

31 March 2025

Mat Garner
Director, South-East Metropolitan
Victorian Planning Authority
1 Spring Street
MELBOURNE VIC 3000

Via email: Mat.Garner@vpa.vic.gov.au

Dear Mat,

SUBMISSION TO AMENDMENT C295case TO THE CASEY PLANNING SCHEME CASEY FIELDS SOUTH & DEVON MEADOWS PRECINCT STRUCTURE PLAN

proUrban Advisory, Planning and Management (proUrban) acts at the instruction of YourLand, on behalf of the landowners of 1845 South Gippsland Highway, 1430 Ballarto Road and 245-255 Clyde-Fiveways Road, Clyde ('the site').

proUrban is pleased to provide this submission to the Victorian Planning Authority (VPA) in relation to exhibited Amendment C295case ('the amendment') to the Casey Planning Scheme – Casey Fields South and Devon Meadows Precinct Structure Plan (PSP).

proUrban has undertaken a detailed review of the exhibited PSP and provides the following submission to key matters as they relate to the site. proUrban is further engaging technical reviews in collaboration with the following expert entities in order to comprehensively understand the opportunities and constraints of the PSP.

- YourLand Developments;
- Traffix Group;
- Spiire; and
- Urban Enterprise.

The significant matters pertinent to this submission that relate to the site, overall PSP area and surrounding municipality are:

- | | |
|--|----------------------|
| 1. Land Use | 4. Open Space |
| 2. Staging and Drainage | 5. Native Vegetation |
| 3. Road Network and Transport Infrastructure | |

proUrban requests further discussions with the VPA, Melbourne Water and South East Water to work through the submissions with the intention of reaching an agreed position prior to proceeding to the Standing Advisory Committee (SAC) hearing.

Please find the following supporting technical reports attached:

- Casey Fields South PSP – Drainage Memorandum prepared by Spiire; and
- Casey Fields South PSP – Proposed Changes to Staging Boundaries Memorandum prepared by Traffix Group.



Executive Summary

proUrban is pleased to provide this submission on behalf of the landowners of the site to the VPA in relation to the Amendment. The submission comprises five (5) components as outlined below.

1. Land use

We request that the designated land use areas and definitions be revised to further maintain flexibility and allow market forces to drive development in the precinct consistent with the broader State policy for the area. We request that business park, retail and commercial uses be co-located close to other designated activity centres within Devon Meadows for better integration and synergies as well as higher exposure. While the core of the precinct be designated for industrial use in a cohesive arrangement.

2. Staging and Drainage

While we understand the staging plan was intended to provide flexibility in the application of the PSP, the proposed staging plan does not consider the development of essential transport infrastructure necessary in the early stages of the delivery of the PSP. We request:

- The staging plan be revised to include CF-05 and CF-20 and therefore IN-02 and IN-05 into Stage 1b.
- The PSP to confirm that interim drainage infrastructure is possible in the initial stages of the PSP (as per the updated proposed staging plan) to facilitate early works approvals and enable development.

3. Road Network and Transport Infrastructure

We request Plan 4 (Movement Network) and Appendix 6 road cross-sections be amended to:

- Redesign the connector street (employment avenue) to allow for a wider carriageway (8.4m) accommodating truck turning movements such as in the Officer South Employment PSP whilst retaining the provision of quality landscaping and supporting minimum forms of active transport.
- Remove the local access streets (employment service loops) from the plan as they are not ICP items and do not directly connect to external arterial roads. This will allow for flexibility in subdivision design and be guided by market conditions and standard road network design principles.

We request detailed designs for all ICP intersections and arterial roads where they impact the PSP (ie. Ballarto Road widening and construction costs) to be provided to ensure they are deliverable and that the standard levy is appropriate. (Further intersection design submissions are detailed in the traffic engineering assessment attached to this submission.)

4. Open Space

We request that:

- The linear park located along the key connector roads in the PSP be removed and reconfigured as a centrally located local park
- The connector street (employment avenue) be redesigned to accommodate the issues identified in Item 3 (Road Network) above and potential for a 'shadeway' intention in providing increased canopy cover within the revised road reserve.
- Plan 14 (Bushfire) be removed as it is redundant given the statutory subdivision and development requirements present within the Casey Planning Scheme.

5. Native Vegetation

We request that native vegetation retention should not be mandatory within the PSP area and should remain a guideline with the intention to retain vegetation where possible.

Introduction

Site Context

The syndicate of landowners have collectively acquired 5 parcels of land in Clyde amounting to approximately 81.1ha of land as shown in Figure 1. The lots are listed below:

ADDRESS	LOT NUMBER	SIZE
1845 South Gippsland Highway	Lot 2 LP204989	37.74ha
1430 Ballarto Road	Lot 2 LP205490	19.02ha
245 Clyde-Fiveways Road	Lot 1 LP217828	0.54ha
251 Clyde-Fiveways Road	Lot 2 LP217828	10.28ha
255 Clyde-Fiveways Road	Lot 2 LP118602	13.53ha

The site is currently categorised as farmland with minimal associated rural dwellings. The site is relatively flat, with a topography that slopes downwards from the northwest to the southeast (approximately 10m) following the alignment of the South Gippsland Highway. The area has a high-water table, and multiple shallow depressions extend diagonally across the PSP area reflecting informal drainage lines. The site is marginally encumbered by Cultural Heritage Sensitivity, predominantly adjoining South Gippsland Highway.

The site is benefited by three frontages summarised below:

- South Gippsland Highway (4-lane arterial) – 400m
- Ballarto Road (unsealed road) – 366m
- Clyde-Fiveways Road (2-lane arterial) – 347m

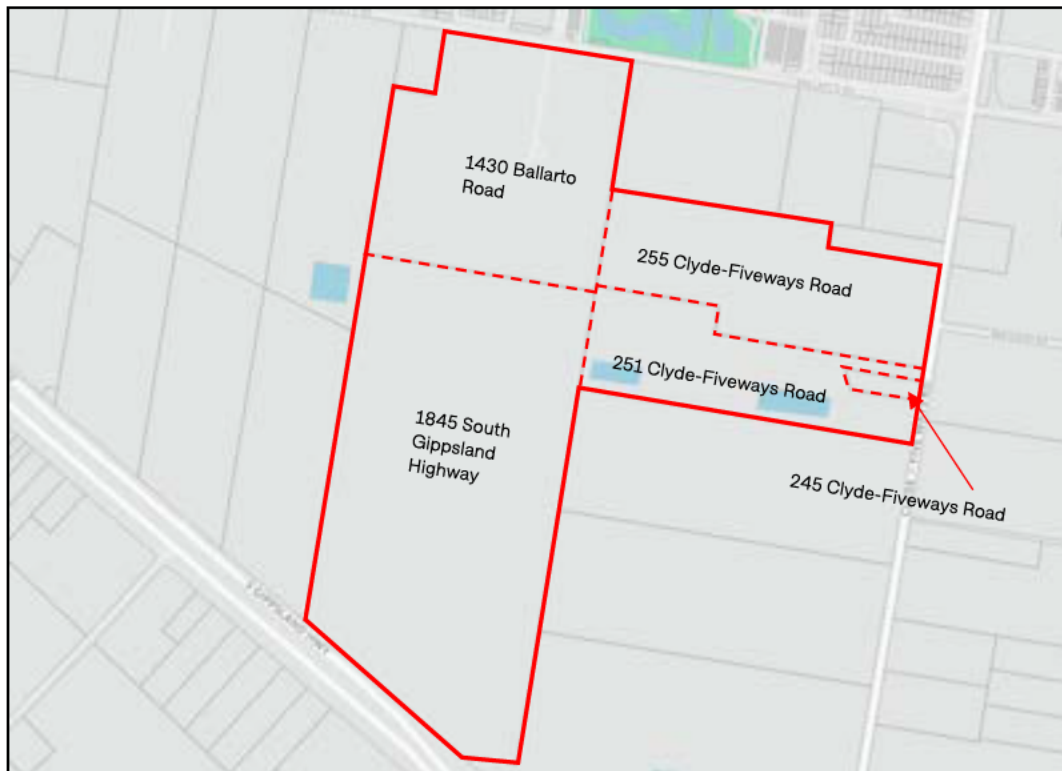


Figure 1 | Cadastral Map of Subject Site

Surrounding Context

The PSP is strategically located between three State Significant Employment Precincts (SSIP), Southern SSIP, Officer-Pakenham SSIP and Hastings SSIP. Casey Fields South Residential PSP is located to the immediate north of the site and was gazetted in 2014 and has predominantly been developed in accordance with the plan. At the north of 1430 Ballarto Road is an identified north-south connector road (Morison Road) intended to extend through the site to connect to Devon Meadows. To the northwest of the intersection of Ballarto and Morison Roads is a local convenience centre yet to be developed. Dwellings to the north of Ballarto Road are accessible from internal loop road with no access from Ballarto Road.

The surrounding precinct has undergone significant change to improve the Ballarto Road and South Gippsland Highway intersection to accommodate increased population and traffic generation providing a safer road network. Stage 1 of this project was completed in 2023 while stage 2 is expected to be completed mid-2025. Furthermore, the City of Casey are seeking to extend the Cranbourne Train Line to terminate in Clyde and include additional railway stations in Cranbourne East and Casey Fields.

Strategic Context

The Southeast Growth Corridor Plan identifies Casey Fields South (Employment) as intended for 'industrial' use and development, further influenced by the Melbourne Industrial and Commercial Land Use Plan (MICLUP), which identifies the land as a future Regionally Significant Industrial Precinct (RSIP). The intention of the RSIP is to provide opportunities for a range of industrial and employment uses that can contribute significantly to regional and local economies. Furthermore, MICLUP identifies the demand for industrial land in the Southern Region has been advancing in the manufacturing sector, with strong growth prospects for freight, logistics and warehousing.

The South East Economic Corridor Strategic Context Report to 2060 (SEEC) supports MICLUP and identifies Casey Fields South as having good connections to the potential future South East Airport, opportunity to create a gateway to urban Casey along South Gippsland Highway and to provide a sensitive interface to adjoining residential.

Plan for Victoria's (2025) Economic Growth Statement identifies industry sectors that are priorities for growth and development over time. These include advanced manufacturing and defence, health technologies and medical research, circular economy, digital technologies and agribusiness. Furthermore, Plan for Victoria presents initiatives to locate more employment land closer to homes.

It is understood that the Infrastructure Coordination: Infrastructure and Development Staging Guidance Note prepared by the VPA in February 2025 provides guidance on ensuring development occurs in an orderly manner, aligning with infrastructure delivery and to provide basic and essential infrastructure early. Furthermore, the guidance note highlights that the implementation of staging development is not intended to create a 'queue' where those at the head of the queue can control the pace of development. This new document is intended to align with the objectives of the *Planning and Environment Act 1987* in providing fair, orderly, economic and sustainable use and development of land.

Casey Fields South Precinct Structure Plan

The site is located exclusively within the Casey Fields South PSP. Below is a summary of the strategic plan as it relates to the site.

Land Use

- The PSP seeks to establish an employment precinct in accordance with MICLUP and the South East Growth Corridor.
- Pursuant to the Urban Growth Zone – Schedule 15 (UGZ15) the applied zones for developable employment land on the site include:
 - Industry – Industrial 1 Zone (IN1Z)
 - Light Industry – Industrial 3 Zone (IN3Z)
 - Mixed Business and Industry – Commercial 2 Zone (C2Z)
- The site further includes the allocation of a business services centre and emergency services facility within 1845 South Gippsland Highway.

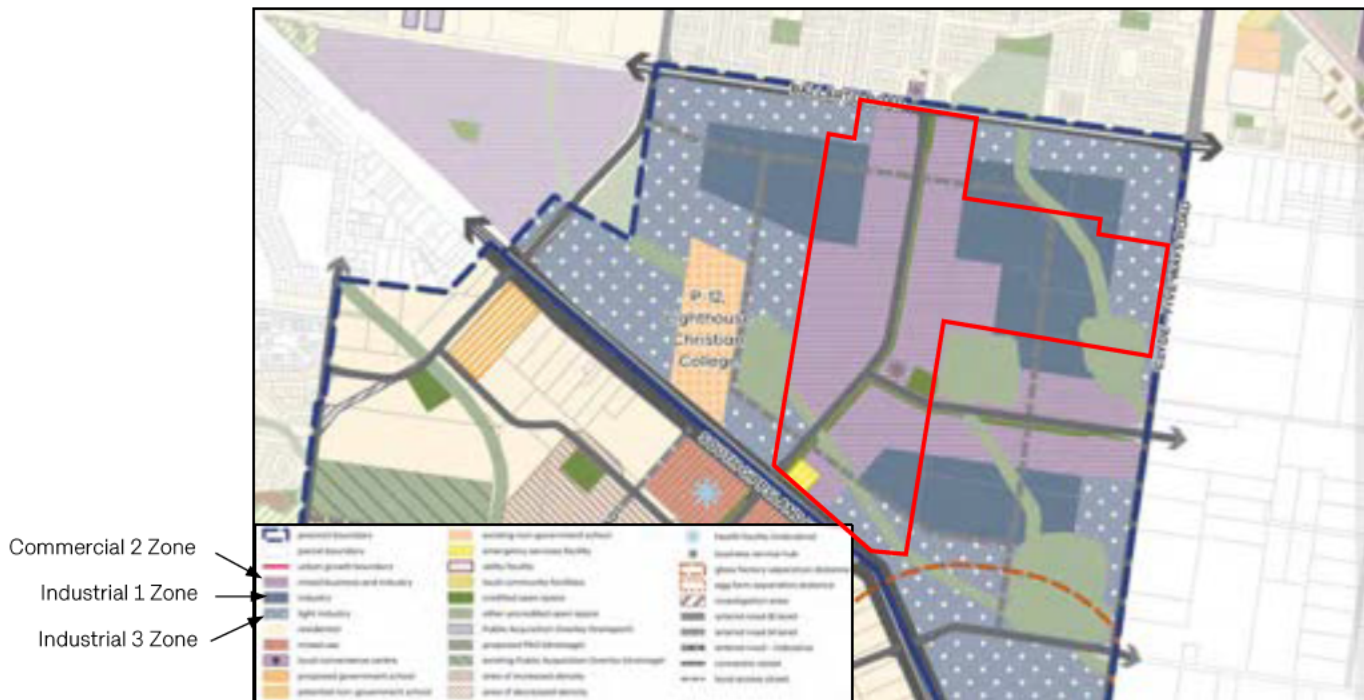


Figure 2 | Plan 2 – Place Based Plan

Road Network

- South Gippsland Highway will increase to a primary 6-lane arterial road (41m)
 - Signalised intersection identified with north-south connector streets.
- Clyde-Fiveways Road will remain a 2-lane connector street (25m)
- Ballarto Road will become a secondary 4-lane arterial road (34m)
 - Signalised intersection identified at Morison Road
- Internal connector streets – Employment Avenue (20m width + 15m linear credited open space)
- Internal local access street – employment services loop (20m)

All roads above (except Ballarto Road) are proposed to provide a two-way bike path. Ballarto Road is proposed to provide an off-road shared path.

Vegetation and Open Space

- Plan 13 of the PSP identifies a number of trees that **must** be retained.
- The internal connector street – employment avenue seeks to provide a linear park with the project ID references CF-LP-01 and CF-LP-03 providing passive open space totalling 2.86ha.
- Additionally, passive open space CF-LP-2 is located on 1845 South Gippsland Highway providing 0.7ha local parkland.

Drainage Infrastructure Staging

- The PSP sets out 4 stages across both Devon Meadows and Casey Fields South PSP areas for the purposes of establishing the necessary drainage infrastructure to manage future development of the precinct.
 - Stage 1b – 245 -255 Clyde-Fiveways Road
 - Stage 2b – 1845 South Gippsland Highway and 1430 Ballarto Road
- Drainage infrastructure **must** be designed to the satisfaction of South East Water, Melbourne Water and the Responsible Authority (R8).
- Development **must** provide for the delivery of ultimate waterway and drainage infrastructure as detailed in the DSS including stormwater detention and quality treatment, and outfalls to the satisfaction of Melbourne Water and the Responsible Authority (R28).
 - Where it can be demonstrated that this is not possible, development proposals must demonstrate how any interim solution adequately manages flow rates, treats stormwater generated from the development (without causing adverse impacts to the other properties within or outside the precinct, the environment, cultural heritage, or other infrastructure), to the satisfaction of Melbourne Water and the responsible authority.
 - An interim solution will not be considered for assets WD1, WD2, WD3, SGC, WD4, O1, O2, O3. These assets must be delivered in their ultimate form. Development construction and interim solutions must avoid or mitigate the risk of soil erosion and waterway degradation.

Detailed Submissions:

This submission comprises of five (5) components detailed below in relation to the Casey Fields South PSP.

1. Land Use

The South East Economic Corridor (SEEC) Strategic Context Report to 2060 states that the PSP will primarily cater for manufacturing, logistics and population-serving businesses in the shorter term with the potential role and function of the PSP to include agriculture value add, freight, logistics and urban services. These uses are generally aligned with Industrial Zoning. Pursuant to the VPA Background Report (February 2025), the project vision for Casey Fields South (Employment) precinct is described as being a flexible employment precinct.

