included in the land budget tables in the ICP. It is not clear whether this has been accounted for in the VPA's final versions.

Over scoped community infrastructure

For the reasons set out in Chapter 2.4, the Committee does not support revising the target densities in the PSP (although it has recommended changes to the PSP to provide more flexibility in relation to densities and typologies). In that context, it would not be appropriate to rescope the community infrastructure as Mr Hrelja suggested.

(iv) Conclusions and recommendation

The Committee concludes:

- The Cardinia Creek pedestrian bridge (PB-01) should be deleted from the PSP and ICP.

- The Lower Gum Scrub Creek pedestrian bridge (PB-02) should be retained in the PSP and ICP.
- PB-02 should not be apportioned to the residential class of development only.
- Where shared paths are not able to be included within the drainage and waterway reserves or road reserves, an allowance for the land required should be included in the land budget tables in the ICP.
- Intersection IN-12 should remain in the ICP.
- The VPA should confirm whether RD-01 is required, and if not, all references to RD-01 should be removed from the ICP.
- RD-04 should be removed from the ICP.
- The community infrastructure should not be rescoped in the PSP and ICP.

The Committee recommends:

Infrastructure Contributions Plan

Amend the Infrastructure Contributions Plan as follows:

- a) Remove references to road project RD-01 if it is not required.**
- b) Remove references to RD-04.**
- c) Include an allowance in the land budget for shared paths that are not able to be located in either a drainage and waterway reserve or a road reserve.**

Recalculate the levies accordingly, and make consequential amendments to the Precinct Structure Plan.

6.5 Apportionment of land for CI-01 and SR-01

(i) The issue

The issue is:

- whether the land component of the Level 2 Community Centre (CI-01) and the sports reserve (SR-01) should be apportioned in the same way construction costs are apportioned.

(ii) Evidence and submissions

Development Victoria and YourLand submitted the land component of CI-01 and SR-01 should be apportioned between the Officer South ICP and the CREP in the same way the construction costs are apportioned. Mr Hrelja and Mr Shipp both agreed apportionment of the land component would be more equitable.

While Cardinia acknowledged the two ICP experts (including its own expert Mr Shipp) agreed the land component should be apportioned, it resisted this approach. It submitted that to meet its financial obligations under the *Local Government Act 2020*, it is essential that any statutory obligation to pay land credit amounts under the ICP is fully funded, subject only to an agreement on timing of those payments. It submitted:

If only 34 percent or 45 percent of the Land Credit Amount was funded, Council would not have the funding for the balance. In that event, the ICP would be imposing an unfunded liability ... in relation to an infrastructure item that Council cannot avoid delivering. That is unpalatable and totally inconsistent with the Financial Management Principles. It would be tantamount to imposing a legal obligation on Council that would put Council in breach of its statutory obligations.

Council indicated in oral submissions that the likely outcome in this scenario is that it would simply not be able to deliver the facilities, either at the size required to serve both communities, or at all.

Mr Panozzo expressed the view at the ICP roundtable that preserving the land for these important community infrastructure items is the 'number one' priority. He made the point that if Cardinia gets the land early, it can start the funding of those projects through other means. He indicated there could be some flexibility around the staging of the delivery of the infrastructure, but if the land is not secured and funded through the ICP, there is a risk that the infrastructure will not be delivered.

(iii) Discussion

CI-01 and SR-01 are legacies of bad planning for the CREP. These facilities are needed to service the residential communities in both the CREP and Officer South, and yet no arrangements are in place to allow collection of contributions toward the land component of these infrastructure items from the CREP. It is inequitable to require Officer South to pay the full costs for the land component for these facilities, when it is only generating 45 per cent of the need for these facilities.

This legacy issue cannot now be corrected. The residential parts of the CREP are substantially developed. Even if the CREP Development Contributions Plan was amended to include the CREP's share of the land costs of these projects, it would be too late to collect the levies as permits for most of the residential land have already issued. It would amount to shutting the gate after the horse had bolted.

Cardinia has made it clear that if the Officer South ICP only funds its share (45 per cent) of the land costs, the facilities will likely not be delivered – at least at the required size to serve both communities. Mr Panozzo also highlighted this as a risk.

The Committee is therefore faced with a choice between two evils.

On balance, it considers net community benefit is better served by the full land allocation being apportioned to Officer South. It would be a worse planning outcome if the land allocation was apportioned and consequently the facilities were not delivered, than the inequity involved in Officer South developers having to bear the full cost of land for which their developments only generate part of the need.

(iv) Conclusion

The Committee concludes:

- The land costs for the community centre and sports reserve should be fully apportioned to Officer South, to avoid the risk of the facilities not being delivered at the required size to serve both communities, or at all.

6.6 Exemptions

(i) The issues

The issues are whether the following should be exempt from levies:

- the Freeway Service Centre (property 4)
- the State Government Facility (part of property 30E)
- the Emergency Services Facility (part of property 22).

(ii) Evidence and submissions

The Freeway Service Centre is currently accessed directly from the Princes Freeway with exclusive entry and exit roads. Access to the local road network is not permitted, and DTP's original submission (S70) confirmed it would not support access to the local road network as long as the land remains used for the Freeway Service Centre.

The landowner of property 4 submitted that there is therefore no nexus between the current land use and the proposed ICP transport items.

Mr Shipp agreed that (assuming access is restricted in this way) it would be inequitable for an ICP levy to be triggered by, say, development of an expanded car park to service the Freeway Service Centre or a new retail outlet on the land. If, however, property 4 was to be redeveloped for a different use that had access to the surrounding network, it should not be exempt.

Mr Shipp noted that property 4 is identified in the PSP and ICP as Net Developable Area (NDA). His view was that if the exemption is included, the NDA should be removed from the land budget to ensure that the ICP is not underfunded. He noted that if the land is ultimately redeveloped, levies will still be payable and the overall ICP balance can be reconciled at the conclusion of the ICP period in accordance with the provisions of the PE Act.

Submissions were made that the Emergency Services Facility should be exempt from levies on the basis that the facilities will serve a public purpose and community benefit. Mr Shipp noted that an Emergency Services Facility is not one of the classes of development that is exempt under the Ministerial Direction for ICPs (schools being an example). His evidence was:

In my experience, it is normal practice for emergency services sites identified in PSPs to be included in the NDA and subject to ICP levy payments in the same way as other development. I do not see any reason to divert from that practice in this ICP.

YourLand submitted the State Government Facility land should be excluded from the ICP and the NDA. Mr Shipp's response was:

In the case of the proposed State Government Health Facility, a relatively large land area is required (2 hectares, according to submission 73). Submission 58 argues that the land should be excluded from the ICP, noting that the need for and timing of the facility is uncertain. In my view, this uncertainty warrants the retention of the NDA in the ICP land budget and levy calculation.

(iii) Discussion

The Committee agrees with Mr Shipp's recommendations in relation to the Freeway Service Centre, the Emergency Services Facility and the State Government Facility, for the reasons set out by Mr Shipp.

(iv) Conclusions and recommendation

The Committee concludes:

- The Freeway Service Centre should be exempt from paying levies where a permit application is made that relates to the existing use of the land.
- The Emergency Services Facility and the State Government Facility should not be exempt from levies under the ICP.

The Committee recommends:

Infrastructure Contributions Plan

Amend the Infrastructure Contributions Plan as follows:

- a) **Include text to provide that an application to use or develop Property 4 in connection with its current use as a Freeway Service Centre is exempt from levies.**
- b) **Remove Property 4 from the Net Developable Area. Recalculate the levies accordingly, and make consequential amendments to the Precinct Structure Plan.**

6.7 Plan preparation costs

(i) The issues

The issues are whether the following should be recovered under the ICP:

- the VPA's plan preparation costs
- YourLand's contribution to the plan preparation costs.

(ii) Evidence and submissions

YourLand submitted it (and Development Victoria) had made "*significant financial contributions*" towards funding the VPA's costs in preparing the PSP, and that these should be included in the ICP. It submitted this was:

- consistent with the objectives of planning in Victoria
- lawful under the provisions of the PE Act.

In support of the first point, YourLand submitted the objectives of planning include to provide for the fair, orderly, economic and sustainable use and development of land, and that it is fair that all plan preparation costs are spread across all landowners, regardless of whether the VPA received upfront contributions from third parties. It submitted:

Indeed it would be unfair if third parties who contributed to plan preparation costs could not have those contributions apportioned among all landowners in the same way as the VPA. It is also orderly and economic for those contributions to be apportioned through the ICP, to encourage third parties to contribute to the VPA's plan preparation costs to enable the orderly and economic planning of growth areas to occur.

YourLand provided extensive legal submissions in support of its second point, which the Committee has considered but has not repeated here.

Mr Shipp recommended plan preparation costs be removed from the ICP. He noted that the Ministerial Direction allowed them to be included (subject to certain conditions), but the ICP Guidelines indicated that only the costs of "*a planning authority other than the VPA*" could be recovered. He noted that the plan preparation costs appeared to be funded at least in part by third party funding agreements, and:

Given that neither the VPA nor landowners would be defined as a "*planning authority other than the VPA*", it is my view that including plan preparation costs in the ICP would not be consistent with the ICP Guidelines, and therefore that the item should be deleted.

The VPA submitted that plan preparation costs incurred by third parties are not recoverable under the PE Act. It submitted that it is not seeking that the Committee make legal findings on this issue, but commented as follows in relation to voluntary third party funding agreements:

- the legal advice received by VPA over previous months is plan preparation costs incurred via an Agreement are not recoverable

- it is common ground that the Agreement does not provide for these costs to be refunded
- the Agreement is authorised under separate legislation, namely the *Victorian Planning Authority Act 2017*
- the Agreement is intended to bring about prioritisation, and the use of resources by the VPA to bring forward planning processes. It is not simply concerned with consultant costs
- this is not the only PSP where an Agreement has been entered into on the same terms, though it is the only one where a party to the Agreement has sought reimbursement
- the ICP was not exhibited with the inclusion of this item, and “*this was not a mere omission*”
- even if there is scope to argue that the costs were ‘incurred’ by the Planning Authority, this would not be sufficient to make it appropriate to do so in the circumstances for Officer South.

(iii) Discussion

The PE Act allows plan preparation costs to be recovered through an ICP, provided they are:

- incurred by the planning authority (section 46GG(1))
- relate to the proposed development of land in the ICP plan area.

The Ministerial Direction includes plan preparation costs as an allowable item, subject to certain conditions, namely plan preparation costs recovered under the:

- standard levy cannot exceed 1 per cent of the total standard levy
- supplementary levy must relate to works, services or facilities to be funded from the supplementary levy.

Although this has not been clearly demonstrated, there is no suggestion in any of the submissions or evidence that these conditions are not met.

The VPA’s plan preparation costs

The ICP Guidelines state (at page 22, emphasis added):

Plan preparation costs are the reasonable costs and expenses incurred by a planning authority, other than the Victorian Planning Authority, in preparing an ICP and any related precinct structure plan or strategic plan.

The Guidelines go on to explain:

While the costs must be incurred by a planning authority, this does not need to be the same planning authority that subsequently prepares an amendment to incorporate the ICP into the planning scheme.

Example: If a council prepares an ICP but the Minister is subsequently the planning authority for the amendment to incorporate the ICP into the planning scheme, the council’s plan preparation costs may be funded through the ICP.

Plan preparation costs do not include the costs and expenses incurred by a planning authority in preparing an amendment or undertaking steps in the amendment process for an ICP.

The Guidelines are not legally binding, and cannot override the express powers in the PE Act for plan preparation costs incurred by a planning authority to be recovered under the ICP (provided the conditions in the Ministerial Direction are met). However, the Guidelines indicate a clear intent that preparation costs incurred by planning authorities other than the VPA (generally councils) can be recovered, but not those of the VPA. While it is not clear from the Guidelines why this distinction is made, the intent is clear. The Committee therefore agrees with Mr Shipp that the VPA’s plan preparation costs should be removed from the ICP.

YourLand's plan preparation costs

The Committee does not accept YourLand's arguments that spreading plan preparation costs among all landowners constitutes fair and orderly planning, and a more economic use and development of the land. YourLand (and Development Victoria) chose to enter into voluntary third party funding agreements. Other landowners did not. The Committee does not regard it as fair and orderly for one landowner to voluntarily agree to contribute to plan preparation costs, and then expect to be reimbursed for those costs from other landowners who did not make that choice.

It is not the Committee's role to make legal rulings on whether the PE Act allows costs contributed under a third party funding agreement to be recovered under an ICP. That said, the Committee accepts that plan preparation costs do not necessarily need to be directly 'out of pocket' to be recoverable. For instance, staff time is an indirect cost of the planning authority that may be recoverable notwithstanding it is not an 'out of pocket' expense. Costs contributed under a third party funding agreement may also be recoverable, although it seems to the Committee to be a stretch of the language of the PE Act to suggest that these are costs 'incurred by' the planning authority where there is no legal obligation to repay those contributions. (That said, the Committee makes no findings as to whether the VPA has any legal obligation to repay those costs to YourLand, as the third party funding agreement was not before the Committee).

In any event, given the Committee has concluded it would be inconsistent with the ICP Guidelines to recover the plan preparation costs incurred directly by the VPA, it follows that costs paid by third parties through voluntary third party funding agreements – even if they could be said to be indirectly incurred by the VPA – should also not be recoverable.

(iv) Conclusions and recommendation

The Committee concludes:

- Neither the VPA's direct costs nor those arguably 'incurred by' the VPA under voluntary third party funding agreements should not be recovered through the ICP.

The Committee recommends:

Infrastructure Contributions Plan

Amend the Infrastructure Contributions Plan as follows:

- a) Remove item PP-01 (plan preparation costs) and references to plan preparation costs.**

Recalculate the levies accordingly, and make consequential changes to the Precinct Structure Plan.

6.8 Adjusting for revised land takes

(i) The issue

The issue is:

- whether land released for development after the ICP has been finalised should be subject to levies.

(ii) Evidence and submissions

Cardinia indicated that where additional land is released for development after the land budget in the ICP has been finalised, its intention would be to charge levies on the land. An example is where the detailed design process demonstrates that a particular drainage asset can be designed in a smaller footprint, but still achieve the required performance parameters.

Cardinia indicated that in these circumstances, developers should not get a 'free kick' in respect of the land released for development. If it is developable, it should be leviable in the same way as the rest of the NDA in the precinct. Cardinia indicated that in the past, it has had difficulty negotiating permit conditions to this effect in the absence of supporting wording in the ICP. It proposed suggested wording in the ICP, to give such permit conditions statutory force.

In response to a question from the Committee, Cardinia indicated it would not apply the same approach in reverse. In other words, if the drainage asset in question needed to be larger than allowed for in the land budget, Cardinia would still intend to charge levies on the 'lost' developable area.

(iii) Discussion

It seems appropriate that, if land is released for development as a result of assets shifting or reducing in size, then levies should be payable on that land. Similarly, the land credit and land equalisation amounts for that parcel of land should be adjusted accordingly. The Committee supports Cardinia's proposed wording in the ICP (with some minor modifications for clarity) to provide statutory support for permit conditions that seek to implement this principle.

This begs the question as to whether the same principle should apply in reverse. In other words, if more land is required for a particular asset, should the developer only have to pay levies on the actual developable area (not the NDA recorded in the PSP/ICP property specific land budget tables)?

The Committee put this to Cardinia at the Hearing. Cardinia explained that the difficulty with this approach is that the infrastructure listed in the PSP and ICP still needs to be delivered, at the same cost. It would not be financially responsible for Cardinia to forego levies that it knows are required to cover the cost of the asset.

The ICP is set to cover the cost of infrastructure. If the land take is reduced at detailed design stage, and Cardinia is able to collect levies in relation to the additional NDA, that could be seen as a windfall for Cardinia. Yet if more land is needed, the developer loses NDA while Cardinia collects the same amount of levies. This does not seem fair and orderly planning.

On balance, however, the Committee accepts Cardinia's position. It accepts that the cost of the infrastructure will not change if more land is required, so not being able to collect levies on the additional land that becomes non-developable would result in further underfunding under the ICP.

(iv) Conclusion and recommendation

The Committee concludes:

- It is appropriate that, if land identified in the ICP as non-developable subsequently becomes developable, levies should be payable on that land and the land equalisation and land credit amounts adjusted accordingly.

The Committee recommends:

Infrastructure Contributions Plan

Amend the Infrastructure Contributions Plan as follows:

a) Amend the last paragraph in section 5.3 to read as follows:

For the purposes of this ICP, the number of net developable hectares for any specific parcel of land as set out in Table 17 is changed if the area of non-developable land is reduced through detailed design and/or the collecting agency and the owner of that parcel agree to a variation to the parcel specific land budget as set out in Table 17. The changes to Table 17 and any consequential changes to the public purpose land credit and equalisation amounts in Table 11 must be set out in an agreement made under section 173 of the *Planning and Environment Act 1987*. In that event:

- the Monetary Component for that parcel must then be paid based on that varied number net developable hectares;**
- the Land Credit Amount for that parcel is the amount set out in that agreement; and**
- the Land Equalisation Amount for that parcel is the amount set out in that agreement.**

7 Aboriginal cultural heritage

7.1 Introduction

(i) Overview

The precinct and its surrounds are in an area of known Aboriginal cultural heritage. The Officer region is on the traditional lands of the Bunurong people, one of the five tribal groups of the Kulin Nation. The lands of the Bunurong extend from the Werribee River and Port Phillip Bay (western boundary) to Warragul in West Gippsland (eastern boundary), and from the southern end of the Dandenong Ranges National Park (northern boundary) to the coast bordering Bass Strait (southern boundary).

The western boundary of the precinct is Cardinia Creek, a natural (and relatively undisturbed) waterway that is typical of many smaller waterways throughout south east Australia. Before colonisation, most Aboriginal people lived close to water courses for easy access to water and the food sources, both flora and fauna, that would be present. Archaeologically, Aboriginal settlements and other substantial evidence of human 'residence' is usually found within 200 metres of natural waterways, which would be the most likely case for Cardinia Creek. Indeed, evidence was given during the Aboriginal cultural heritage roundtable that when cultural heritage work was done in the Officer precinct, substantial cultural heritage material was unearthed along Cardinia Creek.

(ii) What is proposed?

The Amendment proposes to apply the RCZ to manage and protect tangible and intangible cultural Aboriginal cultural heritage values within 200 metres to the east of Cardinia Creek (in the Cultural Value Investigation Area identified on the PSP plans). The effect of this would be to create a 200 metre buffer from Cardinia Creek into the precinct which would be excluded from industrial development.

Some, but not all, of the Cultural Value Investigation Area intersects with other environmental values. As can be seen from the Place Based Plan in Figure 3, there is a substantial overlap between the Biodiversity Conservation Strategy (BCS) area and the Cultural Value Investigation Area. There is also substantial overlap between the waterway and drainage land and the Cultural Value Investigation Area. However, the Cultural Value Investigation Area extends beyond both these other areas.

This is the first time a PSP and the associated amendment have sought to use planning controls to manage and protect cultural heritage.

The VPA made it clear at the Hearing that the RCZ is not intended to displace the Victorian *Aboriginal Heritage Act 2006* and associated regulations (the AH regime), which would continue to apply.

(iii) Relevant policy

In addition to the AH regime, there are a number of clauses in the Planning Policy Framework that support the protection of Aboriginal cultural heritage, including:

- Clause 12.03-1S (River and riparian corridors, waterways, lakes, wetlands and billabongs), which seeks to enhance a sense of place and landscape identity by conserving areas of identified Victorian Aboriginal cultural heritage significance relating to waterway systems

- Clause 15.03-1S (Heritage conservation), which seeks to identify, assess and document places of natural and cultural heritage significance as a basis for their inclusion in the Planning Scheme
- Clause 15.03-2S (Aboriginal cultural heritage), which seeks to ensure the protection and conservation of places of Aboriginal cultural heritage significance
- Clause 21.02-7 (Aboriginal cultural heritage), which seeks to provide for the protection and management of significant Aboriginal heritage sites, material culture, and places of historical and spiritual significance to relevant contemporary Aboriginal people.

(iv) Proposed planning controls

The Amendment proposes to apply the RCZ3 and IPO3 to the Cultural Value Investigation Area.

The purposes of the RCZ3 include to:

- conserve the values specified in the schedule
- protect and enhance the natural environment and natural processes for their historic, archaeological and scientific interest, landscape, faunal habitat and cultural values
- protect and enhance natural resources and the biodiversity of the area
- conserve and enhance the cultural significance and character of open rural and scenic non-urban landscapes.

The proposed RCZ3 identifies the values to be conserved as:

To recognise and protect the cultural heritage values along Cardinia Creek within the Officer South Employment Precinct Structure Plan area and acknowledge the importance of this area to the Bunurong Land Council Aboriginal Corporation. Ensure use and development of this area is compatible with and protects the landscape and intangible cultural heritage values.

(v) Resolved issue

The resolved issue is:

- There was general agreement that Aboriginal cultural heritage will likely be present in the precinct, particularly in the vicinity of Cardinia Creek, which is a natural waterway.

7.2 The use of planning controls

(i) The issue

The issue is:

- whether it is appropriate and justified to use planning controls (specifically the RCZ) to protect Aboriginal cultural heritage values.

(ii) Evidence and submissions

The BLCAC, represented by Dr Tutchener, participated in the Aboriginal cultural heritage roundtable. The BLCAC engaged extensively with the VPA during the development of the PSP and requested the creation of a conservation area within 200 metres of the Cardinia Creek. The BLCAC submitted the area around Cardinia Creek was an important site for intangible Aboriginal cultural heritage and cultural practice. They stated that important cultural lore tracks or paths passed through the area, and it was important that these are protected. Dr Tutchener noted at the roundtable that use of the RCZ provides broader public amenity benefit, including biodiversity corridors, cultural flows (green space) and managing heat impacts.

Ms Murphy gave cultural heritage evidence for the VPA. She considered the RCZ to be a reasonable and appropriate tool to manage cultural heritage values in the precinct. She considered the BLCAC's position to be a matter of importance. Mr Glossop for the VPA equally supported the use of the RCZ given its purposes are focused on conservation, protection and enhancement of the natural environment, and include specific reference to cultural heritage.

Parklea submitted the RCZ3 and IPO3 should not be applied beyond the BCS area and that there was no clear need to extend the conservation area to 200 metres from Cardinia Creek based on intangible or tangible values. Ms Nicholson gave evidence in support of Parklea's position and considered the existing approvals regime under the AH regime is appropriate for managing intangible (and tangible) cultural heritage values. Mr Woodland's planning evidence for Parklea noted the PSP's role in identifying potential heritage values and broad directions to protect them, but that Cultural Heritage Management Plans (CHMP) provide the statutory process to undertake high impact activities in areas of identified cultural sensitivity.

Similar to Parklea, ISPT considered planning controls unnecessary on that basis that the AH regime and CHMPs are the appropriate means to manage cultural heritage within 200 metres of the Cardinia Creek. ISPT submitted the RCZ should not be applied to the Cultural Value Investigation Area and that it should not be included in the PSP plans.

Eildon also submitted that the use of the RCZ for this purpose is unreasonably restrictive and contrary to the CHMP process.

The VPA submitted in closing that there was public value in a nexus between the Planning Scheme and those cultural values to be identified, and that there was room for growth in how the AH regime and the PE Act interact in relation to the identification and protection of Aboriginal cultural heritage. It maintained its position that use of the RCZ is appropriate, and emphasised the degree of consultation undertaken to date – including, of primary importance, with the BLCAC – in coming to this position. The VPA noted that any weaknesses in the AH regime were not the basis for its decision to use complementary planning controls, and pointed to the broader public amenity benefits acknowledged by Dr Tutchener.

(iii) Discussion

The Committee has turned its mind to the threshold question of whether there is sufficient evidence of the presence of Aboriginal cultural heritage to justify the application of planning controls to recognise and protect cultural heritage values.

The experts (including the BLCAC) were in general agreement that it is highly likely that both tangible and intangible cultural heritage values are present within 200 metres of Cardinia Creek. The Committee is satisfied that that this is likely the case, on the basis of the BLCAC's *Cultural Values Mapping: Cardinia Creek* report (Document 174), and the work on tangible and intangible values undertaken to date by Tardis Archaeology. However, a CHMP (or CHMPs) need to be prepared to fully determine the nature and extent of those values.

Accepting that Aboriginal cultural heritage (tangible and intangible) likely exists near the creek, the primary issue is how best to manage and protect it. The key questions are:

- whether planning controls should be used to protect cultural heritage, given a separate purpose-designed legislative regime already does so
- if so, whether the application of the RCZ to protect cultural heritage is an appropriate use of the RCZ.

With regard to the first question, it is important to acknowledge that the AH regime was established specifically as a tailored approach to protect and manage Aboriginal heritage in Victoria. Before the AH regime, Aboriginal heritage was managed under Part IIA of the Commonwealth *Aboriginal & Torres Strait Islander Heritage Protection Act 1984*. Criticisms of Part IIA included that it did not consider Traditional Owners as it was of the ‘pre-Mabo’ era, and it was really about the managed destruction of Aboriginal heritage rather than its protection.

The AH regime was developed after an extensive engagement and consultative process with all stakeholders, with a primary focus on the Aboriginal community and specifically Traditional Owners. The Mabo decision and subsequent legal and legislative evolutions meant that Traditional Owners are the natural and appropriate decision makers regarding pre-colonisation Aboriginal heritage.

The Committee heard in the cultural heritage roundtable that the BLCAC considered the AH regime deficient in protecting Aboriginal cultural heritage and that, given the breadth and extent of cultural heritage that most likely exists within 200 metres of Cardinia Creek, the RCZ is a better vehicle to protect this heritage (both tangible and intangible). The BLCAC did not provide specific demonstrations of how the AH regime was deficient, although it did mention that it is more geared toward identification and managed destruction of cultural heritage, rather than its in situ protection.

The Committee acknowledges that the AH regime may not meet all the expectations of all stakeholders (especially Traditional Owners). It also acknowledges that, like all legislative regimes, the AH regime can probably be further improved, particularly when it comes to protecting intangible cultural heritage values. That said, the Committee considers it is nonetheless the most appropriate mechanism for the identification, protection and management of Aboriginal cultural heritage.

The Committee acknowledges the VPA’s statement during the Hearing that it has not proposed applying the RCZ because it considers the AH regime to be deficient. Rather, the VPA pointed to the need to ‘raise the bar’ in terms of what the planning system can do to protect Aboriginal cultural heritage.

Nonetheless, the Committee is concerned that applying the RCZ in this circumstance may imply that the AH regime is not fit for purpose, or requires supplementing. It is not the Committee’s role to critique the AH regime, but if it is not fit for purpose, or is deficient in some way, that is a matter that must be resolved by legislative change led by the responsible Minister.

On whether the RCZ is an appropriate tool for protecting Aboriginal cultural heritage, the purposes of the RCZ make it clear that it can be used to conserve values spanning environmental, landscape and cultural matters. It specifically seeks to “*protect and enhance the natural environment and natural processes for their historic, archaeological and scientific interest, landscape, faunal habitat and cultural values*” (Committee’s emphasis).

In this case, the proposed RCZ3 identifies Aboriginal cultural heritage along the Cardinia Creek corridor as the value to be recognised and protected. The use of the control as proposed would appear consistent with the purposes of the RCZ, even if it is centred primarily on cultural heritage values (rather than, say, the environmental values of the BCS area). Of the available Victoria Planning Provisions zones, the RCZ appears most appropriate.

However, the primary question is whether the use of planning controls is appropriate in the context of the AH regime and statutory CHMP process. For the reasons set out above, the Committee concludes that it would not be appropriate.

Further, and just as importantly, the nature and extent of the cultural values present on the land have not yet been fully determined. Applying the RCZ to recognise and protect cultural heritage is a novel approach, and this is the first time it has been proposed in the PSP context. In the Committee's view, a novel approach needs to be robustly strategically justified. The RCZ is a highly restrictive zone, which allows minimal development of the land. A full assessment of the cultural values present on the land needs to be undertaken to determine whether those values justify the application of the RCZ having regard to its purposes.

It follows that applying the IPO3 to manage cultural heritage values is also not appropriate. The IPO3 will need to be amended to remove the requirement for a land management plan that demonstrates how applications within the Cultural Value Investigation Area will manage intangible cultural heritage values. The land management plan requirements of the IPO3 are more appropriately dealt with as part of a CHMP(s).

Once a CHMP(s) has been prepared for the land to the east of Cardinia Creek, the nature and extent of the cultural heritage values present on the land will be better understood. It may be appropriate at that point for the VPA to reconsider the extent of what is now defined as the Cultural Value Investigation Area in the PSP, the appropriate zoning for that land, and whether other planning tools (such as a Significant Landscape Overlay) might be appropriate to recognise and manage those values going forward.

(iv) Conclusions and recommendations

The Committee concludes:

- The AH regime is the appropriate and most suitable tool for identifying, protecting and managing Aboriginal cultural heritage in the Officer South precinct.
- Applying the RCZ (or the IPO3) to manage and protect Aboriginal cultural heritage in the circumstances presented in the Officer South precinct has not been justified.
- Once a CHMP has been prepared, it may be appropriate to reconsider:
 - the extent of what is now defined as the Cultural Value Investigation Area in the PSP
 - the appropriate zoning for that land
 - whether other planning tools (such as a Significant Landscape Overlay) might be a better fit to recognise and manage the values identified in the CHMP.

The Committee recommends:

General recommendations

For land identified in the Precinct Structure Plan solely as 'Cultural Value Investigation Area' (without intersecting values such as the environmental values in the Biodiversity Conservation Strategy area):

- a) do not apply the Rural Conservation Zone**
- b) retain the land in the Urban Growth Zone, with an applied Industrial 1 Zone**
- c) do not apply the Incorporated Plan Overlay.**

Adjust the Precinct Structure Plan and the planning scheme maps accordingly.

Changes to the draft Amendment

Amend the Incorporated Plan Overlay Schedule 3 to remove the requirements for a land management plan for applications in the Cultural Value Investigation Area.

7.3 Other issues

(i) The issues

Given the Committee's conclusion that it is not appropriate to apply the RCZ to the Cultural Value Investigation Area, the remaining key issues in relation to Aboriginal cultural heritage are less pressing. Nevertheless, the issues are:

- the width of the Cultural Value Investigation Area (100 metres or 200 metres)
- ownership and management of the Cultural Value Investigation Area
- the location of drainage assets within the Cultural Value Investigation Area.

The Committee has dealt with these issues briefly.

(ii) The width of the Cultural Value Investigation Area

The Committee does not support removing the Cultural Value Investigation Area from the PSP plans, as some submitters have suggested. The Committee has found that cultural values (both tangible and intangible) are likely to be present, although further investigations are required to fully determine the nature and extent of those values. It is therefore appropriate to identify this area as requiring further investigation. It should, however, be identified as an investigation area, rather than 'cultural heritage'. The brown (cultural heritage) layer should be removed, but the brown hatched (Cultural Value Investigation Area) layer should be retained.

The question therefore remains whether the Cultural Value Investigation Area should be 200 metres wide (as shown in the PSP), or 100 metres wide (as some submitters suggested). The 100 metre width would largely if not entirely overlap with the BCS area and/or the waterway and drainage land.

The BLCAC explained at the Aboriginal cultural heritage roundtable that the width of the Cultural Value Investigation Area had been informed by Bunurong Elders. The BLCAC explained that cultural heritage values, particularly intangible values, don't simply stop 200 metres from a creek line. They continue across the whole area and broader landscape. However the BLCAC and Bunurong Elders recognised that seeking protections beyond the 200 metre zone (the area that is defined under the AH regime as an area of cultural heritage sensitivity) would be unlikely to be supported.

The Committee agrees that it is appropriate to define the Cultural Value Investigation Area as the area within 200 metres of the creek. Other than Parklea (through the evidence of Ms Nicholson), no substantive evidence was put forward by any of the parties to justify why 100 metres was more appropriate than 200 metres. The 200 metre distance aligns with the area of cultural heritage sensitivity under the AH regime, and the Committee regards it as appropriate, at least until CHMPs are finalised and more accurately define the nature and extent of the cultural heritage values in the area.

(iii) Management and ownership of the Cultural Value Investigation Area

Several parties expressed concern as to who would manage the Cultural Value Investigation Area. The BLCAC indicated at the roundtable that it has some interest in potentially being involved in the management and care for the Cultural Value Investigation Area, subject to its fairly limited resources. Cardinia indicated it did not wish to take on ownership of the Cultural Value Investigation Area or responsibility for its management.

Given the Committee's recommendations that the Cultural Value Investigation Area remain in the Urban Growth Zone (with an applied Industrial 1 Zone), and the IPO3 requirements for a land

management plan be removed, ownership and management of the Cultural Value Investigation Area is no longer such an issue. The land in the BCS area will eventually vest in (and be managed by) DEECA, and the land remaining in the Cultural Value Investigation Area outside the BCS area will remain in private ownership, able to be developed for industrial purposes subject to the requirements of the AH regime. It is not necessary to specify particular ownership or management arrangements for the land.

This would, however, have been a significant issue if the land were to be rezoned to RCZ. Without appropriate ownership and management arrangements in place, the Cultural Value Investigation Area would be unable to be developed or managed in a coordinated way for purposes consistent with its cultural values. The land would be left in multiple separate parcels, with multiple owners who are unable to develop the land for their own purposes. This would likely result in the land becoming neglected and poorly maintained, which could compromise the whole purpose of setting the land aside for the protection of cultural values.

(iv) Drainage assets within the Cultural Value Investigation Area

The issue of the placement of drainage assets within the Cultural Value Investigation Area is primarily an issue for Melbourne Water. Melbourne Water indicated in its closing submission that to ensure the drainage assets could be delivered, they should be moved outside the Cultural Value Investigation Area, subject to being able to move them back in should this prove to be acceptable from a cultural heritage perspective. This will not be known until a CHMP is prepared.

The Committee supports this approach, and the submissions of Melbourne Water on this issue. This will require adjustments to various PSP plans, with a note added as provided for in Appendix D. Should the assets be relocated back within the Cultural Value Investigation Area after CHMPs are completed, the Committee is satisfied that the additional words in the ICP suggested by Cardinia (see Recommendation 7(g)) will ensure any land that becomes developable will be subject to infrastructure contributions under the ICP.

(v) Conclusions and recommendation

The Committee concludes:

- The Cultural Value Investigation Area should be retained on the PSP plans, but the brown layer identified as cultural heritage should be removed.
- The proposed width of the Cultural Value Investigation Area (at 200 metres) is appropriate.
- Given the land will not be rezoned RCZ, it is not necessary to specify particular ownership or management arrangements for the land in the Cultural Value Investigation Area.
- Melbourne Water's proposed approach to drainage assets that were shown in the exhibited PSP as located within the Cultural Value Investigation Area is appropriate.

The Committee recommends:

Precinct Structure Plan

Amend the Precinct Structure Plan as shown in Appendix D, to:

- a) Remove the brown (cultural heritage) layer from Plan 3 and any other plans, but retain the brown hatched (Cultural Value Investigation Area) layer.**

- b) Relocate drainage asset outside the Cultural Value Investigation Area, and add a note indicating assets may be relocated to within the Cultural Value Investigation Area subject to Cultural Heritage Management Plans and at the election of the developer. Make any consequential changes to the Infrastructure Contributions Plan.**

8 Miscellaneous issues

8.1 Pumping station

(i) Introduction

What is proposed?

The PSP identifies an existing South East Water owned and operated sewer pumping station on Property 09. The PSP proposes a 180 metre separation area around the pumping station. The land within the proposed separation area is owned by the Galileo Group, and is located in the RSCA with an applied Commercial 2 Zone.

Proposed planning controls

The exhibited UGZ7 proposes the following within the separation area:

- certain sensitive uses are prohibited ('caretakers house' and 'education centre')
- other sensitive uses require a permit (such as 'art gallery', 'cinema' and 'food and drink premises')
- an application requirement for an amenity impact assessment covering odour and noise impacts
- decision guidelines that require consideration of:
 - whether the proposed use may be affected by odour impacts
 - the views of South East Water.

Relevant policy

Relevant policy includes:

- clause 13.06-1S (Air Quality Management) of the Planning Scheme which seeks to ensure adequate separation between land uses that reduce amenity and sensitive land uses
- clause 53.10 of the Planning Scheme which specifies the minimum threshold distance between amenity impacting industrial uses and sensitive land use zones (for example residential zones)
- *Planning Practice Note 92: Managing Buffers for Land Use Compatibility*, Department of Environment, Land, Water and Planning, March 2021 (PPN92)
- *EPA Publication 1518 – Recommended Separation Distances for Industrial Residual Air Emissions* (EPA, March 2013)
- draft *EPA Publication 1949 – Separation Distance Guideline* (EPA, December 2022).

(ii) The issue

The issue is:

- whether the width of the separation area (100 or 180 metres) is appropriate and justified.

The resolved issues (as between the VPA and Galileo) are:

- It is not necessary or appropriate to apply a Buffer Area Overlay to land within the separation area. Rather, the appropriate approach is to apply suitable controls within the UGZ7:
- The application requirements in the UGZ7 will only apply to use applications, not buildings and works applications.

- Noise is not an issue, and references to noise issues in the PSP and UGZ7 will be removed.

(iii) South East Water's position

South East Water did not participate in the Hearing. The material before the Committee is restricted to:

- its submission on the exhibited PSP and Amendment (S71)
- a further written submission to the Committee (Document 145)
- a report titled *Recommended buffer zone for Officer South Pumping Station* prepared for South East Water by Consulting Environmental Engineers in May 2022 (CEE report), which was apparently prepared to inform South East Water's initial request for a Buffer Area Overlay (Document 146)
- a table containing South East Water's response to Galileo's opening submission (Document 147).

South East Water's position on the resolved issues is unclear. There are inconsistencies between S71 and Document 147:

- On the Buffer Area Overlay, the Committee understands South East Water originally sought the Overlay be applied. This was not pursued in South East Water's submission (S71). However, Document 147 contains several references to the Overlay Schedule (even though no schedule is before the Committee), but does not state whether or not South East Water considers the Overlay should be applied.
- On buildings and works controls, Document 147 indicates "*buildings need to be considered as part of land uses*", but does not state whether South East Water considers changes should be made to the UGZ7 application requirements to apply them to buildings and works applications.
- On noise, S71 states the assessment (presumably the CEE report) found that current and predicted future operation of the pumping station meets (or will meet) the relevant noise criteria at the nearest proposed residential development. Document 147 states the CEE report shows noise will be contained within the proposed odour buffer, but does not state whether South East Water considers noise should be referenced in the PSP or planning controls.

Document 147 also states "*there is a requirement to manage non sensitive use permissions within the Buffer Area Overlay or separation distance to ensure odour and/or noise will not affect these uses and manage any perceived grey areas*". It is unclear what South East Water means by this.

Document 147 also responds to technical matters raised in the expert evidence of Dr Cowan (for Galileo) on odour. South East Water did not participate in the Hearing, and did not put these matters to Dr Cowan.

The Committee has placed limited weight on Document 147. It was tabled on 14 March 2024, only two business days before Galileo presented its case, which provided limited opportunity for Galileo (or its expert Dr Cowan) to respond to the material. The Committee was not provided with notice that the additional material would be provided, or any context for Document 147 other than a statement in Document 145 (submitted with Document 147) that Galileo's opening statements are addressed in the table.

It would have been more helpful to the Committee for South East Water to have attended the Hearing, to:

- clearly explain what (if any) changes it seeks to the Day 1 versions of the PSP and Amendment
- put technical matters on which it disagrees with Dr Cowan to him directly.

(iv) Evidence and submissions

Relying on evidence from Dr Cowan, Galileo requested the separation distance be reduced from 180 metres to 100 metres. Dr Cowan's evidence was:

- the CEE report that informed the 180 metre separation area:
 - did not apply the odour risk assessment methodology from EPA Publication 1883 (as EPA Publication 1883 was finalised after the CEE report was completed)
 - failed to acknowledge the surrounding land use would be pursuant to the Commercial 2 Zone, which is of 'medium sensitivity' under EPA Publication 1883
- the proposed 180 metre separation distance is based on limited surveys of current unmitigated emissions during monthly maintenance
- there are practicable measures that are implemented at other pumping stations across Melbourne which would reduce the impact during maintenance
- South East Water intends to implement an air treatment system either before or as the PSP is built out, which will mitigate emissions during monthly maintenance
- there are no odour impacts outside of monthly maintenance
- interstate guidance indicates that a reasonable separation distance for appropriately controlled pumping stations is 100 metres.

Galileo submitted:

- the impact of a 180 metre separation area on its land is significant when compared to a 100 metre separation area
- separation distances should be used for upset conditions, not routine operations
- separation distances should not be used in lieu of reasonably practicable mitigation measures
- under the General Environmental Duty, it is incumbent on South East Water to implement these measures or demonstrate why they are not practicable before relying on a separation distance.

South East Water's submission stated:

- it assessed the pumping station in line with EPA Odour Guidelines which involved field work, odour surveys and dispersion modelling, providing "*multiple lines of evidence*" for the recommended 180 metre buffer
- Environment Protection Authority Victoria (EPA) accepted that offsite odour will likely extend to a distance of around 200 metres from the pumping station, possibly further
- South East Water required 180 metres to operate within the General Environment Duty
- Galileo's request for a reduction in the separation distance to 100 metres was based on a report from Tonkin and Taylor which "*did not evidence any field studies but rather used a generic buffer and guidelines from other States*".

EPA did not participate in the Hearing, but its submission on the exhibited PSP and Amendment (S52) noted:

- there is a known risk of odour arising from the pumping station
- steps have been taken to limit the establishment of sensitive uses within the area of risk through the application of an appropriate zone (UG27) with controls on sensitive uses

- the UGZ7 controls are generally appropriate
- once development in the precinct commences, the UGZ will need to be translated into an appropriate standard zone, and the controls will need to be translated across to the permanent planning controls for the area.

The VPA's position on the pumping station separation area is outlined in its Key Issues Statement in relation to matters raised by Galileo (Document 149):

- the 180 metre separation area is provided as required under the *Ministerial Direction on the Form and Content of Planning Schemes* (Ministerial Direction 19), for land uses that may significantly impact the environment, amenity, and human health
- the VPA relies on the advice of:
 - EPA, who has advised that a 180 metre separation distance is appropriate
 - South East Water, who has considered Galileo's submission and maintains that in order to continue to operate within the General Environmental Duty, a minimum of 180 metre separation distance is required to mitigate risks associated with odour and noise
- South East Water noted in Document 147 that odour surveys indicated obvious odour at a 160 metre radius and subtle odour at a 190 metre radius.

(v) Discussion

There was no dispute that:

- the Officer South pumping station is critical infrastructure
- without mitigation, there is a high risk of odour from the pumping station
- the flow rates through the pumping station will increase over time.

In seeking a reduction of the separation distance from 180 metres to 100 metres, both Galileo and Dr Cowan put forward arguments that seemed to support the proposition that there should be no separation distance at all.

Dr Cowan's evidence and Galileo's submission made much of the fact that EPA Publication 1518 indicates separation distances are intended to deal with unintended odour impacts, not (they said) predicted impacts arising from routine maintenance.

The Committee does not necessarily agree that references to unintended impacts in EPA 1518 (and draft EPA 1949) should be understood in the way Dr Cowan and Galileo suggest. EPA 1949 states:

Separation distances are necessary to account for potential unintended offsite emissions expected as part of the day-to-day operation of industrial land uses. Such emissions may occur due to:

- the nature of the operation
- slight changes in weather conditions
- minor accidents
- minor equipment failure.

Unintended offsite emissions may still occur even when an industrial land use is operating in accordance with all relevant statutory obligations, including minimising the risk of harm to human health or the environment from pollution and waste so far as reasonably practicable.

In the Committee's view, while odour arising from routine monthly maintenance may be foreseeable, it may nevertheless be 'unintended' for the purposes of EPA 1518 and EPA 1949.

Dr Cowan and Galileo also emphasised that a separation distance should not be used in lieu of reasonably practicable mitigation measures, which South East Water would be obliged to implement

pursuant to the General Environmental Duty. The Committee agrees, and notes this is expressly stated in EPA 1949:

Separation distances are not to be used by duty holders as an alternative to controlling offsite impacts or meeting legal obligations.\

The General Environmental Duty will require South East Water to reduce odour emissions from the pumping station as far as reasonably practical, whether or not a separation distance is applied (and regardless of how wide the separation area is). However, it is also important to recognise that the VPA and/or Galileo also have a General Environmental Duty, as ‘agents of change’. As EPA 1949 states:

The agent of change has the responsibility to:

- consider their obligations under the General Environmental Duty, including the risks of harm to human health or the environment from pollution or waste from the proposed activity
- avoid land use conflict
- ensure potential impacts on nearby land uses are appropriately mitigated and managed.

In terms of the appropriate width of the separation area, there is no recommended default separation distance in Victorian guidelines for sewage pumping stations. The separation distance therefore needs to be determined based on a risk assessment.

The CEE Report undertook a risk assessment, and concluded, based on odour surveys and an analysis of historical odour complaints, there is a potential for odour impact on a monthly basis when the pumping station is desludged which could extend to 180 metres. EPA suggested odour impacts could potentially extend even further.

Neither the Tonkin and Taylor Reports attached to Galileo’s original submission (S54) nor Dr Cowan’s expert evidence were based on odour surveys, or analysis of historical complaints. The Committee regards the CEE report as the more comprehensive risk assessment.

While the Committee acknowledges that interstate guidance suggests lesser separation distances may be appropriate, it does not consider the proposed 180 metre separation distance should be reduced. The Committee has formed this view having regard to the current operations of the pumping station, and the more comprehensive risk assessment undertaken in the CEE report.

Importantly, the UGZ7 controls do not prohibit use or development within the separation area (other than ‘caretakers house’ and ‘education centre’). Rather, they introduce a permit trigger for a limited range of sensitive uses, and require an amenity impact assessment to demonstrate that odour impacts of the pumping station can be appropriately managed. This will require a ‘point in time’ assessment that will have regard to any future upgrades or mitigation treatments to the pumping station that may reduce odour emissions.

This strikes an appropriate balance between the need to facilitate commercial development in the RSCA, and the need to manage amenity impacts of the pumping station.

(vi) Conclusions

The Committee concludes:

- The pumping station separation distance should not be reduced to 100 metres.

8.2 Arboriculture

(i) What is proposed?

A Preliminary Tree Assessment (Homewood, 24 September 2020) was prepared to assess trees located within the precinct. Out of 10,430 trees assessed:

- 16 trees were identified as being of very high retention value
- 699 trees were identified as being of high retention value
- 3,993 trees were identified as being of medium retention value.

Homewood recommended that all very high and high retention value trees be retained and incorporated into the final design of the PSP, with as many medium retention value trees retained as possible. This is reflected in the PSP in R28, Plan 2 (precinct features) and Plan 7 (native vegetation retention and removal).

(ii) Evidence and submissions

Mr Brennan of Homewood provided written arboricultural evidence for the VPA. Based on submissions, he conducted further assessments of various trees in the precinct, and revised the retention values of some of those trees. The VPA accepted his recommendations, which resulted in changes to the trees identified for retention on Plans 2 and 7 in the Day 1 version.

Ms May provided written arboricultural evidence for the Best Hooper clients. She met with Mr Brennan before the Hearing, and agreed on a number of adjustments to the PSP in relation to tree retention requirements, including R28. These are recorded in Documents 130 and 131, and reflected in the VPA's final version.

R28 in the VPA's final version reads:

Existing high, very high and potential high value trees as per Plan 2 and Plan 7 must be retained and incorporated into the public realm during the subdivision design, that includes road reserves, biolink and public open space where possible to the satisfaction of the responsible authority.

Cardinia opposed the addition of the underlined words, submitting they are unnecessary and open up a broad discretion which is contrary to the effort that has been made to identify and log every tree and rate its retention value pursuant to a consistent methodology as set out in the Preliminary Tree Assessment.

(iii) Discussion

The Committee appreciates the efforts of the parties and experts to resolve arboricultural matters, including reaching agreement on the retention value of various individual trees. This resulted in the arboricultural roundtable no longer being required.

The Committee generally supports the final version revisions to the tree requirements in the PSP, subject to some minor refinement of the wording of R28. They provide greater clarity, and greater consistency between Plan 2 and Plan 7. The Summary Tables in Appendix 10 of the Day 1 PSP, which were prepared by Ms May and Mr Brennan, identify specific trees to be retained on 345 and 425 Officer South Road, and provide further clarity and assistance in interpreting Plans 2 and 7.

While the Committee acknowledges Cardinia's submissions that adding a discretion to R28 opens up the retention of trees to argument, it considers that there should be some flexibility built into the requirement to deal with unforeseen circumstances, such as:

- where the health of a particular tree identified for retention has declined over time
- where road reserves cannot be located to include trees identified for retention, for example because of the location of other assets such as drainage retarding basins.

(iv) Conclusion

The Committee concludes:

- The tree retention requirements in the VPA's final version of the PSP, including the addition of discretion to R28, are appropriate.

8.3 European heritage

(i) What is proposed?

There are two heritage places in the PSP area that are protected by the existing Heritage Overlay:

- Cardinia Park at 410 Officer South Road, owned by Parklea (HO91)
- Jesmond Dene at 425 Officer South Road, owned by ISPT Pty Ltd (HO92).

The Amendment proposes to reduce the curtilage of both HO91 and HO92, and to set the areas of the curtilages aside for local parks.

(ii) The issues

The issues are:

- the revised curtilage for Jesmond Dene (HO92)
- the treatment of the original Jesmond Dene gate
- whether heritage buildings should be within local parks.

(iii) Resolved issues

Resolved issues are:

- The shed on 185 Officer South Road including the contents should be photographed and recorded before it is demolished, if onsite restoration or their transfer to the Berwick Pakenham Historical Society is not feasible. This is reflected in G27 in the VPA's final version of the PSP.
- Any potential heritage significance of 90 Handford Lane should be separately assessed. If it is found to meet the threshold for local significance, the Heritage Overlay should be applied through a separate amendment, not this Amendment.

(iv) Evidence and submissions

Jesmond Dene (HO92)

The heritage experts before the Hearing, which resulted in agreement between all experts that the homestead has been significantly altered and no longer meets the threshold for local heritage significance.

Mr Hemingway (for the VPA) and Mr Raworth (for ISPT) agreed on a revised Heritage Overlay (HO92) curtilage that differs from the exhibited curtilage. The revised curtilage includes a number of historically significant trees, an early²⁰th century intact barn or outbuilding, and remnant elements of the property's original entry gate, originally located on Patterson Road. Dr Dyson (for Cardinia)

considered the existing HO92 curtilage should be retained and extended to incorporate the mature Oaks by the Officer South Road gate and trees of importance planted during the Patterson era.

Mr Hemingway and Mr Raworth agreed that:

- the statement of significance for HO92 should be amended to identify the barn/outbuilding and five trees as significant, and to note that all other built fabric and trees, including the dwelling and other outbuildings, are not of heritage significance
- the PSP should include a requirement to restore the gate and erect it somewhere within the reduced heritage curtilage.

The VPA's final versions of the documents included a revised statement of significance prepared by Mr Hemingway. It included the original timber gate and posts as a significant element. The VPA submitted the gate should not be included as a significant item in the statement of significance, but rather be dealt with by way of a requirement in the PSP, because:

- the gate is not currently in its original position, and exists in a dilapidated, disassembled state in a shed on the property
- it would therefore be inappropriate to recognise the 'original' timber gate and posts as a significant element in the statement of significance.

Cardinia Park (HO91)

The heritage experts meeting resulted in agreement between the VPA and Parklea:

- on a revised curtilage for HO91 that differs from the exhibited curtilage
- that tree controls are not warranted for HO91.

Dr Dyson agreed the HO91 curtilage could be reduced to the existing house, outbuildings and associated mature trees, but recommended a larger area towards the east and south of the house be included to retain important views towards Cardinia Creek. She did not propose a specific curtilage extent. The Committee is satisfied that the revised curtilage agreed between the VPA and Parklea will allow for views between the creek and the homestead.

In his planning evidence for Parklea, Mr Woodland considered the land within the HO91 curtilage should be incorporated into the adjoining parklands as credited open space and opportunities for adaptive reuse of the heritage dwelling should be explored, given it would be difficult to develop for industrial purposes. The revised curtilage and the VPA's final version of the local park provision (Documents 231 and 232) effectively achieve this, although it appears the local park (LP-13) does not extend to the entirety of the curtilage. This is addressed in Chapter 8.4.2.

Heritage buildings within local parks

Cardinia supported local parks being co-located with the heritage curtilages but did not support heritage buildings being located in the local parks. It did not explain the basis for its objection.

(v) Discussion

The Committee supports the revised curtilage for HO92 agreed between Mr Hemingway and Mr Raworth. The Committee acknowledges Dr Dyson's evidence that other plantings on the property may have heritage significance, including the mature Oaks at the Officer South Road entrance. However, the Committee considers it inappropriate to extend the existing curtilage as part of the Amendment. Any proposal to extend the existing curtilage would require a full assessment as part of a separate process.

The Committee agrees with the VPA that the original Jesmond Dene gate, which is extremely dilapidated and being stored in a shed on the property, should not be included in the statement of significance for HO92. It is no longer intact, or in its original location, making it difficult to appreciate its integrity or legibility as part of a heritage place. The Committee considers the gate (in isolation) does not meet the threshold for local significance. The gate is more appropriately managed through a requirement in the PSP (R46 in the VPA's final version of the PSP is appropriate).

The Committee notes the VPA's final version of the statement of significance (Document 237.32) still refers to the gate – the VPA should check this before progressing the Amendment for adoption and approval.

The Committee presumes Cardinia does not support heritage buildings being included in local parks because it is unwilling to take ownership of (and responsibility for) buildings which it will then need to maintain when the local park is vested in it. The Committee received no detailed submissions on this issue, and is unclear whether the intention would be for the buildings to vest in Cardinia along with the local parks. The VPA should resolve this issue before progressing the Amendment for adoption and approval.

(vi) Conclusions and recommendation

The Committee concludes:

- The Heritage Overlay (HO92) curtilage should be revised as agreed between Mr Hemingway and Mr Raworth, as reflected in the VPA's final version of the Heritage Overlay map (Document 237.19).
- The Jesmond Dene timber gate should be dealt with through a requirement in the PSP, rather than in the statement of significance.
- The revised Heritage Overlay (HO91) curtilage provides for views between Cardinia Creek and the homestead as recommended by Dr Dyson.
- The VPA should resolve the issue of ownership of heritage buildings within local parks before progressing the Amendment.

The Committee recommends:

General recommendation

Before progressing the Amendment, the Victorian Planning Authority should:

- a) **revise the statement of significance for 425 Officer South Road, Officer South (Jesmond Dene) to remove references to the timber gate**
- b) **resolve the issue of ownership of heritage buildings located within local parks.**

8.4 Open space

8.4.1 Introduction

(i) What is proposed?

The PSP proposes over 300 hectares of open space. This includes a series of local parks in both the residential area and the employment areas. Local parks have been located to incorporate high value trees where practical. The local parks supplement the green spine along the existing alignment of Lecky Road, and the passive open space on encumbered land (including the BCS areas, the electricity transmission easement and drainage and waterway reserves).

In response to submissions, the VPA revised the local park distribution in the employment areas iteratively throughout the Hearing, with the final revised local park plan in Document 231 (extracted in Figure 12 below). Document 232 is a table that explains the iterative differences between the local park distribution in the exhibited, 'working draft' and final local park plans.

The PSP includes an 8.11 hectare active sport reserve (SR-01) located in the Village sub-precinct, on YourLand land. As discussed in Chapter 6, SR-01 is designed to serve the residential communities in both Officer South and the CREP. The ICP apportions 100 per cent of the land and 45 per cent of the construction costs to Officer South (see Chapter 6.5 for more detail). The balance of the construction costs are apportioned to Cardinia/the CREP.

The exhibited PSP located SR-01 adjacent to the encumbered open space along the Lower Gum Scrub Creek corridor, resulting in an awkwardly shaped triangular corner. The Day 1 version relocated it further west, allowing for a more regular shape. The VPA's final version of the PSP shows the sports reserve as 8.5 hectares (on the recommendation of Mr Panozzo and agreed with Cardinia, but disputed by YourLand).