We understand the PSP provides the following breakdown of employment land:

EMPLOYMENT	INDICATIVE USES & ACTIVITIES	LAND BUDGET	PROPOSED ZONE
Mixed Business and Industry	Business parks, research and development, bulky goods retail, offices, professional services of a small to medium scale	55ha/27% NDA	Commercial 2 Zone
Business Service Hub	Cafes, food and beverage, gym, childcare, pharmacy. Smaller-scale food and beverage, retail and commercial services.	Within 'Mixed business and Industry'	Commercial 2 Zone
Light Industry	Small scale manufacturing, service industries, research and development.	103ha/48% NDA	Industrial 3 Zone
Industry	Industry, manufacturing, warehousing and storage of goods, trade supplies, transport, logistics. Include provision of large lots that can accommodate building footprints over 2,000sqm	48 ha/23% NDA	Industrial 1 Zone

The PSP has been informed by an Employment and Retail Needs Assessment prepared by SGS Economics and Planning in 2022. The purpose of this assessment was to recommend the most suitable and in demand employment uses that could be located in the PSP area. The assessment identified the proportion of land that is suitable for each land use type based on criteria around access, infrastructure, natural and built constraints, amenity and sensitive uses and preferred locations of these land use types. The findings are below:

LAND USE TYPE	DEVON MEADOWS	CASEY FIELDS SOUTH
Service Industry	96%	100%
Business Park/Research	96%	100%
Heavy Industry	0%	10%
Light Industry	0%	48%
Freight	13%	89%

The Assessment recommended the following options for the PSP area:

- **Option 1: Business Park & Research Focus** – large commercial development sites that offer campus style office/ research facilities.
- **Option 2: General Employment Precinct** – a mix of light industry, service industry, freight and business parks.
- **Option 3: Hybrid Approach** – where the inner core of the precinct becomes commercial and is designed with strong amenity and active transport focus, whereas the outer parts of the precinct with strong arterial access is preferred for industry and freight.

Pursuant to the report prepared by SGS Economics and Planning, Casey Fields South Employment precinct has the potential to satisfy a variety of employment typologies due to the prospective growth in the area, access to major infrastructure and proximity to other economic regions. However, the current designation of land areas and corresponding definitions and activities appear to restrict the potential to provide a diverse employment precinct in a timely manner. Flexibility is imperative to safeguarding the broader vision of the PSP. An important consideration for flexibility in land use outcomes is ensuring both short- and long-term viability and capacity to achieve any stated vision.

PSP's such as the Truganina PSP and Armstrong Creek PSP should provide living examples of delays to achieving desired development outcomes as a consequence of over prescription in land use outcomes. Whilst Truganina has recently seen an increase in approvals and development outcomes, these reflect an internal shift from Council to accommodate uses permissible under the applied zone after a decade of inactivity.

The employment uses proposed in the Casey Fields South PSP should seek to align with the State's policy designation as a Regionally Significant Industrial Precinct. The PSP should focus on accommodating priority and high growth sectors, as well as industries of comparative economic advantage identified in State and Regional strategies, including manufacturing, freight, logistics, warehousing and population service industrial. Whilst the zoning proposed generally achieves the objectives of state and local policy, the PSP seeks to introduce a focus on business and commercial land uses that is not contemplated to the extent proposed in other state policy. Additional prescriptions in the PSP requirements and guidelines also ultimately result in confusion and delays to development and job creation.

Furthermore, it is worth noting the SGS assessment was prepared prior to the State obtaining a comprehensive understanding of the significant deficit of industrial land supply. Therefore, the recommendations for more business park and research facilities are not as relevant in the current industrial climate. Industry and warehousing should be included in the suite of desirable land uses in the Mixed Business and Industry area. While the significant application of Commercial 2 Zone (C2Z) allows for Industry and Warehouse as of right, the definition of Mixed Business and Industry in Table 4 (employment areas planned outcomes) of the PSP provides a prescriptive application to the land which conflicts with the applied zone and reduces the flexibility and purpose of the C2Z in this context. In addition, G16 further restricts use and development in the Mixed Business and Industry area and should be reconsidered in the context of varying uses that are permissible under the C2Z.

We broadly agree that the precinct does not lend itself to heavy industry and the subsequent absence of the Industrial 2 Zone is accepted. We note that scale of building should not necessarily be determinative of the weighting of use (i.e. light or heavy). Pursuant to all applied zone's land use tables, a proponent's proposal for land uses that are not compatible with the surrounding residential precincts will be controlled through conditions triggering permit requirement where the Responsible Authority has the discretion to establish a compliant and mutually beneficial employment precinct.

Use	Condition
Industry (other than Materials recycling and Transfer station)	<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 an Activity Centre Zone, Capital City Zone, Commercial 1 Zone, Docklands 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 2002. • Require a notification under the Occupational Health and Safety Regulations 2002. • Require a licence under the Dangerous Goods (Explosives) Regulations 2011. • Require a licence under the Dangerous Goods (HCDG) Regulations 2016. <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.

Figure 3 | Industrial 1 Zone (IN1Z) example of as of right land use conditions

We request that the designated land uses be revised to further maintain flexibility and allow market forces to drive development in the precinct. While we appreciate the intention of the VPA to establish a central heart to the employment precinct, we consider the application of land uses should result in:

- The frontage to South Gippsland Highway and eastern interface to existing school to accommodate Mixed Business and Industry and the description of this use in the PSP be revised to reflect the ability to deliver industrial uses in this zone.
 - This will provide comprehensive integration with the Devon Meadows Activity Centre and Mixed Use area.
 - Benefits from major arterial road frontage leveraging the favourable and advantageous attributes of the Highway with significant exposure to passing traffic.
- Internal clustered core of the precinct to provide for industry.
 - Resulting in a higher total percentage of land allocation to increase supply in the context of the industrial land shortage
 - Support the identified demand for manufacturing, logistics and transport
 - Provide convenient access from arterial roads via connector street (employment avenue) rather than local connector loop roads.
 - Accommodates uses that are commensurate with strategic and policy directions for the PSP and the Southern Region.
- Periphery of the precinct to allow for light industry to act as a buffer to surrounding residential land.
- Relocation of linear park to pocket parks located at functional intersections. Amongst other things, this park acts as a revenge strip and is likely to impede land use flexibility becoming a hazard for both cyclists and vehicles.

- The business service hub can remain in place or be shifted north or south to the junction with either Ballarto Road or South Gippsland Highway. Its existence is not imperative to the future success of the employment precinct.
- Reduce the prescriptive definitions of employment types.
 - We consider the application of the applied zones (with permit required uses subject to the decision of the Responsible Authority) and driving market forces should primarily enforce the use and development of the land, with the PSP as a guiding document. Furthermore, as exhibited in Figure 3 below, heavy industrial land uses (uses with adverse amenity impacts) will generally be subject to the Council's decision.

Please refer to the below plan prepared by Spiire which sets out a more appropriate employment precinct layout.

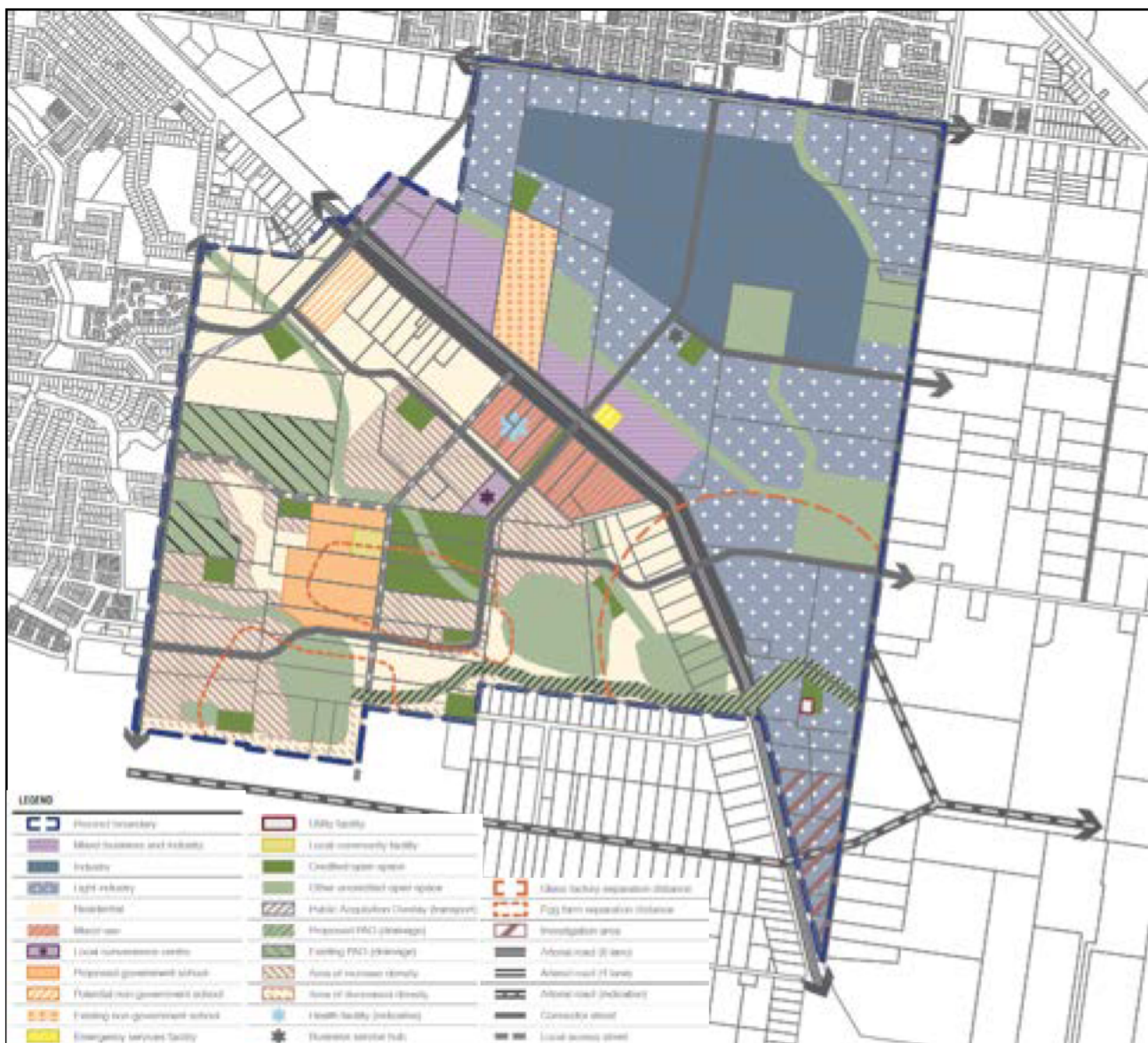


Figure 4 | Proposed allocation of land use

2. Staging and Drainage

We acknowledge the extensive work undertaken by the VPA, Melbourne Water Corporation (MWC) and South East Water in the preparation of the drainage objectives for the PSP to enable the development of a thriving employment precinct and ensure safe stormwater and drainage outcomes.

The PSP includes 97ha of land (26% of the PSP) proposed to facilitate the delivery of the Development Services Scheme (DSS). The draft version of the DSS will be comprised of multiple new constructed waterways, and seven new retarding and wetland assets.

The drainage diversion channel provides outfall for the entire precinct and is represented in the Plan 9 (Infrastructure and Development Staging Plan) by WD1, WD2, WD3 and WD4 O1, O2. Pursuant to the Infrastructure and Development Staging Background Report the drainage infrastructure within each stage must be delivered prior to any other development commencing in the relevant or subsequent stages. Furthermore, we note that interim solutions for these assets are not recommended or supported.

Furthermore, the Infrastructure and Development Staging Background Report provides an assumption that some projects identified to be delivered in a stage will be delivered by developers through Works in Kind (WIK) arrangements. If this is to occur, then developers will forward fund the cost of constructing the infrastructure and offset against their future ICP monetary contribution. This assumption relies on developer eagerness and ability to deliver projects through WIK arrangements.

Despite the intention of the relevant strategic documents and the VPA's 10 Year Plan for Melbourne Greenfields (October 2024) that land be adequately serviced when it is released, the current staging objectives will result in a delay of 5-10 years at the employment precinct. The requirements for Outfalls 2 and 3 to be developed prior to Stage 1b commencing with no alternatives for interim solutions to be considered will contribute to this significant delay (R28). Furthermore, we consider the current staging plan only considers the requirement of drainage infrastructure resulting in the impractical development of Stage 1b limiting access to this stage of the employment precinct.



Figure 5 | Plan 10 – Precinct Infrastructure Plan (left) and Plan 11 – Land Use Budget (right)

Furthermore, there are a significant number of concerns raised about the boundary of Stage 1b within the employment precinct:

- The current staging boundary for 1b provides egress only to Clyde-Fiveways Road (currently two-way rural connector) and no access point from South Gippsland Highway (a major arterial road expected to provide a key traffic route to accessing the employment land).
- Lots CF-12, CF-21 and CF-22 located within current Stage 1b boundary do not have any access point to the external road network (land locked) and would be reliant on others to develop first unless a temporary access point could be negotiated with the road authority.
- It is not clear whether IN-09 would be part of stage 1b (employment) or 1a (residential). If the employment land is developed first, there may be only a single access point (IN-06). The PSP land is located within a Designated Bushfire Prone Area and the fire authority typically requires a minimum of two points of access to any subdivision which is within a bushfire prone area.
- The current stage 1B provides a total NDA of 73.76ha (36% of overall NDA). If it is assumed that the overall employment PSP will accommodate 5,400 jobs, then the current Stage 1B could accommodate in the order of 1,942 jobs. Based on the business park traffic generation rates, this could generate in the order of:
 - 1,417 vehicle trips during the road network peak hours, and
 - 13,670 vehicle trips per day.

This level of traffic will exceed the capacity of a single connector road access point and is also likely to exceed the capacity of Clyde-Fiveways Road noting that it already carries in excess of 8,000vpd.

While we understand the staging plan was intended to provide flexibility in the application of the PSP, the proposed staging does not consider the development of essential transport infrastructure. This has the potential to be enforced as a hard stage boundary which would be detrimental to the delivery of the PSP in the short-medium term. We request:

- The staging plan be revised to include parcels CF-05 and CF-20 and therefore intersections IN-02 and IN-05 into Stage 1b (as shown in Figure 5). We consider this a suitable alternative as:
 - Both parcels are under single ownership and will result in a timely delivery of an essential transit route.
 - Allow for earlier access to employment land without requiring funding from uncompleted PSP's (Clyde South).
 - Reduces traffic impacts to Clyde-Fiveways Road which will delay the need for DTP to acquire the PAO land and duplicate the road.
 - It will satisfy the Designated Bushfire Prone Area access requirements.
 - We consider the expanded Stage 1b with the inclusion of the additional ICP intersections (CF-IN-02 and CF-IN-05) will not compromise the funding for priority ICP infrastructure projects as will be outlined in any future ICP.
- The PSP and any other incorporated or background documents supporting the PSP and Staging Plan to allow for interim drainage infrastructure to allow flexibility in development outside the initial stages. The management and retention of stormwater can be regulated by existing clauses in the Casey Planning Scheme (Clause 19.03-3S and 53.18) for individual lots.
- The Public Acquisition Overlay – Schedule 4 (PAO4) be applied to Outfall Assets 2 and 3 in the PSP providing consistency for all outfall assets and further mitigating delays in developing Stage 1b.

- Further clarification on how the Infrastructure Drainage Background Report will be utilised in the amendment. Should it be incorporated into the Casey Planning Scheme and be utilised as background document supporting the decision making within the PSP, we request that we be allowed to provide a submission relating to the document in accordance with the requests in this submission.



Figure 5 | Plan 9 – (Infrastructure and Development Staging) Amended Stage 1b Boundary

Please refer to the attached Casey Fields South PSP – Drainage Memorandum prepared by *Spiire* and Casey Fields South PSP – Proposed Changes to Staging Boundaries Memorandum prepared by *Traffix Group* for further details.

We request the VPA remain open to consider further technical submissions currently being prepared to justify the extended Stage 1b boundary.

3. Road Network and Transport Infrastructure

Plan 4 (Movement Network) of the PSP proposes a hierarchy of roads to accommodate major arterial networks at the periphery of Casey Fields South PSP and internal connector roads to accommodate access to employment land. The connector street (employment avenue) is shown on the site (north-south alignment through 1845 South Gippsland Highway) providing two key access points to the employment land.