(ii) Relevant policy

The PSP Guidelines set out targets for credited open space of:

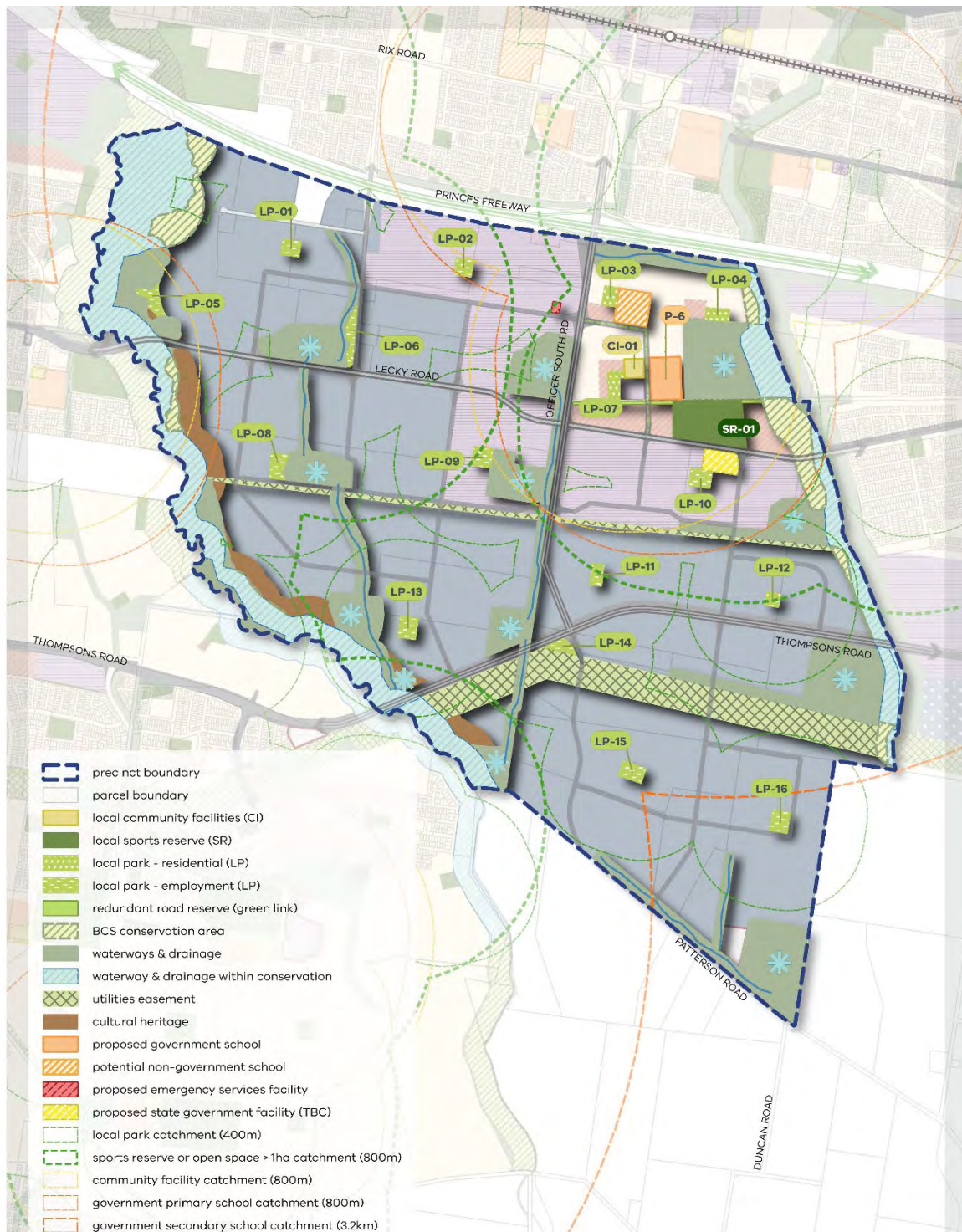
- 2 per cent of NDA for employment land
- 10 per cent of NDA for residential land.

(iii) Resolved issues

The resolved issues are:

- LP-03 has been removed from the Galileo land.
- LP-07 (LP-06 in the revised local park plan) has been relocated as a linear park to the strip of industrial land between the waterway on Mack Property land and Stephens Road (the issue of the waterway itself remained unresolved, and is discussed in Chapter 4.4.4).

Figure 12 Final revised local park plan



Source: Document 231

8.4.2 Local parks

(i) The issues

The issues are:

- whether the revised local park plan provides sufficient open space in the employment areas
- whether green links should be credited open space

- the size and location of various local parks (mainly in the employment areas).

(ii) Evidence and submissions

Submissions on the exhibited Plan 6 (Open space and community facilities) raised some general issues on the size and location of local parks:

- Cardinia submitted there are a large number of small parks (less than 1 hectare) which are inefficient to maintain and limit the ability to encourage and support different options for physical activity. It requested the location of local open spaces be reviewed having regard to trees and vegetation required to be protected, and that the location of the local parks be revised to facilitate trees or vegetation being located in the public realm.
- Handford Projects submitted the size and location of local parks should be revised in favour of the creation of 'open space destinations', co-located with amenities such as cafes.
- Development Victoria submitted green links (wherever they end up being provided in the residential part of the precinct) should be credited open space.

Parties also made submissions on specific parks:

- Relying on the evidence of Mr Granger, Development Victoria submitted LP-04 and LP-05 (LP-03 and LP-04 in the VPA's final revised local park plan) could be co-located with nearby encumbered open space (the waterway reserve to the south of the freeway, or WLRB G), resulting in a more efficient use of the Development Victoria land.
- Eildon submitted if a local park is to be provided on its land, it should be co-located with the waterway and drainage corridor for greater efficiency and to maximise amenity and allow for retention of trees around the existing dwelling.
- Mack Property submitted if the waterway on their land cannot be removed or realigned to the eastern boundary of the site, the area of industrial land along the site's eastern boundary will be largely undevelopable and should be replaced with credited open space (in the form of a linear park).
- Abiwood submitted LP-18 and LP-19 (LP-11 and LP-12 in the revised local park plan) should be relocated to the gas easement along the northern boundary of its land, and LP-20 should be fully credited as open space.

The issue of local parks in the employment areas was discussed at the strategic planning roundtable, where the experts generally observed local parks in employment areas are seldom used, as workers get very little time to walk to a park and enjoy the amenity they may offer.

The 'working draft' revised local park plan

In response to the above submissions and discussion at the strategic planning roundtable, the VPA produced a revised 'working draft' local park plan (Document 160) on Day 10 of the Hearing, which (among other things):

- reduced the number of local parks from 25 to 16, with a small reduction in the overall percentage of the employment land as credited open space
- resized LP-01 on the Handford Projects land from 0.5 to 1.0 hectare and shifted it south (but still fully within the Handford Projects land)
- relocated and reshaped LP-04 and LP-05 on the Development Victoria land (LP-03 and LP-04 in the revised version) generally as requested by Development Victoria, and to include high value native trees

- relocated LP-06 on the Eildon land (LP-05 in the revised park plan) to co-locate it with the waterway and drainage corridor, and doubled its size from 0.5 to 1.0 hectare
- created a new linear park (LP-06 in the revised park plan) on Mack Property land, between the waterway and Stephens Road
- relocated LP-18 (now LP-11) on the Abiwood land north adjacent to the gas easement and increased its size from 0.5 to 1.05 hectares, and increased the size of LP-19 (now LP-12) from 0.51 to 1 hectares.

In the 'working draft' revised park plan:

- no parks within the employment area are over 1 hectare in area (the VPA submitted the use of these parks is different to that in a residential area, and the size is appropriate as there are less parks to facilitate group lunches, outdoor staff group activities, exercise courses and so on)
- parks under 1 hectare reflect the space available in that location.

The VPA submitted:

In accordance with the PSP Guidelines the VPA has, as far as practicable, facilitated the provision of 2 percent open space to employment areas within a walkable distance. This seeks to provide equitable access to amenity throughout the PSP. In reducing the number of parks, and relocating some, to retain a 2 percent cover of the employment [net developable area] the resulting parks have increased to around 1 hectare each, which now also aligns with Council's preferred scale for maintenance reasons.

Cardinia generally supported the revised 'working draft' local park plan, and provided detailed feedback on each park in an attachment to its submission on miscellaneous issues (Document 207). It noted a few general concerns:

- the redistribution of parks has resulted in a slight reduction in the overall provision of open space in the employment areas (by 0.11 hectares), which Cardinia submitted should be made good by increasing the size of one or more of the parks to achieve the 2 per cent target for employment areas
- a plan should be provided showing access to parks within the 400 and 800 metre walkable catchments (the final revised park plan shows catchments)
- while Cardinia supports revised LP-05 (the park on the Eildon land which has been relocated to sit adjacent to the Cardinia Creek corridor) in principle, further clarification should be provided in relation to flooding, accessibility and conservation maintenance matters (which will need to be resolved with Melbourne Water and DEECA).

The VPA acknowledged the credited open space provision in its final revised local park plan was slightly under the 2 per cent target in the PSP Guidelines, but submitted the Guidelines recognise the target may be secondary to the achievement of the primary employment objectives in a SSIP. On that basis, it did not intend to increase the total credited open space to 2 per cent, noting there is considerable amenity available through the drainage reserves and utility easements.

Unresolved issues about specific local parks are discussed below.

Handford Projects (LP-01)

Handford Projects strongly opposed the 'working draft' revised park plan, submitting it was contrary to the principles of procedural fairness for this to be proposed so late in the Hearing process. It strenuously objected to the doubling of the size of LP-01 on a "*relatively modest*" 13 hectare parcel, noting there were much larger parcels in the immediate surrounds that could better accommodate a 1.0 hectare park. It submitted:

- the VPA acknowledged that parks in industrial areas receive very little use, so there is no nexus between need and provision
- the upsizing of LP-01 appeared to be to meet the “*arbitrary*” 2 per cent target, while significantly disadvantaging Handford Projects
- the revised location of LP-01 does not protect vegetation and is inappropriately located over 60 metres south of Handford Lane (noting that a road is usually required around the periphery of open space, which would reduce the developable land on its parcel even further and make parts of the balance difficult to develop).

Handford Projects submitted that if the Committee did not support reducing the size of LP-01 back to 0.5 hectare, a more appropriate outcome would be relocating it to the south west, where good quality native vegetation on the Handford Projects site is able to be retained, and the park could be shared with the neighbouring landowner, resulting in a more equitable outcome.

In response, the VPA’s final version of the local park plan (Document 231) relocated and reshaped LP-01 to include high value native tree number 590, and distributed the park between the Handford Projects land and the neighbouring Eildon land.

Abiwood (revised LP-11 and LP-12)

Abiwood submitted that out of the 948 hectares of employment land, 285 hectares will be for parks (12.59 hectares), conservation, drainage, waterways, and utilities. It submitted this equates to about 30 per cent of the land area being available or contributing towards open space. It submitted that under these circumstances, both revised LP-11 and revised LP-12 should be located in the gas easement as linear park (not abutting it as proposed for LP-11 in both the ‘working draft’ and final revised park plans), or reduced back to their original (exhibited) sizes.

Abiwood submitted:

- the function and needs for open space in an industrial precinct are not the same as in residential or mixed use areas
- the gas easement cannot be developed for other land uses, and open space is an appropriate and efficient use of this land
- there is no clear rationale for the sizes of LP-11 (at 1.05 hectares) and LP-12 (at 1.0 hectares)
- LP-11 will not protect any existing trees
- there is a significant extent of encumbered open space in the employment area.

Abiwood acknowledged the 2 per cent target in the PSP Guidelines, but pointed out that the PSP Guidelines also recognise that the importance of SSIPs is such that other targets (including the 2 per cent park target) “*may be secondary to the achievement of the primary employment objectives*”.

Eildon (LP-01 and revised LP-05)

Eildon supported the relocation of LP-06 (revised LP-05) to adjacent to the encumbered open space along the creek corridor, but opposed its doubling in size. It submitted:

Eildon’s requested change was not a barter. The change in location is positive from a strategic point of view, but the increase in size has no discernible basis. Under R61, open space is to be developed and embellished by a developer as part of subdivision, therefore the upsizing of a local park, even on encumbered land, has a real implication.

Eildon also strongly opposed the relocation of LP-01 to straddle its land and Handford Projects’ land, for largely the same reasons that it opposes the increase to the size of revised LP-05. It generally

adopted Handford Projects' submissions regarding the lesser benefit and utility of local parks within industrial precincts.

Parklea (LP-08, LP-09 and LP-13)

Relying on Mr Woodland's evidence, Parklea submitted LP-08 and LP-09 should be deleted, and LP-13 should be realigned to sit entirely within the revised agreed HO91 curtilage.

(iii) Discussion

General issues

The Committee supports the VPA's rationalisation of local parks in the employment areas. Fewer larger parks will be more straightforward for Cardinia to maintain. The Committee notes that most of the parks achieve the minimum 1.0 hectare size advocated by Cardinia. The larger size may better facilitate local parks in the employment areas being 'open space destinations', co-located with cafes, conference facilities and the like as suggested by Handford Projects.

The Committee is comfortable with the slight reduction in the total amount of credited open space in the employment areas reflected in the VPA's final revised park plan for the following reasons:

- it is only slightly below the 2 per cent target in the PSP Guidelines
- according to the planning experts, local parks in industrial areas are not generally used (which is consistent with the observations in submissions from Handford Projects, who has considerable experience in developing in industrial areas)
- the PSP Guidelines recognise that the 2 per cent target may be secondary to broader objectives for the delivery of industrial land (particularly pertinent in a SSIP)
- there is a large amount of encumbered open space in the employment areas, including the creek corridors and the transmission easement, that supplements the credited open space.

Development Victoria submitted green links in the residential area should be credited open space. It did not explain in its submissions how this would be practically achieved. The only green link specifically provided for in the PSP is the one located on the existing Lecky Road reserve (which will become available for conversion to a green link when Lecky Road is realigned). As this land is already encumbered, the Committee does not consider it would be appropriate to make this credited open space.

LP-01

The Committee generally supports both the relocation and the upsizing of LP-01 as shown in the final revised park plan. The relocated and resized park:

- meets Cardinia's preferred minimum size
- appears to be better located to protect existing native vegetation on the Handford Projects site
- requires only 0.5 hectare of Handford Projects' site to be set aside as credited open space (consistent with the exhibited Plan 6).

The Committee acknowledges the revised park plan sets aside 1.5 hectares of Eildon's land (compared to 0.5 hectare on the exhibited Plan 6), through a combination of the relocation and upsizing of LP-01 and the upsizing of LP-05. The Eildon land is a substantially larger parcel than the Handford Projects land, and the revised locations of LP-01 and LP-05 (being on the peripheries of Eildon's developable land) do not present any obvious development challenges for the Eildon land

such as awkwardly shaped ‘leftover’ parcels, as would have been the case for the Handford Projects land with the ‘working draft’ revised park plan.

LP-05

The Committee broadly supports the co-location of revised LP-05 with the encumbered open space along Cardinia Creek. This allows a more efficient use of the Eildon land, without compromising on the coverage of the north west portion of the employment area within walkable access to a local park. While it has doubled in size, the pocket of industrial land that would be left if the park were reduced in size to 0.5 hectare would be awkwardly shaped and located, and would likely be difficult to develop for industrial purposes.

There may be issues to resolve with Melbourne Water and DEECA in terms of the co-location of LP-05 with the drainage and conservation area corridors, but the Committee is confident that those agencies can work with Cardinia and the VPA to reach an appropriate resolution of those issues (whatever they may be).

LP-11 and LP-12

The final revised park plan upsized and relocated revised LP-11 back closer to its exhibited location (away from the gas easement), and retained revised LP-12 in its original location. While the Committee sees the logic in co-locating open space with already encumbered land (such as the gas easement), this must be balanced against other considerations, including:

- an even distribution of open space throughout the precinct
- ensuring as much land as possible is within walking distance of a local park
- ensuring parks are both sized and configured to provide a range of passive recreation options, as well as amenity
- locating parks to protect vegetation to be retained.

These can be difficult matters to balance, and the Committee is satisfied that the final revised park plan achieves an appropriate balance of these various considerations as regards LP-11 and LP-12.

LP-08, LP-09 and LP-13

The Committee does not support Parklea’s submission that LP-08 and LP-09 should be deleted, and LP-13 realigned to sit entirely within the revised agreed HO91 curtilage. While LP-08 and LP-09 are located abutting drainage reserves, drainage reserves serve a different function to local parks (unencumbered open space). Deleting them would potentially leave gaps in the 400 metre walkable catchments for local parks, and may also result in significant trees being located outside the public realm. Accordingly, the Committee does not support Mr Woodland’s recommended changes to G26.

(iv) Conclusions

The Committee concludes:

- The VPA’s final version of the revised local park plan strikes an appropriate balance between:
 - providing much needed employment land in a SSIP and open space to provide amenity for the workers in the SSIP
 - an even distribution of open space in the employment areas
 - the need to ensure, so far as practicable, employment land is within walking distance of a local park
 - the need to protect high value vegetation

- the need to avoid isolated awkwardly shaped parcels of industrial land that would be difficult to develop
- Cardinia's minimum size requirements for local parks (for maintenance purposes).

8.4.3 Sports reserve

(i) The issue

The issue is:

- the size and location of the active open space (SR-01).

(ii) Evidence and submissions

YourLand supported the relocation of SR-01 to the west as shown in the Day 1 version of the PSP (which was at YourLand's request), but remained concerned there is insufficient funding allocated in the ICP for the construction costs of SR-01, and that the land contribution rate is inequitable. These issues are discussed in Chapter 6.

YourLand submitted the PSP Guidelines include a target that 5 to 7 per cent of net developable residential area be set aside for sports field reserves. It submitted that at 18.4 per cent of the net developable land in the residential area, the PSP has a substantial oversupply of active open space – largely as a result of the 'back planning' for the CREP (discussed in more detail in Chapter 6). It submitted that in the absence of proper funding, the VPA and Cardinia's ambitions for SR-01 are inappropriate.

YourLand submitted that, given the shortfall in funding, the area of credited open space should be reduced in size (to 2.75 hectares) to match the demand generated by development within Officer South only and the funding available under the ICP. Alternatively, a sunset provision should be included as discussed in Chapter 6. It tabled further examples of potential configurations of SR-01 that "*better reflect the demand generated within the PSP area*" (Document 156):

- Option 1 is sized at 6.1 hectares (12.7 per cent of the NDA), with one full sized and one junior sized AFL field, four soccer pitches (overlaid on the football fields) two netball courts and two cricket nets, as well as a clubhouse, playground and (reduced) parking area.
- Option 2 is sized at 4.8 hectares (10 per cent of the NDA), with one full sized AFL field, two soccer pitches (overlaid on the football field) four netball courts and two cricket nets, as well as a clubhouse, playground and (reduced) parking area.

YourLand submitted:

YourLand accepts that this scheme (or other alternatives) may not achieve all that [Cardinia] is seeking for SR-01, given the demand generated by development in the CREP. However, a pragmatic approach is needed given the obvious shortfall in funding.

Cardinia submitted that to service the whole catchment (Officer South and the CREP), the 8.5 hectares is required, and any less than that cannot provide the basic facilities that are required. It submitted:

- Mr Panozzo's evidence (for the VPA) explains the ramifications of not providing for the land required for active recreation (discussed in Chapter 6.5)
- Mr Simons' evidence (for Cardinia) explains why 8.5 hectares is required
- there is no expert evidence to the contrary
- YourLand's alternative proposals are unable to be properly tested, as the ovals are not dimensioned

- single ovals are not fit for purpose when a double oval is required.

Mr Simons' evidence outlined why 8.5 hectares is required to accommodate all the facilities proposed, and Mr Panozzo's evidence was consistent with that of Mr Simons. The VPA's final documents show an 8.5 hectare sports reserve.

Mr Shipp's evidence (for Cardinia) was that the funding shortfall for SR-01 would be difficult for Cardinia to fund, and that the approach to addressing the needs of both Officer South and the CREP *"should be carefully considered in that financial context"*.

In closing, the VPA submitted:

- it did not agree with YourLand's submission that SR-01 should be reduced in size to 2.75 hectares, given the role SR-01 plays in providing sporting facilities for both Officer South and the CREP
- the size of SR-01 was now resolved as between the VPA and Cardinia
- it had revised the apportionment of the construction costs for SR-01 to 45 per cent funded under the ICP, reducing the funding shortfall for construction costs
- the land allocation should remain 100 per cent to Officer South, for the reasons discussed in Chapter 6.5.

(iii) Discussion

The Committee has found in Chapter 6.5 that despite its concerns about bad planning in the CREP and the inequity of Officer South having to bear 100 per cent of the land costs for a facility for which it only generates 45 per cent of the need, it would be a poor planning outcome if SR-01 was not delivered, or delivered at the size needed to fully cater for the needs of both the Officer South and CREP residential communities.

It follows that the Committee is not able to support a reduction in the size of SR-01, or the alternative options put forward by YourLand, as these do not meet the combined needs of the future Officer South and CREP communities.

That said, the YourLand options use part of the green spine to accommodate carparking required for the sports reserve, while still appearing to provide enough room to accommodate the shared path envisaged for the green spine. Although this would be unlikely to make a substantial difference in the overall land take required for SR-01, this should be further explored.

(iv) Conclusion and recommendation

The Committee concludes:

- The size of SR-01 should not be reduced to below 8.5 hectares, although the option of using part of the green spine should be further explored with the aim of reducing the amount of YourLand land required for the 8.5 hectares.

The Committee recommends:

General recommendation

Before progressing the Amendment, the Victorian Planning Authority should:

- a) Explore whether any of the green spine land can be used to accommodate the sports reserve. If this is viable, adjust the land use budgets in the Infrastructure Contributions Plan accordingly.**

8.5 Bushfire requirements

(i) Introduction

The PSP is within a Bushfire Prone Area.

What is proposed?

Plan 8 (Bushfire hazard areas) in the PSP identifies bushfire hazard areas and setbacks along the two creeks. It also identifies the drainage reserves and open space areas as 'low threat vegetation'. Table 4 sets out bushfire hazard vegetation management and setback requirements. The PSP contains several requirements relating to bushfire management in and adjacent to the bushfire hazard areas (R18, R43 and R66).

Proposed planning controls

The Amendment includes the following bushfire management requirements:

- the UGZ7:
 - requires applications to subdivide land in a bushfire hazard area to be accompanied by a Bushfire Management Plan that meets the requirements of Table 4
 - contains a mandatory permit condition requiring the Bushfire Management Plan to be endorsed by the responsible authority before the subdivision is certified
- the IPO3 enforces the requirement for a Bushfire Management Plan for any application to subdivide land adjacent to a bushfire hazard area.

Relevant policy

Clause 13.02 of the Planning Scheme requires (among other things) prioritising the protection of human life over all other policy considerations. It provides direction on assessing permit applications, including the implementation of appropriate bushfire protection measures.

(ii) The issue

The issue is:

- whether the PSP and associated planning controls should include requirements for a Bushfire Management Plan.

(iii) Evidence and submissions

Relying on the evidence of Mr Granger, Development Victoria submitted bushfire management is more appropriately dealt with at the permit application stage. Its original submission stated that the role of structure planning is to identify the risk, rather than prescribe how it should be managed. It submitted detailed assessments should be required at the planning permit stage, rather than in the PSP, as development and subdivision of land takes time. It submitted the bushfire threat may change, vegetation levels fluctuate, and policy guidelines may alter over the life of the PSP, and it would be better to manage bushfire risk in accordance with the relevant Australian Standard. Further, the scale of Plan 8 is such that the location of the vegetation classes and the point from which setbacks are measured is unclear and confusing. Mr Granger recommended removing the Bushfire Management Plan requirements from the PSP and the associated planning controls, and reframing Plan 8 as context for decision makers.

The VPA did not support Mr Granger's recommendations. It submitted:

Bushfire provisions have been included in the PSP to seek consistency with the recommendations of recent PPV hearings (for example, Wonthaggi North East PSP) and to meet the expectations of the Country Fire Authority. The wording of the bushfire provisions in the UGZ schedule has been included to ensure this consistency.

(iv) Discussion

Consistent with previous panels and advisory committees, the Committee supports the inclusion of bushfire management provisions in both the PSP and the associated planning controls. It notes the CFA supports the bushfire provisions in the UGZ7. Bushfire is a known (though low) risk, and it is appropriate that the PSP and planning controls reflect the risk with appropriate and proportionate management measures. As the Committee considering the Wonthaggi North East PSP stated:⁷

At the strategic planning stage future neighbourhoods should be planned to strengthen the resilience of communities to bushfire risk through appropriate planning and design that prioritises protection of human life.

The VPA made minor adjustments to the bushfire provisions and requirements in its Day 1 version of the PSP, which the Committee supports.

(v) Conclusion

The Committee concludes:

- The bushfire requirements in the PSP and the UGZ7 and IPO3 should be maintained.

8.6 Other issues

8.6.1 Social and affordable housing

(i) What is proposed?

The PSP contains an objective (O22) and a guideline (G36) seeking eight per cent affordable and social housing contributions within the UDPA in accordance with affordable and social housing policy, evidence and guidance.

The UGZ7 includes:

- an application requirement for a written statement outlining how the proposal will contribute to the delivery of affordable housing
- a decision guideline regarding whether the proposal contributes towards the provision of affordable housing.

(ii) The issue

The issue is:

- whether the PSP and Amendment will be effective in ensuring delivery of social and affordable housing.

(iii) Submissions

Cardinia submitted the PSP aspires to the provision (by developers) of affordable housing but it does not require that any be provided. It submitted:

⁷ Draft Bass Coast PSA C152bascc [2022] VPA Projects Standing Advisory Committee Referral 3 at page 113.

It is tantamount to a planning control saying “please provide” but ultimately leaves it up to the developer.

Cardinia submitted that similar provisions in other recent PSPs (Beveridge North West and Shenstone Park) have failed, because the planning provisions were not drafted appropriately. It submitted the guideline in the PSP should be converted to a requirement.

Cardinia provided an example of a recent VCAT decision involving the Shenstone Park PSP and UGZ schedule, which had equivalent provisions to those proposed in Officer South (*960 Blueways Development Pty Ltd v Whittlesea CC*).⁸ The developer successfully challenged a permit condition requiring the provision of affordable housing. The Tribunal noted:

... the decision to not make the provision of affordable and social housing an objective or requirement of the Shenstone Park PSP, and the confining of the policy guideline in the Planning Scheme to the structure planning stage, arguably mean that whether there is specific policy basis on which to support the permit condition in the context of this application is debatable.

The Tribunal’s main concern, however, was with the way the condition was drafted, finding that the condition was so flexible as to be uncertain. Cardinia submitted:

If the planning controls had contained requirements, the Tribunal would have been in no position to relent on account of the flexibility of the condition merely because of the submission that it was uncertain.

(iv) Discussion

The Shenstone Park panel recommended provisions in the PSP and UGZ schedule that are substantively the same as those proposed for Officer South. Those provisions were ultimately included in the PSP and the relevant UGZ schedule. The Shenstone Park panel concluded:

A revised guideline, combined with the application requirement and decision guideline specified in the Part A UGZ7, will enable Council to more effectively negotiate the provision of appropriate affordable housing contributions.

However, the developer was able to successfully challenge the affordable housing condition at the Tribunal.

One of the grounds on which the Tribunal did not support the affordable housing condition in *Blueways* was that the contribution required under the permit condition was not voluntary. It stated (paragraph 50):

On balance, on the basis of the submissions and on the information available to me, I conclude that the applicant did not agree to the condition (or its requirements) as drafted and, in the circumstances of this case, the condition was not included on a voluntary basis.

The Tribunal’s main concern, however, was with the way the condition was drafted, finding that the condition was so flexible as to be uncertain.

The Tribunal made it clear that it did not regard *Blueways* as a ‘test case’. Rather, the decision was based on the drafting of the particular condition. The Tribunal did note the fact that the PSP included a guideline (rather than a requirement) encouraging the provision of affordable housing. However, it is not clear that a requirement would have ‘saved’ the particular condition in question.

The policy and legislative framework for the provision of affordable housing has for some time encouraged affordable housing contributions on a voluntary basis. Previous panels have repeatedly

⁸ *960 Blueways Development Pty Ltd v Whittlesea CC (Corrected)* [2023] VCAT 179 at paragraph 65.

found that while there is strong policy support for affordable housing, the policy and legislative framework does not support mandatory requirements. This remains the case, and the Committee therefore finds it cannot support Cardinia's proposal to convert G36 into a requirement.

(v) Conclusion

The Committee concludes:

- There is no support in the legislative or policy framework for affordable housing requirements (as opposed to objectives and guidelines) in a PSP.

8.6.2 Buffer to the green wedge

(i) The issue

The issue is:

- whether there should be a buffer between industrial development and the Green Wedge land (which is zoned Farming Zone) to the south and south east of the PSP.

(ii) Submissions

Simon Beard submitted the PSP brings heavy industry into contact with farming land, which presents risks for his farming operations, including through the spread of contaminants onto his land which is used for organic food production. He was concerned about reverse amenity impacts affecting his right to farm, for example the smell arising from the application of organic fertilisers on his paddocks and noise from farm machinery. He advocated for a buffer zone of around 70 metres inside the PSP boundary, which consists of:

- cyclone fencing on the boundary paid for by the PSP developers
- a 20 metre wide tree lined shelter belt
- an open drain to catch any potentially contaminated flood water off the PSP land
- a road.

(iii) Discussion

While the Committee has some sympathy for the issues raised by Mr Beard, there is nothing in the policy framework which supports setting aside what would likely amount to a fairly significant proportion of the industrial land in the PSP as a buffer to the adjoining farmland.

(iv) Conclusion

The Committee concludes:

- There is no support in the legislative or policy framework for a buffer along the PSP boundary where it adjoins farming land.

9 Drafting issues

9.1 Precinct Structure Plan

The Committee has considered the various parties' responses to the VPA's final version of the PSP. It supports some of those changes, and not others. More significant changes are discussed below but given the Committee's reporting timelines it has not addressed every suggested change, or drafted specific recommendations for each change. Instead, a track changed version of the PSP is provided in Appendix D.

(i) Drainage

The drainage Joint Expert Statement (Document 150) states the experts agreed the drainage asset names or identifiers should be added to Plan 9. They also agreed (with the exception of Mr Carroll) that a table should be added after Plan 9 that sets out details of the drainage assets and associated land budgets and expected ownership responsibilities. Parklea included changes to this effect in its final version of the PSP, as well as suggesting that indicative shapes of wetlands should be replaced with a generic shape.

The VPA's final version of Plan 9 contains a lot of detail. Adding the asset names or identifiers will likely make the plan hard to read. The Committee considers a table that lists key information about each asset will assist future readers of the PSP. The VPA should consider what information should be included in the table (including Parklea's suggestions in Document 288), and how to link the name or identifier in the table to the asset as shown on Plan 9, as it finalises the PSP.

In light of the Committee's Recommendation 6(h) to provide more explicit flexibility in relation to the size and location of drainage assets, the Committee does not consider it is necessary to show wetlands as a generic shape.

The Committee concludes:

- It would assist in the interpretation of the PSP if a table was added after Plan 9 (Integrated Water Management) which identifies the drainage assets and provides other information about those assets that the VPA considers appropriate.

(ii) Cultural heritage

The brown (cultural heritage) and brown hatched (Cultural Value Investigation Area) layers on the Place Based Plan are confusing and appear to duplicate one another. As no CHMPs have yet been prepared, the Committee considers the area should be identified as an investigation area, rather than 'cultural heritage', for the reasons set out in Chapter 7.3.

Ms Nicholson and Mr Woodland recommended R23 and G30 be deleted. Requirement R23 states a mandatory CHMP must be undertaken before development in the Cultural Value Investigation Area. Guideline G23 provides guidance for what a CHMP should provide for.

While R23 may be unnecessary (as it merely states the situation under the AH regime), it is not inaccurate or problematic and the Committee does not consider it should be deleted.

Guideline G30 states that a CHMP should provide recommendations for the ongoing management and maintenance of any creeks, wetlands and water features. These are appropriate, subject to the

qualification that the guideline only applies where the creeks, wetlands and water features are found to have cultural value. The Committee has made appropriate adjustments in Appendix D.

(iii) Land use budgets

Parklea's final version of the PSP (Document 288) points out that neither the summary land use budget table (Table 8) nor the property specific land use budget table (Table 9) are referenced anywhere in the PSP, and they serve no function. The Committee agrees with Parklea's suggestion that they be deleted, with a note added to Table 7 to cross refer to the land budgets in the ICP.

9.2 Infrastructure Contributions Plan

In addition to the Committee's specific recommended changes to the ICP, the VPA's final version (Document 237.01) needs a thorough edit before it is finalised, including to fix broken cross references. Further:

- If a staging control is found to be warranted, the ICP should be amended to explain the relationship between the staging control and the ICP, in particular any gateway infrastructure items that are to be funded in whole or part under the ICP. The ICP should explain whether the ICP will deliver the gateway items to their interim or ultimate standard, and (if interim) who will be responsible for delivering the item to ultimate standard.
- The Committee supports the following drafting changes in Cardinia's Day 1 version (Document 39(d)), and recommends these be included in the final version:
 - the changes to section 3
 - the changes to section 5.10
 - the changes to section 5.11
 - the changes to section 5.12.
- The land credit and equalisation amounts will need to be added to Tables 3, 10 and 11.
- Check calculations of the land credit and equalisation rates and amounts.
- Consider explaining what the 'short', 'medium' and 'long term' timeframes involve, and whether there should be triggers for the delivery of any particular infrastructure items (for example, the community centre).
- Consider extending the timeframe for the ICP beyond 25 years, as recommended by Mr Shipp in Document 106.

The Committee recommends:

Infrastructure Contributions Plan

Amend the Infrastructure Contributions Plan as follows:

- a) **Make the changes recommended in Chapter 9.2 of this Report.**

Appendix A Submitters to the Amendment

Note: names have been reproduced as shown on the submissions. Some names are incomplete.

No	Submitter
1	Not provided
2	Warna
3	N Sahithi
4	David
5	John Paterson
6	Jared Leyton
7	Jess Kost
8	D Hillon
9	Dianne Parkin
10	Bronwyn Grey
11	Brendan Rice
12	Phil Harron
13	Jack Larcombe
14	Nick Mastroianni
15	Simon Beard
16	Grendon & Amanda Holmes
17	Darcsfield Co-Operative Limited
18	Department of Education
19	Abiwood OSR Pty Ltd
20	Kaduna Park Estate Landowner
21	Gurpeet Singh Bajwa
22	Kathryn Marriott
23	Karen
24	Peter Harris
25	Growland
26	ISPT
27	Harmon Group
28	Peter Jonoski
29	McMullin Commercial Pty Ltd
30	Lucas Petrovich
31	Eildon Capital Group

No	Submitter
32	Parklea Developments Pty Ltd
33	Officer (Handford Lane) Pty Ltd
34	ProUrban
35	National Broadband Network
36	Department of Education
37	Invest Victoria
38	Simon Beard
39	James Bateman
40	David Young
41	Lucas Petrovich
42	GLG Invest
43	Lumanovski family
44	Luke
45	Greater South East Melbourne
46	Mack Property Developments Pty Ltd
47	Parklea Developments
48	Honi Walker
49	Tuck Family
50	Officer Land Co Pty Ltd
51	Chris Beardshaw - Afflux Consulting
52	Environment Protection Authority Victoria
53	John Hobson
54	Galileo Group
55	Karen Davis
56	Indara
57	City of Casey
58	YourLand Developments
59	Development Victoria
60	Tristan Weeks
61	Melbourne Water
62	Handford Projects Pty Ltd
63	Department of Energy, Environment and Climate Action
64	Cardinia Shire Council

No	Submitter
65	Cardinia Shire Council
66	Cardinia Shire Council
67	Cardinia Shire Council
68	APA
69	Country Fire Authority
70	Department of Transport
71	South East Water
72	Bunurong Land Council Aboriginal Corporation
73	Department of Health
74	Chisholm Institute
75	Sherrill Willmott

Appendix B Parties to the Hearing

Submitter	Represented by
Victorian Planning Authority	<p>Chris Townshend KC and Carly Robertson of Counsel, instructed by Ashurst, who called the following expert evidence:</p> <ul style="list-style-type: none"> - Arboriculture from John Brennan of Homewood Consulting* - Built form / tree heritage from Anthony Hemingway of RBA* - Cultural heritage from Andrea Murphy of Tardis - Economics from Yilong Shi of SGS - ICPs from Robert Panozzo of ASR Research - ICPs from Faraz Ahmed of Stantec - Strategic planning from John Glossop of Glossop Town Planning - Traffic from Aaron Walley of Ratio - Traffic from Reece Humphreys of Stantec
Abiwood OSR Pty Ltd, GLG Invest Pty Ltd and ISPT Pty Ltd (the Best Hooper clients)	<p>Jordan Wright of Counsel and John Cicero and Edward Mahony of Best Hooper, who called the following expert evidence:</p> <ul style="list-style-type: none"> - Arboriculture from Kylie May of John Patrick Landscape Architects* - Built form heritage from Bryce Raworth of Bryce Raworth Conservation & Heritage* - Drainage from John Mathios of DPM Consulting - Strategic planning from Andrew Clarke of UpCo - Traffic from John-Paul Maina of Impact - Tree heritage from John Patrick of John Patrick & Associates*
Bunurong Land Council Aboriginal Corporation	David Tutchenor
Cardinia Shire Council	<p>Terry Montebello of Maddocks Lawyers, who called the following expert evidence:</p> <ul style="list-style-type: none"> - Built form heritage from Christina Dyson of GML* - Drainage from Jonathon McLean of Alluvium - ICPs from Lance Weatherell of WT Partnership - ICPs from Paul Shipp of Urban Enterprise - Leisure from Richard Simons of Simons Leisure - Traffic from Ali Abdou of Trafficworks
Chisholm Institute	Thomas Patereskis
City of Casey	Margo Savage

Submitter	Represented by
Darcsfield Co-Operative Limited	Peter Harris and Norm Morrish
Department of Transport and Planning (Transport)	Daniel Zaslon
Development Victoria	Nick Sutton of Norton Rose Fulbright, who called the following expert evidence: <ul style="list-style-type: none"> - Drainage from Nina Barich of Incitus - Economics from Rhys Quick of Urbis - ICPs from Alex Hrelja of HillPDA Consulting - Strategic planning from Evan Granger of Urbis - Traffic from Charmaine Dunstan of Traffix
Eildon Capital Group	Sean McArdle of Counsel, instructed by Jackson Lane Legal, who called the following expert evidence: <ul style="list-style-type: none"> - Drainage from Stephen Watters of SMEC - Strategic planning from David Barnes of Hansen Partnership - Traffic from John-Paul Maina of Impact
Galileo Group	Matthew Townsend of Counsel, instructed by Ethos Urban, who called the following expert evidence: <ul style="list-style-type: none"> - Acoustic from Darren Tardio of Enfield Acoustics* - Odour from Iain Cowan of Zepher Environmental - Strategic planning from Tim McBridge-Burgess of Contour - Traffic from John Paul Maina of Impact
Handford Projects Pty Ltd	Louise Lowe of KLM Spatial
Harmon Group	Nick Hooper of Taylors
Lumanovski Family	Robert Williams of Human Habitats
Melbourne Water	Greg Tobin and Aaron Shrimpton of Harwood Andrews, who called the following expert evidence: <ul style="list-style-type: none"> - Drainage from Jamie Carroll of Spiire - Drainage from Paul Clemson of Engney* - Soil from Peter Sandercock of Jacobs
Officer (Handford Lane) Pty Ltd	Did not attend the Hearing
Parklea Developments Pty Ltd	Jennifer Trewhella of Counsel, instructed by Polis Legal, who called the following expert evidence: <ul style="list-style-type: none"> - Built form heritage from John Patrick of John Patrick & Associates* - Cultural heritage from Oona Nicholson of Ecology & Heritage Partners - Drainage from Michael Mag of Stormy Water Solutions - Economics from Tony Dimasi of Gap Advisory

Submitter	Represented by
	<ul style="list-style-type: none">- Strategic planning from Mark Woodland of Echelon Planning- Traffic from, Jason Walsh of Traffix
Sherrill Willmott	
Simon Beard	
South East Water	Did not appear, provided written material only
Tuck Family	Paul Chiappi of Counsel, instructed by Wollerman Shacklock Lawyers
Mack Property Developments Pty Ltd	Nicola Collingwood of Counsel, instructed by Planning and Property Partners, who called the following expert evidence: <ul style="list-style-type: none">- Drainage from Nina Barich of Incitus
YourLand Developments	Emily Porter SC and Tom Ellicott of Counsel, instructed by Hall and Wilcox, who called the following expert evidence: <ul style="list-style-type: none">- Drainage from Rob Swan of Hydrology and Risk Consulting- Traffic from Valentine Gnanakone of One Mile Grid

* These witnesses provided written evidence but did not appear at the Hearing

Appendix C Document list

No	Date	Description	Presented by
1	21 Dec 2023	Committee Directions Hearing notice letter	Planning Panels Victoria (PPV)
2	31 Jan 2024	Letter to Committee outlining various preliminary issues, enclosing: a) Letter to the VPA and Melbourne Water seeking further information, dated 20 Dec 2023	Parklea Developments Pty Ltd (Parklea)
3	31 Jan	Letter to Committee outlining suggested timetable	Victorian Planning Authority (VPA)
4	2 Feb	Letter to Committee outlining various preliminary issues	ISPT Pty Ltd, Abiwood OSR Pty Ltd and GLG Invest Pty Ltd (ISPT; Abiwood OSR; GLG Invest)
5	5 Feb	Letter to Committee outlining directions it will seek regarding production of further information on proposed 'State Government Facility'	YourLand Developments Pty Ltd (YourLand)
6	6 Feb	Committee letter to all parties regarding procedural issues, Directions Hearing	PPV
7	8 Feb	Letter to Committee regarding the name of submitter 31, enclosing: a) Letter of authorisation from landowner of 90 Handford Lane, Officer	Eildon Capital Group (Eildon Capital)
8	9 Feb	Proposed timetable outline on behalf of various submitters	Parklea
9	9 Feb	List of documents sought from the VPA and Melbourne Water by Parklea	Parklea
10	9 Feb	Letter to Committee responding to requests for documents	Melbourne Water
11	9 Feb	Letter to Committee regarding participation of Eildon Capital Group	Eildon Capital
12	12 Feb	Late submission 31a (Eildon Capital Group)	VPA
13	13 Feb	Committee Directions	PPV
14	16 Feb	Landowner map (provided to Committee only in accordance with direction)	VPA
15	16 Feb	Submitter map (provided to Committee only in accordance with direction)	VPA
16	19 Feb	Part A submission	VPA
17	19 Feb	Request for Information Tracker	VPA
18	19 Feb	Submissions summary log	VPA

No	Date	Description	Presented by
19	19 Feb	Supplementary Staging Document explaining methodology in the Staging Technical Paper	VPA
20	19 Feb	Technical Paper – Coordinated Delivery of Infrastructure and Staging Provisions (February 2024)	VPA
21	19 Feb	Day 1 Planning Scheme maps: a) 007icoMap11 b) eaoMap11 c) esoMap11 d) hoMap11 e) ipoMap11 f) lsio-foMap11 g) paoMap11 – Princes Freeway h) paoMap11 – Thompsons Road i) scoMap11 j) znMap11	VPA
22	19 Feb	Day 1 Design and Costings Report, and attachments	VPA
23	19 Feb	Day 1 Officer South Employment PSP	VPA
24	19 Feb	Day 1 Officer South Employment ICP	VPA
25	19 Feb	Day 1 Planning Scheme ordinance: a) Explanatory Report b) Instruction Sheet c) Clause 35.03s3 (RLZ3) d) Clause 37.01s8 (SUZ8) e) Clause 37.07s7 (UGZ7) f) Clause 42.01s7 (ESO7) g) Clause 43.01s (HO) h) Clause 43.03s3 (IPO3) i) Clause 45.01s (PAO) j) Clause 45.11s3 (ICO3) k) Clause 45.12s (SCO) l) Clause 52.17s (Native Vegetation) m) Clause 66.04s (Referral of Permit Applications Under Other State Standard Provisions) n) Clause 66.06s (Notice of Permit Applications Under Local Provisions) o) Clause 72.03s (What Does this Planning Scheme Consist of?) p) Clause 72.04s (Incorporated Documents)	VPA
26	20 Feb	Hearing Timetable version 1	PPV

No	Date	Description	Presented by
27	20 Feb	Letter to Committee regarding availability of VPA's experts	Parklea
28	20 Feb	Letter to Committee enclosing: a) Working draft SCO Incorporated Document	VPA
29	22 Feb	Letter to Committee regarding documents to be tabled and DSS Investigation Area	Melbourne Water
30	22 Feb	Revised Officer South Employment PSP DSS Asset Overview Plan (Jacobs, DWG No. 308544, Revision A, Sheet 1 of 9, dated 08.09-23) (Asset Overview Plan)	Melbourne Water
31	22 Feb	Officer South Employment PSP High Level Regional Drainage Strategy (Stormy Water Solutions, 23rd November 2020)	Melbourne Water
32	22 Feb	Zip folder of RORB and MUSIC Modelling, including relevant notes	Melbourne Water
33	23 Feb	Site inspection requests: a) Development Victoria b) Parklea c) ISPT Pty Ltd, Abiwood OSR Pty Ltd and GLG Invest Pty Ltd d) YourLand Developments e) Melbourne Water f) Eildon Capital Group g) Individual submitter	Various parties
34	26 Feb	Parklea preferred Day 1 documents: a) Clause 43.03s3 (IPO3) b) Clause 3506s3 (RCZ3) c) Clause 37.07s7 (UGZ7) d) Clause 42.01s7 (ESO7) e) SCO14 map f) SCO Incorporated Document (clean version) g) SCO Incorporated Document (tracked against VPA exhibited version)	Parklea
35	26 Feb	Galileo Group preferred Day 1 documents: a) Clause 37.07s7 (UGZ7) b) Officer South Employment PSP	Galileo Group
36	26 Feb	YourLand preferred Day 1 documents (changes made against VPA Day 1 versions): a) Officer South Employment PSP (YourLand changes identified in yellow comment boxes) b) Officer South Employment ICP (YourLand changes identified in yellow comment boxes) c) Clause 37.07s7 (UGZ7) d) SCO Incorporated Document	

No	Date	Description	Presented by
37	26 Feb	Melbourne Water preferred Day 1 documents (changes made against VPA Day 1 versions): a) Clause 37.07s7 (UGZ7) b) Officer South Employment PSP	Melbourne Water
38	26 Feb	Officer Land Co preferred Day 1 documents: a) Cover letter b) SCO Incorporated Document	Officer Land Co
39	26 Feb	Cardinia Shire Council preferred Day 1 documents: a) Road Cross-sections b) Clause 37.01s8 (SUZ8) c) Clause 37.07s7 (UGZ7) d) Officer South Employment ICP – with Council comments e) Officer South Employment PSP – VPA Day 1 comparison with all Council tracked changes f) Clause 43.03s3 (IPO3) g) Clause 43.03s3 (IPO3) with Council changes	Cardinia Shire Council
40	26 Feb	Eildon Capital Group preferred Day 1 documents: a) Cover letter b) SCO Incorporated Document (superseded by Document 44a)	Eildon Capital
41	26 Feb	Development Victoria preferred Day 1 documents (changes made against VPA Day 1 versions): a) Officer South Employment PSP b) Clause 37.07s7 (UGZ7)	Development Victoria
42	27 Feb	Best Hooper clients' preferred Day 1 documents (changes made against exhibited version, but including VPA mark ups that are otherwise not opposed): a) Clause 35.06s3 (RCZ3) b) Clause 37.07s7 (UGZ7) c) Clause 43.03s3 (IPO3) d) Clause 45.01s (PAO) e) SCO Incorporated Document	ISPT, Abiwood OSR and GLG Invest
43	28 Feb	Mack Property preferred Day 1 documents: a) Cover letter b) SCO Incorporated Document	Mack Property
44	29 Feb	Letter to Committee regarding appearance of expert witnesses and enclosing: a) Updated Day 1 version of SCO Incorporated Document including updated Map 1 that was not included in version filed on 26 Feb 2024	Eildon Capital

No	Date	Description	Presented by
45	1 Mar	Letter to Committee regarding inclusion of additional submitters in Stage 1	VPA
46	1 Mar	Letter to Committee seeking extension to file evidence in light of revised staging plan	Officer Land Co
47	1 Mar	Email confirming grant of extension request to Officer Land Co	PPV
48	4 Mar	Opening submission	Mack Property
49	4 Mar	Expert witness report of Jamie Carroll	Melbourne Water
50	4 Mar	Expert witness report of Peter Sandercock	Melbourne Water
51	4 Mar	Opening submission	Melbourne Water
52	4 Mar	Expert witness report of Faraz Ahmed	VPA
53	4 Mar	Expert witness report of John Brennan	VPA
54	4 Mar	Expert witness report of John Glossop	VPA
55	4 Mar	Expert witness report of Anthony Hemingway	VPA
56	4 Mar	Expert witness report of Reece Humphreys	VPA
57	4 Mar	Expert witness report of Andrea Murphy	VPA
58	4 Mar	Expert witness report of Robert Panozzo	VPA
59	4 Mar	Expert witness report of Yilong Shi	VPA
60	4 Mar	Expert witness report of Aaron Walley	VPA
61	4 Mar	Opening submission, enclosing attachments: a) Attachment C - Submission summary log b) Attachment D - Submitters Day 1 Document	VPA
62	4 Mar	Opening submission	Officer Land Co
63	4 Mar	Expert witness report of Rob Swan	YourLand
64	4 Mar	Expert witness report of Valentine Gnanakone	YourLand
65	4 Mar	Opening submission	YourLand
66	4 Mar	Opening submission	Parklea
67	4 Mar	Opening submission versions of Planning Scheme maps and ordinance: a) Clause 43.01s (HO91) b) Clause 43.03s3 (IPO3) c) Clause 35.06s3 (RCZ3) d) Clause 37.07s7 (UGZ7) e) Clause 42.01s7 (ESO7) f) Thompsons Road PAO Map	Parklea
68	4 Mar	Expert witness report of Oona Nicolson	Parklea
69	4 Mar	Expert witness report of John Patrick	Parklea

No	Date	Description	Presented by
70	4 Mar	Expert witness report of Michael Mag	Parklea
71	4 Mar	Expert witness report of Jason Walsh	Parklea
72	4 Mar	Expert witness report of Tony Dimasi	Parklea
73	4 Mar	Expert witness report of Evan Granger	Development Victoria
74	4 Mar	Expert witness report of Alex Hrelja	Development Victoria
75	4 Mar	Expert witness report of Rhys Quick	Development Victoria
76	4 Mar	Expert witness report of Tim McBride-Burgess	Galileo Group
77	4 Mar	Expert witness report of Iain Cowan	Galileo Group
78	4 Mar	Expert witness report of Darren Tardio	Galileo Group
79	4 Mar	Opening submission	Cardinia Shire Council
80	4 Mar	Expert witness report of Ali Abdou	Cardinia Shire Council
81	4 Mar	Expert witness report of Jonathon McLean	Cardinia Shire Council
82	4 Mar	Expert witness report of Richard Simon	Cardinia Shire Council
83	4 Mar	Expert witness report of Christina Dyson	Cardinia Shire Council
84	4 Mar	Expert witness report of Charmaine Dunstan	Development Victoria
85	4 Mar	Expert witness report of Nina Barich	Development Victoria
86	4 Mar	Opening submission	Eildon Capital
87	4 Mar	Expert witness report of David Barnes	Eildon Capital
88	4 Mar	Expert witness report of Stephen Watters (infrastructure servicing)	Eildon Capital
89	4 Mar	Expert witness report of Stephen Watters (infrastructure contributions)	Eildon Capital
90	4 Mar	Expert witness report of Lance Weatherell	Cardinia Shire Council
91	4 Mar	Opening submission	Eildon Capital
92	4 Mar	Updated Day 1 ordinance - Clause 37.07s7 (UGZ7)	ISPT, Abiwood OSR and GLG Invest

No	Date	Description	Presented by
93	4 Mar	Updated Day 1 ordinance - Clause 43.03s3 (IPO3)	ISPT
94	4 Mar	Day 1 version of PSP	ISPT, Abiwood OSR and GLG Invest
95	4 Mar	Expert witness statement of John Mathios	ISPT, Abiwood OSR and GLG Invest
96	4 Mar	Expert witness statement of Andrew Clarke	ISPT and Abiwood OSR
97	4 Mar	Expert witness statement of Kylie May	ISPT
98	4 Mar	Expert witness statement of Kylie May	Abiwood OSR
99	4 Mar	Expert witness statement of Bryce Raworth	ISPT
100	4 Mar	Expert witness statement of John-Paul Maina	Galileo Group
101	4 Mar	Opening submission	Galileo Group
102	5 Mar	Expert witness statement of Mark Woodland	Parklea
103	5 Mar	Opening submission	Development Victoria
104	5 Mar	Expert witness statement of John Patrick	ISPT
105	5 Mar	Expert witness statement of John-Paul Maina	ISPT and Abiwood OSR
106	6 Mar	Expert witness statement of Paul Shipp	Cardinia Shire Council
107	6 Mar	Opening statement presentation	VPA
108	6 Mar	Expert witness statement of John-Paul Maina	Eildon Capital
109	6 Mar	Letter to Committee regarding oral opening statement	Officer Land Co
110	6 Mar	Hearing submission	City of Casey
111	6 Mar	Expert witness statement of Nina Barich	Mack Property
112	6 Mar	Expert witness statement of Robert Milner	Officer Land Co
113	6 Mar	Expert witness statement of Raymond Todd	Officer Land Co
114	6 Mar	Expert witness statement of Deborah Donald	Officer Land Co
115	6 Mar	Hearing submission	DTP on behalf of the Head, Transport for Victoria (TfV)
116	7 Mar	Hearing submission, enclosing: a) Arcadis memo	Lumanovski family

No	Date	Description	Presented by
117	7 Mar	Email advising withdrawal from hearing	Officer (Handford Lane) Pty Ltd
118	7 Mar	Hearing submission	Handford Projects Pty Ltd
119	7 Mar	Hearing submission	Harmon Group
120	7 Mar	Hearing presentation	Sherrill Willmott
121	7 Mar	4 photos: a) Image No 1. Google Earth of Willmotts, 680 Cardinia Road Cardinia b) Image No 2. Flood up to house. 29 th Oct 2022 c) Image No 3. Cardinia Road Flooded due to thick vegetation in Lower Gum Scrub Creek Jan 2024 d) Image No 4. thick vegetation in Low Gum Scrub Creek, looking back to Willmotts	Sherrill Willmott
122	7 Mar	Hearing submission	Simon Beard
123	8 Mar	Hearing Timetable version 3 (reissued)	PPV
124	8 Mar	Hearing submission (filed 6 Mar)	Darcsfield Cooperative Ltd
125	8 Mar	Hearing presentation (filed 6 Mar)	Darcsfield Co-operative Ltd
126	8 Mar	Melbourne Water Works Request May 2020 (filed 6 Mar)	Darcsfield Co-operative Ltd
127	8 Mar	Darcsfield Flood History Update Feb 2024 (filed 6 Mar)	Darcsfield Co-operative Ltd
128	8 Mar	Aboriginal Cultural Heritage Key Issues Statement	VPA
129	8 Mar	Built Heritage Key Issues Statement	VPA
130	8 Mar	Arboricultural Key Issues Statement	VPA
131	8 Mar	Addendum to Arboricultural Key Issues Statement	VPA
132	8 Mar	Strategic Planning Key Issues Statement	VPA
133	9 Mar	Hearing submission	Tuck Family
134	12 Mar	Hearing submission	Chisholm Institute
135	12 Mar	Committee email regarding questions on notice for Head, Transport for Victoria	PPV
136	12 Mar	Letter regarding roundtable	Bunurong Land Council Aboriginal Corporation (BLCAC)

No	Date	Description	Presented by
137	12 Mar	Committee email regarding written statement of additional issues for BLCAC	PPV
138	12 Mar	Submissions on strategic planning	ISPT, Abiwood OSR and GLG Invest
139	12 Mar	Clause 37.07s7 (UGZ7) - Updated 12 March 2024	ISPT, Abiwood OSR and GLG Invest
140	13 Mar	Correction to expert witness report of David Barnes	Eildon Capital
141	13 Mar	Amended arboricultural joint statement	ISPT, Abiwood OSR and VPA
142	13 Mar	Submissions on strategic planning	Cardinia Shire Council
143	13 Mar	Letter regarding VPA issues in dispute statements	Cardinia Shire Council
144	14 Mar	Submissions on strategic planning	Parklea Developments Pty Ltd
145	14 Mar	Submission regarding sewer pumping station site at 170 Officer South Road	South East Water
146	14 Mar	Recommended Buffer Zone for Officer South Pumping Station (CEE, May 2022)	South East Water
147	14 Mar	Table of Galileo opening submission comments and South East Water responses regarding sewer pumping station	South East Water
148	15 Mar	Joint expert statement on ICP issues including costs	VPA
149	15 Mar	Statement of issues in dispute between VPA and Galileo	VPA
150	15 Mar	Joint expert statement on drainage	Melbourne Water
151	15 Mar	Joint expert statement on traffic and transport	VPA
152	15 Mar	Hearing submission	Galileo Group
153	15 Mar	Presentation of planning evidence by Tim McBride-Burgess	Galileo Group
154	15 Mar	Presentation of odour evidence by Dr Iain Cowan	Galileo Group
155	19 Mar	Hearing submission	YourLand
156	19 Mar	Active open space review and options	YourLand
157	19 Mar	Statement of issues in dispute between VPA and YourLand	VPA
158	19 Mar	Letter from APA Group	Melbourne Water
159	20 Mar	Hearing Timetable version 4	PPV
160	20 Mar	Revised Local Park Provision - Working Plan	VPA

No	Date	Description	Presented by
161	20 Mar	Revised Local Park Provision - Comparison Table with VPA Day 1 version	VPA
162	21 Mar	Hearing Timetable version 5	PPV
163	22 Mar	Statement of drainage issues in dispute	VPA
164	22 Mar	Statement of drainage issues in dispute	Melbourne Water
165	22 Mar	Catchment plan to be presented at drainage roundtable	Parklea
166	22 Mar	Memo regarding Gum Scrub Creek	Melbourne Water
167	22 Mar	Memo regarding drainage conclave matters	Melbourne Water
168	25 Mar	Drainage conclave joint statement clarifications by Jamie Carroll	Melbourne Water
169	25 Mar	Drainage memo on proposed PAO	Abiwood OSR
170	26 Mar	Documents relied on by Mr Carroll in the preparation of his expert witness statement: a) File Note - Gum Scrub Creek Modelling b) File Note - Cardinia Creek Modelling c) Stephens Road DSS & Officer South Road DSS Functional Design d) Lower Gum Scrub Creek DSS Functional Design e) DSS asset overview - Overall layout with indicative fill f) OSE PSP RORB GIS (zipped folder) g) Predevelopment Flow Metrics - File Note Explaining Adjustments h) RORB OSE PSP CARD CK sent to Melbourne Water 5.10.23 (zipped folder) i) RORB OSE PSP GSC sent to Melbourne Water 5.10.23 (zipped folder) j) 308544_MUS_IW_03_Lower GSC DSS k) 308544_MUS_IW_08_OS DSS l) MUSIC catchment plan - Cardinia Creek	Melbourne Water
171	26 Mar	Brief for engineering review of Cardinia Industrial DSS	Melbourne Water
172	26 Mar	Alluvium briefing materials - Email	Melbourne Water
173	26 Mar	Hydrology 101 diagram prepared by Michael Mag during the Hearing on Day 14	Parklea
174	26 Mar	Report – Cultural Values Mapping: Cardinia Creek [Confidential]	BLCAC
175	26 Mar	Hearing Timetable version 6	PPV
176	27 Mar	Submissions for drainage roundtable	Cardinia Shire Council

No	Date	Description	Presented by
177	28 Mar	Lecky Road Wetland / Retarding Basin WLRB G Functional Layout prepared by Nina Barich	Development Victoria
178	28 Mar	Officer South Waterway Functional Layout prepared by Nina Barich	Development Victoria
179	28 Mar	Modelling from Ms Barich: a) Zip folder titled 'RORB Files' b) Zip folder titled 'WLRB G MUSIC files'	Development Victoria
180	28 Mar	Traffic Key Issues Statement	VPA
181	28 Mar	ICPs Key Issues Statement	VPA
182	28 Mar	Presentation for drainage roundtable	Eildon Capital
183	28 Mar	Supplementary submission - Response to questions on notice from 12 Mar 2024	TfV
184	2 Apr	Minta Farm and Croskell Transport Modelling Report	Cardinia Shire Council
185	2 Apr	Traffic and transport Key Issues Statement	Cardinia Shire Council
186	2 Apr	Table – Interpretation of Plan 3 – Place Based Plan	VPA
187	2 Apr	Explanatory Document for Council alternative ICP proposition re Thompsons Road Bridge West BR04	Cardinia Shire Council
188	2 Apr	Diagram which shows the key moves referenced in the Explanatory Document	Cardinia Shire Council
189	3 Apr	Memo prepared by Michael Mag regarding the Thompsons Road PAO	Parklea
190	3 Apr	Email from AusNet to Melbourne Water referred to by Mr Carroll	Melbourne Water
191	3 Apr	Plan showing diversion pipe and outfall properties	Melbourne Water
192	3 Apr	Further submissions	Handford Projects Pty Ltd
193	4 Apr	Submissions for traffic and transport roundtable	Cardinia Shire Council
194	5 Apr	Memo prepared by Jason Walsh regarding the Thompsons Road PAO	Parklea
195	5 Apr	Retail Economics Key Issues Statement	VPA
196	5 Apr	Letter to Committee – SCO Day 2 Version	VPA
197	5 Apr	SCO Incorporated Document Day 2 Version	VPA
198	8 Apr	Submissions	Development Victoria

No	Date	Description	Presented by
199	8 Apr	Planning Permit PLN15/0367 referred to by John-Paul Maina during traffic roundtable	ISPT, Abiwood OSR
200	8 Apr	Section 173 Agreement - 185 Dandenong-Hastings Road, Dandenong South	ISPT, Abiwood OSR
201	8 Apr	Submissions	Officer Land Co
202	8 Apr	Submissions - Miscellaneous Issues	VPA
203	8 Apr	Primary Provision Assessment – Officer South PSP – Justification Assessment, SRF Consulting (March 2022)	VPA
204	9 Apr	Hearing Timetable version 7	PPV
205	9 Apr	Memorandum on Stephens Road waterway	Melbourne Water
206	9 Apr	Submissions on miscellaneous issues	ISPT, Abiwood OSR, GLG Invest
207	9 Apr	Submissions on miscellaneous Issues	Cardinia Shire Council
208	9 Apr	Submissions on ICP	Cardinia Shire Council
209	10 Apr	Memorandum on Thompsons Road drainage	Melbourne Water
210	10 Apr	Cardinia Road Employment PSP	YourLand
211	10 Apr	Cardinia Road PSP	YourLand
212	11 Apr	Submissions – Summary of Parklea’s Position	Parklea
213	11 Apr	Submissions – Strategic Planning	Parklea
214	11 Apr	Submissions – Staging, enclosing: a) Attachment A – Parklea Sub-Precinct Plan Matrix	Parklea
215	11 Apr	Submissions – Parklea’s Experience in CREP, enclosing: a) Attachment A – CREP Plan b) Attachment B – CREP Permit Extracts c) Attachment C – Concept Plan Thompsons Road	Parklea
216	11 Apr	Submissions – ICP and Traffic	Parklea
217	11 Apr	Submissions – Drainage	Parklea
218	11 Apr	Submissions – Aboriginal Cultural Heritage	Parklea
219	12 Apr	Email – Update in relation to the size and location of the Local Town Centre	VPA
220	12 Apr	Memorandum on Lecky Road Culvert	Melbourne Water
221	12 Apr	Second supplementary submission	TfV
222	12 Apr	Email – Council staging plan, enclosing: a) OSE Staging Plan Option 1C revised 13.2.2024	Cardinia Shire Council

No	Date	Description	Presented by
223	15 Apr	Updated Response to Submissions table - Submitters who provided responses to VPA Day 1 documents	VPA
224	15 Apr	Updated Response to Submissions table - Other submitters	VPA
225	15 Apr	Closing submission, enclosing: a) Photographs	Darcsfield Co-operative Ltd
226	15 Apr	Submissions – Economics	Parklea
227	16 Apr	Further submission	Melbourne Water
228	16 Apr	Examples of asset resizing post PSP gazettal	Melbourne Water
229	16 Apr	Carroll review of Barich material	Melbourne Water
230	16 Apr	Further submission	Mack Property
231	16 Apr	Revised Local Park Provision – PSP Plan 6 (Final day version)	VPA
232	16 Apr	Revised Local Park Provision - Comparison Table with VPA Day 1 and Day 2 version	VPA
233	16 Apr	Addendum to outline of submissions	Development Victoria
234	16 Apr	Supplementary submission	Tuck Family
235	16 Apr	Hearing Timetable v8	PPV
236	16 Apr	Closing submission	Simon Beard
237	17 Apr	Part C (closing) versions of: - PSP and ICP (Documents 237.01 – 237.02) - PSP Ordinance (Documents 237.03 – 237.17) - PSP Planning Scheme Maps (Documents 237.18 – 237.28) - ICP Ordinance (Document 237.29) - ICP Planning Scheme Map (Document 237.30) - SCO (Document 237.31) - HO 92 Statement of Significance (Document 237.32)	VPA
238	17 Apr	Closing submission, enclosing attachments: a) Attachment A - Table prepared by Parklea of Melbourne Water examples b) Attachment–B - Proposed directions and recommendations c) Attachment–C - Examples of VPA post-hearing changes	Parklea

No	Date	Description	Presented by
239	17 Apr	Closing versions of amendment documents: a) Summary of drafting changes b) Clause 43_01s - HO91 c) Clause 43_03s3 - IPO3 d) Clause 35_06s3 - RCZ3 e) Clause 37_07s7 - UGZ7 f) Clause 42_01s7 - ESO7 g) ICP changes to Exhibited version h) Map - HO91 i) Map - IPO3 j) Map - SCO14 k) Map - Zone l) Map PAO Thompsons Road m) PSP track changes to Exhibited version n) Staging Incorporated Document (clean version)	Parklea
240	18 Apr	Closing submission	Development Victoria
241	18 Apr	Closing submission	ISPT, Abiwood OSR, GLG Invest
242	18 Apr	Closing submission	Eildon Capital
243	18 Apr	Banyan Place Residential Estate Permit (permit T200562 dated 12 May 2022)	Parklea
244	18 Apr	McMullin Permit (permit T210184 dated 8 March 2022, amended 14 March 2023)	Parklea
245	18 Apr	Closing submission, enclosing: a) Attachment 1 - Mesh Memorandum b) Attachment 2 - IN-08 area markup c) Attachment 3 - Explanatory Memorandum, Planning and Environment Amendment (Public Land Contributions) Bill 2017 d) Attachment 4 - Second Reading, Planning and Environment Amendment (Public Land Contributions) Bill 2017 e) Attachment 5 - Explanatory Memorandum, Planning and Environment Amendment Bill 2021 f) Attachment 6 - Second Reading, Planning and Environment Amendment Bill 2021	YourLand
246	18 Apr	Supplementary evidence of Rob Swan	YourLand
247	18 Apr	Supplementary statement of evidence of Valentine Gnanakone	YourLand
248	19 Apr	Part C (closing) Submission	VPA

No	Date	Description	Presented by
249	19 Apr	Supplementary submission plans	Tuck Family
250	19 Apr	Closing submission	Galileo Group
251	19 Apr	Closing submission	Melbourne Water
252	19 Apr	Email from APA Networks 18.4.24	Melbourne Water
253	19 Apr	Email from APA Networks 18.4.24 – Attachment 1	Melbourne Water
254	19 Apr	Email from APA Networks 18.4.24 – Attachment 2	Melbourne Water
255	19 Apr	Letter attached to email from APA Networks 18.4.24	Melbourne Water
256	19 Apr	Closing submission	Cardinia Shire Council
257	19 Apr	Word version of Part C PSP (Document 239m)	VPA
258	22 Apr	Closing submission	City of Casey
259	22 Apr	Email – Committee further directions	PPV
260	29 Apr	Letter – Response to final day documents	Eildon Capital
261	29 Apr	Without prejudice drafting - Clause 37_07s7 - UGZ7 and Staging Incorporated Document	Eildon Capital
262	29 Apr	Response to final day drafting	Cardinia Shire Council
263	29 Apr	Without prejudice drafting - Clause 37_07s7 - UGZ7	Cardinia Shire Council
264	29 Apr	Without prejudice drafting - PSP	Cardinia Shire Council
265	29 Apr	Without prejudice drafting - PSP	Galileo Group
266	29 Apr	Without prejudice drafting - Clause 37_07s7 - UGZ7	Galileo Group
267	29 Apr	Committee letter to all parties advising it will not issue an interim report	PPV
268	29 Apr	Summary of changes table to the PSP	Development Victoria
269	29 Apr	Without prejudice drafting - PSP	Development Victoria
270	29 Apr	Summary of changes table to the UGZ7	Development Victoria
271	29 Apr	Without prejudice drafting – Clause 37_07s7 - UGZ7	Development Victoria
272	29 Apr	Without prejudice drafting – PSP	ISPT; Abiwood OSR; GLG Invest
273	29 Apr	Without prejudice drafting – Clause 35_06s3 - RCZ3	ISPT; Abiwood OSR; GLG Invest

No	Date	Description	Presented by
274	29 Apr	Without prejudice drafting – Clause 37_07s7 - UGZ7	ISPT; Abiwood OSR; GLG Invest
275	29 Apr	Without prejudice drafting – Clause 43.03 - IPO	ISPT; Abiwood OSR; GLG Invest
276	29 Apr	Without prejudice drafting – Clause 45.01 - PAO	ISPT; Abiwood OSR; GLG Invest
277	1 May	Outline of position on drafting changes, Document 246 (Mr Swan’s supplementary evidence) and the Drainage Investigation Area	Melbourne Water
278	6 May	Letter – Drafting comments and comments on additional YourLand material	Parklea
279	6 May	Without prejudice drafting – Clause 35_06s3 - RCZ3	Parklea
280	6 May	Without prejudice drafting – Clause 37_01s8 - SUZ8	Parklea
281	6 May	Without prejudice drafting – Clause 37_07s7 - UGZ7	Parklea
282	6 May	Without prejudice drafting – Clause 42_01s7 - ESO7	Parklea
283	6 May	Without prejudice drafting – Clause 43_03s3 – IPO3	Parklea
284	6 May	Without prejudice drafting – d-HO91 Map	Parklea
285	6 May	Without prejudice drafting – ICP	Parklea
286	6 May	Without prejudice drafting – IPO3 Map	Parklea
287	6 May	Without prejudice drafting – PAO Map Thompsons Road	Parklea
288	6 May	Without prejudice drafting – PSP	Parklea
289	6 May	Without prejudice drafting – SCO Incorporated Document	Parklea
290	6 May	Without prejudice drafting – SCO Incorporated Document (clean version)	Parklea
291	6 May	Without prejudice drafting – SCO14 Map	Parklea
292	6 May	Without prejudice drafting – Zone Map	Parklea
293	6 May	Without prejudice drafting – Summary of drafting changes	Parklea

Appendix D Committee recommended version of the Precinct Structure Plan

Tracked Added

~~Tracked Deleted~~

PSP2.0

VICTORIA
State
Government

Officer South Employment

PRECINCT STRUCTURE PLAN

BUNURONG COUNTRY

Draft for public consultation

SEPTEMBER 2023

vpa
Victorian Planning Authority

The **Victorian Planning Authority proudly acknowledges** Victoria's Aboriginal community and their rich culture and pays respect to their Elders past and present.

We acknowledge Aboriginal people as Australia's first peoples and as the Traditional Owners and custodians of the land and water on which we rely.

We recognise and value the ongoing contribution of Aboriginal people and communities to Victorian life and how this enriches us.

We embrace the spirit of reconciliation, working towards the equality of outcomes and ensuring an equal voice.

The Officer South Employment Precinct is located on the traditional lands of the Bunurong People. The Bunurong People are represented by the Bunurong Land Council Aboriginal Corporation (BLCAC).

We acknowledge the Bunurong People as the Aboriginal Traditional Owners of their unceded Country. We acknowledge their ongoing connection to this land, and we pay our respects to their Elders past and present.

'Cardinia' has been identified as the anglicised interpretation of an eastern Kulin term roughly translated to "looking east from the creek" (BCLAC)

We thank BLCAC for their engagement throughout this project.

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This planning report was developed by the Victorian Planning Authority (VPA) on behalf of the Victorian Government.

Any projections are based on reasonable assumptions at the time of publication but should not be relied upon without first seeking appropriate expert advice. Although every effort has been made to ensure that the information in this document is factually correct at the time of publication, the VPA does not warrant the accuracy, completeness or relevance of the information. Any person using or relying upon this document does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.

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1. CONTEXT

1.1 How to read this document

The Precinct Structure Plan (PSP) guides land use and development where a planning permit is required under the Urban Growth Zone (Clause 37.07 of the Cardinia Planning Scheme), or any other provision of the Cardinia Planning Scheme that references this PSP.

Part 1: Context

The first part contains an overview of the PSP document and the function of individual components as well as infrastructure contributions required to deliver the precinct

PSP Guidelines refers to the **Precinct Structure Planning Guidelines: New Communities in Victoria**, available on [the VPA website](#)



Part 2: PSP Outcomes

A planning application and subsequent planning permit must implement the outcomes of the PSP.

The outcomes are expressed as:

- the **vision**, which is the overarching unique place-based outcome intended for this PSP
- the **purpose**, which sets out how the PSP will deliver on the vision for the precinct
- the **place-based plan**, which is a plan of the future community

The **PSP performance summary** illustrates performance against the targets set out in the PSP Guidelines. Where targets are not met, the PSP identifies the reasons why the targets have not been met, and what alternative approaches have been adopted to comply with the PSP Guidelines principles.

Part 3: Implementation

Each **hallmark** is implemented according to the following sub-structure:

- **PSP objectives:** The PSP identifies a set of place-based objectives to achieve the vision and purpose for the precinct. These provide the guidance required to achieve the specific outcomes sought for each of the seven hallmarks within the precinct
- **PSP implementation and delivery:** To assist with understanding how to implement the strategies, the PSP provides guidance in the form of requirements, plans, tables and diagrams
- **Place-based requirements and guidelines:** Provides decision making guidance when exercising discretion to determine if an application meets the relevant requirement

Alternative strategies to achieve the vision and objectives may be considered by the responsible authority. Alternative strategies must demonstrate how they will achieve the vision and objectives of the PSP.

To assist with understanding where alternative approaches may be supported, **plans, tables and diagrams** identify the level of flexibility that may be considered.

Not every aspect of land use, development or subdivision is addressed in this PSP. A responsible authority may manage development and issue permits as relevant under its general discretion. The [Generally in Accordance Guidance Note](#) is available on the VPA website to provide direction in the application of discretion where a PSP applies.

Development must comply with Acts and approvals where relevant e.g., the *Environment and Biodiversity Conservation Act 1999* or the *Aboriginal Heritage Act 2006*, amongst others.

1.2 Objectives, requirements and guidelines

A planning application and subsequent planning permit must implement the outcomes of the PSP. The outcomes are expressed as the PSP Vision, PSP Purpose and Objectives in the following chapters.

Each chapter of the PSP 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 however they may not be of the same wording as in the structure plan. A requirement may reference a plan, table or figure in the 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 and /or objectives, the responsible authority may consider the alternative. Alternative solutions put forward must be generally in accordance with the PSP. A guideline may include or reference a plan, table or figure in the PSP.

Meeting these Requirements and Guidelines will implement the Vision, Purpose and Objectives of the PSP.

1.3 Purpose of the PSP

The purpose of the PSP is to activate the PSP outcomes by:

- providing the planning conditions for private industry delivery
- identifying and, where appropriate, providing the shared funding for a diverse range of open spaces and community infrastructure
- ensuring planning permit applications will generate the population to support investment in critical infrastructure.

1.4 Regional and strategic policy context

Plan Melbourne 2017–2050, the Melbourne Industrial and Commercial Land Use Plan (MICLUP) and the South-East Growth Corridor Plan (2012) have identified the Officer South Employment Precinct to support a State Significant Industrial Precinct and Regionally Significant Commercial Area (including business with residential uses). These policies envisage the primary role for the precinct to cater for an employment and economic role, providing a long-term supply of employment land as part of a broader Officer–Pakenham employment corridor in Melbourne’s south-east (refer Plan 1: Regional Context).

1.5 Precinct features

The Officer South Employment Precinct is bound by Cardinia Creek to the west, Lower Gum Scrub Creek to the east, Princes Freeway to the north and green wedge to the south. The precinct area abuts several emerging growth area communities including Cardinia Road Employment PSP to the east, Minta Farm, Clyde North, Cardinia Creek South PSP to the west, and Officer PSP to the north.

The natural watercourses form a large transition zone between this precinct and the neighbouring communities to its east and west, providing a high-quality cultural and landscape amenity opportunity for its future population to enjoy. Aboriginal heritage areas of sensitivity are identified throughout the precinct and a cultural heritage investigation area is identified along Cardinia Creek, to be enhanced and protected through the PSP.

The VPA has consulted with Bunurong Land Council Aboriginal Corporation as the Traditional Owners of the land to help ascertain the important cultural values that are significant in the precinct. The Bunurong people’s heritage and story play an important role within the PSP, guiding outcomes that recognise the celebration of water, their journey (from the Dandenong Ranges to the south), Cardinia Creek life and the congregating of people and communities. Open spaces have been planned at identified high ground meeting places and connecting active path networks celebrate their journey in the east–west and north–south directions.

Two significant easements, a high-pressure gas and an electricity transmission easement, further divide the precinct into approximately three horizontal parts, which carry significant development constraints. There are also existing NBN fibre optic cables, additional gas distribution mains and high to very high retention value trees throughout the precinct.

A major existing sewer pumping station is located in the north of the precinct to provide wastewater services to the precinct and Officer. South East Water have proposed a sewer pumping station in the south of the precinct along Patterson Road to service the PSP catchment.

Public Acquisition Overlays (PAO) have been applied for the south-eastern freeway interchange ramps and for potential future widening along Thompsons Road. The Floodway Overlay (FO) north of Lecky Road at Lower Gum Scrub Creek has been amended to accommodate future infrastructure and updated floodway data, as detailed by the planning ordinances.

Plan 2: Precinct Features illustrates the existing natural and cultural features. These precinct features guide and influence the character of the precinct structure and its future neighbourhood, namely through:

- Aboriginal heritage areas of cultural sensitivity and landform
- Existing high value vegetation
- Environment Protection and Biodiversity Conservation (EPBC) protected species
- Post-contact heritage features and values
- Water features
- Treed view lines and views to the Dandenong Ranges.

Water will be a positive, visible, and significant contribution to the public realm and open space, including at key gateways of Thompsons Road, Grices and Lecky Road bridges and along the Officer South Road north–south gateway corridor. Celebrating water in the landscape will have multiple benefits by slowing and storing stormwater, including significant stormwater management strategies to protect the Koo Wee Rup Levy, and providing ecological regeneration and enhanced biodiversity. Significant changes of level within the Cardinia Creek corridor present areas where development could be restricted due to flooding and drainage constraints.

Areas downstream of the PSP presently experience flooding impacts in minor rainfall events. This includes flows from the PSP itself, but also flows from adjoining areas to the north [and east](#) of the PSP which will be treated, retarded and/or diverted through infrastructure to be delivered ~~during development of the PSP~~. Management of the catchment to the east of Officer South Road is dependent upon the construction of the Gum Scrub Creek Priority Works (shown on Plan 9) to outfall to divert volumes from Gum Scrub Creek. Development within the eastern portion of the PSP will be limited until the delivery of the Gum Scrub Creek Priority Works.

The precinct has also been home to rural lifestyle and agricultural uses, including farming, horticulture, and equine industries. The potential extension of existing equestrian trails from the Cardinia Creek Parklands and City of Casey through the precinct may provide further support to the regional equestrian community, promoting tourism for the local economy.

The precinct contains significant ecological features including habitat to be protected for matters of national environmental significance. The creek corridors bounding the PSP to the east and west provide important biodiversity corridors. Eastern Grey Kangaroos are present in the local rural and natural areas. Development of the precinct should consider the management of kangaroo.

There are two identified post-contact heritage sites situated within the precinct, being Cardinia Park, Former Gin Gin Bean Pre-Emptive Right Site at 410 Officer South Road, Officer (HO_91), and [four trees and one outbuilding at](#) Jesmond Dene ~~House and Trees~~ at 425 Officer South Road, Officer (HO_92).

In addition, the site at 90 Handford Lane, Officer is on the Victorian Heritage Inventory (H7921-0129) as it contains historical archaeological remains including artefact scatters, exotic plantings and building remains.

The Officer South Employment PSP has been prepared to ensure the seamless integration of the precinct into its key cultural, natural, and urban features.

Refer to the Officer South Employment Precinct Background Report for a more detailed discussion of regional context and features that have informed spatial planning outcomes sought by this PSP.

1.6 Infrastructure contributions plan

The legal framework for the infrastructure contributions plan (ICP) system is primarily set out in the *Planning and Environment Act 1987* (P&E Act). The main component of the ICP legislation is contained in Part 3AB of the P&E Act.

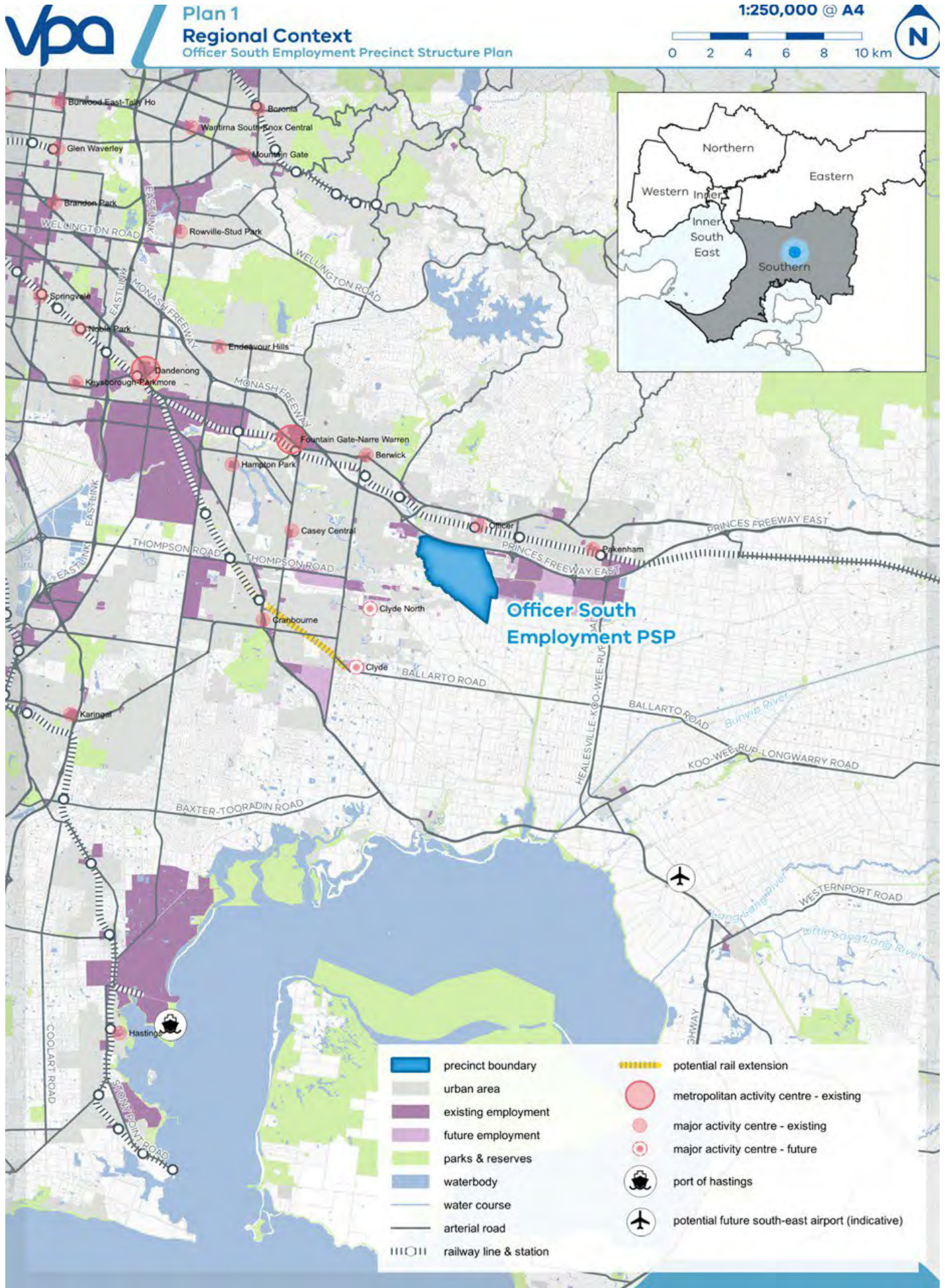
Development proponents within the Officer South Employment Precinct will be bound by the Officer South Employment Supplementary Infrastructure Contributions Plan (the ICP). The ICP sets out requirements for infrastructure funding across the Officer South Employment Precinct and will be incorporated in the Cardinia Planning Scheme.

1.7 Background information

The *Officer South Employment Precinct Background Report* provides detailed background information relating to the precinct, including its strategic and local context, physical attributes and provides a detailed account of the VPA's position on various challenges in the precinct based on the 20-minute neighbourhood principles.

The Background Report Summaries highlight considerations and research that have informed the preparation of the PSP, including the key findings from the various technical studies such as arboriculture, drainage, open space, transport, utilities, economics, and community facilities.

The *Officer South Employment Precinct Background Report* with the associated technical report summaries is available on the [Officer South Employment webpage](#). The technical studies are available at <https://vpa.vic.gov.au/project/officer-south-employment/#supporting-documentation>.



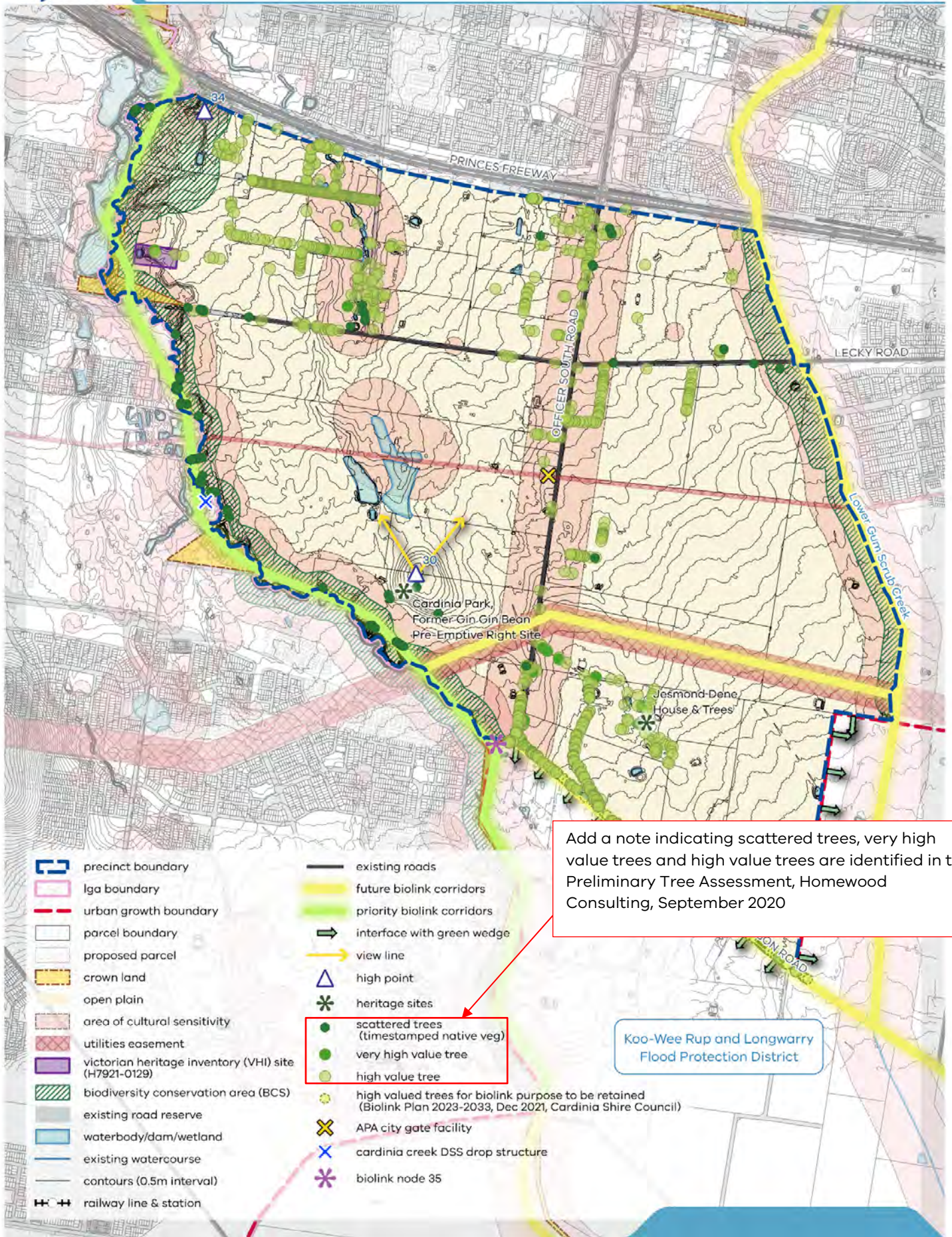
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Plan 2
Precinct Features
Officer South Employment Precinct Structure Plan

1:25,000 @ A4

0 250 500 750 1,000 m



Add a note indicating scattered trees, very high value trees and high value trees are identified in the Preliminary Tree Assessment, Homewood Consulting, September 2020

Koo-Wee Rup and Longwarry
Flood Protection District

2. PSP OUTCOMES

2.1 PSP vision

'Officer South Employment will become an innovative and sustainable employment precinct that will deliver a high amenity regionally-significant commercial area and state-significant industrial precinct, combined with a modern and diverse urban living hub to form a unique working and living environment.'

The precinct forms the core of the Officer–Pakenham State Significant Industrial Precinct and will deliver south-east Melbourne's next generation of industrial, manufacturing and logistics enterprises estimated to bring approximately 22,000 diverse jobs closer to emerging communities in Cardinia Shire and the City of Casey.

The urban structure promotes large and intensive industrial land uses within the core of the precinct, making Officer South Employment the prime location for heavy industries to thrive in the south-east region. It will attract primary industries such as agriculture and mining, as well as next-generation manufacturing for knowledge-based sectors and health care. Complemented by a sleeve of light industrial, and freight and logistics industries, commercial businesses will be able to leverage off industries to take full advantage of the new and exciting employment landscape to inspire innovation.

Excellent connectivity on a north–south and east–west axis connects Officer South Employment to major infrastructure. The north–south axis connects to the Officer Major Activity Centre, Officer Train Station and a potential future south-east airport. The precinct provides significant freight movement via Thompsons Road allowing direct access to broader south-east employment precincts and population centres.

Employment-focused land integrates with a compact 20-minute neighbourhood forming part of an expanded Cardinia Road community. The residential precinct provides a range of housing options and community facilities, creating a vibrant and diverse neighbourhood for workers and residents. It is estimated that Officer South Employment will be home to around 5,000 residents with a walkable, high amenity environment, drawing on a character green spine that links to key destinations anchored by active open space. The local town centre and community hub, provide extensive local opportunities for shopping, education, community services, and recreation.

Officer South Employment will protect conservation areas along the high valued waterways to ensure the protection of habitat for matters of national environmental significance. The natural features of Cardinia and Lower Gum Scrub Creeks will benefit the workers and residents within the precinct and are protected by a complex water management system. The unique natural attributes of the precinct, quality path networks and local parks create an environment conducive to discovery of highlighted heritage and cultural values areas within Officer South Employment.

A beacon for climate change resilience through sustainability and innovation, integrating a high amenity built environment and a significant active transport network, Officer South Employment is the new template for employment precincts of the future. This precinct exemplifies the principles of living locally and will be a primary choice for establishment of industry and businesses of the future.'

While not being prescriptive, Figure 1 is intended to encourage the achievement of the PSP vision on a sub-precinct basis.

Officer South Employment Sub-precinct concept

Princes Enterprise Precinct

Located along the Princes Freeway it enables high exposure to passing traffic and promotes a strong connection to Officer and the adjoining commercial precincts. Its Industrial 1 and Commercial 2 zoning provides the ability to accommodate a diverse mix of industries, including potential **research and innovation premises, warehousing and premium logistics and transport**-based industries.

Cardinia Creek Precinct

The land abutting Cardinia Creek is strategically important providing quality natural amenity to surrounding areas. complemented by the adjacent wetland and interfacing with the cultural value investigation area, this precinct will provide a high-quality SSIP industrial interface to surrounding high amenity areas, and industrial buffering to the western residential communities. It provides flexibility to the SSIP, allowing for smaller to medium lots to be developed to respond to market demand, helping to accommodate high profile light industry operations with a customer focus and high quality presentation to industries such as **wood products and furniture manufacturers, IT industries, textiles and music industries**.

Commercial Gateway Precinct

Premium quality service and commercial frontage to Lecky Road and Officer South Road, this precinct provides a quality northern gateway, complements the residential interfaces and provides a clear transition between intensive industries and proposed Officer South township. The precinct will provide small to medium lots with high quality frontages to Lower Gum Scrub Creek. The precinct will accommodate **service industries and business parks** that will benefit from arterial connections with wider communities and businesses. The inclusion of a proposed state government facility near the neighbourhood activity centre will drive an innovative precinct suitable for **research and development** centres. Facilities such as the proposed industry training institute (Centre of Excellence) are encouraged in commercial/mixed use areas where the sites have high amenity and are well-served with access to transport and community facilities.

Cardinia Park Heritage Precinct

Existing heritage buildings including very high-quality trees are a key feature to the Officer South Employment precinct. Opportunity lies for these locally heritage protected sites to be re-purposed into business capital ventures and to set this precinct apart from other industrial centres in the south-east corridor. Closely located with neighbouring heavy industry and complemented by the adjacent wetland and interfacing with the cultural value investigation area, this precinct will provide much-needed relief to the working environment, repurposed as **industry information centres, integrated upmarket public supply depots, plant nursery** and even **potential breweries**. The adaptive re-use of these premises will provide an opportunity for standout industrial business with no adverse impacts to the surrounding industrial uses.

Green spines/links

An abundance of green links solidify Officer South as a new order employment precinct that offers bio-links, wetlands and retention of age-old trees to help mitigate the impacts of an industrial environment to climate change. Officer South Road is to be recognised as a key significant transport link that will promote adjacent green and blue networks. The gas and electricity easements will accommodate numerous plant species encouraging flora to thrive and fauna to move between the two major creeks that hug Officer South in the north-south axis. The old Lecky Road alignment has been repurposed to a green spine that links several key destinations such as Lower Gum Scrub Creek and extensive wetlands, the local primary school and active open space, the neighbourhood centre and village square.



The Village

The precinct will be an **integrated and connected neighbourhood** that provides for a range of diverse housing options, including small lot housing, rear-accessed townhouses and apartment living, to promote **key worker housing** to the employment area and supporting living locally. An active **green spine** promotes a healthy lifestyle linking the adjoining community at Cardinia Road Employment precinct to the abundance of amenity via walking and cycling networks and bringing communities together with spaces for social events. Delivering two schools, a local town centre and premium open space, this precinct will bring 24-hour life to the State and Regionally Significant employment hub.

Prime Industrial Core Precinct

A robust area of SSIP safeguarded by an Industrial 1 zone and surrounding commercial and light industrial development, this precinct will provide large scale parcels for heavy industrial enterprise to excel. A key part of Officer South Employment, its strong connections to the principal freight network will attract industries such as **advanced manufacturing and engineering** for the construction and transportation industries, **scientific research and chemical production, aerospace**, and others that may require threshold distances and large land parcels.

Gin Gin Bean Precinct

Located next to the green wedge farming land and including the Gin Gin Bean Pre-Emptive Right Site this precinct has a premium quality interface to the southern farmland and urban growth boundary. The sub-precinct will offer key opportunities to **food and fibre** industries to leverage farming and agricultural businesses of the green wedge, and provide opportunities for the distribution of goods and services to local communities. The transmission easement can provide urban farming opportunities and ancillary uses such as public car parking, while water intensive industries are able to leverage off substantial drainage assets in this precinct.

Alternative mode of transport network

Opportunity for a high-speed, signposted e-scooter/cycle network and alternative transport, or autonomous shuttle route with electricity charging infrastructure. An east-west link via Lecky and Grices Roads as well as a north-south link to Officer will provide high grade access to key destinations of Officer Train Station and Minta Farm Innovation precinct.

2.2 PSP purpose

1. Provide for employment and industries of the future

Officer South Employment provides a Regionally Significant Commercial Area (RSCA) and a State Significant Industrial Precinct (SSIP) as part of the broader Pakenham-Officer SSIP corridor, south-east Melbourne's future premier economic and employment hub.

The employment landscape has significantly changed in recent years, shifting the standard employment model to a work-life focused environment. Officer South Employment is creating an employment precinct that focuses on the new movement and place of our working environment, delivering a high amenity residential area which encourages residents to walk, cycle and scooter to work via an efficient active transport network.

An ample supply of industrial land across the precinct will allow for businesses to drive the diversity of industries and their location. The configuration of the commercial land ensures that the SSIP is safeguarded from the new community area, and provides a wide array of opportunities including retail, services and offices that will activate the frontages of Officer South Road, Lecky Road, and the Princes Freeway.

Employment areas are configured to capitalise on the locational attributes that will support industries of the future. Large land parcels and direct access to the high voltage power network and where needed, the gas network and renewable gas, encourages and supports industries to expand their businesses, and additionally leverage off access to the key freight corridor of Thompsons Road and beyond to the potential future south-east airport.

2. Value-add to existing communities

The precinct delivers a diverse range of knowledge-based, manufacturing, logistics and agribusiness enterprises for existing and emerging communities, meaning surrounding residents have more job choice and can work closer to home.

The precinct's high amenity and well-designed residential neighbourhood provides the population to deliver broader community needs, including two primary schools (government and non-government), local town centre, and sports reserve. The new housing diversity PSP targets ensure that there are more housing choices which will unlock options for key worker and affordable housing within a walkable catchment.

Additional mixed-use precincts around local parks plan for a connected community that can take advantage of small local eating and work opportunities at key destinations. These small sub-hubs allow for potential small workshop/ shared workspaces, eateries and shop top residences to create an active, practical, and vibrant environment.

3. Release key transport/economic links

Officer South Employment incorporates strategic planning for the alignment of Thompsons Road, a pivotal east-west arterial freight route that will unlock the Pakenham-Officer SSIP. In addition, Grices and Lecky Roads will provide essential east west connections to the adjoining residential precincts in Cardinia Road Employment, Minta Farm and Clyde North enabling residents with good access to employment and surrounding community destinations. Within the precinct, the active and public transport links connect surrounding townships of Officer, Berwick, and Pakenham.

4. Integrate complementary community and open space assets

Officer South Employment will capitalise on the existing and proposed amenity and recreational values of green spaces within utility easements, Cardinia Creek, Lower Gum Scrub Creek, and future drainage assets. Its active and passive open space networks provide key points of destination within the precinct, to enable community and employees of the broader region to access and use these areas for leisure and recreation purposes via its connected road, active and public transport networks. The precinct provides for the establishment of Biodiversity Conservation Strategy (BCS) conservation areas to ensure the protection of connected habitat for Growling Grass Frogs within the precinct.

5. Respond to sustainable environmental and drainage needs

Officer South Employment fosters the coordinated delivery of servicing and onsite integrated water management opportunities to facilitate a sustainably responsive precinct. It will contribute to the long-term conservation of significant flora and fauna species through establishment and protection of habitat, particularly within BCS conservation area 36, providing high quality connected habitat corridors.

The precinct's integrated water management (IWM) strategy outlines the priorities available to ensure stormwater management and water use can be considered in the design and delivery of built form, streets, open space, and drainage assets. These opportunities are subject to further innovation, supported by future investigations into 'closed loop' water systems and stormwater harvesting and reuse.

6. Future-proof industry-ready services and infrastructure

The Officer South Employment PSP implements appropriate planning mechanisms to facilitate innovative utility service systems and infrastructure design and delivery. These delivery mechanisms encourage consideration of opportunities for green star construction, carbon reduction, clean energy generation and smart city technology through development of its utility networks, built form, parks and transport solutions.

The PSP provides for the staging of development of the precinct that aligns with infrastructure provision which will also assist with the forecasting of development to plan for future services. **Committee note:** Consider whether to adjust language in relation to staging throughout the PSP in light of the Committee's Recommendations 3 and 4.

Recommendation 6(k): Add a note to read "The underlying zoning for the land affected by the PAO for Thompsons Road is Industrial 1. Applications can be made for the use and development of that land, but they must be referred to the acquiring authority to determine whether the land is surplus to the needs of the acquiring authority".

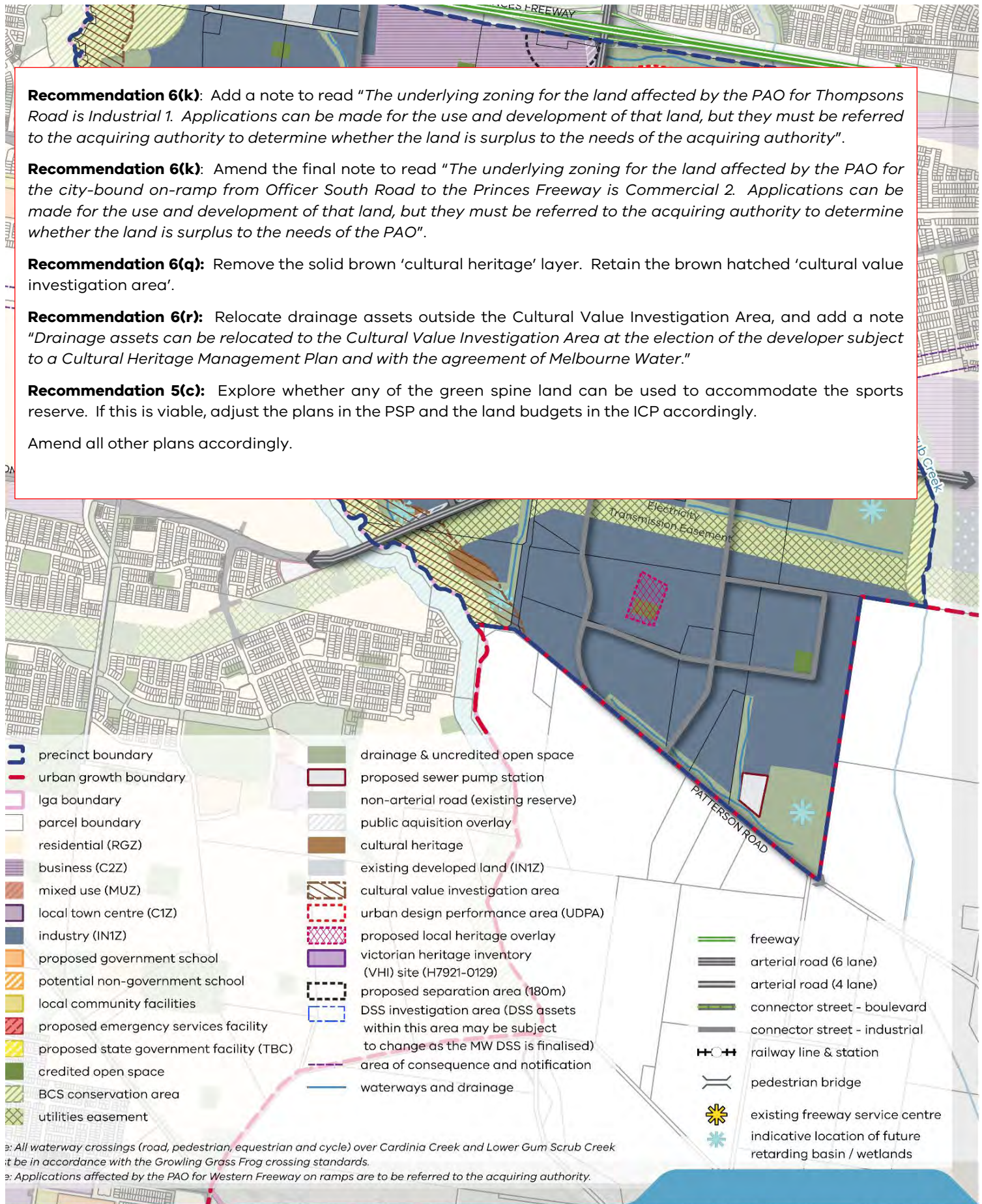
Recommendation 6(k): Amend the final note to read "The underlying zoning for the land affected by the PAO for the city-bound on-ramp from Officer South Road to the Princes Freeway is Commercial 2. Applications can be made for the use and development of that land, but they must be referred to the acquiring authority to determine whether the land is surplus to the needs of the PAO".

Recommendation 6(q): Remove the solid brown 'cultural heritage' layer. Retain the brown hatched 'cultural value investigation area'.

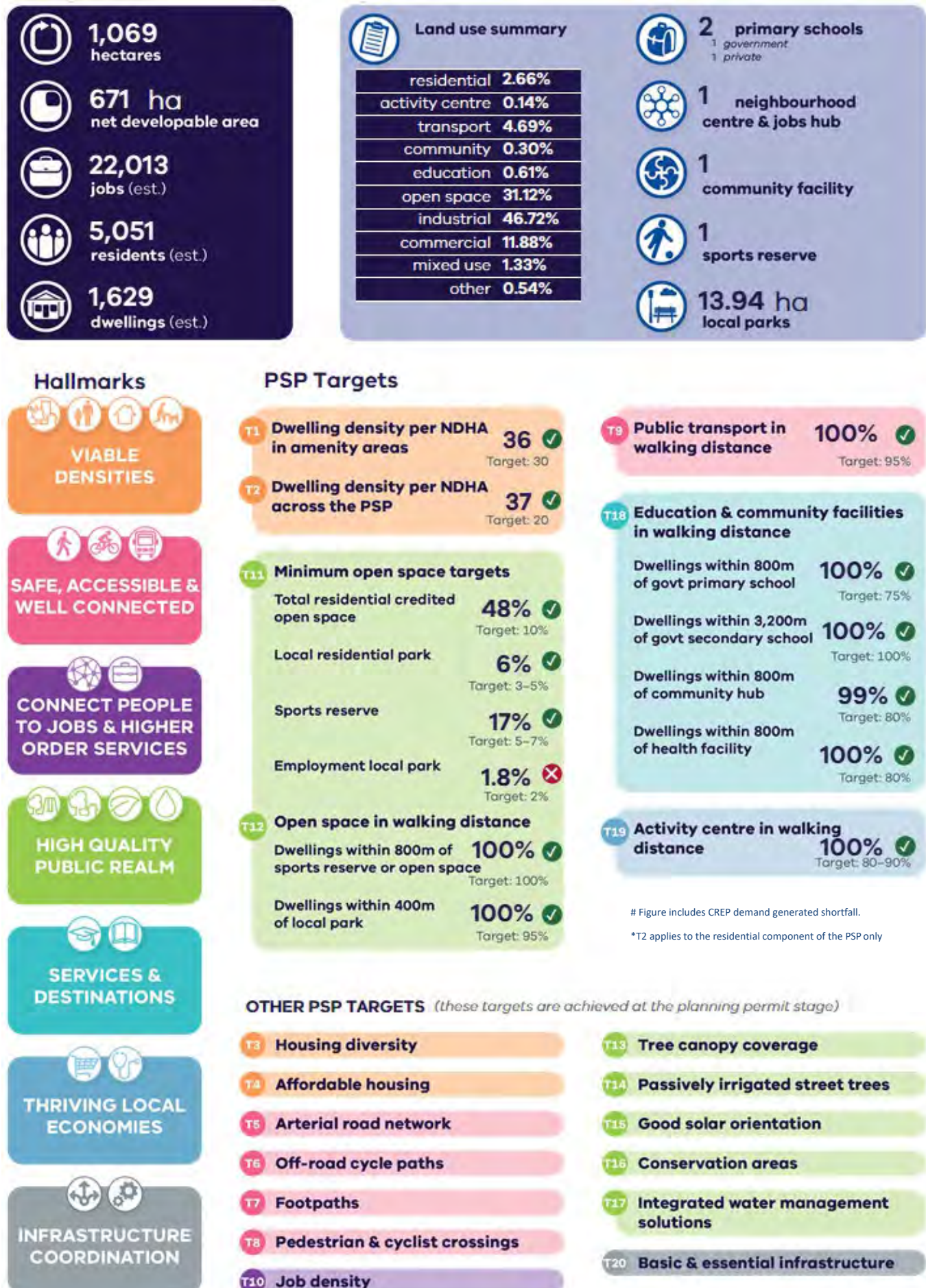
Recommendation 6(r): Relocate drainage assets outside the Cultural Value Investigation Area, and add a note "Drainage assets can be relocated to the Cultural Value Investigation Area at the election of the developer subject to a Cultural Heritage Management Plan and with the agreement of Melbourne Water."

Recommendation 5(c): Explore whether any of the green spine land can be used to accommodate the sports reserve. If this is viable, adjust the plans in the PSP and the land budgets in the ICP accordingly.

Amend all other plans accordingly.



2.3 Precinct snapshot



3 IMPLEMENTATION

3.1 Thriving local economies

Plan Melbourne identifies that the Officer-Pakenham SSIP is a key industrial precinct in the south-east region. The Officer South Employment precinct provides a total of 1,069 hectares of key opportunity for the region and acts as a gateway precinct for the broader Officer-Pakenham SSIP, a key future export and employment centre for the region.

The *Melbourne Industrial and Commercial Land Use Plan* (MICLUP) envisages that the Officer South Employment precinct will deliver a State Significant Industrial Precinct (SSIP) and a Regionally Significant Commercial Area (RSCA), with no more than 50 per cent of the RSCA to be designated for residential purposes.

State Significant Industrial Precinct

The Officer South Employment precinct provides a key opportunity for the region and acts as a gateway precinct for the broader Officer-Pakenham SSIP, a key export and employment centre for the region.

Key industry opportunities for the precinct include:

- Manufacturing for primary industries (agriculture/mining)
- Manufacturing for knowledge sectors (professional services)
- Manufacturing for health care
- Manufacturing for transport industries (rolling stock and infrastructure)
- Transport and logistics, particularly moving manufactured products
- Wholesaling
- Business serving professional services.

A future-ready precinct, Officer South Employment aspires for innovative technology and smart city opportunities, to not only support a growing economic landscape but become a catalyst for delivering to adaptable new businesses, directly supported by key worker housing and public transport networks for a truly flexible employment environment.

Regionally Significant Commercial Area

The Officer South Employment RSCA will provide a significant role in helping to accommodate the commercial demand for the longer term to allow for changing market conditions. This commercial area will provide for an essential buffer between the core industrial activity and neighbouring residential areas of the precinct. The commercial area will evolve over time and will become a beacon of innovation.

Key industry opportunities for [the commercial area](#) include:

- Specialised facilities
- Dispersed institutional facilities
- Urban services, office, and retail facilities.

The precinct accommodates land for a proposed emergency services site and future proposed state government facility that may provide a health campus and mental health services to the broader catchment and is envisaged to evolve over time. A potential work hub or industry training institute (centre of excellence) with potential links to surrounding commercial uses, may provide an economic and community enabler with space for business leaders, educators, and residents to meet and share ideas, work, learn and conduct business.

Industrial sub-precincts

Extensive opportunities exist for Officer South Employment to lead the vision for an industrial precinct of rich character and place value. Sub-precincts that are arranged to leverage the wealth of the site's offerings, will help to guide future development and inspire optimum outcomes. [Figure 1: Sub-precinct Concept Plan](#) illustrates possible aspirations for the site, [indicatively](#) demarcating important site to industry relationships that can be drawn upon to achieve sustainable and potentially carbon neutral outcomes for future generation industrial and commercial enterprise.

Objectives

Committee note: The Objectives, requirements and guidelines should be renumbered, and any unused rows deleted, before the PSP is finalised. Update any cross references accordingly.

Place-based objectives – thriving local economies

O1	To deliver a local town centre of around 0.5 to 1 hectares that can accommodate the range of jobs, services, amenities, and activities that supports its role and function, and meets the changing economic climate and social needs of Officer South Employment precinct.
O2	To deliver a diverse and vibrant employment precinct to establish the south-east region as a hub for smart city initiatives , advanced manufacturing and engineering with diversified industrial activities and supporting services.
O3	To grow a vibrant local, regional, and international food economy which supports growers and enables people to access produced food by developing food chains which support growers to participate and operate in their chosen marketplace (e.g. food co-ops, farmers markets and retail spaces).

Requirements and Guidelines

Requirements and Guidelines – thriving local economies

R1	
R2	
G1	<p>Cafes, restaurants, convenience shops and convenience restaurants, where possible, should front:</p> <ul style="list-style-type: none"> • drainage channels and waterways, • conservation areas, open space or utility reserves and • arterial roads or connector streets <p>to the satisfaction of the responsible authority</p>
G2	Employment sectors are encouraged in commercial and industrial areas at key locations and sub-precincts. Facilities such as the potential industry training institute (Centre of Excellence) are encouraged in commercial / mixed use areas where the sites have high-amenity and are well serviced with access to transport and community facilities.
G3	<p>Permit applications for section 2 uses within the RSCA and local town centre should have regard to:</p> <ul style="list-style-type: none"> • Table 1: Estimated employment • Table 2: Local town centre composition and delivery guide • Table 10: Local town centre performance requirements and <p>and demonstrate how the proposed use contributes to the achievement of the minimum job density and the local town centre Design Principles in Appendix 6 Local town centre design criteria or is otherwise a use that supports development of the RSCA and SSIP.</p>

Table 1: Estimated employment generation

LAND USE	NDA (HA)	ESTIMATED JOBS
State Significant Industrial Precinct (SSIP)	502.6	10,236
Regionally Significant Commercial Area (RSCA)	125.7	11,008
Residential (includes local town centre 1.5 <u>between 0.5 and 1</u> ha & Mixed Use 13.7 ha)	43.9	769
TOTAL	672.2	22,013

Table 2: Local town centre composition and delivery guide

ACTIVITY CENTRE	COMPOSITION	DELIVERY GUIDE
Local town centre	Land area (Ha) = <u>0.5 to 1.5</u> Retail floor space (m ²) = 2,300 (including a supermarket not exceeding 1,200) Commercial floor space (m ²) = 1,600	The purpose of the Officer South Employment local town centre is to service all residents within the precinct and meet their day-to-day retail and community needs. The Officer South Employment local town centre will provide for a small grocery store.