Figure 7 | Plan 4 – Movement Network

We make the following submissions in relation to the proposed transport network and design:

- Subsequently, with the proposed amendments to the employment land uses addressed in item 1 (Land Use) above, it is submitted that the employment avenue with adjoining linear park would be ineffective in the movement of heavy vehicles through the precinct and equally ineffective for cyclists or other micromobility vehicles. A major consideration of this employment avenue is to access the employment land bounded arterial roads. It is worth reinforcing that there are minimal access points to the employment land from outside precincts as discussed in item 2 (Staging) above.
 - Whilst it is admirable to strive to deliver linear open spaces and unencumbered shared paths through future communities, it should not be at the expense of ensuring that this industrial employment precinct can be developed in a way that facilitates the safe and effective movement of heavy vehicles and ultimately achieves the broader PSP Vision.
 - Suitable bike linkages can still be provided within industrial road cross sections which can also provide for high quality public realm and canopy trees ensuring that these objectives are still met but in a way that doesn't compromise an effective industrial road network.
- Pursuant to R2, all roads must be designed and constructed generally in accordance with Plan 4 (Movement Network). We consider the designation of local access streets (employment service loops) is restrictive to subdivision design and may have a detrimental impact on land use viability. Creating industry as a large centralised and unincumbered area should be a key theme of the PSP. A finer grain road network can be accommodated at the subdivision stage and inclusion of lower order roads such as the employment service loop unnecessarily encumbers the precinct.
- 20m Connector Street (Employment Avenue) Cross-section
 - The provision for pedestrians is excessive. It would appear that there isn't a need (or demand for) two footpaths within the linear park. One (the outer one) would be sufficient.

- A 7m wide carriageway is well below the typical provision for an industrial subdivision and does not meet the Public Transport Guidelines for Land Use Development, which shows a minimum 8.4m carriageway.
- The cross-section shows the 4m verges are required to accommodate planted swale, bus stops and parking bays. In industrial estates parking bays are required to be a minimum of 2.6m wide to cater to heavy vehicles. There will be minimal space for swales and any planting of trees will need to be widely spaced to allow for truck layovers.
- Local Access Street (Employment Service Loop)
 - The nature strips are only 3m wide and are also proposed to accommodate a planted swale in addition to indented car parking and canopy trees. Indented truck parking bays need to be long enough for articulated trucks, leaving little room for planting. In an industrial/employment estate there would typically be a reasonable provision for on-street parking of 2.6m wide, leaving only 0.4m for the planted swale.
 - The loop access road is proposed to be the primary movement corridor for heavy vehicle movements and servicing of employment lots. However, heavy vehicle movements will still need to enter and exit the estate via the employment avenue connectors.
 - The proposed carriageway width is significantly narrower than at other industrial estates, and the overall reservation width (20m) is also narrower than standard despite allocating more space to active travel.
 - The cross-section includes an 8m effective verge on one side which includes a 3m wide shared path. In an industrial estate/business park environment, any potential cyclists are likely to be competent riders (not children or retirees). Local streets typically carry lower volumes and have low operating speeds and cyclists can share the roadway and not require a separate facility.
- There is inadequate provision for parking within an employment precinct context.

Furthermore, there are a number of concerns relating to the ICP associated with the development of transport infrastructure:

- Intersections along Clyde-Fiveways Road are only partially funded by the PSP and are reliant on additional funding from the Clyde South PSP (yet to be completed). In the absence of development at Clyde South PSP, the interim intersections will require land acquisition including PAO land as well as additional land beyond the boundaries of the PAO to deliver a cross-intersection. Alternatively, a signalised T-intersection could be delivered and added to later by the Clyde South PSP, however a staged delivery approach would result in additional costs being incurred beyond what would be reimbursable through the ICP.
- PSP Plan 11 (land use budget) appears to show consideration of the land required for intersections (noted as arterial and non-arterial road widening/intersection flaring), However no intersection plans have been included in the publicly available documents. Plan 11 indicates that intersections IN-05 and IN-06 are located predominantly within one title but have a small section which potentially extends across an adjacent lot in different ownership making delivery of the intersections more difficult. Additionally, IN-05 does not appear to include any splays. It is noted that there is an existing wide verge on South Gippsland Highway, and it is likely that the splays can be accommodated within the existing road reservation. However, this should be confirmed within the PSP.

- Almost all of the road and intersection projects are labelled “CF” (Casey Fields), with only one project being labelled “DM” (Devon Meadows), while parks and community infrastructure are more evenly split between the two. It is not appropriate to tie the two PSPs together with a single ICP without including details of apportionment between the two.

Therefore, we request Plan 4 (Movement Network) and Appendix 6 road cross-sections be amended to:

- Redesign the connector street (employment avenue) to allow for a wider carriageway (8.4m) accommodating truck turning movements such as in Officer South Employment PSP whilst retaining the provision of quality landscaping and supporting minimum sustainable forms of transport.
 - Achieving desired outcomes such as activation of certain frontages or beautification of certain transport corridors can be achieved through prescription of design-based outcomes rather than prescription of land use outcomes.
- Remove the local access streets (employment service loops) from the plan as they are not ICP items and do not directly connect to external arterial roads. This will allow for flexibility in subdivision design and be guided by market conditions and standard road network design principles.
 - Furthermore, should the cross-section for the employment service loops remain in the PSP, we request they be amended to accommodate heavy industrial vehicles.

We also request to view and provide commentary on the ICP and confirm that the land and construction costs are sufficient. We are also seeking to confirm that the widening and construction of Ballarto Road are appropriately funded.

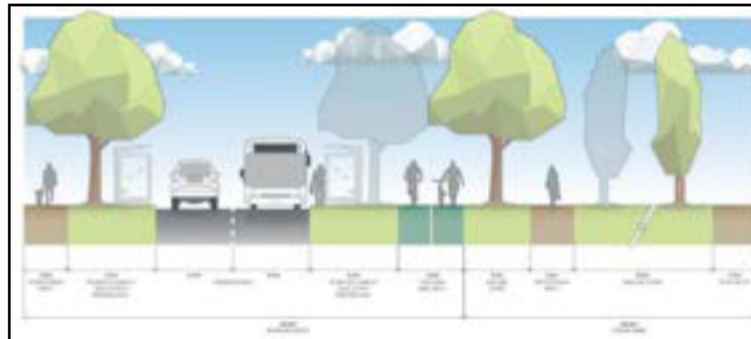


Figure 8 | Casey Fields South Employment PSP – Connector Street (Employment Avenue)

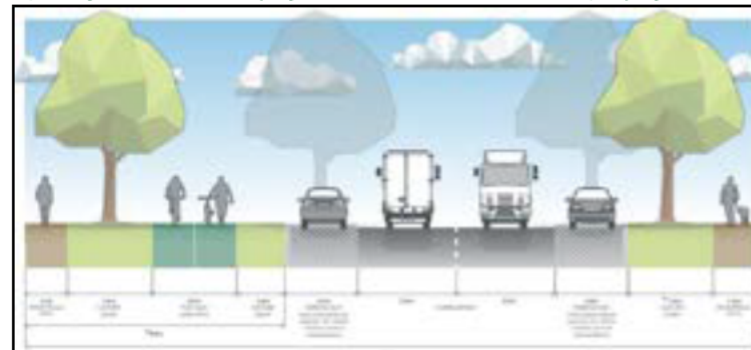


Figure 9 | Officer South Employment PSP – Connector Street (26m Industrial)

Please refer to the attached Casey Fields South PSP – Proposed Changes to Staging Boundaries Memorandum prepared by *Traffix Group* for further details.

Furthermore, we request the VPA remain open to consider further technical submissions currently being prepared to justify the revised road network.

4. Open Space

Plan 5 (Public Realm) has allocated a linear park (with references CF-LP-01 and CF-LP-03) to adjoin the major internal connector street (employment avenue) as well as CF-LP-02 within 1845 South Gippsland Highway to the west of retarding basin CF-RB-02. While we consider the 0.7ha local park adjoining the drainage reserve a suitable outcome, we consider the linear park to be predominantly redundant within an industrial precinct.

We have identified concerns relating to the provision of local parks in the PSP:

- Pursuant to opportunity 4 of the Integrated Water Management – Issues and Opportunities prepared by Alluvium, it recommends the provision of ‘shadeways’ (linear lengths of enhanced shading) and is assumed to be located along connector roads and accommodate 2 trees to every 10m.
- We appreciate the intention of providing canopy coverage and supporting sustainable forms of transport through bicycle and footpaths in order to connect the various surrounding precincts. However, we consider a more suitable alternative will satisfy the intention without utilising 2.86ha of developable land.
- Furthermore, the linear park reduces the functionality and accessibility of industrial lots utilising the prime frontages to the connector road.
- It is our understanding that the PSP 2.0 model allows for 2% open space in employment precincts. Totalling the credited and uncredited open space within the Casey Fields South PSP area, this exceeds the 2% requirement.

Furthermore, Plan 14 (Bushfire) nominates an indicative 19m setback (grassland) to all drainage infrastructure and retarding basins. Pursuant to Clause 13.02-1S applies to land that is within a designated bushfire prone area or proposed to be used of developed in a way that may create a bushfire hazard. Therefore, the objectives and strategies will apply this statutory requirement on the development of this land. Furthermore, should a frontage road not be proposed to separate the uncredited open space pursuant to G21, industrial developments require a 6m fire access track to access the perimeter of the building further negating the requirement for Plan 14.

We request that:

- The linear park be relocated to Clyde-Fiveways Road for the following reasons:
 - Clyde-Fiveways Road is a more suitable link that is already part of the Principal Bike Network.
 - Improving cyclist and pedestrian safety as, as there will be less crossovers along road.
 - Capitalising on the Public Acquisition Overlay (PAO) on the road where the Department of Transport (Victoria’s Big Build) already intends to upgrade Clyde Road (extending to Clyde-Fiveways Road) by road duplication, widening and addition of footpaths as well as improving the intersection with South Gippsland Highway connecting northern suburbs (including new Clyde Major Activity Centre in Clyde Creek PSP) to Devon Meadows.
 - Should the employment avenue road reserve be widened, we consider the retention of a linear park will significantly reduce the net development employment land of the precinct.
- The connector street (employment avenue) be redesigned to accommodate the issues identified in Item 3 (Road Network) above, but retains potential for a ‘shadeway’ intention in providing increased canopy cover.
- Plan 14 (Bushfire) be removed as it is redundant against the statutory subdivision and development requirements present within the Casey Planning Scheme.

5. Native Vegetation

The PSP is located within the Melbourne Strategic Assessment (MSA) Program area. The intention of the MSA is to support development of land while meeting environmental regulations to protect local flora and fauna. In order to develop in an area subject to the MSA, developers are required to pay the MSA Levy which funds the creation and management of conservations reserves and programs for vulnerable species.

We have identified concerns in relation to the PSP's intention to retain vegetation:

- Pursuant to the MSA Levy Estimator, parts of the site are identified as habitats for the Southern Brown Bandicoot and Growling Grass Frog, with a small area (0.008ha) of native vegetation identified. It is our understanding that the VPA's background Ecological Assessment prepared by WSP relating to the retention of Southern Brown Bandicoot habitat did not identify habitat areas to retain within the Casey Fields South PSP area.
- The MSA Levy Estimator has identified one location of scattered trees (individual trees or small groups of trees that are found outside of larger areas of native vegetation, often in agricultural or developed landscapes) on the existing agricultural land, thus triggering a biodiversity offset requirement to compensate for the loss. The Environment Mitigation Information System (EMIS) maps the location of scattered trees within the Biodiversity Conservation Strategy (BCS) area, which is used to calculate habitat compensation fees for their removal.
- The location of the identified scattered trees is on 255 Clyde-Fiveways Road which have a corresponding low or no retention value pursuant to the Arboricultural Assessment prepared by ENSPEC. We note the Arborist was not able to access this site to comprehensively assess the vegetation.
- Pursuant to the Arboricultural Assessment, the scattered trees that **must** be retained on Plan 13 of the PSP are predominantly moderate or high retention value trees. We note that all of these have not been captured in the MSA Levy Estimator. The retention value at each lot can be summarised below:

SITE	HIGH	MODERATE	LOW	NONE
1845 South Gippsland Highway	2	16	81	79
1430 Ballarto Road	-	3	537	408
245 Clyde-Fiveways Road	-	2	2	69
251 Clyde-Fiveways Road	-	1	51	548
255 Clyde-Fiveways Road	-	16	41	425

Native vegetation retention should not be mandatory within the PSP area and should remain a guideline with the intention to retain vegetation where possible because:

- The MSA and BCS applies to the entire PSP area and therefore an offset levy is mandatory to remove trees and develop the land.
- The retention of a small number of trees will considerably affect the subdivision functionality and development potential reducing the net developable employment land.
- Plan for Victoria – Action 8: *Ensure new industrial and commercial land is ready for development*. The action includes removing barriers to industrially-zoned land being used for its intended purpose to resolve issues preventing development, including connections to services and utilities, drainage and **environmental constraints** that make it difficult to unlock industrial-zoned land.
- Cut and fill across the precinct is likely to necessitate removal of vegetation.

Conclusion

We look forward to continuing our collaborative and positive approach with the VPA in order to progress the development of the PSP. We hope to continue discussions throughout the process with all relevant authorities to facilitate mutually beneficial progress. We request responses to all or specific parts of our submission prior to the proposed Directions Hearing.

Furthermore, we request the VPA remain open to consider further technical submissions currently being prepared to justify the recommendations proposed in this submission.

It is hoped that upon review of this submission and subsequent addendums, key matters can be discussed and ultimately resolved with both the Victorian Planning Authority (VPA) and the City of Casey (Council) prior to any Standing Advisory Committee (SAC) Hearing.

If you require any further information or clarification, please do not hesitate to contact us on [REDACTED] or via email at [REDACTED]

Yours sincerely,



[REDACTED]
Director

MEMO

To:	██████████
From:	██████████
Date:	27 March 2025
Reference:	323300
Project name:	Casey Fields South PSP
Subject:	Key PSP Risks

1. INTRODUCTION

This memo is prepared on behalf of the landowners represented by YourLand. It pertains to the Casey Fields South Precinct Structure Plan (PSP). Our brief includes reviewing the PSP, Melbourne Water Drainage Strategy (MW DS), and other relevant background information to provide comprehensive advice to YourLand on behalf of the landowners.

Critically, we have been tasked with identifying any key risks that could prevent the effective delivery of the project. Additionally, we will make recommendations on how these issues could be resolved through changes to the PSP or other documents as appropriate.

2. FLOOD MAPPING

Based on the review of the PSP documentation including the GHD Drainage Strategy, there has been no updated existing or developed flood mapping done to determine flood conditions downstream of Casey Fields South. The GHD report has only used Tuflow modelling as a comparison with RORB.

Based on our review the downstream conditions east of Clyde Fiveways Road has limited capacity to receive existing and developed flows. Refer to next section for our analysis of existing outfall conditions. The existing serviceability of drainage infrastructure downstream would be lucky to have “1 year” capacity.

The flood modelling report by Cardno (2021) was not made available during the consultation period. The importance of this information is to understand existing conditions as this would form a basis of sequencing development in absence of ultimate conditions being available. This also impacts staging of the development.

RECOMMENDATION - Melbourne Water should provide all flood mapping for the existing conditions and consider sequencing and requirements around interim development scenarios.

3. KEY OUTFALL LOCATIONS FOR CASEY FIELDS SOUTH

The marked-up locations of the key outfalls for Casey Fields South are shown in the below figures.



Figure 1 - CFS outfall locations

3.1 Clyde Fiveways Rd / Moores Road intersection location (Proposed CFS4 upstream)



Figure 2 - Existing drainage downstream of CFS4

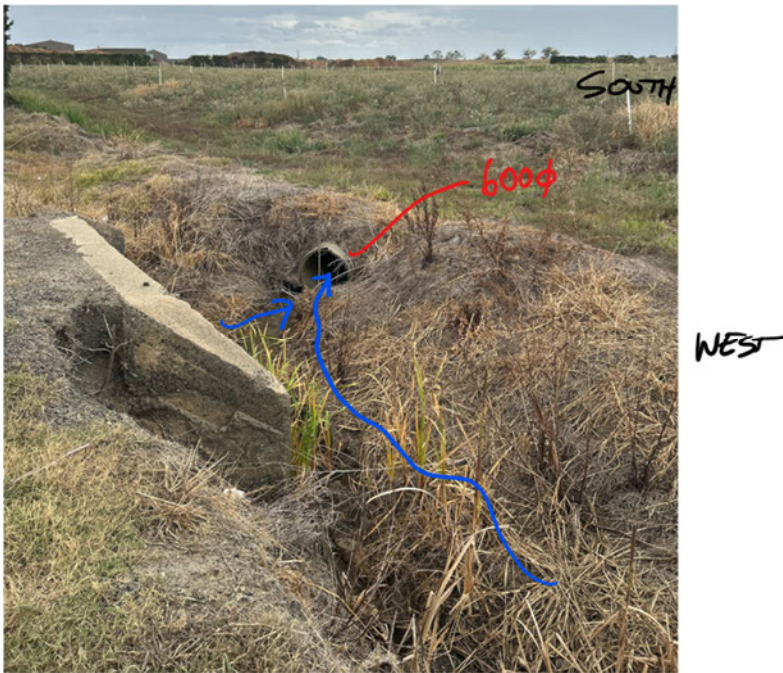


Figure 3 - Ex. Outfall through private property (looking South-East)



Figure 4 - Ex. Outfall in Moores Rd (looking West)

3.2 226 Clyde Fiveways Road location (Proposed CFS3 upstream)



Figure 5 - Existing outfall arrangements downstream of CFS3



Figure 6 - Existing Outfall conditions of CFS3 (Looking South)

4. PROPOSED CFS3 OUTFALL

The approximate road level of Clyde Fiveways Road at CFS3 is approximated at 28.5m AHD.