3.2 Connect people to jobs and higher order services

Objectives

Place-based objectives – connect people to jobs and higher order services

O4	To create a high amenity employment precinct that responds appropriately to the environmental sensitivity of the waterways, conservation and heritage areas, and interface with adjacent residential precincts and rural land, to attract a diversity of businesses and employers and provide jobs to support the Casey–Cardinia Growth area.
O5	To maximise accessibility of the precinct through the strengthening of links to the Princes Freeway, Thompsons Road and to the surrounding arterial road network opening key gateways to the Dandenong National Employment and Innovation Cluster (NEIC) and other NEIC's, potential future south-east airport and Port of Hastings to protect the economic prosperity of the precinct and the Greater South East region.
O6	To facilitate access to a quality integrated public transport network that connects people to jobs and higher order services.
O7	To establish a thriving production and distribution precinct with improved and new freight connections that capitalise on arterial roads and the potential future south-east airport.
O8	To provide land for local and regional employment and economic activity and to secure job density.
O9	To foster Workplace Integrated Social Enterprises (WISE) and community initiatives which provide a reliable and affordable source of fresh produce to people experiencing household food insecurity.

Requirements and guidelines

Place-based requirements and guidelines – connect people to jobs and higher order services

R3	<p>Commercial and industrial development is to be well integrated through:</p> <ul style="list-style-type: none"> • A road network design that creates a permeable environment between adjoining developable parcels and provides direct connections to arterial roads; and • Building design that positively contributes to the public realm with a strong visual address and active frontages to primary street frontages, delivering a high amenity outcome <p>to the satisfaction of the responsible authority.</p>
R4	<p>Subdivisions should seek to provide a diversity of lot sizes to meet the needs of a range of commercial business and industries, including providing some large lots for large footprint economic and employment uses.</p>
G4	<p>The front setback of commercial and industrial premises should promote an active streetscape and public realm. The front setback should be landscaped with canopy trees where practical and vegetation to promote water sensitive urban design and to help reduce the impact of the urban heat island effect.</p>
G5	<p>Car parks should be landscaped with canopy trees and have adequate pedestrian paths to provide direct, dedicated accessways from parking to building entrances. Large car parks of 6 bays or more should provide a minimum of one tree per six bays or a shade structure that may include solar panels.</p>
G6	<p>Mixed use areas co-located with local parks should build on the surrounding residential uses to accommodate small scale businesses including offices, home based businesses, retail premises and creative enterprise.</p>
G7	<p>Development should consider the inclusion of smart technology to facilitate, support and advance growth as well as encourage ongoing innovation. This may be achieved through:</p> <ul style="list-style-type: none"> • establishment of IoT (Internet of Things) sensor infrastructure to capture environmental and transport data to help monitor air and water quality, heat island effect, microclimates, climate change resilience and movement of vehicles and people • establishment of IoT infrastructure to enhance the community's ability to engage and participate in the digital economy • automated lighting to respond to the movement of people and the surrounding environment to improve the safety and vibrancy of private and public spaces • Wi-Fi stations and digital local community boards for social and wayfinding information.

3.3 Safe, accessible and well-connected

Objectives

Place-based objectives – Safe, accessible and well connected

O10	<p>To design and implement an integrated transport network that facilitates the safe and efficient movement of both people and goods within a local, sub-regional and regional area.</p>
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O11	To create a high amenity, safe, accessible, direct, and suitable walking and cycling environment that allows residents and employees to be active and travel safely and directly between key destinations, local parks, Lower Gum Scrub and Cardinia Creeks.
O12	To facilitate innovation and alternatives to fossil fuel through delivery of essential supporting infrastructure, including end of trip facilities, solar energy capture, smart city conduit, ICT infrastructure, and low emission vehicle infrastructure (e.g. electric vehicle charging station).
O13	To provide a safe and accessible road layout that identifies and considers bushfire protection measures in the design of the local street network.
O14	To maximise accessibility for all ages and abilities to employment areas and community facilities, with a particular focus on active and public transport networks.

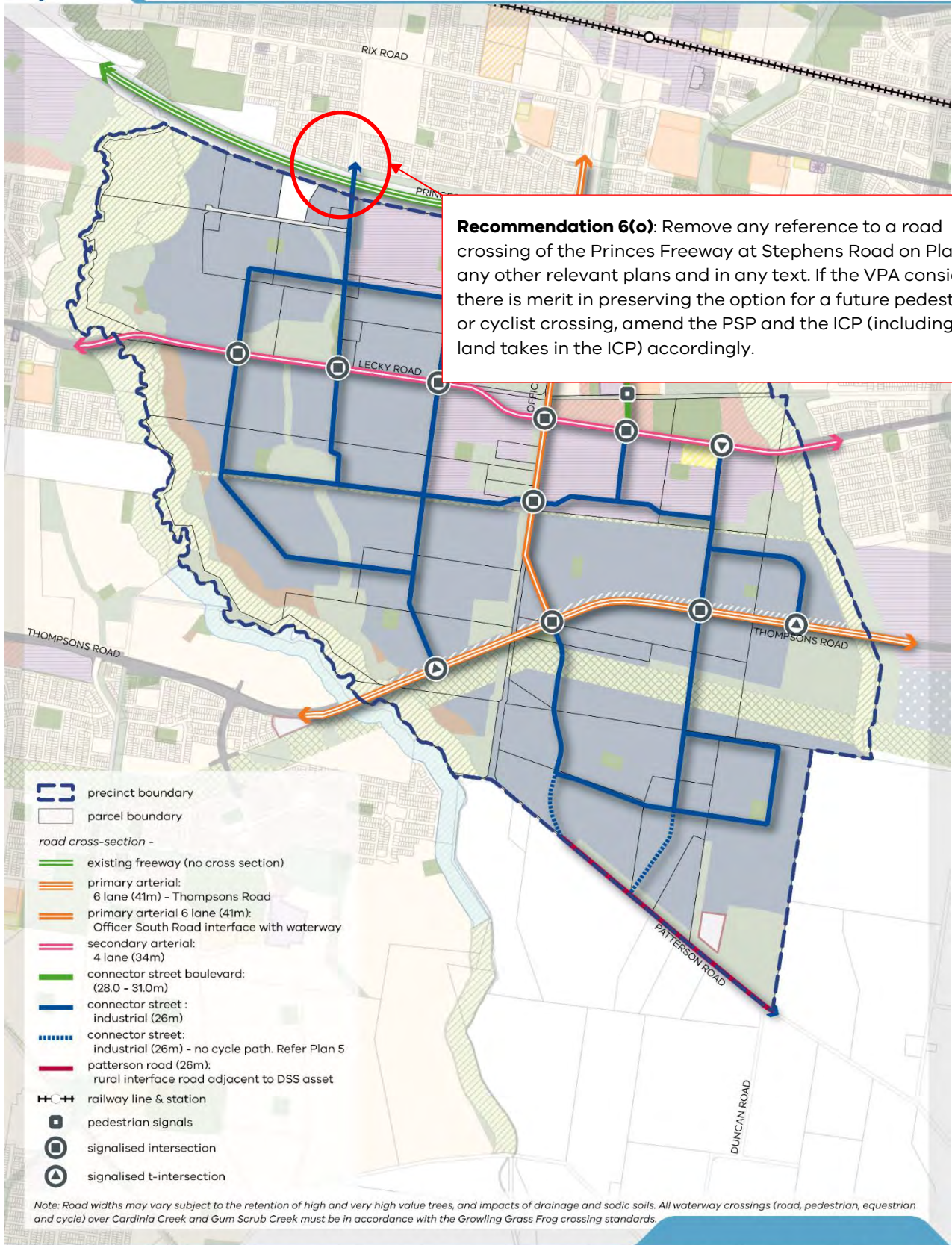
Requirements and guidelines

Place-based requirements and guidelines – Safe, accessible and well connected

R5	Road networks and street types must be designed and developed to an urban standard generally in accordance with the cross sections in Appendix 7 unless otherwise agreed by the relevant authority. Any interim road nominated in Table 7: Precinct Infrastructure as a potential public transport route must be constructed in accordance with the corresponding cross section in the precinct structure plan and the Department of Transport and Planning's guidance for public transport and land use development, to the satisfaction of the responsible authority.
R6	Any connector road or local access street abutting a community or education facility must be designed to achieve slow vehicle speeds and incorporate a shared path and provide designated pedestrian crossing points, including hard stand areas within the verge, for clear accessibility within the vicinity of a proposed school site and community facility.
R7	The widths of shared use paths and bicycle paths must be in accordance with current Austroads guidelines, to the satisfaction of the responsible authority.
R8	Key destinations (active and public open space, local town centre, community facilities and commercial centres) must: <ul style="list-style-type: none"> • be accessible by active and public transport routes • provide active street frontages • provide bicycle parking facilities • include fast charge charging stations for electric vehicles to the satisfaction of the responsible authority.
R9	Design of all subdivisions, streets/roads must provide: <ul style="list-style-type: none"> • A permeable, direct, and safe street network prioritising walking and cycling • Footpaths, at least 1.5 metres wide, on both sides of all streets and roads, except adjacent to community facilities where 1.8 metre footpaths are required to comply with the precinct structure plan and relevant cross section in Appendix 7 • Shared paths, bicycle paths, and or alternative transport networks, where identified in the precinct structure plan and relevant cross section in Appendix 7 • Consistent wayfinding and interpretative signage are created along key shared use paths, cycle paths while raising awareness of the natural values of the precinct • Safe pedestrian crossings of all roads, local streets, intersections, at key desire lines and destinations and on regular intervals appropriate to the function of the road and public transport provision • Safe and convenient transition between on- and off-road bicycle networks all to the satisfaction of the Head, Transport for Victoria relevant road authority and the responsible authority. • Local service road, internal loop road or rear lane to lots fronting arterial roads to the satisfaction of the relevant road authority Head, Transport for Victoria and the responsible authority. • Convenient access to local and regional points of interest and destinations for effective integration with neighbouring properties, parkland, and sports reserves

	<ul style="list-style-type: none"> • Direct and convenient access to public transport services for walking, cycling and other forms of active transport.
R10	If roundabouts are to be used at major intersections, safe pedestrian and cyclist connections are to be provided with appropriately located pedestrian operated signals (i.e. pedestrian operated signals) to the satisfaction of the coordinating road authority.
R11	
R12	Subdivision layouts and the street network must be designed to safely manage stormwater runoff to the satisfaction of Melbourne Water and the responsible authority.
R13	Public pedestrian, equestrian paths (where feasible) , local roads and infrastructure must be located outside conservation -drainage and waterway areas within the conservation areas unless shown on Plan 5 Public Transport and Active Paths Network and Plan 13 Utilities Plan or otherwise approved by the relevant authority. If conservation -crossings of the conservation areas are required, they must be planned (and co-located where applicable) to maintain the waterway gully form, drainage function and minimise disturbance to native vegetation and habitat for Growling Grass Frog, Australian Grayling and Dwarf Galaxias habitat and to the satisfaction of Melbourne Water, Department of Transport and Planning (DTP), Department of Energy, Environment and Climate Action (DEECA) and the responsible authority. Future waterway crossings cannot fill in or block the waterway gully form.
R14	
G8	Location and design of walkways or pedestrian and cycle paths in addition to those described through the standard cross sections should consider the need for appropriate lighting and passive surveillance that considers wildlife sensitive lighting principles.
G9	In addition to waterway crossings shown on Plan 11: Precinct Infrastructure, development proponents should provide waterway crossings at intervals no greater than 400 metres or corresponding with all perpendicular through roads or pedestrian and cycle paths. This does not include waterway crossings within the BCS conservation area.
G10	Culs-de-sac should be avoided unless a shared access way to an adjacent road or cul-de-sac is provided. Where culs-de-sac cannot be avoided, they should not negatively impact walkability and cycle connections and provide an appropriate response to crime prevention through environmental design.
G11	<p>The frequency and impact of vehicular crossovers on verges of connector roads should be minimised to avoid undue impacts on public transport movements using a combination of:</p> <ul style="list-style-type: none"> • rear loaded lots with laneway access • vehicular access from the side streets • combined or grouped crossovers • increased lot widths.
G12	<p>Direct off-road active network paths should be delivered between key destination points such as:</p> <ul style="list-style-type: none"> • the local town centre including the commercial precinct or local employment areas, local parks, active open space and school destinations • access to surrounding precincts, including the Officer Train Station and Town Centre regional destinations. <p>These active network paths may be located along desired internal pedestrian corridors outside the road reserve where not shown on Plan 5: Public Transport and Active Path Networks to the satisfaction of the responsible authority.</p>

G13	<p>A variety of connector roads and local access street cross sections should be utilised in subdivision layouts, as per Appendix 7, to create differentiation, placemaking and neighbourhood character.</p> <p>Alternative cross sections should ensure that:</p> <ul style="list-style-type: none"> • Minimum required carriageway dimensions are maintained to ensure safe and efficient operation of emergency vehicles on all streets, as well as low line buses on connector streets • The performance characteristics of standard cross sections as they relate to pedestrian and cycle use are maintained • Relevant minimum road reserve widths for the type of street are maintained • Appropriate on-street carparking is provided • Existing trees identified as 'to be protected<u>retained</u>' on Plan 7: Native Vegetation Retention and Removal are protected • The 30% tree canopy cover <u>required under R17</u> can be accommodated <p>to the satisfaction of the responsible authority.</p>
G14	<p>Commercial, industrial and retail premises at-grade parking, including loading and storage areas, should be provided at either the side or rear of the building, with direct pedestrian paths connecting off-street car parks to the primary entrances of buildings to facilitate a high quality and landscaped streetscape. <u>Locate disability parking spaces close to entrances.</u></p>
G15	<p>All signalised intersections should be designed having regard to the <i>Guidance for Planning Road Networks in Growth Areas November 2015</i> and be to the satisfaction of the Head, Transport for Victoria</p>
G16	<p>Minimise the number of utility and road crossings, including local roads, over the high transmission gas pipeline easement within the precinct to align with Plan 3 and Figure 8.</p>



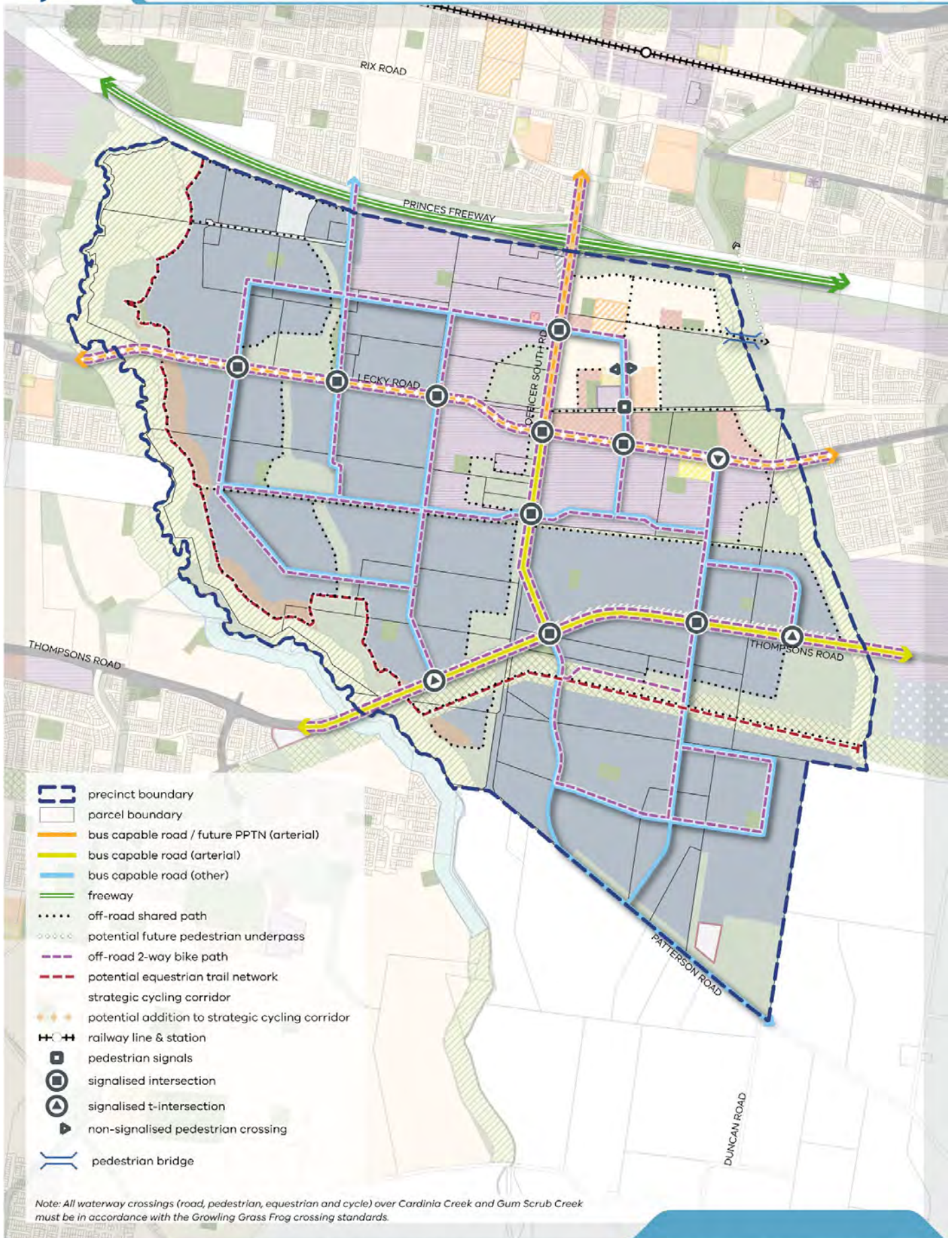
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Plan 5
Public Transport and Active Path Networks
Officer South Employment Precinct Structure Plan

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3.4 High quality public realm

Committee note: consider whether the two new objectives and new requirement with respect to Integrated Water Management proposed by Cardinia Shire Council for section 3.4 (Document 264) are appropriate and should be added.

Objectives

Place-based objectives – High quality public realm

O15	To support the protection and conservation of cultural heritage, Traditional Owner values, and post-contact heritage values.
O16	To deliver an integrated and linked network of open space that provides equitable access for residents and workers to amenities and facilities for sport and recreation; environmental, cultural and visual amenity along natural and constructed waterways, gas and electrical easements, streets, parks and public spaces, in alignment with Cardinia Shire Councils Open Space Strategy.
O17	To facilitate safe, resilient, water sensitive, environmentally sustainable urban development and urban forestry that respond to climate change and other hazards.
O18	To protect and enhance areas of biodiversity and native vegetation value (local, state, nationally significant) including the bio links and BCS conservation areas along Cardinia Creek and Lower Gum Scrub Creek.
O19	To develop sustainable water, drainage and wastewater systems that protect, conserve and improve biodiversity, waterways and other natural resources and maintains or enhances the safety, health and wellbeing of people and property.
O20	To create a sustainable urban landscape focused on achieving net zero carbon emissions, which enhances the existing biodiversity, cultural heritage, drainage, and landscape values within the precinct and mitigates urban heat island effect.
O21	To plan for the long-term conservation of flora and fauna species through the protection of habitat and bio links across the precinct, particularly habitat for Growling Grass Frog, and Australian Grayling and Dwarf Galaxias in the BCS conservation areas along Cardinia Creek and Lower Gum Scrub Creek.
O22	

Requirements and guidelines

Place-based requirements and guidelines – High quality public realm

R15	<p>Committee note: Convert this requirement to a guideline and reorder as appropriate.</p> <p>Subdivision and development applications must<u>should</u> deliver an open space network that must:</p> <ul style="list-style-type: none"> Respond<u>s</u> to the Cardinia Shire Council Developer Landscape Guidelines Policy 2017 (or as amended) Considers<u>s</u> the Cardinia Shire Council Recreation Reserve Facility Standards Policy 2019 (or as amended) Includes<u>s</u> a range of open space shapes, typologies, and classifications Maximises<u>s</u> the amenity and value of service to open space through the provision of paths, trails, and other recreational elements Respond<u>s</u> to the values of any adjoining open space, waterways, drainage reserves, trees, conservation areas, and Aboriginal and post-contact heritage Provides<u>s</u> flexible recreational opportunities that allow for urban agriculture uses required by the community <u>where appropriate</u> provides<u>s</u> space allocation for future energy infrastructure <u>where appropriate</u> <p>to the satisfaction of the responsible authority.</p>
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R16	<p>Trees and vegetation in streets, civic places and the passive open space network must be provided in accordance with the <i>Cardinia Shire Council Developer Landscape Guidelines 2017</i> (or as amended), and must:</p> <ul style="list-style-type: none"> comprise a mix of native flowering and non-flowering species and include either native, indigenous, and exotic species and any other species as appropriate to the location and design and local conditions. Edible planting (e.g. fruits, nuts, herbs and bush foods) are encouraged in open space areas (not within streetscapes) be larger species to facilitate continuous canopy cover be planted in modified and improved soil to support tree establishment be appropriately sized to nature strips, nearby utilities, and buildings.
R17	<p>Unless provided with the application, a condition of any permit issued for the subdivision of land within the PSP area must require a Landscape Plan to be submitted to the responsible authority for approval. The Landscape Plan must illustrate and quantify canopy tree coverage within the public realm and open space to an average of 30 per cent (excluding areas dedicated to biodiversity or native vegetation conservation).</p>
R18	<p>Development and subdivision must provide for a minimum 19 metre perimeter road or alternative bushfire interface at the conservation area boundary, drainage reserves, constructed waterways, and the southern and south-east boundary adjoining the Green Wedge. The bushfire interface area may incorporate paths, open space, and drainage, flood protection, and stormwater quality treatment infrastructure. Where a setback from a bushfire hazard area is required by Plan 8: Bushfire Hazard Areas and/or Table 4: Bushfire hazard vegetation management and setback requirements, vegetation within the setback must be managed as follows, unless otherwise agreed by the responsible authority and relevant fire authority:</p> <ul style="list-style-type: none"> Grass must be short cropped and maintained during the declared fire danger period All leaves and vegetation debris must be removed at regular intervals during the declared fire danger period Shrubs must not be located under the canopy of trees Individual and clumps of shrubs must not exceed five square metres in area and must be separated by at least five metres The canopy of trees must be separated by at least two metres at maturity There must be a clearance of at least two metres between the lowest tree branches and ground level Within 10 metres of a building, flammable objects must not be located close to the vulnerable parts of the building Plants greater than 10 centimetres in height must not be placed within three metres of a window or glass feature of the building. <p>Consultation is required with Department of Energy, Environment and Climate Action Melbourne Strategic Assessment (DEECA MSA), Country Fire Authority (CFA), Melbourne Water and council to confirm the conservation area planting and bushfire risk implications prior to undertaking a development application.</p>
R19	
R20	<p>Pre- and post-contact cultural heritage and history must be recognised through the design of public places and infrastructure.</p>

R21	Passive open space, roadways, pathways and other infrastructure must be located to protect any tree with Aboriginal cultural significance which is identified for protection through an approved Cultural Heritage Management Plan (CHMP).
R22	Signage or opportunities for cultural celebration and interpretation must be explored and must be integrated into the public realm, utilised along equestrian trails (where these are incorporated along Cardinia Creek) and walking paths at conservation areas to support and contribute to the knowledge and understanding of the local Aboriginal Cultural Heritage of the Bunurong people
R23	A mandatory <i>Cultural Heritage Management Plan</i> is required to be undertaken prior to development and/or subdivision occurring within the cultural value investigation area as identified in Plan 3, as required by the <i>Aboriginal Heritage Act 2006</i> . Interface outcomes with culturally sensitive sites must be delivered in conjunction with the <i>Cultural Heritage Management Plan</i> and in consultation with the BLCAC.
R24	
R25	Reinstatement of creeks, waterways, water bodies, other water features must be undertaken with indigenous species, with species selection undertaken in consultation with BLCAC.
R26	Development impacting Victorian Heritage Inventory site H7921-0129 must obtain a <i>Heritage Act 2017</i> Consent to authorise any works that may affect historical archaeological remains at the place.
R27	
R28	Existing high and very high and potential high value trees as per identified on Plan 2 and Plan 7 must be retained and incorporated into the public realm during the subdivision design, that includes (including road reserves, biolinks and public open space) where possible to the satisfaction of the responsible authority.
R29	<p>Stormwater runoff from the development must meet the performance objectives of the <i>Commonwealth Scientific and Industrial Research Organisation Best Practice Environmental Management Guidelines for Urban Stormwater</i> (or as amended) prior to discharge to receiving waterways and as outlined in Plan 9: Integrated Water Management, unless otherwise approved by Melbourne Water and the responsible authority.</p> <p>Proposals that exceed the performance objectives are highly encouraged and can be considered, all to the satisfaction of South East Water, Melbourne Water, and the responsible authority.</p>
R30	<p>Permit applications for subdivision and/or development must be accompanied by an appropriate IWM Plan which clearly identifies how development will contribute towards Plan 9: Integrated Water Management and towards:</p> <ul style="list-style-type: none"> • Outcomes applicable to the development identified in the DEECA <i>Western Port Strategic Directions Statement</i> (September 2018) and <i>Western Port IWM Catchment Scale Plan</i> (September 2022) • Potable water reduction targets applicable to the development outlined in the <i>Greater Melbourne Urban Water and System Strategy</i> • Waterways and integrated water management outcomes which enable land to be used for multiple recreation and environmental purposes • Supply and use of recycled water for residential and public realm purposes, and if agreed by South East Water, for Industrial and commercial land • Mitigation where relevant, of additional stormwater mean annual runoff volumes from new development entering the Lower Gum Scrub Creek catchment south of the PSP; • The delivery of the applicable Melbourne Water approved development services scheme(s). <p>to the satisfaction of South East Water, Melbourne Water, and the responsible authority.</p>

R31	The final layout and design of constructed wetlands, retarding basins, constructed waterways, stormwater infrastructure and associated paths, boardwalks, bridges and planting, must be designed to the satisfaction of Melbourne Water and the responsible authority, including appropriate considerations to mitigate flood flows and volumes into the receiving waterways, and the risk of erosion from sodic soils and dispersive soils. <u>Changes may be made to the size or location of drainage assets, including wetlands, retarding basins or constructed waterways, with the approval of Melbourne Water. Any such changes will be 'generally in accordance with' the PSP if the asset achieves the intended performance standards, to the satisfaction of Melbourne Water.</u>
R32	Waterways must: <ul style="list-style-type: none"> • provide safe drainage and flood protection • incorporate environmental, cultural and amenity value • provide open waterways all to the satisfaction of Melbourne Water and the responsible authority.
R33	For development draining into Lower Gum Scrub Creek, development proposals must also demonstrate the management of stormwater flow and volume to ensure no additional downstream inundation impacts, duration impacts and flood impacts are caused by the development of land, via the delivery of the diversion system as part of the ultimate assets of Melbourne Water's Development Services Schemes and/or via a stormwater harvesting/reuse , to the satisfaction of Melbourne Water and the responsible authority.
R34	Where development is proposed in areas adjacent to, but outside of the waterway corridor/conservation area along Cardinia Creek, development must demonstrate to the relevant authority that this area can be serviced for drainage and is consistent with the relevant Development Services Scheme (DSS). Development must not have any adverse impact on flood protection, drainage and waterway health along Cardinia Creek.
R35	Drainage, flood protection, and stormwater quality treatment infrastructure must be designed generally in accordance with Plan 9: Integrated Water Management, and to implement the relevant Development Services Schemes (subject to any necessary revision to respond to cultural heritage or environmental values) to avoid or mitigate the risk of erosion of sodic and/or dispersive soils, and to appropriately manage flow rate and flow volume, to the satisfaction of Melbourne Water and the responsible authority. Note: the response to further assessment of values within the cultural value investigation area, and/or environmental values, may result in variation to the Melbourne Water assets shown on Plan 9.
R36	
R37	Where local parks and recreation areas occur adjacent to BCS conservation areas, they must be designed to complement the outcomes required in Section 5 of the BCS relating to Conservation Area 36 and allow for bushfire buffer requirements outside the conservation area to the satisfaction of the Secretary DEECA.
R38	Any proposed development or works within a BCS conservation area must obtain the approval of DEECA, and must be generally in accordance with the corresponding conservation area concept plans (Appendix 2) and cross sections (Appendix 7). No planting of tall shading trees is permitted where Growling Grass Frog wetland Areas of Strategic Importance is adjacent to the conservation area boundary.

R39	Public lighting must be designed to the lowest AS/NZS 1158 lighting category that can be reasonably applied, use the warmest colour temperature possible (less 3000K), and be baffled to prevent light spill and glare within and adjacent to the BCS conservation area, unless otherwise agreed by the DEECA.
R40	<p>Development in or adjacent to the BCS conservation area must:</p> <ul style="list-style-type: none"> • Ensure natural or pre-development hydrological patterns are maintained in conservation areas as far as practical • Maintain passage for fauna species including Growling Grass Frog, Australian Grayling, and Dwarf Galaxias except where drainage assets are required • Minimise utility corridors intercepting the conservation area • Ensure there are no significant impacts from overshadowing to Growling Grass Frog wetlands (existing and proposed) or native vegetation patches • Mitigate flood flows and volumes into the receiving waterways • Must be consistent with the cross section in Appendix 7.
R41	Any infrastructure crossing Cardinia Creek and Lower Gum Scrub Creek must be designed to avoid impacting native vegetation within the BCS conservation area to the greatest extent practicable and must be designed and constructed in accordance with the <i>Growling Grass Frog Crossing Design Standards</i> (2017) to the satisfaction of DEECA, Melbourne Water and responsible authority.
R42	Drainage from stormwater treatment infrastructure must be designed to have no net impact on habitat for Matters of State and National Environmental Significance within BCS conservation areas to the satisfaction of the DEECA.
R43	The conservation area boundary must be fenced to exclude vehicles, allowing for pedestrian and maintenance access where required to the satisfaction of DEECA and the responsible authority.
R44	The vegetation within the bushfire hazard areas shown on Plan 8, must be managed to a level that ensures it does not result in a vegetation class that would require a greater 'separation distance' than that specified in Plan 8.
R45	<p>The final layout and design of constructed wetlands, retarding basins, and stormwater quality treatment infrastructure adjacent to BCS conservation areas must consider:</p> <ul style="list-style-type: none"> • the potential to supply treated stormwater for Growling Grass Frog wetlands • hydraulic and hydrological requirements to ensure habitat protection and ecological requirements of Dwarf Galaxias and Australian Grayling within Cardinia Creek as identified in: • Jacobs (2021) Cardinia Creek hydrological and fish risk assessment. Report by Jacobs for Melbourne Water • Jacobs (2023) Cardinia Creek Fish Assessment Amendment. Report by Jacobs for Melbourne Water <p>to the satisfaction of Melbourne Water and the Secretary DEECA.</p>
R46	<p>Subdivision and development surrounding or relating to site HO_92 at 425 Officer South Road must ensure:</p> <ul style="list-style-type: none"> • the 'original gate' from the Patterson era located in the property, identified in Plate 4 shown on page 33 of the <i>Officer South Employment PSP - Post-contact Heritage Assessment</i> (BHM 2022) is restored and erected within the heritage curtilage • A Heritage Interpretation Plan be prepared to ensure an interpretation outcome which would address the whole of the site and its historical and social significance to the local and regional context.

R47	<p>Planning of developments within the precinct must:</p> <ul style="list-style-type: none"> • Aim to integrate with the conservation area in a manner that will not degrade the habitat values, such as introducing weeds, pest animals, contaminants, and will not result in major alterations to the hydrology other than in accordance with the approved DSSs • Consider any effects that development may cause downstream on the Western Port Ramsar wetland. Increased sediment or contaminant loads should not increase above current baseline conditions. This may require some developments to store and treat stormwater on site and have appropriate controls for contaminant spills or leaks.
R48	Development must consider locating service lanes or roads to separate development from bushfire hazard areas on Plan 8: Bushfire Hazard Areas, including Princes Freeway, to the satisfaction of the responsible authority.
R49	Development must provide a lot-based rainwater tank where recycled water is not available.
G17	Where a canopy tree cannot be provided because of local climate and soil conditions, a suitable species may be selected which closest achieves this diameter. The requirement in R17 for a minimum 30% canopy tree coverage within the public realm should still be met.
G18	Open spaces should have a frontage road to all edges except when abutting mixed use development or drainage reserve, or where housing fronts open space with an access way to the satisfaction of the responsible authority. Direct frontage and rear access ways are not an acceptable interface to the BCS conservation area where a 30 m conservation interface is shown on Figures 3–7 in Appendix 2 Conservation area concept plans.
G19	A consistent suite of lighting and furniture should be used across residential neighbourhoods and employment areas, appropriate to the type and role of public space, to the satisfaction of the responsible authority.
G20	<p>Where developed, linear parks should be located and designed to:</p> <ul style="list-style-type: none"> • Enhance the wider walking and cycling network • Connect and integrate key neighbourhood destinations and landscape features • Support residential and employment neighbourhood legibility and sense of place • Enhance the diversity of open space environments and access to urban agriculture • Provide active frontages • Avoid vehicle crossings • Assist in achieving higher residential densities <p>to the satisfaction of the responsible authority.</p>
G21	Where possible, salvaged rocks should be incorporated into the design of waterways, retaining structures, fences, and other landscape features.
G22	Significant landscape features, such as high points, vegetation, open space, and waterways should be used as focal points for view lines along streets.

G23	Subdivision design should incorporate natural and constructed design elements which respond to local heritage, neighbouring land uses and topography to assist in place making and the achievement of a 'sense of place'.
G24	Subdivision design should respond sensitively to the visual setting and character of pre- and post- contact heritage places and values by providing appropriate distance to new industrial buildings through large lot configurations at these sites.
G25	Subdivision and development surrounding or relating to site HO_92 at 425 Officer South Road: <ul style="list-style-type: none"> Should consider providing an open space buffer/public reserve between the boundaries of the HO and any future development Should not reduce the extent of the garden area surrounding the house as it is presently defined within the heritage overlay boundary.
G26	Subdivision and development surrounding site HO_91 at 410 Officer South Road should consider providing an open space buffer/ public reserve between the northern and western boundaries of the garden. The layout and planting of the open space should aim to preserve the views from the Cardinia Creek homestead to the east. There should be no reduction in the extent of the garden area surrounding the house as it is presently defined.
G27	Prior to demolition of the dairy at 185 Officer South Road, the contents of the dairy, namely the intact brick and render water trough and the tin feed room should be recorded in detail and provided to the Berwick-Pakenham Historical Society along with the contents of the dairy.
G28	Existing vegetation and trees should be retained, protected, and enhanced to provide habitat and movement corridors for local fauna. Where existing vegetation <u>and trees are located</u> exists along a street, roads may be realigned or reserve widths may be varied to ensure that the provision of footpaths, utility services, and drainage does not compromise the long-term health of the vegetation, to the satisfaction of the responsible authority.
G29	Development and subdivision should: <ul style="list-style-type: none"> protect and manage Matters of State and National Environmental Significance, particularly within conservation areas, in relation to water quality and suitable hydrological regimes (both surface and groundwater). enable supply of gravity fed treated stormwater for existing and future Growling Grass Frog wetlands. maximise habitat values for local flora and fauna species support flood sensitive planning and urban design (FSPUD) outcomes recognise and respond to Aboriginal cultural heritage significance <u>where identified through a CHMP</u>.
G30	Where a Cultural Heritage Management Plan <u>CHMP</u> is required, this should provide recommendations for the ongoing management and maintenance of <u>any</u> creeks, wetlands and water features <u>that are found to have cultural heritage value</u> . Any such ongoing management and maintenance requirements (in respect of land that will remain in private ownership) should be considered to be included as an appropriately worded condition on a relevant planning permit. Where possible management and maintenance requirements should be consistent for the length of the cultural value investigation area.
G31	
G32	Drainage assets and public open space areas should be located adjacent with to the conservation area and waterways to provide a buffer to development where appropriate to the satisfaction of the responsible authority, <u>and subject to the requirements of any approved CHMP</u> .

G33	<p>Development proposals should enhance habitat for native flora and fauna, providing opportunities for people to experience nature in urban areas. This should demonstrate the principles of Biodiversity Sensitive Urban Design (BSUD) to the satisfaction of the responsible authority that:</p> <ul style="list-style-type: none"> • Protects and creates habitat • Helps species disperse • Encourages positive human-nature interaction.
G34	<p>The design and layout of public open space within commercial and residential areas, community facilities, schools, transmission easements and sporting reserves should consider space for growing, harvesting, distributing, and consuming food where appropriate. This should be achieved using Flood Sensitive Planning and Urban Design initiatives such as urban farming, raised garden beds, car space gardens, rooftop gardens and community gardens that utilise rainwater or recycled water as negotiated with South East Water and to the satisfaction of the responsible authority.</p>
G35	<p>Applications should consider a range of IWM options where practicable and where agreements are in place with drainage authorities for future management as indicated in Plan 9: Integrated Water Management. Potential IWM options may include but are not limited to:</p> <ul style="list-style-type: none"> • Rainwater tanks on all industrial, commercial, and residential lots • Passive irrigation of trees in the public realm, include all streets and public open space • Local stormwater harvesting systems to service the watering needs of future open spaces • Regional scale rainwater tanks collecting roof water from all industrial, commercial and residential lots to be reticulated back within the precinct • Supplying stormwater of the right quality to existing and future Growling Grass Frog wetlands • Use of Melbourne Water stormwater management assets to provide green corridors and community amenity • Identifying designs to maximise opportunities for infiltration • Regional scale stormwater harvesting systems to service the watering needs of the precinct and beyond.
G36	<p>Development and subdivision should:</p> <ul style="list-style-type: none"> • avoid and minimise impacts to conservation areas including with regard to the location of essential and other services • provide appropriately managed and sensitively designed community access to conservation and landscape values areas and ensure protection of the primary conservation and landscape values can be maintained.
G37	<p>The design and layout of roads, road reserves, and public open space should optimise water use efficiency and long-term viability of vegetation, tree canopy and public uses to contribute to a sustainable and green urban environment. This should be achieved through the use of overland flow paths, passive watering and Water Sensitive Urban Design initiatives such as street swales, rain gardens and/or locally treated storm water for irrigation.</p>
G38	<p>All local parks should be located, designed and developed generally in accordance with the relevant description in Table 3 and any local open space strategy to the satisfaction of the responsible authority.</p> <p>An alternative provision of land for local parks to that illustrated on Plan 6 is considered to be generally in accordance with this plan provided the local park:</p> <ul style="list-style-type: none"> • Is located so as to not reduce the walkable access to local parks demonstrated on Plan 6 • Does not diminish the quality of usability of the space for passive recreation • Is equal to or more than the passive open space provision within the ICP.

G39	On land where cultural heritage is identified, naming opportunities for neighbourhoods, roads, streets, parks, wetlands or conservation zones, passive or active open spaces and community or local town centres should be given to Traditional Owners,, represented by BLCAC. This should include consultation with Traditional Owners, represented by BLCAC to inform the potential naming opportunities.
G40	<p>Potential management methods to avoid or mitigate the risk of erosion of sodic and/or dispersive soils may include but are not limited to:</p> <ul style="list-style-type: none"> • Widening the buffer distances between the core riparian zone and the outside vegetated buffers that allows sufficient tolerances for channel migration • Diversion of water away from sodic and/or dispersive materials • Minimising potential convergence and/or ponding of surface flows • Compacting to reduce pore spaces and minimise water movement through material • Physical and chemical soil ameliorants • Maintenance of topsoil across undisturbed land, preferably with grasses to provide surface soil stability and root anchorage • Minimising the amount of time land is exposed (e.g. by staging development) • Ensuring that culverts and drains excavated into dispersive subsoils are capped with non-dispersive topsoil, gypsum stabilised and vegetated.

Table 3: Credited open space delivery

Committee note: check against final local park provision plan, update as required

PARK ID	AREA	TYPE	LOCATIONAL ATTRIBUTES	RESPONSIBILITY
ACTIVE OPEN SPACE				
SR-01	7.477.47	Local Sports Reserve	Located in the north of the precinct to serve the Officer South Employment and Cardinia Road Employment residential areas, and broader catchment via the street network.	Cardinia Shire Council
LOCAL PARKS				
LP-01	0.50	Local Park	Located to provide passive open space to the industrial area.	Cardinia Shire Council
LP-02	0.90	Local Park	Located to provide passive open space to the commercial area.	Cardinia Shire Council
LP-03	0.90	Local Park	Located to provide passive open space to the commercial area.	Cardinia Shire Council
LP-04	0.75	Local Park	Located to provide passive open space to the residential area.	Cardinia Shire Council
LP-05	0.00	Local Park	Located to provide passive open space to the residential area.	Cardinia Shire Council
LP-06	0.75	Local Park	Located to provide passive open space to the industrial area.	Cardinia Shire Council

LP-07	0.50	Local Park	Located to retain existing vegetation (refer Plan 9) within a passive open space.	Cardinia Shire Council
LP-08	0.50	Local Park	Located to provide passive open space next to the local town centre.	Cardinia Shire Council
LP-09	1.00	Local Park	Located to provide passive open space next to the local town centre.	Cardinia Shire Council
LP-10	0.50	Local Park	Located to provide passive open space to the industrial area.	Cardinia Shire Council
LP-11	0.50	Local Park	Located to provide passive open space to the industrial area.	Cardinia Shire Council
LP-12	0.50	Local Park	Located to provide passive open space in the commercial area next to a drainage reserve.	Cardinia Shire Council
LP-13	0.50	Local Park	Located to provide passive open space to the industrial area.	Cardinia Shire Council
LP-14	0.56	Local Park	Located to provide passive open space along the gas easement in the industrial area.	Cardinia Shire Council
LP-15	0.50	Local Park	Located to provide passive open space next to the heritage overlay.	Cardinia Shire Council
LP-16	1.00	Local Park	Located to provide passive open space to the industrial area.	Cardinia Shire Council
LP-17	0.75	Local Park	Located to provide passive open space next to a proposed state government facility.	Cardinia Shire Council
LP-18	0.50	Local Park	Located to provide passive open space to the industrial area.	Cardinia Shire Council
LP-19	0.51	Local Park	Located to provide passive open space to the industrial area.	Cardinia Shire Council
LP-20	0.47	Local Park	Located to provide passive open space next to Thompsons Road and Officer South Road intersection.	Cardinia Shire Council
LP-21	0.20	Local Park	Located to provide passive open space to the industrial area.	Cardinia Shire Council
LP-23	0.72	Local Park	Located to provide passive open space to the industrial area.	Cardinia Shire Council
LP-24	0.72	Local Park	Located to provide passive open space to the industrial area.	Cardinia Shire Council
LP-25	0.72	Local Park	Located to provide passive open space to the industrial area.	Cardinia Shire Council

Table 4: Bushfire hazard vegetation management and setback requirements

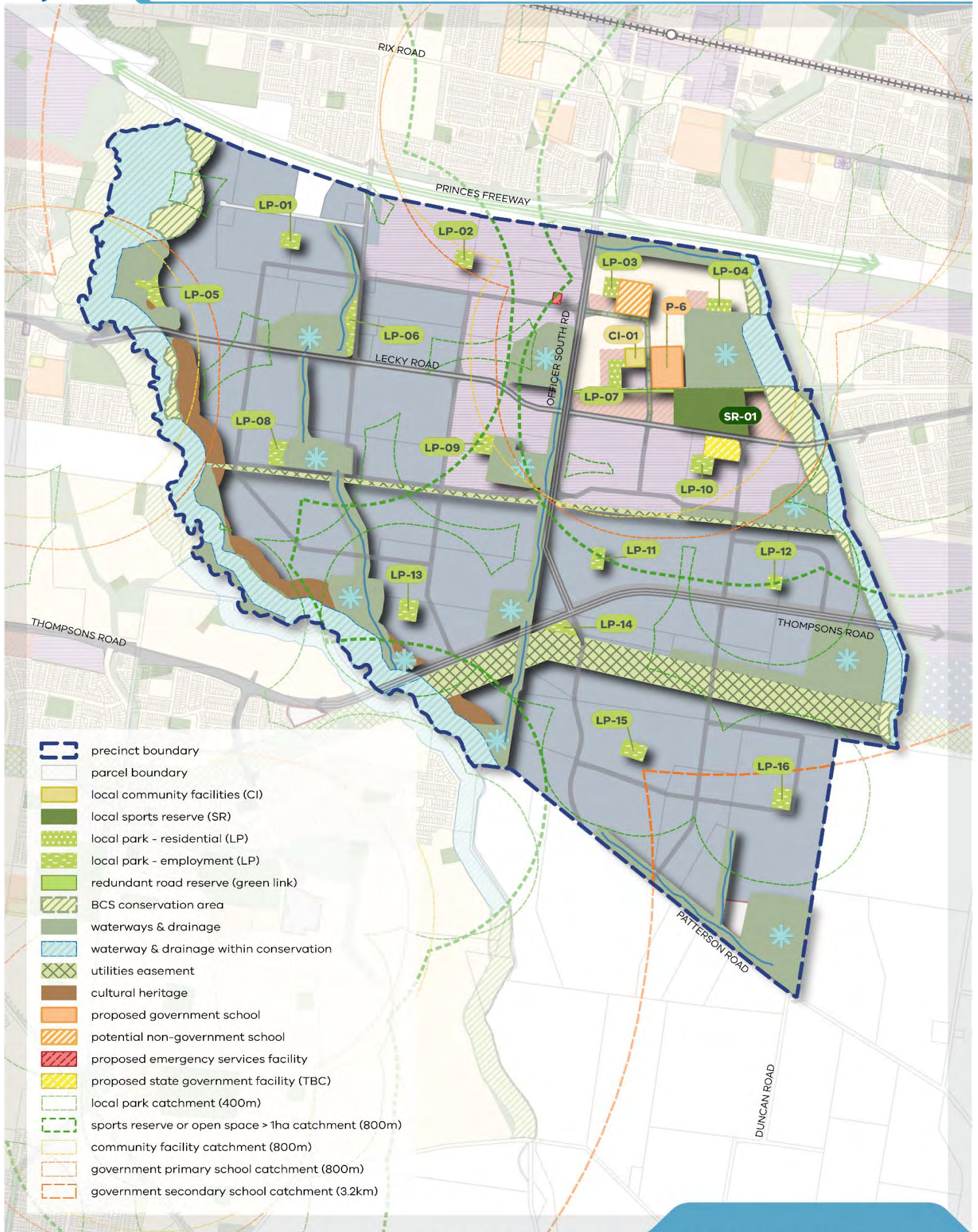
Slope Class	Vegetation	Setback Distance in accordance with AS3959 – 2018 (or as amended)
All upslopes and flat land	Grassland and Shrubland	19 m
	Scrub	27 m
	Woodland	33 m
	Forest	48 m



Plan 6
Open Space and Community Facilities
Officer South Employment Precinct Structure Plan

1:25,000 @ A4

0 250 500 750 1,000 m

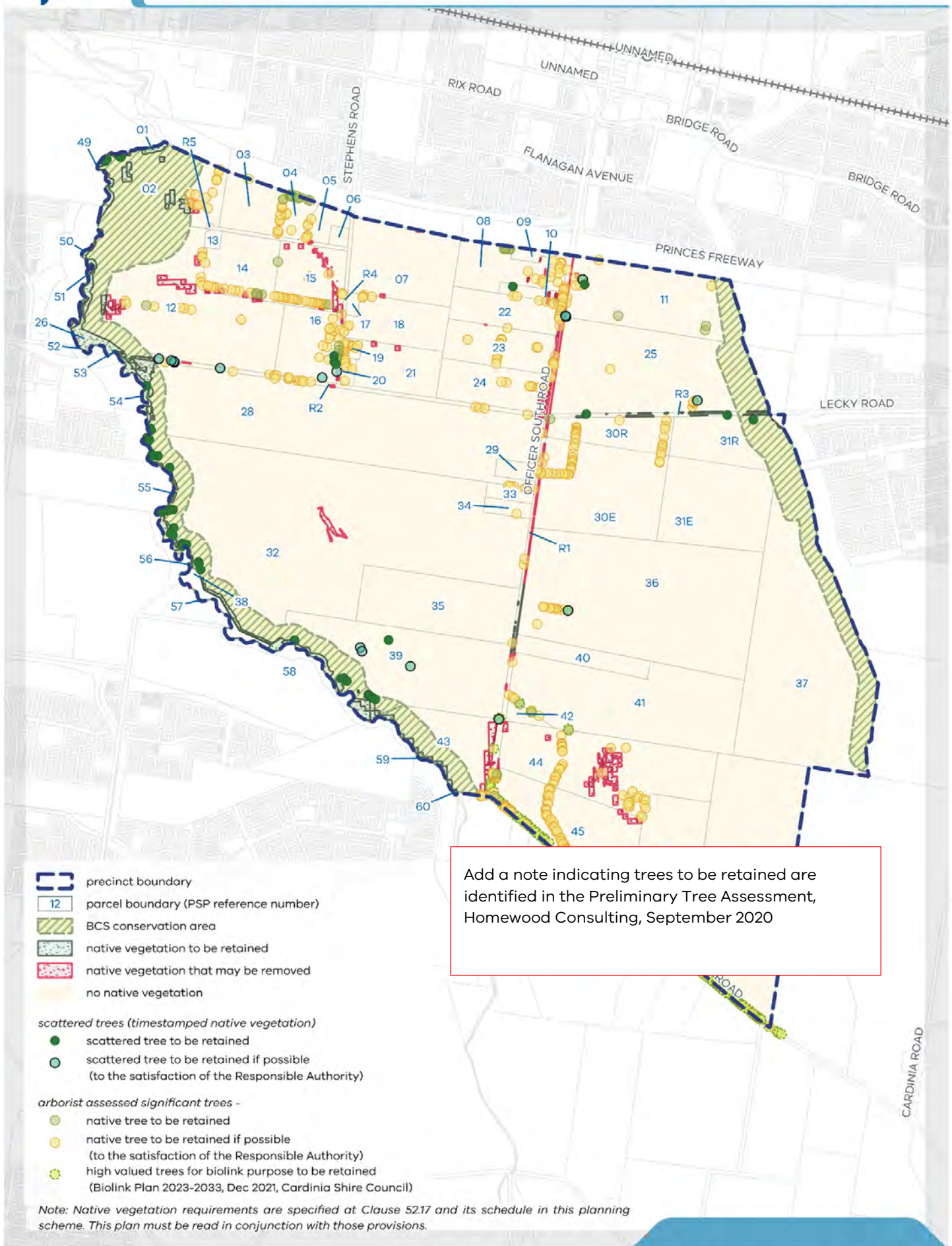




Plan 7
Native Vegetation Retention & Removal
Officer South Employment Precinct Structure Plan

1:25,000 @ A4

0 250 500 750 1,000 m

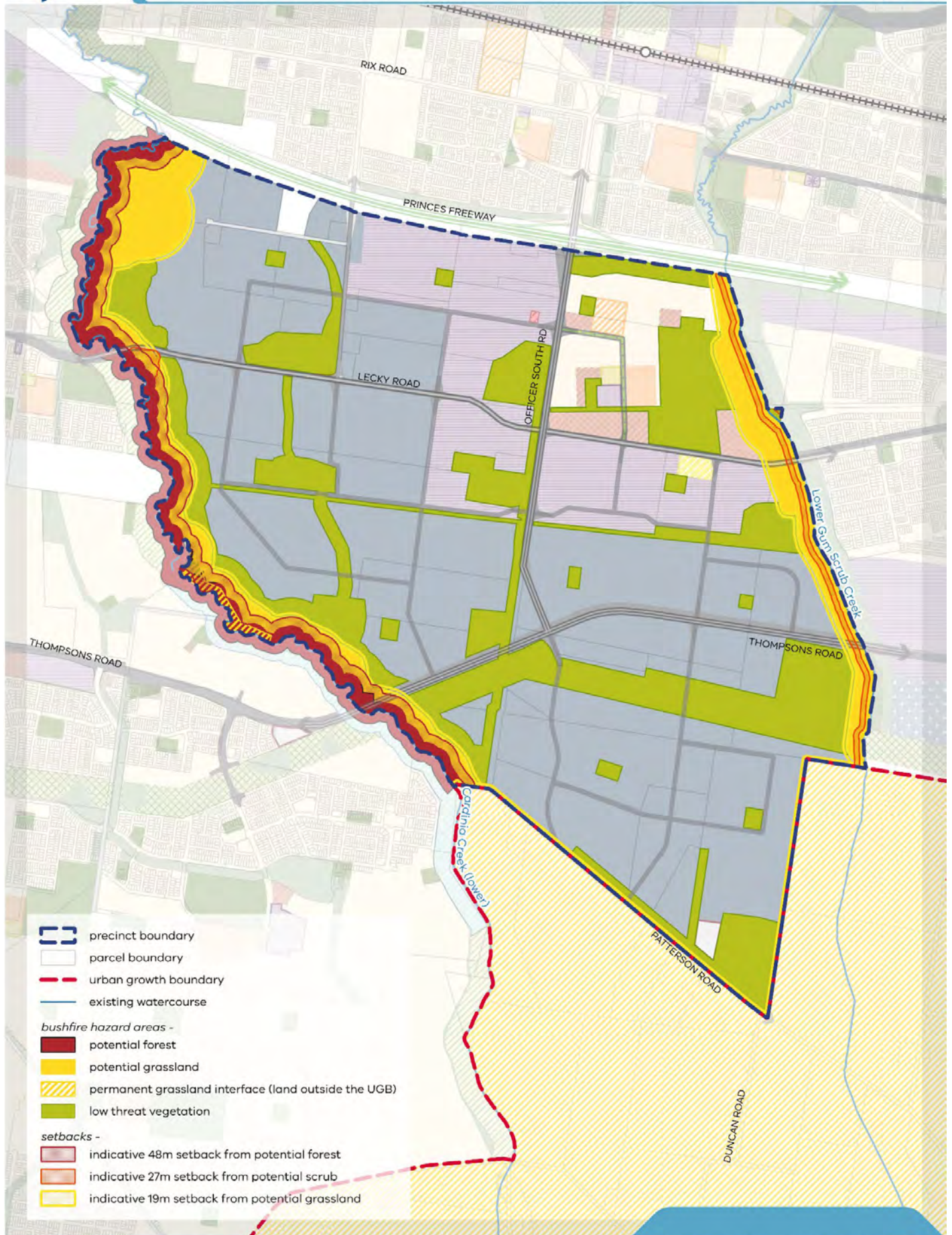




Plan 8
Bushfire Hazard Areas
Officer South Employment Precinct Structure Plan

1:25,000 @ A4

0 250 500 750 1,000 m



- precinct boundary
- parcel boundary
- urban growth boundary
- existing watercourse
- bushfire hazard areas -**
 - potential forest
 - potential grassland
 - permanent grassland interface (land outside the UGB)
 - low threat vegetation
- setbacks -**
 - indicative 48m setback from potential forest
 - indicative 27m setback from potential scrub
 - indicative 19m setback from potential grassland

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Plan 9
Integrated Water Management
Officer South Employment Precinct Structure Plan

1:50,000 @ A4

0 500 1,000 1,500 2,000 m



Recommendation 6(i): Amend Plan 9 as follows:

- Remove the Stephens Road waterway.
- Include some supporting text (in the form of a note on Plan 9 and/or a Requirement or Guideline) encouraging the relevant integrated water management initiatives in each pilot area
- Remove references to Class A recycled water in pilot areas 1 and 3 if the use of recycled water would compromise the potential benefits of stormwater harvesting in reducing the total volume of stormwater in the system.
- Correct the boundaries of pilot area 4 if required.

Recommendation 6(r): Relocate drainage assets outside the Cultural Value Investigation Area, and add a note "Drainage assets can be relocated to the Cultural Value Investigation Area at the election of the developer subject to a Cultural Heritage Management Plan and with the agreement of Melbourne Water."

Chapter 9.1: Include asset names or identifiers and a table containing key information about each asset after Plan 9

IWM opportunities identified for Officer South Employment PSP can contribute to the seven strategic outcomes in the Western Port IWM Forum Strategic Directions Statement (see below).

Drainage assets are subject to refinement through detailed design, to the satisfaction of Melbourne Water and the responsible authority.

Recommendation 6(h): Replace this text with "Drainage assets shown on Plan 9 may be refined through detailed design, including size and/or location, to the satisfaction of Melbourne Water and the responsible authority. Changes to the size of location of assets will be 'generally in accordance with' the PSP if the asset achieves the intended performance standards."



Jobs, economic growth and innovation

- Water to support jobs and economic growth (council, SEW)



Safe, secure, and affordable supplies in an uncertain future

- Lot-scale rainwater and stormwater harvesting substitution for potable water demands (council, SEW)
- Regional scale rainwater and stormwater harvesting (MW, council, SEW)
- Stormwater for alternative use – storage and transfer infrastructure (MW, SEW)



Opportunities are sought to manage existing and future flood risks and impacts

- Flood mitigation via the Melbourne Water Development Services Scheme (MW)



Community values are reflected in place-based planning

- Community engagement for IWM initiatives (council, SEW)



Effective and affordable wastewater systems

- Sewer pumping station and raising main (SEW)
- Recycled water for residential and employment uses (SEW)



Healthy and valued urban, rural, agricultural, and green landscapes

- Passive irrigation of street trees to support tree health and achieve minimum tree canopy coverage targets (council)
- Stormwater harvesting for passive and active open space irrigation (council)
- Drainage reserves and conservation areas provide green corridors for increased amenity (MW, council, DEECA)



Healthy and valued waterways and marine environments

- Stormwater infiltration via Water Sensitive Urban Design (council, MW)
- Stormwater supply to Growling Grass Frog conservation areas (MW, DEECA)

3.5 Viable densities

The Officer South Employment residential precinct is a compact and high amenity place to live, work and play. A 20-minute neighbourhood that strongly promotes walking and cycling to work, it will be a standout urban residential neighbourhood that delivers a high-quality urban design outcome. Designated as an Urban Design Performance Area (UDPA), ~~a master plan and vision development~~ is required to be ~~provided and~~ assessed through performance-based criteria that sets the benchmark for ~~the~~ subdivision, buildings, and road and active movement networks to ensure high quality outcomes.

Targeting higher densities than the surrounding neighbourhoods, approximately 1,600 homes will be delivered in the designated residential area alongside essential community infrastructure. The Officer South Employment community will be the life hub, bringing people, amenity, and community facilities to the precinct.

Objectives

Place-based Objectives – viable densities

O23	To provide diversity of housing types and choice (lot size and physical form of housing) to meet community needs, including increased densities, accessible and specialised housing, and affordable and social housing options.
O24	To deliver diverse streetscapes and neighbourhoods that support the type of density and housing to meet the quality of urban design outcomes.
O25	To deliver a highly accessible, functional, and vibrant local town centre that encourages social interaction, focuses on activating the Lecky Road green spine with high quality architecture and active street frontages, and creates a strong sense of place.
O26	To deliver an accessible network of neighbourhood community hubs across the precinct (particularly to local parks) that provide access to social, recreation, and health services that include flexible, adaptable design and facilitate a variety of uses.
O27	Prepare for the impacts of climate change by facilitating resilient environmentally sustainable design, subdivision and development.

Requirements and guidelines

Place-based requirements and guidelines – viable densities

	<p>Before a permit to use or subdivide land, construct a building or construct or carry out works is granted by the responsible authority on any land located in the UDPA on must be approved to the satisfaction of the responsible authority.</p> <p>The Concept Master plan must be to scale and respond to the urban design elements, the performance requirements and benchmark outcomes outlined in Table 6, the density outcomes reflected in Table 5 and the Urban Design Guidelines for Victoria, 2017.</p> <ul style="list-style-type: none"> • The plan must illustrate at a high level: • Urban Structure: • The LTC block layout to show how it integrates with the surroundings and at its edges • The mixed-use areas block layouts • Proposed locations for densities and typologies • Sub-precincts if applicable and a character statement for each sub-precinct • Local parks with area notated • Linear parks/public realm • Clearly identify where proposed tree canopy may be located to meet the 30% tree canopy target • Built Form & Interfaces: • indicative building heights and street wall height interfaces • Movement & Sense of Place • The transport, public and active networks • Key destinations • The plan must be accompanied by a high-level staging plan showing the delivery
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	<p>sequence of key infrastructure items.</p> <ul style="list-style-type: none"> • The developer must work in consultation to seek support from the Department of Transport and Melbourne Water on the proposed Drainage Service Scheme, the Princes Freeway interchange and drainage assets as appropriate. <p>Once approved, an application to use or subdivide land or construct a building or construct or carry out works must be generally in accordance with the layout of the Master plan (or subsequent revisions).</p>
R50A	<u>Subdivisions must demonstrate a diversity of lot sizes to ensure that a range of dwelling types can be delivered in appropriate locations throughout the residential area.</u>
G40A	Subdivisions and development must <u>should</u> respond to Plan 32 and Plan 10 with minimum densities and typologies per catchment as stated in Table 5, to provide a diverse neighbourhood character with a range of lot sizes and dwelling types in appropriate locations throughout the residential area.
G41	<p>Specialised housing forms, such as lifestyle communities, retirement living, aged care, affordable housing, labour hire accommodation or temporary crisis accommodation should:</p> <ul style="list-style-type: none"> • respond to and integrate with adjoining development, avoiding inactive interfaces and blank facades to the public street network • be located within a walkable catchment area shown on Plan 10 • be accessible by public transport and shared path networks • not present a barrier to movement through the surrounding road, public transport, pedestrian and active transport movement network • incorporate back up power solutions to improve safety for vulnerable residents during power outages.
G42	<p>Additional local convenience centre uses may be located in the designated mixed-use areas adjoining local parks subject to demonstrating that they do not compromise the role and function of the primary local town centre, to the satisfaction of the responsible authority. The ancillary centres are to provide opportunities for activating the local park, such as provision for cafes, small grocer, take-away and home office/small businesses without diminishing the density requirements for that area.</p>
G43	An application for subdivision of land into residential lots or development of land for residential or mixed-use purposes should provide ten per cent minimum of all housing within the UDPA affordable and social housing, as defined by the <i>Planning and Environment Act 1987</i> .
G44	<p>Subdivision should provide for a local street separating development from drainage reserves, sporting reserves and local parks, promoting an active interface. Where subdivision does not propose a local street,</p> <ul style="list-style-type: none"> • lots should be set back at least 4.5 metres and provide a 4 metre wide access way as the primary point of access along the lot frontage • lots should allow for vehicular access via a rear laneway or shared driveway • subdivision design should avoid side or rear fence treatments fronting open space and DSS assets • subdivision design should maximise opportunities for informal passive surveillance • subdivision design should not limit the use of adjacent open space. <p>All to the satisfaction of the responsible authority and where adjacent to a waterway or drainage reserve to the satisfaction of the responsible authority and Melbourne Water.</p>

G45	
G46	Screening of waste collection points, service and car parking areas should provide appropriate landscaping with planting of canopy trees to minimise amenity impacts with adjoining development, and heat island effect.

Table 5: Housing density and diversity

CATCHMENT	HOUSING TYPOLOGY	
	TARGET DENSITY	TARGET TYPOLOGIES
Amenity-based Density Area 23 NDHA	<p>Average 36 dwellings per ha</p> <p>Target quantity 797 dwellings</p>	<p>To support diverse housing outcomes, the master plan and subsequent subdivision applications must <u>should</u> include opportunities for the delivery of multiple housing typologies. The mix of housing typologies may include, but is not limited to:</p> <ul style="list-style-type: none"> integrated and apartment-style development multi-unit development for sites near schools and community facilities attached townhouse-style development semi-detached/duplex-style development/Small Lot Housing Code product Low to mid-rise medium density development surrounding the school and amenity areas. <p>Mixed typology helps break up the density, create view corridors and provide a sensitive interface to the school.</p>
Mixed Use Area 14 NDHA	<p>Average 40 dwellings per ha</p> <p>Target quantity 548 dwellings</p>	<p>To support diverse housing outcomes, the master plan and subsequent subdivision applications <u>should</u> must include opportunities for multiple housing typologies. The mix of housing typologies may include, but is not limited to:</p> <ul style="list-style-type: none"> attached townhouse-style development with small office accommodation 2–3 storey integrated and apartment style development walk-up low-rise apartment-style development shop-top retail low-rise (2–3 storey) residential development with cafes and local produce stores to activate parks. social and affordable, key worker accommodation near the local town centre and Lecky Road commercial precinct. <p>Encourage higher rise and density development to face and frame amenity and assist in creating a sense of place with passive surveillance and activity. Opportunity for key destination hubs at parks and schools promote opportunities for key worker accommodation located close to the bus capable road network.</p>

CATCHMENT	HOUSING TYPOLOGY	
	TARGET DENSITY	TARGET TYPOLOGIES
Town Centre Area 1.5 NDHA	<p>Average 40 dwellings per ha</p> <p>Target quantity 60 dwellings</p>	<p>To support diverse housing outcomes, the master plan and subsequent subdivision applications should must include opportunities for the delivery of multiple housing typologies within the centre to promote diversity. The mix of dwelling typologies may include, but is not limited to:</p> <ul style="list-style-type: none"> 3–5 storey integrated and apartment style development with concealed integrated car parking Walk-up low-rise apartment style development with concealed integrated car parking Shop-top retail low-rise (2–3 storey) residential development for sites closer to the local parks Social and affordable, key worker accommodation located close to the Lecky Rd commercial precinct. <p>High-density and high-quality development surrounding and within the local town centre to create destination points, aid with scale to create view corridors within the precinct and provide a sensitive interface to the community centre.</p>
Balance Area 6 NDHA	<p>Average 32 dwellings per ha</p> <p>Target quantity 211 dwellings</p>	<p>To support diverse housing outcomes, the master plan and subsequent subdivision applications should must include opportunities for the delivery of multiple housing typologies that promote affordable housing outcomes such as:</p> <ul style="list-style-type: none"> Semi-detached/duplex-style development/Small Lot Housing Code product Multi-unit affordable housing development for sites closer to the local parks Detached traditional-style housing Low-rise social housing projects Attached townhouse development. <p>Low to mid-rise development to help diversify housing choice, create view corridors, and provide the opportunity for density relief.</p>

Table 6: UDPA performance measures

URBAN DESIGN PRIORITY ELEMENTS	PERFORMANCE REQUIREMENTS	
	REQUIRED PERFORMANCE CRITERIA	BENCHMARK OUTCOMES*
URBAN STRUCTURE	<ul style="list-style-type: none"> Provide a permeable and legible urban structure that enables a cohesive 20-minute neighbourhood and promotes identifiable precincts creating a clear understanding of place. Ensure a safe, highly pedestrianised public realm supported by 	<ul style="list-style-type: none"> Varied block sizes are strategically placed to promote sub-precincts, diverse patterns and housing diversity that responds to the current and expected future markets. Streets positioned along a north-south or east-west axis promote rectangular lot formations. Clear view lines to the local town centre from key destinations are used to promote wayfinding and provide a connection with the CREP community. Large lots or superlots are planned to accommodate future higher-density and / or

URBAN DESIGN PRIORITY ELEMENTS	PERFORMANCE REQUIREMENTS	
	REQUIRED PERFORMANCE CRITERIA	BENCHMARK OUTCOMES*
	<p>good solar orientation and place-based features with equitable access to amenity and destinations.</p>	<p>mixed-use development.</p> <ul style="list-style-type: none"> The green spine forms a linear park that is multifunctional, designed for active transport networks, intermittent exercise centres and meeting spaces to connect the community to the local town centre and activate surrounding areas. The town square at the Local Town Centre integrates uses and provides a key destination for community functions. Linear parks are used to facilitate precincts of higher density or to promote vistas and are wide enough for practical use and council maintenance. Small redundant areas within the masterplan UDPA are utilised as tree reserves in the public realm for lingering and shade, and to assist with the 30% tree canopy target in R17.
BUILT FORM & INTERFACES	<ul style="list-style-type: none"> Ensure a varied and visually stimulating built environment through a range of building heights, scale, interface treatments (including to open space) and typologies. Provide a cohesive planned future character that promotes a sense of community, safety and inclusion by delivering housing diversity. 	<ul style="list-style-type: none"> The master plan applies to Variations of built form and typology to promote various sub-precinct characters. Rear-loaded typology is used to promote a safe pedestrian and canopy focus to reserves and mixed use areas. Buildings of over 4 levels are concentrated around the local town centre and commercial zoned areas to support a hub experience. Massing and building setbacks limit overshadowing of the public realm. Key sites at precinct gateways are earmarked for taller or distinctive built form outcomes to signify the important role they play in the centre as wayfinding features. Open public forecourts are located at strategic sites where the building interfaces the public realm at a height of 4 levels or more to improve visibility and solar access. Buildings are designed to promote passive surveillance.
MOVEMENT & SENSE OF PLACE	<p>Create a pedestrian-focused environment that:</p> <ul style="list-style-type: none"> Connects people to services and destinations of natural and cultural amenity, including the wider context includes a safe and cohesive transport network Provides places to 	<ul style="list-style-type: none"> A clear road hierarchy identifies direct routes to key destinations Pedestrian centric zones are used at key locations The precinct is designed to support public transport including connections to the Officer Train Station via Officer South Road, and connections to Cardinia Road Employment Precinct and Minta Farm via Grices/Lecky Road. Key axis /corridors use cycle, and shared paths to create various journeys to designated

URBAN DESIGN PRIORITY ELEMENTS	PERFORMANCE REQUIREMENTS	
	REQUIRED PERFORMANCE CRITERIA	BENCHMARK OUTCOMES*
	<p>linger.</p> <ul style="list-style-type: none"> encourages alternative modes of transport 	<p>meeting places.</p> <ul style="list-style-type: none"> The public realm includes embellishments such as drinking fountains, seating and at ground lighting of paths to encourage all hours use.

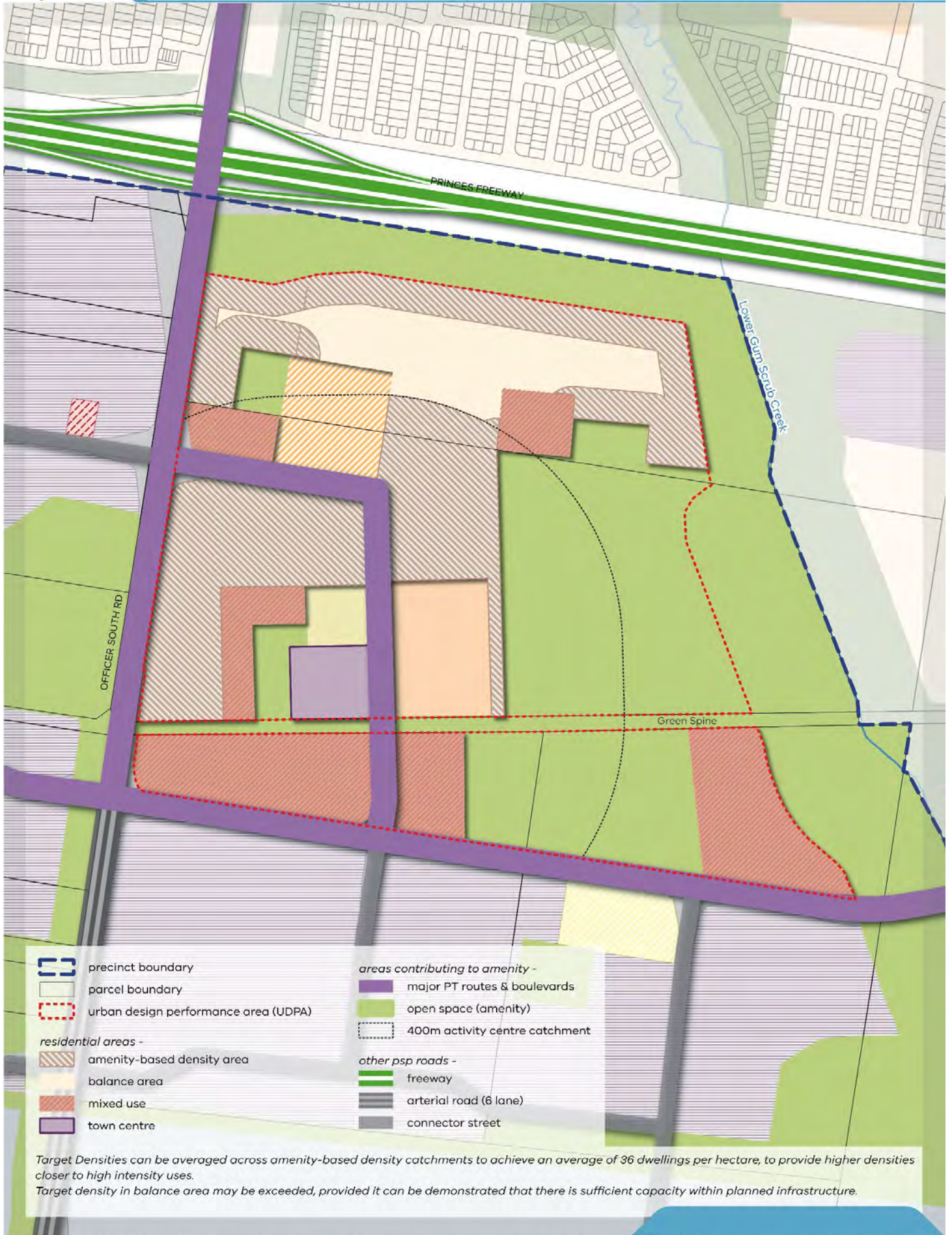
**Denotes a benchmark outcome is an example of how to achieve a performance. It is not a mandatory response. Other solutions may be presented for approval by the responsible authority.*



Plan 10
Housing Plan
Officer South Employment Precinct Structure Plan

1:7,500 @ A4

0 100 200 300 400 m



3.6 Services and destinations

Objectives

Place-based objectives – Services and destinations

O28	To support education and community infrastructure and facilities that cater for multiple social needs, and that are located to equitably and efficiently maximise their accessibility and shared use with adjoining precincts and the broader region.
O29	To develop a local town centre that services the local and wider community with strong connections through Officer South Road and Lecky Road.
O30	To deliver key destinations connected to the cycling and active path network that are designed within flexible open space to promote cultural and social activities/events.
O31	To encourage investment and support education and training opportunities for technical industries within the local town centre where closely located by the commercial land uses.

Requirements and guidelines

Place-based requirements and guidelines – Services and destinations

R50	Proposed government school sites must have a minimum of two road frontages (three preferred), one of which must be a bus-capable connector road. All roads fronting school sites must be wide enough to simultaneously accommodate safe and efficient: <ul style="list-style-type: none"> pedestrian movement two-way traffic and cycling movement student drop-off zones, and indented parking of cars and buses.
R51	Any lot created for a proposed government school site must be designed and serviced to the satisfaction of Department of Education.
R52	Any lot created for a proposed state government facility must be designed and serviced to the satisfaction of Department of Health as identified in Plan 3 Place-based Plan.
G47	Subdivision and development should facilitate integration of schools, sports reserves, and community facilities and promote: <ul style="list-style-type: none"> Integration with neighbouring facilities to maximise efficiencies through the sharing of car parking and other complementary infrastructure Out-of-hours use, street activation and permeability Safe and convenient pedestrian and cyclist access.
G48	Educational, community or civic infrastructure not shown on Plan 3 should be located within or proximate to a local town centre, community facility, as appropriate.
G49	Public health and justice services should be located within or adjacent to a community facility or local town centre and with access to public transport.
G50	The land identified as a proposed state government facility may be used for an alternative interim purpose such as a local pop-up park, which is generally in accordance with the PSP and consistent with the provisions of the applied zone, until such time the Department of Health requires the land or the land is released for development in accordance with G61 . Any interim use must be consistent with the priorities of the <i>Victorian Public Health and Well-being Plan</i> . If and w hen the land is required by the Department of Health, the land must be finished to a standard that satisfies the requirements of the Department of Health prior to the transfer of the land back to the Department of Health.

G51	<p>Where the responsible authority is satisfied that land shown on Plan 3 as proposed emergency services facility is unlikely to be used for this purpose at ultimate development of the PSP, that land must <u>may</u> be used for an alternative purpose that is compatible with the surrounding land uses and the provisions of the applied <u>Commercial 2</u> zone. <u>The development/subdivision of the PSP must be 80 per cent complete and the responsible authority must be in receipt of</u></p> <p>Justification must include written advice from the Department of Health stating that the land is no longer required for the proposed emergency services facility.</p>
G52	<p>Where the responsible authority is satisfied that land shown as a potential non-government school site is unlikely to be used for a non-government school, the land may be used for an alternative purpose which is generally in accordance with the PSP and consistent with the provisions of the applied zone. The development/subdivision of the PSP must be 80 per cent complete and the responsible authority must be in receipt of a letter from the proposed education provider stating that the land is no longer required.</p> <p>The responsible authority must verify the need for the potential school with the education provider by referring to the Background Report and Community Infrastructure Assessment of the subject PSP area.</p> <p>Further guidance on this can be found in the VPA's 'Non-government School Planning Guidance Note'.</p>
G53	<p>The indicative configuration of the community facility, open space and sports field as illustrated in Plan 8 may be altered to the satisfaction of the relevant responsible authorities. Where the alterations may impact a proposed government school site, the Department of Education should be consulted by the responsible authority to ensure that the changes are also to the satisfaction of that department.</p>
G54	<p>Common boundaries of school sites with residential uses should be avoided where possible to avoid potential adverse amenity impacts on residential areas.</p>
G55	<p>Drop off/pick up facilities for the proposed government primary school and adjacent kindergarten facility should be located in close proximity where practicable.</p>
G56	<p>The amount of on street parking available on roads and streets which abuts a proposed government school site should be maximised.</p>
G57	
G58	<p>Education, industry institutions and business training premises should be near key public and active transport links.</p>
G59	<p>Ensure appropriate traffic management and road design is adopted around the development of the non-government primary school to limit congestion along the connector boulevard within the UDPA.</p>
G60	<p>Land in the electricity transmission easement should be utilised to support community facilities related to walking, cycling and <u>potential</u> equestrian paths/trails <u>(where feasible)</u> as part of the broader open space network and service utilities, such as roads, renewable energy sources and the like. <u>Use and development for purposes ancillary to adjacent industrial or employment uses (such as carparking areas) may also be appropriate.</u></p>
G61	<p>Where the responsible authority is satisfied that land shown as a proposed state government facility is unlikely to be used for that purpose, the land may be used for an alternative purpose which is generally in accordance with the PSP and consistent with the provisions of the applied zone.</p> <p>The development/subdivision of stage 1 <u>Parcels 30E, 30R, 31E and 31R</u> in the PSP as shown in Plan <u>14 (Property identifications)</u> 12 (Infrastructure and Development Staging) must be 80 per cent complete and the responsible authority must be in receipt of a letter from the Department of Health stating that the land is no longer required.</p>

3.7 Infrastructure coordination

Objectives

Place-based objectives – Infrastructure coordination

O32	To plan for development and infrastructure that encourages leveraging of existing and planned infrastructure, and the timely delivery of new infrastructure.
O33	To actively pursue innovative and sustainable models for infrastructure delivery, and long-term strategic infrastructure opportunities that align with the UN Sustainable Development Goals.
O34	To encourage environmentally sustainable design and development and encourage the use of sustainable energy across the precinct, including generation, storage and distribution.
O35	To plan for an integrated water management system that reduces reliance on reticulated potable water, increases the re-use of alternative water through stormwater harvesting and water recycling contributing towards a sustainable and green urban environment.
O36	To encourage diversion of waste from landfill, minimise waste generation and increase recovery of more resources with circular economy considerations.
O37	Facilitate development that is adapted and resilient to climate-related hazards and supports the transition to net zero greenhouse gas emissions.

Requirements and guidelines

Place-based requirements and guidelines – Infrastructure coordination

R53	All above ground electricity cables (excluding substations and cables with a voltage of 66kv or greater) must be placed underground where feasible, including above ground cables as part of the upgrade of existing roads or subdivision works.
R54	Above ground utilities (such as electricity substations, kiosks, and sewer pumps) must be identified at the subdivision design stage to ensure effective integration with the surrounding neighbourhood, to minimise amenity impacts and be designed to the satisfaction of the relevant authority. Where that infrastructure is intended to be in public open space, the land required to accommodate that infrastructure will not be counted as contributing to public open space requirements specified and will be additional to the areas designated in Table 3.
R55	The inclusion of public art and complementary infrastructure along pedestrian, bicycles and shared use paths and any equestrian trails must be consistent with the <i>Cardinia Shire Council Developer Landscape Guidelines January 2017</i> (or as amended) and <i>Cardinia Shire Council Public Art Policy 2017</i> (or as amended).

R56	
R57	Delivery of arterial roads and connector streets must prioritise construction to meet the adjacent property boundaries where a connection to the adjacent property is intended or indicated on Plan 12, in accordance with the staging requirement of the PSP. For development abutting an arterial road, staging must prioritise the delivery of the road and drainage infrastructure, to the satisfaction of the responsible authority.
R58	<p>Development staging must be generally in accordance with Plan 12 (Infrastructure and Staging Plan) and Table 7 (PIP) and must provide for the timely provision and delivery of the following infrastructure to the satisfaction of the responsible authority:</p> <ul style="list-style-type: none"> • Connection to any arterial road network and seek to co-ordinate the delivery of these roads in conjunction with the timing of the arterial road connections located external to the precinct • Connector streets and connector street bridges • Street connections between properties, constructed to the property boundary • On- and off-road pedestrian and bicycle network paths • Safe pedestrian path/s (crushed rock or alternative interim provision where deemed appropriate) from any existing pedestrian network/s to proposed connections to facilitate connectivity to services, transport, community infrastructure and adjoining communities • Drainage, flood protection, and stormwater quality treatment infrastructure to implement the applicable Development Services Scheme(s) • Essential infrastructure • Land for community infrastructure, sports fields, local open space including urban agriculture.
R59	<p>Staging of development must be determined by the development proposals on land within the precinct and the availability of infrastructure services, see reference to Plan 12. Development applications must demonstrate how the development will:</p> <ul style="list-style-type: none"> • Integrate with adjoining developments, including the timely provision of roads and connections • Provide for the delivery of community facilities, open space, and amenity to new residents to the satisfaction of the responsible authority • Provide sealed road access to each new allotment • Provide safe pedestrian access to existing pedestrian networks • Deliver any necessary trunk service extensions, including confirmation of the agreed approach and timing by the relevant service provider to the satisfaction of the responsible authority • Deliver drainage, flood protection, and stormwater quality treatment infrastructure to implement the applicable Development Services Scheme(s) • Avoid and minimise impacts to conservation areas with regard to the location of essential and other services to the satisfaction of the responsible authority.
R60	<p>Subdivision of land within the PSP must provide for and meet the cost for all local infrastructure, other than that provided for within the Officer South Employment ICP. This includes, but is not limited to:</p> <ul style="list-style-type: none"> • All roads not funded by the Officer South Employment ICP • Local bus stop infrastructure (where locations have been agreed in writing by Head, Transport for Victoria) • Landscaping, including canopy tree planting of all existing and future roads and local streets for a minimum establishment period of 24 months as per the <i>Cardinia Council Landscape Developer Guidelines</i> (or as amended) • Intersection works and traffic management measures along arterial roads, connector streets, and local streets • Council approved fencing and landscaping (where required) along arterial roads and reserves

	<ul style="list-style-type: none"> • Pedestrian and bicycle paths and equestrian trails (where feasible) along local arterial roads, connector roads, utilities easements, local streets, waterways and within local parks including bridges, intersections, and barrier crossing points • Bicycle parking facilities • Electric vehicle charging stations • Optic fibre conduit within the road reservation for Smart City initiatives • Appropriately scaled lighting (including wildlife friendly lighting) along all roads, major shared bicycle, and pedestrian paths, and traversing public open space • Local drainage system, including land and works for water services (i.e. pressure reducing stations) and water sensitive urban design (WSUD) features • Construction of culverts for waterway crossings of boulevard connector streets, connector streets and local streets • Local street and pedestrian path crossings of waterways or electricity transmission easement unless outlined as the responsibility of another agency in Table 11 • Provision of water tapping, potable and recycled water connection points for any potential open space • Infrastructure as required by utility service providers including water, sewerage, , electricity, gas, telecommunications, and drainage (except where the item is funded through a Development Services Scheme or other mechanism) • Construction of pedestrian and bicycle paths along waterways and open space.
R61	All public open space (where not otherwise provided via the Officer South Employment ICP) must be finished to a standard that satisfies the requirements of the responsible authority prior to the transfer of the public open space.
R62	Where an inter-parcel connection is intended or indicated in the PSP, streets must be constructed to property boundaries at the relevant stage of development required or approved by the responsible authority. Provision should be made for temporary vehicle turning until the inter-parcel connection is delivered.
R63	Other than perpendicular road crossings of the gas transmission pipeline easement, no road or carriageway easements are to be relocated on gas pipeline easements unless to the satisfaction of the pipeline owner and operator.
R64	Development must ensure sensitive land uses are minimised within the consequence area shown on Plan 13 in Appendix 1 subject to planning controls responding to the high-pressure gas transmission pipeline and that construction is managed to minimise risk of any adverse impacts. Clear access must be provided to the APA City Gate Facility at all times to the satisfaction of the operator and facility owner.
R65	Utilities must be placed outside of conservation areas and waterway corridors identified in Plan 3. Where services cannot avoid crossing or being located within a conservation area or waterway corridor, they must consolidate utilities into dedicated service corridors where possible, and be located to avoid disturbance to existing waterway values, native vegetation, significant landform features, heritage sites and habitats to the satisfaction of DEECA, Melbourne Water, BLCAC and the responsibility authority or consolidate utilities into dedicated service corridors.
R66	

R67	Development must provide for the delivery of ultimate waterway and drainage infrastructure, including stormwater detention, quality treatment, and volume control (as applicable), and consider opportunities for early establishment of waterways to the satisfaction of Melbourne Water and the responsible authority. Where it can be demonstrated to the satisfaction of Melbourne Water that this delivery of drainage infrastructure in its ultimate form is not possible, development proposals must demonstrate how any interim solution adequately manages flow rates and flow volume, treats stormwater generated from the development (without causing adverse impacts to other properties within or outside the precinct, the environment, cultural heritage, or other infrastructure) and how this will enable delivery of an ultimate drainage solution, to the satisfaction of Melbourne Water and the responsible authority. Development construction staging and interim solutions must avoid or mitigate the risk of soil erosion and water and waterway degradation from sodic and/or dispersive soils.
R68	Where there are no alternative options other than passing through BCS Conservation Areas, subdivisional development must consolidate utilities into dedicated service corridors.
R69	Any lot created for a proposed sewer pump station site must be designed and serviced to the satisfaction of South East Water.
G62	Development should aim for net zero carbon emissions and seek to provide opportunities for local renewable energy generation technology and infrastructure.
G63	The delivery of underground services should be coordinated, located, and bundled (using common trenching) to maintain the cross-section widths of paths and nature strips as shown in the PSP and to facilitate trees and other planting within road reserve.
G64	Subdivision design should provide emergency services with good access/egress to the arterial road network to maximise coverage and reduce response times.
G65	All new above-ground utilities, including temporary utilities, should be located outside of key view lines, and screened to the satisfaction of the responsible authority.
G66	The design and location of underground services and trunk services should be guided by requirements as per Appendix 8 and placed along general alignments as advised by the relevant servicing authorities.
G67	
G68	Utilities should generally be located within the road reserve. Where this is not practical, or disrupts the ability to create 30% tree canopy coverage <u>in accordance with R17</u> , easements to place utilities at the rear of lots may be considered where there is no practical alternative.
G69	Staging of development in the Gum Scrub Creek catchment should prioritise the delivery of the Gum Scrub Priority Works shown on Plan 9.
G70	
G71	Infrastructure projects identified in Plan 11 should be delivered as per the timing priority identified in the timing column of Table 7. Note: Project delivery timing outlined in Table 7 is indicative and subject to periodic review by the relevant responsible authority
G72	Any utility infrastructure running adjacent to or crossing a high-pressure gas transmission pipeline should cross at 90 degrees unless approved otherwise by the responsible authority and be engineered to protect the integrity of the asset to the satisfaction of the responsible authority and gas pipeline owner/operator.

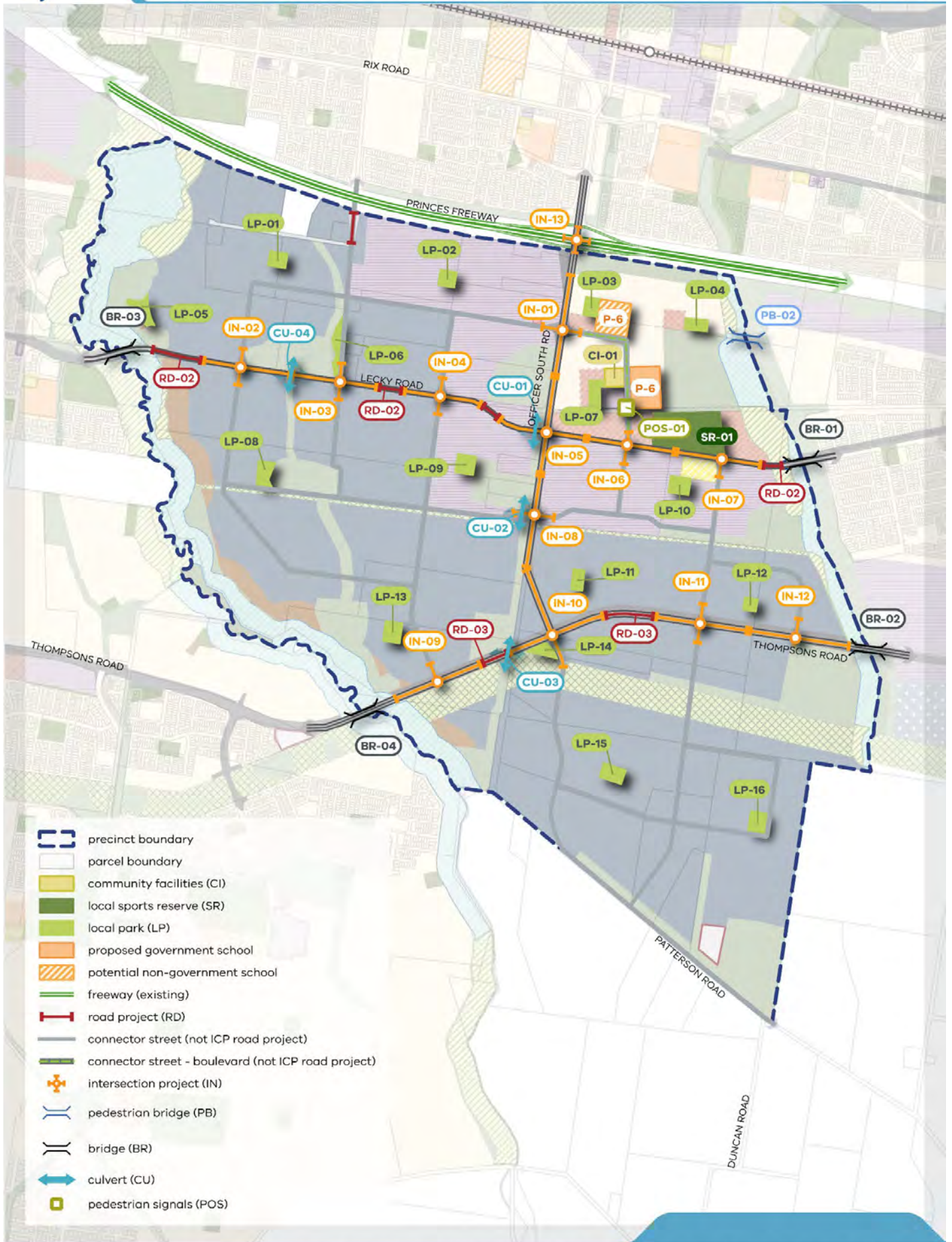
G73	The existing gas distribution assets will require a 2.1 m clearance from title boundaries and a 3.0m clearance from proposed building facades, inclusive of verandas and canopies.
G74	The asset manager may consider the high-pressure gas distribution pipeline easement to be located within the front of private lots where there is car parking and landscaping. In this scenario, the asset manager retains the legal access to the pipeline. Approval from the asset manager and responsible authority must be obtained prior to proceeding with any construction. Committee note: this guideline needs to be re-written. See Recommendation 6(g)
G75	For all landscaping, paths and public furniture/exercise equipment proposed within a gas easement, a landscape plan must be submitted to the responsible authority in consultation with the service owner/operator demonstrating species, their location and who will be responsible for the ongoing management of landscaping within the easement.
G76	Sports fields, community facilities, local parks and playgrounds should be delivered as early as possible within the residential neighbourhood and may be delivered in stages.
G77	<p>Development should consider Environmentally Sustainable Development principles, such as the inclusion of, but not limited to:</p> <ul style="list-style-type: none"> • material re-use and recycling (use of materials with reduced embodied energy) • electrical self-generation, car charge schemes, smart grids, and battery storage <p>use of tools such as Built Environment Sustainability Scorecard (BESS) , Sustainable Subdivisions Framework & Green Star Buildings</p> <ul style="list-style-type: none"> • measures that reduce the urban heat island effect • waste management initiatives • development should facilitate the reduction of environmental impacts and resource use through: <ul style="list-style-type: none"> • public realm design and connectivity. • facilitation of alternative energy generation systems • access to public and integrated active transport networks.
G78	Road design, line markings, traffic signs and other road infrastructure should, where practical, meet best practice standards for autonomous vehicles including shuttle services.



Plan 11
Precinct Infrastructure Plan
Officer South Employment Precinct Structure Plan

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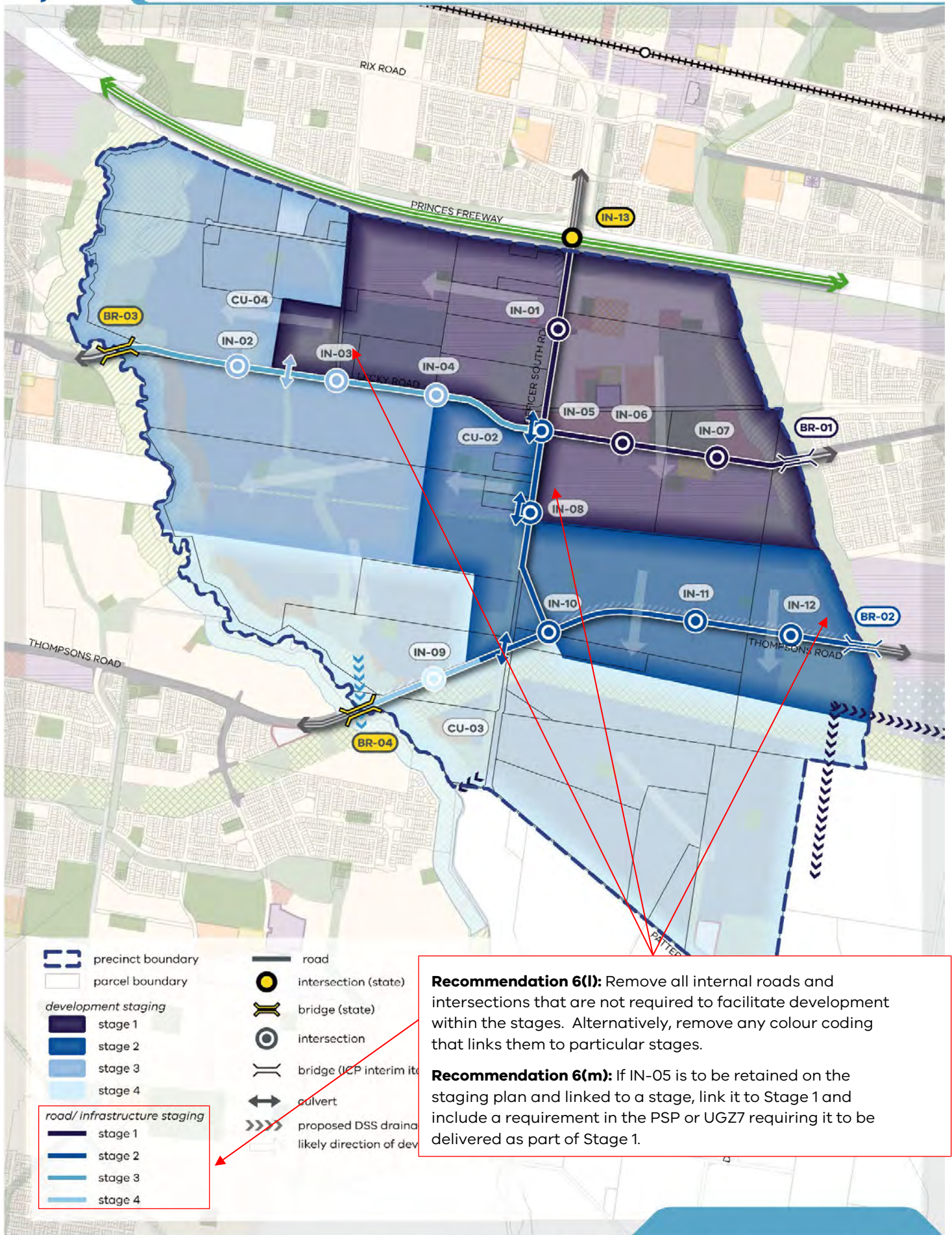
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Plan 12
Infrastructure and Development Staging
Officer South Employment Precinct Structure Plan

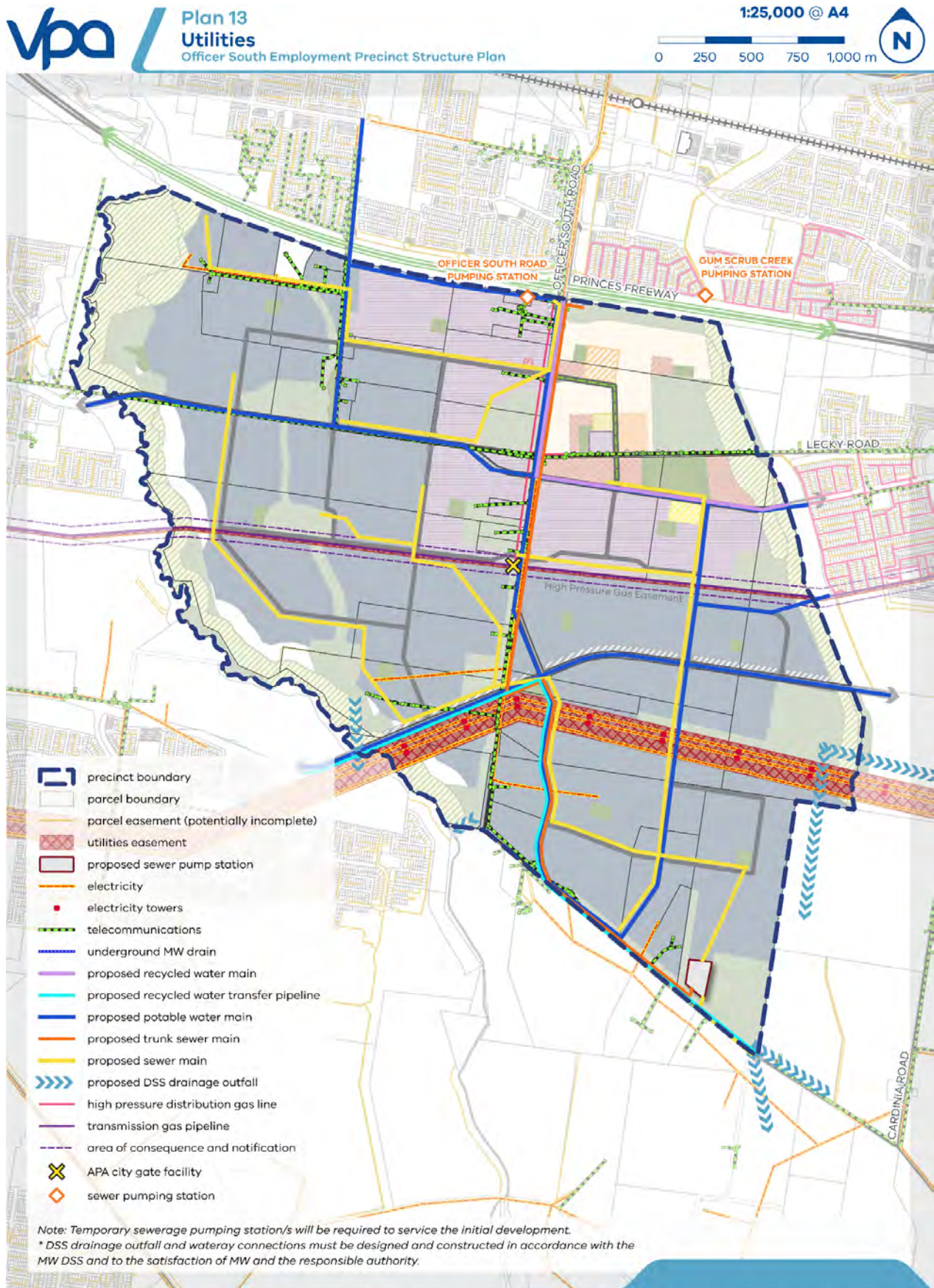
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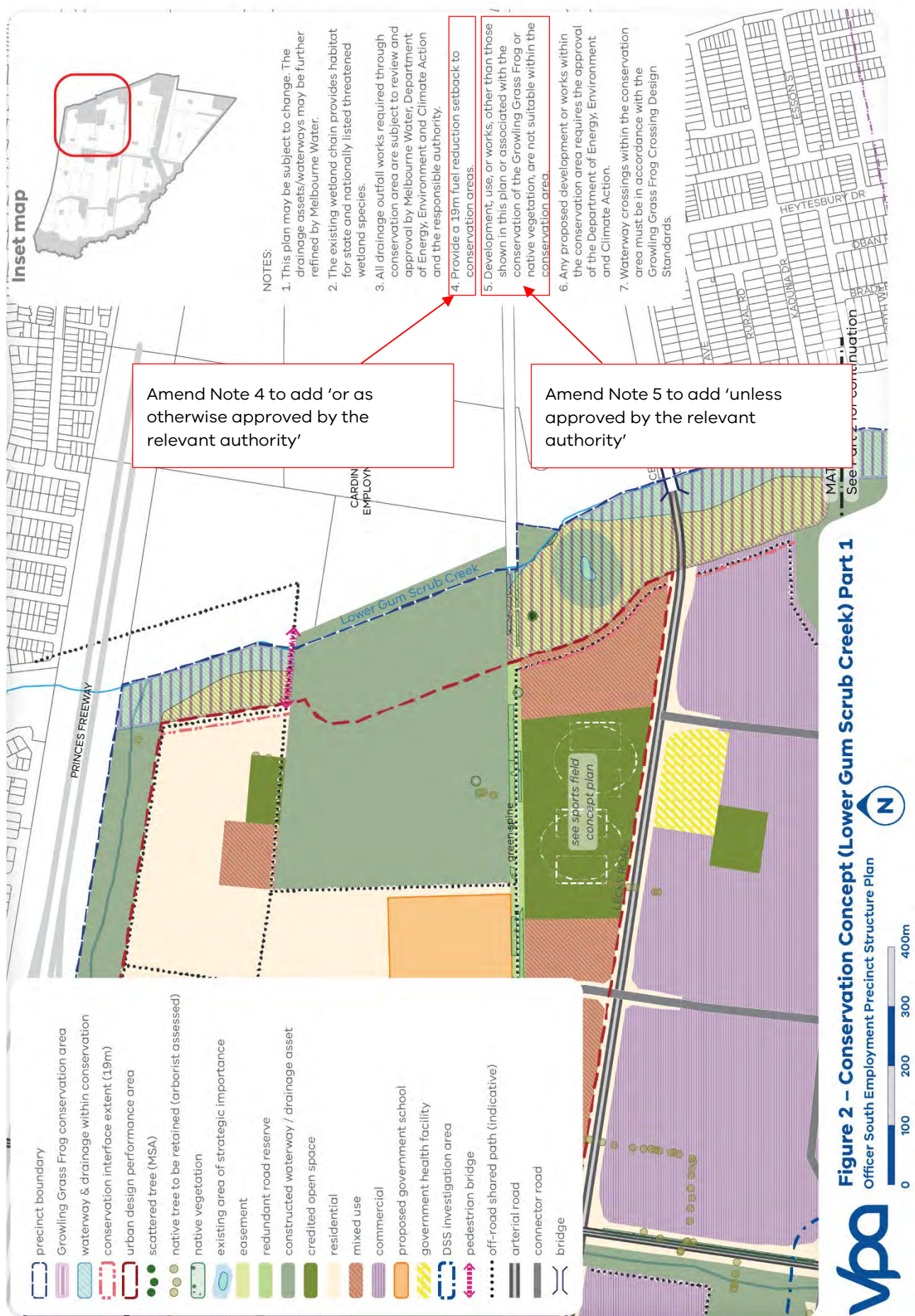
APPENDICES

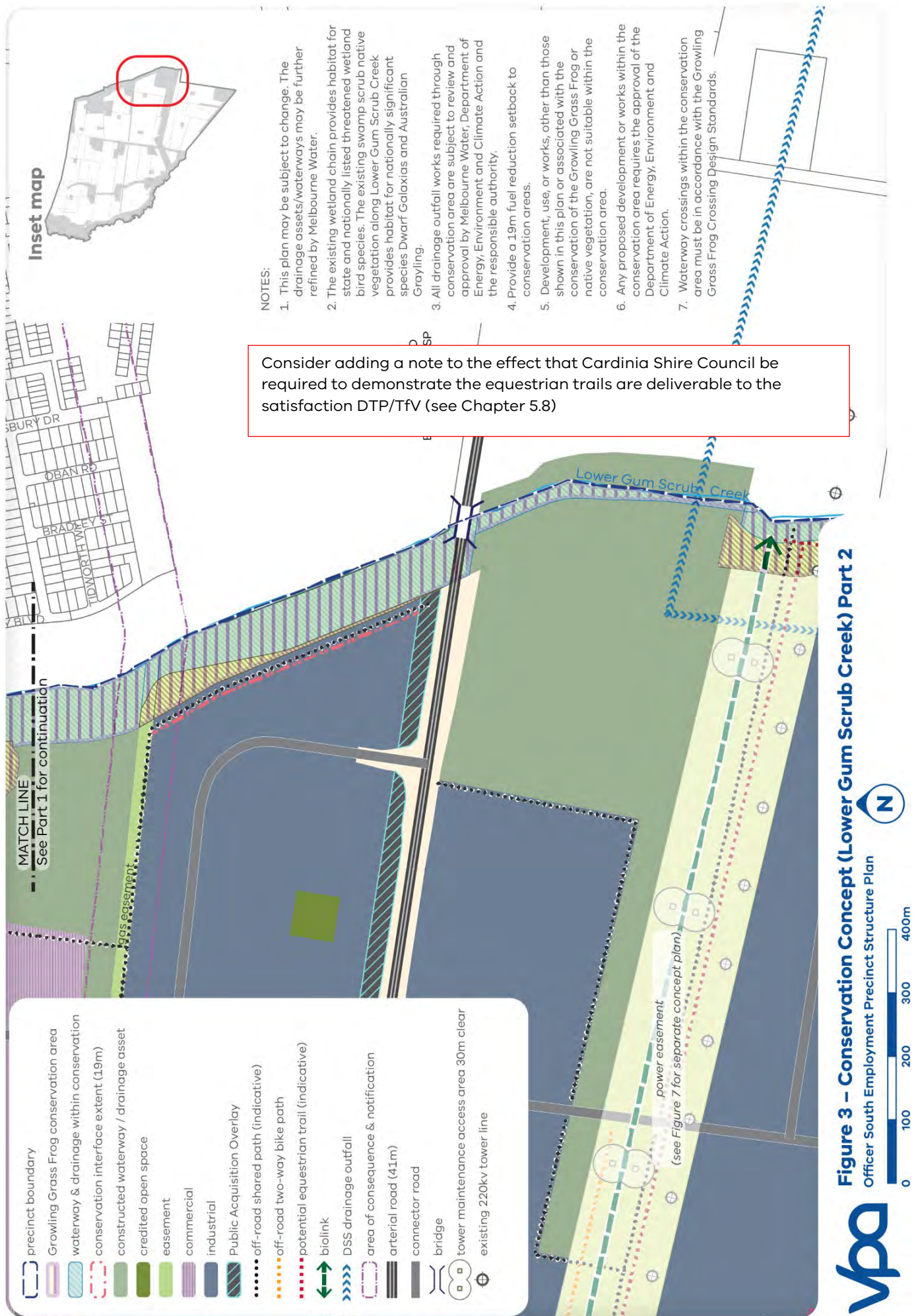
Appendix 1

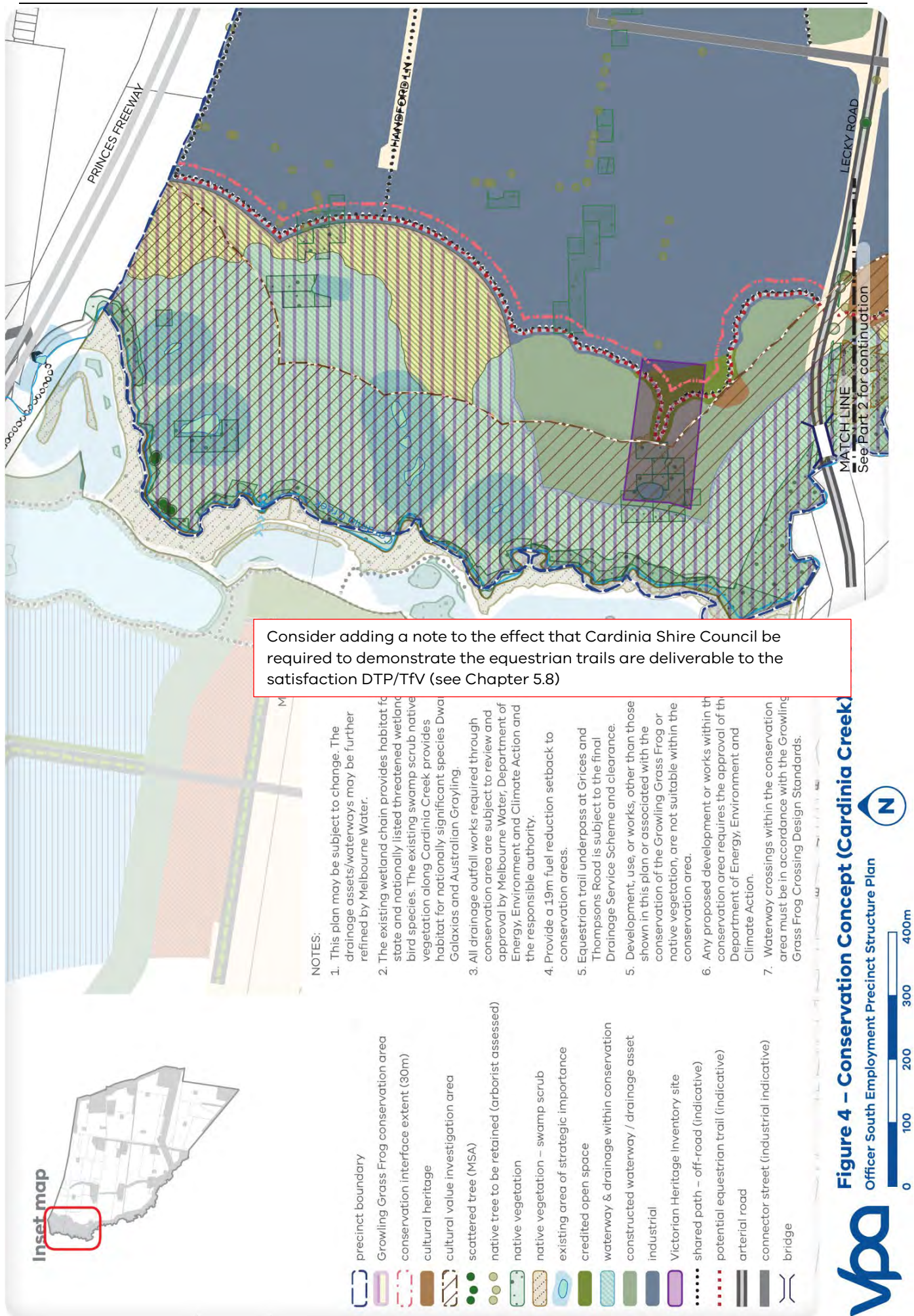
Plan 13: Utilities plan



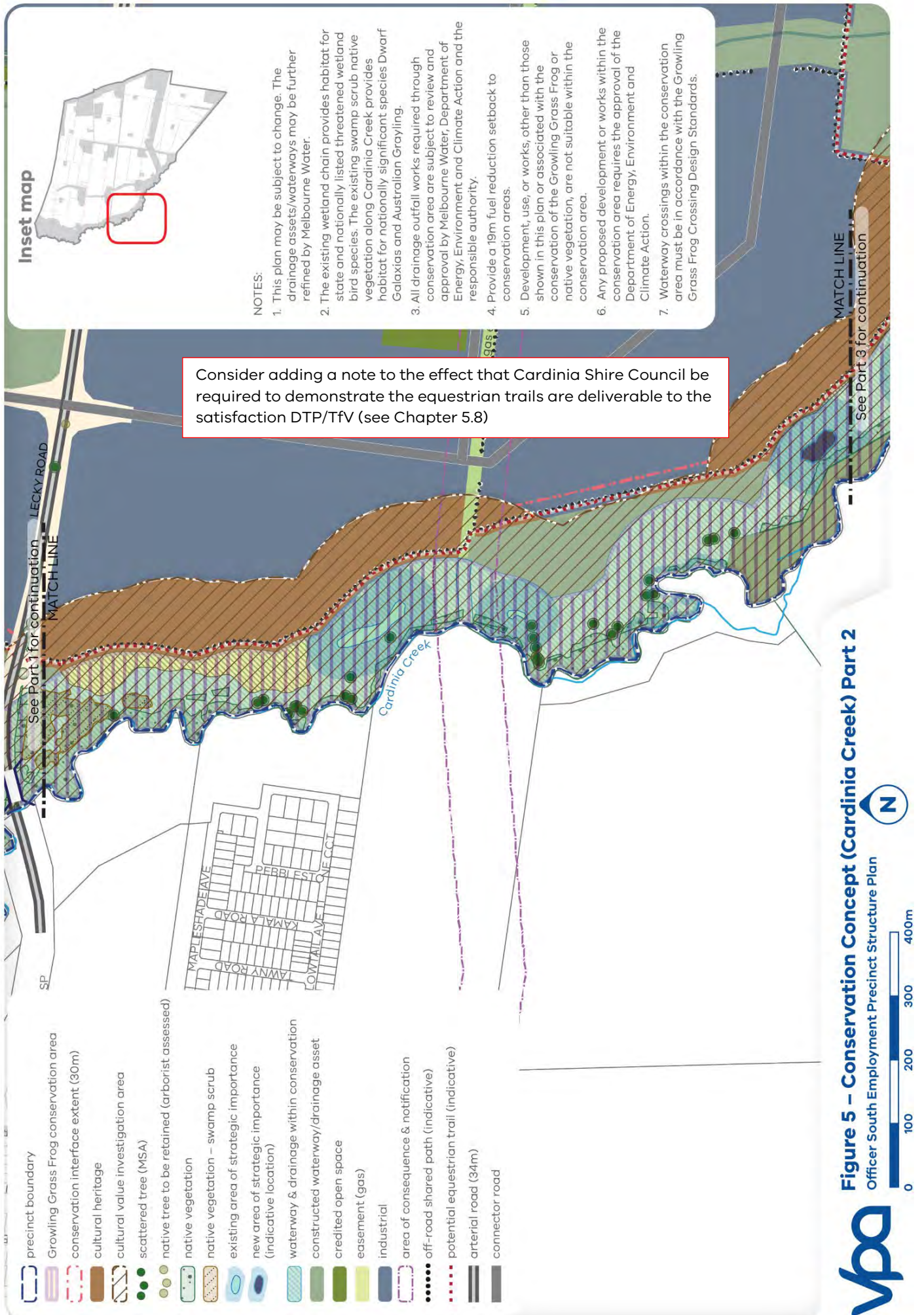
Appendix 2 Conservation area concept plans

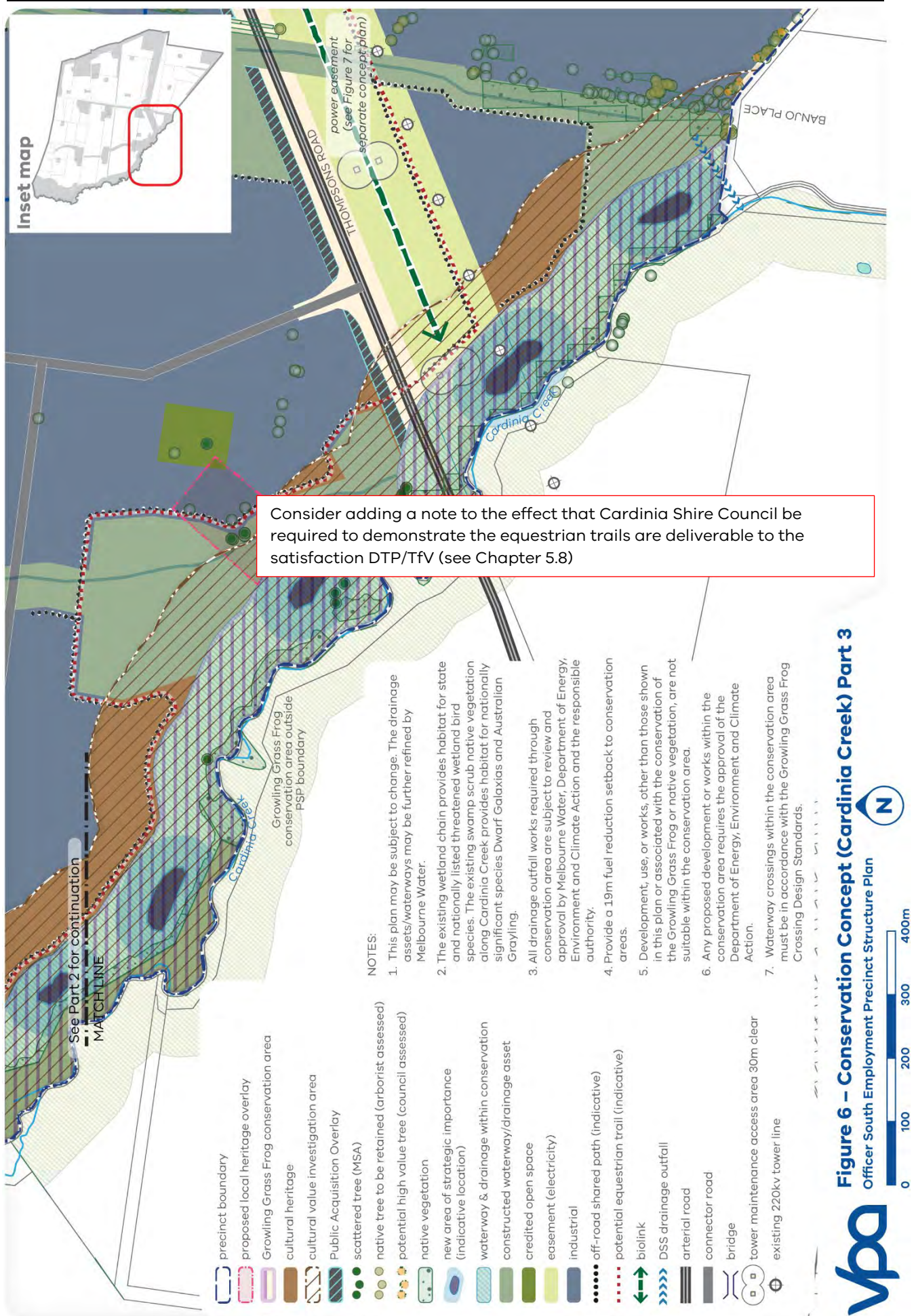






Consider adding a note to the effect that Cardinia Shire Council be required to demonstrate the equestrian trails are deliverable to the satisfaction DTP/TFV (see Chapter 5.8)





Consider adding a note to the effect that Cardinia Shire Council be required to demonstrate the equestrian trails are deliverable to the satisfaction DTP/TfV (see Chapter 5.8)

Appendix 3 Electricity and gas easement concept plans

Figure 7: Power easement concept

Recommendation 6(f): Amend note 2 to read 'Potential for other uses and development within the transmission easement – refer to G60'.