The proposed outfall level of CFS3 at Clyde Fiveways is 25.75m AHD. This equates to 2.75m deep outfall at the outfall location. The existing depth would be no greater than 1m as shown above in the existing conditions.

This presents challenges for the development upstream as there is unlikely to be ability to achieve a free flowing outlet without the construction of a waterway within the Clyde South PSP. If no ability to have an outfall Stage 1b will be in jeopardy to proceed. Interim solutions will be looked at by the development community such as adding additional fill, looking for alternate outfall locations or introducing pumped solutions.

CALL TO ACTION – A PAO is required downstream of Clyde Fiveways Road for the Casey Fields South PSP and staging boundaries should be expanded to allow areas further upstream to be developed in absence of an ultimate waterway within Clyde South in the immediate future.

5. PROPOSED CFS4 OUTFALL

The approximate road level of Clyde Fiveways Road at CFS4 is approximated at 24.0m AHD.

The proposed outfall level of CFS4 at Clyde Fiveways is 19.57m AHD. This equates to 4.43m deep outfall at the outfall location. The existing depth would be no greater than 1m as shown above in the existing conditions.

Again just like CFS3 outfall, this presents challenges for the development upstream as there is unlikely to be ability to achieve a free flowing outlet without the construction of a waterway within the Clyde South PSP. If no ability to have an outfall Stage 1b will be in jeopardy to proceed. Interim solutions will be looked at by the development community such as adding additional fill, looking for alternate outfall locations or introducing pumped solutions.

CALL TO ACTION – A PAO is required downstream of Clyde Fiveways Road for the Casey Fields South PSP and staging boundaries should be expanded to allow areas further upstream to be developed in absence of an ultimate waterway within Clyde South in the immediate future.

6. CLYDE SOUTH PSP

The Clyde South PSP is not earmarked to be complete until 2028-2029. I would expect that unless land is acquired downstream there will be a limited ability to due downstream outfall works until 2030+. This will be a significant issue for interim development conditions and the short term delivery of the PSP.

Given the above an amended Stage 1b with an expanded development area is more likely to be viable on the basis that temporary retardation can occur prior to and in conjunction with the construction of O3 and O4. Refer to section 9 below for further information regarding staging.

7. WETLAND/RB CONCEPTS

We question whether these concepts have been designed with effective and efficient land provisions. There is also no information as to whether these assets would meet Melbourne Water's deem-to-comply criteria. The wetlands have been designed "on-line" of which we do not have major issues with but this is typically at odd's with MW's preference to have wetlands offline from waterway's.

The GHD report makes no reference to volume requirements from a retardation perspective, this needs to be included in their report.

RECOMMENDATION – Melbourne Water need to provide further justification to the sizing as we believe these sizes are overstated and further detail is required to enable confidence that the conceptual design meets MW requirements.

8. MW'S CONCEPT FILL PLAN

This conceptual fill plan provided in Appendix F of GHD report is unclear as to what it is trying to achieve and potentially misleading. The plan infers that freeboard needs to be contained within the waterway and basin locations. The freeboard is there to set a minimum lot level or finished floor level. The Casey Fields South PSP has low lying areas in parts of the PSP and will need fill in these areas

to support future urban development. The industrial/commercial areas will require 10% AEP pipes and hence this can influence fill to increase along with typical road grades required by local government.

There is a risk that without the Clyde South outfalls in place that developers and their consultant will look to achieve a free-flowing outfall by filling the land further.

We believe a fill plan sets a good basis for decisions on drainage asset locations and level requirements, but we believe that it needs to be considered on the following basis:

- ▶ Waterway and basin locations and level requirements
- ▶ Major piped drains including cover requirements (Pipe size + 1.2m cover as a first cut)
- ▶ Minimum road grades of say 1in 200 or 0.5%.
- ▶ Lot levels achieving 600mm freeboard abutting major waterways and basins.

It is expected that parts of CFS PSP will indeed need fill irrespective of key drainage requirements. This plan should be a good base line indication to ensure drainage is not influencing filling in an unsustainable way. Hence a holistic approach considering the above points would be beneficial.

RECOMMENDATION – Melbourne Water to review the fill plan based on the above considerations.

9. PSP STAGING

We consider the following documents and legislation to be the guiding basis for the provision of staging within a PSP. The key elements related to infrastructure and servicing are summarized below.

9.1 Infrastructure Coordination: Infrastructure and Development Staging Guidance Note prepared by the VPA (February 2025)

In reviewing the Infrastructure Coordination: Infrastructure and Development Staging Guidance Note prepared by the VPA (February 2025), we understand that with respect to Infrastructure that the intended outcome of PSP staging is to:

- ▶ Ensure development occurs in **an orderly manner, aligning with infrastructure delivery** to avoid out-of-sequence and disconnected subdivisions.
- ▶ Provide **basic and essential infrastructure** early, maintain infrastructure capacity, and support a viable rate of development.
- ▶ Align with planning guidelines and state policies to ensure infrastructure is delivered at the right time.

In accordance with the Guidance Note, staging is not intended to create a “queue” where those at the “head of the queue” can control the pace of land development.

9.2 Planning and Environment Act 1987

Infrastructure and Development Staging is intended to accord with the objectives of planning in Victoria stipulated in section 4(1) of the Planning and Environment Act 1987.

In particular, the following objectives are met:

- (a) To provide for the **fair, orderly, economic, and sustainable use**, and development of land.

(c) To secure a pleasant, efficient, and safe working, living and recreational environment for all Victorians and visitors to Victoria.

(e) **To protect public utilities and other assets and enable the orderly provision and co-ordination of public utilities** and other facilities for the benefit of the community.

9.3 A 10-Year Plan for Melbourne's Greenfields, (October 2024)

The 10-year plan also outlines Government's intent for infrastructure and development staging, noting that "staging provisions will be included in future PSPs as required to ensure infrastructure delivery keeps pace with development and **land can be adequately serviced when it is released**".

9.4 A Proposed Staging Plan

The current staging without a dedicated drainage outfall means that development within stage 1b is at risk until such time an outfall is achieved, hence development delays could be a high likelihood.

Sewer and Water (ultimate and/or temporary) is needed to be constructed within Clyde Fiveways Road so from a sewer and water perspective stage 1b makes sense. Provided land access can be negotiated, sewer and water would be able to be constructed internally of CFS to enable Stage 2b to be enabled.

Development of the expanded Stage 1b would make complete sense on the basis of no outfall as there would be more "buffer" area between the outfalls and development to enable a free flowing outfall.

The current staging plan stifles the ability for other parts of the CFS PSP to be implemented earlier as stage 1b is predicated on the basis that a drainage outfall can be achieved. There is no evidence or timeframe around securing an outfall and thus Stage 1b boundaries should be increased further west to enable some of the PSP to be implemented in the event no outfall is realised in the short to medium term

The revised staging plan also enables alternative access points into the PSP.

RECOMMENDATION - Our opinion is that VPA should consider the below alternative staging plan.

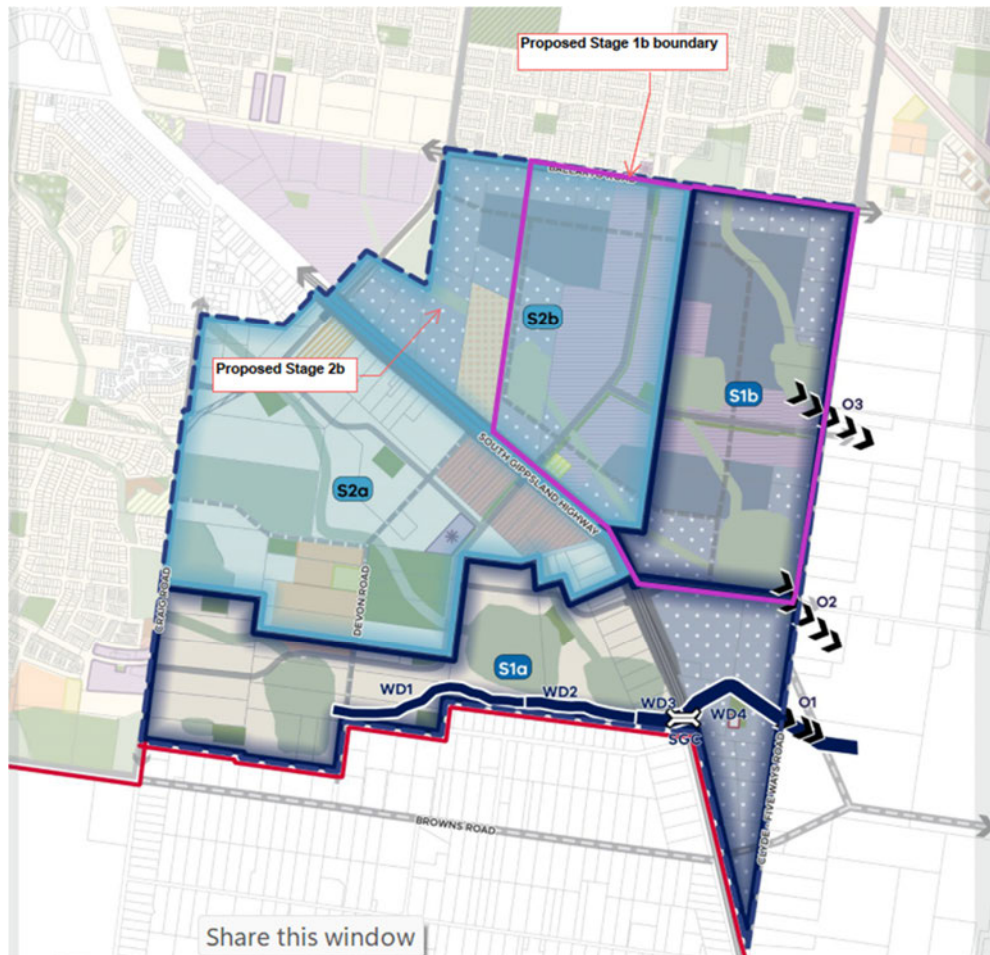


Figure 7 - Alternative staging plan based on exhibited PSP

10. USE OF PAO'S OR WATER ACT LAND ENTRY NOTICES (LEN)

As previously mentioned, the outfall locations within Clyde South are problematic in the early stages of Casey Fields South implementation. Without a PAO or LEN our opinion is that this will result in delayed implementation of Casey Fields South. Clyde South is also some years away as mentioned above.

QUESTION – What (if any) is Governments position on securing access to these outfall locations?

11. REVISED URBAN LAYOUT AND DRAINAGE SCHEME

A revised urban layout for the PSP has been proposed by the consultant team of Yourland. The aim of this plan is to work better with the urban framework, whilst being sympathetic to the proposed Melbourne Water Scheme. The MW DSS does not consider the urban form and thus creates issues with respect to fragmentation, unrealised NDA and just poor integration. The aim of this revised plan is as follows:

- Reduce areas of fragmentation

- Align waterway's with roads and avoid unusable areas of NDA
- Align more with the previous Co-design plan.
- Minimal cost impacts to the overall DSS

Refer to appendix for our proposed alternative layout where the drainage integrates better with the urban form without excessive manipulation of existing topography.

RECOMMENDATION – VPA & MW Should consider alternative urban design.

12. INTERIM DEVELOPMENT & VOLUMETRIC CONDITIONS

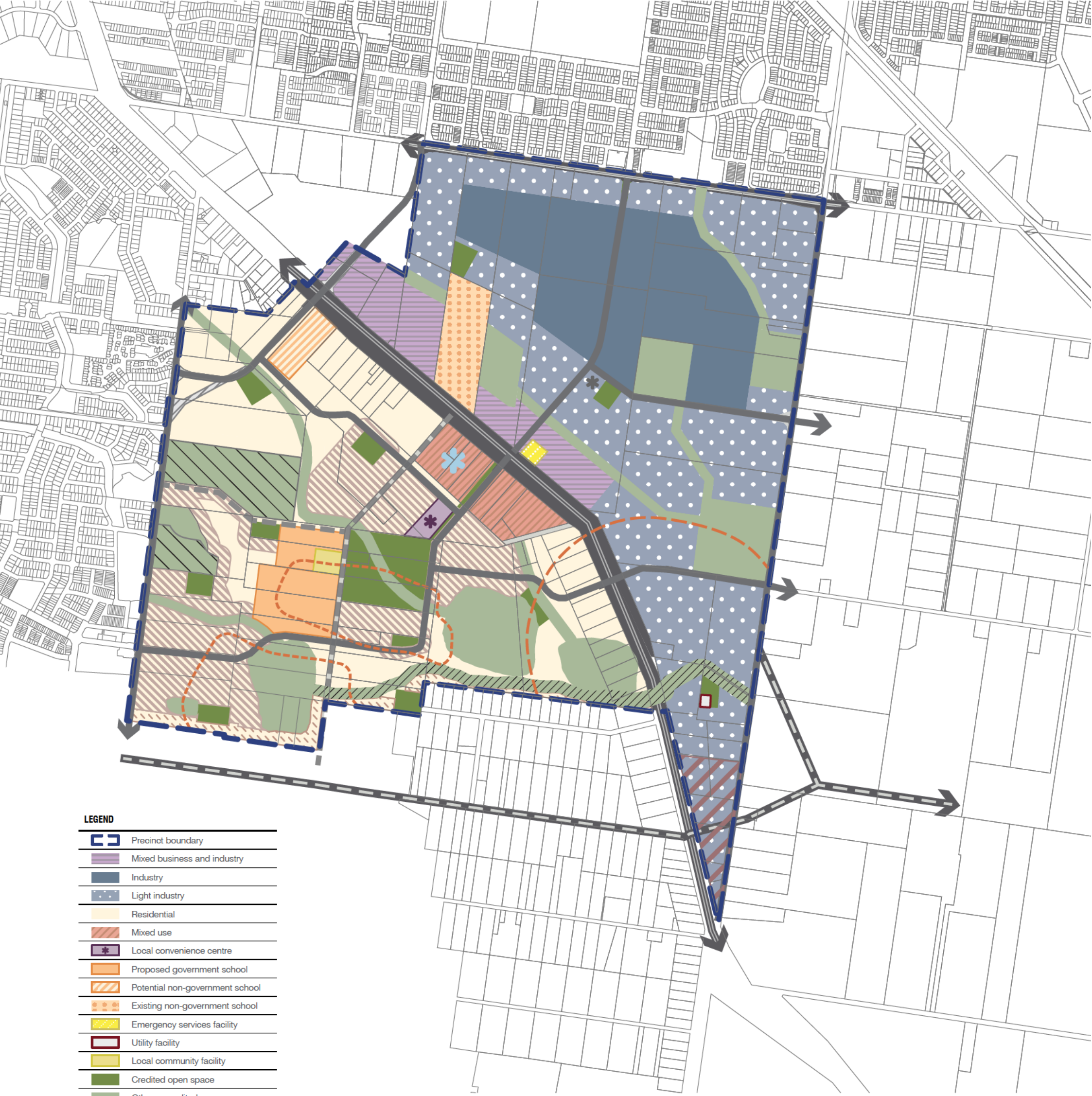
Volumetric requirements have been applied retrospectively by Melbourne Water in the past few years where “out of sequence” development is occurring. Avoiding detrimental impact is a key consideration of any downstream land owner. Given downstream land is already on a low lying flood plain, we are of the opinion that downstream land use will not change upon development. It is noted that flood impacts should not be altered, however pre-developed volumetric requirements should not apply.

RECOMMENDATION – Volumetric requirements should not apply to CFS PSP provided existing flood impacts downstream are not altered. It is supported that IWM opportunities should be investigated to assist waterway health and potable substitution ambitions.

13. CONCLUSION

We believe further refinements and investigations are required by the relevant authorities to improve the viability of the PSP including the enablement of implementation pathways of the CFS PSP. The key risk for CFS PSP is the drainage outfalls and not enough work has been done to mitigate implementation delays. Stage boundaries should also be expanded to enable more development options until enabling infrastructure such as construction of drainage outfalls cannot be achieved early.

14. APPENDIX A – ALTERNATIVE URBAN DESIGN



LEGEND

- Precinct boundary
- Mixed business and industry
- Industry
- Light industry
- Residential
- Mixed use
- Local convenience centre
- Proposed government school
- Potential non-government school
- Existing non-government school
- Emergency services facility
- Utility facility
- Local community facility
- Credited open space
- Other uncredited open space
- Public Acquisition Overlay (transport)
- Proposed PAO (drainage)
- Existing PAO (drainage)
- Area of increase density
- Area of decreased density
- Health facility (indicative)
- Business service hub
- Glass factory separation distance
- Egg farm separation distance
- Investigation area
- Arterial road (6 lane)
- Arterial road (4 lane)
- Arterial road (indicative)
- Connector street
- Local access street

To:		From:	
Our Ref:	G36516M-01B	Date:	Monday, 31 March 2025

Casey Fields South PSP – Proposed Changes to Staging Boundaries

Background

Traffix Group has been engaged to undertake a review of the Casey Fields South Employment Precinct Structure Plan (PSP) including the staging plan and traffic engineering related supporting documents and:

- undertake high-level traffic engineering assessments to determine suitability of intersections taking into account staged delivery,
- undertake a high-level review of the PSP movement network infrastructure including road layout, hierarchy and cross-sections, and
- identify key issues, opportunities and constraints.