Consider adding a note to the effect that Cardinia Shire Council be required to demonstrate the equestrian trails are deliverable to the satisfaction DTP/TfV (see Chapter 5.8)

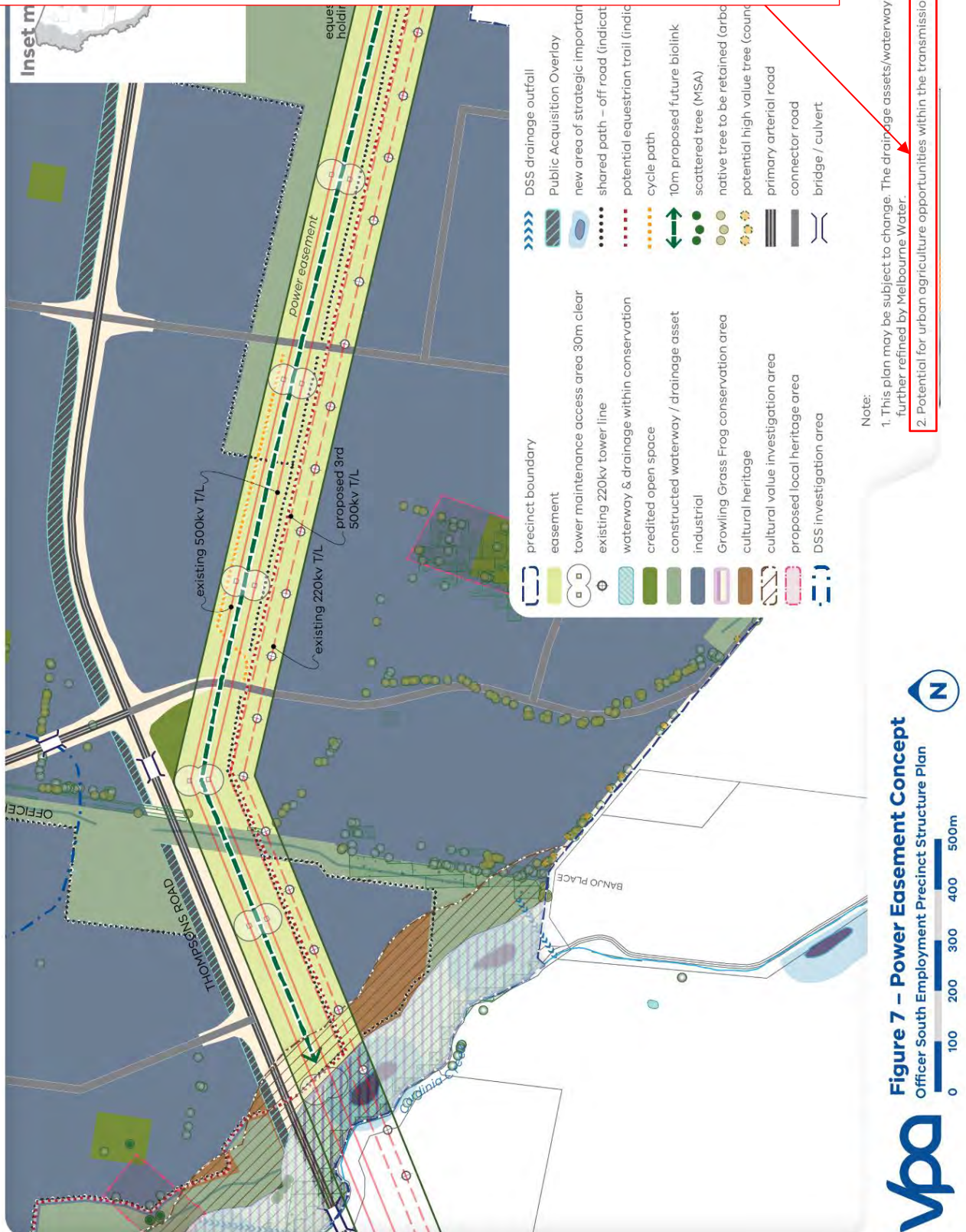


Figure 7 – Power Easement Concept
Officer South Employment Precinct Structure Plan

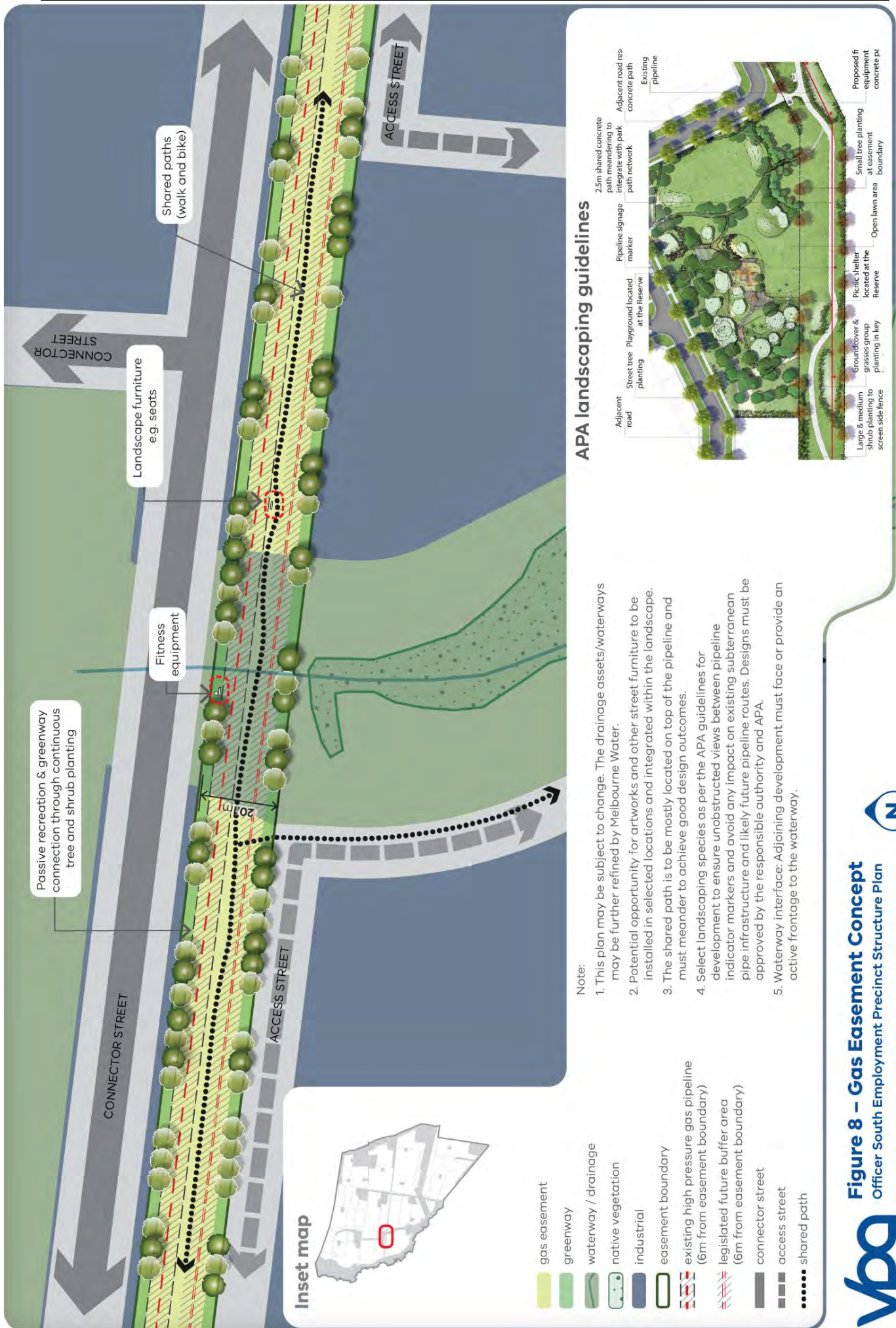


Figure 8 – Gas Easement Concept
Officer South Employment Precinct Structure Plan



Appendix 4 Precinct infrastructure

Table 7 Precinct infrastructure

[Refer to the Officer South Employment ICP for land use budgets](#)

Category	PIP Reference No.	Title	Description	Lead agency	Component Included in ICP			Timing	Apportionment Funding Source	Apportionment to the ICP
					Ultimate land	Interim Construction	Ultimate Construction			
Transport	OS-PB-02	Cardinia Road Employment Precinct (CREP) Pedestrian Bridge	Construction of a shared pedestrian and cyclist bridge over Lower Gum Scrub Creek into Cardinia Road Employment Precinct.	Cardinia Shire Council	No	No	Yes	M	Cardinia Shire	50.000%
Transport	OS-BR-01	Lecky Road Bridge	Construction of a secondary arterial road bridge (interim standard) over Lower Gum Scrub Creek into the CREP PSP in accordance with the Growling Grass Frog Conservation Area requirements.	Cardinia Shire Council	No	Yes	No	S-M	Cardinia Road Employment Precinct/Cardinia Shire	50.000%
Transport	OS-BR-02	Thompsons Road Bridge	Construction of an arterial road bridge (interim standard) over Lower Gum Scrub Creek into the CREP PSP in accordance with the Growling Grass Frog Conservation Area requirements.	Cardinia Shire Council	No	Yes	No	M-L	Cardinia Road Employment Precinct/ Cardinia Shire	50.00%
Transport	OS-BR-03	Grices Road Bridge	Construction of a secondary arterial road bridge (ultimate) over Cardinia Creek into Clyde North PSP in accordance with the Growling Grass Frog Conservation Area requirements	Department of Transport	No	No	No	M-L		-

Category	PIP Reference No.	Title	Description	Lead agency	Component Included in ICP			Timing	Apportionment Funding Source	Apportionment to the ICP
					Ultimate land	Interim Construction	Ultimate Construction			
Transport	OS-BR-04	Thompsons Road Bridge	Construction of an arterial road bridge (ultimate) over Cardinia Creek into the Cardinia Creek South PSP in accordance with the Growling Grass Frog Conservation Area requirements	Department of Transport	No	No	No	L	N/A	-
Transport	OS-IN-01	Intersection: Officer South Road/East-West Connector (North)	Construction of aan interim primary arterial to connector signalised 4-way intersection.	Cardinia Shire Council	Yes	Yes	No	S-M	N/A	100.00%
Transport	OS-IN-02	Intersection: Lecky Road/ North-South Connector (West)	Construction of aan interim secondary arterial to connector signalised 4-way intersection.	Cardinia Shire Council	Yes	Yes	No	M-L	N/a	100.00%
Transport	OS-IN-03	Intersection: Lecky Road/ North-South Connector (West)	Construction of aan interim secondary arterial to connector signalised 4- way intersection.	Cardinia Shire Council	Yes	Yes	No	M-L	N/a	100.00%
Transport	OS-IN-04	Intersection: Lecky Road/ North-South Connector (West)	Construction of aan interim secondary arterial to connector signalised 4- way intersection.	Cardinia Shire Council	Yes	Yes	No	S-M	N/a	100.00%
Transport	OS-IN-05	Intersection: Lecky Road/Officer South Road	Construction of a primary arterial to secondary arterial 4-way signalised intersection	Cardinia Shire Council	Yes	Yes	No	M	N/a	100.00%
Transport	OS-IN-06	Intersection: Lecky Road/ North-South Connector (West)	Construction of a-secondary <u>secondary</u> arterial to connector signalised 4- way intersection.	Cardinia Shire Council	Yes	Yes	No	M	N/A	100.00%

Category	PIP Reference No.	Title	Description	Lead agency	Component Included in ICP			Timing	Apportionment Funding Source	Apportionment to the ICP
					Ultimate land	Interim Construction	Ultimate Construction			
Transport	OS-IN-07	Intersection: Lecky Road/ North-South Connector (West)	Construction of aan interim secondary arterial to connector signalised T-intersection.	Cardinia Shire Council	Yes	Yes	No	S-M	N/A	100.00%
Transport	OS-IN-08	Intersection: Officer South Road/East-West Connector (Central)	Construction of a primary arterial to connector signalised 4- way intersection.	Cardinia Shire Council	Yes	Yes	No	S-M	N/a	100.00%
Transport	OS-IN-09	Intersection: Thompsons Road/ North Connector (West)	Construction of a primary arterial to connector signalised T-intersection.	Cardinia Shire Council	Yes	Yes	No	L	N/A	100.00%
Transport	OS-IN-10	Intersection: Officer South Road/Thompsons Road	Construction of a primary arterial to primary arterial - 4-way signalised intersection.	Cardinia Shire Council	Yes	Yes	No	M	N/a	100.00%
Transport	OS-IN-11 (Standard Levy)	Intersection: Thompsons Road/ North-South Connector (East)	Construction of a primary arterial to connector - 4 - way signalised intersection.	Cardinia Shire Council	Yes	Yes	No	M	N/a	37.75%
Transport	OS-IN-11 (Supplementary Levy)	Intersection: Thompsons Road/ North-South Connector (East)	Construction of a primary arterial to connector - 4 - way signalised intersection.	Cardinia Shire Council	Yes	Yes	No	M	N/a	62.25%
Transport	OS-IN-12	Intersection: Thompsons Road/ North-South Connector (East)	Construction of a primary arterial to connector signalised- T-intersection.	Cardinia Shire Council	Yes	Yes	No	M	N/a	100.00%
Transport	OS-IN-13	Intersection: Officer South Freeway Interchange	Ultimate signalisation and provision of primary arterial under Freeway	Department of Transport	No	No	No	M	N/a	-

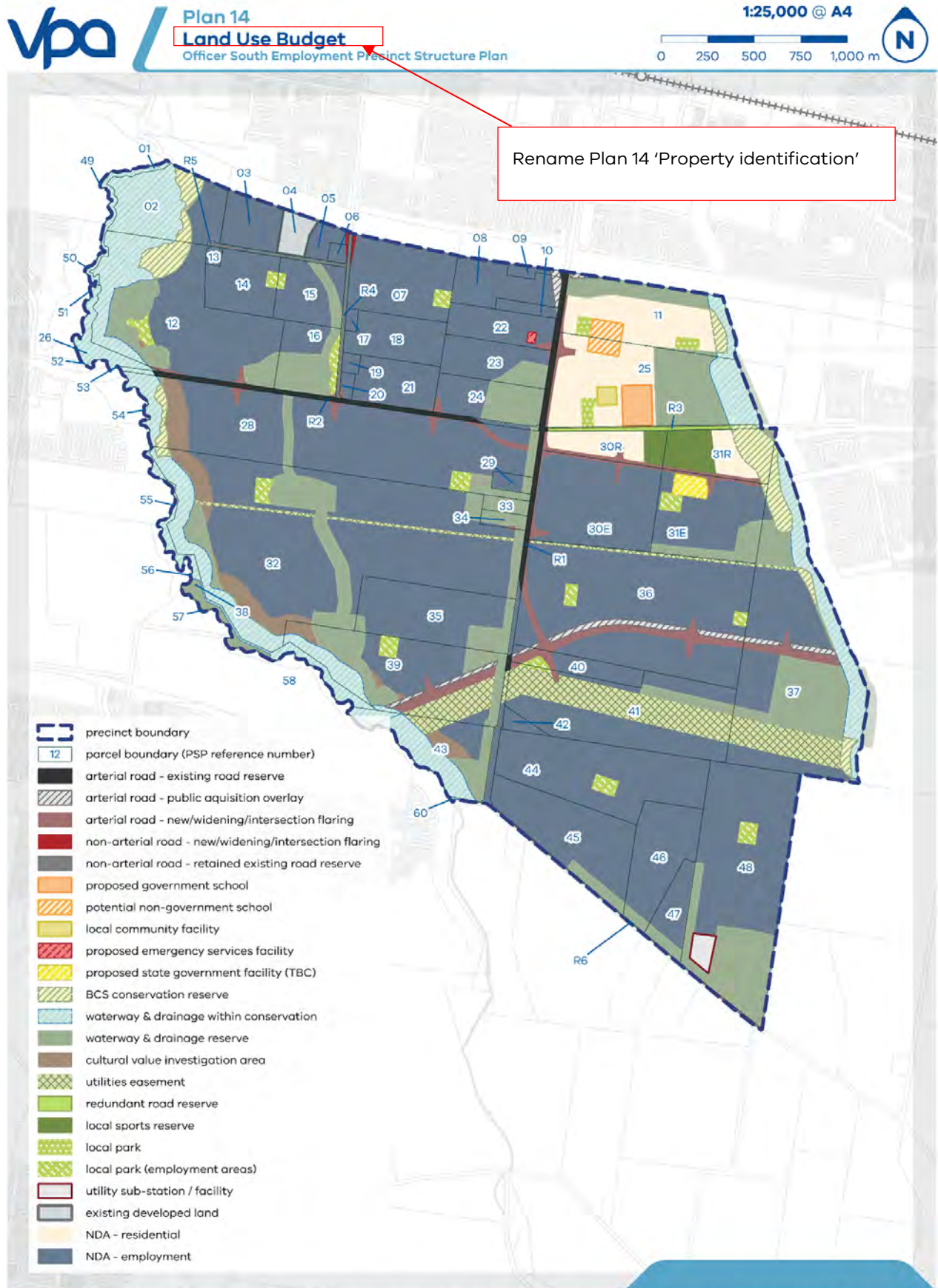
Category	PIP Reference No.	Title	Description	Lead agency	Component Included in ICP			Timing	Apportionment Funding Source	Apportionment to the ICP
					Ultimate land	Interim Construction	Ultimate Construction			
Transport	OS-CU-01	Lecky Road Culvert	Construction of culvert crossing over the 40m wide drainage corridor of secondary arterial interim	Cardinia Shire Council	N/A	No	Yes	S-M	N/a	100.00%
Transport	OS-CU-02	Connector Road Culvert	Construction of culvert crossing over the 45m wide drainage corridor of primary arterial interim intersection extent	Cardinia Shire Council	N/A	No	Yes	S-M	N/A	100.00%
Transport	OS-CU-03	Thompsons Road Culvert (Depending alignment of Thompsons Road)	Construction of culvert crossing over the 50m wide drainage corridor of primary arterial interim	Cardinia Shire Council	N/A	No	Yes	M	N/a	100.00%
Transport	OS-CU-04	Lecky /Stephens Road Culvert	Construction of culvert crossing over the 45m wide drainage corridor of secondary arterial interim	Cardinia Shire Council	N/A	No	Yes	M-L	N/a	100.00%
Transport	OS-RD-01	Officer South Road: Arterial Road	Construction of 2 lanes in one carriageway in a road reservation with a width of 41 metres.	Cardinia Shire Council	Yes	Yes	No	S-M	N/a	100.00%
Transport	OS-RD-02	Lecky Road: Arterial Road	Construction of 2 lanes in one carriageway in a road reservation with a width of 34 metres.	Cardinia Shire Council	Yes	Yes	No	S-M	N/a	100.00%
Transport	OS-RD-03	Thompsons Road: Arterial Road	Construction of 2 lanes in one carriageway in a road reservation with a width of 41 metres.	Cardinia Shire Council	Yes	Yes	No	M	N/a	100.00%
Transport	OS-RD-04	Land for Non Arterial Road	Land for road approach to bridge	Cardinia Shire Council	Yes	No	No	M	N/A	100.00%

Category	PIP Reference No.	Title	Description	Lead agency	Component Included in ICP			Timing	Apportionment Funding Source	Apportionment to the ICP
					Ultimate land	Interim Construction	Ultimate Construction			
Transport	OS-POS-01	Connector Boulevard Pedestrian Operated Signals	Construction of pedestrian operated signals along the connector boulevard	Cardinia Shire Council	N/A	N/A	Yes	S-M	N/a	100.00%
Community	OS-CI-01	Level 2 Facility	Construction of a Level 2 multipurpose community centre (including 4 x kindergartens, community rooms, neighbourhood house, consulting suites for outreach visiting services and additional facilities to cater for childcare and 2 x maternal child health)	Cardinia Shire Council	Yes	N/A	Yes	S-M	N/a	45.00%
School	N/a	Greenspine Proposed P6	Land and construction of government school (incorporating potential joint-use oval with adjoining Council sports reserve as relevant)	Department of Education	No	No	No	S-M	N/A	-
School	N/a	Non Government School	Land and construction of non-government school.	Catholic Diocese	No	No	No	S-M	N/A	-
Community	N/A	State Government Health Facility	Purchase of land and construction of a proposed State Government Health Facility	Department of Health	No	No	No	M	N/A	-
Utilities	N/A	Sewer Pump Station	Purchase of land and construction of a proposed Sewer Pump Station	South East Water	No	No	No	M	N/A	-
Open Space	OS-SR-01	Sports fields	Construction of a local sports reserve (comprising 2 x Australian Rules Football/cricket ovals, 2x netball courts, 2 x soccer fields)	Cardinia Shire Council	Yes	No	Yes	S-M	N/A	45.00%

Category	PIP Reference No.	Title	Description	Lead agency	Component Included in ICP			Timing	Apportionment Funding Source	Apportionment to the ICP
					Ultimate land	Interim Construction	Ultimate Construction			
Open Space	OS-SR-01c	Sports fields	Construction of multi purpose pavilion	Cardinia Shire Council	Yes	No	Yes	S-M	N/A	45.00%
Open Space	OS-LP-01	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	M-L	N/A	100.00%
Open Space	OS-LP-02	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	S-M	N/A	100.00%
Open Space	OS-LP-03	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	S-M	N/A	100.00%
Open Space	OS-LP-04	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	S-M	N/A	100.00%
Open Space	OS-LP-05	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	S-M	N/A	100.00%
Open Space	OS-LP-06	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	M-L	N/A	100.00%
Open Space	OS-LP-07	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	M-L	N/A	100.00%
Open Space	OS-LP-08	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	S-M	N/A	100.00%
Open Space	OS-LP-09	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	S-M	N/A	100.00%
Open Space	OS-LP-10	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	M-L	N/A	100.00%
Open Space	OS-LP-11	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	M-L	N/A	100.00%
Open Space	OS-LP-12	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	M	N/A	100.00%

Category	PIP Reference No.	Title	Description	Lead agency	Component Included in ICP			Timing	Apportionment Funding Source	Apportionment to the ICP
					Ultimate land	Interim Construction	Ultimate Construction			
Open Space	OS-LP-13	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	L	N/A	100.00%
Open Space	OS-LP-14	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	M-L	N/A	100.00%
Open Space	OS-LP-15	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	L	N/A	100.00%
Open Space	OS-LP-16	Passive Open Space	Provision of land for a local park	Cardinia Shire Council	Yes	No	No	L	N/A	100.00%
Service Open Space	N/A	Cardinia Creek Conservation Areas	Land and provision of conservation areas	DELWP	N/A	N/A	N/A	M-L	N/A	-
Service Open Space	N/A	Lower Gum Scrub Creek Conservation Areas	Land and provision of conservation areas	DELWP	N/A	N/A	N/A	M-L	N/A	-
Other Infrastructure	N/A	Drainage Infrastructure	Land and construction of precinct drainage infrastructure	Melbourne Water	N/A	N/A	N/A	M-L	N/A	-
Transport	OS-PP-04	Plan Preparation Costs	Plan Preparation Costs	Victorian Planning Authority	N/A	N/A	N/A	S	Third-Party Funding	28.65%

Appendix 5 ~~Land use budget~~ Property identification



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Committee note: Table 8 (Summary land use budget) and Table 9 (Property specific land use budget) have been deleted, as they serve no purpose in the PSP. Refer to Chapter 9.1. Renumber subsequent tables as appropriate.

Appendix 6 Local town centre design criteria

Table 10: Local town centre performance requirements and example benchmark outcomes

Local Town Centre Principle	Performance criteria	Example benchmark outcome
<p>PRINCIPLE 01</p> <p>Create a sense of place with high quality engaging urban design and built form.</p> <p>Relevant key elements:</p> <ul style="list-style-type: none"> • Urban structure • Built form and interfaces • Services • Urban Character • Noise 	<ul style="list-style-type: none"> • The centre must address all relevant elements of the Urban Design Guidelines of Victoria. • Development blocks must be based on a permeable layout with varying block sizes to enable flexibility to suit a variety of land uses and allow viable short-term development as well as efficient long-term evolution. • The local town centre core must integrate with the surrounding neighbourhoods, public transport, and community facilities, and transition the building scale to its edges. • The centre must seek to minimise amenity and noise impacts resulting from the mix of uses • The design of each building must contribute to a cohesive and legible character for the local town centre as a whole. • The built form must define the primary street frontage with visually rich, interesting, and well-articulated facades, finished in suitable materials and colours that contribute to the character of the local town centre. • Car parking and service areas must be well integrated and screened. • Mixed-use areas should primarily provide retail and/or office and commercial at ground level and residential above ground level. 	<ul style="list-style-type: none"> • Retail uses along street frontages include access points at regular intervals to encourage activity along the length of the street. • Retail and commercial buildings within the centre are generally built to the property line. • The village square and green spine act as a forecourt to the mixed use and centre, and act as a focal point for surrounding retail and residential uses • Urban art and street furniture is incorporated into the public realm in areas that are highly visible and close to or adjoining pedestrian desire lines/gathering spaces. • Specialty retail and mixed use sleeve the anchor retail core and village square. • Car parking edges are wrapped with built form to improve the street interface • Service areas present a well-designed and secure facade to public • Car parking areas are screened from the main street with appropriate landscaping, planted with canopy trees and provided with dedicated pedestrian thoroughfares. • Key strategic buildings are located in the centre along view lines, 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). • Separation areas such as open space, road networks and transitional scale is provided to address community facilities and outdoor function spaces.

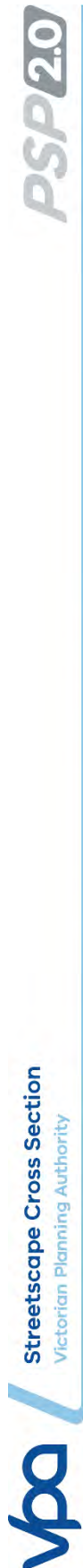
		<ul style="list-style-type: none"> • Development on the west side of the boulevard connector provides for ground floor specialist suites (office, medical services, etc) and independent retail and hospitality tenancies. • Grouping waste collection points are planned for to maximise opportunities for recycling and reuse, and screened to minimise amenity impacts with adjoining areas and users of the centre.
<p>PRINCIPLE 02</p> <p>Design the local town centre to be safe, pedestrian-friendly and accessible by all modes of transport, while enabling private vehicle access.</p> <p>Relevant key elements:</p> <ul style="list-style-type: none"> • Transportation modes • Passive surveillance 	<ul style="list-style-type: none"> • The centre must provide a safe and accessible transport and active transport network, including bike parking, bike stations and vehicular charging stations. • The centre must provide active frontages that address connector streets and boulevard connectors as a main street frontage. • Movement must be prioritised for pedestrians, then cycling, then lastly vehicular within the core of the centre. • Public transport must be readily accessible from the centre and boulevard connector street. • Services must be provided to promote lingering in the public realm. 	<ul style="list-style-type: none"> • The green spine promotes the active transport network to integrate the local town centre core with the surrounding neighbourhoods, public transport, and community facilities. • Separate pedestrian and cyclist paths are delivered on the green spine, to integrate the local town centre core with the surrounding neighbourhoods, public transport, and community facilities. • Bicycle parking is provided within the street network and public spaces in highly visible locations and close to pedestrian desire lines and key destinations. • 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. • 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.

		<ul style="list-style-type: none"> • 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. • Smart City connectivity is provided including wi-fi in the village square. • Building frontages incorporate the use of a consistent covered walkway or veranda to provide for weather protection. • The main streets are designed to include canopy tree provision, outdoor dining and pedestrian activity with minimal on-street parking
<p>PRINCIPLE 03</p> <p>Promote localisation, sustainability, and adaptability.</p> <p>Relevant key elements:</p> <ul style="list-style-type: none"> • Natural ventilation • Solar orientation • WSUD 	<ul style="list-style-type: none"> • The centre must 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 centre must include planning and building design which can be adapted to accommodate a variety of uses over time. • WSUD must be integrated to promote the IWM initiatives of the PSP. 	<ul style="list-style-type: none"> • The selection of retail on the periphery of the centre considers day and evening trading to reduce travel and promote localised services. • Reduced on road car parking promotes the use of alternative transport modes • Energy efficient design and construction methods for all buildings is investigated • Water Sensitive Urban Design principles such as integrated stormwater retention and reuse is implemented (e.g. landscape irrigation) • Options for shade and shelter through a combination of landscape and built form treatments are planned for. • Buildings are naturally ventilated to reduce the reliance on plant equipment for heating and cooling • Passive solar orientation in the configuration and distribution of built form and public spaces is used to ensure solar access. • Solar energy is capitalised for water and space heating, electricity generation and internal and external lighting • Floor to ceiling heights allow for adaptive use with a minimum of 3.6m on ground floor. • Public spaces are oriented to capture north sun and protect from prevailing winds and

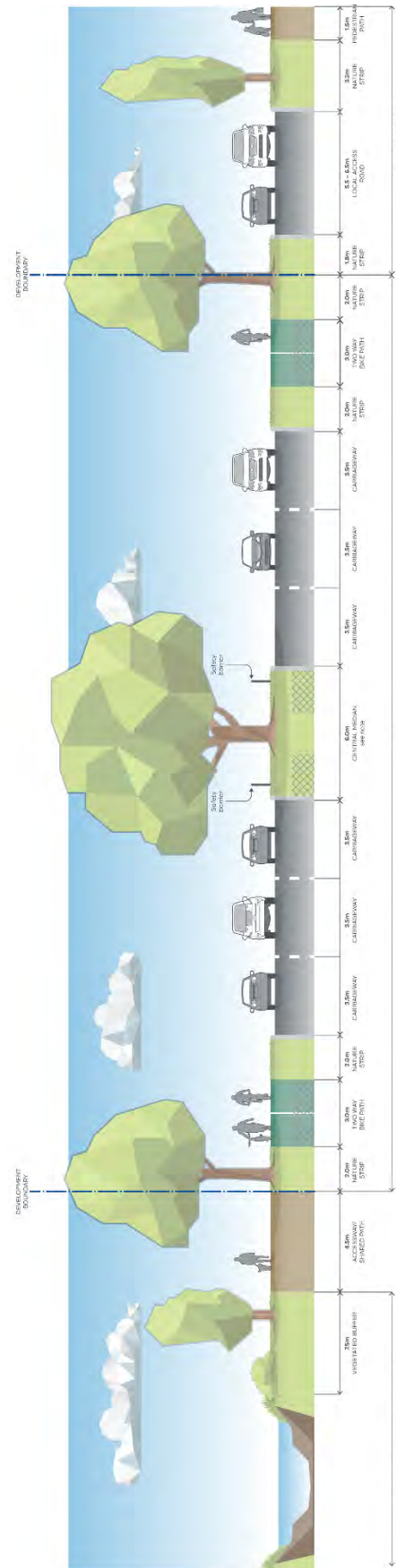
		weather.
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Appendix 7

Standard road cross sections & functional layout plans



Primary Arterial 6 Lane – 41m – Officer South Road with waterway interface



Recommendation 6(p): add notes to relevant cross sections to:

- allow for paths or shared paths to be located within either abutting public open space or the road reserve
- specify that footpaths in the town centre be 1.8 metres wide
- make it clear that the paths on either side of the primary and secondary arterials will initially be a shared path, then converted to a dedicated cycle path once the footpath is provided along the entire length of the adjoining development front.

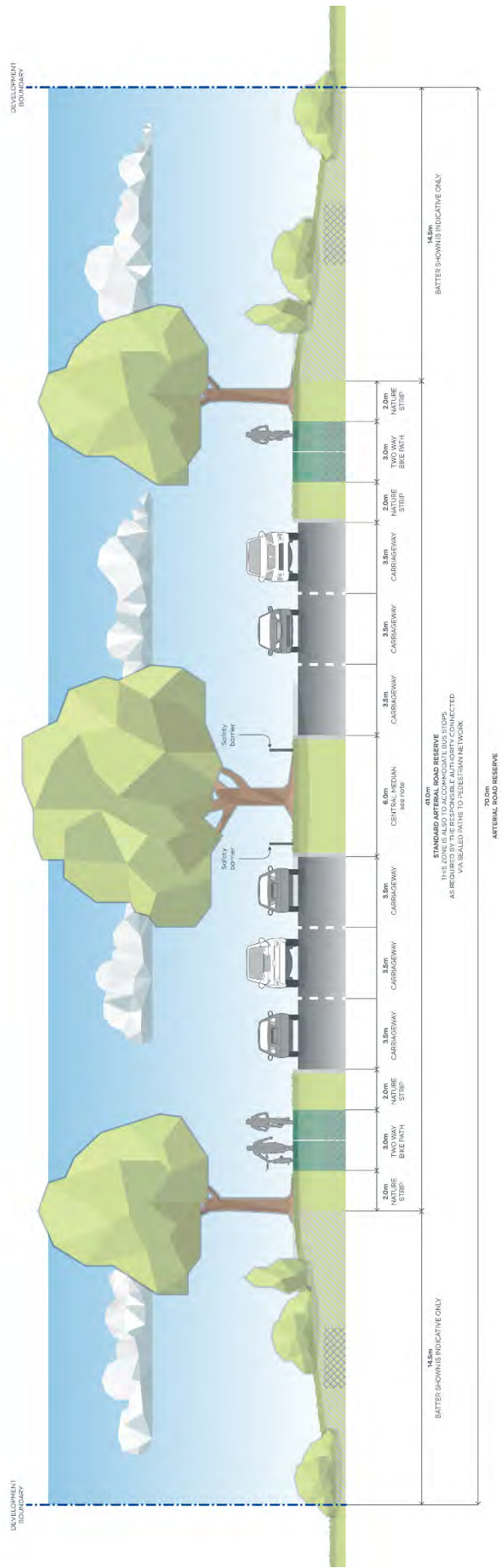
Potential locations for trunk services such as water and 750mm diameter recycled water transfer pattern in the cross sections. These locations are indicative only and are subject to the relevant stakeholders. Final location, depth and placement of the relevant authority. Within tree protection zones, placement of any minimal to no impact to trees or tree root zone responsible authority.



NOTES:

- Includes typical commercial / industrial interface both sides.
- Minimum street tree mature height 15 metres.
- Kerbs for arterial carriageways are to be SM2 Semi-Mountable Kerb, and local frontage roads are to be B2 Barrier Kerb.
- See VicRoads *Tree Planting Policy*. Large trees within the road reserve to be protected by safety barriers where required.
- Off-road two-way cycle path shall change to a shared path when traversing under Princes Freeway to allow pedestrian connectivity to the north
- Provides typical utility services and includes optic fibre conduit and ICP infrastructure for smart city applications

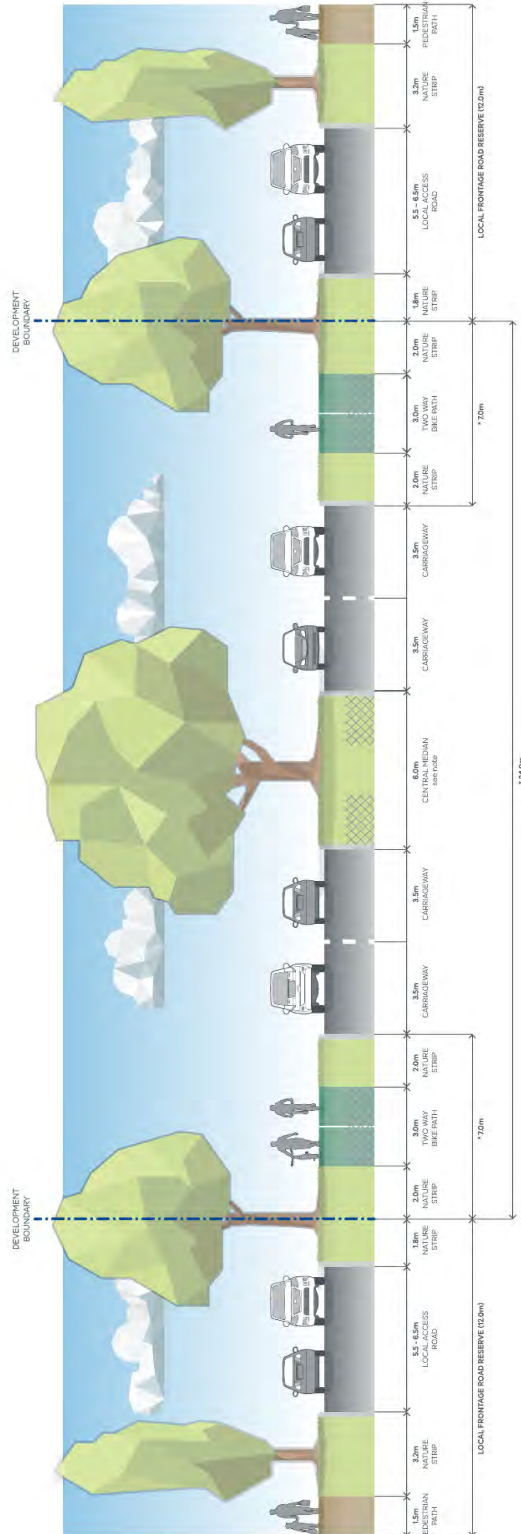
Primary Arterial 6 Lane – 70m – Thompsons Road



NOTES:

- Includes typical commercial/industrial interface both sides. Local frontage road reserves may provide a service road that connects back to the arterial road in accordance with Department of Transport requirements and standards.
 - Minimum street tree mature height 15 metres.
 - Kerbs for arterial carriageways are to be SM2 Semi-Mountable Kerb, and local frontage roads are to be B2 Barrier Kerb.
 - See VicRoads *Tree Planting Policy*. Large trees within the road reserve to be protected by safety barriers where required.
 - Final road reserve width may be reduced and is to be confirmed post-consultation.
 - Provide typical utility services and include optic fibre conduit and ICP infrastructure for smart city applications.
 - The off-road two-way cycle path shall be marked as a shared path until the local access road is constructed, at which point pedestrian paths are provided and the markings shall be amended to indicate a two-way cycle path as shown.
- Potential locations for trunk services such as the 900mm diameter sewer main and 750mm diameter recycled water transfer main are indicated with a hatch pattern in the cross sections.
- These locations are indicative only and are subject to finalisation post-PSP with the relevant stakeholders. Final location, depth and method of placement shall be to the satisfaction of the relevant authority.
- Within tree protection zones, placement of any services must ensure there is minimal to no impact to trees or tree root zones to the satisfaction of the responsible authority.

Secondary Arterial 4 Lane – 34m – Lecky Road



NOTES:

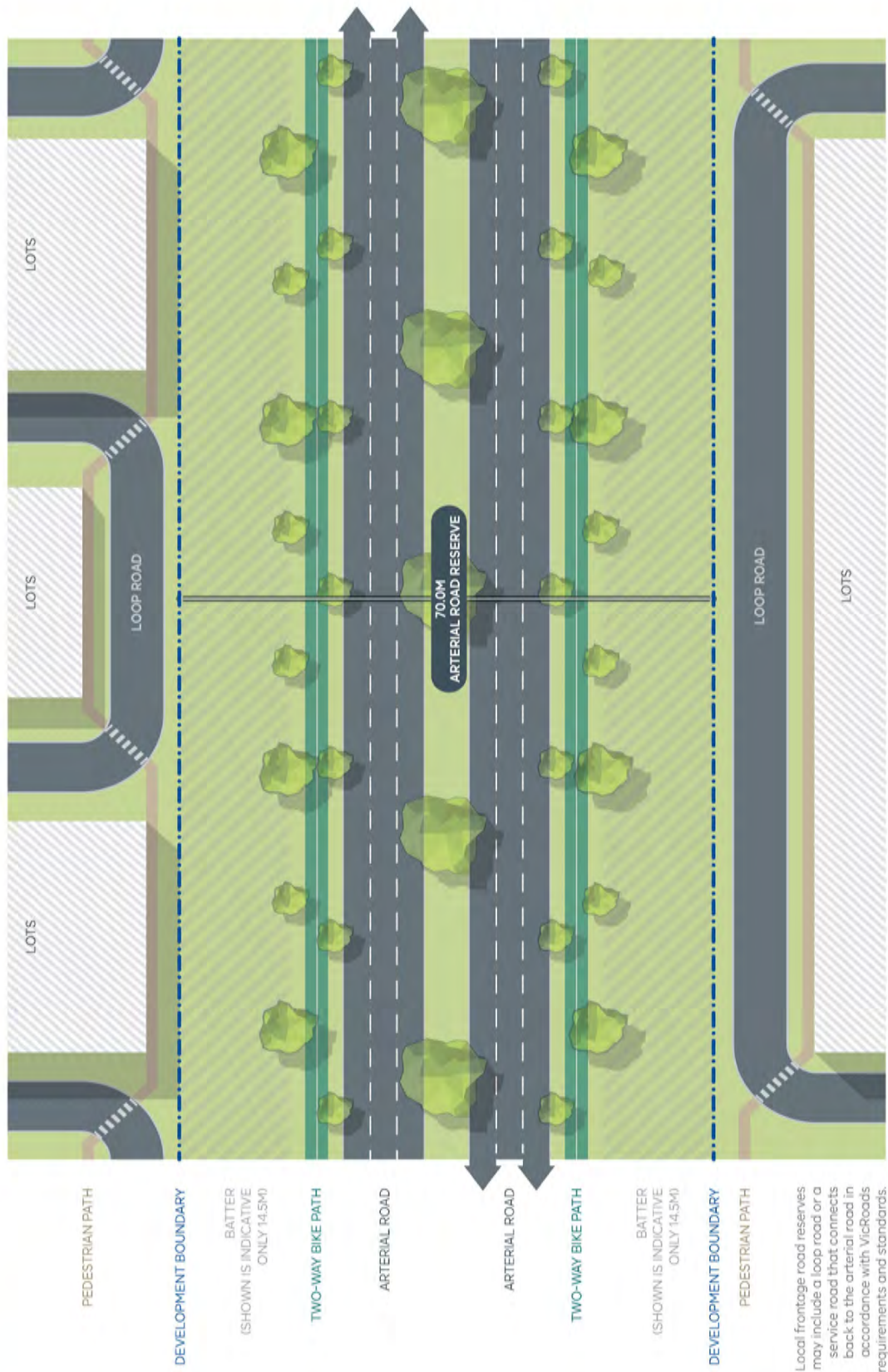
- Includes typical commercial/industrial interface both sides.
- Minimum street tree mature height 15 metres.
- Kerbs for arterial carriageways are to be SM2 Semi-Mountable Kerb, and local frontage roads are to be B2 Barrier Kerb.
- See *VicRoads Tree Planting Policy*. Large trees within the road reserve to be protected by safety barriers where required.
- * Indicates that road reserve width is to increase where required to include the retention of very high and high value trees identified on the Precinct Features Plan where possible in accordance with Australian Standard AS 4970 2009.
- The off-road two-way cycle path shall be marked as a shared path until the local access road is constructed, at which point pedestrian paths are provided and the markings shall be amended to indicate a two-way cycle path as shown.
- Provides for provision of typical utility services and includes optic fibre conduit and ICP infrastructure for street infrastructure.

Potential locations for trunk services such as the 900mm diameter sewer main and 750mm diameter recycled water transfer main are indicated with a hatch pattern in the cross sections.

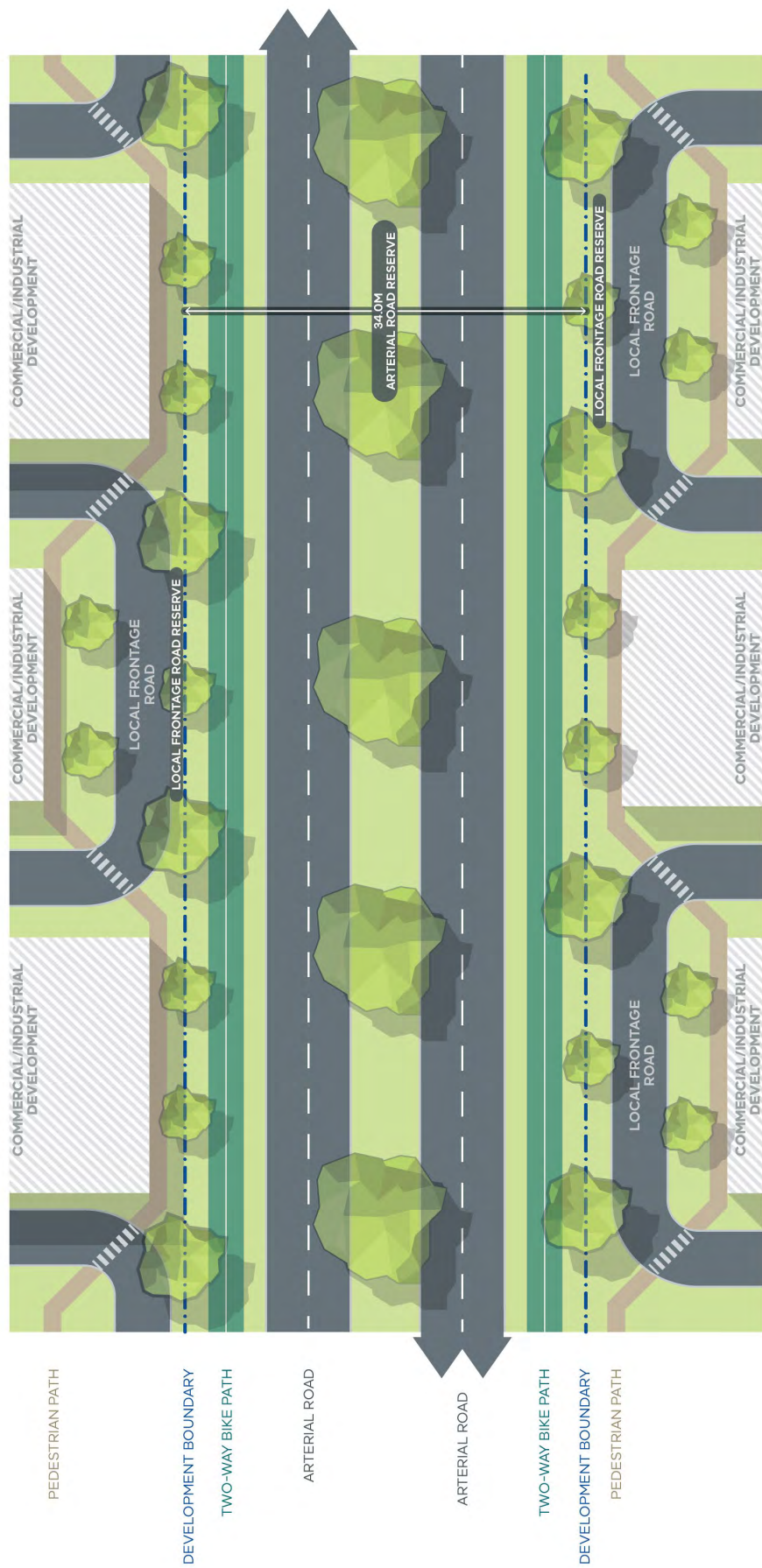
These locations are indicative only and are subject to finalisation post PSP with the relevant stakeholders. Final location, depth and method of placement shall be to the satisfaction of the relevant authority.

Within tree protection zones, placement of any services must ensure there is minimal to no impact to trees or tree root zones to the satisfaction of the responsible authority.

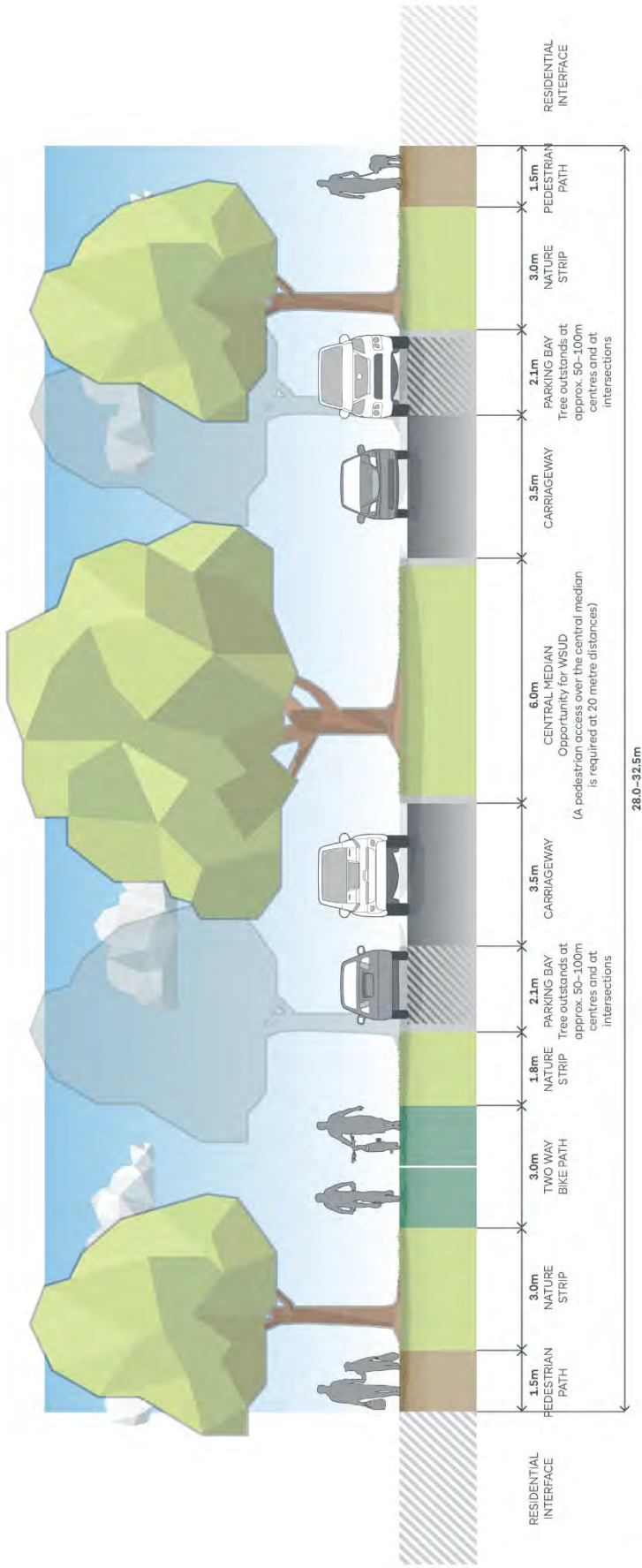
Primary Arterial 6 Lane – 70m – Thompsons Road – Plan view



Secondary Arterial 4 Lane – 34m – Plan view



Connector Street Boulevard – 28m–32.5m – Residential

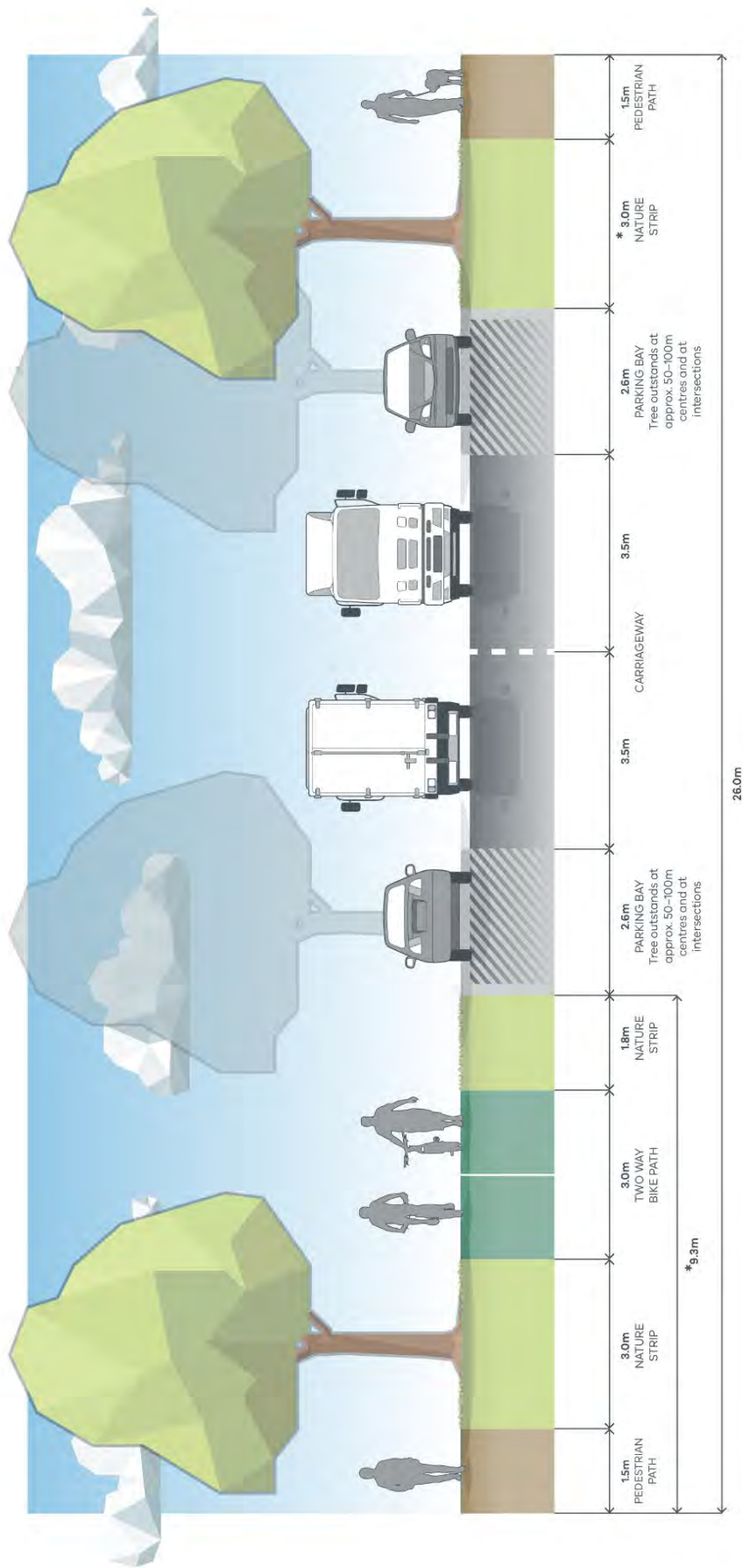


NOTES:

- Include a central median with large canopy trees to create a boulevard effect. Trees are to be centrally planted in median.
- Topsoil used in central medians is to be sandy loam, with a minimum depth of 200mm. The surface of medians is to be free-draining with a minimum cross fall of 2%, and is to be planted with warm season grasses.
- In areas where high pedestrian volumes are expected (e.g. around schools and town centres), central medians should be paved with harder wearing surfaces such as granitic sand or other pavements. Canopy tree planting must be incorporated into additional paved area.
- Any garden beds in central medians are to be offset 1.5m from back of kerb.
- Kerb to central median is to be SM2 semi-mountable kerb.
- Depending on the location of breaks in the median, provide intermediate pedestrian crossing points to accommodate mid-block crossings.
- An alternative boulevard treatment can be achieved through a wider verge on one side capable of accommodating a double row of canopy trees.
- Variations to indicative cross-section may include water sensitive urban design (WSUD) outcomes. 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.
- Provides typical utility services and includes optic fibre conduit and ICP infrastructure for smart city applications.
- Accommodate bus stops zone as required by responsible authority connected via sealed paths to pedestrian network.

Connector Street – 26m – Industrial

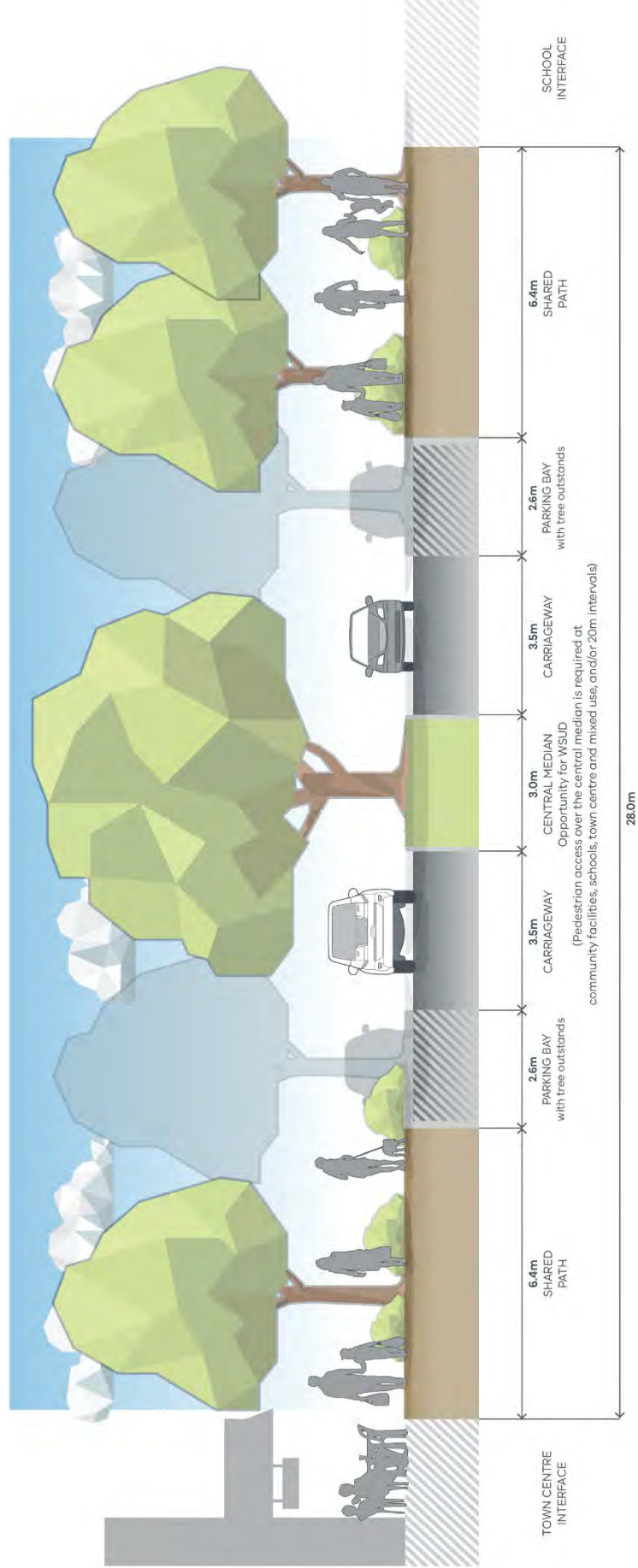
VPA Standard Cross Section



NOTES:

- Minimum street tree mature height 15 metres.
- All kerbs are to be B2 Barrier Kerb.
- Where roads about thoroughfares, grassed nature strip should be replaced with pavement. Canopy tree planting must be incorporated into any additional pavement.
- Verge widths may be reduced where roads about open space with the consent of the responsible authority.
- Variation 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.
- *Varies indicates that road reserve width is to increase where required to include the retention of very high and high value trees identified on the Precinct Features Plan where possible *in accordance with Australian Standard AS 4970 2009*.
- Provides typical utility services and includes optic fibre conduit and ICP infrastructure for smart city applications.
- Where an industrial connector street is shown on the Public Transport and Active Path Networks Plan without an off-road 2-way cycle path, a 3.0m nature strip and 1.5m pedestrian path will be mirrored on either side of the road carriageways to provide a minimum 21.2m cross section

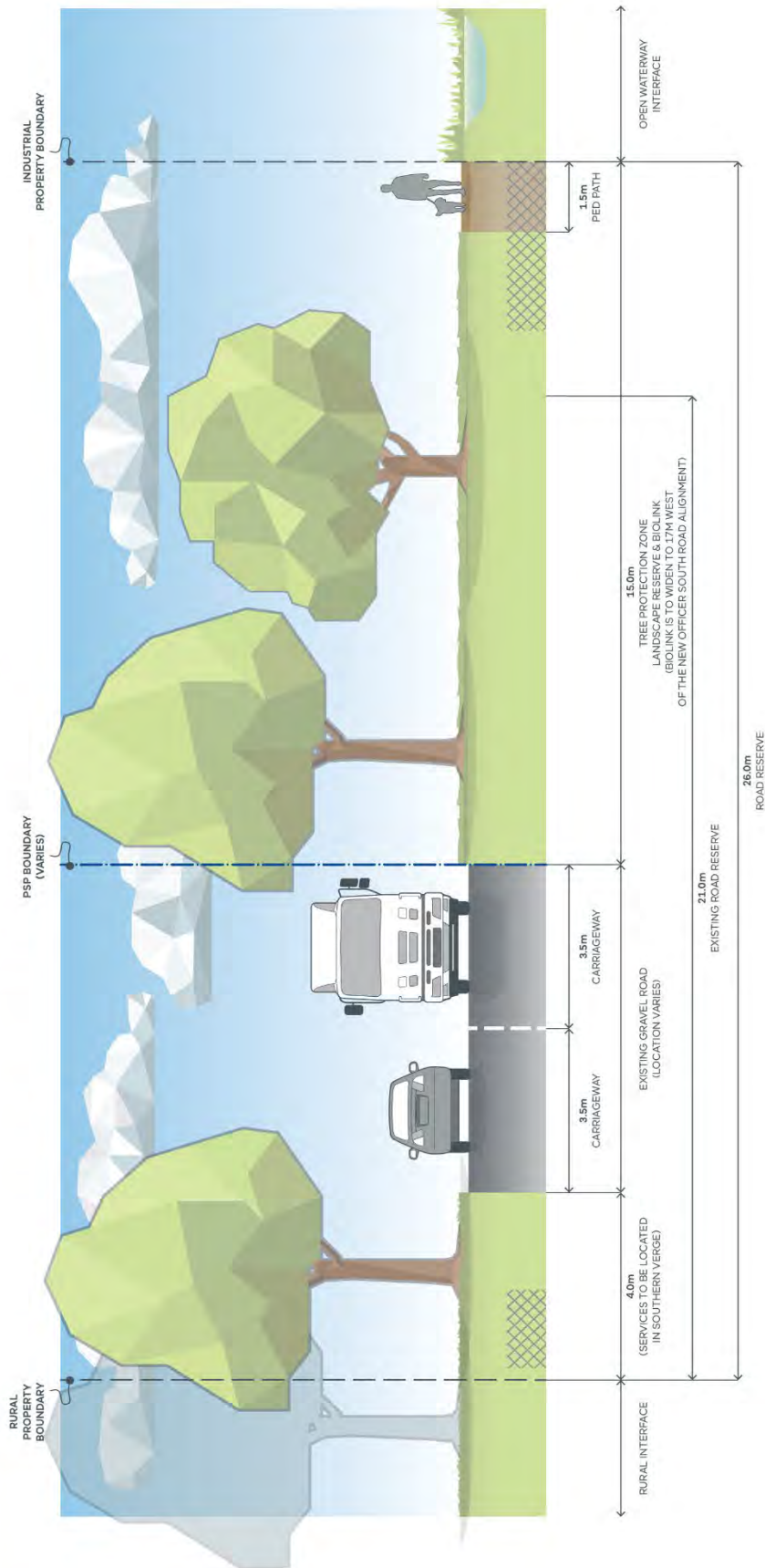
Connector Street Boulevard – 28m – To town centre & schools



NOTES:

- Include a central median with large canopy trees to create a boulevard effect. Trees are to be centrally planted in median.
- Topsoil used in central medians is to be sandy loam, with a minimum depth of 200mm. The surface of medians is to be free-draining with a minimum cross fall of 2%, and is to be planted with warm season grasses.
- Where pedestrian access is required, the central median should be paved with harder wearing surfaces such as granitic sand or other pavements. Canopy tree planting must be incorporated into additional paved area.
- Kerb to central median is to be SM2 semi-mountable kerb.
- Depending on the location of breaks in the median, provide intermediate pedestrian crossing points to accommodate mid-block crossings.
- An alternative boulevard treatment can be achieved through a wider verge on one side capable of accommodating a double row of canopy trees.
- Variations to indicative cross-section may include water sensitive urban design (WSUD) outcomes. 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.
- Provide typical utility services and includes optic fibre conduit and ICP infrastructure for smart city applications.
- Accommodate bus stop zones as required by responsible authority connected via sealed paths to pedestrian network.
- The shared path to the school interface shall circle the school's perimeter in order to not continue past the school to the residential frontages. A pedestrian path is to front the residential development

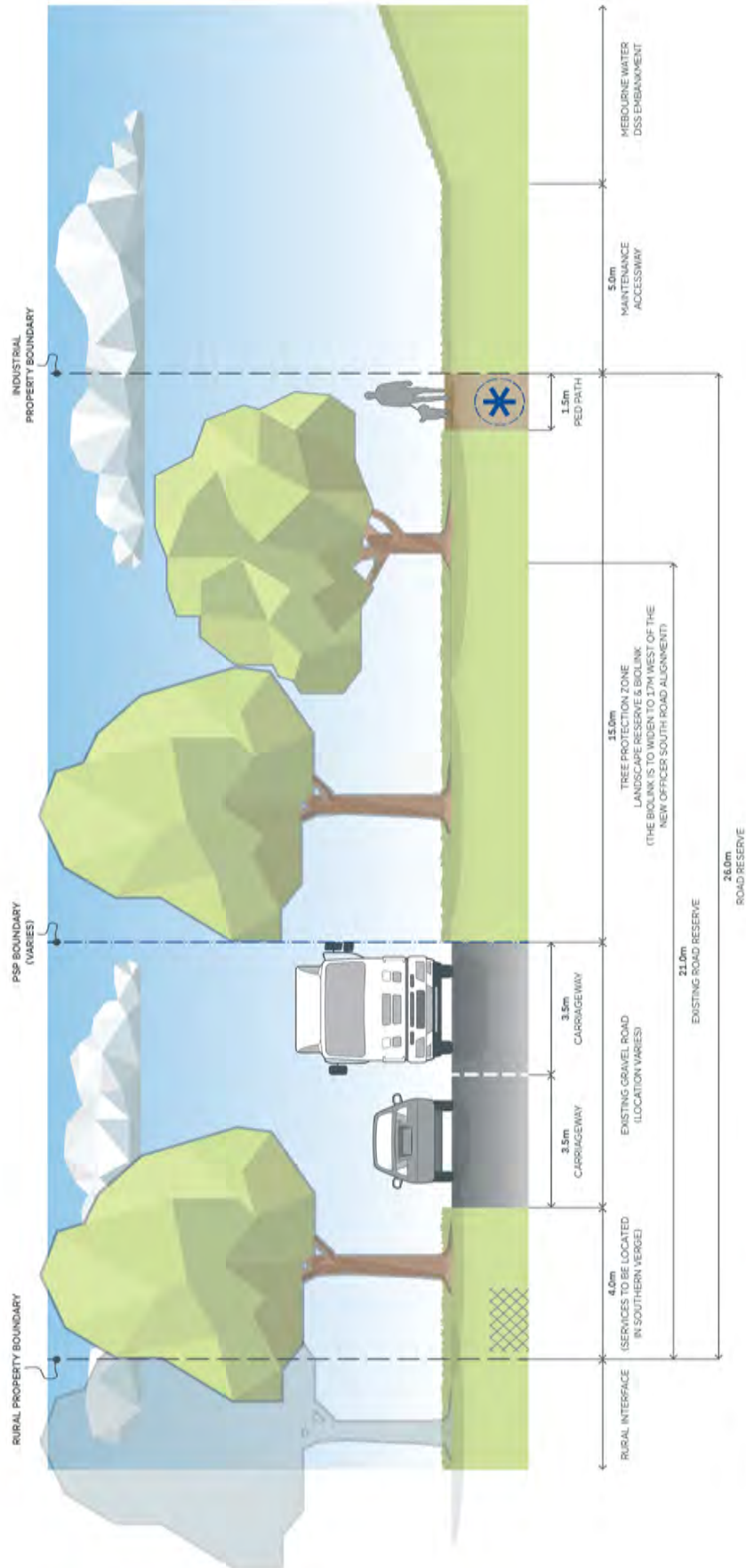
Patterson Road – 26m – rural interface road adjacent open waterway



NOTES:

- The PSP boundary location varies within the road reserve and in relation to the existing gravel road. The final road pavement and road reserve may vary from this cross section, protecting the biolink as the main focus of the road reserve design.
 - To provide suitable access, the existing gravel road located both internal and external to the precinct boundary, is to be sealed to the satisfaction of the relevant authority.
 - Existing trees within the biolink and very high to high value trees identified on the Precinct Features Plan should be retained where practical and to the satisfaction of the responsible authority.
 - Where roads about thoroughfares, grassed nature strip should be replaced with pavement.
 - Canopy tree planting must be incorporated into any additional pavement.
 - Provide typical utility services and include optic fibre conduit and ICP infrastructure for smart city applications.
- An access way for maintenance purposes is required within the waterway reserve interfacing with the biolink. Melbourne Water in consultation with council will undertake a functional design of this constructed waterway to ensure waterway functions, maintenance, biolink requirements and sodic soil risks are applied. In relation to this waterway and the subdivision interface, refer to G37. For all the other PSP constructed waterways, refer to Typical open waterway interface cross section in Appendix 7.
- Potential locations for trunk services such as the 900mm diameter sewer main and 750mm diameter recycled water transfer main are indicated with a hatch pattern in the cross sections. These locations are indicative only and are subject to finalisation post-PSP with the relevant stakeholders. Final location, depth and method of placement shall be to the satisfaction of the relevant authority.
- Within tree protection zones, placement of any services must ensure there is minimal to no impact to trees or tree root zones to the satisfaction of the responsible authority.


Patterson Road – 26m – rural interface road adjacent retarding basin



NOTES:

- The PSP boundary location varies within the road reserve and in relation to the existing gravel road. The final road pavement and road reserve may vary from this cross section, protecting the biolink as the main focus of the road reserve design.
- To provide suitable access, the existing gravel road located both internal and external to the precinct boundary, is to be sealed to the satisfaction of the relevant authority.
- Existing trees within the biolink and very high to high value trees identified on the Precinct Features Plan should be retained where practical and to the satisfaction of the responsible authority. No works are to occur within the Tree Protection Zone as per the Australian standards for tree protection unless to the satisfaction of the responsible authority.
- Provide typical utility services and include optic fibre conduit and ICP infrastructure for smart city applications.

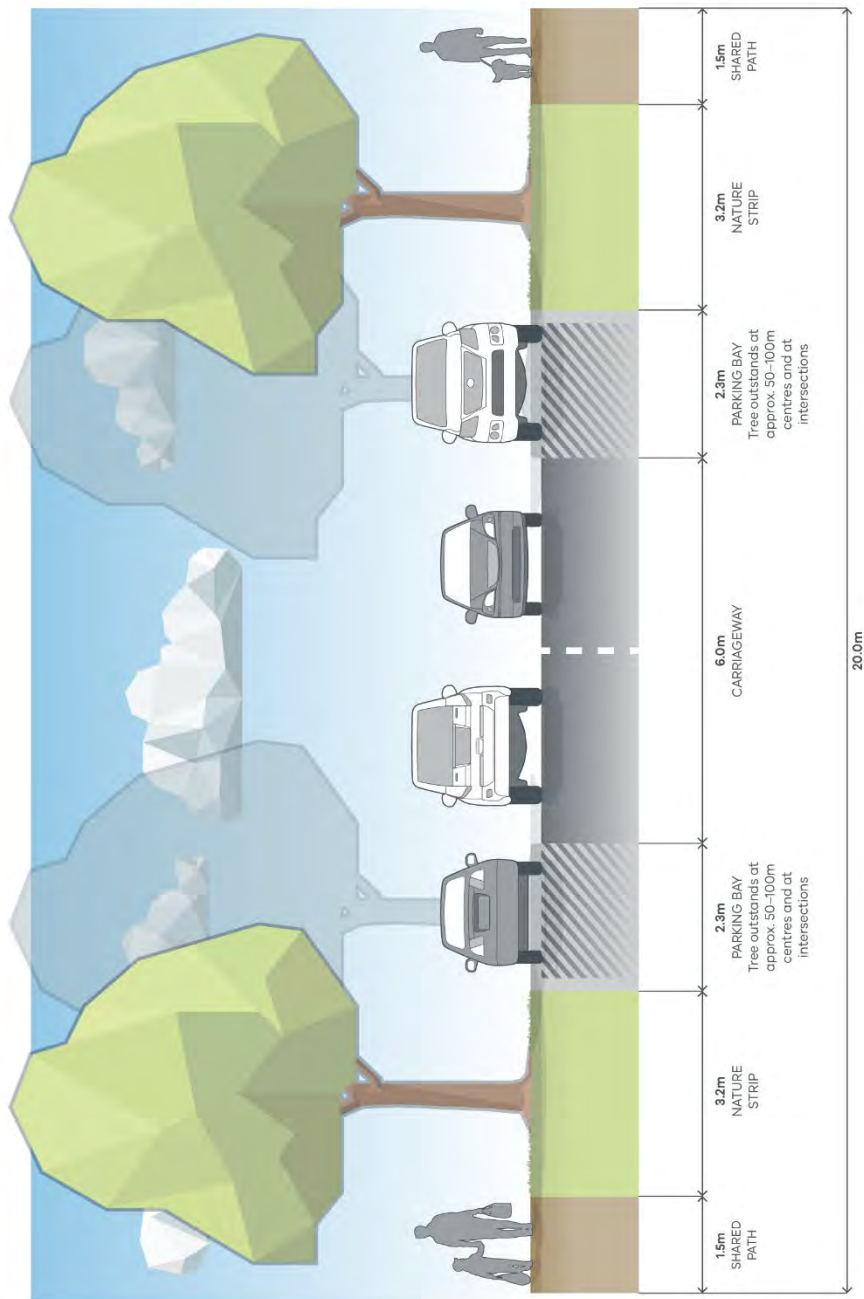
 1500mm diameter Melbourne Water overflow pipe to be located under the pedestrian path for the last 100m of the road reserve, subject to further functional and detailed design to the satisfaction of Melbourne Water and responsible authorities. The biolink trees must be protected to the satisfaction of Cardinia Council.

 Potential locations for trunk services such as the 900mm diameter sewer main and 750mm diameter recycled water transfer main are indicated with a hatch pattern in the cross sections. These locations are indicative only and are subject to finalisation post-PSP with the relevant stakeholders. Final location, depth and method of placement shall be to the satisfaction of the relevant authority.

Within tree protection zones, placement of any services must ensure there is minimal to no impact to trees or tree root zones to the satisfaction of the responsible authority.

Local Access Street Level 2 – 20m – Residential

VPA Standard Cross Section

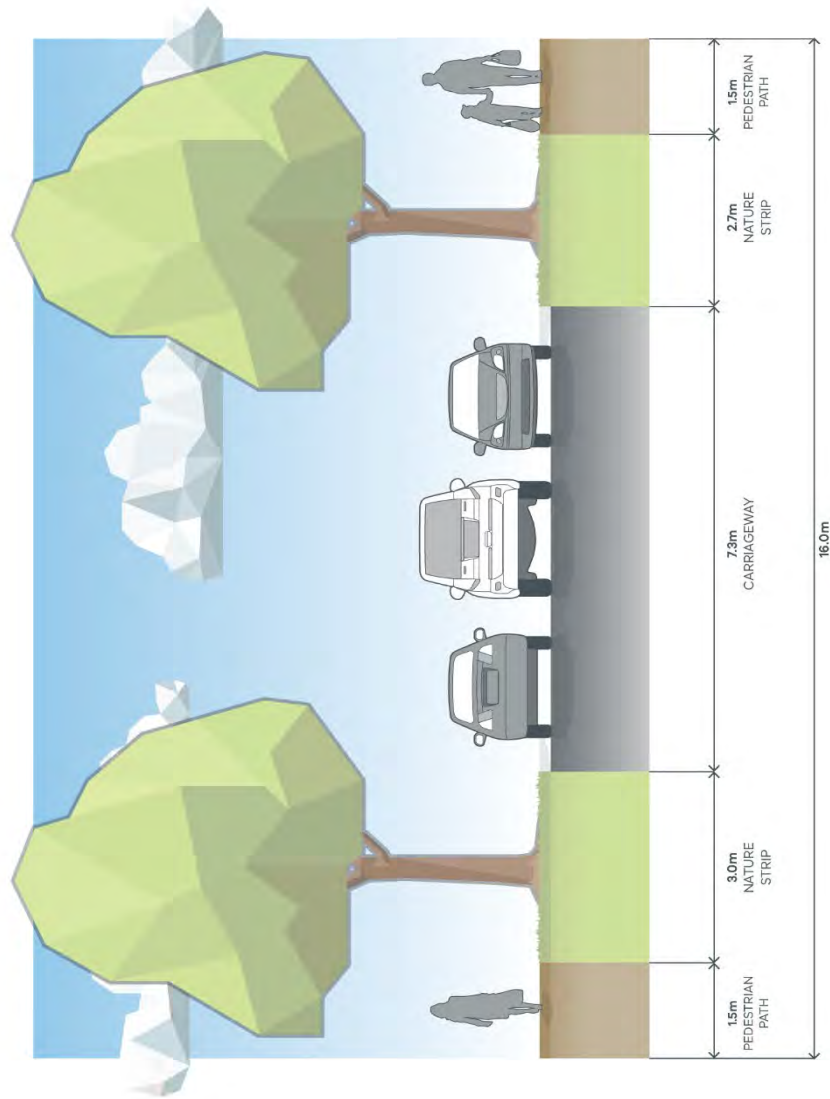


NOTES:

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

Local Access Street Level 1 (16m)

VPA Standard Cross Section

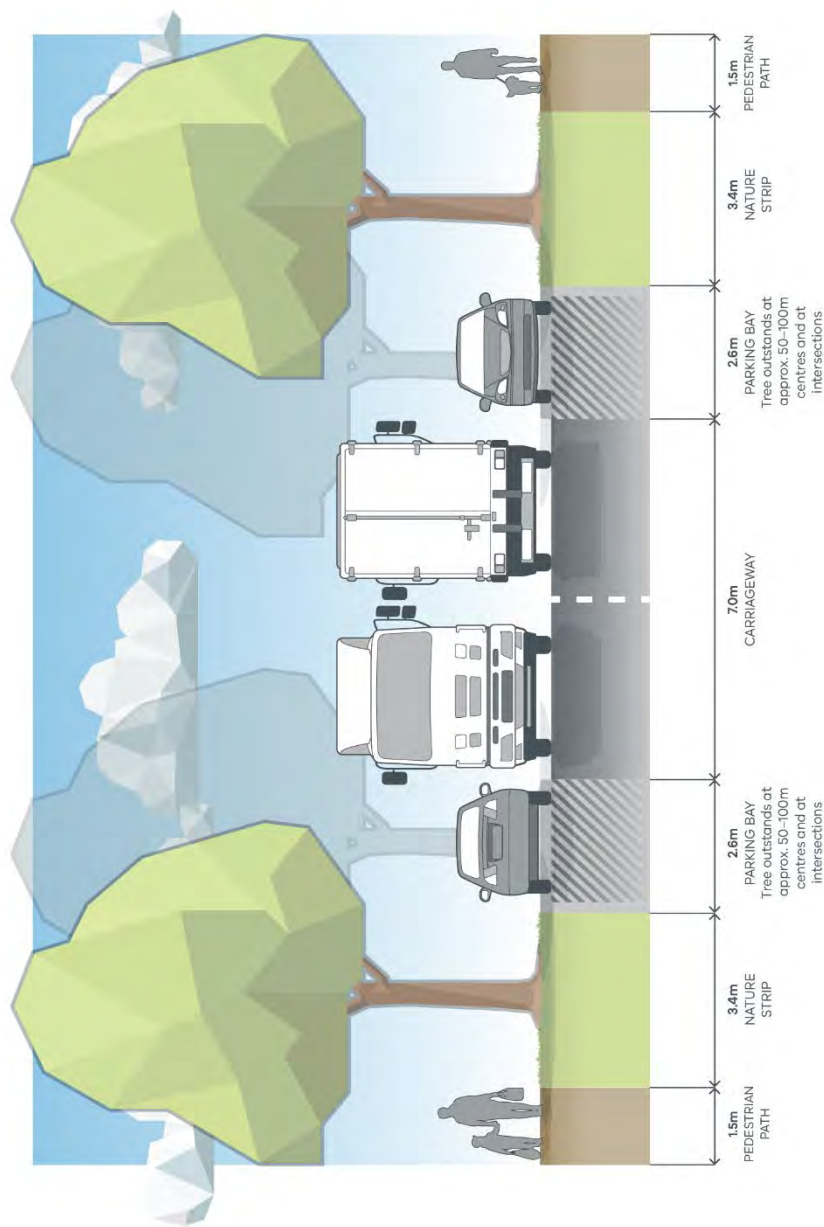


NOTES:

- Minimum street tree mature height 15 metres.
- All kerbs are to be B2 Barrier Kerb.
- Verge widths may be reduced where roads about open space with consent of the responsible authority.

Local Access Street Level 2 – Industrial (22m)

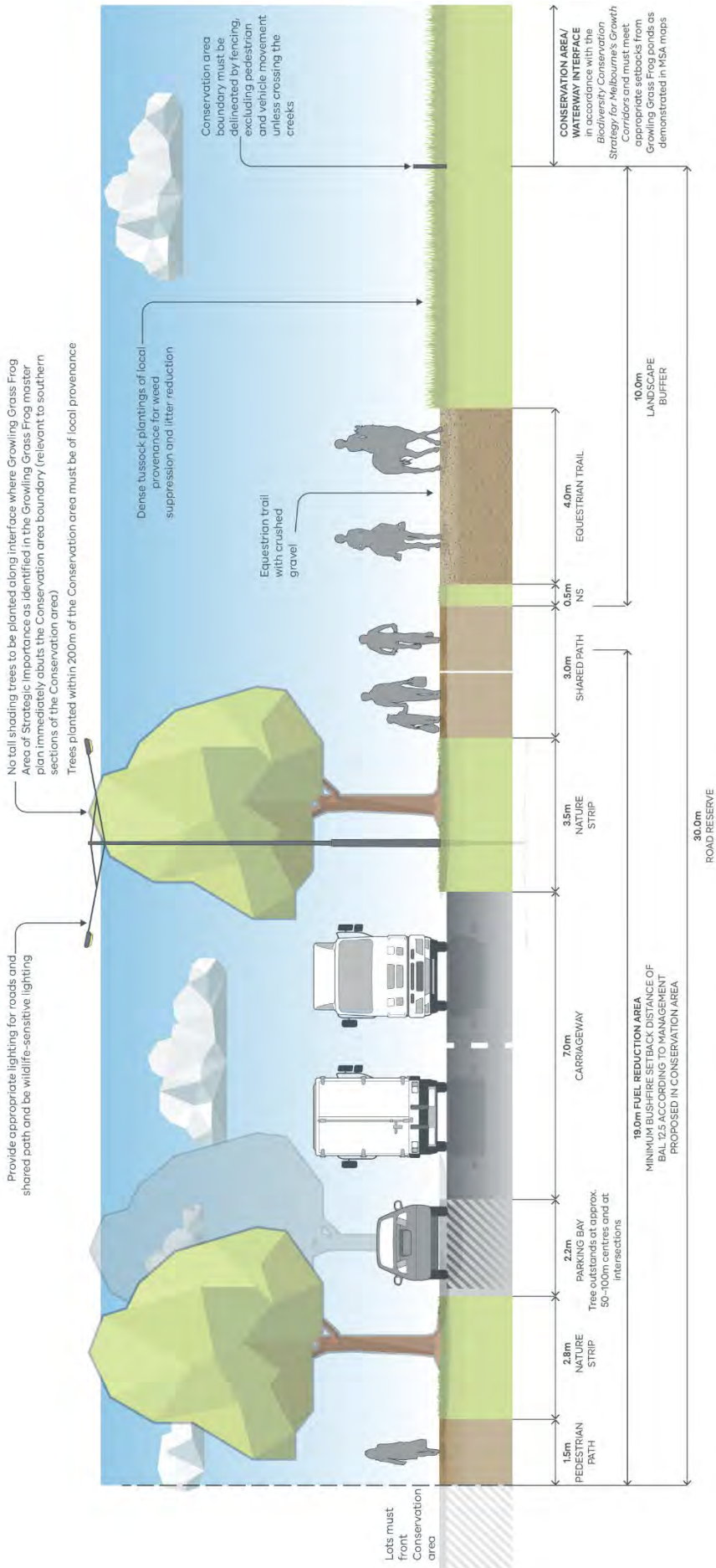
VPA Standard Cross Section



NOTES:

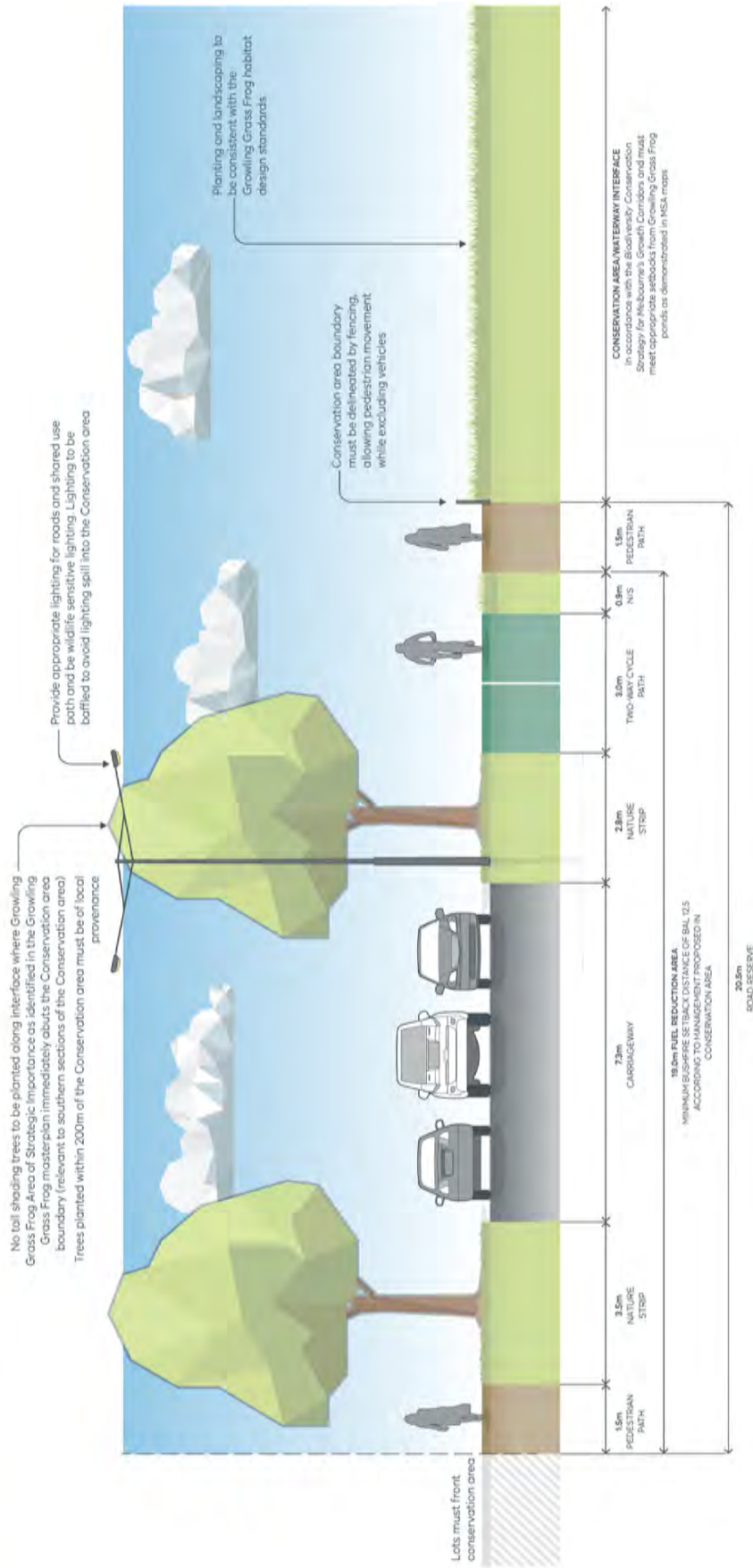
- All kerbs are to be B2 Barrier Kerb.
- Verge widths may be reduced where roads abut open space with consent of the responsible authority.

Local Access Street Industrial – CVIA and Conservation area



- NOTES:
- Street tree planting of a medium to large size appropriate for the widths and function of the street.
 - All kerbs are to be B2 Barrier Kerb.
 - Verges widths may be reduced where roads abut open space with the consent of the responsible authority.
 - All necessary fire breaks must be outside of the Conservation area.
 - Fencing must be constructed in accordance with the recommendations in the DEECA requirements for permanent fencing around conservation areas under the Melbourne Strategic Assessment.
 - Street lights installed in the nature strip must provide lighting for both the road and shared path and be wildlife sensitive lighting to assist reducing light spill into the Conservation area, in accordance with the MSA Growing Grass Frog Crossing Design Standards.
 - Nature strip trees must be indigenous species within 200m of Conservation areas, in accordance with the Cardinia Shire Council Developer Landscape Guidelines.
 - Space must be provided for off-road vehicle pull-over bays at maintenance access points (minimum 12m long x 2.1m wide).
 - Provides typical utility services and includes optic fibre conduit and ICP infrastructure for smart city applications.

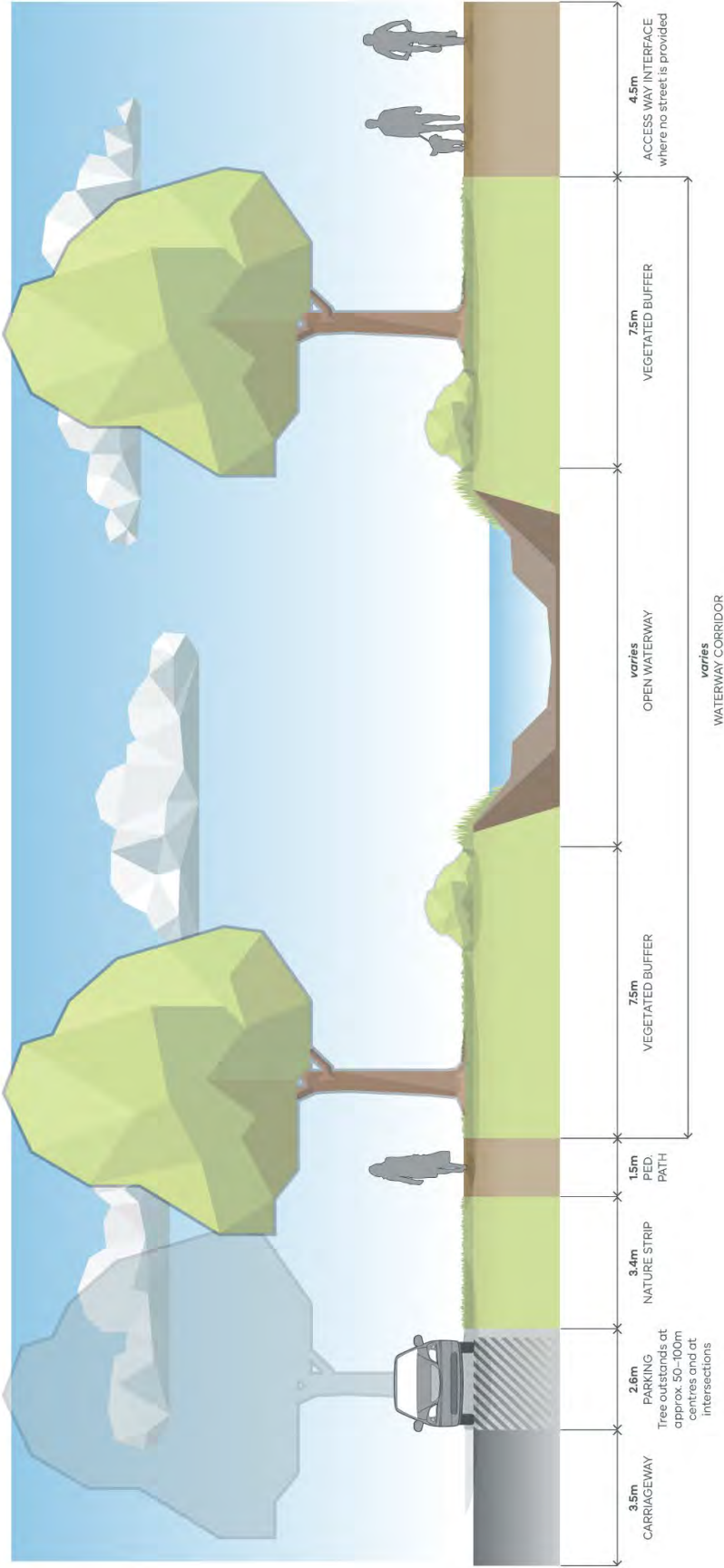
Local Access Street residential – conservation interface



NOTES:

- Street tree planting of a medium to large size appropriate for the widths and function of the street.
- All kerbs are to be B2 Barrier Kerb.
- Verges widths may be reduced where roads about open space with the consent of the responsible authority.
- All necessary fire breaks must be outside of the conservation area.
- Fencing must be constructed in accordance with the recommendations in the DEECA requirements for permanent fencing around conservation areas under the Melbourne Strategic Assessment.
- Street lights installed in the nature strip must provide lighting for both the road and shared path and be wildlife sensitive lighting to assist reducing light spill into the Conservation Area, in accordance with the MSA Growing Grass Frog Crossing Design Standards.
- Nature strip trees must be indigenous species within 200m of Conservation areas, in accordance with the Cardinia Shire Council Developer Landscape Guidelines.
- Space must be provided for off-road vehicle pull-over bays at maintenance access points (minimum 12m long x 2.1m wide).
- Provides typical utility services and includes optic fibre conduit and ICP infrastructure for smart city applications.

Open waterway interface to utility easements



- NOTE:
- Shared pathways (including equestrian trails) and infrastructure is to be located outside the waterway corridor.
 - This is a typical cross section for the constructed open waterways interfacing with a utility easement **excluding** Lower Gum Scrub Creek and the Patterson Road biolink waterway which addresses protected tree root zones.
 - A 4.5m wide access way is to be included within the active edge zone for use as a maintenance track where no street interface is proposed. This can be co-used as a shared path or equestrian trail.

Appendix 8 Design and location of underground services

The *Engineering Design and Construction Manual for Subdivision in Growth Areas* (December 2019) outline placement of services for a typical residential street environment. This approach is appropriate for most of the 'standard' road cross sections outlined in Appendix 7 – Standard road cross sections & functional layout plans, containing grassed nature strips, footpaths and road pavements.

(i) Non-standard road cross sections

To achieve greater diversity of streetscape outcomes in Melbourne's growth areas, 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. This PSP contains suggested non-standard 'variation' road cross sections, however other non-standard outcomes are encouraged.

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* (December 2019)' is not applicable, the following service placement guidelines will apply, if being installed.

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 (e.g. drainage, street light electricity supply) closer to the road carriageway
- Maintain appropriate services clearances and overlap these clearances wherever possible.

Table 11: Design and location of underground services

	Under pedestrian pavement	Under nature strips	Directly under trees	Under kerb	Under road pavement	Within allotments	Notes
SEWER	Preferred	Possible	Possible	No	Possible	Possible	
POTABLE WATER	Possible	Preferred	Preferred	No	No	No	Can be placed in combined trench with gas
RECYCLED WATER	Possible	Preferred	Preferred	No	No	No	
GAS	Possible	Preferred	Preferred	No	No	No	Can be placed in combined trench with potable water
ELECTRICITY	Preferred	Possible	Possible	No	No	No	Pits to be placed either fully in footpath or nature strip

FTTH/TELCO	Preferred	Possible	Possible	No	No	No	Pits to be placed either fully in footpath or nature strip
DRAINAGE	Possible	Possible	Possible	Possible	Possible	Possible	
TRUNK SERVICES	Possible	Possible	Possible	Possible	Possible	No	

NOTES

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

Appendix 9 Glossary of terms

TERM	DEFINITION
activity centre	Provide the focus for services, employment and social interaction. They are where people shop, work, meet, relax and live. Usually well-served by public transport, they range in size and intensity of use.
affordable housing	Has the same meaning as Section 3AA of the <i>Planning and Environment Act 1987</i> .
Biodiversity Conservation Strategy (BCS)	The <i>Biodiversity Conservation Strategy for Melbourne Growth Corridors</i> (State Government of Victoria, 2013).
canopy cover	The total area that all canopy tree foliage covers within the public realm.
canopy tree	A tree which has a potential canopy of foliage larger than 6m in diameter at maturity in the summer months.
CHMP	Cultural heritage management plan
co-location	Adjoining land uses to enable complementary programs, activities, and services as well as shared use of resources and facilities, for example, the co-location of schools and sporting fields.
community facilities	<p>Infrastructure provided by government or non-government organisations for accommodating a range of community support services, programs, and activities. This includes:</p> <ul style="list-style-type: none"> Facilities for education and learning (e.g. government and non-government schools, universities, adult learning centres) Early years (e.g. preschool, maternal and child health, childcare) Health and community services (e.g. hospitals, aged care, doctors, dentists, family and youth services, specialist health services) Community (e.g. civic centres, libraries, neighbourhood houses) Arts and culture (e.g. galleries, museums, performance space) Sport, recreation and leisure (e.g. swimming pools) Justice (e.g. law courts) Voluntary and faith (e.g. places of worship) and Emergency services (e.g. police, fire and ambulance stations).
encumbered land	Land that is constrained for development purposes, including easements for power/transmission lines, sewer, gas, waterways/drainage; retarding basins/wetlands; landfill; conservation, protected vegetation and heritage areas. This land may be used for a range of activities (e.g. walking trails, sports fields) and is not credited. However, regard is taken to the availability of encumbered land when determining the open space requirement.
fire threat edge	The interface between urban development and an area which presents a permanent potential for fire to impact on a community.
frontage	The road alignment at the front of a lot. If a lot abuts two or more roads, the one to which the building, or proposed building faces.
gross developable area	Total precinct area excluding encumbered land, arterial roads and other roads with four or more lanes.
high density housing	Housing with an average density of 40 dwellings or more per net developable hectare.
housing density (gross)	The number of houses divided by gross developable area.

housing density (net)	The number of houses divided by net developable area.
Key worker housing	<i>Affordable rental housing that is appropriate for people who work within Cardinia Shire Council, who require a physical presence to perform their work, and whose household earns very low, low or moderate incomes. The housing must be allocated and monitored by a Registered Housing Agency.</i>
linear open space network	Corridors of open space, mainly along waterways that link together forming a network.
land-use budget table	A table setting out the total precinct area, gross developable area, net developable area and constituent land uses proposed within the precinct.
main street	A function of an activity centre, where vitality and activity are created by orienting uses towards the street and ensuring that the primary address of all retail stores is the street. This would normally be a connector street rather than an arterial road.
medium density housing	Housing with an average density of 35–39 dwellings per net developable hectare.
local town centre	Activity centres that are an important community focal point and have a mix of uses to meet local needs. Accessible to a viable user population by walking, cycling and by local bus services and public transport links to one or more principal or major activity centres. This should be sufficient size to accommodate a supermarket.
net developable area	Land within a precinct available for development. This excludes encumbered land, arterial roads, railway corridors, government schools and community facilities and public open space. It includes lots, local streets, and connector streets. Net Developable Area may be expressed in terms of hectare units (i.e. NDHa).
passive open space	Open space that is set aside for parks, gardens, linear corridors, conservation bushlands, nature reserves, public squares and community gardens that are made available for passive recreation, play and unstructured physical activity including walking, cycling, hiking, revitalisation, contemplation and enjoying nature.
principal public transport network	Incorporated document <i>Principal Public Transport Network 2017</i> (Victorian Government, 2017), and <i>Principal Public Transport Network Area Maps</i> (Victorian Government, August 2018).
principal freight network	A strategic network of current and recognised future freight places and connecting movement corridors (road and rail) which are nationally, state and/or regionally significant.
public open space	Land that is set aside in the precinct structure plan for public recreation that incorporates active and passive open space.
social housing	A type of rental housing that is provided and/or managed by the government or by a not-for-profit organisation. Social housing is an overarching term that covers both public housing and community housing.
Labour Hire Accommodation	<i>Any house, building, structure or site (including any shared facilities on a site), whether temporary or permanent, used to provide accommodation for a worker under, or in connection with, a labour hire arrangement with that worker. It applies to four or more workers.</i>
Temporary Crisis Accommodation	<i>Temporary crisis accommodation provided on a non-profit basis by an agency which receives homelessness support funding from the State.</i>
sensitive response	A design or engineered response that does not significantly contrast with the existing landform.

unencumbered	Land that is not constrained by uses required to enable development (including easements for power/transmission lines, sewer, gas, waterways/ drainage: retarding basins/wetlands; landfill; conservation protection vegetation and heritage areas).
water sensitive urban design	A sustainable water management approach that aims to provide water-quality, flood management and green landscapes. Key principles include minimising water-resistant areas; recharging natural groundwater aquifers (where appropriate) by increasing the amount of rain absorbed into the ground; encouraging onsite reuse of rain and incorporation of rain gardens' encouraging onsite treatment to improve water quality and remove pollution and using temporary rainfall storage (e.g., basins/wetlands) to reduce the load on drains.
biodiversity sensitive urban design	A protocol with the aim of transforming urban areas to have increased habitat and food resources for native species and ecological communities.

Appendix 10 Recommended Tree Inclusion on Plan 2 and 7

Table 13: 345 Officer South Road

Homewood Consulting Number	Tree Should be included on Plan 2	Reason	Tree should be included on Plan 7 as:		Tree should NOT be shown on Plan 7 (not native to Victoria)
			"Native tree to be retained"	"Native tree to be retained if possible, to the satisfaction of the Responsible Authority"	
28 – 36, 38, 39, 41	Yes	Trees of fair or good health and structure with long ULE	No	Yes (planted)	N/A
18 – 27, 37	Yes	Trees of fair or good health and structure with long ULE	No	No	Yes
17	No	Not suitable for retention on areas accessed by public	N/A	N/A	N/A
43 – 47, 50 – 64	No	Starting to break up	N/A	N/A	N/A
48, 49, 65 – 69	No	Break up of adjacent Trees 50 – 64 likely to lead to changes in wind dynamics that will impact structural integrity of these trees	N/A	N/A	N/A

Table 14: 425 Officer South Road

Homewood Consulting Number	Tree Should be included on Plan 2	Reason	Tree should be included on Plan 7 as:		Tree should NOT be shown on Plan 7 (not native to Victoria)
			"Native tree to be retained"	"Native tree to be retained if possible, to the satisfaction of the Responsible Authority"	
85, 121	Yes	Remnant tree in good condition	Yes		
88, 92, 94 – 99, 102 – 113, 128 – 150, 154 – 162, 172, 178, 190 – 199, 202 – 207	Yes	Trees of fair or good health and structure with long ULE	No	Yes (planted)	N/A
70, 71, 72, 86, 87, 89 – 91, 151 – 153, 163 – 171, 174 – 177, 179 – 183, 186 – 189, 208, 210, 211	Yes	Trees of fair or good health and structure with long ULE.	No	No	Yes
93, 100, 101, 200, 201	Only if confirmed habitat tree	Habitat value to be confirmed by ecologist	No	Only if confirmed habitat tree	N/A
173, 184, 185	No	All <i>Pinus radiata</i> , a species recognised by Cardinia Shire Council as an environmental weed	N/A	N/A	N/A
209	No	In decline	N/A	N/A	N/A
122 – 123	No	Starting to break up	N/A	N/A	N/A

**Officer South Employment
Precinct Structure Plan
April 2024 – Final Day Version**



Appendix E Committee recommended version of the Urban Growth Zone Schedule 7

[Tracked Added](#)

[Tracked Deleted](#)

SCHEDULE 7 TO CLAUSE 37.07 URBAN GROWTH ZONE

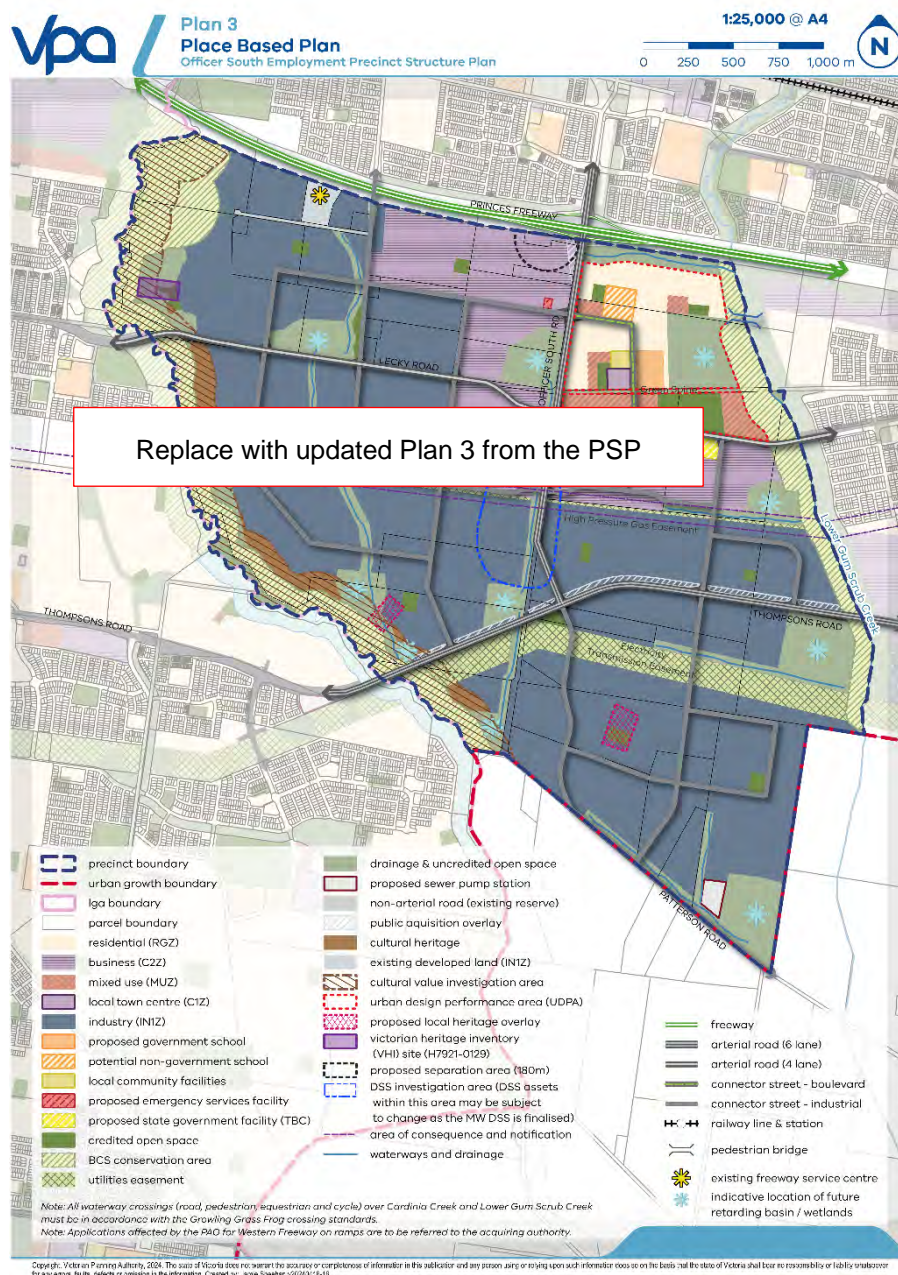
Shown on the planning scheme map as **UGZ7**.