PSP

The Victorian Planning Authority (VPA) is leading the preparation of a PSP for the combined Casey Fields South (employment) Precinct and the Devon Meadows Precinct which is proposed to be incorporated into the Casey Planning Scheme via Amendment C295case to the Casey Planning Scheme. The draft PSP is currently on public exhibition.

The proposed future urban structure (Place Based Plan) is shown in Figure 1 below.

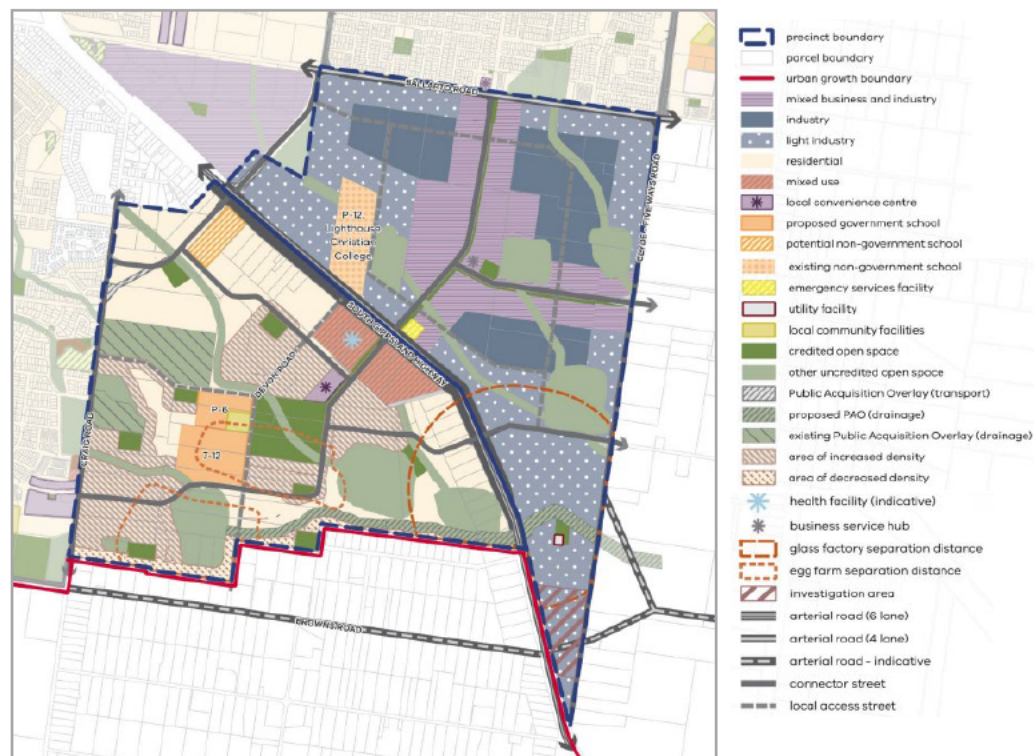


Figure 1: PSP Place Based Plan

The Casey Fields South (Employment) Precinct is irregular in shape, covering an area of approximately 275 hectares with frontages to Clyde-Fiveways Road, Ballarto Road and South Gippsland Highway.

Figure 1 shows the employment PSP will include mixed business, industry and light-industry uses as well as an emergency services facility, open space and retention of an existing non-government school (Lighthouse Christian College).

The proposed movement network plan is shown in Figure 2 below.

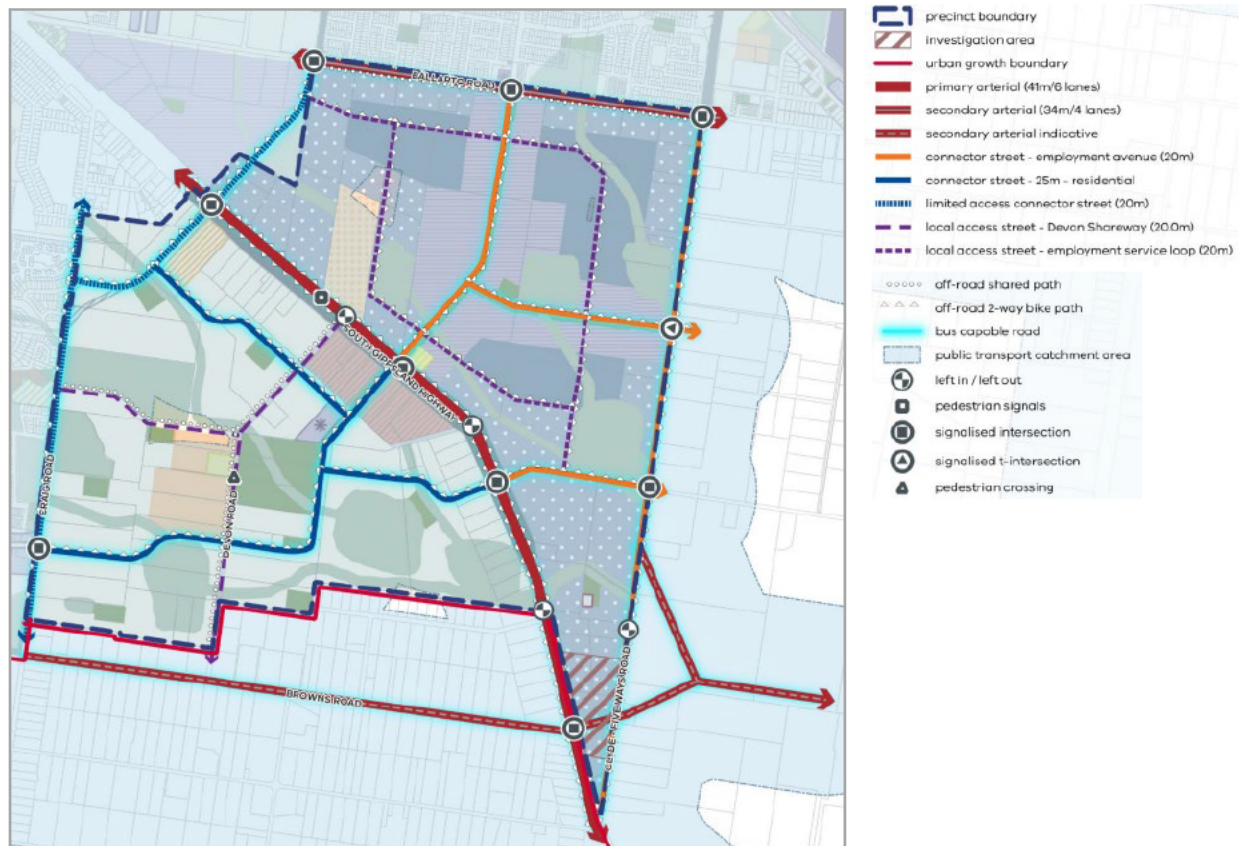


Figure 2: PSP Movement Network Plan

Figure 2 shows the following ultimate road network to service the employment land:

- South Gippsland Highway is a primary arterial road (4 – 6 lanes).
- Ballarto Road is a secondary arterial road (4 lanes, 34m reservation).
- Clyde-Fiveways Road is shown as a 20m connector street (employment avenue).
- A network of 20m connector streets (employment avenues) is shown within the PSP area providing connections to Ballarto Road, Clyde-Fiveways Road and South Gippsland Highway at signalised intersections.
- A 20m wide “local access street – employment service loop” is shown within the PSP area connecting between the network of connector streets.



ICP

In relation to the Infrastructure Contributions Plan (ICP), the VPA website states that the ICP ... *"is expected to adopt a standard levy. As no supplementary levy is proposed, the ICP document does not form part of the consultation material, the ICP document will be included for approval and gazettal."*

The projects proposed to be included as ICP items are shown in Figure 3 below.

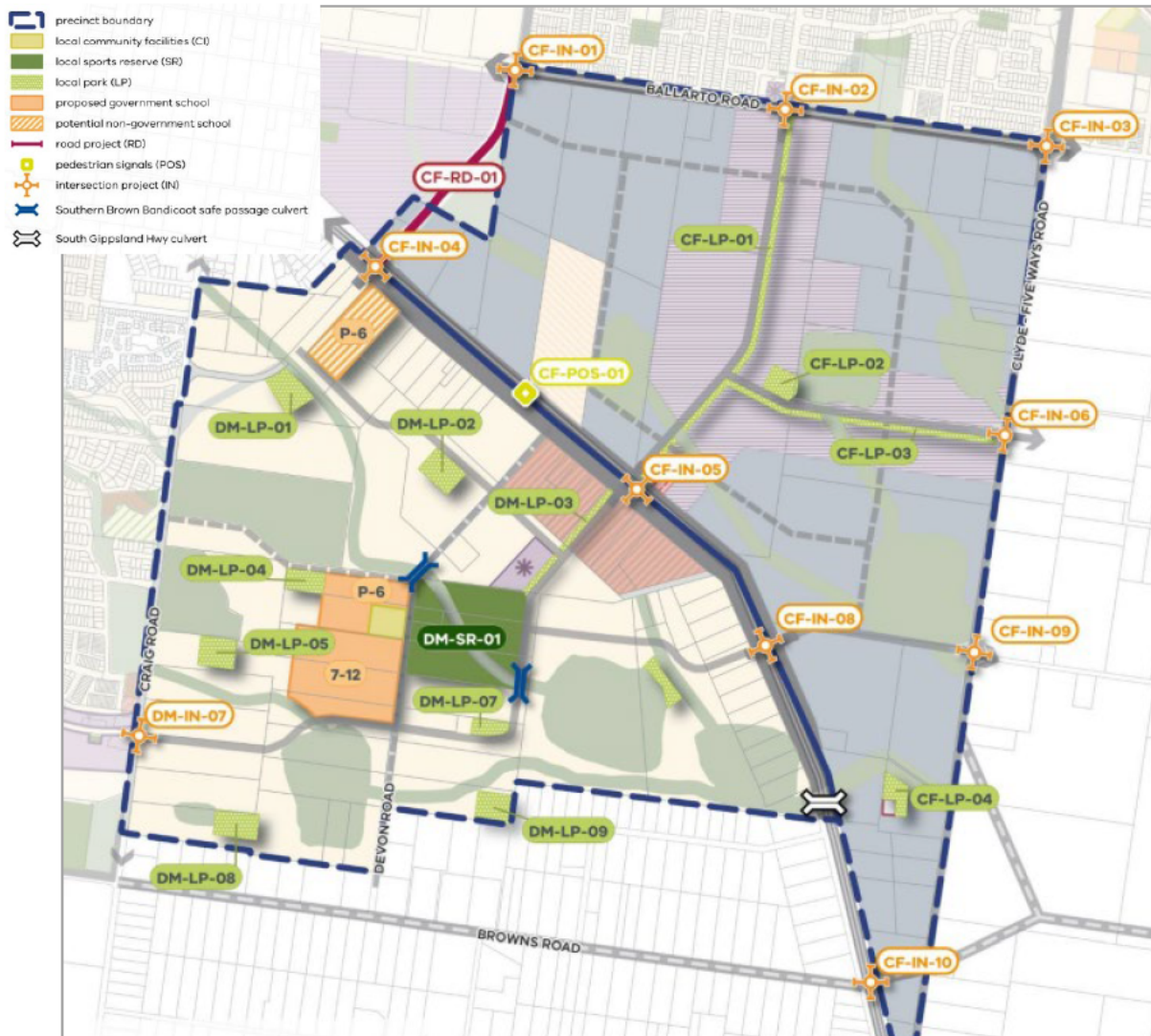


Figure 3: PSP Precinct Infrastructure Plan

Notably, Figure 3 shows that there is one ICP-funded road project at the north-west corner of the PSP area connecting between Ballarto Road and South Gippsland Highway and there are ten ICP-funded intersection projects of which nine are located along the Casey Fields South (Employment) PSP boundary and one solely serves the Deavon Meadows PSP.

Yourland Parcels

Yourland represent a significant landholding within the PSP. The land is known as CF05, CF12, CF20, CF21 and CF22 in the PSP and is shown in Figure 4.



Notably, the land holding controls the following land parcels within the PSP:

- CF05 (19.01 hectares) – 1430 Ballarto Road,
- CF12 (13.53 hectares) – 255 Clyde-Fiveways Road,
- CF20 (37.73 hectares) – 1845 South Gippsland Highway,
- CF21 (10.27 hectares) – 251 Clyde-Fiveways Road, and
- CF22 (0.54 hectares) – 245 Clyde-Fiveways Road.

The combined total area of the land holding parcels is 81.08ha which corresponds to 31% of the total Casey Fields (Employment) PSP area.

The combined net developable area (NDA) of the land holding parcels is 70.81ha which corresponds to 34.5% of the overall NDA for the Casey Fields (Employment) PSP area.

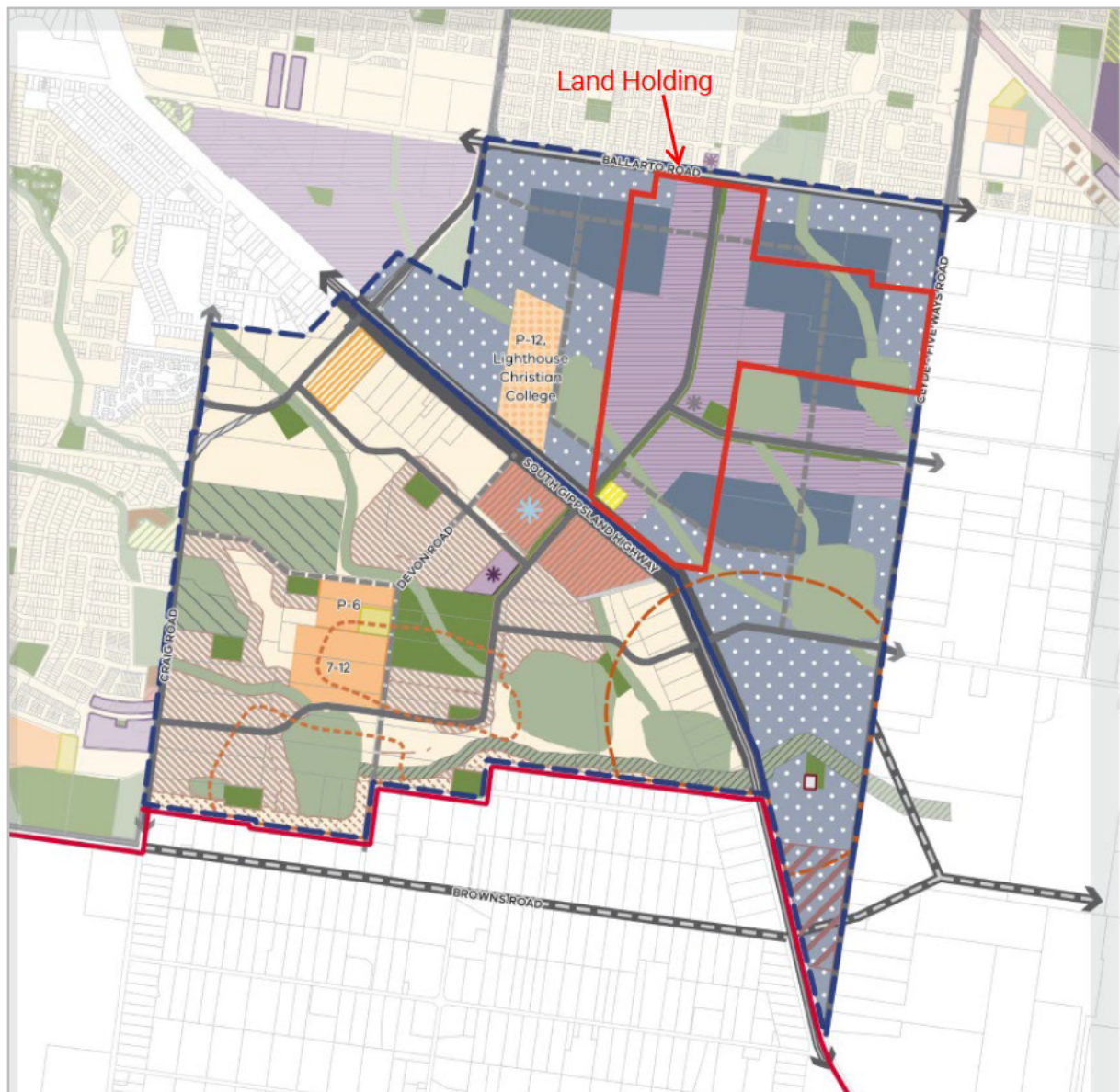


Figure 4: Land Ownership – Casey Fields (Employment) PSP



Existing Road Network Conditions

Clyde-Fiveways Road

Clyde-Fiveways Road is an Arterial Road (Transport Zone Schedule 2 – TRZ2) under the control of DTP. It extends approximately 4.6km in a north-south direction between Pattersons Road and South Gippsland Highway. To the north of Pattersons Road it continues as Berwick-Cranbourne Road.