OFFICER SOUTH EMPLOYMENT PRECINCT STRUCTURE PLAN

1.0 The Plan

Plan 1 shows the future urban structure proposed in the incorporated *Officer South Employment Precinct Structure Plan*.

Plan 1 to Schedule 7 of Clause 37.07



2.0 Use and development

2.1 The Land

The use and development provisions specified in this schedule apply to the land within the 'precinct boundary' on Plan 1 and shown as UGZ7 on the planning scheme maps. This schedule must be read in conjunction with the incorporated Officer South Employment Precinct Structure Plan (PSP).

Note: If land shown on Plan 1 is not zoned UGZ, the provisions of this zone do not apply

2.2 Applied zone provisions

Table 1 allocates the land use/development shown on Plan 1 of this schedule with a corresponding zone from this scheme.

Where the use/development in the left column is carried out or proposed generally in accordance with the incorporated Officer South Employment Precinct Structure Plan, the use, subdivision, construction of a building and construction and carrying out of works provisions of the corresponding zone in the right column apply.

A reference to a planning scheme zone in an applied zone must be read as if it were a reference to an applied zone under this schedule.

Note: e.g. The General Residential Zone specifies 'Place of worship' as a Section 1 Use with the condition, 'The site must adjoin, or have access to, a road in a Transport Zone.' In this instance the condition should be read as, 'The site must adjoin, or have access to, a road in a Transport Zone or an applied Transport Zone in the Urban Growth Zone schedule applying to the land'

Table 1: Applied zone provisions

Land shown on plan 1 of this schedule as Local town centre	Applied Zone Provisions Clause 34.01 – Commercial 1 Zone
Land shown on plan 1 of this schedule as Business	Applied Zone Provisions Clause 34.02 - Commercial 2 Zone
Land shown on plan 1 of this schedule as Industry, existing developed land or waterway and drainage	Applied Zone Provisions Clause 33.03 - Industrial 1 Zone
Land shown on plan 1 of this schedule as Mixed Use	Applied Zone Provisions Clause 32.04 – Mixed Use Zone
Land shown on plan 1 of this schedule as Freeway Arterial road	Applied Zone Provisions Clause 36.04 – Transport Zone 2
Land shown on plan 1 of this schedule as Public Acquisition Overlay on Officer South Road	Applied Zone Provisions Clause 34.02 - Commercial 2 Zone

Land shown on plan 1 of this schedule as Public Acquisition Overlay on Thompsons Road	Applied Zone Provisions Clause 33.03 - Industrial 1 Zone
Land shown on plan 1 of this schedule Residential All other land	Applied Zone Provisions Clause 32.07 – Residential Growth Zone

2.3 Specific provisions – Use of land

Section 1 - Permit not required

Use	Condition
Use	Condition
Art Gallery – where the applied zone is Commercial 2 Museum – where the applied zone is Commercial 2	Must not be on land identified within the South East Water 'separation area (180m)' on Plan 3 – Place Based Plan of the incorporated <i>Officer South Employment Precinct Structure Plan</i>
Cinema – where the applied zone is Commercial 2 Cinema based facility – where the applied zone is Commercial 2	Must not be on land shown within the 'area of consequence and notification' depicted on Plan 13 - Utilities of the incorporated <i>Officer South Employment Precinct Structure Plan</i> The site must adjoin, or have access to, a road in a Transport Zone 2 or Transport Zone 3. Must not be on land identified within the South East Water 'separation area (180m)' on Plan 3 – Place Based Plan of the incorporated <i>Officer South Employment Precinct Structure Plan</i>
Child care centre Hall Indoor recreation centre Library Medical centre Restricted recreation facility	The location of the use must generally accord with the location of 'local community facilities' in the <i>Officer South Employment Precinct Structure Plan</i> and with the prior written consent of Cardinia Shire Council.
Dwelling – where the applied zone is Mixed Use	Any frontage at ground floor level must not exceed 2 metres.
Education centre (other than child care centre Tertiary institution and Employment training centre)	The location of the use must generally accord with the location of 'potential non-government school' in the incorporated <i>Officer South Employment Precinct Structure Plan</i> and with the prior written consent of Cardinia Shire Council.
Emergency Services Facility	On land identified as 'proposed emergency services facility' on Plan 3 – Place Based Plan of the incorporated <i>Officer South Employment Precinct Structure Plan</i> .
Food and drink premises – where the applied zone is Commercial 2	Must not be on land identified within the South East Water 'separation area (180m)' on Plan 3 – Place Based Plan of the incorporated <i>Officer South Employment Precinct Structure Plan</i> The leasable floor area must not exceed 100 square metres

Hospital	On land identified as 'proposed state government facility' on Plan 3 – Place Based Plan of the incorporated <i>Officer South Employment Precinct Structure Plan</i> .
Minor sports and recreation facility	<p>The location of the use must generally accord with the location of 'local sports reserve' in the incorporated <i>Officer South Employment Precinct Structure Plan</i> and with the prior written consent of Cardinia Shire Council.</p> <p>Must not be on land identified within the South East Water 'separation area (180m)' on Plan 3 – Place Based Plan of the incorporated <i>Officer South Employment Precinct Structure Plan</i></p>
Rural industry (other than Abattoir and Sawmill) – where the applied zone is Industrial 1	<p>Must be on land identified as the Gin Gin Bean sub-precinct in the incorporated Officer South Employment Precinct Structure Plan.</p> <p>Must not have a gross floor area more than 200 square metres.</p> <p>Must not be within 100 metres of a dwelling.</p> <p>Must not be a purpose listed in the table to Clause 53.10 with no threshold distance specified.</p> <p>The land must be at least the following distances from land (not a road) which is in a Commercial 1 Zone, residential zone or Rural Living Zone, land used for a hospital, an education centre or a corrective institution or land in a Public Acquisition Overlay to be acquired for a hospital, an education centre or a corrective institution:</p> <ul style="list-style-type: none"> ▪ The threshold distance, for a purpose listed in the table to Clause 53.10. ▪ 30 metres, for a purpose not listed in the table to Clause 53.10. <p>Must not:</p> <ul style="list-style-type: none"> ▪ Exceed a fire protection quantity under the Dangerous Goods (Storage and Handling) Regulations 2012. ▪ Require a notification under the Occupational Health and Safety Regulations 2017. ▪ Require a licence under the Dangerous Goods (Explosives) Regulations 2011. ▪ Require a licence under the Dangerous Goods (HCDG) Regulations 2016

Service Station – where the applied zone is Industrial 1	<p>Must not be on land shown within the 'area of consequence and notification' depicted on Plan 13 - Utilities of the incorporated <i>Officer South Employment Precinct Structure Plan</i></p> <p>The land must be at least 30 metres from land (not a road) which is in an Activity Centre Zone, Capital City Zone, Commercial 1 Zone, residential zone or Rural Living Zone, land used for a hospital, an education centre or a corrective institution.</p> <p>Must not adversely affect the amenity of the neighbourhood, including through the:</p> <ul style="list-style-type: none"> ▪ Transport of materials, goods or commodities to or from the land. ▪ Appearance of any stored goods or materials. ▪ Emission of noise, artificial light, vibration, odour, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil.
Shop - where the applied zone is Commercial 1 Zone	The combined leasable floor area on land identified as 'local town centre' in the incorporated <i>Officer South Employment Precinct Structure Plan</i> must not exceed 2,300 sqm.
Supermarket – where the applied zone is Commercial 1 Zone	The leasable floor area on land identified as 'local town centre' in the incorporated <i>Officer South Employment Precinct Structure Plan</i> must not exceed 1,200 sqm
Any use listed in Clause 62.01	Must meet requirements of Clause 62.01.

Section 2 – Permit required

Use	Condition
Rural industry – where the applied zone is Commercial 2	
Supermarket – where the applied zone is Commercial 2 or Mixed Use	The leasable floor area must not exceed 500sqm.
Warehouse – where the applied zone is Industrial 1	
Any other use not in Section 1 or 3 in the Table of uses in the applicable applied zone	

Section 3 – Prohibited

Use	Condition
Caretaker's house Education Centre	On land identified within the South East Water 'separation area (180m)' on Plan 3 – Place Based Plan of the incorporated <i>Officer South Employment Precinct Structure Plan</i> .
Child care centre - where the applied zone is Commercial 2 or Industrial 1	
Gaming premise - where the applied zone is Commercial 1	
Primary school - where the applied zone is Commercial 2	

Residential hotel - where the applied zone is Commercial 2

Restricted retail premises - where the applied zone is Industrial 1

Secondary school - where the applied zone is Commercial 2

Any use listed in Section 3 in the Table of uses of the applicable applied zone

2.4 Specific provisions - Subdivision

None specified.

Urban Design Performance Area

~~A permit must not be granted to subdivide land within the Urban Design Performance Area on Plan 3—Place Based Plan of the incorporated Officer South Employment Precinct Structure Plan, until a Concept Masterplan has been prepared to the satisfaction of the responsible authority. The Concept Masterplan must be generally in accordance with the incorporated Officer South Employment Precinct Structure Plan.~~

~~An application for subdivision on land within the Urban Design Performance Area must be consistent with any masterplan approved under this schedule.~~

~~The responsible authority must seek the views of the Department of Transport and Planning and Melbourne Water in relation to how the Masterplan responds to the potential impacts to the Princes Freeway interchange onramp and drainage assets respectively.~~

2.5 Specific provisions - Buildings and works

Urban Design Performance Area

~~A permit must not be granted to construct a building or construct and carry out works on land within the Urban Design Performance Area on Plan 3—Place Based Plan of the incorporated Officer South Employment Precinct Structure Plan, until a Masterplan has been prepared to the satisfaction of the responsible authority. The Concept Masterplan must be generally in accordance with the incorporated Officer South Employment Precinct Structure Plan.~~

~~An application for development on land within the Urban Design Performance Area must be consistent with any masterplan approved under this schedule.~~

~~The responsible authority must seek the views of the Department of Transport and Planning and Melbourne Water in relation to how the Masterplan responds to the potential impacts to the Princes Freeway interchange onramp and drainage assets respectively.~~

Buildings and works for future local parks and community facilities

A permit is not required to construct a building or construct or carry out works for a local park, sport reserve or community facility provided the use or development is carried out generally in accordance with the incorporated *Officer South Employment Precinct Structure Plan* and with the prior written consent of Cardinia Shire Council.

Dwellings on a lot less than 300 square metres

A permit is not required to construct or extend one dwelling on a lot with an area less than 300 square metres where a site is identified as a lot to be assessed against the *Small Lot Housing Code* (Victorian Planning Authority, November 2019) via a restriction on title, and it complies with the *Small Lot Housing Code* (Victorian Planning Authority, 2019), incorporated into the Cardinia Planning Scheme.

Buildings and works for a school

A permit is required to construct a building or construct or carry out works associated with a Primary school or Secondary school on land shown as a 'potential non-government school' on Plan 3 of the incorporated *Officer South Employment Precinct Structure Plan*, unless exempt under Clauses 62.02-1 and 62.02-2.

Buildings and works within 50 metres of the gas pipeline easement

A permit is required to construct a building or construct or carry out works within 50 metres of the boundary of the high-pressure gas easement shown on Plan 3 – Place Based Plan in the incorporated *Officer South Employment Precinct Structure Plan*.

Bulk Earthworks

A permit is required for bulk earthworks.

3.0 Application requirements

The following application requirements apply to an application for a permit under Clause 37.07, in addition to those specified in Clause 37.07 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority.

If in the opinion of the responsible authority (or for any application requirement expressed as requiring approval / endorsement by, or being required to the satisfaction of an agency, in the opinion of that agency and the responsible authority) an application requirement listed below is not relevant to the assessment of an application, the responsible authority may waive or reduce the requirement.

General Subdivision

All applications for subdivision must be accompanied by the following information to the satisfaction of the responsible authority:

- A written statement that sets out how the application implements the incorporated *Officer South Employment Precinct Structure Plan*.
- A land use budget table in the same format and methodology as those within the *Officer South Employment Precinct Structure Plan* applying to the land setting out the amount of land allocated to the proposed uses, mix of lot sizes (including estimated superlots) and expected population, dwelling and employment yields if relevant.
- Where a parcel is proposed to be subdivided or developed in stages, an overall masterplan for the parcel must be provided showing the proposed staging and lot size diversity by including a lot size plan, reflecting generally in accordance with the lot size categories provisions in the incorporated *Officer South Employment Precinct Structure Plan*.
- **Committee note: Either this provision should be consolidated with the TIAR provisions on page 10 of 21, or the two documents (the Traffic Impact Assessment and the TIAR) should be named differently to clearly distinguish them, so as to avoid confusion.** A Traffic Impact Assessment which includes:
 - functional Functional layout plans.
 - A feasibility / concept road safety audit that demonstrates how the local street and movement network integrates with adjacent urban development or can integrate with future development on adjacent land parcels.
 - How the application responds to existing approved development within the precinct, and whether the capacity of any existing infrastructure requires upgrading
 - A plan showing the proposed road and street network, that addresses the interface treatments adjacent to arterial roads, open space and environmentally sensitive areas.
 - A plan showing access arrangements for properties adjacent to all existing and future arterial roads.

- Potential bus route and bus stop locations prepared in consultation with the Head, Transport for Victoria.
- A hydrogeological assessment of the groundwater conditions on the site and the potential impacts on the proposed development including any measures required to mitigate the impacts of groundwater on the development and the impact of the development on groundwater.
- An arboricultural report identifying all trees on the site and a tree retention plan identifying how the application proposes to retain the retained vegetation set out in Plan 7 Native Vegetation Retention and Removal and any tree protection requirements and guidelines within the incorporated *Officer South Employment Precinct Structure*.
- A landscape master plan prepared by a suitably qualified professional that:
 - Shows natural features including trees and other significant vegetation, habitat for protected species, drainage lines, water courses, wetlands, ridgelines, hill tops and features of geomorphic significance;
 - Recognises and responds to sodic or dispersive soils;
 - Shows recreation facilities to be provided within public open space (with the exception of the active open space);
 - Shows proposed species, location, approximate height and spread of proposed planting;
 - Identifies how it is proposed to retain the retained vegetation and trees set out in Plan 7 – Native Vegetation Retention and Removal of the incorporated *Officer South Employment Precinct Structure Plan*;
 - Shows storm water facilities that are compliant with the relevant approved drainage strategy; and Integrated Water Management plan; and
 - Identifies all re-vegetation which is proposed.

Subdivision – Residential development

In addition to the general subdivision requirements and the requirements of Clause 56.01-2, a subdivision design response for a residential subdivision of 10 lots or more must be accompanied by the information listed below. An application for the construction of 10 or more dwellings on a lot must be accompanied by the same information:

- Subdivision and Housing Design Guidelines, in accordance with the incorporated *Officer South Employment Precinct Structure Plan*, that demonstrates how the proposal responds to and achieves the objectives and planning and design requirements and guidelines within the viable densities section of the PSP.
- A demonstration of how the application will contribute to the achievement of the residential density outcomes in Table 5 of the incorporated *Officer South Employment Precinct Structure Plan*.
- Written statement outlining how the proposal will contribute to the delivery of affordable housing including social housing (as defined in the *Planning and Environment Act 1987*) in the precinct, including proposed delivery mechanisms.

Environmentally sustainable development

An application for ~~residential and non-residential~~ development, ~~excluding subdivision of land in the categories described below~~ must be accompanied by a Sustainable Design Assessment (SDA) report or a ~~Sustainable~~ Sustainability Management Plan (SMP), whichever is specified.

The SDA or SMP must be prepared by a suitably qualified professional that demonstrates how the development will achieve best practice sustainable design. This includes encouraging energy performance, integrated water management, indoor environment quality, transport, waste management and urban ecology. Best practice environmental design for the development can use the Built Environment Sustainability Scorecard (BESS) or other comparable sustainable design tool.

A ~~Sustainable Design Assessment-SDA~~ (including an assessment using BESS, STORM or other methods) ~~should consider as relevant to the below~~ is required for development in the following categories of development:

Category - Residential

- 2-9 dwellings or.
- A building used for accommodation other than dwellings with a gross floor area between 100 square metres and 999 square metres.

Category - Non-residential

- A non-residential building with a gross floor area of 300 square metres to 999 square metres.
- An extension to an existing non-residential building creating between 300 square metres to 999 square metres of additional gross floor area (excluding outbuildings).

A ~~Sustainable Management Plan-SMP~~ (including an assessment using BESS/Green star, STORM/MUSIC or other methods) and a Green Travel Plan are required for the following categories of development ~~for~~:

Category - Residential

- 10 or more dwellings or.
- A building used for accommodation other than dwellings with a gross floor area equal to or more than 1000 square metres.

Category - Non-residential

- A non-residential building with a gross floor area equal to or more than 1000 square metres (excluding outbuildings).
- An extension to an existing non-residential building equal to or creating more than 1000 square metres of additional gross floor area (excluding outbuildings).

Category - Mixed use

Applicable assessments for the residential and non-residential components of the development as specified above.

Consider as relevant the following tools to support a ~~Sustainable Design Assessment-SDA~~ or a ~~Sustainability Management Plan-SMP~~:

- Sustainable Design Assessment in the Planning Process (IMAP, 2015)
- Built Environment Sustainability Scorecard 'BESS' (Council Alliance for a Sustainable Built Environment 'CASBE')
- Green Star (Green Building Council of Australia)
- Model for Urban Stormwater Improvement Conceptualisation 'MUSIC' (Melbourne Water)
- Nationwide House Energy Rating Scheme 'NatHERS' (Department of Climate Change and Energy Efficiency)
- Stormwater Treatment Objective - Relative Measure 'STORM' (Melbourne Water)
- Urban Stormwater Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999)
- Waste Management and Recycling in Multi-Unit Developments - Better Practice Guide (Sustainability Victoria, 2018).

In determining an application, the responsible authority will consider as appropriate:

- Whether an ESD plan or framework has previously been approved by the responsible authority

Public infrastructure plan

An application for subdivision and/or use and development of land must be accompanied by a public infrastructure plan which addresses the following:

- What land may be affected or required for the provision of infrastructure works;
- The provision, staging and timing of road works internal and external to the land consistent with any relevant traffic report or assessment;
- What, if any, infrastructure set out in the infrastructure contributions plan applying to the land is sought to be provided as "works in lieu" subject to the consent of the collecting agency;
- The provision of Inner Purpose Land including public open space and land for any community facilities; and
- Any other matter relevant to the provision of public infrastructure required by the responsible authority.

A public infrastructure plan must be consistent with any ~~Transport Management Plan~~ [Traffic Impact Assessment](#) approved under this schedule.

Traffic impact assessment

An application that proposes to create or change access to a road in the Transport Zone 2 must be accompanied by a Traffic Impact Assessment Report (TIAR). The TIAR, including functional layout plans and a feasibility and/or concept road safety audit, must be to the satisfaction of ~~Head, Transport for Victoria~~ [the relevant road authority](#) and Cardinia Shire Council.

Retail impact assessment

An application to use land for a Shop [on land in the Local Town Centre shown on Plan 1 of this schedule](#) ~~in a local town centre as described in the incorporated Officer South Employment Precinct Structure Plan, where the combined leasable floor area of all shops exceeds the figure shown in the land use table at 2.3 of this schedule~~ must be accompanied by a retail economic impact assessment prepared by a suitably qualified professional [if the combined leasable floor area of all shops exceeds the figure shown in the land use table at clause 2.3 of this schedule](#).

Acoustic assessment report

Any application for subdivision and/or use or development of land for Accommodation, Education centre (other than Tertiary institution and Employment training centre) or Hospital, must be accompanied by an acoustic assessment report prepared by a qualified acoustic consultant or other suitably skilled person to the satisfaction of the responsible authority which:

- Applies the following noise objectives:
 - Not greater than 35 dB LAeq,8h when measured within a sleeping area between 10pm and 6am.
 - Not greater than 40 dB LAeq,16h when measured within a living area between 6am and 10pm.
 - For areas other than sleeping and living areas, not greater than the median value of the range of recommended designed sound levels of Australian Standard AS/NZ 2107:2016 (*Acoustics – Recommended design sound level and reverberation times for building interiors*).
- Noise levels should be assessed:
 - Considering the cumulative noise from all sources impacting on the proposal including road traffic noise and industry noise, as well as other potential noise sources; and

- In unfurnished rooms with a finished floor and the windows closed and be based on average external noise levels measured as part of a noise level assessment.
- Identifies lots and/or buildings requiring mitigation from noise (including vibration as relevant) from all sources impacting on the proposal, including road traffic noise and industry noise. If lots and/or buildings requiring acoustic mitigation are identified, the report should include recommendations for any noise attenuation measures required to meet the applicable noise level objectives. These recommendations should prioritise measures that benefit both outdoor and indoor spaces, and should address:
 - Noise compatible design for buildings, with siting, orientation, and internal layout, to be considered prior to setting building envelope performance requirements;
 - Potential noise character (tonality, impulsiveness or intermittency);
 - Noise with high energy in the low frequency range;
 - Transient or variable noise; and
 - Vibration.

This requirement does not apply if the permit applicant provides, to the satisfaction of the responsible authority, a statement in writing supported by verifiable evidence from a qualified acoustic consultant or other suitably skilled person and having regard to Clause 13.05 and to the environmental values for ambient sound defined in the Environment Reference Standard (ERS). The statement must demonstrate that:

- The proposed development is not prejudiced;
- Community amenity and human health is not adversely impacted by noise emissions; and
- No noise attenuation measures are required.

South East Water Pump Station Amenity Area

An application to use land within the South East Water 'separation area (180m)' on Plan [1 of this schedule 3](#) ~~Place Based Plan of the incorporated Officer South Employment Precinct Structure Plan~~ must be accompanied by an amenity impact assessment prepared by a suitably qualified professional [that assesses the potential for odour impacts from the South East Water Sewage pumping station on which provides for an assessment of the proposed use against the potential for odour impacts](#). The amenity impact assessment must make recommendations on a suitable design response to ensure the use within the proposed buildings will experience an appropriate level of amenity.

Sodic and Dispersive Soils Management Plan

An application to subdivide land or construct or carry out bulk earthworks must be accompanied by a sodic and dispersive soils management plan prepared by a suitably qualified professional, that describes:

- The existing site conditions, including:
 - extent of sodic and dispersive soils based on topsoil and subsoil samples in the works area.
 - land gradient.
 - erosion risk mapping
 - the extent of any existing erosion, landslip or other land degradation.
- Soils investigation, undertaken by a soil scientist;
- The extent of any proposed earthworks;
- Recommendations for soil management practices (including fill) with consideration of anticipated sodic and dispersive soil exposure;
- The management of drainage during all stages of development (including run-off);
- The staging of development;

- Any training and supervisions processes proposed for construction contractors to ensure compliance with the sodic and dispersive soils management plan;
- Proposed document monitoring and reporting processes that ensure works are undertaken in accordance with the sodic and dispersive soils management plan;
- Any treatment of soil proposed to be removed from the site;
- Any post-construction monitoring and/or management requirements; and
- Recommendations that inform a site management plan including:
 - The management, volume and location of any stockpiles.
 - Vehicle access and movement within the site area.
 - Any treatment to manage the soil while works are undertaken.
 - Treatments to rehabilitate areas that are disturbed during site works.
 - Any soil treatment to manage the soil to reduce risk to existing or current infrastructure and dwellings.
 - Ensuring potential environmental impacts are properly quantified.
 - Adequacy addressing both surface and subsurface erosion.
 - Site specific recommendations for management practices of sodic soils.
 - The collection and treatment of stormwater.

Integrated Water Management

An application to subdivide land must be accompanied by an Integrated Water Management Strategy (IWMS). The IWMS must be prepared to the satisfaction of the Responsible Authority and Melbourne Water and include details of:

- Drainage servicing, including assessment of the existing surface and subsurface drainage conditions on the site,
- The provision, staging and timing of stormwater drainage works in accordance with the applicable Melbourne Water Development Services Scheme(s)
- The provision, decommissioning, staging and timing of any temporary drainage works (including but not limited to outfall detention, treatment and / or volume control infrastructure),
- Flow rate and flow volume management measures to ensure no additional downstream inundation impacts, duration impacts and flood impacts are caused by the proposed development ~~of land~~, [to the satisfaction of Melbourne Water](#).

Bushfire Management Plan

An application to subdivide land adjacent to a Bushfire Hazard Areas shown on Plan 8 Bushfire Hazard Areas of the *Officer South Employment Precinct Structure Plan* must be accompanied by a Bushfire Management Plan that demonstrates how the application will address bushfire risk at the site. The plan must be prepared in accordance with table 4 - Bushfire hazard vegetation management & setback requirements, of the *Officer South Employment Precinct Structure Plan*, unless otherwise agreed in writing by the Responsible Authority and CFA. The plan must include:

- The design and layout of the subdivision, including lot layout, road design and access points, both vehicular and pedestrian.
- The location of any bushfire hazard areas.
- The details of any bushfire protection measures required for individual lots.
- The identification of any areas to form the setback between a bushfire hazard and built form.
- The details of any vegetation management in any area of defendable space including information on how vegetation will be managed and when the vegetation management will occur i.e., annually, quarterly, during the fire danger period.
- Notation that indicated what authority is responsible for managing vegetation within open space areas and public realms; and

- Notation that ensures that the areas of classified vegetation in the nominated bushfire hazard areas must be managed to a level that will ensure the vegetation classification under AS3959-2019 will not be altered.

The responsible authority and fire authority may waive this requirement if a plan has been approved for the land.

Economic Impact Assessment

~~An application for the use of land where the applied zone is Industrial 1 for Warehouse must be accompanied by an Economic Impact Assessment prepared by a suitably qualified professional which includes the following information:~~

- ~~▪ A land suitability assessment for the proposed use.~~
- ~~▪ The expected number of jobs which the proposed use will generate on the site.~~
- ~~▪ The extent to which the proposed use contributes to the achievement of the economic needs and job density of the Officer South Employment precinct.~~

Heritage Places

~~An application to subdivide land or to construct a building or construct and carry out works on land containing an identified heritage place(s) within a Heritage Overlay must:~~

- ~~▪ Address the proposed future use or adaptive reuse of the affected heritage place(s);~~
- ~~▪ Include a Conservation Management Plan for the heritage place(s) to the satisfaction of the responsible authority; and~~
- ~~▪ Include the provision of sufficient space around the heritage building to allow its adaptive reuse to comply with other planning requirements, such as car parking and landscaping.~~

Committee note: the VPA has not demonstrated a strategic justification for these heritage provisions. They largely duplicate the requirements for heritage sites set out below. Any other requirements can be dealt with under the Heritage Overlay.

4.0

Conditions and requirements for permits

The following conditions and requirements apply to a permit issued pursuant to this schedule, as appropriate, to the satisfaction of the responsible authority.

If in the opinion of the responsible authority (or for any condition or requirement expressed as requiring approval / endorsement by, or being required to the satisfaction of an agency, in the opinion of that agency and the responsible authority) a condition or requirement listed below is not required, the responsible authority may waive or reduce the condition or requirement.

Conditions – Subdivision permits that allow for the creation of a lot of less than 300 square meters

Any permit for subdivision that allows the creation of a lot less than 300 square metres must ~~contain~~ include the following conditions:

- Prior to the certification of the plan of subdivision for the relevant stage, a plan must be submitted for approval to the satisfaction of the Responsible Authority. The plan must identify the lots that will include a restriction on title allowing the use of the provisions of the *Small Lot Housing Code* (Victorian Planning Authority, November 2019) incorporated pursuant to Clause 72.04 of the Cardinia Planning Scheme; and
- The plan of subdivision submitted for certification must identify whether type A or type B of the *Small Lot Housing Code* (Victorian Planning Authority, November 2019) applies to each lot to the satisfaction of the Responsible Authority.

Conditions - Heritage Sites

Any permit for the subdivision of land at 410 and 425 Officer South Road must contain include the following conditions:

- Prior to the certification of a stage of the subdivision, a Conservation Management Plan must be approved for the heritage place and describe the cultural value value/significance, appropriate site boundaries, any required restoration works, possible future uses and interpretative signage.
- Before the commencement of works for the relevant stage of subdivision, containing the heritage place, the heritage place must be appropriately secured against damage as a result of the [proposed](#) works, to the satisfaction of the Responsible Authority.
- Prior to the issue of a statement of compliance for the first stage of subdivision the owner must enter into an agreement with the Responsible Authority made pursuant to Section 173 of the Planning and Environment Act 1987 which provides for any works to the heritage places for the purposes of restoration and repair, as recommended in the approved Conservation Management Plan are in accordance with the timeframes and requirements of the approved Conservation Management Plan.

[Any permit for the subdivision of land at 185 Officer South Road must include the following condition:](#)

- Prior to the demolition of the dairy shed at 185 Officer South Road, the remanent water trough and tin feed room must be photographed and recorded on the Victorian Heritage data base.

Condition – Construction Environmental Management Plan

A permit to subdivide land, construct a building, or construct or carry out works on or within 50 metres of land shown as a BCS conservation area ~~as shown on Plan 1 in this schedule in Plan 3 in the incorporated Officer South Employment Precinct Structure Plan~~ must include the following condition:

- Before works start, a Construction Environmental Management Plan consistent with *DELWP requirements for Construction Environmental Management Plans under the Melbourne Strategic Assessment* (Department of Environment, Land, Water and Planning, November 2020) must be submitted to and approved by the Secretary to the Department of Energy, Environment and Climate Action (as constituted under Part 2 of the *Conservation, Forests and Lands Act 1987*) and the responsible authority, demonstrating how the conservation area will be protected during works.

Once approved the plan will form part of the permit and must be implemented to the satisfaction of the Secretary and the responsible authority.

Condition - Land Management Plan for Conservation Area

A permit to subdivide land containing a BCS conservation area as shown [on Plan 1 in this schedule](#) ~~in Plan 3 in the Officer South Employment Precinct Structure Plan~~ must include the following condition:

- Prior to the commencement of development, a land management plan for the conservation area land must be prepared by a suitably qualified consultant, submitted to, and approved by the Secretary to the Department of Energy, Environment and Climate Action (as constituted under Part 2 of the *Conservation, Forests and Lands Act 1987*) (Secretary). The land management plan must outline how the biodiversity values for the land identified in the *Biodiversity Conservation Strategy for Melbourne's Growth Corridors* (Department of Environment and Primary Industries, 2013) will be maintained, managed and improved, including:
 - How environmental weeds will be managed up until the securing of the conservation area.
 - How any revegetation will be undertaken in coordination with weed management activities to prevent re-colonisation of weed species.
 - How rubbish and hazards will be removed, and any contaminated material managed up until the securing of the conservation area.

Once approved the land management plan will form part of the permit and must be implemented to the satisfaction of the Secretary and the responsible authority.

Condition – Public transport

Committee note: VPA to specify which types of permits should include this condition

A permit to XXX must include the following condition:

- Unless otherwise agreed by Head, Transport for Victoria, prior to the issue of a statement of compliance for any subdivision stage, bus stop hard stands with direct and safe pedestrian access to a pedestrian path must be constructed:
 - In accordance with the Public Transport Guidelines for Land Use and Development; and compliant with the Disability Discrimination Act – Disability Standards for accessible Public Transport 2002.
 - At locations approved by the Department of Transport and Planning, at no cost to the Department of Transport and Planning, and to the satisfaction of Head, Transport for Victoria.

Condition – Road network

Any permit for subdivision or buildings and works must ~~contain~~ include the following conditions:

- Prior to the certification of a plan of subdivision, the plan of subdivision must show the land affected by the widening of the road reserve which is required to provide road widening and/or right of way flaring for the ultimate design of any adjacent intersection.
- Land required for road widening (excluding widening under a Public Acquisition Overlay for road widening) including right of way flaring for the ultimate design of any intersection within an existing or proposed arterial road must be transferred to or vested in council at no cost to the acquiring agency unless funded by the Officer South Employment Infrastructure Contributions Plan.
- Roads and intersections identified as bus capable on Plan 5 of the incorporated *Officer South Employment Precinct Structure Plan* must:
 - Be constructed to accommodate ultra-low floor buses, in accordance with the Public Transport Guidelines for Land Use and Development and to the satisfaction of Transport for Victoria and the responsible authority.
 - Be compliant with the Disability Discrimination Act – Disability Standards for Accessible Public Transport 2002; and
 - Be provided with direct and safe pedestrian access to a pedestrian path to the satisfaction of Public Transport Victoria and the responsible authority.

Condition – Public Infrastructure Plan

Any permit for subdivision must ~~contain~~ include the following conditions:

- Prior to the certification of a plan of subdivision or at such other time which is agreed between the council and the owner, if required by the responsible authority, the owner must enter into an agreement or agreements under section 173 of the *Planning and Environment Act 1987* which provide for:
 - The implementation of the Public Infrastructure Plan approved under this permit.
 - The timing and amount of any payments to be made to a person in respect of any infrastructure project having regard to the availability of funds collected under the Infrastructure Contributions Plan.

Conditions – Subdivision or buildings and works permits where land is required for community facilities, public open space, or road widening

A permit for subdivision or buildings and works, where land is required for community facilities, public open space or road widening (excluding widening under a Public Acquisition Overlay for road widening) must include the following conditions:

- The costs associated with effecting the transfer or vesting of land required for community facilities, public open space or road widening must be borne by the permit holder.
- Land required for community facilities, public open space or road widening must be transferred to or vested in the relevant public agency with any designation (e.g. road, reserve or lot) nominated by the relevant agency.

Condition – Integrated water management plan

A permit to subdivide land, must include the following condition:

- Unless otherwise agreed by the Responsible Authority and Melbourne Water, before certification of the plan of subdivision the Integrated Water Management Plan must be approved by Melbourne Water and approved and endorsed by the Responsible Authority.

Condition – Bushfire management plan

A permit to subdivide land adjacent to a Bushfire Hazard Area shown on Plan 8 Bushfire Hazard Areas, must include the following condition:

- Unless otherwise agreed by the Responsible Authority and the Country Fire Authority, before certification of the plan of subdivision the Bushfire Management Plan must be endorsed by the Responsible Authority.

Condition – Security of conservation land

A permit to subdivide land containing a 'BCS conservation area' as shown [on Plan 1 in this schedule](#) ~~in Plan 3 in the Officer South Employment Precinct Structure Plan~~ must include the following condition:

- The owner of the land must, as part of the plan of subdivision (or the first plan of subdivision submitted for registration, in the case of any staged subdivision), create the 'BCS conservation area' as shown in the Place Based Plan in the *Officer South Employment Precinct Structure Plan* as a separate lot or reserve (which may or may not include the cultural values investigation area as shown on Plan 3 of the *Officer South Employment Precinct Structure Plan*). The boundaries of the lot or reserve on the plan of subdivision are subject to the prior satisfaction of the Secretary to the Department of Energy, Environment and Climate Action as constituted under Part 2 of the *Conservation, Forests and Lands Act 1987* (Secretary). The owner must further secure the conservation area, by causing that lot or reserve to be vested, transferred, or protected in perpetuity in one of the following ways:
 - Prior to a statement of compliance being issued for the plan of subdivision (or, in the case of a staged subdivision, the plan of subdivision or masterplan which implements the first stage of the subdivision), enter into an agreement under section 173 of the *Planning and Environment Act 1987* by which the owner agrees to transfer ownership of the conservation area to, or to vest the conservation area in, the Minister responsible for section 5 of the *Crown Land (Reserves) Act 1978*, the Council or Melbourne Water. The transfer or vesting must either be for no or nominal consideration. The Secretary and the person or body to whom the land is to be transferred or vested must also be a party to the agreement. The terms of the agreement must include that the owner pays the reasonable costs of the other parties to the agreement that were incurred for the preparation, execution, and registration of the agreement. The owner must cause the agreement to be registered prior to lodgement of the plan of subdivision for registration; or
 - Prior to a statement of compliance being issued for the plan of subdivision (or, in the case of a staged subdivision, the plan of subdivision or masterplan which implements the first

stage of the subdivision), enter into an agreement with the Secretary under section 69 of the *Conservation, Forests and Lands Act 1987*, which provides for the conservation and management of the conservation area by or on behalf of the owner in perpetuity. The terms of the agreement must include that the owner pays the reasonable costs of the Secretary incurred for the preparation, execution, and registration of the agreement. The owner must cause the agreement to be registered prior to lodgement of the plan of subdivision for registration.

The requirement to include the above condition does not apply if the permit applicant provides the responsible authority with a statement in writing from the Secretary, as constituted under Part 2 of the *Conservation, Forests and Lands Act 1987*, that the condition is not required because the Secretary is satisfied that either:

- the land containing the conservation area is expected to be further subdivided and a further permit will be required for that subdivision (to which the above condition requirement will apply); or
- the conservation area has been or will be otherwise secured in perpetuity.

Condition – Fencing of conservation areas

A permit ~~granted~~ to subdivide land where works are required to carry out the subdivision, or a permit ~~granted~~ to construct a building or carry out works, on land including or abutting a BCS conservation area as shown ~~on Plan 1 in this schedule in Plan 3 in the Officer South Employment Precinct Structure Plan~~, must include the following conditions:

- Prior to the commencement of development, a conservation area fencing plan must be submitted to and approved by the Secretary to the Department of Energy, Environment and Climate Action (as constituted under Part 2 of the *Conservation, Forests and Lands Act 1987*) (Secretary) to ensure the conservation area is adequately protected. The fencing plan must contain the following:
 - The boundaries of any conservation area, and the location of any scattered tree and the boundaries of any patch of native vegetation within the conservation area.
 - The location and alignment of temporary protection fencing ~~at the showing the following~~ minimum distance from the element to be protected ~~as specified in the following table~~:

Element	Distance
Conservation area	0.5 metres
Scattered tree	12 x diameter at a height of 1.3 metres
Patch of native vegetation	2 metres

- The timing of installation and removal of temporary protection fencing.
 - The timing of installation of permanent fencing.
 - Location and details of ongoing maintenance vehicle access points.
 - The type of temporary and permanent fencing including materials, heights and spacing of uprights.
 - Frequency of inspections and rectification works for temporary protection fencing.
- Once approved the plan will form part of the permit and must be implemented to the satisfaction of the Secretary to the Department of Energy, Environment and Climate Action and the responsible authority.
- Stockpiles, fill, machinery, vehicle parking, excavation and construction activity of any kind must not be bought into, or be undertaken within, the area to be fenced, except with the prior written consent from the Secretary.

Condition – Correct alignment of protective fencing

A permit to subdivide land where works are required to carry out the subdivision, or a permit to construct a building or carry out works, on land including or abutting a BCS conservation area as shown on Plan 1 in this schedule, must include the following condition:

- Buildings and works must not commence until written evidence that protection fencing has been erected in accordance with the approved Conservation Area Fencing Plan is provided by a suitably qualified land surveyor to the Secretary to the Department of Energy, Environment and Climate Action (as constituted under Part 2 of the *Conservation, Forests and Lands Act 1987*) (Secretary), and the Secretary confirms it is satisfied by the evidence.

Condition – Protection of native vegetation during construction

A permit ~~granted~~ to subdivide land or to construct a building or carry out works, on land including or abutting patch of native vegetation or scattered tree identified for retention in the incorporated *Officer South Employment Precinct Structure Plan* must include the following conditions ~~ensure that:~~

- Before the start of construction or carrying out of works in or around a scattered native tree or patch of native vegetation the developer of the land must erect a vegetation protection fence that is:
 - Highly visible.
 - At least 2 metres in height.
 - Sturdy and strong enough to withstand knocks from construction vehicles.
 - In place for the whole period of construction.
 - Located at a minimum distance from the identified elements as specified in the following table: ~~in Table 1.~~

Element	Minimum distance from element
Scattered tree	Twice the distance between the tree trunk and the edge of the tree canopy
Patch of native vegetation	2 metres

- Construction stockpiles, fill, machinery, excavation and works or other activities associated with the buildings or works must:
 - Be located outside the vegetation protection fence;
 - Be constructed and designed to ensure that the conservation area, scattered tree or patches of native vegetation are protected from adverse impacts during construction;
 - Not be undertaken if it presents a risk to any vegetation within a conversation area; and
 - Be carried out under supervision of a suitably qualified ecologist or arborist.

Condition Requirement – Acoustic Report

~~Any~~ A permit for subdivision and/or use or development of land where an acoustic assessment report has identified that mitigation from noise sources is required, must include the following condition:

- ~~implement a~~ Any recommendations of the acoustic assessment report submitted with the application ~~and include any conditions necessary, in the opinion of the responsible authority,~~ to implement noise attenuation measures must be implemented to the satisfaction of the responsible authority.

~~*—All to the satisfaction of the responsible authority.~~

Condition Requirement – Sodic and dispersive soil site management plan

A permit to subdivide land or to undertake earthworks must include the following ~~a~~ condition:

- ~~that requires the~~ Any recommendations identified in the approved sodic and dispersive soil management plan must, ~~to~~ be implemented to the satisfaction of the Responsible Authority.

Condition - Gas Pipeline Construction Management Plan

[A permit to subdivide and/or develop land within 50 metres of the boundary of the high pressure gas easement shown on Plan 3 – Place Based Plan in the incorporated Officer South Employment Precinct Structure Plan must include the following condition:](#)

- Prior to the construction of a building or the carrying out of works, including demolition, on land within 50 metres of the boundary of the high pressure gas easement shown on Plan 3 – Place Based Plan in the incorporated *Officer South Employment Precinct Structure Plan*, a Construction Management Plan must be submitted to and approved by the responsible authority. The plan must:
 - Prohibit the use of rippers or horizontal directional drills unless otherwise agreed by the operator of the gas transmission pipeline.
 - Be endorsed by the operator of the gas transmission pipelines where the works are within or crossing the relevant gas transmission easement.
 - Include any other relevant matter to the satisfaction of the responsible authority.
 - Land required for community facilities, public open space or road widening must be transferred to or vested in the relevant public agency with any designation (e.g. road, reserve or lot) nominated by the relevant agency.

The responsible authority must be satisfied that the gas transmission pipeline licensee has reviewed and approved the Construction Management Plan.

The Construction Management Plan must be implemented to the satisfaction of the responsible authority.

The Construction Management Plan may be amended to the satisfaction of the responsible authority.

Condition – Freeway Noise Wal

Any permit for subdivision, use ~~and~~ [or](#) development adjacent to the Princes Freeway must include the following condition:

- Any subdivision (or, in the case of a staged subdivision, the first stage of subdivision), use or development of land directly abutting the Princes Freeway boundary and between Officer South Road and Lower Gum Scrub Creek must comply with the *VicRoads Traffic Noise Reduction Policy, 2005* to the satisfaction of, and at no cost to, the Head, Transport for Victoria.

5.0 Exemption from notice and review

None specified.

6.0 Decision guidelines

The following decision guidelines apply to an application for a permit under Clause 37.07, in addition to those specified in Clause 37.07 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

[Traffic and transport impacts](#)

[Before deciding on an application under this schedule the responsible authority must consider as appropriate:](#)

- [How the application responds to the traffic and transport impacts identified in the Traffic Impact Assessment submitted with the application.](#)

Local Town Centre

Before deciding on an application to create floorspace in excess of any cap in a local town centre, in addition to the decision guidelines at Clause 37.07-14 and Clause 65, the responsible authority must consider, as appropriate:

- The local catchment and Officer South Employment Precinct Structure Plan catchment demand for the additional floor area; and
- The effect on existing and future town centres within Cardinia Shire Council.

Acoustic Attenuation

Before deciding on ~~a permit~~ [an](#) application under this schedule the responsible authority must consider, as appropriate:

- If Accommodation, Hospital or Education centre (other than Tertiary institution and Employment training centre) is proposed, whether the proposal minimises the impact on human health and amenity from noise exposure near the transport system and other noise emission sources having regard to:
 - whether the impact of potential noise sources have been mitigated through siting, orientation design, layout, and location and whether this reduces the need for acoustic treatment of buildings or compromises the useability of the building by its occupant;
 - any building façade treatments that are required to mitigate noise impacts; and
 - any relevant recommendations of an Acoustic Assessment Report for the application.

Affordable Housing

Before deciding on an application to develop or subdivide land for dwellings, the responsible authority must consider, as appropriate:

- Whether the proposed subdivision application contributes towards the provision of affordable housing and social housing within the meaning of the Act.
- The Ministerial Notice under 3AA(2) of the Act, as amended from time to time.

South East Water Separation Area

Before deciding on an application to use land within the South East Water ‘separation area (180m)’ on Plan 3 – Place Based Plan of the incorporated Officer South Employment Precinct Structure Plan, the responsible authority must consider, as appropriate:

- Whether the proposed use may be affected by potential unintended odour impacts from the pump station; and
- The view of South East Water Ltd (or their successors).

~~Use – Warehouse~~

~~Before deciding on a permit application under this schedule the responsible authority must consider as appropriate:~~

- ~~▪ The extent to which the application for a Warehouse use in the applied Industrial 1 Zone contributes towards the provision of jobs as envisaged by the incorporated Officer South Employment Precinct Structure Plan.~~

Princes Freeway Service Centre

Committee note: this is not a decision guideline. It should either be redrafted as such, or deleted.

Should the use associated with the ‘existing Freeway Service Centre site’ on Plan 3 – Place Based Plan of the incorporated Officer South Employment Precinct Structure Plan, cease to operate, the responsible authority must note:

- The existing access to the Princes Freeway will terminate in accordance with the Department of Transport and Planning (Transport) terms of access agreement for the site.

7.0 Signs

The advertising sign category for the land is the category specified in the zone applied to the land at Section 2.2 of this schedule.

Committee note: consider whether it is appropriate to include Cardinia's proposed provisions regarding signage (Document 263).

Appendix F Committee recommended starting point for staging control

F:1 Incorporated Document

OFFICER SOUTH EMPLOYMENT PRECINCT - STAGING

Incorporated Document
[Date]

1. INTRODUCTION

- 1.1 This document is an incorporated document in the Cardinia Planning Scheme (the **Planning Scheme**) pursuant to section 6(2)(j) of the *Planning and Environment Act 1987*.
- 1.2 This document applies to land mapped **SCO14** by Clause 45.12 Specific Controls Overlay within the Planning Scheme.
- 1.3 Despite any provision to the contrary in the Planning Scheme, pursuant to clause 45.12 of the Planning Scheme, the land identified in this document can only be developed in accordance with the specific controls contained in this document. If there is any inconsistency between the specific controls contained in this document and the general provisions of the Planning Scheme, the specific controls in this document prevail.
- 1.4 In this document:
 - a. **Delivery Agency** means the agency responsible for delivering an Infrastructure Item, as identified in an approved Staging Plan.
 - b. **Infrastructure Item** means a required infrastructure item identified in an approved Staging Plan.
 - c. **PSP** means the Officer South Employment Precinct Structure Plan incorporated into the Planning Scheme.
 - d. **Staging Plan** means a staging plan prepared and approved in accordance with Clause 5.1, or reviewed and approved in accordance with Clause 5.2.

2. BACKGROUND

- 2.1 The existing road network does not have sufficient capacity to adequately manage the anticipated traffic demand generated by new development within the PSP area.
- 2.2 Specific infrastructure items are considered necessary to support the full development of the PSP.
- 2.3 The Victorian Planning Authority will develop a Staging Plan that identifies the required Infrastructure Items, and sets out the relationship between the staging of development in the PSP and the delivery of the Infrastructure Items.

3. PURPOSE

- 3.1 To identify areas within the PSP which require the delivery of Infrastructure Items before they are fully developed.

4. OBJECTIVES

- 4.1 To facilitate the timely delivery of employment and housing outcomes in accordance with the PSP.
- 4.2 To ensure that the use and development of land in the PSP area proceeds with appropriate transport infrastructure in place, while avoiding unnecessary restriction of development.
- 4.3 To encourage the timely delivery of the Infrastructure Items.
- 4.4 To enable existing uses to continue to operate, and limited development to occur, in the PSP area where this would not generate the need for new infrastructure.

5. SPECIFIC CONTROLS

5.1 Preparation and approval of a Staging Plan

The Victorian Planning Authority must prepare and approve a Staging Plan that identifies:

- a. stages of development within the PSP area
- b. the Infrastructure Items required to facilitate development of those stages.

The Staging Plan must be a single document and must apply to the whole of the land to which this incorporated document applies.

Content of the Staging Plan

The Staging Plan must include:

- a. The date of its approval.
- b. A brief explanation of the staging rationale.
- c. A list of the required Infrastructure Items, and information on:
 - i. the funding source for each Infrastructure Item
 - ii. the Delivery Agency responsible for the delivery of each Infrastructure Item
 - iii. the anticipated timing of the delivery of each Infrastructure Item (where known).
- d. A table listing the required Infrastructure Item(s) for each stage, and specifying whether the Infrastructure Item is required:
 - i. before development of that stage can commence, or
 - ii. to be delivered as part of that stage (and if so, at what point in the development of that stage the Infrastructure Item must be delivered).

Only Infrastructure Items listed against a stage are required for that stage. Specific Infrastructure Items may be listed against more than one stage.

- e. A plan showing:
 - i. the proposed stages of development
 - ii. Infrastructure Items required for each stage.

Approval of a Staging Plan

A Staging Plan must not be approved until the following reports are prepared to the satisfaction of the Victorian Planning Authority:

- a. An Infrastructure Report that:
 - i. demonstrates why the required Infrastructure Items identified in Staging Plan are required for each stage
 - ii. demonstrates how the existing capacity of the road network has been maximised in stage 1
 - iii. provides information in relation to:
 - the funding source for each Infrastructure Items
 - the agency responsible for the delivery of each Infrastructure Item (the **Delivery Agency**)
 - the anticipated timing of the delivery of the Infrastructure Item (where known).
- b. A Consultation Report detailing the views of relevant Delivery Agencies, and the owners of land covered by the Staging Plan.

5.2 Review of an approved Staging Plan

The Victorian Planning Authority must review an approved Staging Plan no more than three years after its approval.

The purpose of the review is to identify whether the staging provided for in the approved Staging Plan can be adjusted, having regard to:

- a. traffic conditions in the PSP and surrounding areas at the time of the review
- b. the provision of transport infrastructure in the PSP and surrounding areas at the time of the review
- c. transport modelling which demonstrates whether or not the Infrastructure Items identified for each stage remain necessary to facilitate development in that stage
- d. current and projected land supply and demand in the PSP and surrounding areas at the time of the review.

The review must consider:

- a. whether or not the Infrastructure Items identified for each stage remain necessary to facilitate development in that stage
- b. whether the geographic extent of the Specific Controls Overlay should be adjusted
- c. the views of Delivery Agencies and landowners within the PSP.

Any review of a Staging Plan must not be approved until the following reports are prepared to the satisfaction of the Victorian Planning Authority:

- a. An updated Infrastructure Report that meets the requirements of Clause 5.1.
- b. A Consultation Report detailing the views of relevant Delivery Agencies, and the owners of land covered by the Staging Plan, in relation to the proposed changes to the Staging Plan.

5.3 Expiry of the Staging Plan

A Staging Plan will expire on the approval by the Victorian Planning Authority of a revised staging plan after a review in accordance with Clause 5.2.

5.4 Requirements for permits

Prior to approval of a Staging Plan

A permit must not be granted for the use, subdivision or development of land to which this incorporated document applies until a Staging Plan has been approved by the Victorian Planning Authority in accordance with Clause 5.1, unless the responsible authority, having consulted with the Victorian Planning Authority, is satisfied that transport infrastructure to appropriately service the proposed use, development or subdivision:

- a. exists, or
- b. is able to be provided as part of the proposed use, development or subdivision.

This does not apply to a permit to use or develop land in accordance with the provisions of Clause 37.07-1 to 37.07-8 (Urban Growth Zone Part A) as if no precinct structure plan applied to the land to which this incorporated document applies.

After approval of a Staging Plan

Once a Staging Plan has been approved under Clause 5.1, a permit for the use, subdivision or development of land in a stage identified in the Staging Plan must not allow the use or development to commence, or a statement of compliance for the subdivision to issue, before the relevant Infrastructure Item(s) identified for that stage have been provided in accordance with the timing specified in the Staging Plan, unless:

- a. the responsible authority and the relevant Delivery Agency are satisfied that other transport infrastructure to appropriately service the proposed use, development or

subdivision exists, or is able to be provided as part of the proposed use, development or subdivision, or

- b. the Minister for Planning advises the responsible authority that the grant of permit may be considered. [Note, this is to allow for 'unicorn proposals' as identified by Mr Glossop].

Decision guidelines

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

- a. how the proposal would contribute to achieving the objectives of this incorporated document, and the vision and objectives set out in the PSP
- b. the capacity and timing of delivery of existing and planned infrastructure
- d. the traffic implications of allowing the proposal to proceed in advance of the relevant Infrastructure Items being delivered
- c. any reasons given by the Victorian Planning Authority when advising that a permit may be granted before a Staging Plan is approved
- d. any reasons given by the Minister for Planning when advising that the grant of permit may be considered.

6. EXPIRY OF THIS DOCUMENT

6.1 This document will expire on the earlier of:

- a. 12 months from the date of this document, unless the first Staging Plan has been approved in accordance with Clause 5.1
- b. three years from the date of approval of each subsequent Staging Plan, if the Staging Plan is not reviewed and updated in accordance with the requirements of Clause 5.2
- b. receipt by the Victorian Planning Authority of a letter from the Minister for Planning stating that the controls in this incorporated document are no longer required
- c. written confirmation from the Delivery Agencies that construction of all the Infrastructure Items identified in the Staging Plan has [commenced/been completed], or that the controls in this incorporated document are no longer required.

F:2 Staging Plan

OFFICER SOUTH EMPLOYMENT PRECINCT – STAGING PLAN

Introduction

This document is a Staging Plan prepared and approved pursuant to the incorporated document in the Cardinia Planning Scheme titled *Officer South Employment Precinct – Staging*, Incorporated Document, [date].

This Staging Plan applies to land subject to the Specific Controls Overlay 14 in the Cardinia Planning Scheme.

This Staging Plan was approved on [date].

Rationale

[Insert the rationale for the staging plan, including what transport infrastructure currently exists, the capacity of the existing infrastructure, and when that capacity is expected to be reached].

Stages of development

The stages of development of land in the Officer South Employment Precinct Structure Plan (PSP) area are shown on Map 1.

Required Infrastructure Items

[The text in Tables 1 and 2 is provided to show how the information might be laid out. It is based on the VPA's proposed Staging Plan, which the Committee does not support. The infrastructure items and stage boundaries will need to be identified through further strategic work and empirical analysis].

Table 1 sets out the Infrastructure Items required to facilitate the use, development and subdivision of land in the PSP area in accordance with the Urban Growth Zone Schedule 7.

Table 1: Relevant infrastructure items and the funding source for each item

Reference	Infrastructure item	Delivery Agency	Funding source	Likely timing
BR-01	Lecky Road Bridge being a completed secondary arterial road bridge (interim standard) across Lower Gum Scrub Creek	Cardinia	ICP, Cardinia	
BR-02	Thompsons Road (East) Bridge being a completed primary arterial road bridge (interim standard) across Lower Gum Scrub Creek.	Head, Transport for Victoria	State	
IN-13	Officer South Freeway Interchange Intersection being a signalised intersection (ultimate standard) from Officer South Road and the Princes Freeway.	Head, Transport for Victoria	State	
BR-03	Grices Road Bridge being a completed secondary arterial	Cardinia	ICP, Cardinia	

	road bridge (ultimate standard) across Cardinia Creek.			
BR-04	Thompsons Road (West) Bridge being a completed primary arterial road bridge (ultimate standard) across Cardinia Creek.	Head, Transport for Victoria	State	

Land in each stage identified on Map 1 can only be used, developed or subdivided when the relevant Infrastructure Items specified in Table 2 for that stage have been provided, to the satisfaction of the relevant Delivery Agency specified in Table 1.

Table 2: Required infrastructure for each stage

Stage	Required Infrastructure Item	Timing
1	Intersection IN-05	To be completed by the time 50% of Stage 1 is developed
2	Lecky Road Bridge (BR-01). Officer South Freeway Interchange Intersection (IN-13).	Before Stage 2 commences/ To be completed by the time 50% of Stage 2 is developed
3	Thompsons Road (East) Bridge (BR-02). Grices Road Bridge (BR-03).	Before Stage 3 commences/ To be completed by the time 50% of Stage 3 is developed
4	Thompsons Road (West) Bridge (BR-04).	Before Stage 4 commences/ To be completed by the time 50% of Stage 1 is developed

MAP 1

[Insert a new staging plan that identifies the proposed stages of development and the Infrastructure Items required for each stage].