In the vicinity of the PSP area, Clyde-Fiveways Road is currently constructed with a 6.7m (approx.) sealed carriageway carrying one traffic lane in each direction.

A posted speed limit of 80kph applies.

Ballarto Road

Ballarto Road is currently classified as a local access street under Casey Council's Register of Public Roads. However, it is identified as a secondary arterial road in the Casey Fields South Residential PSP (2014) which is largely complete with the exception of a number of intersections along Ballarto Road which have not been constructed.

For the first 300m extending west from Clyde-Fiveways Road, Ballarto Road is configured with 9.3m (approx.) sealed carriageway within a 20m road reservation. Further to the west, it reduces to a 6.3m carriageway.

A posted speed limit of 80kph applies.

South Gippsland Highway

South Gippsland Highway is an arterial road Arterial Road (TRZ2) under the control of DTP.

In the vicinity of the PSP area, South Gippsland Highway is currently constructed with a divided carriageway carrying two traffic lanes in each direction with sealed shoulders separated by a 26m median, within a 92m (approx.) road reservation. On the north side of South Gippsland Highway adjacent to the Casey Fields South (Employment) PSP, the verge is approximately 17m wide, and safety barriers are installed on both sides of the carriageway.

A posted speed limit of 80kph applies.

Existing Traffic Volumes

The Department of Transport and Planning (DTP) Open Data Hub provides indicative existing traffic volumes for Victoria's freeway and arterial road network, as follows:

- Clyde-Fiveways Road: 8,100vpd two-way AADT¹ (south of railway line)
19% commercial vehicles
- South Gippsland Hwy: 14,000vpd two-way AADT
11% commercial vehicles

Ballarto Road is not an arterial road between Clyde-Fiveways Road and South Gippsland Highway and accordingly there are no indicative existing traffic volumes on the DTP data portal.

¹ AADT = Average Annual Daily Traffic



Proposal

The PSP proposes to incorporate staging boundaries to guide the order of development within both the Devon Meadows and Casey Fields (Employment) PSPs.

The proposed development staging starts at the south (S1a) and east (S1b) and moves towards the north (S2a) and west (S2b).

It is proposed to alter the staging boundary for Stage 1b to include the connector road intersections to South Gippsland Highway and Ballarto Road (IN-02 and IN-05).

The current and proposed staging boundaries are identified in Figure 5 below.

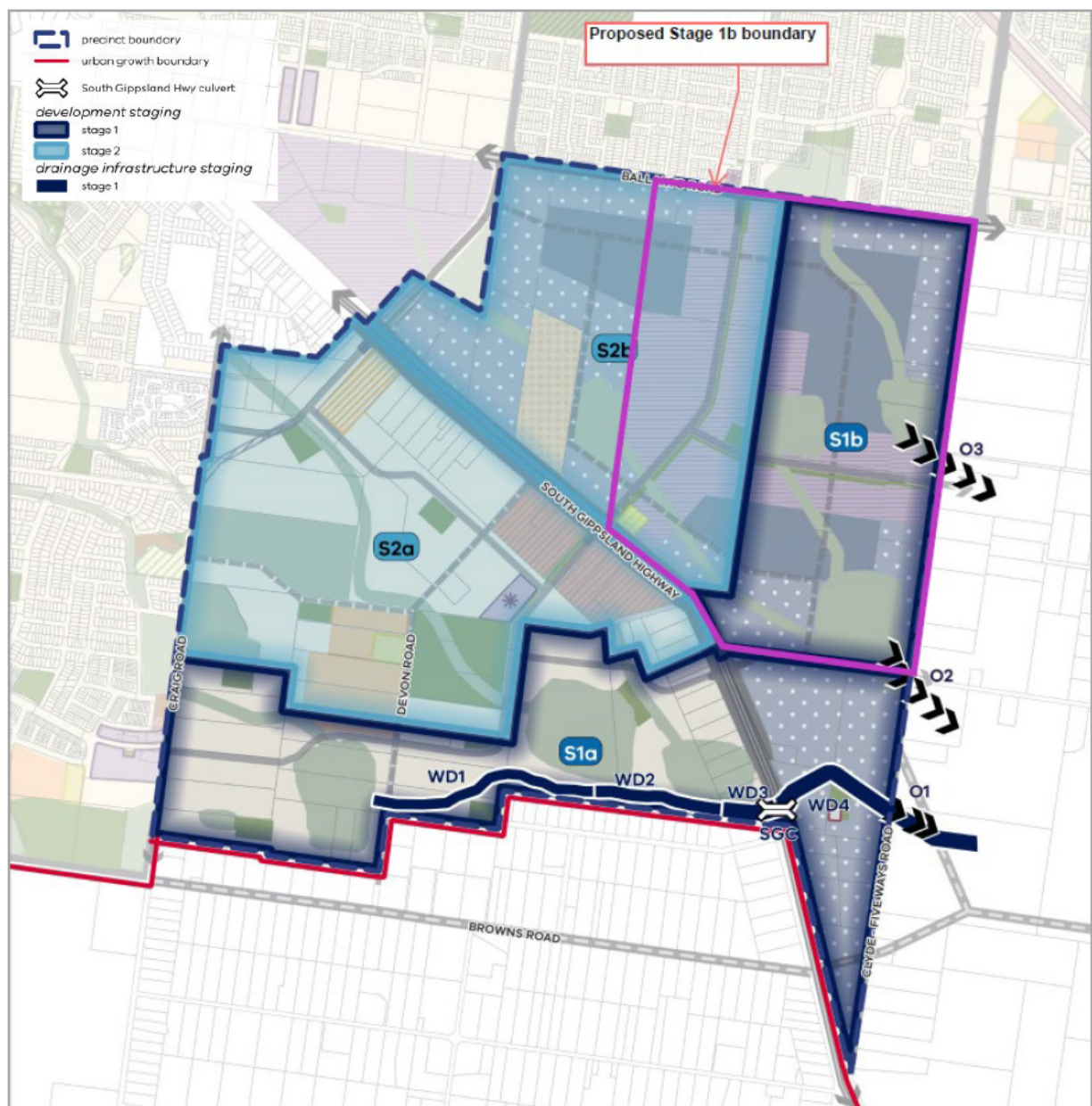


Figure 5: Proposed Staging Boundaries



Opportunities and Constraints

Constraints:

- Drainage – it is understood that the current staging boundaries have been largely based on constraints associated with drainage infrastructure.
- Road Network Capacity - The current staging boundary (Stage 1b) provides egress only to Clyde-Fiveways Road which is currently a two-lane two-way rural connector along the PSP boundary.
- Road Network Connectivity – The South Gippsland Highway provides a significant connection to major industrial areas including Dandenong South and is likely to be a key traffic route for trucks accessing the site. Stage 1b does not provide convenient access to South Gippsland Highway.
- Intersection Delivery – intersections along Clyde-Fiveways Road are only partially funded by the PSP and are reliant on additional funding from the Clyde South PSP which is yet to be completed. In the absence of development at Clyde South PSP, the interim intersections will require land acquisition including PAO land as well as additional land beyond the boundaries of the PAO to deliver a cross-intersection. Alternatively, a signalised T-intersection could be delivered and added to later by the Clyde South PSP, however a staged delivery approach would result in additional costs being incurred beyond what would be reimbursable through the ICP.
- Potential for Temporary Access – the Yourland parcel that is located within Stage 1b does not have any access point to the external road network (land locked) and would be reliant on others to develop first unless a temporary access point could be negotiated with the road authority.
- Emergency Services Access – it is not clear whether IN-09 would be part of stage 1b (employment) or 1a (residential). If the employment land is developed first, there may be only a single access point (IN-06). The PSP land is located within a Designated Bushfire Prone Area and the fire authority typically requires a minimum of two points of access to any subdivision which is within a bushfire prone area.

Opportunities:

- The Yourland parcels include intersections IN-02 and IN-05 to the external road network (Ballarto Road and South Gippsland Highway) and are under the control of a single developer, allowing for timely delivery of alternative access to the precinct.
- Inclusion of IN-02 and IN-05 in Stage 1b would allow for the Designated Bushfire Prone Area access requirements to be met.
- Inclusion of IN-02 and IN-05 in Stage 1b would allow for early access to the employment land to proceed without requiring funding from PSPs which are not yet completed (i.e. Clyde South). IN-02 relies on funding from Casey Fields (Residential) which is largely complete, while IN-05 relies on Devon Meadows PSP which is being planned in tandem with Casey Fields (Employment) PSP.
- Inclusion of IN-05 in Stage 1b allows for heavy vehicles to use South Gippsland Highway which is an established duplicated arterial road corridor within a wide reservation and well suited to heavy vehicle use.



It is noted that our assessments assume that a drainage solution is possible (by others) and the proposed changes to the staging boundary has been considered from a purely best-practice transport solution point of view.

Traffic Impact Analysis

The Jacobs modelling report (2024) refers to the SGS Economics and Planning report (December 2022) which suggests that the build-up of jobs will take considerably longer than the construction of dwellings, with the following projected growth:

- 4,100 jobs by 2016, and
- 9,100 jobs in the longer term (potentially out to 2091).

The above figures apply to the Casey Fields (employment) PSP only and exclude the 300 jobs anticipated to be located within the Devon Meadows PSP.

It is noted that regardless of the timeframe for delivery, it is necessary for the modelling to address the ultimate number of jobs (full build-out) to ensure adequate infrastructure is planned for.

The modelling report modelled a reference case of 317 jobs and an ultimate build-out with 9,100 jobs.

However, the Jacobs Integrated Transport Assessment Report (March 2025) refers to 5,400 jobs within the employment PSP.

There is no discussion in the later Jacobs report as to the discrepancy in job numbers between the two reports, and the modelling has not been updated.

The NSW Guide to Transport Impact Assessment (2024) provides indicative trip generation rates for a broad range of land uses. The "Business Park" rates refer to ... *"developments that permit a range of land uses in an integrated complex. The developments generally incorporate a mix of office, retail and wholesale stores, warehousing, workshops, manufacturing, light industrial, showrooms and scientific research establishments"*.

The data report included employee numbers for some sites, allowing a trip generation rate per employee to be identified, as follows²:

- 0.73 vehicle trips per person during the road network peak hour
- 0.91 person trips (includes all modes) per person during the road network peak hour
- 7.04 vehicle trips per person per day
- 8.41 person trips (includes all modes) per person per day

Current Stage 1B

The current stage 1B incorporates 35 properties with a total NDA of 73.76ha corresponding to 36% of the overall employment PSP NDA.

If it is assumed that the overall employment PSP will accommodate 5,400 jobs, then the current Stage 1B could accommodate in the order of 1,942 jobs.

² Rates averaged across two business parks where employee numbers were reported, with a total floor area of 59,749m² and 413 employees.



Based on the business park traffic generation rates, this could generate in the order of:

- 1,417 vehicle trips during the road network peak hours, and
- 13,670 vehicle trips per day.

This level of traffic will exceed the capacity of a single connector road access point and is also likely to exceed the capacity of Clyde-Fiveways Road noting that it already carries in excess of 8,000vpd and is configured with a two-lane two-way rural cross-section.

Proposed Amended Stage 1B

The proposed amended Stage 1B adds two additional properties and results in an amended Stage 1B NDA of 123.78ha corresponding to 60% of the overall employment PSP NDA.

If it is assumed that the overall employment PSP will accommodate 5,400 jobs, then the current Stage 1B could accommodate in the order of 3,259 jobs.

Based on the business park traffic generation rates, this could generate in the order of:

- 2,379 vehicle trips during the road network peak hours, and
- 22,941 vehicle trips per day.

Adding properties CF-05 and CF-20 to Stage 1b would result in an increase of Stage 1b traffic in the order of 9,000vpd. Importantly, the revised staging boundary spreads the traffic across all three arterial road frontages via at least three arterial road connections (IN-02, IN-05 and IN-06).

Notably, the proposed amended Stage 1B boundary:

- allows development to commence without relying on PSP intersections which are partially funded by a yet-to-be-completed external PSP,
- reduces traffic impacts to Clyde-Fiveways Road which will delay the need for DTP to acquire the PAO land and duplicate the road, and
- allows for direct access from the employment land to South Gippsland Highway which is already a divided primary arterial road designed to accommodate heavy vehicle traffic.



PSP Review

Suitability of Cross-Sections

Figure 6 below shows the proposed secondary arterial road cross-section.

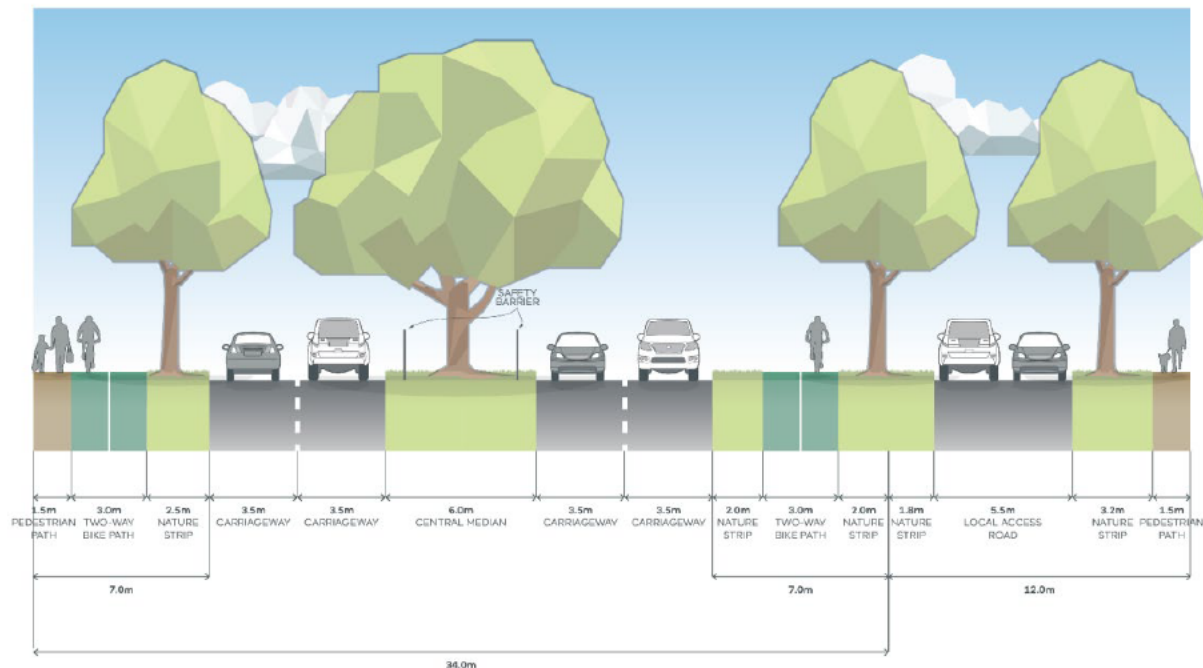


Figure 6: Casey Fields (Employment) PSP – Secondary Arterial Cross-Section (Proposed)

Comments:

- 34m is a standard reservation width for a four-lane secondary arterial road.
- The reservation appears to apply to Ballarto Road as it is the only identified secondary arterial road within the Movement Network Plan.
- The “plan view” is based on residential frontages on both sides, which is not relevant in this instance, and shows footpaths provided within the 34m road reservation on one side but required to be provided outside of (in addition to) the 34m road reservation on the other side.
- Where the footpath is provided within the road reservation, it is hard up against the two-way bike path with no separation.
- There is no provision for on-street parking. This is common on PSP arterial roads. Parking is typically provided on frontage roads or service lanes and not on the main arterial road carriageway.
- The Casey Fields South (Residential) PSP includes a cross-section for Ballarto Road which differs from the proposed cross-section. A copy is provided below for reference.



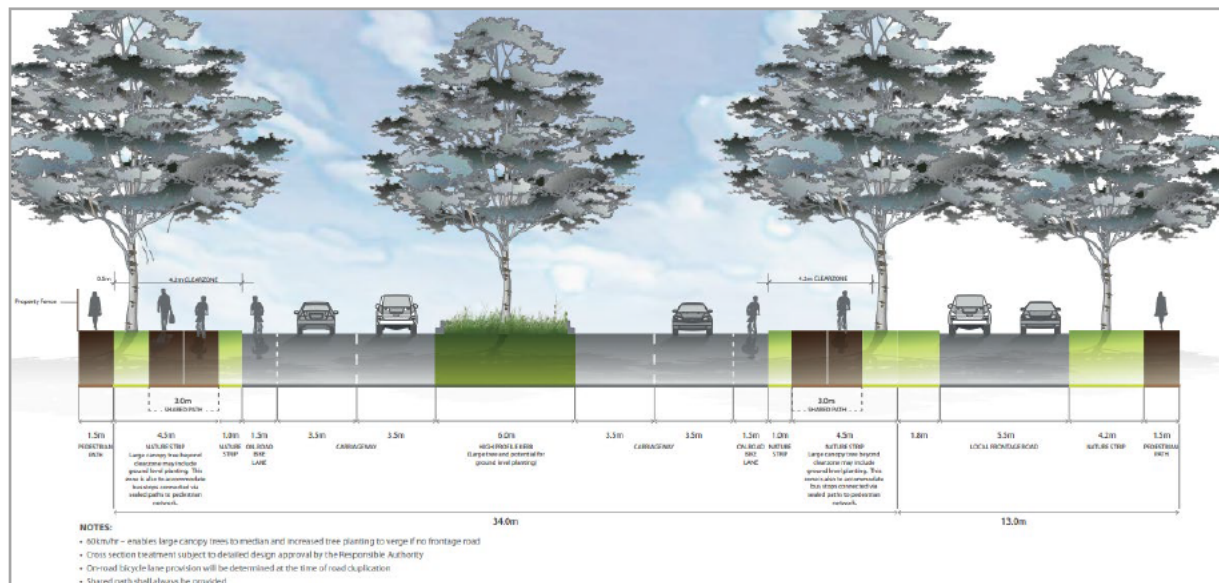


Figure 7: Casey Fields (Residential) PSP – Secondary Arterial Cross-Section (Ballarto Road)

The main difference between the two cross-sections is a removal of on-road cycle lanes and a change from shared path to two-way bike path.

There are two cross-sections shown for the employment PSP. Figure 8 shows the proposed 20m Connector Street (Employment Avenue) and Figure 9 shows the proposed Local Access Street (Employment Service Loop).

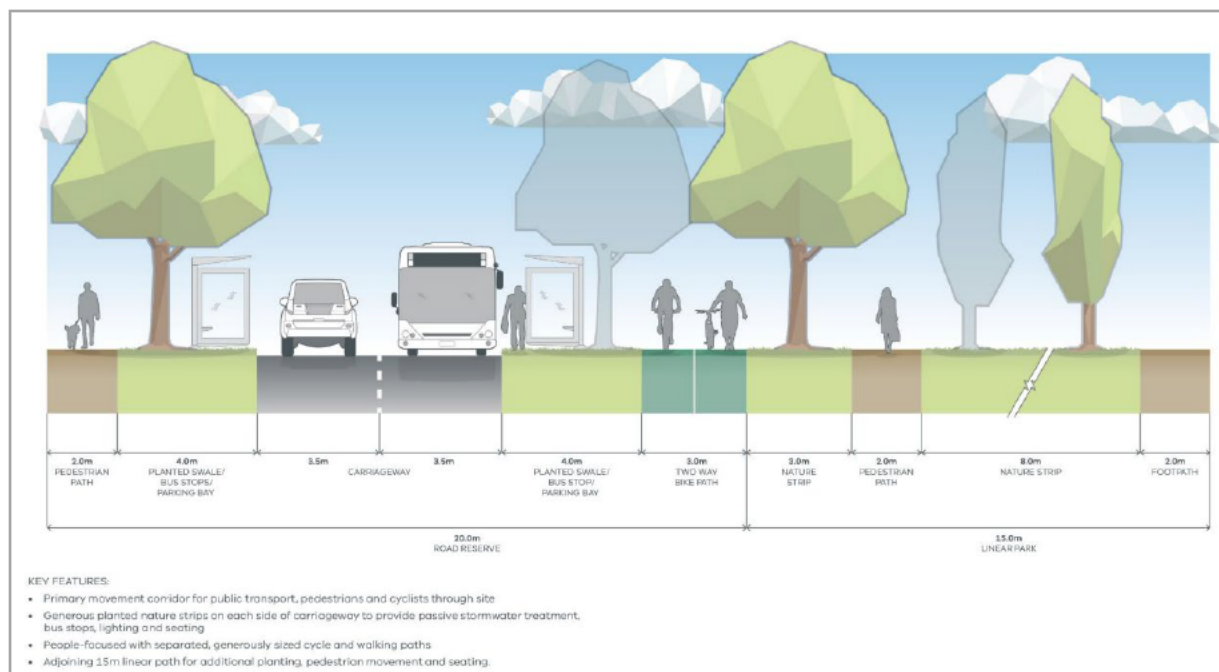


Figure 8: Casey Fields (Employment) PSP – Connector Street – Employment Avenue Cross-Section (20m)

Comments:

- All of the identified connector streets within the Casey Fields PSP are proposed to have an adjacent 15m linear park with the exception of the road connecting between IN-08 and IN-09.



- For the roadway between IN-08 and IN-09, there is inadequate provision for pedestrians on one side unless the two-way bike path is changed to a shared path. Additionally, based on the Jacobs modelling, that section of road is anticipated to carry too much traffic for a connector classification.
- Where the employment avenue connector is located adjacent to a 15m linear park, the provision for pedestrians is excessive. It would appear that there isn't a need (or demand for) two footpaths within the linear park. One (the outer one) would be sufficient.
- A 7m wide carriageway (two 3.5m lanes) is well below the typical provision for an industrial subdivision and does not meet the Public Transport Guidelines for Land Use Development, which shows a minimum 8.4m carriageway for bus-capable roads where separate on-road cycle lanes are not included.
- The "key features" notation refers to the proposed nature strips as ... *"generous planted nature strips on each side of the carriageway to provide passive stormwater treatment, bus stops, lighting and seating"*. However, the cross-section shows the 4m verges are required to accommodate planted swale, bus stops and parking bays. In industrial estates parking bays are required to be a minimum of 2.6m wide to cater to heavy vehicles. There will be minimal space for swales and any planting of trees will need to be widely spaced to allow for truck layovers.

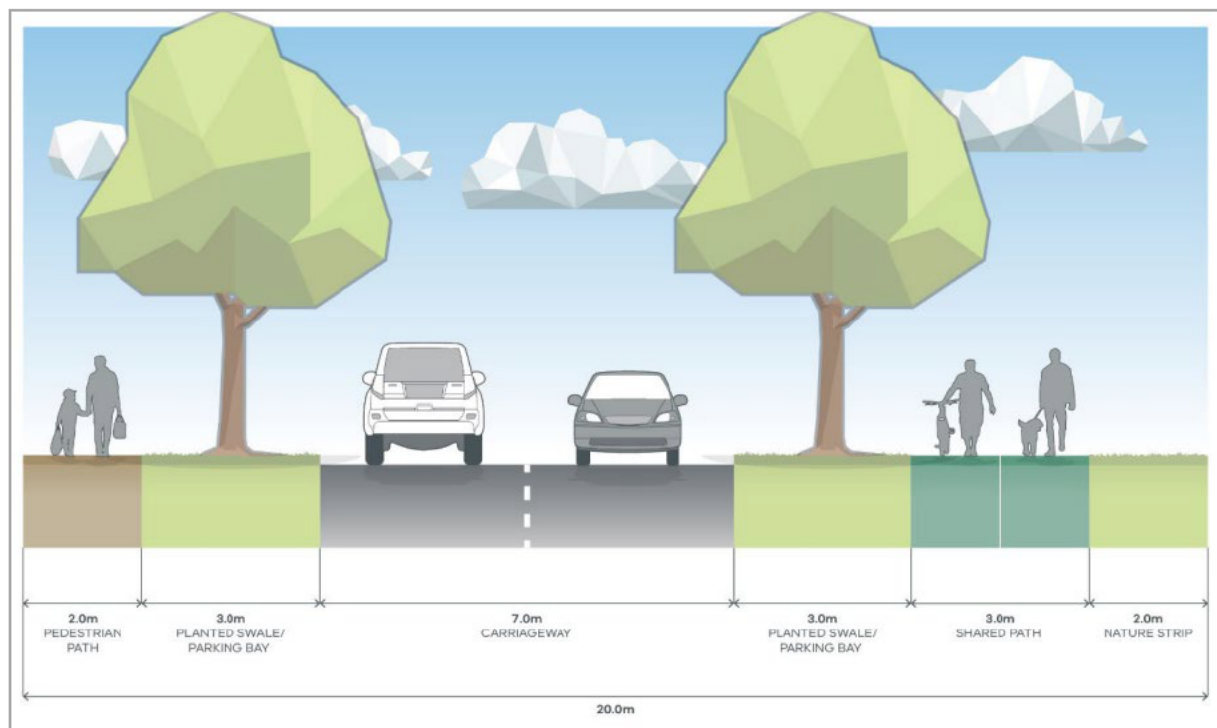


Figure 9: Casey Fields (Employment) PSP – Local Access Street – Employment Service Loop Cross-Section (20m)

Comments:

- The "key features" notation refers to ... *"generous planted nature strips on each side of carriageway to provide passive stormwater treatment, parking, lighting and seating"*. The nature strips are only 3m wide and are also proposed to accommodate a planted swale in addition to indented car parking and canopy trees. Indented truck parking bays need to be long enough for articulated trucks, leaving little room for planting. In an industrial/employment estate there would typically be a reasonable provision for on-street



parking (including for truck layover). Additionally, truck parking bays need to be a minimum of 2.6m wide, leaving only 0.4m for the planted swale.

- The loop access road is proposed to be the primary movement corridor for heavy vehicle movements and servicing of employment lots. However, heavy vehicle movements will still need to enter and exit the estate via the employment avenue connectors. All streets within the employment PSP area will need to cater for the movement of heavy vehicles.
- The “key features” notation refers to the loop road as having a generous vehicle carriageway. The proposed carriageway width is significantly narrower than at other industrial estates, and the overall reservation width (20m) is also narrower than standard despite allocating more space to active travel.
- The cross-section includes an 8m effective verge on one side which includes a 3m wide shared path. In an industrial estate/business park environment, any potential cyclists are likely to be competent riders (not children or retirees). Local streets typically carry lower volumes and have low operating speeds and cyclists can share the roadway and not require a separate facility.

It is noted that the Officer South Employment PSP was very recently completed (November 2024) with the new 2.0 PSP format.

The Industrial Connector cross-section in that PSP is 26m wide and includes a combined 5.6m to accommodate 2.6m parking bays (with tree outstands) and nature-strip, as shown in Figure 10 below.

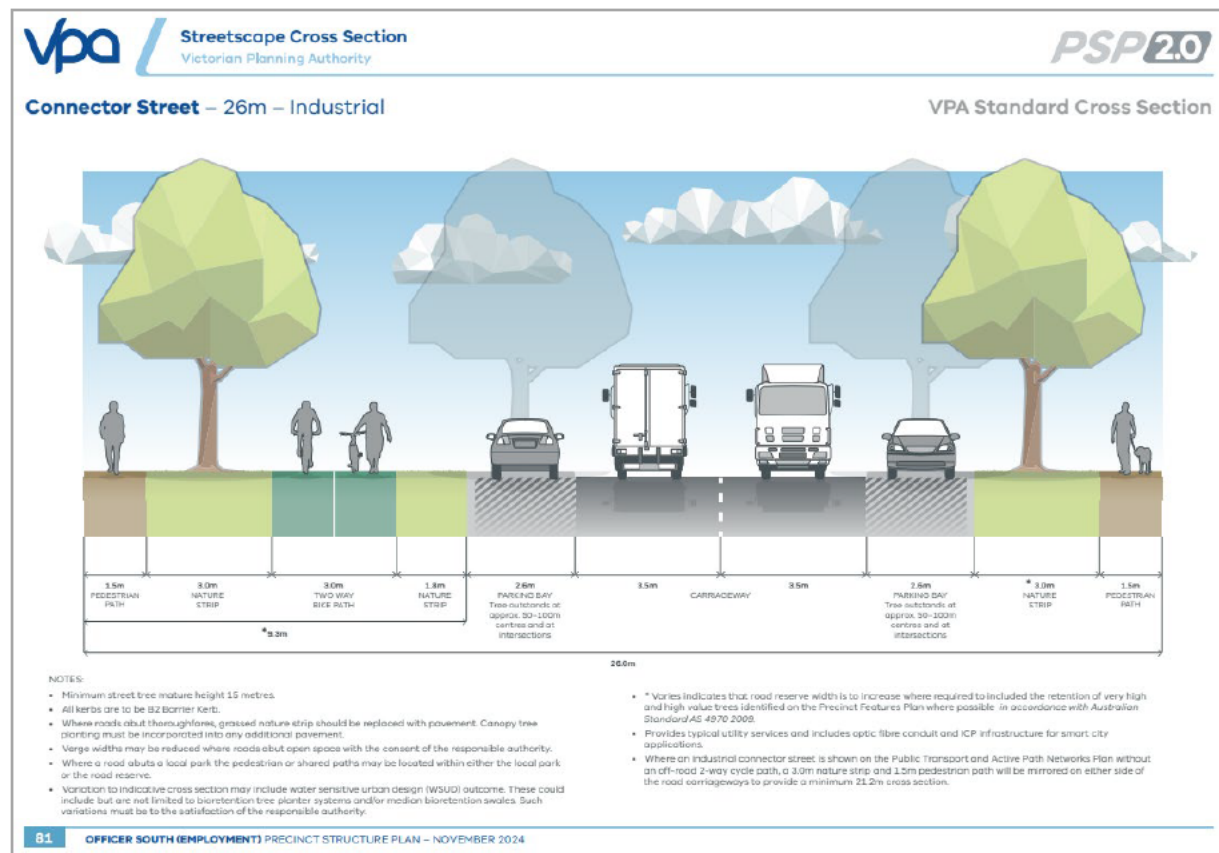


Figure 10: Officer South Employment PSP Industrial Connector Cross-Section



Practicality of Proposed Road Network

- The PSP road network proposes industrial connector streets which are accessed via signalised intersections spaced at approximately 700m – 800m along the external arterial road network, which is in accordance with DTP's access management principles for the arterial road network.
- The PSP road network also proposes an internal loop road (local access street classification) which crosses each of the proposed connector roads at a cross-intersection. One of the cross-intersections is set back approximately 150m from the IN-05 signalised intersection (South Gippsland Highway/connector) and another is set back approximately 200m from the IN-02 signalised intersection (Ballarto Road/connector).

Cross-intersections create potential safety issues which are typically managed by introducing roundabouts in a connector/local street context. Roundabouts reduce vehicle speeds on approach to an intersection and manage conflicting movements, which typically reduces the number and severity of crashes at cross-intersections. However, roundabouts are not ideal where there is pedestrian demand. Additionally, in an industrial estate roundabouts need to accommodate long heavy vehicle turning circles which requires additional land (splays) which reduces the amount of developable area.

- A continuous loop road and cross-intersections are not required to facilitate efficient access to the proposed employment land, and alternatives exist which effectively manage heavy vehicle movement between PSP properties and the external arterial road network. Local streets are not ICP items and do not connect directly to the arterial road network. Accordingly, it would not be inappropriate to remove these from the PSP and allow the internal PSP local street network to be guided by market conditions and standard road network design principles at the time of development.

An example of an industrial cross-intersection roundabout treatment is shown below (intersection of National Avenue/Commercial Drive in Pakenham).



Figure 11: Industrial Estate Cross-Intersection Roundabout Example – Pakenham



Jacobs Report Review

Two background reports were prepared by Jacobs for the Casey Fields South (Employment) and Devon Meadows PSPs, as follows:

- Strategic Transport Modelling Report (October 2024), and
- Integrated Transport Assessment Report (March 2025).

The diagram below shows the 2051 daily traffic volumes with full build-out of the Casey Fields South (Employment) precinct and Devon Meadows PSP.

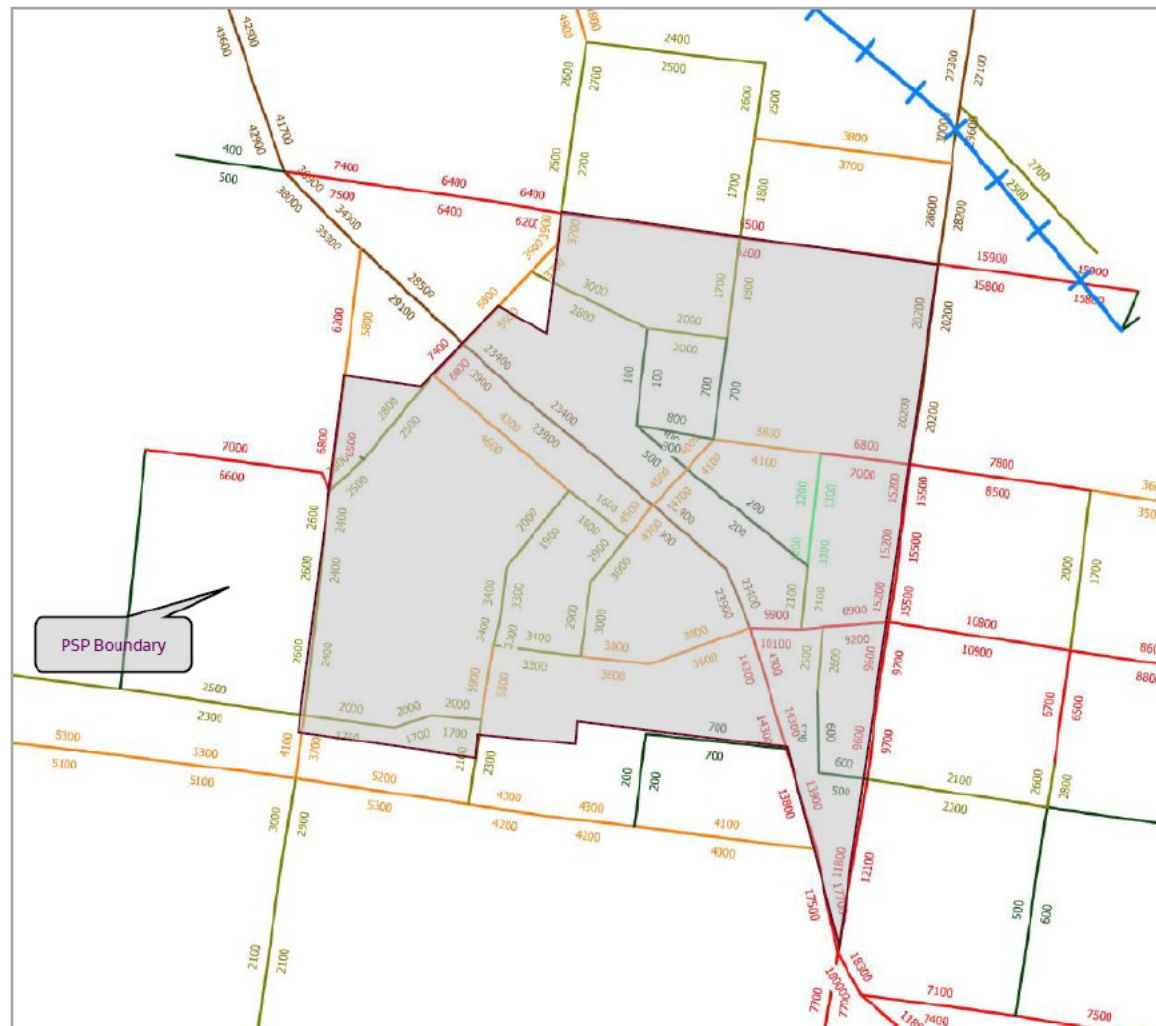


Figure 12: 2051 Daily Traffic Volumes – Full PSP Build Out (Jacobs Modelling)

- It is noted that the above modelling (October 2024 report) is based on 9,100 job opportunities, while the later TIAR (March 2025) refers to 5,400 jobs. There is no discussion in the TIAR in relation to the change.
- The modelling shows volumes consistent with a higher order (arterial) road classification on the link between IN-08 and IN-09.
- The model doesn't include a secondary arterial road connection across South Gippsland Highway at Browns Road (IN-10) which is proposed in the PSP.



- The modelling report does not include details of what traffic generation rates are applied to jobs in the employment precinct, so this could not be compared with rates extrapolated from the NSW Guide to Transport Impact Assessment (2024) data.
- The modelling report refers to a *Transport Model Validation Report, Casey Fields South & Devon Meadows PSP – Transport Modelling Assessment, Jacobs, 8 Dec 2023*, however the validation report does not appear to be publicly available.
- Page 23 of the TIAR states that the connector street network is suitable to accommodate buses, however the road widths do not meet the Public Transport Guidelines.
- Page 24 of the TIAR states that all the proposed connector and local streets are appropriate for the projected traffic volumes in 2051, however this does not appear to be the case based on the volumes shown in the modelling report. Additionally, the modelled jobs scenario doesn't reflect the anticipated PSP yield, and the street network differs. It is not possible to simply scale down the modelled road volumes in line with the reduced number of jobs because some of the traffic within the employment precinct is through traffic generated by the Devon Meadows and Clyde South PSP areas. The statements made in relation to the appropriateness of the road network and classifications to accommodate projected traffic volumes are not backed up by any supporting reasons or assessments against standards.

Intersection Delivery

PSP Plan 11 (land use budget appears to show consideration of the land required for intersections (noted as arterial and non-arterial road widening/intersection flaring), however no intersection plans have been included in the publicly available documents.

The three connector street intersections are shown in the diagrams below (extract of Plan 11).



Figure 13: IN-02 (Ballarto Rd)



Figure 14: IN-05 (Sth Gipps. Hwy)



Figure 15: IN-06 (Clyde-Fiveways Rd)

PSP Plan 11 indicates that intersections IN-05 and IN-06 are located predominantly within one title but have a small section which potentially extends across an adjacent lot in different ownership. This will make delivery of the intersections more difficult and should be avoided if possible.

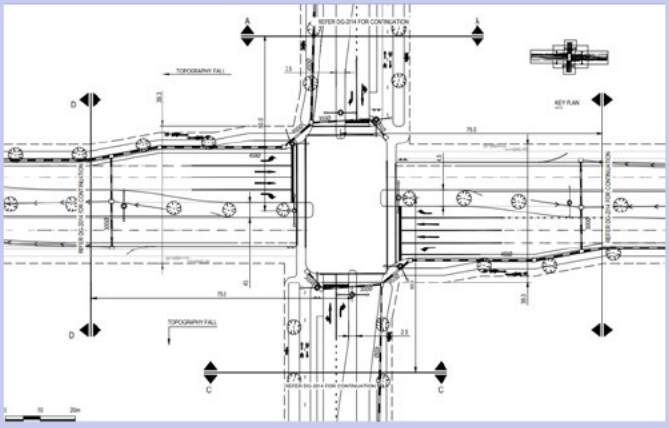
Additionally, IN-05 does not appear to include any splays. It is noted that there is an existing wide verge on South Gippsland Highway and it is likely that the splays can be accommodated within the existing road reservation. However, this should be confirmed within the PSP with the inclusion of an intersection plan as DTP sometimes requires the verge width to be maintained at intersections which requires splays to accommodate turn lanes and impacts on developable area.



ICP Road & Intersection Project Review

Table 1 below discusses each of the proposed road and intersection projects.

Table 1: ICP Road & Intersection Project Review

Project No.	Project	Comment
CF-IN-01	Ballarto Rd/Casey Fields Blvd – land and construction of interim secondary arterial to connector signalised four-way intersection (25% apportionment).	25% apportionment is appropriate. It is noted that the balance is allocated to Casey Fields South (Residential) PSP and the Cranbourne East PSP is not mentioned. The project is in the Cranbourne East PSP as RD-12 (interim signals), although it is likely underfunded there noting that the PSP is 15 years old. Based on the distribution of PSPs, Cranbourne East PSP should contribute 50% and Casey Fields South (Residential) should contribute 25%.
CF-IN-02	Ballarto Rd/Morrison Rd – provision of ultimate land and construction of interim secondary arterial to connector signalised four-way intersection (50% apportionment).	Okay.
CF-IN-03	Ballarto Rd/Clyde-Fiveways Rd – land and construction of interim primary arterial to secondary arterial signalised four-way intersection (25% apportionment).	Clyde-Fiveways Road is referred to as a primary arterial here but shows as a connector street in the PSP Movement Network Plan, transitioning to a secondary arterial where it is shown to divert within the Clyde South PSP. The existing road reserve is 20m wide and a PAO is in place on the east side providing an overall 40m (approx.) reservation in the vicinity of IN-03.
CF-IN-04	Sth Gippsland Hwy/ Casey Fields Blvd – land and construction of interim secondary arterial to connector signalised four-way intersection (100% apportionment).	<p>IN-04 is listed as a secondary arterial to connector. The VPA Benchmark Infrastructure Report (Cardno 2019) provides a cost range of \$3.8mil - \$4.3mil and includes the following standard drawing:</p>  <p>Notably, the secondary arterial has a 39.3m cross-section at its widest point, tapering back to a single lane undivided road, with short turn lane treatments which don't meet the</p>



Project No.	Project	Comment
		<p>requirements for the speed environment on South Gippsland Highway.</p> <p>Given that South Gippsland Highway has a 26m median within a 92m road reservation, IN-04 is not a "standard" (benchmark) intersection, and should be designed and costed to see if ICP costs exceed the standard levy amount and whether a special charge levy might be required for this ICP.</p> <p>Additionally, the ICP nominates South Gippsland Highway as a secondary arterial road, however the PSP shows it as a primary arterial road. A primary-to-connector benchmark intersection has higher costs so an incorrect classification will have implications for the ICP being potentially underfunded.</p>
CF-IN-05	Sth Gippsland Hwy/central connector – land and construction of interim secondary arterial to connector signalised four-way intersection (100% apportionment).	As above (IN-04).
CF-IN-06	Clyde Fiveways Rd/ Central connector – land and construction of interim primary arterial to connector signalised four-way intersection (100% apportionment).	100% apportionment is incorrect. This should be changed to 50% apportionment (with 50% allocated to Clyde South PSP, consistent with IN-09).
DM-IN-07	Craig Rd/Hummingbird Dr Extn. – land and interim connector to connector signalised 4-way intersection (eastern leg only) (100% apportionment).	<p>Connector-to-connector road intersections are not usually included in an ICP.</p> <p>Signals appear to be unnecessary/unjustified at this location based on the Jacobs modelling which shows 2,800vpd on the western leg, 3,000vpd on the northern leg, 3,700vpd on the eastern leg and 7,800vpd on the southern leg. A standard connector-to-connector roundabout would be sufficient.</p> <p>If a treatment is included here, it should be ultimate, not interim. There doesn't appear to be any reason why you would stage the delivery of an intersection on a connector route (not a DTP road).</p>
CF-IN-08	Sth Gippsland Hwy/southern connector – land and construction of interim secondary arterial to connector signalised four-way	As per IN-04.



Project No.	Project	Comment
	intersection (100% apportionment).	
CF-IN-09	Clyde Fiveways Rd/ Moore's Rd extn. – land and construction of interim primary arterial to connector signalised four-way intersection (50% apportionment).	As per IN-04.
CF-IN-10	Sth Gippsland Hwy/Clyde Fiveways Rd/ Browns Rd – land and construction of a primary arterial to secondary signalised four-way intersection (50% apportionment).	<p>IN-10 is a potentially expensive non-standard cross-intersection which joins Browns Road with Clyde South PSP across a narrow section of the very bottom pointy part of the employment PSP, identified as an investigation area (perhaps not suitable for development).</p> <p>Browns Road and Browns Road Extension are identified in the PSP as secondary arterial roads, but the section which passes through the PSP (150m approx.) is not included as a road project in the ICP. It also doesn't provide any benefit to the PSP and wasn't included in the Jacobs modelling.</p> <p>The reservation of land for that link and also IN-10 should be projects for Clyde South PSP if required and the affected land should be taken out of the NDA for the Casey Fields PSP. The 50/50 apportionment of IN-10 is not reasonable in the context of nexus to the employment PSP. Notably, as a secondary arterial, the section within the PSP is too close to the signalised IN-10 to provide any property access to land within the PSP in any form (e.g. local street access, service road, direct driveway, etc.).</p>
CF-RD-01	Casey Fields Blvd connector – provision of land and construction of a connector road (26m) (40% apportionment).	<p>This proposed road connection is located partially outside of the PSP area (within the adjacent Cranbourne East PSP area) and links the Devon Meadows PSP residents to Casey Fields Boulevard including to the Casey Fields regional park and sporting facilities.</p> <p>It was first identified in the Cranbourne East PSP which was completed in 2010 (now 15 years old). The Cranbourne East PSP identifies Casey Fields Blvd as a potential future arterial with a 34m reservation (not 26m). 40% is apportioned to the Casey Fields PSP (note that the project is labelled "CF", not "DM" – it is not clear what this means for apportionment between PSPs).</p> <p>The remaining 60% is expected to be picked up by the Cranbourne East PSP however it appears to be underfunded (land only, not construction in that PSP).</p>
CF-POS-01	Devon Road pedestrian signals – construction of a signalised pedestrian crossing over the South	ICP currently states 0% apportionment to the PSP but also says N/A for the funding source for the balance (appears to be an error).



Project No.	Project	Comment
	Gippsland Highway (0% apportionment).	<p>The item is labelled "CF" and not "DM" which appears to imply it will be funded by the Casey Fields PSP and not the Devon Meadows PSP. The proposed signalised pedestrian crossing is located directly in front of an existing non-government school and would appear to provide for future residents of the Devon Meadows PSP to access the school and also to allow for existing school students to access the public bus stop directly opposite the school on the south side of South Gippsland Highway.</p> <p>There is no desire line for the employment land at that point apart from perhaps access to the bus stop. The cost of signals should be shared between the school and both PSPs.</p>

The following general issues are also identified in relation to the ICP road and intersection projects:

- Almost all of the road and intersection projects are labelled "CF" (Casey Fields), with only one project being labelled "DM" (Devon Meadows), while parks and community infrastructure are more evenly split between the two. This appears to imply that the funding for the road and infrastructure projects will be distributed to the employment land and not shared with the residential land. A number of the projects should be split between the two PSPs.
- It is not appropriate to tie the two PSPs together with a single ICP without including details of apportionment between the two. The intersections along South Gippsland Highway should be split 50/50 between Devon Meadows PSP and Casey Fields (Employment) PSP. The pedestrian signals should also include an external component as the major contributor to pedestrians crossing at that location is the existing non-government school. The road project primarily benefits the residential PSP, not the employment PSP.
- The road between IN-08 and IN-09 is required to be built/funded by the developer, but is anticipated to carry 20,000vpd based on the Jacobs modelling of which the majority is contributed by the Clyde South PSP. Based on the volumes shown in the Jacobs modelling report, this section of road should be classified as a secondary arterial and should be included as an ICP item with apportionment shared with Clyde South PSP.
- The Jacobs modelling road network structure differs notably from the PSP road network, including not having a connection at Browns Road (IN-10) through the PSP. The volume of traffic on the road between IN-08 and IN-09 may be less with the inclusion of a secondary arterial extension of Browns Road through to Clyde South PSP.



Summary of Key Issues

- The Connector Street – Employment Avenue cross-section should be amended because:
 - the road width does not meet the Public Transport Guidelines,
 - there is inadequate provision for parking within an employment precinct context, and
 - there is an unnecessary “doubling up” of footpath provision on the east/south side when taking into account the adjacent linear park.
- The Local Access Street – Employment Service Loop cross-section has inadequate provision for heavy vehicles, including parking provision, and the 20m road reserve is not sufficient to provide generous planted nature strips, swales (passive stormwater treatment), street lighting, seating, pedestrian and cycle facilities and adequate space for trucks including truck layover (parking) and manoeuvring at property access points. Industrial estates typically have wide (10m+) carriageways with on-street parking not interrupted by kerb outstands for street tree planting as this provides for heavy vehicles turning into and out of lots which cannot be accommodated in a 7m carriageway. Shared paths are not typically provided on local streets where volumes and vehicle speeds are low, and cyclists are likely to be competent riders (not children) in the context of local streets within an industrial estate/business park.
- The internal loop road is unnecessary and creates cross-intersection conflict points that are likely to be required to be roundabout-controlled, impacting on NDA and pedestrian connectivity.
- The proposed Stage 1b does not allow for direct access to either South Gippsland Highway or Ballarto Road and concentrates all traffic to Clyde-Fiveways Road which:
 - is currently a rural two-lane two-way arterial,
 - has insufficient capacity to accommodate all of the Stage 1b traffic, and
 - requires significant public funding to implement the PAO to allow for upgrades.
- There are strong traffic engineering related grounds to expand the Stage 1b area to incorporate additional connections to the arterial road network (via IN-05 and IN-02) to minimise the impacts of the PSP on any one arterial route. Notably South Gippsland Highway is already a wide traffic corridor with duplicated carriageways.
- Intersection IN-05 is primarily within a single title but requires a small amount of land from an adjoining title, impacting on the ability to deliver the intersection in a timely manner.
- There are inconsistencies and errors within the PSP document, including:
 - Apportionment of costs of infrastructure projects including IN-06 (should be 50% not 100%) and POS-01 (currently 0% allocated to the PSP).
 - South Gippsland Highway intersections IN-04, IN-05, IN-08 and IN-10 refer to South Gippsland Highway as a secondary arterial while the Road Network Map shows South Gippsland Highway as a primary arterial.
 - Clyde-Fiveways Road intersections IN-03, IN-06 and IN-09 refer Clyde-Fiveways Road as a primary arterial while the Road Network Map shows Clyde-Fiveways Road as an employment connector.



- The PSP labels almost all road and intersection projects as “CF” except for one, implying that the ICP would allocate these projects to the Casey Fields (Employment) PSP. A number of these should be shared between the Devon Meadows and Casey Fields PSPs.
- The modelling report includes an internal road between IN-08 and IN-09 carrying well in excess of connector road volumes, with volumes at a level typically requiring a four-lane divided cross-section.
- The Browns Road extension across South Gippsland Highway appears to be an arterial road classification which will not provide any benefit to the PSP and will not provide any access to the PSP area. If this is required it should be an ICP item for the Clyde South PSP, and the land reserved via a PAO and taken out of the NDA for Casey Fields South (Employment) PSP.
- The ICP has not been advertised and the VPA website notes that a standard levy is expected to be adopted and will not include a supplementary levy. It is not possible to determine whether the standard levy will be sufficient without access to the intersection designs, costings and assumptions in the ICP, however, if standard benchmark intersections have been adopted, it is unlikely that the allocated costs will be sufficient for South Gippsland Highway intersections in particular.
- The ICP should separate the costs between the Devon Meadows and Casey Fields PSPs to allow for appropriate apportionment between each PSP.

— END OF DOCUMENT —

